APPENDIX A

Notice of Preparation and Responses

Notice of Preparation

NOTICE OF PREPARATION
CITY OF ROSEVILLE GENERAL PLAN UPDATE
DRAFT ENVIRONMENTAL IMPACT REPORT

Date: August 26, 2019

To: State Clearinghouse, Placer County Clerk-Recorder, Responsible and Trustee Agencies, and other interested Agencies, Parties, and Organizations

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the City of Roseville General Plan Update and Notice of Public Scoping Meeting

NOP Comment Period: End of posting period is September 24, 2019 by 5:00 p.m.

Contact Information: City of Roseville Development Services - Planning Division
Gina McColl, Associate Planner
311 Vernon Street
Roseville, CA 95678
Telephone: (916) 774-5452
E-mail: gmccoll@roseville.ca.us

NOTICE IS HEREBY GIVEN THAT the City of Roseville ("the City") will serve as Lead Agency in the preparation of an environmental impact report (EIR) addressing an update of the City's 2035 General Plan. This Notice of Preparation (NOP) is being distributed to responsible agencies, trustee agencies, and interested parties, as required by the California Environmental Quality Act (CEQA). The City invites comments on the scope of analysis, feasible mitigation measures for potential impacts of implementation of the General Plan Update, and alternatives that should be explored in the EIR. The City is particularly interested in responses that relate to the statutory responsibilities of responsible and trustee agencies.

NOP Response Period

Due to the time limits mandated by State law, your response to this NOP must be received by the City within 30 calendar days after receipt of this notice, and should be received by 5:00 p.m., September 24, 2019. Please send your response via U.S. Mail or e-mail using the contact information displayed above. Please provide contact information with each response, so that the City may request clarification, if needed. If a responsible or trustee agency fails by the end of this 30-day period to provide a response, the City will presume that the subject responsible or trustee agency does not have a response (CEQA Guidelines Section 15082[b][2]). Responsible and trustee agencies may request a meeting with the City to assist in determining the scope of analysis and other content of the EIR. Please use the contact information above to request such a meeting.

Scoping Meeting

The City will conduct a meeting to (1) inform the public and interested agencies about the General Plan Update; and (2) receive input on the scope of environmental issues to be addressed in the General Plan Update EIR, feasible mitigation for potential impacts, and the range of alternatives that should be evaluated. The date, time, and place of the meeting are as follows:

Tuesday, September 17th, 2019
2:00pm-4:00pm (Open House)
Civic Center Meeting Rooms 1 & 2
311 Vernon Street
Roseville, CA 95678

Those interested in attending the scoping meeting may participate at any time during the 2pm-4pm window – there will be no formal presentation.

Project-Related Documents

Please see the City's General Plan Update website for more information:

https://www.roseville.ca.us/government/departments/development_services/planning/projects_of_interest

(Click on the link to "2018 General Plan Update")

Project Location

Roseville is in Placer County, 15 miles northeast of downtown Sacramento. The Planning Area for this General Plan Update is the City's Sphere of Influence. The City's Sphere of Influence and current City limits are shown in **Figure 1.**

Background

The General Plan provides the basis for the City's regulation of the overall amount, character, and location of urban development, as well as preservation and natural resource conservation, economic development, transportation, safety, public facilities and services, and housing. As the City's "constitution," the General Plan fulfills State legal requirements for long-range comprehensive planning and provides a framework for the City to exercise its land use entitlement authority, as provided under State law. The General Plan identifies locations within the Planning Area where there is capacity for future growth and identifies how the City will protect, enhance, and maintain a high quality of life along with growth and development.

Because the General Plan includes projections of future development capacity, it serves as a tool for the City and other service providers to plan for services, facilities, infrastructure, and environmental mitigation. The General Plan provides a decision making guide – the City relies on the General Plan when reviewing private development applications, public investments, and other important actions to ensure that they are consistent with the General Plan. The General Plan also provides direction for agencies or organizations that do business or provide services in the City's Planning Area.

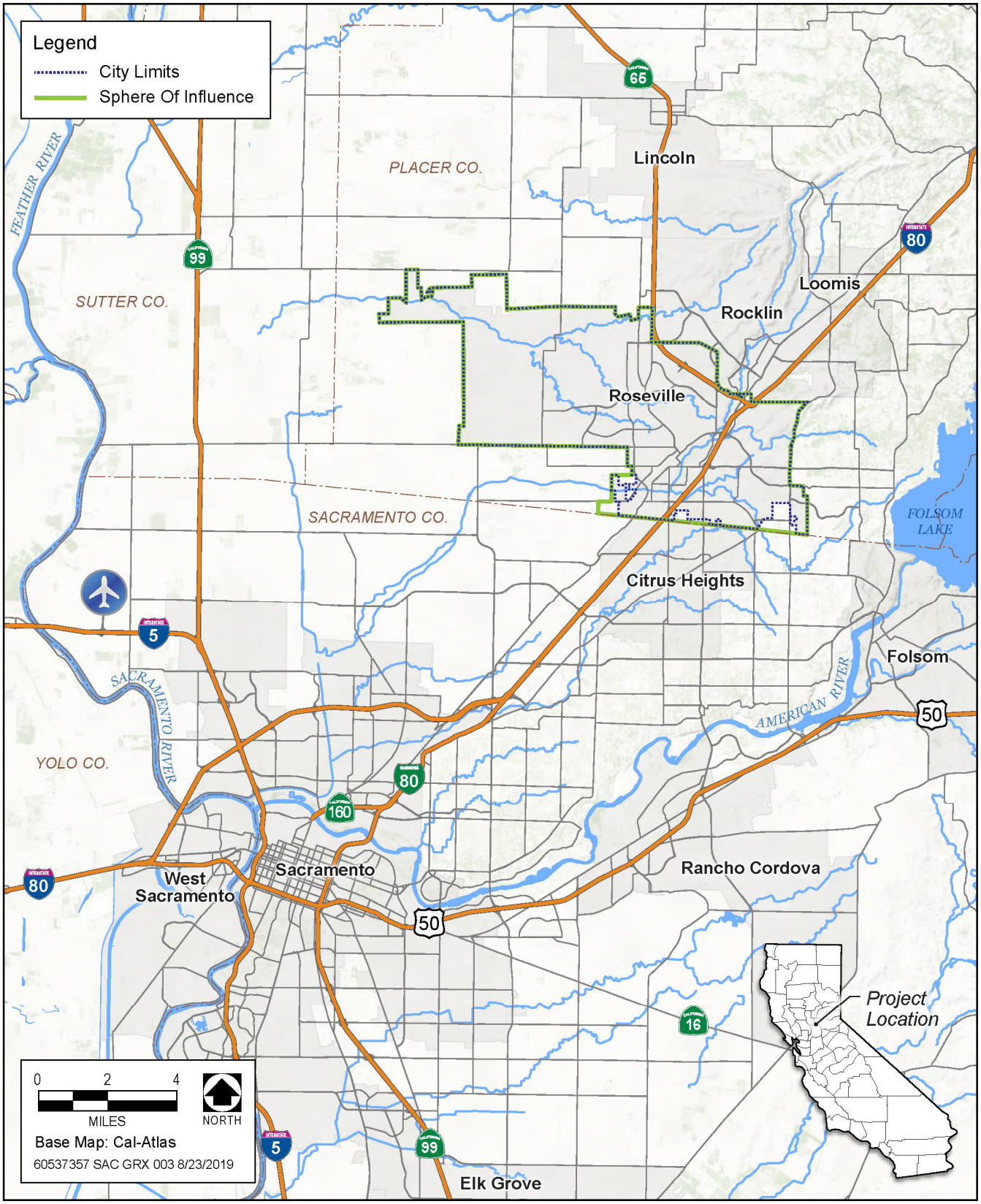

Figure 1 **Regional Location**

State law requires that a General Plan address seven topics: land use, circulation, housing, conservation, open space, noise, and safety (Government Code Sections 65300 et seq.). These topics can be addressed in individual elements (chapters), or organized and addressed in a different way at the discretion of the jurisdiction. Jurisdictions are also free to adopt additional elements covering subjects of particular interest. The existing General Plan addresses each of the required topics, along with optional elements for air quality and climate change, parks and recreation, and public facilities.

Project Description

The City's last comprehensive General Plan update was in 1992. The General Plan has been amended with the adoption of specific plans since then, with the most recent update in 2016 with the adoption of the Amoruso Ranch Specific Plan. The Housing Element was certified by the State Department of Community Development in 2013, addressing the Regional Housing Needs Allocation (RHNA) requirements for the planning period of 2013 to 2021. No changes to the Housing Element are proposed as part of this update. This is a focused General Plan Update. The focus is on compliance with State planning laws, the 2017 General Plan Guidelines, and updates to the California Environmental Quality Act (CEQA) Guidelines and precedent case law. The City is not pursuing changes to the Land Use Map or Sphere of Influence as a part of this Update.

In particular, the following revisions are anticipated as a part of this General Plan Update:

- **Circulation Element**: updates to reflect AB 1358 (Complete Streets) and SB 743 as it relates to active transportation and travel demand (vehicle miles traveled, or "VMT").
- **Air Quality & Climate Change Element**: updates to include feasible mitigation to reduce GHG emissions.
- **Open Space & Conservation Element**: updates to reflect State law related to Native American consultation.
- **Noise Element**: updates for clarity and to better balance the City's economic development goals with goals for land use and noise compatibility.
- **Throughout entire document**:
    - Revise outdated information, provide greater clarity, and eliminate unnecessary detail that is more appropriate for other City plans and documents.
    - Update goals, policies, and implementation measures consistent with current best practices, State laws, and the General Plan Guidelines.
    - Update the format to be more user friendly.

Probable Environmental Effects

The EIR will evaluate potential environmental impacts associated with adoption and implementation of the General Plan Update. The EIR will disclose potential impacts of the General Plan Update, propose feasible mitigation measures to avoid and/or reduce impacts deemed potentially significant, identify alternatives, and compare the environmental impacts of the alternatives to the impacts of the updated General Plan. The EIR will focus on impacts associated with implementing the updated General Plan compared to baseline conditions, which, in general, are existing physical conditions as of the publication of this NOP. Pursuant to Section 15063(a) of the CEQA Guidelines, no Initial Study will be

prepared. The EIR will evaluate the full range of environmental issues contemplated under CEQA and the CEQA Guidelines, as relevant, and as described below:

- **Aesthetics** – This section will present an analysis of potential impacts to aesthetics, including scenic vistas, scenic resources, and light and glare, as well as a discussion of visual changes that are inconsistent with applicable aesthetic regulations.

- **Agricultural Resources** – This section will present an analysis of potential impacts resulting from the conversion of agricultural land to non-agricultural uses. No property within the Planning Area is zoned as forestland, timberland, or a Timberland Production Zone. The Planning Area does not contain timberland as defined by Public Resources Code Section 4526 or contain 10 percent native tree cover that would be classified as forestland under Public Resources Code Section 12220(g). The EIR will not study Forestry Resources impacts.

- **Air Quality** – Construction and operation of land uses accommodated under the updated General Plan would generate air pollutant emissions. Earth is disturbed during site development activities, generating dust, and construction equipment will create short-term pollutant emissions. Development accommodated under the updated General Plan would result in additional vehicular traffic and demand for energy that would generate air pollution. Land use change under the updated General Plan could expose sensitive receptors to substantial pollutant concentrations and odors.

- **Biological Resources** – This section will address direct and indirect impacts to regulated waterways and wetlands, sensitive habitats and mature native trees, sensitive plants and wildlife, and wildlife movement corridors, and will include a discussion of potential conflicts with relevant biological resources policies or ordinances.

- **Cultural and Tribal Resources** – The EIR will examine potential adverse impacts on historical resources (or eligible historical resources), archaeological, and tribal cultural resources.

- **Energy** – This section will include an analysis of energy consumption attributable to implementation of the General Plan Update, with an emphasis on avoiding or reducing inefficient, wasteful, or unnecessary consumption of energy. The section will also include a discussion of potential conflicts with applicable plans for renewable energy or energy efficiency. Adverse physical environmental effects associated with energy demand within the Planning Area will be reported in relevant sections, such as Air Quality and Greenhouse Gas Emissions.

- **Geology and Soils** – This section will present an analysis of potential direct or indirect geological and seismic impacts from implementation of the General Plan Update, as well as potential effects related to paleontological resources and unique geologic features.

- **Greenhouse Gas Emissions** – The EIR will present an analysis of greenhouse gas emissions attributable to implementation of the General Plan Update and cumulative impacts related to climate change. The EIR will not analyze the impact of climate change or other environmental impacts on the Planning Area, except to the extent the General Plan Update would substantially exacerbate these hazards.

- **Hazards and Hazardous Materials** – This section will discuss impacts related to toxic substances, conflicts with emergency response, and direct or indirect wildfire risk resulting from implementation of the General Plan Update. The City's Planning Area is not located in safety zones or noise contours associated with airfields or airports that are a concern for land use compatibility planning for this General Plan Update and this issue will not be studied in detail in the EIR.

- **Hydrology and Water Quality** – The EIR will present an analysis of impacts of the General Plan Update related to drainage patterns, erosion, flooding, and water and groundwater quality within the Planning Area.

- **Land Use and Planning** – This section will discuss inconsistencies between the updated General Plan and applicable policies or regulations that were adopted with the express purpose of reducing or avoiding an environmental effect. This section will also examine potential impacts associated with physically dividing an established community.

- **Mineral Resources** – This section will examine impacts to mineral resources of value to the region and residents of the state from implementation of the General Plan Update.

- **Noise and Vibration** – This section will present an analysis of noise generation associated with implementation of the General Plan, as well as vibration impacts. The City's Planning Area is not located in noise contours associated with airfields or airports that are a concern for land use compatibility planning. This issue will not be studied in detail in the EIR.

- **Population and Housing** – This section will examine adverse physical environmental effects associated with inducing unplanned population growth and displacing substantial numbers of people or housing such that replacement housing would need to be constructed.

- **Public Services and Recreation** – The EIR will present an analysis of increased demand for public services, including police, fire, schools, parks, and recreation to the extent that this increased demand would require service extensions or expansions that could have potentially significant environmental impacts or cause a substantial physical deterioration of existing parks or recreational facilities.

- **Transportation** – The EIR will discuss potential conflicts with applicable policies related to circulation, including transit, roadway, bicycle, and pedestrian facilities and potential conflicts with State guidance related to increases in travel demand. The EIR will also present an analysis of potential impacts related to hazardous design features and emergency access.

- **Utilities and Service Systems** – This section will present an analysis of the potential impacts associated with changes to water supply, wastewater services, solid waste, drainage, electricity, natural gas, and telecommunications systems that would be required to serve demand generated under the General Plan Update.

The EIR will also discuss the cumulative impacts of the project in combination with other closely related past, present, and reasonably foreseeable probable future projects.

The EIR will describe and evaluate the comparative merits of a reasonable range of alternatives to the updated General Plan that would meet the basic project objectives and could avoid or substantially lessen one or more potentially significant impacts. The EIR will also present an analysis of the "no project alternative" and will identify the environmentally superior alternative. The EIR will briefly describe and explain alternatives that were eliminated from detailed consideration. The alternatives to be analyzed will be developed during the environmental review process and will consider input received during the public scoping process.

Notice of Preparation Responses

Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
North Central Region/Region 2
1701 Nimbus Road
Rancho Cordova, CA 95670
(916) 358-2900
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

September 24, 2019

Gina McColl
Associate Planner
City of Roseville Development Services - Planning Division
311 Vernon Street
Roseville, CA 95678

Subject: Notice of Preparation of a Draft Environmental Impact Report
City of Roseville General Plan Update
State Clearinghouse No. 2019080418

Dear Ms. McColl:

The Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the City of Roseville General Plan Update (project) [State Clearinghouse No. 2019080418]. The Department is responding to the NOP as a Trustee Agency for fish and wildlife resources (California Fish and Game Code sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code sections 1600 *et seq.*) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code sections 2080 and 2080.1).

The General Plan update is focused on compliance with State planning laws, the 2017 General Plan Guidelines, and updates to the CEQA Guidelines and case law. The update will include changes to the General Plan's Circulation Element, Air Quality & Climate Change Element, Open Space & Conservation Element, and Noise Element. The General Plan will also be updated throughout the entire document to revise outdated information, provide greater clarity, remove unnecessary detail, update goals, policies, and implementation measures, and update the format to be more user friendly.

COMMENTS AND RECOMMENDATIONS

The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (i.e., biological resources); and administers the Natural Community Conservation Planning Program (NCCP Program). The Department offers

the comments and recommendations presented below to assist the City of Roseville (City; the CEQA lead agency) in adequately identifying and/or mitigating the project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable the Department to adequately review and comment on the proposed project with respect to impacts on biological resources. The Department recommends that the forthcoming DEIR address the following:

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable Department staff to adequately review and comment on the project, the DEIR should include a complete assessment of the flora and fauna within and adjacent to the City's Sphere of Influence, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. The Department recommends that the DEIR specifically include:

1. An assessment of the various habitat types located within the City's Sphere of Influence, and a map that identifies the location of each habitat type. Adjoining habitat areas should also be included in this assessment where the implementation of the updated General Plan could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type within the City's Sphere of Influence and within adjacent areas that could be affected by the project. The Department's California Natural Diversity Database (CNDDB) in Sacramento should be contacted at (916) 322-2493 or bdb@wildlife.ca.gov to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed project.

   Please note that the Department's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. The Department recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the City. In order to obtain a more complete list of special status species potentially present, the Department recommends that occurrences in quads adjacent to the City's Sphere of Influence be considered as well as those within.

3. A complete inventory of rare, threatened, endangered, and other sensitive species known to be located within the City's Sphere of Influence and within adjacent areas with the potential to be affected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511).

Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the project area and should not be limited to resident species.

4. A thorough assessment of special status plants and natural communities within the City's Sphere of Influence and within adjacent areas with the potential to be affected.

5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the project. To ensure that project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:

1. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by zoning of development projects or other project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address project-related changes on drainage patterns and water quality within, upstream, and downstream of the project site, including: volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site.

2. A discussion of potential indirect project impacts on biological resources, including resources in areas adjacent to the City's Sphere of Influence, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).

3. A cumulative effects analysis developed as described under CEQA Guidelines § 15130. Please include all potential direct and indirect project related impacts to riparian areas, wetlands, vernal pools, aquatic habitats, oak woodlands, wildlife corridors or wildlife movement areas, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

Mitigation Measures for Project Impacts to Biological Resources

The DEIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the implementation of the General Plan Update. When proposing measures to avoid, minimize, or mitigate impacts, the Department recommends consideration of the following:

1. *Fully Protected Species*: Fully Protected Species (Fish and Game Code § 3511) may not be taken or possessed at any time. The project should be designed so that its implementation completely avoids any fully protected species that have the potential to be present within or adjacent to the City's Sphere of Influence. The Department also recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. The Department recommends that the City include in the analysis how appropriate avoidance, minimization and mitigation measures will reduce indirect impacts to fully protected species.

2. *Sensitive Plant Communities*: The Department considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts.

3. *Mitigation*: The Department considers adverse project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

   The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc. Mitigation measures for impacts to burrowing owls or their habitat should be designed in accordance with the Department's 2012 Staff Report on Burrowing Owl

Mitigation (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843). Future projects' mitigation strategies should be formulated in advance and included in their CEQA documents rather than deferred until after the results of pre-construction surveys are available.

The proposed Placer County Conservation Program (PCCP) is a landscape-level plan designed to ensure that land will be managed to support the survival and well-being of covered species, as well as hundreds of other species that are dependent on the same habitat. The Department has been working cooperatively for many years with Placer County, City of Lincoln, Placer County Water Agency, United States Fish and Wildlife Service, National Marine Fisheries Service, United States Environmental Protection Agency, United States Corps of Engineers and the State Water Resources Control Board to develop the plan. It is a high priority to the Department. The PCCP recently completed public review and it is anticipated that it will be adopted in the near future. If projects implemented within the City's Sphere of Influence propose biological mitigation within the PCCP area, if any projects are proposed adjacent to the PCCP reserve system, or if any project activities may affect implementation of the PCCP, the Department recommends that the City consider these effects and coordinate with the Placer Conservation Authority to avoid any potential conflicts with the PCCP.

4. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

   The Department recommends that local onsite propagules from the project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

5. *Nesting Birds and Migratory Bird Treaty Act:* Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) also afford protective measures as follows: section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

   If the project has the potential to cause impacts to nesting and migratory birds, the Department recommends that the DEIR contain specific measures to avoid those impacts. Project-specific avoidance and minimization measures may include, but not be limited to: project phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. If pre-construction surveys are proposed in the DEIR, the Department recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

6. *Moving out of Harm's Way:* If the project is anticipated to result in the clearing of natural habitats that support native species, a qualified biologist may be retained to move out of harm's way wildlife that would otherwise be injured or killed from project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety. Please note that temporary relocation of onsite wildlife does not effectively mitigate for project impacts associated with habitat loss.

7. *Translocation of Species*: The Department generally does not support the use of relocation, salvage, and/or transplantation as the sole mitigation for impacts to rare, threatened, or endangered species as studies have shown that these efforts are experimental in nature and largely unsuccessful.

California Endangered Species Act

The Department is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). The Department recommends that a CESA Incidental Take Permit (ITP) be obtained if the project has the potential to result in "take" (California Fish and Game Code section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the project. CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats.

The Department encourages early consultation, as significant modification to the proposed project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. Please note that the proposed avoidance, minimization, and mitigation measures must be sufficient for the Department to conclude that the project's impacts are fully mitigated and the measures, when taken in aggregate, must meet the full mitigation standard.

Lake and Streambed Alteration Program

Fish and Game Code section 1602 requires an entity to notify the Department prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the floodplain of a body of water. The notification should include maps, preferably using aerial photographs as backgrounds, of all rivers, streams, and lakes in the area of the activity, as well as any riparian habitat, associated wetlands, floodplains, high-flow channels, associated vernal pools, and any other habitats associated with the rivers, streams, and/or lakes. *The maps should not be limited to Waters of the United States or the jurisdiction of any other agencies, as river, stream, and lake-associated habitats often extend beyond those limits.* Maps of vernal pools should document the hydrologic connectivity, if it exists, to nearby streams and/or to other pools, or any other wetlands. The notification should also include maps showing the proposed activity's temporary and permanent impacts on the mapped rivers, streams, and/or lakes as well as their associated habitats.

Upon receipt of a complete notification, the Department determines if the proposed project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. A LSA Agreement includes measures necessary to protect existing fish and wildlife resources.

The Department may suggest ways to modify the proposed activity that would eliminate or reduce harmful impacts to fish and wildlife resources.

The Department's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with the Department is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to https://www.wildlife.ca.gov/Conservation/LSA/Notify-CDFW.

Further Coordination

The Department appreciates the opportunity to comment on the NOP of a DEIR for the City of Roseville General Plan Update (SCH No. 2019080418) and recommends that the City address the Department's comments and concerns in the forthcoming DEIR.

If you should have any questions pertaining to the comments provided in this letter or wish to schedule a meeting and/or site visit, please contact Environmental Scientist Gabriele Quillman at (916) 358-2955 or at gabriele.quillman@wildlife.ca.gov.

Sincerely,

Jeff Drongesen
Environmental Program Manager

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Gabriele Quillman, Gabriele.quillman@wildlife.ca.gov
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State ClearingHouse, state.clearinghouse@opr.ca.gov

Gregg McKenzie, gamckenz@placer.ca.gov
Placer County Community Development Resource Agency

Literature Cited

California Department of Fish and Wildlife. 2012. Staff Report on Burrowing Owl Mitigation. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. http://vegetation.cnps.org/.

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October 24, 2019

GTS# 03-PLA-2019-00468

City of Roseville Development Services – Planning Division
Gina McColl
Assistant Planner
311 Vernon Street
Roseville, CA 95678

Gina McColl – Notice of Preparation of a Draft Environmental Impact Report

Dear Ms. McColl:

Thank you for including California Department of Transportation (Caltrans) in the preliminary review process for the City of Roseville (City) 2035 General Plan update. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system. We review this local development for impacts to the State Highway System (SHS) in keeping with our mission, vision and goals for sustainability/livability/economy, and safety/heath. We provide these comments consistent with the state's mobility goals that support a vibrant economy and build communities.

Vehicle Miles Traveled (VMT) Requirements
Senate Bill 743 (2013) mandates that Vehicle Miles Traveled (VMT) be used as the primary metric in identifying transportation impacts of all development projects under CEQA, starting July 1, 2020.

As the City begins to update its General Plan, Caltrans anticipates (given the lengthy nature of General Plan analysis and approval processes) that it will reflect a VMT metric and thresholds for land use projects and supports the use of VMT as a metric for transportation projects. Caltrans would like to meet with the City's traffic engineers to discuss the scope of the traffic study and if the City plans to develop its own thresholds or use those established by the Office of Planning and Research.

For more information see the 2018 CEQA Guidelines update and the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA dated December 2018: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

If you have questions regarding these comments or require additional information, please contact Shannon Roberts, Intergovernmental Review Coordinator for Placer County, by phone (530) 740-4989 or via email to Shannon.T.Roberts @dot.ca.gov.

Sincerely,

Kevin Yount, Branch Chief
Office of Transportation Planning
Regional Planning Branch – East

CALIFORNIA
Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

11 September 2019

Gina McColl
City of Roseville
311 Vernon Street
Roseville, CA 95678

CERTIFIED MAIL
7019 0700 0002 0112 0088

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, CITY OF ROSEVILLE GENERAL PLAN UPDATE PROJECT, SCH#2019080418, PLACER COUNTY

Pursuant to the State Clearinghouse's 26 August 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the City of Roseville General Plan Update Project, located in Placer County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental

Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

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[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program.

There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently $1,277 + $8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited*

Threat Discharges to Surface Water (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Gerken, Matthew

From: McColl, Gina <GMcColl@roseville.ca.us>
Sent: Thursday, September 5, 2019 2:52 PM
To: Gerken, Matthew
Subject: FW: General Plan Update NOP

FYI: 1st response on the NOP

Thank you,

Gina McColl
Associate Planner
Development Services Dept.- Planning Division
o: (916) 774-5452
f: (916) 774-5126
Office Hours: 8:30 am - 4:00 pm M-F
Working together to build a quality community.

Civic Center | 311 Vernon Street | Roseville, CA | 95678

From: Kempenaar, Casey [mailto:ckempenaar@citrusheights.net]
Sent: Wednesday, September 4, 2019 9:25 AM
To: McColl, Gina <GMcColl@roseville.ca.us>
Cc: Blomquist, Leslie <lblomquist@citrusheights.net>; Hodgkins, Stuart <shodgkins@citrusheights.net>
Subject: General Plan Update NOP

EXTERNAL: This email originated from outside of the organization. Do not click on any links or open attachments unless you recognize the sender and know the content is safe.

Good Morning Gina:

We have reviewed the NOP for the General Plan Update.

We have no comments at this time, however, we would like to review the Circulation Element (SB743 related) information related to thresholds, mitigation, etc. as soon as feasible.

Good luck on the updated.

Thanks,

Casey Kempenaar, MPA, AICP
Planning Manager
ckempenaar@citrusheights.net
6360 Fountain Square Dr. | Citrus Heights, CA
(916) 727-4740 | www.citrusheights.net

September 24, 2019 via email: gmccoll@roseville.ca.us

City of Roseville Development Services – Planning Division
Gina McColl, Associate Planner
311 Vernon Street
Roseville, CA 95678

Subject: Notice of Preparation of an EIR for the City of Roseville General Plan Update

Dear Ms. McColl:

Placer County appreciates the opportunity to engage at this stage in the process. After reviewing the submitted information, the County finds that the scope of the issues proposed to be analyzed in the EIR appears adequate. The County does not have any specific comments on the scope of the EIR.

The County looks forward to reviewing the Draft EIR when it is available.

Thank you again for the opportunity to comment on the Notice of Preparation of an EIR for the City of Roseville General Plan Update.

Sincerely,

LEIGH CHAVEZ, PRINCIPAL PLANNER
ENVIRONMENTAL COORDINATOR

Second page info here.

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov

RECEIVED
SEP 17 2019
Planning Department

September 10, 2019

Gina McColl
Roseville, City of
311 Vernon Street
Roseville, CA 95678

RE: SCH# 2019080418, City of Roseville General Plan Update Project, Placer County

Dear Ms. McColl:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP) for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
    a. A brief description of the project.
    b. The lead agency contact information.
    c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
    d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
    a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
    a. Alternatives to the project.
    b. Recommended mitigation measures.
    c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
    a. Type of environmental review necessary.
    b. Significance of the tribal cultural resources.
    c. Significance of the project's impacts on tribal cultural resources.
    d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
    a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
    b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
   a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
   b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
       i. Planning and construction to avoid the resources and protect the cultural and natural context.
       ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
       i. Protecting the cultural character and integrity of the resource.
       ii. Protecting the traditional use of the resource.
       iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Staff Services Analyst

cc: State Clearinghouse

Placer County
AIR POLLUTION CONTROL DISTRICT

110 Maple Street, Auburn, CA 95603 • (530) 745-2330 • Fax (530) 745-2373 • www.placerair.org

Erik C. White, Air Pollution Control Officer

September 30, 2019 SENT VIA E-MAIL: gmccoll@roseville.ca.us

City of Roseville Development Services – Planning Division
Gina McColl, Associate Planner
311 Vernon Street
Roseville, CA 95678

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report for the City of Roseville General Plan Update

Ms. McColl,

Thank you for submitting the **Notice of Preparation of a Draft Environmental Impact Report for the City of Roseville General Plan Update Project** (Project) to the Placer County Air Pollution Control District (District) for review and comment. We apologize that this is past the deadline. The comments made are the ones we normally see as part of any general plan updates.

1. The District's CEQA Thresholds of Significance for criteria pollutants and Greenhouse Gas (GHG) are summarized in the tables below:

Criteria Pollutant Thresholds								
Construction Phase			Operational Phase Project-Level			Operational Phase Cumulative-Level		
ROG	NOx	PM_{10}	ROG	NOx	PM_{10}	ROG	NOx	PM_{10}
(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
82	82	82	55	55	82	55	55	82

Greenhouse Gas Thresholds			
Bright-line Threshold 10,000 MT CO2e/yr			
Efficiency Matrix			
Residential		Non-residential	
Urban	Rural	Urban	Rural
(MT CO2e/capita)		(MT CO2e/1,000sf)	
4.5	5.5	26.5	27.3
De Minimis Level 1,100 MT CO2e/yr			

The District recommends applying the District's adopted thresholds to determine the level of significance for the Project's related criteria pollutants and GHG impacts.

2. The District's California Environmental Quality Act (CEQA) Air Quality 2017 Handbook (Handbook) provides recommended analytical approaches and feasible mitigation measures when preparing air quality analyses for land use projects. The Handbook is available on the District's website at http://www.placerair.org/landuseandceqa/ceqaairqualityhandbook. Except where noted below additional detail relating to the following recommended items can be found within the Handbook.

   - The Project is located within the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the District. The SVAB is designated as nonattainment for federal and state ozone (O_3) standards, nonattainment for the federal particulate matter standard ($PM_{2.5}$) and state particulate matter standard (PM_{10}). Within the Air Quality section of the Initial Study, the District recommends the discussion include the area designations for the federal and state standards for the SVAB.

- The California Emissions Estimator Model (CalEEMod) is recommended when estimating the Project related air pollutants emissions from construction and operational phases. CalEEMod quantifies criteria pollutant emissions, including greenhouse gases (GHGs) from construction and operation (including vehicle use), as well as GHG emissions from energy production, solid waste handling, vegetation planting and/or removal, and water conveyance. In addition, CalEEMod calculates the benefits from implementing mitigation measures, including GHG mitigation measures, developed and approved by CAPCOA. Please contact the District for information on appropriate default settings applicable to the project area.

  The District requests copies of all modeling analysis files during the review of the DEIR for public review and comment.

- In the event the air quality analysis demonstrates the potential for the Project to cause or generate significant adverse air quality related impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. Additional mitigation measures can be found in the District's CEQA Handbook within the following related appendices.

  Appendix A. District Rules and Regulations (Construction and Operational)

  Appendix C. Recommended Mitigation Measures (Construction)

  Appendix E. Recommended Mitigation Measures (Operational)

  Appendix F. Mitigation Measures (Greenhouse Gases)

- As previously stated, the Project is located within the SVAB and is designated nonattainment for the $PM_{2.5}$ standard. PM has been linked to a range of serious respiratory and cardiovascular health problems.[1] Wood burning devices are a source of PM emissions which contribute to the region's air pollution. The District recommends that the construction, installation or use of wood burning devices be prohibited within the Project area. Only natural gas or propane fired fireplace appliances shall be allowed. These appliances shall be clearly delineated on the Floor Plans submitted in conjunction with the Building Permit application.

- The District recommends a CALINE 4 modeling analysis for carbon monoxide (CO) concentration be performed and discussed within the environmental document either of the following scenarios is true for any intersection affected by the project traffic, the project should conduct a site-specific CO dispersion modeling analysis to evaluate the potential local CO emission impact at roadway intersections:

  - A traffic study for the project indicates that the peak-hour LOS on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity will be degraded from an acceptable LOS (e.g., A, B, C, or D) to an unacceptable LOS (e.g., E or F); or

  - A traffic study indicates that the project will substantially worsen an already existing unacceptable peak-hour LOS on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes situations where a delay would increase by 10 seconds or more when project-generated traffic is included.

Thank you for allowing the District this opportunity to review the project proposal. Please do not hesitate to contact me at 530.745.2327 or ahobbs@placer.ca.gov if you have any questions.

Sincerely,

Ann Hobbs
Associate Planner
Planning & Monitoring Section

1 http://www.epa.gov/ncer/science/pm/

September 24, 2019

Gina McColl, Associate Planner
City of Roseville Development Services – Planning Division
311 Vernon Street
Roseville, CA 95678

Subject: **Comments on Notice of Preparation of Draft Environmental Impact Report (DEIR) for City of Roseville General Plan Update**

Dear Ms. McColl:

Reclamation District No. 1000 (RD 1000; District) appreciates the opportunity to comment on the Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the City of Roseville General Plan Update (Plan). RD 1000 is the entity responsible for the operation and maintenance of the levees and drainage system protecting the Natomas Basin in Sacramento and Sutter counties. Minimizing the impacts of flooding for human safety, health, and welfare is RD 1000's sole mission. As such, the District has been working closely with the Sacramento Area Flood Control Agency (SAFCA), State Central Valley Flood Protection Board and U.S. Army Corps of Engineers (USACE) on levee improvements to provide a minimum of 200-year flood protection to the system commensurate with the flood risk, as required by State Urban Level of Flood Protection standards.

Due to the nature of the items to be considered in the Plan coupled with RD 1000's mission to minimize impacts of flooding, the District requests the DEIR specifically address the following comments:

<u>Hydraulic Impact Analysis.</u>

- The hydraulic impact analysis should evaluate changes to peak stage for the 10 – 200-year flood events, as required by the State's Urban Level of Flood Protection (ULOP).
- The evaluation of hydraulic impacts should focus on mitigating increases in peak flood stage, as well as changes in the duration of flooding and changes in velocity that have the potential to increase erosion. This is particularly true for downstream levee systems that have a short hydrograph. Extending the duration of high water on these levee systems may result in increased performance issues associated with seepage both through and under the levees. The District requests that the DEIR disclose the change in duration of flood events and determine whether that change adversely effects downstream levee systems. Mitigation measures could be considered that include alternatives such as groundwater recharge, metering the water more slowly out of detention basins, or storage of the water for use.

- RD 1000 is concerned the potential impacts of increased storm water drainage flows into upstream tributaries for past projects; and potential future projects may increase flood risks downstream. Mitigating increased runoff is crucial in order to avoid downstream impacts to critical flood infrastructure. Mitigation measures in the DEIR should consider all potential hydrologic impacts; specifically, increases to peak and base flows, the duration of runoff, duration of peak flows, and the subsequent increased periods of high velocities.

- Hydrographs for smaller systems tend to have shorter hydrographs. Past performance is based on this tendency and is considered in the design of downstream levee improvements. If detention is the alternative used to mitigate increases in peak flow, it can result in the adverse impact of extending the duration of the hydrograph. This has the potential to increase geotechnical problems, such as slope stability and under seepage, and can contribute to an increase of erosion potential, all of which would increase flood risk and create increased Operations and Maintenance (O&M) costs for downstream critical flood infrastructure. In addition, to peak flows and duration, upstream development typically results in higher base flows due to runoff from landscaping, wastewater treatment discharge, or other discharges associated with urbanization. Increasing base flows may also result in increased vegetation growth, erosion, and beaver activity; thus, causing an increase in downstream O&M costs.

Any of the impacts discussed in this letter could have detrimental downstream effects that not only could increase flood risk to public safety but could also result in increased O&M costs for RD 1000 that may be required in order to mitigate potential Plan impacts. Flood risk may include erosion, increased vegetation, or potential impacts to channel maintenance or downstream flood infrastructure due to an increased duration of peak runoff and peak flows.

Therefore, RD 1000 believes thorough hydraulic impact analysis is a critical component of the DEIR. The Plan should consider any planned future development within the area that may contribute to cumulative downstream effects on both stage and duration of peak flows.

The District appreciates the opportunity to review and comment on Notice of Preparation for the DEIR for the General Plan Update. The District is prepared to work with the City of Roseville to ensure the Plan impacts are appropriately addressed and mitigated. Should there be further questions or the need for additional clarification on the information provided, please contact me directly via email (kking@rd1000.org) or phone (916) 922-1449.

Sincerely,

Reclamation District 1000

Kevin L. King
General Manager

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Gavin Newsom
Governor

Kate Gordon
Director

Notice of Preparation

RECEIVED
JUL 30 2019
Planning Department

August 26, 2019

To: Reviewing Agencies

Re: City of Roseville General Plan Update
SCH# 2019080418

Attached for your review and comment is the Notice of Preparation (NOP) for the City of Roseville General Plan Update draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Gina McColl
Roseville, City of
311 Vernon Street
Roseville, CA 95678

with a copy to the State Clearinghouse in the Office of Planning and Research at state.clearinghouse@opr.ca.gov . Please refer to the SCH number noted above in all correspondence concerning this project on our website: https://ceqanet.opr.ca.gov/2019080418/2.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

cc: Lead Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL 1-916-445-0613 state.clearinghouse@opr.ca.gov www.opr.ca.gov

NOP Distribution List

County: Placer CR

SCH# 2019080418

esources Agency

- [x] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  Denise Peterson
- [ ] **California Coastal Commission**
  Allyson Hitt
- [ ] **Colorado River Board**
  Elsa Contreras
- [x] **Dept. of Conservation**
  Crina Chan
- [x] **Cal Fire**
  Dan Foster
- [x] **Central Valley Flood Protection Board**
  James Herota
- [ ] **Office of Historic Preservation**
  Ron Parsons
- [x] **Dept of Parks & Recreation**
  Environmental Stewardship Section
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve Goldbeck
- [ ] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

Fish and Wildlife

- [ ] **Depart. of Fish & Wildlife**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Wildlife Region 1**
  Curt Babcock
- [ ] **Fish & Wildlife Region 1E**
  Laurie Harnsberger
- [x] **Fish & Wildlife Region 2**
  Jeff Drongesen
- [ ] **Fish & Wildlife Region 3**
  Craig Weightman
- [ ] **Fish & Wildlife Region 4**
  Julie Vance
- [ ] **Fish & Wildlife Region 5**
  Leslie Newton-Reed
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6**
  Tiffany Ellis
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6 I/M**
  Heidi Calvert
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Wildlife M**
  William Paznokas
  Marine Region

Other Departments

- [ ] **California Department of Education**
  Lesley Taylor
- [x] **OES (Office of Emergency Services)**
  Monique Wilber
- [ ] **Food & Agriculture**
  Sandra Schubert
  Dept. of Food and Agriculture
- [ ] **Dept. of General Services**
  Cathy Buck
  Environmental Services Section
- [x] **Housing & Comm. Dev.**
  CEQA Coordinator
  Housing Policy Division

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Erik Vink
- [ ] **Delta Stewardship Council**
  Anthony Navasero
- [ ] **California Energy Commission**
  Eric Knight
- [x] **Native American Heritage Comm.**
  Debbie Treadway
- [x] **Public Utilities Commission**
  Supervisor
- [ ] **Santa Monica Bay Restoration**
  Guangyu Wang
- [x] **State Lands Commission**
  Jennifer Deleong
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Cal State Transportation Agency CalSTA

- [ ] **Caltrans - Division of Aeronautics**
  Philip Crimmins
- [ ] **Caltrans – Planning HQ LD-IGR**
  Christian Bushong
- [x] **California Highway Patrol**
  Suzann Ikeuchi
  Office of Special Projects

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jackman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [x] **Caltrans, District 3**
  Susan Zanchi
- [ ] **Caltrans, District 4**
  Patricia Maurice
- [ ] **Caltrans, District 5**
  Larry Newland
- [ ] **Caltrans, District 6**
  Michael Navarro
- [ ] **Caltrans, District 7**
  Dianna Watson
- [ ] **Caltrans, District 8**
  Mark Roberts
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Jacob Armstrong
- [ ] **Caltrans, District 12**
  Maureen El Harake

Cal EPA

Air Resources Board

- [x] **Airport & Freight**
  Jack Wursten
  - [ ] **Transportation Projects**
    Nesamani Kalandiyur
  - [ ] **Industrial/Energy Projects**
    Mike Tollstrup
- [ ] **California Department of Resources, Recycling & Recovery**
  Kevin Taylor/Jeff Esquivel
- [ ] **State Water Resources Control Board**
  Regional Programs Unit
  Division of Financial Assistance
- [x] **State Water Resources Control Board**
  Cindy Forbes – Asst Deputy
  Division of Drinking Water
- [ ] **State Water Resources Control Board**
  Div. Drinking Water #_____
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Phil Crader
  Division of Water Rights
- [x] **Dept. of Toxic Substances Control Reg. #_____**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [ ] **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- [x] **RWQCB 5S**
  Central Valley Region (5)
  - [ ] **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
  - [ ] **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** _____
  _____
  _____
- [ ] _____
  Conservancy

Last Updated 5/22/18

APPENDIX B

Air Quality and Greenhouse Gas Emissions

GHG Emissions Summary

New Development, as Proposed under the General Plan Buildout

Emissions Source	GHG Emissions ($MTCO_2e$ / year)
Construction GHG Emissions	
Maximum Annual Construction Emissions	54,820
Total Construction Emissions of Full Buildout	548,204
Operational GHG Emissions	
Area	37,040
Energy	108,513
Mobile[1]	502,822
Waste	28,731
Water	13,452
Total Annual Operational Emissions	**690559**
Total[4] Annual Operational + Amortized Construction Emissions	**708,832**
Total\[4] Annual Project Emissions per 1,000 Square Feet[2]	**10.33**
PCAPCD GHG Efficiency Threshold	***27.3***
Total[4] Annual Project Emissions per Service Population[3]	**11.39**
2030 Statewide GHG Efficiency Threshold	***2.25***
Exceed threshold?	**Yes**

Notes:

[1] Mobile emissions are calculated outside of CalEEMod using EMFAC 2017 emissions rates and VMT from the Transportation Impact Analysis.
[2] Annual project emissions (amortized construction + operational) per 1,000 square feet calculated based upon new development of approximately 68,600,861 square feet with buildout of the General Plan.
[3] Annual project emissions (amortized construction + operational) are calculated based upon estimated additional population and employment with new development under the General Plan.
[4] Totals may not add due to rounding.

Source: Modeled by AECOM in 2019

Existing in City of Roseville + New with the General Plan Buildout

Emissions Source	GHG Emissions ($MTCO_2e$ / year)
Construction GHG Emissions	
Maximum Annual Construction Emissions	54,820
Total Construction Emissions of Full Buildout	548,204
Operational GHG Emissions	
Area	115,302
Energy	303,238
Mobile[1]	1,071,198
Waste	87,758
Water	33,268
Total Annual Operational Emissions	**1,610,763**
Total[4] Annual Operational + Amortized Construction Emissions	**1,629,037**
Total\[4] Annual Project Emissions per 1,000 Square Feet[2]	**9.07**
PCAPCD GHG Efficiency Threshold	***27.3***
Total[4] Annual Project Emissions per Service Population[3]	**5.12**
2030 Statewide GHG Efficiency Threshold	***2.25***
Exceed threshold?	**Yes**

Notes:

[1] Mobile emissions are calculated outside of CalEEMod using EMFAC 2017 emissions rates and VMT from the Transportation Impact Analysis.
[2] Annual project emissions (amortized construction + operational) per 1,000 square feet calculated based upon total Land Use in Planning Area with buildout of 2035 General Plan Updtae (approximately 68,600,861 square feet of development).
[3] Annual project emissions (amortized construction + operational) per service population are calculated based upon estimate of 198,000 residents + 120,000 employees in the City of Roseville in 2035 with buildout of the 2035 General Plan Update (See General Plan Land Use Element)
[4] Totals may not add due to rounding.

Source: Modeled by AECOM in 2019

2016 GHG Emissions Inventory

Emissions Source	GHG Emissions ($MTCO_2e$ / year)
Operational GHG Emissions	
Area[1]	-
Energy[2]	446,557
Mobile[3]	565,734
Waste[4]	33,236
Water[5]	4,903
Total[6] Annual Operational Emissions	**1,050,430**
Existing Service Population (residents + employees)	***204,802***
Total[6] Annual Project Emissions per Service Population[3]	**5.13**

Notes:

2016 emissions inventory is based on City and relevant agency provided activity data, use of industry standard emission factors, and modeling results from the ClearPath tool, which allow users to input the sector activity (e.g., kilowatt hour) and emission factors to calculate the final carbon dioxide equivalent (CO2e) emissions.

[1.] Area emissions would be those generated by wood burning fireplaces. Data was not available to assess these emissions for 2016 conditions. However, as shown in tables above, default modeling assumptions were used for the purposes of the New Development and Total GP Planning Area Full Buildout Scenarios.

[2.] Energy emissions includes electricity and natural gas, as well as LPG, wood burning, and fule oil use in the residential, commercial/institutional and industrial buildings.

[3.] Mobile emissions are based on SACOG data and EMFAC emission factors.

[4.] These emissions are associated with solid waste that is generated within the community and disposed in a landfill. The anerobic decompositior process in a landfill environment produces methane as organic waste materials, such as food scraps, paper and cardboard, wood debris, and yard trimmings, decompose over time.

[5.] Water energy emissions represent the electricity used to supply potable water to residents and businesses. Wastewater influent and effluent emissions occur as a result of the wastewater treatment process and include process emissions of nitrous oxide (N2O). Wastewater emissions also include those associated with combustion of digester gas that is collected during the treatment process.

[6.] Totals may not add due to rounding.

Source: Modeled by AECOM in 2018

GHG Efficiency Target

Table 1 **Statewide Population Projections**

	2020	2024	2025	2030	2035	2050
Population	40,719,999	42,069,604	42,407,005	44,019,846	45,521,334	49,158,401

Source: http://www.dof.ca.gov/Forecasting/Demographics/projections/
P-1: State Population Projections (2010-2060), February 2017

Note: 2024 value interpolated between 2020 and 2025 for use in employment forecasts in Table 3

Table 2 **Statewide Employment Projections**

	2014	2020	2024
Total	17,135,000	18,686,300	19,720,500
	2014	**2020**	**2024**
LU sorted	15,694,600	17,178,580	18,167,900

Source: http://www.labormarketinfo.edd.ca.gov/data/employment-projections.html
Long-Term (Ten-years) Projections, Occupational Proections

Note: LU sorted excludes occupations that align with the statewide emissions sectors that were removed from the LU-based GHG inventory for local climate planning;
See Roseville Target Setting Memo for full descrption of SOC codes that were removed from total employment value

Table 3 **Statewide Demographic Projections**

	2020	2024	2030	2035	2050
Population	40,719,999	42,069,604	44,019,846	45,521,334	49,158,401
Employment	18,686,300	19,720,500	20,634,693	21,338,529	23,043,437
Service Pop.	59,406,299	61,790,104	64,654,539	66,859,863	72,201,838
Emp/Pop ratio		46.9%	46.9%	46.9%	46.9%

Source: See Table 1 for Population source; see Table 2 for Employment source

Note: Employment projections beyond 2024 calculated as ratio of 2024 Employment/Population, and held constant for future years

Table 4 **Statewide Efficiency Targets**

	2020	2030	2035	2050
MT CO2e	431,000,000	258,600,000	215,500,000	86,200,000
MT/capita	10.58	5.87	4.73	1.75
MT/SP	7.26	4.00	3.22	1.19

Source: https://www.arb.ca.gov/cc/inventory/1990level/1990level.htm

Note: 2020 MT CO2e is CA statewide 2020 emissions limit (revised in 2014 from original 2007 limit that used SAR instead of 4AR);
2030 value calculated as 40% below 2020 limit; 2035 calculated as 50% below 2020 limit; 2050 calculated as 80% below 2020 limit

Table 5 **Demographic Projects - Land Use Sorted**

	2020	2024	2030	2035	2050
Population	40,719,999	42,069,604	44,019,846	45,521,334	49,158,401
Employment	17,178,580	18,167,900	19,010,119	19,658,541	21,229,221
Service Pop.	57,898,579	60,237,504	63,029,965	65,179,875	70,387,622
Emp/Pop ratio		43.2%	43.2%	43.2%	43.2%

Source: See Table 1 for Population source; see Table 2 for Employment source

Note: Employment projections beyond 2024 calculated as ratio of 2024 Employment/Population, and held constant for future years

Table 6 **Efficiency Targets - Land Use Sorted**

	2020	2030	2035	2050
MT CO2e	293,400,000	176,040,000	146,700,000	58,680,000
MT/capita	7.21	4.00	3.22	1.19
MT/SP	5.07	2.79	2.25	0.83

Criteria Air Pollutant Emissions

Construction-related Emissions

Max Single-Year Construction Scenario (2021)		Unmitigated Maximum Daily Emissions (lb/dy)							
Construction Phase		VOC	NOX	PM10 Fugitive Dust	PM10 Exhaust	PM10 Total	PM2.5 Fugitive Dust	PM2.5 Exhaust	PM2.5 Total
Demolition	*on-site*	3.3121	33.201	0	1.6587	1.6587	0	1.5419	1.5419
	off-site	0.0563	0.0401	0.1232	0.00078	0.12398	0.0327	0.00072	0.03342
	Sub-total	*3.3684*	*33.2411*	*0.1232*	*1.65948*	*1.78268*	*0.0327*	*1.54262*	*1.57532*
Site Preparation	*on-site*	4.0765	42.4173	18.0663	2.1974	20.2637	9.9307	2.0216	11.9523
	off-site	0.0676	0.0482	0.1479	0.00094	0.14884	0.0392	0.00087	0.04007
	Sub-total	*4.1441*	*42.4655*	*18.2142*	*2.19834*	*20.41254*	*9.9699*	*2.02247*	*11.99237*
Grading	*on-site*	4.4501	50.1975	8.6733	2.1739	10.8472	3.5965	2	5.5965
	off-site	0.0751	0.0535	0.1643	0.00104	0.16534	0.0436	0.00096	0.04456
	Sub-total	*4.5252*	*50.251*	*8.8376*	*2.17494*	*11.01254*	*3.6401*	*2.00096*	*5.64106*
Building Construction	*on-site*	2.1198	19.186	0	1.1171	1.1171	0	1.0503	1.0503
	off-site	24.1855	230.4032	50.0247	1.211	51.2357	13.5517	1.15	14.7017
	Sub-total	*26.3053*	*249.5892*	*50.0247*	*2.3281*	*52.3528*	*13.5517*	*2.2003*	*15.752*
Paving	*on-site*	1.3566	14.0656	0	0.7528	0.7528	0	0.6926	0.6926
	off-site	0.0563	0.0401	0.1232	0.00078	0.12398	0.0327	0.00072	0.03342
	Sub-total	*1.4129*	*14.1057*	*0.1232*	*0.75358*	*0.87678*	*0.0327*	*0.69332*	*0.72602*
Architectural Coating	*on-site*	468.8793	1.6838	0	0.1109	0.1109	0	0.1109	0.1109
	off-site	3.4327	2.4455	7.5083	0.0477	7.556	1.9916	0.044	2.0356
	Sub-total	*472.312*	*4.1293*	*7.5083*	*0.1586*	*7.6669*	*1.9916*	*0.1549*	*2.1465*
Total		**512.0679**	**393.7818**	**84.8312**	**9.27304**	**94.10424**	**29.2187**	**8.61457**	**37.83327**

Table x.x. Summary of Maximum Daily Construction Emissions:
Maximum Single-Year Construction Scenario (2021)

Construction Phase	Maximum Daily Emissions (lb/dy)		
	VOC	NO_X	PM_{10}
Demolition	3	33	2
Site Preparation	4	42	20
Grading	5	50	11
Building Construction	26	250	52
Paving	1	14	1
Architectural Coating	472	4	8
Maximum Daily Emissions	**512**	**394**	**94**
PCAPCD Thresholds of Significance	**82**	**82**	**82**
Does Project Exceed Thresholds?	**Yes**	**Yes**	**Yes**

Notes: lb/day = pounds per day; VOC = volatile organic compounds; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; PCAPCD = Placer County Air Pollution Control District.

Source: AECOM 2019; See Appendix X for detailed modeling assumptions, outputs, and results.

Operational Emissions

Summary of CalEEMod Modeled Maximum Daily Long-Term Operational Emissions of Criteria Air Pollutants and Precursors[1]

Emissions Source	Daily Emissions (lbs/day)		
	ROG	NO_X	PM_{10}
Area	38745	748	6437
Energy	26	227	18
Mobile[2]	167	1701	3609
Total Daily Operational Emissions[3]	**38937**	**2676**	**10064**
PCAPCD Thresholds of Significance	**55**	**55**	**82**
Does Project Exceed Thresholds?	**Yes**	**Yes**	**Yes**

Notes: lbs/day = pounds per day; ROG = reactive organic gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; PCAPCD = Placer County Air Pollution Control District.

[1] Operational emissions were modeled for full buildout year 2035.
[2] Mobile emissions are calculated outside of CalEEMod using EMFAC 2017 emissions rates and VMT from the Transportation Impact Analysis.
[3] Total emissions may not add correctly due to rounding.

Source: AECOM 2019; See Appendix X for detailed modeling assumptions, outputs, and results.

Criteria Air Pollutant Emissions

Construction-related Emissions

Max Single-Year Construction Scenario (2021)				Mitigated Maximum Daily Emissions (lb/dy)					
Construction Phase		VOC	NOX	PM10 Fugitive Dust	PM10 Exhaust	PM10 Total	PM2.5 Fugitive Dust	PM2.5 Exhaust	PM2.5 Total
Demolition	*on-site*	0.4623	2.0032	0	0.0616	0.0616	0	0.0616	0.0616
	off-site	0.0563	0.0401	0.1232	0.00078	0.12398	0.0327	0.00072	0.03342
	Sub-total	*0.5186*	*2.0433*	*0.1232*	*0.06238*	*0.18558*	*0.0327*	*0.06232*	*0.09502*
Site Preparation	*on-site*	0.4656	2.0175	7.0485	0.0621	7.1106	3.873	0.0621	3.9351
	off-site	0.0676	0.0482	0.1479	0.00094	0.14884	0.0392	0.00087	0.04007
	Sub-total	*0.5332*	*2.0657*	*7.1964*	*0.06304*	*7.25944*	*3.9122*	*0.06297*	*3.97517*
Grading	*on-site*	0.7616	3.3	3.3826	0.1015	3.4841	1.4026	0.1015	1.5041
	off-site	0.0751	0.0535	0.1643	0.00104	0.16534	0.0436	0.00096	0.04456
	Sub-total	*0.8367*	*3.3535*	*3.5469*	*0.10254*	*3.64944*	*1.4462*	*0.10246*	*1.54866*
Building Construction	*on-site*	0.3278	2.2347	0	0.0408	0.0408	0	0.0408	0.0408
	off-site	24.1855	230.4032	50.0247	1.211	51.2357	13.5517	1.15	14.7017
	Sub-total	*24.5133*	*232.6379*	*50.0247*	*1.2518*	*51.2765*	*13.5517*	*1.1908*	*14.7425*
Paving	*on-site*	0.2805	1.2154	0	0.0374	0.0374	0	0.0374	0.0374
	off-site	0.0563	0.0401	0.1232	0.00078	0.12398	0.0327	0.00072	0.03342
	Sub-total	*0.3368*	*1.2555*	*0.1232*	*0.03818*	*0.16138*	*0.0327*	*0.03812*	*0.07082*
Architectural Coating	*on-site*	468.6668	0.1288	0	0.00396	0.00396	0	0.00396	0.00396
	off-site	3.4327	2.4455	7.5083	0.0477	7.556	1.9916	0.044	2.0356
	Sub-total	*472.0995*	*2.5743*	*7.5083*	*0.05166*	*7.55996*	*1.9916*	*0.04796*	*2.03956*
Total		**498.8381**	**243.9302**	**68.5227**	**1.5696**	**70.0923**	**20.9671**	**1.50463**	**22.47173**

Table x.x. Summary of Maximum Daily Construction Emissions: Maximum Single-Year Construction Scenario (2021)

Construction Phase	Maximum Daily Emissions (lb/dy)		
	VOC	**NO_X**	**PM_{10}**
Demolition	0.5186	2.0433	0.18558
Site Preparation	0.5332	2.0657	7.25944
Grading	0.8367	3.3535	3.64944
Building Construction	24.5133	232.6379	51.2765
Paving	0.3368	1.2555	0.16138
Architectural Coating	472.0995	2.5743	7.55996
Maximum Daily Emissions	**472.0995**	**232.6379**	**51.2765**
PCAPCD Thresholds of Significance	**82**	**82**	**82**
Does Project Exceed Thresholds?	**Yes**	**Yes**	**No**

Notes: lb/day = pounds per day; VOC = volatile organic compounds; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; PCAPCD = Placer County Air Pollution Control District.

Source: AECOM 2019; See Appendix X for detailed modeling assumptions, outputs, and results.

Operational Emissions - Mobile

Mobile Sources Annual Emissions of Planning Area in 2035 with Buildout of General Plan

		Emissions (tons/yr)						MT / Year
Land Use	**Annual VMT[1]**	**ROG**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**	**CO_2e**
Total	3,755,740,500	64.80	661.33	2,079.92	11.35	1,403.23	382.90	1,071,197.85

[1] Annual VMT is based upon Roseville_GP_VMT_Summary dated 10Jan2020

Mobile Sources Average Daily Emissionsof Planning Area in 2035 with Buildout of General Plan

	Emissions (lb/dy)					
Land Use	**ROG**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Total	355.07	3,623.70	11,396.80	62.19	7,688.95	2,098.08

Mobile Sources Annual Emissions of New Development in 2035 General Plan

		Emissions (tons/yr)						MT / Year
Land Use	**Annual VMT[1]**	**ROG**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**	**CO_2e**
Total	1,762,950,000	30.42	310.43	976.32	5.33	658.68	179.73	502,821.81

[1] Annual VMT is based upon Roseville_GP_VMT_Summary dated 10Jan2020 for the Delta from Baseline to 2035 Cumultive + Project

Mobile Sources Average Daily Emissionsof New Development in General Plan

	Emissions (lb/dy)					
Land Use	**ROG**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Total	166.67	1,700.97	5,349.68	29.19	3,609.21	984.84

Exhaust Emission Factors:

			Emission Factors (g/mile)						
Vehicle Type	**Year**	**Vehicle Class**	**ROG**	**NO_X**	**CO**	**SO_X**	**PM_{10}[1]**	**$PM_{2.5}$[1]**	**CO_2e**
Average Fleet	2035	Aggregate	0.016	0.160	0.502	0.003	0.054	0.023	285.213

[1] PM10 and PM2.5 are inclusive of BW and TW emissions

Source: EMFAC 2017

EMFAC 2017 Adjustment Factor: *Need to account for this (only applicable to light-duty vehicles (LDA, LDT1, LDT2, MDV)?*
https://ww3.arb.ca.gov/msei/emfac_off_model_adjustment_factors_final_draft.pdf?utm_medium=email&utm_source=govdelivery

On-Road Fugitive Dust Emission Factors:

$EF_{DUST} = [(k(sL)^{0.91} \times (W)^{1.02})(1 - P/4N))$

Source: AP-42 Section 13.2.1 (Paved Roads) - http://www.epa.gov/ttnchie1/ap42/ch13/final/c13s0201.pdf

EF (PM10)	0.00062755	lb/VMT
EF (PM2.5)	0.000154035	lb/VMT

Variable	Value	Description	
k (PM10)	0.0022	particle size multiplier for particle size rangeand units of interest (lb/VMT)	
k (PM2.5)	0.00054	particle size multiplier for particle size rangeand units of interest (lb/VMT)	
sL	0.1	road surface silt loading (g/m^2)	
W	2.4	average weight (tons) of vehicles (2.4 tons)	
P	74	number of "wet" days with at least 0.254 mm (0.1 inches) of precipitation during	*CalEEMod data for Placer-Sacramento
N	365	number of days in averaging period	

Conversion Factors:	
grams per pound:	*454*
pounds per ton:	*2,000*
pounds per metric ton:	*2,205*
days per year	*365*

Global Warming Potential[1]:	
CO2	1
CH4	28
N2O	265

[1]Per IPCC 5th Assessment Report (AR5)

Construction Energy Consumption

Maximum Annual Construction Scenario

Phase	Source	MT CO_2e/yr [a]	Fuel Type	Emission Factor (MT CO_2/gallon) [b]	Gallons/year
Demolition	Offroad Equip	445.10	Diesel	0.01016	43,809
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	13.23	Gas	0.008887	1,488
Site Prep	Offroad Equip	438.11	Diesel	0.01016	43,121
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	15.87	Gas	0.008887	1,786
Grading	Offroad Equip	714.02	Diesel	0.01016	70,278
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	17.63	Gas	0.008887	1,984
Building Construction	Offroad Equip	302.93	Diesel	0.01016	29,816
	Hauling	0.00	Diesel	0.01016	-
	Vendor	6621.61	Diesel	0.01016	651,733
	Worker	4029.23	Gas	0.008887	453,384
Paving	Offroad Equip	262.47	Diesel	0.01016	25,834
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	13.23	Gas	0.008887	1,488
Architectural Coating	Offroad Equip	33.26	Diesel	0.01016	3,273
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	805.85	Gas	0.008887	90,677
			Total	**Diesel**	**867,865**
				Gasoline	**550,807**

Notes:

Assumed amortization period is 30 years.

Sources:

[a] Modeled by AECOM in 2019;

[b] U.S. Energy Information Administration 2016 (https://www.eia.gov/environment/emissions/co2_vol_mass.php)

Amortization period (years):	30
Construction Buildout Period (years):	16

Factor:	MT/gallon
Diesel	1.02E-02
Gasoline	8.89E-03

Full Build-Out Scenario

Phase	Source	MT CO_2e [a]	Fuel Type	Emission Factor (MT CO_2/gallon) [b]	Gallons
Demolition	Offroad Equip	4451.01	Diesel	0.01016	438,092
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	132.25	Gas	0.008887	14,881
Site Prep	Offroad Equip	4381.13	Diesel	0.01016	431,213
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	158.70	Gas	0.008887	17,858
Grading	Offroad Equip	7140.23	Diesel	0.01016	702,778
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	176.33	Gas	0.008887	19,842
Building Construction	Offroad Equip	3029.29	Diesel	0.01016	298,159
	Hauling	0.00	Diesel	0.01016	-
	Vendor	66216.10	Diesel	0.01016	6,517,333
	Worker	40292.27	Gas	0.008887	4,533,844
Paving	Offroad Equip	2624.72	Diesel	0.01016	258,339
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	132.25	Gas	0.008887	14,881
Architectural Coating	Offroad Equip	332.57	Diesel	0.01016	32,733
	Hauling	0.00	Diesel	0.01016	-
	Vendor	0.00	Diesel	0.01016	-
	Worker	8058.45	Gas	0.008887	906,769
			Total Demand	**Diesel**	**8,678,646**
				Gasoline	**5,508,075**
			Amortized Annual Demands (over 30 years)	**Diesel**	**289,288**
				Gasoline	**183,602**
			Average Annual Demands (over 16 year Buildout Period)	**Diesel**	**542,415.40**
				Gasoline	**344,254.66**

Notes:

Total construction demand determined based upon 10 times the maximum annual construction year (assumed to be 10% of total buildout)

Assumed amortization period is 30 years.

Sources:

[a] Modeled by AECOM in 2019;

[b] U.S. Energy Information Administration 2016 (https://www.eia.gov/environment/emissions/co2_vol_mass.php)

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Placer (SV)
Calendar Year: 2035
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Yea	Speed	Fuel	Population	VMT	% VMT	Trips	Fuel Consumption	Fuel Consumption per VMT (gallons per vehicle mile travelled)
Placer (SV)	2035	All Other Buses	Aggregate	Aggregate	DSL	35.5526	1785.566	0.002041	298.6419	0.167224826	0.093653706
Placer (SV)	2035	LDA	Aggregate	Aggregate	DSL	1418.863	48222.16	0.055127	6719.668	0.725496169	0.01504487
Placer (SV)	2035	LDT1	Aggregate	Aggregate	DSL	2.548698	81.99059	9.37E-05	11.35262	0.002416802	0.029476578
Placer (SV)	2035	LDT2	Aggregate	Aggregate	DSL	530.6868	19415.54	0.022196	2494.523	0.391569271	0.020167828
Placer (SV)	2035	LHD1	Aggregate	Aggregate	DSL	3436.262	108363.2	0.12388	43223.85	5.110709063	0.047162766
Placer (SV)	2035	LHD2	Aggregate	Aggregate	DSL	1341.059	41935.35	0.04794	16868.84	2.2269626	0.053104661
Placer (SV)	2035	MDV	Aggregate	Aggregate	DSL	1228.364	38751.05	0.0443	5696.152	1.040043371	0.026839104
Placer (SV)	2035	MH	Aggregate	Aggregate	DSL	358.3321	2669.469	0.003052	35.83321	0.245036142	0.091792081
Placer (SV)	2035	Motor Coach	Aggregate	Aggregate	DSL	13.19952	1574.104	0.001799	192.713	0.204506875	0.129919578
Placer (SV)	2035	PTO	Aggregate	Aggregate	DSL	0	6516.443	0.00745	0	1.053971784	0.161740349
Placer (SV)	2035	SBUS	Aggregate	Aggregate	DSL	225.371	7145.642	0.008169	2600.75	0.755590835	0.105741493
Placer (SV)	2035	T6 CAIRP heavy	Aggregate	Aggregate	DSL	26.06266	4460.069	0.005099	380.5148	0.305042397	0.068394103
Placer (SV)	2035	T6 CAIRP small	Aggregate	Aggregate	DSL	19.71602	875.8966	0.001001	287.8538	0.066971606	0.076460634
Placer (SV)	2035	T6 instate construction he	Aggregate	Aggregate	DSL	82.25659	5195.976	0.00594	371.8788	0.559121736	0.107606674
Placer (SV)	2035	T6 instate construction sm	Aggregate	Aggregate	DSL	552.4827	27465.62	0.031398	2497.753	2.690979784	0.09797629
Placer (SV)	2035	T6 instate heavy	Aggregate	Aggregate	DSL	1150.929	134248.8	0.153472	13281.56	10.22312433	0.076150581
Placer (SV)	2035	T6 instate small	Aggregate	Aggregate	DSL	3913.041	188910.3	0.21596	45155.95	15.5352838	0.082236282
Placer (SV)	2035	T6 OOS heavy	Aggregate	Aggregate	DSL	14.5074	2498.117	0.002856	211.808	0.170669424	0.068319228
Placer (SV)	2035	T6 OOS small	Aggregate	Aggregate	DSL	7.897747	347.2486	0.000397	115.3071	0.026618269	0.076654782
Placer (SV)	2035	T6 Public	Aggregate	Aggregate	DSL	393.8122	6139.243	0.007018	1194.564	0.670172301	0.109162044
Placer (SV)	2035	T6 utility	Aggregate	Aggregate	DSL	33.70568	562.2801	0.000643	387.6153	0.049123012	0.087363957
Placer (SV)	2035	T7 CAIRP	Aggregate	Aggregate	DSL	207.4169	43902.39	0.050189	3028.286	4.637676426	0.105636083
Placer (SV)	2035	T7 CAIRP construction	Aggregate	Aggregate	DSL	20.39027	3732.315	0.004267	92.18361	0.488789633	0.130961518
Placer (SV)	2035	T7 NNOOS	Aggregate	Aggregate	DSL	311.2435	53525.06	0.061189	4544.155	5.833752033	0.108991051
Placer (SV)	2035	T7 NOOS	Aggregate	Aggregate	DSL	82.45604	17234.09	0.019702	1203.858	1.866196958	0.10828523
Placer (SV)	2035	T7 other port	Aggregate	Aggregate	DSL	2.817993	443.7593	0.000507	21.41675	0.053939245	0.121550691
Placer (SV)	2035	T7 POAK	Aggregate	Aggregate	DSL	13.49755	2107.414	0.002409	102.5814	0.262060112	0.124351529
Placer (SV)	2035	T7 Public	Aggregate	Aggregate	DSL	298.2996	6043.071	0.006908	904.842	0.912132259	0.150938536
Placer (SV)	2035	T7 Single	Aggregate	Aggregate	DSL	414.3114	32818.11	0.037517	4781.096	4.125951085	0.125721776
Placer (SV)	2035	T7 single construction	Aggregate	Aggregate	DSL	124.3229	9259.187	0.010585	562.0591	1.394069316	0.150560662
Placer (SV)	2035	T7 SWCV	Aggregate	Aggregate	DSL	166.9187	6806.534	0.007781	650.9829	2.122717294	0.311864663
Placer (SV)	2035	T7 tractor	Aggregate	Aggregate	DSL	273.2711	32861.51	0.037567	3470.543	3.381170883	0.102891531
Placer (SV)	2035	T7 tractor construction	Aggregate	Aggregate	DSL	103.2217	7638.014	0.008732	466.6613	1.137064261	0.148869098
Placer (SV)	2035	T7 utility	Aggregate	Aggregate	DSL	6.457847	130.8456	0.00015	74.26524	0.017634234	0.134771271
Placer (SV)	2035	UBUS	Aggregate	Aggregate	DSL	106.5037	11080.4	0.012667	426.0149	1.328319314	0.119880113
							874746.8	1			
Placer (SV)	2035	LDA	Aggregate	Aggregate	ELEC	6629.065	252364.7		32009.11	0	0
Placer (SV)	2035	LDT1	Aggregate	Aggregate	ELEC	518.8695	19575.24		2498.44	0	0
Placer (SV)	2035	LDT2	Aggregate	Aggregate	ELEC	2015.07	52254.43		9681.928	0	0
Placer (SV)	2035	MDV	Aggregate	Aggregate	ELEC	1387.218	36372.11		6690.445	0	0
							360566.5				
Placer (SV)	2035	LDA	Aggregate	Aggregate	GAS	115557.8	3887645	0.506709	544977.5	92.16299073	0.023706636
Placer (SV)	2035	LDT1	Aggregate	Aggregate	GAS	17097.75	589347.1	0.076815	78699.61	16.28506063	0.027632377
Placer (SV)	2035	LDT2	Aggregate	Aggregate	GAS	55493.52	1924882	0.250886	256038.3	53.32862201	0.027704876
Placer (SV)	2035	LHD1	Aggregate	Aggregate	GAS	2974.297	98644.19	0.012857	44312.6	10.01867937	0.101563808
Placer (SV)	2035	LHD2	Aggregate	Aggregate	GAS	462.7912	15239.16	0.001986	6894.899	1.77535436	0.116499483
Placer (SV)	2035	MCY	Aggregate	Aggregate	GAS	7738.661	39709.56	0.005176	15477.32	1.067441569	0.026881223
Placer (SV)	2035	MDV	Aggregate	Aggregate	GAS	35780.23	1087699	0.141769	163100.7	37.5537363	0.034525846
Placer (SV)	2035	MH	Aggregate	Aggregate	GAS	557.9828	5055.704	0.000659	55.8206	0.892907288	0.176613849
Placer (SV)	2035	OBUS	Aggregate	Aggregate	GAS	83.63229	3119.149	0.000407	1673.315	0.541327217	0.173549658
Placer (SV)	2035	SBUS	Aggregate	Aggregate	GAS	45.07108	1687.541	0.00022	180.2843	0.155264239	0.092006213
Placer (SV)	2035	T6TS	Aggregate	Aggregate	GAS	341.6607	14676.98	0.001913	6835.947	2.528237999	0.172258749
Placer (SV)	2035	T7IS	Aggregate	Aggregate	GAS	1.253791	132.9878	1.73E-05	25.08585	0.024640588	0.185284588
Placer (SV)	2035	UBUS	Aggregate	Aggregate	GAS	55.98137	4501.1	0.000587	223.9255	0.875746585	0.194562775
							7672340	1			

Fuel	% VMT by Fuel Type	Weighted Ave Fuel Consumption per VMT
Gasoline	0.86132001	0.02831079
Diesel	0.098201712	0.079774063

*remaining 5% VMT is electric and not accounted for in fuel consumption calculation

Maximum Land Use Development in a Single Year

Buildout Duration (years)	16
Work Days in 1 year (5 days/week)	260
Max percent of total land use development in a single year:	10%

Proposed Land Uses

LandUseType	LandUseSubType	Total General Plan Land Use (Existing + Proposed Buildout)	Additional LandUseUnitAmount under the General Plan Buildout	LandUseSizeMetric	Additional LotAcreage in General Plan Buildout	Additional LandUseSquareFeet in General Plan Buildout	Additional Population in General Plan Buildout	10% of Porposed Additional Land Use Unit Amount	10% of Proposed Additional Acreage	Additional Population with 10% Buildout
Residential	Single Family Housing	50,403 (population = 146,169)	14,288.00	Dwelling Units	4638.96	25,718,400	41435	1429	463.896	4143.5
Residential	Apartments Low Rise	20538 (population = 43,130)	9,008.00	Dwelling Units	563	900,800	18917	901	56.3	1891.7
Residential	Retirement Community	4245 (population = 7,981)	905.00	Dwelling Units	181	905,000	1701	91	18.2	170.1
Retail	Strip Mall	18,677	8,904.70	Thousand Square Feet (KSF)	204.42	8,904,700		890.47	20.442	
Retail	Regional Shopping Center	1,755	572.20	Thousand Square Feet (KSF)	13.14	572,200		57.22	1.314	
Commercial	Office Park	13,352	6,152.10	Thousand Square Feet (KSF)	141.23	6,152,100		615.21	14.123	
Industrial	Industrial Park	13,208	6,818.80	Thousand Square Feet (KSF)	156.54	6,818,800		681.88	15.654	
Industrial	General Light Industry	5,025	2,649.20	Thousand Square Feet (KSF)	60.82	2,649,200		264.92	6.082	
Recreational	Arena	0	0	Thousand Square Feet (KSF)				0	0	
Educational	Place of Worship	1,006	266.30	Thousand Square Feet (KSF)	6.11	26,300		26.63	0.611	
Recreational	Motel	49	0	Thousand Square Feet (KSF)				0	0	
Commercial	Medical Office Building	1,007	86.50	Thousand Square Feet (KSF)	1.99	86,500		8.65	0.199	
Commercial	Hospital	1,803	0	Thousand Square Feet (KSF)				0	0	
Residential	Congregate Care (Assisted l	340 (population = 972)	60.80	Thousand Square Feet (KSF) (61 dwelling units in CalEEMod)	3.8	60,800	174	6	0.38	17.4
Recreational	Hotel	1,862	388.00	Thousand Square Feet (KSF) *(268 rooms in CalEEMod)*	8.9	387,684		27	0.9	
Commercial	Government Civic Center	1,771	1,012.70	Thousand Square Feet (KSF)	23.25	1,012,700		101.27	2.325	
Commercial	Government Civic Center	0	0.00	Thousand Square Feet (KSF)				0	0	
Educational	Elementary School	32,422	9,800.00	Students	18.81	819,313		980	1.881	
Recreational	Golf Course	812	0	Acres				0	0	
Recreational	City Park	1,450	307.30	Acres	307.3	13,385,988		30.73	30.73	
Recreational	City Park		0	Acres				0	0	
Recreational	Arena	34	4.60	Acres	4.6	200,376		0.46	0.46	
~~Educational~~	~~Junior College~~	~~0~~	~~0~~	~~Students~~				~~0~~	~~0~~	
				Total	**6333.87**	**68,600,861**	**62,227**	**6,111**	**633**	**6,223**

Total Square Feet of Land Use Development in Planning Area with Buildout	278087217

Roseville Electric Power Mix & GHG Emission Factor

2016

Electricity Portofilo	Roseville Electric
Eligibile Renewables	32%
Coal	0%
Large Hydro	14%
Natural Gas	33%
Nuclear	0%
Other	0%
Unspecified	21%
Total	**100%**
Total Renewable	46%
Total Coal	0%
Total "Gas"	54%
Emissions Factors	**Roseville Electric**
lb CO2e/MWh	509.94
MT CO2e/MWh	0.231

2017

Electricity Portofilo	Roseville Electric
Eligibile Renewables	28%
Coal	0%
Large Hydro	29%
Natural Gas	3%
Nuclear	0%
Other	0%
Unspecified	40%
Total	**100%**
Total Renewable	57%
Total Coal	0%
Total "Gas"	43%

2018

Electricity Portofilo	Roseville Electric
Eligibile Renewables	40%
Coal	0%
Large Hydro	13%
Natural Gas	22%
Nuclear	0%
Other	0%
Unspecified	25%
Total	**100%**
Total Renewable	53%
Total Coal	0%
Total "Gas"	47%

Total Gas calculation assumes 'unspecified' is combined cycle natural gas generation.

Electricity Portfolio Sources:

CEC Power Content Labels https://ww2.energy.ca.gov/pcl/2016_labels/Roseville.html

Emissions Factor Sources:

Emissions factors from Brian Zard email to Josh Lathan on

Conversion Factor

MT/lbs
0.000453592

Land Use Baseline and GP Update Type and Size

	Scenario	Total TAZ	SFDU	MFDU	ARDU	RET	MALL	OFF	IND	HTI	CC	CHURCH	LODGE	MED	HOSP	CONV	HOTEL	PQPL	PQPH	SCHOOL	GOLF	PARK	CEM	FAIR	UNIV
Region	Base	1,113	97,548	21,133	10,084	18,285	1,183	10,066	20,257	2,376	0	1,844	317	1,413	1,988	1,219	2,430	514	2,247	65,531	3,104	1,779	200	29	21,107
	GP Update	1,344	149,766	50,507	13,532	39,913	1,755	25,856	35,711	6,129	0	2,957	315	2,027	2,153	1,456	3,837	1,108	3,307	109,781	3,111	2,621	210	39	76,410
Roseville	Base	402	36,115	11,530	3,340	9,772	1,183	7,200	6,389	2,376	0	740	50	921	1,863	279	1,474	183	576	22,622	812	1,123	20	29	3,007
	GP Update	505	50,403	20,538	4,245	18,677	1,755	13,352	13,208	5,025	0	1,006	49	1,007	1,803	340	1,862	409	1,362	32,422	812	1,430	20	34	0
	Delta = new construction.	103.00	14,288.00	9,008.00	905.00	8,904.70	572.20	6,152.10	6,818.80	2,649.20	0.00	266.30	-1.20	86.50	-60.20	60.80	388.00	226.50	786.20	9,800.00	0.30	307.30	-0.10	4.60	-3,007.00
	In a year	10.30	1,429.00	901.00	91.00	890.47	57.22	615.21	681.88	264.92	0.00	26.63	-0.12	8.65	-6.02	6.08	38.80	22.65	78.62	980.00	0.03	30.73	-0.01	0.46	-301.00
	Linear (to 2035)	6.44	893.00	563.00	56.56	556.54	35.76	384.51	426.18	165.58	0.00	16.64	-0.08	5.41	-3.76	3.80	24.25	14.16	49.14	613.00	0.02	19.21	-0.01	0.29	-188.00
	Units		DU	DU	Du	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	KSF	Students	Acres	Acres	Acres	Acres	Students
	Land Use Description		Single Family DU	Multi-Family DU	Age-Restricted DU	Retail	Mall	Office	Industrial	High-Tech Industrial	Convention Center	Church/Worship Center	Lodging	Medical Office/Clinic	Hospital	Convalescent Home	Hotel Rooms	Public/Quasi-Public Low	Public/Quasi-Public High	School (K-12)	Golf Course	Park	Cemetery	Fairgrounds	University
	CalEEMod Land Use Type		Residential	Residential	Residential	Retail	Retail	Commercial	Industrial	Industrial	Recreational	Educational	Recreational	Commercial	Commercial	Residential	Recreational	Commercial	Commercial	Educational	Recreational	Recreational	Recreational	Recreational	Educational
	CalEEMod Land Use Subtype		Single Family Housing	Apartments Low Rise	Retirement Community	Strip Mall	Regional Shopping Center	Office Park	Industrial Park	General Light Industry	Arena	Place of Worship	Motel	Medical Office Building	Hospital	Congregate Care (Assisted Living)	Hotel	Government Civic Center	Government Civic Center	Elementary School	Golf Course	City Park	City Park	Arena	Junior College

Final Buildout Year	2035
Construction Start Year	2020
Total Construction Duration for	16
Maximum annual construction (	10%

*Notes: DU = Dwelling Units; KSF = Thousand Square Feet

Average Household Size	
Single-Family Units	2.9
Multi-Family Units	2.1
Age-Restricted	1.88

Added Population Estimates:

LandUse Baseline_GPU Type	CalEEMod Land Use	Size	Units	Lot Acreage	Land Use Square Feet	Population	Assumption
Single Family	Single Family Housing	14,288	DU	4638.96	25,718,400	41,435	2.9 persons per dwelling unit
Multi-Family	Apartments Low Rise	9,008	DU	563	900,800	18,917	2.1 persons per dwelling unit
Age-Restricted	Retirement Community	905	DU	181	905,000	1,701	1.88 persons per dwelling unit
Convalescent Home	Congregate Care (Assisted Living)	60.8	KSF	3.8	60,800	174	350 square feet per resident
						62,227	

Total Population Estimates (Existing + Buildout):

LandUse Baseline_GPU Type	CalEEMod Land Use	Size	Units	Lot Acreage	Land Use Square Feet	Population	Assumption
Single Family	Single Family Housing	50,403	DU	16,364.61	90,725,400	146,169	2.9 persons per dwelling unit
Multi-Family	Apartments Low Rise	20,538	DU	1,283.63	20,538,000	43,130	2.1 persons per dwelling unit
Age-Restricted	Retirement Community	4245	DU	849.00	4,245,000	7,981	1.88 persons per dwelling unit
Convalescent Home	Congregate Care (Assisted Living)	340	KSF	21.24	340,000	972	350 square feet per resident
						198,251	

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Sub-Area
Region: Placer (SV)
Calendar Year: 2035
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSX and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	Calendar Y	Vehicle Ca	Model Yea	Speed	Fuel	Population	VMT	Trips	ROG_RUN	ROG_IDLE	ROG_STRE	ROG_HOT	ROG_RUN	ROG_REST	ROG_DIUR	TOG_RUN	TOG_IDLE	TOG_STRE	TOG_HOT	TOG_RUN	TOG_REST	TOG_DIUR	CO_RUNE	CO_IDLEX	CO_STREX	NOx_RUNE	NOx_IDLE	NOx_STRE	CO2_RUNE	CO2_IDLE	CO2_STRE	CH4_RUNE	CH4_IDLE	CH4_STRE	PM10_RUI	PM10_IDL	PM10_STR	PM10_PM	PM10_PM	PM10_PM	PM2_5_RU	PM2_5_ID	PM2_5_ST	PM2_5_PI	PM2_5_PI	SOx_RUNE	SOx_IDLEX	SOx_STREX	N2O_RUN	N2O_IDLE	N2O_STREX
Placer (SV)	2035	All Other B	Aggregate	Aggregate	DSL	35.5526	1785.566	298.6419	0.010798	0.049332	0	0	0	0	0	0.012293	0.056161	0	0	0	0	0	0.139244	2.088954	0	2.090915	2.855497	2.214387	942.0376	565.778	0	0.000502	0.002291	0	0.005689	0.000713	0	0.012	0.13034	0.005443	0.000682	0	0.003	0.05586	0.0089	0.005345	0	0.148075	0.088932	0
Placer (SV)	2035	LDA	Aggregate	Aggregate	GAS	115557.8	3887645	544977.5	0.002392	0	0.092174	0.049292	0.164862	0.090338	0.12007	0.003491	0	0.100919	0.049292	0.164862	0.090338	0.12007	0.424776	0	1.591123	0.018225	0	0.117718	197.9706	0	41.21681	0.000774	0	0.023732	0.000667	0	0.000977	0.008	0.03675	0.000614	0	0.000898	0.002	0.01575	0.001959	0	0.000408	0.002965	0	0.018866
Placer (SV)	2035	LDA	Aggregate	Aggregate	DSL	1418.863	48222.16	6719.668	0.004752	0	0	0	0	0	0	0.00541	0	0	0	0	0	0	0.13843	0	0	0.012635	0	0	153.142	0	0	0.000221	0	0	0.001202	0	0	0.008	0.03675	0.00115	0	0	0.002	0.01575	0.001448	0	0	0.024072	0	0
Placer (SV)	2035	LDA	Aggregate	Aggregate	ELEC	6629.065	252364.7	32009.11	0	0	0	0.004888	0	0.007655	0.025178	0	0	0	0.004888	0	0.007655	0.025178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.03675	0	0	0	0.002	0.01575	0	0	0	0	0	0
Placer (SV)	2035	LDT1	Aggregate	Aggregate	GAS	17097.75	589347.1	78699.61	0.002857	0	0.112138	0.074809	0.290567	0.159368	0.207142	0.004169	0	0.122777	0.074809	0.290567	0.159368	0.207142	0.4424	0	1.692967	0.020449	0	0.137262	230.9207	0	49.18407	0.000892	0	0.027629	0.000739	0	0.001138	0.008	0.03675	0.000679	0	0.001046	0.002	0.01575	0.002285	0	0.000487	0.003182	0	0.020894
Placer (SV)	2035	LDT1	Aggregate	Aggregate	DSL	2.548698	81.99059	11.35262	0.017398	0	0	0	0	0	0	0.019806	0	0	0	0	0	0	0.181699	0	0	0.127675	0	0	300.0426	0	0	0.000808	0	0	0.006893	0	0	0.008	0.03675	0.006594	0	0	0.002	0.01575	0.002836	0	0	0.047163	0	0
Placer (SV)	2035	LDT1	Aggregate	Aggregate	ELEC	518.8695	19575.24	2498.44	0	0	0	0.004888	0	0.007655	0.025178	0	0	0	0.004888	0	0.007655	0.025178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.03675	0	0	0	0.002	0.01575	0	0	0	0	0	0
Placer (SV)	2035	LDT2	Aggregate	Aggregate	GAS	55493.52	1924882	256038.3	0.003355	0	0.137328	0.073952	0.28521	0.202667	0.248139	0.004895	0	0.150357	0.073952	0.28521	0.202667	0.248139	0.492271	0	2.134643	0.020184	0	0.141588	231.3485	0	50.845	0.001063	0	0.033681	0.000713	0	0.001073	0.008	0.03675	0.000656	0	0.000986	0.002	0.01575	0.002289	0	0.000503	0.003091	0	0.021321
Placer (SV)	2035	LDT2	Aggregate	Aggregate	DSL	530.6868	19415.54	2494.523	0.013381	0	0	0	0	0	0	0.015233	0	0	0	0	0	0	0.138877	0	0	0.029432	0	0	205.2887	0	0	0.000622	0	0	0.004215	0	0	0.008	0.03675	0.004032	0	0	0.002	0.01575	0.001941	0	0	0.032269	0	0
Placer (SV)	2035	LDT2	Aggregate	Aggregate	ELEC	2015.07	52254.43	9681.928	0	0	0	0.004888	0	0.007655	0.025178	0	0	0	0.004888	0	0.007655	0.025178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.03675	0	0	0	0.002	0.01575	0	0	0	0	0	0
Placer (SV)	2035	LHD1	Aggregate	Aggregate	GAS	2974.297	98644.19	44312.6	0.012052	0.329934	0.066196	0.089471	0.486547	0.020502	0.04508	0.017586	0.481439	0.072476	0.089471	0.486547	0.020502	0.04508	0.253082	3.773629	1.516885	0.079212	0.02875	0.363355	862.1073	106.8111	16.85163	0.003166	0.09732	0.014043	0.002195	0	0.000329	0.008	0.07644	0.002019	0	0.000302	0.002	0.03276	0.008531	0.001057	0.000167	0.005879	0.002703	0.032612
Placer (SV)	2035	LHD1	Aggregate	Aggregate	DSL	3436.262	108363.2	43223.85	0.138978	0.10976	0	0	0	0	0	0.158218	0.124954	0	0	0	0	0	0.660739	0.909745	0	0.716753	1.481492	0	476.2776	119.6163	0	0.006455	0.005098	0	0.014619	0.027182	0	0.012	0.07644	0.013987	0.026006	0	0.003	0.03276	0.006503	0.001131	0	0.074864	0.018802	0
Placer (SV)	2035	LHD2	Aggregate	Aggregate	GAS	462.7912	15239.16	6894.899	0.007994	0.328726	0.055977	0.064828	0.331802	0.017489	0.035349	0.011665	0.479676	0.061288	0.064828	0.331802	0.017489	0.035349	0.170649	3.780518	1.411699	0.065234	0.028624	0.360616	988.9115	122.7507	19.0616	0.00237	0.098195	0.012437	0.002073	0	0.000297	0.008	0.08918	0.001906	0	0.000274	0.002	0.03822	0.009786	0.001215	0.000189	0.005708	0.002693	0.032455
Placer (SV)	2035	LHD2	Aggregate	Aggregate	DSL	1341.059	41935.35	16868.84	0.135206	0.10976	0	0	0	0	0	0.153923	0.124954	0	0	0	0	0	0.646469	0.909745	0	0.552776	1.456975	0	534.4164	191.9036	0	0.00628	0.005098	0	0.019812	0.027405	0	0.012	0.08918	0.018955	0.026219	0	0.003	0.03822	0.005052	0.001814	0	0.084003	0.030165	0
Placer (SV)	2035	MCY	Aggregate	Aggregate	GAS	7738.661	39709.56	15477.32	2.121704	0	1.89639	0.803273	1.376879	1.248792	2.68458	2.654377	0	2.065123	0.803273	1.376879	1.248792	2.68458	17.35823	0	9.363747	1.136335	0	0.269341	207.7511	0	59.73273	0.315846	0	0.247378	0.002135	0	0.002713	0.004	0.01176	0.001991	0	0.002535	0.001	0.00504	0.002056	0	0.000591	0.06519	0	0.015161
Placer (SV)	2035	MDV	Aggregate	Aggregate	GAS	35780.23	1087699	163100.7	0.004678	0	0.163284	0.103336	0.336211	0.298493	0.367145	0.006826	0	0.178776	0.103336	0.336211	0.298493	0.367145	0.532623	0	2.234644	0.026783	0	0.162799	287.2777	0	63.06969	0.001343	0	0.037856	0.000759	0	0.001133	0.008	0.03675	0.000698	0	0.001042	0.002	0.01575	0.002843	0	0.000624	0.003467	0	0.022512
Placer (SV)	2035	MDV	Aggregate	Aggregate	DSL	1228.364	38751.05	5696.152	0.005843	0	0	0	0	0	0	0.006651	0	0	0	0	0	0	0.163038	0	0	0.015134	0	0	273.1957	0	0	0.000271	0	0	0.001637	0	0	0.008	0.03675	0.001566	0	0	0.002	0.01575	0.002583	0	0	0.042943	0	0
Placer (SV)	2035	MDV	Aggregate	Aggregate	ELEC	1387.218	36372.11	6690.445	0	0	0	0.004888	0	0.007655	0.025178	0	0	0	0.004888	0	0.007655	0.025178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.03675	0	0	0	0.002	0.01575	0	0	0	0	0	0
Placer (SV)	2035	MH	Aggregate	Aggregate	GAS	557.9828	5055.704	55.8206	0.01377	0	0.106172	0.038392	0.453605	0.020823	0.064209	0.020093	0	0.116245	0.038392	0.453605	0.020823	0.064209	0.231663	0	2.257556	0.135059	0	0.39072	1517.676	0	22.20224	0.004506	0	0.028685	0.001334	0	0.000283	0.012	0.13034	0.001227	0	0.000261	0.003	0.05586	0.015019	0	0.00022	0.013877	0	0.044348
Placer (SV)	2035	MH	Aggregate	Aggregate	DSL	358.3321	2669.469	35.83321	0.108855	0	0	0	0	0	0	0.123924	0	0	0	0	0	0	0.367533	0	0	3.708801	0	0	934.3533	0	0	0.005056	0	0	0.073757	0	0	0.016	0.13034	0.070567	0	0	0.004	0.05586	0.008833	0	0	0.146867	0	0
Placer (SV)	2035	Motor Coa	Aggregate	Aggregate	DSL	13.19952	1574.104	192.713	0.018515	3.994912	0	0	0	0	0	0.021078	4.547903	0	0	0	0	0	0.172056	59.0281	0	1.881471	47.20762	2.229987	1245.782	9143.424	0	0.00086	0.185553	0	0.0239	0.017002	0	0.012	0.13034	0.022866	0.016266	0	0.003	0.05586	0.01177	0.086383	0	0.19582	1.437219	0
Placer (SV)	2035	OBUS	Aggregate	Aggregate	GAS	83.63229	3119.149	1673.315	0.017435	0.749934	0.127712	0.027902	0.320563	0.01678	0.049937	0.025442	1.094302	0.139828	0.027902	0.320563	0.01678	0.049937	0.335141	5.796677	2.538075	0.138725	0.065306	0.306217	1470.705	329.9705	22.42988	0.004257	0.19944	0.025395	0.001349	0	0.000268	0.012	0.13034	0.00124	0	0.000246	0.003	0.05586	0.014554	0.003265	0.000222	0.01054	0.005724	0.025792
Placer (SV)	2035	PTO	Aggregate	Aggregate	DSL	0	6516.443	0	0.025296	0	0	0	0	0	0	0.028797	0	0	0	0	0	0	0.405353	0	0	4.562671	0	0	1646.358	0	0	0.001175	0	0	0.004792	0	0	0	0.004585	0	0	0	0	0.015554	0	0	0.258785	0	0
Placer (SV)	2035	SBUS	Aggregate	Aggregate	GAS	45.07108	1687.541	180.2843	0.012021	10.64152	0.296908	0.054604	0.379002	0.01108	0.033273	0.017542	15.52808	0.325077	0.054604	0.379002	0.01108	0.033273	0.202385	82.24088	7.417871	0.114226	0.92653	0.477224	727.4955	2203.343	41.29533	0.002722	2.410246	0.05232	0.001549	0	0.000703	0.008	0.7448	0.001424	0	0.000647	0.002	0.3192	0.007199	0.021804	0.000409	0.011336	0.095585	0.047705
Placer (SV)	2035	SBUS	Aggregate	Aggregate	DSL	225.371	7145.642	2600.75	0.061147	0.266885	0	0	0	0	0	0.069611	0.303829	0	0	0	0	0	0.214886	8.5091	0	3.193018	29.64875	1.451233	972.9682	3277.668	0	0.00284	0.012396	0	0.025546	0.017889	0	0.012	0.7448	0.024441	0.017116	0	0.003	0.3192	0.009192	0.030966	0	0.152937	0.515204	0
Placer (SV)	2035	T6 CAIRP h	Aggregate	Aggregate	DSL	26.06266	4460.069	380.5148	0.007762	0.049332	0	0	0	0	0	0.008836	0.056161	0	0	0	0	0	0.06433	2.088954	0	0.91848	2.855497	1.31518	693.2816	496.8328	0	0.000361	0.002291	0	0.009854	0.000713	0	0.012	0.13034	0.009428	0.000682	0	0.003	0.05586	0.00655	0.004694	0	0.108974	0.078095	0
Placer (SV)	2035	T6 CAIRP s	Aggregate	Aggregate	DSL	19.71602	875.8966	287.8538	0.007881	0.049332	0	0	0	0	0	0.008972	0.056161	0	0	0	0	0	0.065313	2.088954	0	0.944544	2.855497	1.315365	767.1512	495.0368	0	0.000366	0.002291	0	0.010246	0.000713	0	0.012	0.13034	0.009803	0.000682	0	0.003	0.05586	0.007248	0.004677	0	0.120585	0.077813	0
Placer (SV)	2035	T6 instate	Aggregate	Aggregate	DSL	82.25659	5195.976	371.8788	0.018327	0.049319	0	0	0	0	0	0.020864	0.056146	0	0	0	0	0	0.211607	2.083795	0	2.557335	2.884863	2.655787	1086.414	563.1988	0	0.000851	0.002291	0	0.011674	0.000756	0	0.012	0.13034	0.011169	0.000724	0	0.003	0.05586	0.010264	0.005321	0	0.170769	0.088527	0
Placer (SV)	2035	T6 instate	Aggregate	Aggregate	DSL	552.4827	27465.62	2497.753	0.014928	0.049333	0	0	0	0	0	0.016894	0.056161	0	0	0	0	0	0.186206	2.088538	0	2.092493	2.85758	2.6844	986.7217	526.0047	0	0.000693	0.002291	0	0.008739	0.000715	0	0.012	0.13034	0.008361	0.000684	0	0.003	0.05586	0.009322	0.004969	0	0.155099	0.082681	0
Placer (SV)	2035	T6 instate	Aggregate	Aggregate	DSL	1150.929	134248.8	13281.56	0.008982	0.049332	0	0	0	0	0	0.010225	0.056161	0	0	0	0	0	0.102205	2.088954	0	1.446174	2.855497	2.139644	770.6538	523.0805	0	0.000417	0.002291	0	0.006816	0.000713	0	0.012	0.13034	0.006521	0.000682	0	0.003	0.05586	0.007281	0.004942	0	0.121136	0.082221	0
Placer (SV)	2035	T6 instate	Aggregate	Aggregate	DSL	3913.041	188910.3	45155.95	0.008883	0.049332	0	0	0	0	0	0.010112	0.056161	0	0	0	0	0	0.101074	2.088954	0	1.419069	2.855497	2.141541	826.4758	512.1644	0	0.000413	0.002291	0	0.006642	0.000713	0	0.012	0.13034	0.006354	0.000682	0	0.003	0.05586	0.007808	0.004839	0	0.12991	0.080505	0
Placer (SV)	2035	T6 OOS he	Aggregate	Aggregate	DSL	14.5074	2498.117	211.808	0.007753	0.049332	0	0	0	0	0	0.008827	0.056161	0	0	0	0	0	0.064257	2.088954	0	0.916311	2.855497	1.315217	692.5423	495.9889	0	0.00036	0.002291	0	0.009825	0.000713	0	0.012	0.13034	0.0094	0.000682	0	0.003	0.05586	0.006543	0.004686	0	0.108858	0.077963	0
Placer (SV)	2035	T6 OOS un	Aggregate	Aggregate	DSL	7.897747	347.2486	115.3071	0.007907	0.049332	0	0	0	0	0	0.009001	0.056161	0	0	0	0	0	0.065527	2.088954	0	0.951544	2.855497	1.31518	768.9684	496.9289	0	0.000367	0.002291	0	0.01033	0.000713	0	0.012	0.13034	0.009884	0.000682	0	0.003	0.05586	0.007265	0.004695	0	0.112871	0.07811	0
Placer (SV)	2035	T6 Public	Aggregate	Aggregate	DSL	393.8122	6139.243	1194.564	0.019351	0.260189	0	0	0	0	0	0.022029	0.296206	0	0	0	0	0	0.127297	10.26055	0	1.698747	18.0764	2.892835	930.31	2819.357	0	0.000899	0.012085	0	0.006926	0.007679	0	0.012	0.13034	0.006627	0.007346	0	0.003	0.05586	0.008789	0.026636	0	0.146232	0.443164	0
Placer (SV)	2035	T6 utility	Aggregate	Aggregate	DSL	33.70568	562.2801	387.6153	0.007268	0.13558	0	0	0	0	0	0.008274	0.154348	0	0	0	0	0	0.085066	5.74113	0	0.942804	7.847841	1.971911	807.6738	1361.349	0	0.000338	0.006297	0	0.003391	0.001959	0	0.012	0.13034	0.003244	0.001874	0	0.003	0.05586	0.007631	0.012861	0	0.126955	0.213985	0
Placer (SV)	2035	T6TS	Aggregate	Aggregate	GAS	341.6607	14676.98	6835.947	0.012887	1.028119	0.152085	0.048685	0.237183	0.013101	0.026686	0.018805	1.500229	0.166514	0.048685	0.237183	0.013101	0.026686	0.234014	15.29555	3.054785	0.10246	0.089524	0.326679	1455.323	456.2143	31.23557	0.003321	0.274581	0.031114	0.001406	0	0.000423	0.012	0.13034	0.001293	0	0.000389	0.003	0.05586	0.014402	0.004515	0.000309	0.008889	0.008266	0.029832
Placer (SV)	2035	T7 CAIRP	Aggregate	Aggregate	DSL	207.4169	43902.39	3028.286	0.019958	10.43423	0	0	0	0	0	0.02272	11.87857	0	0	0	0	0	0.185464	154.1743	0	2.063772	123.3006	2.233176	978.1012	20567.36	0	0.000927	0.484643	0	0.027989	0.044406	0	0.036	0.06174	0.026778	0.042485	0	0.009	0.02646	0.009241	0.19431	0	0.153744	2.232902	0
Placer (SV)	2035	T7 CAIRP c	Aggregate	Aggregate	DSL	20.39027	3732.315	92.18361	0.035307	1.594405	0	0	0	0	0	0.040195	1.815109	0	0	0	0	0	0.491928	23.55864	0	4.002116	18.84098	4.565374	1316.09	3106.166	0	0.00164	0.074056	0	0.020873	0.006786	0	0.036	0.06174	0.01997	0.006492	0	0.009	0.02646	0.012434	0.029346	0	0.206871	0.488246	0
Placer (SV)	2035	T7 NNOOS	Aggregate	Aggregate	DSL	311.2435	53525.06	4544.155	0.018629	12.95028	0	0	0	0	0	0.021208	14.74291	0	0	0	0	0	0.17312	191.351	0	1.861994	153.0327	2.233405	963.4826	25097.42	0	0.000865	0.601507	0	0.024246	0.055114	0	0.036	0.06174	0.023198	0.05273	0	0.009	0.02646	0.009103	0.237108	0	0.151446	3.944965	0
Placer (SV)	2035	T7 NOOS	Aggregate	Aggregate	DSL	82.45604	17234.09	1203.858	0.019985	12.95028	0	0	0	0	0	0.022752	14.74291	0	0	0	0	0	0.18572	191.351	0	2.068443	153.0327	2.233117	979.8398	2582.24	0	0.000928	0.601507	0	0.028066	0.055114	0	0.036	0.06174	0.026852	0.05273	0	0.009	0.02646	0.009257	0.241688	0	0.154017	4.021172	0
Placer (SV)	2035	T7 other p	Aggregate	Aggregate	DSL	2.817993	443.7593	21.41675	0.029031	1.641997	0	0	0	0	0	0.033049	1.869289	0	0	0	0	0	0.414427	24.26185	0	3.994307	19.40337	1.786372	1216.712	3236.819	0	0.001348	0.076267	0	0.015691	0.006988	0	0.036	0.06174	0.015013	0.006686	0	0.009	0.02646	0.011495	0.03058	0	0.19125	0.508783	0
Placer (SV)	2035	T7 POAK	Aggregate	Aggregate	GAS	13.49755	2107.414	102.5814	0.029381	2.621748	0	0	0	0	0	0.033448	2.984661	0	0	0	0	0	0.419423	38.73848	0	4.062436	30.98104	1.786372	1232.563	5185.689	0	0.001365	0.121773	0	0.016048	0.011158	0	0.036	0.06174	0.015354	0.010675	0	0.009	0.02646	0.011645	0.048992	0	0.193742	0.815118	0
Placer (SV)	2035	T7 Public	Aggregate	Aggregate	DSL	298.2996	6043.071	904.842	0.055487	1.147128	0	0	0	0	0	0.063168	1.305918	0	0	0	0	0	0.303576	15.4934	0	4.143594	20.67321	4.439152	1402.751	2707.642	0	0.002577	0.053281	0	0.016642	0.017535	0	0.036	0.06174	0.015922	0.016776	0	0.009	0.02646	0.013252	0.02558	0	0.220493	0.425604	0
Placer (SV)	2035	T7 Single	Aggregate	Aggregate	DSL	414.3114	32818.11	4781.096	0.01784	2.186104	0	0	0	0	0	0.020309	2.488713	0	0	0	0	0	0.218114	32.30148	0	2.128234	25.83305	3.625568	1221.243	4632.343	0	0.000829	0.101539	0	0.01275	0.009304	0	0.036	0.06174	0.012198	0.008901	0	0.009	0.02646	0.011538	0.043764	0	0.191962	0.72814	0
Placer (SV)	2035	T7 single c	Aggregate	Aggregate	DSL	124.3229	9259.187	562.0591	0.03263	1.591715	0	0	0	0	0	0.037146	1.812047	0	0	0	0	0	0.432124	23.50923	0	3.332707	18.86767	4.532952	1486.404	3437.545	0	0.001516	0.073931	0	0.015998	0.006869	0	0.036	0.06174	0.015306	0.006572	0	0.009	0.02646	0.014043	0.032476	0	0.233642	0.540334	0
Placer (SV)	2035	T7 SWCV	Aggregate	Aggregate	DSL	166.9187	6806.534	650.9829	0.029759	1.446922	0	0	0	0	0	0.033878	1.644934	0	0	0	0	0	0.07925	20.2766	0	1.865904	22.72213	4.928451	3093.936	384.25	0	0.001382	0.067113	0	0.016949	0.01424	0	0.036	0.06174	0.016216	0.013624	0	0.009	0.02646	0.02923	0.031028	0	0.486324	0.516238	0
Placer (SV)	2035	T7 tractor	Aggregate	Aggregate	DSL	273.2711	32861.51	3470.543	0.018389	1.879641	0	0	0	0	0	0.020934	2.139828	0	0	0	0	0	0.15913	27.77323	0	1.835003	22.2116	1.870108	1014.136	3992.244	0	0.000854	0.087304	0	0.027473	0.007999	0	0.036	0.06174	0.026285	0.007653	0	0.009	0.02646	0.009581	0.037717	0	0.159408	0.627525	0
Placer (SV)	2035	T7 tractor	Aggregate	Aggregate	GAS	103.2217	7638.014	466.6613	0.037574	1.593727	0	0	0	0	0	0.042775	1.814337	0	0	0	0	0	0.516235	23.54414	0	4.295398	18.8502	4.548944	1469.734	3374.792	0	0.001745	0.074024	0	0.022951	0.006805	0	0.036	0.06174	0.021959	0.006511	0	0.009	0.02646	0.013885	0.031883	0	0.231022	0.53047	0
Placer (SV)	2035	T7 utility	Aggregate	Aggregate	DSL	6.457847	130.8456	74.26524	0.015734	0.635427	0	0	0	0	0	0.017912	0.723385	0	0	0	0	0	0.020053	9.388957	0	1.75135	7.508802	3.320832	1303.432	1386.027	0	0.000731	0.029514	0	0.006908	0.002704	0	0.036	0.06174	0.00661	0.002587	0	0.009	0.02646	0.012314	0.013094	0	0.204881	0.217864	0
Placer (SV)	2035	TTIS	Aggregate	Aggregate	GAS	1.253791	132.9878	25.08585	0.302296	0	0.001408	0.044345	0.220057	0.012938	0.026113	0.44111	0	0.001542	0.044345	0.220057	0.012938	0.026113	28.89756	0	5.043322	3.008323	0	0.006834	1585.325	0	37.73186	0.068736	0	0.000272	0.001151	0	0.00042	0.02	0.06174	0.001058	0	0.000386	0.005	0.02646	0.015688	0	0.000373	0.131454	0	0.000339
Placer (SV)	2035	UBUS	Aggregate	Aggregate	GAS	55.98137	4501.1	223.9255	0.021063	0	0.492757	0.041263	0.240993	0.007786	0.017429	0.030735	0	0.539507	0.041263	0.240993	0.007786	0.017429	0.343834	0	8.436673	0.263473	0	0.823343	1668.348	0	77.11405	0.006323	0	0.114833	0.002385	0	0.000931	0.01161	0.126331	0.002193	0	0.000856	0.002903	0.054142	0.01651	0	0.000763	0.02287	0	0.072351
Placer (SV)	2035	UBUS	Aggregate	Aggregate	DSL	106.5037	11080.4	426.0149	0.000797	0	0	0

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Placer (SV)
Calendar Year: 2035
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX	NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CO2_TOTEX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	CH4_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW
Placer (SV)	2035	All Other Buses	Aggregated	Aggregated	DSL	0.000274067	8.18662E-05	0	0.000355933	0.00411544	0.000111907	0.000728968	0.004956315	1.854163994	0.022172853	0	1.876336847	9.87191E-07	8.97977E-08	0	1.07699E-06	1.11967E-05	2.79328E-08	0	1.12246E-05	2.3619E-05	0.000256542
Placer (SV)	2035	LDA	Aggregated	Aggregated	DSL	0.007358335	0	0	0.007358335	0.00067163	0	0	0.00067163	8.140389367	0	0	8.140389367	1.17335E-05	0	0	1.17335E-05	6.38805E-05	0	0	6.38805E-05	0.000425247	0.001953477
Placer (SV)	2035	LDT1	Aggregated	Aggregated	DSL	1.64218E-05	0	0	1.64218E-05	1.15391E-05	0	0	1.15391E-05	0.027117592	0	0	0.027117592	7.30357E-08	0	0	7.30357E-08	6.22947E-07	0	0	6.22947E-07	7.23033E-07	3.32143E-06
Placer (SV)	2035	LDT2	Aggregated	Aggregated	DSL	0.002929443	0	0	0.002929443	0.000629904	0	0	0.000629904	4.393581199	0	0	4.393581199	1.33018E-05	0	0	1.33018E-05	9.02025E-05	0	0	9.02025E-05	0.000171216	0.000786522
Placer (SV)	2035	LHD1	Aggregated	Aggregated	DSL	0.078925207	0.003445959	0	0.082371166	0.085616103	0.005611638	0	0.091227741	56.89134048	0.453085958	0	57.34442644	0.000771082	1.93108E-05	0	0.000790393	0.001746269	0.000102961	0	0.00184923	0.0014334	0.009130758
Placer (SV)	2035	LHD2	Aggregated	Aggregated	DSL	0.029883524	0.001344844	0	0.031228368	0.025552491	0.002153794	0	0.027706285	24.70382557	0.283684266	0	24.98750984	0.0002903	7.53638E-06	0	0.000297836	0.00091583	4.05113E-05	0	0.000956342	0.00055471	0.004122418
Placer (SV)	2035	MDV	Aggregated	Aggregated	DSL	0.006964283	0	0	0.006964283	0.000646476	0	0	0.000646476	11.66974873	0	0	11.66974873	1.15921E-05	0	0	1.15921E-05	6.992E-05	0	0	6.992E-05	0.000341726	0.001569803
Placer (SV)	2035	MH	Aggregated	Aggregated	DSL	0.001081496	0	0	0.001081496	0.010913464	0	0	0.010913464	2.749414385	0	0	2.749414385	1.4878E-05	0	0	1.4878E-05	0.000217038	0	0	0.000217038	4.70814E-05	0.000383537
Placer (SV)	2035	Motor Coach	Aggregated	Aggregated	DSL	0.000298543	0.000858857	0	0.0011574	0.003264638	0.00068687	0.000473715	0.004425224	2.161621397	0.133036604	0	2.294658001	1.49218E-06	2.6998E-06	0	4.19197E-06	4.14707E-05	2.47373E-07	0	4.17181E-05	2.08218E-05	0.00022616
Placer (SV)	2035	PTO	Aggregated	Aggregated	DSL	0.002911709	0	0	0.002911709	0.032774336	0	0	0.032774336	11.8260317	0	0	11.8260317	8.43967E-06	0	0	8.43967E-06	3.44228E-05	0	0	3.44228E-05	0	0
Placer (SV)	2035	SBUS	Aggregated	Aggregated	DSL	0.001692594	0.002113906	0	0.0038065	0.02515051	0.007365606	0.004160446	0.036676562	7.663797391	0.814267498	0	8.478064889	2.23708E-05	3.07956E-06	0	2.54504E-05	0.00020122	4.44425E-06	0	0.000205664	9.45207E-05	0.005866582
Placer (SV)	2035	T6 CAIRP heavy	Aggregated	Aggregated	DSL	0.000316271	6.00139E-05	0	0.000376284	0.0045156	8.2036E-05	0.000551647	0.005149283	3.408437646	0.014273588	0	3.422711234	1.77249E-06	6.58283E-08	0	1.83831E-06	4.84463E-05	2.04768E-08	0	4.84668E-05	5.89966E-05	0.000640802
Placer (SV)	2035	T6 CAIRP small	Aggregated	Aggregated	DSL	6.30609E-05	4.53996E-05	0	0.00010846	0.000911967	6.2059E-05	0.000417371	0.001391397	0.740692453	0.010758725	0	0.751451179	3.53414E-07	4.97981E-08	0	4.03212E-07	9.8925E-06	1.54904E-08	0	9.90799E-06	1.15861E-05	0.000125845
Placer (SV)	2035	T6 instate construc	Aggregated	Aggregated	DSL	0.001211995	0.000188943	0	0.001400937	0.014647345	0.000261577	0.001088676	0.015997599	6.222527747	0.051066554	0	6.273594302	4.87568E-06	2.07709E-07	0	5.08338E-06	6.6861E-05	6.85814E-08	0	6.69296E-05	6.8731E-05	0.000746533
Placer (SV)	2035	T6 instate construc	Aggregated	Aggregated	DSL	0.005637508	0.001271948	0	0.006909456	0.063351611	0.001740288	0.007390958	0.072482858	29.87364789	0.320340918	0	30.19398881	2.09921E-05	1.39546E-06	0	2.23876E-05	0.000264581	4.35428E-07	0	0.000265016	0.000363308	0.00394613
Placer (SV)	2035	T6 instate heavy	Aggregated	Aggregated	DSL	0.015124654	0.002650218	0	0.017774873	0.214010465	0.003622717	0.031325272	0.248958455	114.0443745	0.663622755	0	114.7079973	6.17368E-05	2.90698E-06	0	6.46437E-05	0.001008708	9.04257E-07	0	0.001009612	0.001775808	0.019288231
Placer (SV)	2035	T6 instate small	Aggregated	Aggregated	DSL	0.021047348	0.009010469	0	0.030057817	0.295504034	0.012316867	0.106597116	0.414418017	172.103623	2.209163701	0	174.3127867	8.59129E-05	9.88345E-06	0	9.57963E-05	0.001383062	3.07438E-06	0	0.001386137	0.002498856	0.027141741
Placer (SV)	2035	T6 OOS heavy	Aggregated	Aggregated	DSL	0.000176946	3.34058E-05	0	0.000210352	0.002523246	4.56641E-05	0.000307075	0.002875985	1.907055079	0.007931686	0	1.914986765	9.91662E-07	3.66424E-08	0	1.0283E-06	2.70559E-05	1.13981E-08	0	2.70673E-05	3.30444E-05	0.000358918
Placer (SV)	2035	T6 OOS small	Aggregated	Aggregated	DSL	2.50824E-05	1.8186E-05	0	4.32683E-05	0.000364228	2.48593E-05	0.000167165	0.000556253	0.294342649	0.004326151	0	0.2986688	1.4057E-07	1.99479E-08	0	1.60518E-07	3.95424E-06	6.20507E-09	0	3.96045E-06	4.59331E-06	4.9891E-05
Placer (SV)	2035	T6 Public	Aggregated	Aggregated	DSL	0.000861466	0.004454141	0	0.005315607	0.011496021	0.00784703	0.00380923	0.023152281	6.295738189	1.223892789	0	7.519630978	6.08243E-06	5.24619E-06	0	1.13286E-05	4.68717E-05	3.33327E-06	0	5.0205E-05	8.12083E-05	0.000882057
Placer (SV)	2035	T6 utility	Aggregated	Aggregated	DSL	5.27246E-05	0.000213307	0	0.000266031	0.000584357	0.00029158	0.000842544	0.001718481	0.500602284	0.050579732	0	0.551182017	2.09244E-07	2.33973E-07	0	4.43216E-07	2.10175E-06	7.27804E-08	0	2.17453E-06	7.43769E-06	8.07857E-05
Placer (SV)	2035	T7 CAIRP	Aggregated	Aggregated	DSL	0.00897537	0.035250075	0	0.044225445	0.099874384	0.028191188	0.007454593	0.135520165	47.3343127	4.702477386	0	52.03679008	4.48607E-05	0.000110808	0	0.000155668	0.001354485	1.01529E-05	0	0.001364638	0.001742188	0.002987852
Placer (SV)	2035	T7 CAIRP construct	Aggregated	Aggregated	DSL	0.002023874	0.000529514	0	0.002553388	0.016465395	0.000423478	0.000463911	0.017352783	5.414621388	0.069815473	0	5.484436861	6.74696E-06	1.66451E-06	0	8.41147E-06	8.58744E-05	1.52514E-07	0	8.6027E-05	0.00014811	0.000254009
Placer (SV)	2035	T7 NNOOS	Aggregated	Aggregated	DSL	0.01021428	0.065650071	0	0.075864351	0.109859959	0.052503534	0.011187287	0.17355078	56.84668686	8.610602959	0	65.45728982	5.1053E-05	0.000206369	0	0.000257422	0.001430572	1.89089E-05	0	0.001449481	0.002124046	0.003642739
Placer (SV)	2035	T7 NOOS	Aggregated	Aggregated	DSL	0.003528192	0.017392314	0	0.020920506	0.039294875	0.013909474	0.002963405	0.056167753	18.61433327	2.325225775	0	20.93955904	1.76346E-05	5.46723E-05	0	7.23069E-05	0.00053318	5.00944E-06	0	0.000538189	0.000683904	0.001172895
Placer (SV)	2035	T7 other port	Aggregated	Aggregated	DSL	0.000202721	7.53647E-05	0	0.000278086	0.001953858	6.02728E-05	4.21725E-05	0.002056303	0.595167746	0.010054545	0	0.605222291	6.59585E-07	2.36907E-07	0	8.96492E-07	7.67559E-06	2.1707E-08	0	7.6973E-06	1.76098E-05	3.02008E-05
Placer (SV)	2035	T7 POAK	Aggregated	Aggregated	DSL	0.00097433	0.00057637	0	0.0015507	0.009437141	0.000460951	0.000201997	0.010100089	2.863275655	0.077155241	0	2.940430896	3.17013E-06	1.81181E-06	0	4.98193E-06	3.72795E-05	1.6601E-07	0	3.74455E-05	8.36289E-05	0.000143424
Placer (SV)	2035	T7 Public	Aggregated	Aggregated	DSL	0.002022222	0.005094523	0	0.007116744	0.027601904	0.00679774	0.004427687	0.038827331	9.344205422	0.890323796	0	10.23452922	1.71679E-05	1.75198E-05	0	3.46877E-05	0.000110856	5.76568E-06	0	0.000116622	0.000239808	0.000411271
Placer (SV)	2035	T7 Single	Aggregated	Aggregated	DSL	0.007890453	0.014752084	0	0.022642537	0.076990474	0.011797954	0.019107665	0.107896093	44.17941368	2.1155907	0	46.29500438	2.99755E-05	4.63728E-05	0	7.63483E-05	0.000461243	4.24899E-06	0	0.000465492	0.001302328	0.002233492
Placer (SV)	2035	T7 single construct	Aggregated	Aggregated	DSL	0.004410472	0.003221764	0	0.007632237	0.034015281	0.002585673	0.002808453	0.039409408	15.17098729	0.471089843	0	15.64207713	1.54686E-05	1.01317E-05	0	2.56003E-05	0.000163281	9.41401E-07	0	0.000164222	0.000367434	0.00063015
Placer (SV)	2035	T7 SWCV	Aggregated	Aggregated	DSL	0.000594605	0.00373082	0	0.004325425	0.013999724	0.004180789	0.003536586	0.021717098	23.2135413	0.604289885	0	23.81783119	1.03707E-05	1.23485E-05	0	2.27192E-05	0.000127165	2.6202E-06	0	0.000129785	0.000270105	0.00046323
Placer (SV)	2035	T7 tractor	Aggregated	Aggregated	DSL	0.005764263	0.008366123	0	0.014130386	0.06647042	0.006690793	0.007154317	0.08031553	36.73565723	1.202582377	0	37.9382396	3.09391E-05	2.62987E-05	0	5.72378E-05	0.000995177	2.40966E-06	0	0.000997587	0.00130405	0.002236446
Placer (SV)	2035	T7 tractor construc	Aggregated	Aggregated	DSL	0.004346422	0.00267891	0	0.007025332	0.036164959	0.002144822	0.002340004	0.040649784	12.37437415	0.383992068	0	12.75836622	1.46938E-05	8.42269E-06	0	2.31165E-05	0.000193239	7.74324E-07	0	0.000194013	0.000303101	0.000519818
Placer (SV)	2035	T7 utility	Aggregated	Aggregated	DSL	2.95753E-05	6.68358E-05	0	9.64111E-05	0.000252602	5.34518E-05	0.000271855	0.000577908	0.187997431	0.009866507	0	0.197863938	1.05406E-07	2.10097E-07	0	3.15502E-07	9.96413E-07	1.92505E-08	0	1.01566E-06	5.19237E-06	8.90492E-06
Placer (SV)	2035	UBUS	Aggregated	Aggregated	DSL	0.001072209	0	0	0.001072209	0.007513607	0	0	0.007513607	14.90433289	0	0	14.90433289	0.000657863	0	0	0.000657863	5.82732E-05	0	0	5.82732E-05	0.000252511	0.001289067
Placer (SV)	2035	LDA	Aggregated	Aggregated	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002225476	0.010223278
Placer (SV)	2035	LDT1	Aggregated	Aggregated	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000172624	0.000792992
Placer (SV)	2035	LDT2	Aggregated	Aggregated	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000460805	0.002116824
Placer (SV)	2035	MDV	Aggregated	Aggregated	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000320747	0.001473432
Placer (SV)	2035	LDA	Aggregated	Aggregated	GAS	1.820334054	0	0.955842765	2.776176819	0.078100933	0	0.070717485	0.148818418	848.3821646	0	24.76036888	873.1425335	0.003316042	0	0.014256361	0.017572404	0.002859781	0	0.000586995	0.003446777	0.034283162	0.157488275
Placer (SV)	2035	LDT1	Aggregated	Aggregated	GAS	0.287402178	0	0.146867344	0.434269522	0.013284806	0	0.011907635	0.025192441	150.0161718	0	4.266789111	154.2829609	0.000579387	0	0.002396824	0.002976211	0.000480074	0	9.87001E-05	0.000578774	0.005197152	0.023874415
Placer (SV)	2035	LDT2	Aggregated	Aggregated	GAS	1.044509981	0	0.602468634	1.646978615	0.042826769	0	0.039960844	0.082787613	490.8796056	0	14.35018094	505.2297865	0.002255546	0	0.009505951	0.011761497	0.00151285	0	0.000302745	0.001815596	0.016974555	0.077976864
Placer (SV)	2035	LHD1	Aggregated	Aggregated	GAS	0.027519258	0.012372222	0.074094182	0.113985661	0.008613282	9.42611E-05	0.017748535	0.026456078	93.74259027	0.350190915	0.823139138	94.91592033	0.000344274	0.000319075	0.000685932	0.001349281	0.000238713	0	1.60592E-05	0.000254772	0.000869893	0.008311826
Placer (SV)	2035	LHD2	Aggregated	Aggregated	GAS	0.002866606	0.001928593	0.010729365	0.015524564	0.001095818	1.46023E-05	0.002740795	0.003851216	16.6120271	0.062620043	0.144874353	16.8195215	3.98157E-05	5.00934E-05	9.45223E-05	0.000184431	3.48286E-05	0	2.26098E-06	3.70896E-05	0.000134386	0.001498072
Placer (SV)	2035	MCY	Aggregated	Aggregated	GAS	0.759809363	0	0.159753234	0.919562597	0.049739984	0	0.00459518	0.054335165	9.093740154	0	1.019089608	10.11282976	0.013825296	0	0.00421876	0.018044056	9.34702E-05	0	4.62833E-05	0.000139754	0.000175089	0.000514762
Placer (SV)	2035	MDV	Aggregated	Aggregated	GAS	0.638605559	0	0.401761425	1.040366984	0.032112349	0	0.029269161	0.061381509	344.441018	0	11.33915135	355.7801694	0.001610453	0	0.00680602	0.008416473	0.000910607	0	0.000203729	0.001114336	0.009591865	0.044062631
Placer (SV)	2035	MH	Aggregated	Aggregated	GAS	0.001291048	0	0.000138911	0.00142996	0.000752676	0	2.40416E-05	0.000776718	8.457944101	0	0.001366141	8.459310242	2.51138E-05	0	1.76505E-06	2.68789E-05	7.43624E-06	0	1.74365E-08	7.45368E-06	6.68755E-05	0.00072638
Placer (SV)	2035	OBUS	Aggregated	Aggregated	GAS	0.001152307	0.000534389	0.004681514	0.00636821	0.000476975	6.02045E-06	0.000564821	0.001047816	5.056685625	0.030419577	0.041372221	5.128477424	1.4638E-05	1.83861E-05	4.68417E-05	7.98658E-05	4.63798E-06	0	4.94037E-07	5.13201E-06	4.12593E-05	0.000448145
Placer (SV)	2035	SBUS	Aggregated	Aggregated	GAS	0.000376475	0.004085919	0.001474149	0.005936543	0.000212483	4.60322E-05	9.48385E-05	0.000353354	1.353283325	0.109467236	0.008206595	1.470957156	5.06321E-06	0.000119747	1.03975E-05	0.000135207	2.88072E-06	0	1.39795E-07	3.02051E-06	1.48816E-05	0.001385473
Placer (SV)	2035	T6TS	Aggregated	Aggregated	GAS	0.003786022	0.005760553	0.023018842	0.032565417	0.001657653	3.37163E-05	0.002461639	0.004153009	23.54507391	0.171817777	0.235370655	23.95226234	5.37362E-05	0.000103412	0.000234452	0.0003916	2.27469E-05	0	3.19003E-06	2.59369E-05	0.000194143	0.002108719
Placer (SV)	2035	T7IS	Aggregated	Aggregated	GAS	0.004236206	0	0.00013946	0.004375666	0.000441002	0	1.8897E-07	0.000441191	0.232398975	0	0.001043377	0.233442352	1.00762E-05	0	7.51022E-09	1.00837E-05	1.68738E-07	0	1.1613E-08	1.80351E-07	2.93188E-06	9.05071E-06
Placer (SV)	2035	UBUS	Aggregated	Aggregated	GAS	0.001705972	0	0.002082471	0.003788443	0.001307251	0	0.00020323	0.001510481	8.27769705	0	0.019034487	8.296731537	3.13727E-05	0	2.8345E-05	5.97177E-05	1.18323E-05	0	2.29886E-07	1.20622E-05	5.76063E-05	0.000626806

Fuel	% VMT by Fuel Type	Weighted Ave Fuel
Gasoline	0.86132001	0.02831079
Diesel	0.098201712	0.079774063

*remaining 5% VMT is electric and not accounted for in fuel consumption calculation

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Placer (SV)
Calendar Year: 2035
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	PM10_TOTAL	PM2_5_RUNEX	PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW	PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	N2O_TOTEX	Fuel Consumption	Fuel Consumption per
Placer (SV)	2035	All Other Buses	Aggregated	Aggregated	DSL	0.000291385	1.07123E-05	2.67244E-08	0	1.0739E-05	5.90475E-06	0.000109946	0.00012659	1.75172E-05	2.09478E-07	0	1.77267E-05	0.000291449	3.48526E-06	0	0.000294934	0.167224826	0.093653706
Placer (SV)	2035	LDA	Aggregated	Aggregated	DSL	0.002442604	6.11171E-05	0	0	6.11171E-05	0.000106312	0.000837204	0.001004633	7.6956E-05	0	0	7.6956E-05	0.001279556	0	0	0.001279556	0.725496169	0.01504487
Placer (SV)	2035	LDT1	Aggregated	Aggregated	DSL	4.66741E-06	5.95999E-07	0	0	5.95999E-07	1.80758E-07	1.42347E-06	2.20023E-06	2.56359E-07	0	0	2.56359E-07	4.26251E-06	0	0	4.26251E-06	0.002416802	0.029476578
Placer (SV)	2035	LDT2	Aggregated	Aggregated	DSL	0.001047941	8.63003E-05	0	0	8.63003E-05	4.28039E-05	0.000337081	0.000466185	4.15351E-05	0	0	4.15351E-05	0.00069061	0	0	0.00069061	0.391569271	0.020167828
Placer (SV)	2035	LHD1	Aggregated	Aggregated	DSL	0.012413388	0.001670726	9.8507E-05	0	0.001769233	0.00035835	0.003913182	0.006040765	0.000537828	4.28329E-06	0	0.000542111	0.008942526	7.12188E-05	0	0.009013745	5.110709063	0.047162766
Placer (SV)	2035	LHD2	Aggregated	Aggregated	DSL	0.005633469	0.000876212	3.87588E-05	0	0.000914971	0.000138677	0.001766751	0.002820399	0.00023354	2.68184E-06	0	0.000236222	0.003883097	4.45912E-05	0	0.003927689	2.2269626	0.053104661
Placer (SV)	2035	MDV	Aggregated	Aggregated	DSL	0.001981448	6.68953E-05	0	0	6.68953E-05	8.54314E-05	0.000672773	0.000825099	0.000110321	0	0	0.000110321	0.001834322	0	0	0.001834322	1.040043371	0.026839104
Placer (SV)	2035	MH	Aggregated	Aggregated	DSL	0.000647656	0.000207649	0	0	0.000207649	1.17703E-05	0.000164373	0.000383792	2.59919E-05	0	0	2.59919E-05	0.00043217	0	0	0.00043217	0.245036142	0.091792081
Placer (SV)	2035	Motor Coach	Aggregated	Aggregated	DSL	0.0002887	3.96767E-05	2.36672E-07	0	3.99134E-05	5.20546E-06	9.69256E-05	0.000142044	2.04219E-05	1.25686E-06	0	2.16788E-05	0.000339777	2.09115E-05	0	0.000360688	0.204506875	0.129919578
Placer (SV)	2035	PTO	Aggregated	Aggregated	DSL	3.44228E-05	3.29337E-05	0	0	3.29337E-05	0	0	3.29337E-05	0.000111726	0	0	0.000111726	0.001858887	0	0	0.001858887	1.053971784	0.161740349
Placer (SV)	2035	SBUS	Aggregated	Aggregated	DSL	0.006166767	0.000192515	4.252E-06	0	0.000196767	2.36302E-05	0.00251425	0.002734647	7.24038E-05	7.6928E-06	0	8.00966E-05	0.001204642	0.000127992	0	0.001332634	0.755590835	0.105741493
Placer (SV)	2035	T6 CAIRP heavy	Aggregated	Aggregated	DSL	0.000748265	4.63505E-05	1.9591E-08	0	4.63701E-05	1.47492E-05	0.000274629	0.000335749	3.22012E-05	1.3485E-07	0	3.23361E-05	0.000535759	2.24361E-06	0	0.000538003	0.305042397	0.068394103
Placer (SV)	2035	T6 CAIRP small	Aggregated	Aggregated	DSL	0.000147339	9.46455E-06	1.48203E-08	0	9.47937E-06	2.89653E-06	5.39334E-05	6.63093E-05	6.9977E-06	1.01643E-07	0	7.09934E-06	0.000116427	1.69112E-06	0	0.000118118	0.066971606	0.076460634
Placer (SV)	2035	T6 instate construc	Aggregated	Aggregated	DSL	0.000882194	6.39686E-05	6.56146E-08	0	6.40342E-05	1.71828E-05	0.000319943	0.00040116	5.87874E-05	4.82451E-07	0	5.92698E-05	0.000978095	8.02695E-06	0	0.000986122	0.559121736	0.107606674
Placer (SV)	2035	T6 instate construc	Aggregated	Aggregated	DSL	0.004574455	0.000253135	4.16591E-07	0	0.000253552	9.0827E-05	0.001691199	0.002035578	0.000282231	3.02642E-06	0	0.000285258	0.004695721	5.03531E-05	0	0.004746075	2.690979784	0.09797629
Placer (SV)	2035	T6 instate heavy	Aggregated	Aggregated	DSL	0.022073651	0.000965072	8.65139E-07	0	0.000965937	0.000443952	0.008266385	0.009676274	0.001077435	6.26958E-06	0	0.001083704	0.017926188	0.000104312	0	0.0180305	10.22312433	0.076150581
Placer (SV)	2035	T6 instate small	Aggregated	Aggregated	DSL	0.031026734	0.001323232	2.94138E-06	0	0.001326173	0.000624714	0.011632175	0.013583062	0.00162595	2.08711E-05	0	0.001646821	0.027052293	0.00034725	0	0.027399543	15.5352838	0.082236282
Placer (SV)	2035	T6 OOS heavy	Aggregated	Aggregated	DSL	0.000419029	2.58855E-05	1.0905E-08	0	2.58964E-05	8.26111E-06	0.000153822	0.000187979	1.80169E-05	7.49346E-08	0	1.80918E-05	0.000299763	1.24675E-06	0	0.000301009	0.170669424	0.068319228
Placer (SV)	2035	T6 OOS small	Aggregated	Aggregated	DSL	5.84448E-05	3.78318E-06	5.93664E-09	0	3.78912E-06	1.14833E-06	2.13819E-05	2.63193E-05	2.7808E-06	4.08713E-08	0	2.82167E-06	4.62666E-05	6.80011E-07	0	4.69466E-05	0.026618269	0.076654782
Placer (SV)	2035	T6 Public	Aggregated	Aggregated	DSL	0.001013471	4.48441E-05	3.18907E-06	0	4.80331E-05	2.03021E-05	0.000378025	0.00044636	5.9479E-05	1.15627E-05	0	7.10417E-05	0.000989602	0.000192379	0	0.001181981	0.670172301	0.109162044
Placer (SV)	2035	T6 utility	Aggregated	Aggregated	DSL	9.0398E-05	2.01083E-06	6.9632E-08	0	2.08046E-06	1.85942E-06	3.46225E-05	3.85623E-05	4.72944E-06	4.77852E-07	0	5.20729E-06	7.86877E-05	7.95043E-06	0	8.66381E-05	0.049123012	0.087363957
Placer (SV)	2035	T7 CAIRP	Aggregated	Aggregated	DSL	0.006094677	0.001295891	9.71374E-06	0	0.001305604	0.000435547	0.001280508	0.003021659	0.000447191	4.44267E-05	0	0.000491618	0.007440295	0.000739164	0	0.008179459	4.637676426	0.105636083
Placer (SV)	2035	T7 CAIRP construct	Aggregated	Aggregated	DSL	0.000488146	8.21595E-05	1.45916E-07	0	8.23055E-05	3.70276E-05	0.000108861	0.000228194	5.11547E-05	6.59582E-07	0	5.18142E-05	0.000851103	1.0974E-05	0	0.000862077	0.488789633	0.130961518
Placer (SV)	2035	T7 NNOOS	Aggregated	Aggregated	DSL	0.007216266	0.001368686	1.8091E-05	0	0.001386777	0.000531011	0.001561174	0.003478962	0.000537059	8.13487E-05	0	0.000618408	0.008935508	0.001353467	0	0.010288974	5.833752033	0.108991051
Placer (SV)	2035	T7 NOOS	Aggregated	Aggregated	DSL	0.002394988	0.000510114	4.79274E-06	0	0.000514907	0.000170976	0.000502669	0.001188552	0.000175859	2.19676E-05	0	0.000197827	0.002925914	0.000365493	0	0.003291407	1.866196958	0.10828523
Placer (SV)	2035	T7 other port	Aggregated	Aggregated	DSL	5.55079E-05	7.34355E-06	2.0768E-08	0	7.36432E-06	4.40245E-06	1.29432E-05	2.471E-05	5.62285E-06	9.49904E-08	0	5.71784E-06	9.35521E-05	1.58043E-06	0	9.51325E-05	0.053939245	0.121550691
Placer (SV)	2035	T7 POAK	Aggregated	Aggregated	DSL	0.000264498	3.56668E-05	1.58828E-07	0	3.58256E-05	2.09072E-05	6.14673E-05	0.0001182	2.70508E-05	7.28924E-07	0	2.77797E-05	0.000450067	1.21277E-05	0	0.000462195	0.262060112	0.124351529
Placer (SV)	2035	T7 Public	Aggregated	Aggregated	DSL	0.000767702	0.000106061	5.51625E-06	0	0.000111577	5.99521E-05	0.000176259	0.000347788	8.82794E-05	8.41134E-06	0	9.66908E-05	0.001468779	0.000139947	0	0.001608725	0.912132259	0.150938536
Placer (SV)	2035	T7 Single	Aggregated	Aggregated	DSL	0.004001312	0.000441289	4.06518E-06	0	0.000445355	0.000325582	0.000957211	0.001728147	0.000417385	1.99871E-05	0	0.000437372	0.006944389	0.000332541	0	0.00727693	4.125951085	0.125721776
Placer (SV)	2035	T7 single construct	Aggregated	Aggregated	DSL	0.001161806	0.000156217	9.00676E-07	0	0.000157118	9.18586E-05	0.000270064	0.000519041	0.000143328	4.45062E-06	0	0.000147779	0.002384668	7.40488E-05	0	0.002458717	1.394069316	0.150560662
Placer (SV)	2035	T7 SWCV	Aggregated	Aggregated	DSL	0.000863121	0.000121664	2.50685E-06	0	0.000124171	6.75263E-05	0.000198527	0.000390224	0.00021931	5.70903E-06	0	0.000225019	0.003648845	9.4986E-05	0	0.003743831	2.122717294	0.311864663
Placer (SV)	2035	T7 tractor	Aggregated	Aggregated	DSL	0.004538083	0.000952126	2.30542E-06	0	0.000954432	0.000326013	0.000958477	0.002238921	0.00034706	1.13614E-05	0	0.000358422	0.005774334	0.000189029	0	0.005963363	3.381170883	0.102891531
Placer (SV)	2035	T7 tractor construc	Aggregated	Aggregated	DSL	0.001016932	0.000184879	7.40828E-07	0	0.00018562	7.57752E-05	0.000222779	0.000484174	0.000116907	3.62777E-06	0	0.000120535	0.001945079	6.03582E-05	0	0.002005437	1.137064261	0.148869098
Placer (SV)	2035	T7 utility	Aggregated	Aggregated	DSL	1.5113E-05	9.53309E-07	1.84177E-08	0	9.71727E-07	1.29809E-06	3.8164E-06	6.08622E-06	1.77611E-06	9.32139E-08	0	1.86932E-06	2.95506E-05	1.55088E-06	0	3.11015E-05	0.017634234	0.134771271
Placer (SV)	2035	UBUS	Aggregated	Aggregated	DSL	0.001599851	5.57524E-05	0	0	5.57524E-05	6.31276E-05	0.000552457	0.000671337	0.0001409	0	0	0.0001409	0.002342754	0	0	0.002342754	1.328319314	0.119880113
Placer (SV)	2035	LDA	Aggregated	Aggregated	ELEC	0.012448754	0	0	0	0	0.000556369	0.004381405	0.004937774	0	0	0	0	0	0	0	0	0	0
Placer (SV)	2035	LDT1	Aggregated	Aggregated	ELEC	0.000965616	0	0	0	0	4.3156E-05	0.000339854	0.00038301	0	0	0	0	0	0	0	0	0	0
Placer (SV)	2035	LDT2	Aggregated	Aggregated	ELEC	0.002577629	0	0	0	0	0.000115201	0.00090721	0.001022412	0	0	0	0	0	0	0	0	0	0
Placer (SV)	2035	MDV	Aggregated	Aggregated	ELEC	0.001794179	0	0	0	0	8.01868E-05	0.000631471	0.000711658	0	0	0	0	0	0	0	0	0	0
Placer (SV)	2035	LDA	Aggregated	Aggregated	GAS	0.195218214	0.002629463	0	0.00053972	0.003169184	0.00857079	0.067494975	0.079234949	0.008395429	0	0.000245024	0.008640453	0.012708095	0	0.011333284	0.024041379	92.16299073	0.023706636
Placer (SV)	2035	LDT1	Aggregated	Aggregated	GAS	0.029650341	0.000441411	0	9.07511E-05	0.000532162	0.001299288	0.010231892	0.012063342	0.001484532	0	4.22233E-05	0.001526755	0.002067053	0	0.00181261	0.003879663	16.28506063	0.027632377
Placer (SV)	2035	LDT2	Aggregated	Aggregated	GAS	0.096767015	0.00139101	0	0.000278363	0.001669373	0.004243639	0.033418656	0.039331668	0.004857652	0	0.000142007	0.004999658	0.006558858	0	0.006017868	0.012576726	53.32862201	0.027704876
Placer (SV)	2035	LHD1	Aggregated	Aggregated	GAS	0.009436491	0.000219488	0	1.47658E-05	0.000234254	0.000217473	0.003562211	0.004013938	0.000927659	3.46542E-06	8.14563E-06	0.00093927	0.000639224	8.86366E-06	0.001592988	0.002241076	10.01867937	0.101563808
Placer (SV)	2035	LHD2	Aggregated	Aggregated	GAS	0.001669548	3.20236E-05	0	2.07889E-06	3.41025E-05	3.35966E-05	0.000642031	0.00070973	0.000164389	6.19676E-07	1.43365E-06	0.000166443	9.58852E-05	1.374E-06	0.000246672	0.000343931	1.77535436	0.116499483
Placer (SV)	2035	MCY	Aggregated	Aggregated	GAS	0.000829605	8.71674E-05	0	4.32492E-05	0.000130417	4.37723E-05	0.000220612	0.000394801	8.99899E-05	0	1.00847E-05	0.000100075	0.002853521	0	0.000258663	0.003112185	1.067441569	0.026881223
Placer (SV)	2035	MDV	Aggregated	Aggregated	GAS	0.054768832	0.000837269	0	0.000187322	0.001024591	0.002397966	0.018883985	0.022306542	0.003408523	0	0.00011221	0.003520733	0.004157136	0	0.004047363	0.008204498	37.5537363	0.034525846
Placer (SV)	2035	MH	Aggregated	Aggregated	GAS	0.000800709	6.83735E-06	0	1.60322E-08	6.85338E-06	1.67189E-05	0.000311306	0.000334878	8.36982E-05	0	1.35191E-08	8.37117E-05	7.73374E-05	0	2.72878E-06	8.00662E-05	0.892907288	0.176613849
Placer (SV)	2035	OBUS	Aggregated	Aggregated	GAS	0.000494536	4.26445E-06	0	4.54249E-07	4.7187E-06	1.03148E-05	0.000192062	0.000207095	5.004E-05	3.01026E-07	4.09412E-07	5.07504E-05	3.62401E-05	5.27667E-07	4.75738E-05	8.43416E-05	0.541327217	0.173549658
Placer (SV)	2035	SBUS	Aggregated	Aggregated	GAS	0.001403376	2.64871E-06	0	1.28536E-07	2.77725E-06	3.72039E-06	0.000593774	0.000600272	1.33918E-05	1.08327E-06	8.12109E-08	1.45563E-05	2.10863E-05	4.74891E-06	9.48046E-06	3.53157E-05	0.155264239	0.092006213
Placer (SV)	2035	T6TS	Aggregated	Aggregated	GAS	0.002328799	2.0915E-05	0	2.93311E-06	2.38481E-05	4.85358E-05	0.000903737	0.00097612	0.000232998	1.70028E-06	2.32918E-06	0.000237027	0.00014382	3.11294E-06	0.000224796	0.000371729	2.528237999	0.172258749
Placer (SV)	2035	T7IS	Aggregated	Aggregated	GAS	1.21629E-05	1.55148E-07	0	1.06777E-08	1.65826E-07	7.3297E-07	3.87888E-06	4.77767E-06	2.29978E-06	0	1.03251E-08	2.3101E-06	1.92703E-05	0	9.19574E-09	1.92795E-05	0.024640588	0.185284588
Placer (SV)	2035	UBUS	Aggregated	Aggregated	GAS	0.000696474	1.08793E-05	0	2.11371E-07	1.10907E-05	1.44016E-05	0.000268631	0.000294123	8.19145E-05	0	1.88362E-07	8.21029E-05	0.000113473	0	1.78589E-05	0.000131331	0.875746585	0.194562775

Fuel	% VMT by Fuel Type	Weighted Ave Fuel
Gasoline	0.86132001	0.02831079
Diesel	0.098201712	0.079774063

*remaining 5% VMT is electric and not accounted for in fuel consumption calculation

Roseville Electric Utility GHG Emission Factor Forecasted

RPS reduces share in other energy sources on weighted basis from their 2018 contribution to power content la

Roseville Electric - Power Content Label	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
RPS*	32.0%	28.0%	40.0%	40.0%	40.0%	42.0%	44.0%	46.0%	48.0%	50.0%	52.0%	54.0%	56.0%	58.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Large Hydroelectric*	14.0%	29.0%	13.0%	13.0%	13.0%	12.6%	12.1%	11.7%	11.3%	10.8%	10.4%	10.0%	9.5%	9.1%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%
Natural Gas	33.0%	3.0%	22.0%	22.0%	22.0%	21.3%	20.5%	19.8%	19.1%	18.3%	17.6%	16.9%	16.1%	15.4%	14.7%	14.7%	14.7%	14.7%	14.7%	14.7%
Nuclear*	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Unspecified	21.0%	40.0%	25.0%	25.0%	25.0%	24.2%	23.3%	22.5%	21.7%	20.8%	20.0%	19.2%	18.3%	17.5%	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

GHG-Free Energy Sources	46.00%	57.00%	53.00%	53.00%	53.00%	54.57%	56.13%	57.70%	59.27%	60.83%	62.40%	63.97%	65.53%	67.10%	68.67%	68.67%	68.67%	68.67%	68.67%	68.67%
Non-Renewable	54.0%	43.0%	47.0%	47.0%	47.0%	45.4%	43.9%	42.3%	40.7%	39.2%	37.6%	36.0%	34.5%	32.9%	31.33%	31.33%	31.33%	31.33%	31.33%	31.33%
Non-Renewable MT CO2e/MWh	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Power Mix MT CO2e/MWh	0.23	0.18	0.20	0.20	0.20	0.19	0.19	0.18	0.17	0.17	0.16	0.15	0.15	0.14	0.13	0.13	0.13	0.13	0.13	0.13
Power Mix lbs CO2e/MWh	**509.94**	**406.07**	**443.84**	**443.84**	**443.84**	**429.04**	**414.25**	**399.45**	**384.66**	**369.87**	**355.07**	**340.28**	**325.48**	**310.69**	**295.89**	**295.89**	**295.89**	**295.89**	**295.89**	**295.89**

*GHG-free energy sources are considered to include those sources elligible under the RPS standards (biomass & biowaste; geothermal; eligible hydroelectric; solar; and wind), large hydroelectric, and nuc

Conversion Factor

MT/lbs
0.000453592
2204.62

RPS Contribution over Time:

2020	2030	2045
40%	60%	60%

APPENDIX C

Noise

Roseville General Plan Update- Traffic Noise Contours													
Roadway	Roadway Segment	Existing Conditions				GP_Constrained				GP_Unconstrained			
		dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet		
		at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
Blue Oaks Blvd	From Fiddyment Rd to West	54	9	20	42	65	48	104	225	66	52	113	243
Blue Oaks Blvd	From Fiddyment Rd to Del Webb Blvd	61	27	58	124	67	64	139	299	67	67	144	311
Blue Oaks Blvd	From Del Webb Blvd to Woodcreek Oaks Blvd	64	39	85	182	68	73	157	337	68	74	158	341
Blue Oaks Blvd	From Woodcreek Oaks Blvd to Foothills Blvd	66	54	116	250	69	83	178	384	69	84	181	389
Blue Oaks Blvd	From Foothills Blvd to Washington Blvd	67	61	131	282	69	88	190	409	69	89	191	412
Fiddyment Rd	From Blue Oaks to North	60	21	46	99	66	54	117	251	66	54	116	249
Fiddyment Rd	From Blue Oaks Blvd to Pleasant Grove Blvd	63	33	70	151	66	54	117	252	66	53	115	247
Fiddyment Rd	From Pleasant Grove Blvd to Baseline Rd	65	45	97	208	68	74	159	343	68	73	157	339
Woodcreek Oaks Blvd	From Blue Oaks Blvd to North	61	24	52	112	63	37	79	170	63	34	74	160
Woodcreek Oaks Blvd	From Blue Oaks Blvd to Pleasant Grove Blvd	62	31	67	144	65	46	98	212	65	44	96	206
Woodcreek Oaks Blvd	From Pleasant Grove Blvd to Junction Blvd	62	31	67	143	66	52	112	242	66	51	109	235
Woodcreek Oaks Blvd	From Junction Blvd to Baseline Rd	59	20	42	91	62	32	68	147	62	30	65	140
Foothills Blvd	From Blue Oaks Blvd to North	60	20	44	94	66	56	120	258	65	46	100	215
Foothills Blvd	From Blue Oaks Blvd to Pleasant Grove Blvd	63	33	70	151	66	53	113	244	66	52	112	240
Foothills Blvd	From Pleasant Grove Blvd to Junction Blvd	66	51	110	238	67	64	138	298	67	63	136	292
Foothills Blvd	From Junction Blvd to Main St	65	50	107	230	67	64	138	298	67	63	135	290
Foothills Blvd	From Baseline Rd to Vineyard	66	57	122	262	68	70	151	326	68	70	151	325
Foothills Blvd	From Vineyard to Cirby Way	66	57	123	265	67	67	144	310	67	68	146	314
Washington Blvd	From Blue Oaks Blvd to Roseville Pkwy	63	35	75	161	66	58	124	268	66	58	124	267
Washington Blvd	From Roseville Pkwy to Pleasant Grove Blvd	62	30	64	138	65	43	94	202	65	44	95	205
Washington Blvd	From Pleasant Grove Blvd to Junction Blvd	63	36	77	167	65	48	104	225	65	48	102	221
Washington Blvd	From Junction Blvd to Main St	64	37	81	174	66	53	115	247	66	53	114	245
Washington Blvd	From Main St to Oak St	64	39	85	182	66	56	122	262	66	56	120	258
Pleasant Grove Blvd	From Fiddyment Rd to West	61	24	51	110	66	50	108	233	65	50	107	231
Pleasant Grove Blvd	From Fiddyment Rd to Woodcreek Oaks Blvd	64	42	90	194	66	57	124	267	66	58	125	269
Pleasant Grove Blvd	From Woodcreek Oaks Blvd to Foothills Blvd	66	52	113	243	68	73	157	338	68	73	157	338
Pleasant Grove Blvd	From Foothills Blvd to Washington Blvd	67	61	132	284	68	74	159	343	68	74	160	344
Pleasant Grove Blvd	From Washington Blvd to Roseville Pkwy	67	65	140	302	68	78	168	362	68	77	166	358
Pleasant Grove Blvd	From Roseville Pkwy to SR65 SB Ramps	67	68	147	316	69	85	184	397	69	85	184	396
Pleasant Grove Blvd	From Fairway Dr to SR 65 NB Ramps	67	62	133	287	68	72	156	335	68	73	157	339
Pleasant Grove Blvd	From Fairway Dr to North	64	42	90	193	65	49	107	230	65	49	105	227
Junction Blvd	From Woodcreek Oaks Blvd to West	61	24	51	110	65	47	102	219	65	47	102	219
Junction Blvd	From Woodcreek Oaks Blvd to Foothills Blvd	61	26	55	118	64	38	82	176	64	38	83	178
Junction Blvd	From Foothills Blvd to Washington Blvd	62	28	61	130	65	45	96	207	65	45	96	207
Baseline Rd	From Fiddyment Rd to West	62	30	65	140	67	66	143	308	67	65	139	300
Baseline Rd	From Fiddyment Rd to Junction Blvd	62	31	67	145	68	72	156	335	68	72	155	334
Baseline Rd	From Junction Blvd to Woodcreek Oaks Blvd	62	31	68	146	66	52	113	243	66	52	113	243
Baseline Rd	From Woodcreek Oaks Blvd to Foothills Blvd	64	38	82	177	66	55	119	256	66	55	119	256
Main St	From Foothills Blvd to Washington Blvd	60	22	48	103	62	28	60	130	62	27	59	127
Roseville Pkwy	From Washington Blvd to Pleasant Grove Blvd	62	30	65	139	66	58	125	269	66	57	123	266
Roseville Pkwy	From Pleasant Grove Blvd to Galleria Blvd	67	65	141	303	69	92	199	429	69	92	198	427
Roseville Pkwy	From Galleria Blvd to Taylor Rd	68	69	149	322	69	82	177	381	69	82	176	380

Roseville General Plan Update- Traffic Noise Contours													
Roadway	Roadway Segment	Existing Conditions				GP_Constrained				GP_Unconstrained			
		dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet		
		at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
Roseville Pkwy	From Taylor Rd to Sunrise Ave	68	73	157	338	69	83	179	386	69	83	179	387
Roseville Pkwy	From Sunrise Blvd to Secret Ravine	67	65	140	301	69	84	181	390	69	83	179	385
Roseville Pkwy	From Secrete Ravine to Rocky Ridge Dr	66	56	121	261	68	70	152	327	68	70	150	324
Roseville Pkwy	From Rocky Ridge Dr to Douglas Blvd	66	51	111	238	67	66	142	306	67	65	140	302
Roseville Pkwy	From Douglas Blvd to Eureka Rd	63	35	75	161	65	48	102	221	65	47	100	216
Roseville Pkwy	From Eureka Rd to Sierra College Blvd	64	41	88	189	65	48	104	224	65	47	102	220
Fairway Dr	From Pleasant Grove Blvd to Northwest	64	38	81	175	65	48	104	224	65	45	97	208
Fiarway Dr	From Pleasant Grove Blvd to Stanford Ranch Rd	64	38	83	178	65	48	103	221	65	47	101	218
Stanford Ranch Rd	From Fairway Dr to North	64	39	84	182	64	40	86	185	64	39	84	182
Stanford Ranch Rd	From Fairway Dr to SR 65 NB Ramps	67	61	132	285	67	61	132	285	67	61	132	285
Galleria Blvd	From Roseville Pkwy to SR 65 SB Ramps	67	66	142	307	68	75	162	349	68	75	162	349
Galleria Blvd	From Roseville Pkwy to Berry Rd	65	43	93	201	66	56	120	259	66	56	120	259
Harding Blvd	From Wills Rd to Lead Hill Blvd	64	42	91	195	66	53	115	247	66	53	115	247
Harding Blvd	From Lead Hill Blvd to Estates Dr	63	36	78	169	65	50	108	232	66	50	109	234
Harding Blvd	From Douglas Blvd to Estates Dr	63	33	71	153	65	45	96	207	65	45	96	207
Vernon St	From Lincoln St to Grant St	59	20	42	91	61	25	55	118	61	27	57	123
Atlantic St	From Wills Rd to Yosemite St	64	39	83	179	65	49	105	226	65	48	104	224
Eureka Rd	From I-80 EB Ramps to Sunrise Ave	67	63	137	294	69	86	186	401	69	87	186	402
Eureka Rd	From Sunrise Ave to Rocky Ridge Dr	66	54	116	250	68	71	152	328	68	71	152	327
Eureka Rd	From Rocky Ridge Dr to Douglas Blvd	65	45	97	209	66	55	120	257	66	55	118	254
Eureka Rd	From Douglas Blvd to Roseville Pkwy	64	39	83	180	66	51	110	237	66	50	108	234
Douglas Blvd	From Harding Blvd to Vernon	65	48	103	221	66	57	122	263	66	56	121	261
Douglas Blvd	From Sunrise Blvd to Rocky Ridge Dr	68	69	148	320	68	75	161	346	68	73	157	339
Douglas Blvd	From Rocky Ridge Dr to Eureka Rd	67	66	142	306	68	69	149	320	68	69	148	319
Douglas Blvd	From Eureka Rd to Roseville Pkwy	67	62	133	287	68	73	157	338	68	72	155	334
Douglas Blvd	From Roseville Pkwy to Sierra College Blvd	68	70	152	327	69	80	171	369	68	79	170	367
Sunrise Ave	From Roseville Pkwy to Eureka Rd	63	36	78	168	65	48	103	221	65	46	99	214
Sunrise Ave	From Eureka Rd to Lead Hill Blvd	64	41	88	190	66	51	109	235	66	51	110	237
Sunrise Ave	From Lead Hill Blvd to Douglas Blvd	65	43	93	201	66	52	113	243	66	53	113	244
Sunrise Ave	From Douglas Blvd to Oak Ridge Dr	64	42	90	193	65	48	104	224	65	50	107	231
Sunrise Ave	From Cirby Way to Coloma Way	67	60	129	278	67	65	140	303	67	67	143	309
Taylor Rd	From Roseville Pkwy to North	63	33	72	154	65	48	104	224	65	49	105	226
Taylor Rd	From Roseville Pkwy to EB I-80 Ramps	64	40	86	186	64	40	86	186	64	40	86	186
Lead Hill Blvd	From Sunrise Ave to Harding Blvd	64	37	80	172	66	51	111	238	66	52	111	239
Lead Hill Blvd	From Sunrise Ave to Rocky Ridge Dr	62	29	62	133	63	37	79	170	63	36	78	168
Rocky Ridge Dr	From Eureka Rd to Roseville Pkwy	60	23	50	107	61	25	53	114	61	24	52	112
Rocky Ridge Dr	From Eureka Rd to Lead Hill Blvd	62	28	61	131	62	28	61	131	62	28	61	131
Rocky Ridge Dr	From Lead Hill Blvd to Douglas Blvd	63	36	77	165	65	45	96	208	65	45	97	209
Rocky Ridge Dr	From Douglas Blvd to Cirby Way	64	39	83	180	64	43	93	199	65	47	101	218
Cirby Way	From Foothills Blvd to Riverside Ave	67	62	134	288	68	70	150	323	68	70	151	324
Cirby Way	From Riverside Ave to Sunrise Ave	66	53	114	245	66	57	122	263	67	59	127	274
Cirby Way	From Sunrise Ave to Rocky Ridge Dr	65	44	94	202	66	51	109	235	66	51	110	237

Roseville General Plan Update- Traffic Noise Contours													
Roadway	Roadway Segment	Existing Conditions				GP_Constrained				GP_Unconstrained			
		dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet		
		at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
Riverside Ave	From Cirby Way to North	63	35	76	164	65	46	99	213	65	46	99	213
Riverside Ave	From Cirby Way to I-80 WB Ramps	67	66	141	304	68	69	149	321	67	68	146	314
Riverside Ave	From I-80 EB Ramps to South	65	49	106	228	67	59	127	274	67	59	127	275
Secrete Ravine Pkwy	From Roseville Pkwy to Sierra College Blvd	62	30	64	137	64	37	79	171	63	36	78	168
Sierra College Blvd	From Douglas Blvd to Eureka Rd	66	53	114	247	67	63	135	290	67	62	135	290
Sierra College Blvd	From Douglas Blvd to North	65	46	100	216	67	60	128	277	67	60	129	277
Baseline Rd	From Fiddyment Rd to West	62	28	60	129	67	61	132	284	67	60	129	277
Blue Oaks Blvd	From Hayden Parkway to Westbrook Blvd	0				66	50	108	234	66	56	121	261
Westbrook Blvd	From North of to Blue Oaks	0				65	45	97	209	65	43	93	201
Blue Oaks Blvd	From West of to Westbrook Blvd	0				61	25	53	115	64	39	85	183
Santucci Blvd	From Blue Oaks Blvd to Pleasant Grove Blvd	0				64	41	89	192	64	38	83	178
Westbrook Blvd	From Blue Oaks Blvd to Pleasant Grove Blvd	0				66	52	111	240	65	47	102	220
Pleasant Grove Blvd	From Westbrook Blvd to Santucci Blvd	0				62	30	64	138	62	29	62	134
Pleasant Grove Blvd	From Market St to Westbrook Blvd	0				63	36	78	169	63	36	78	168
Santucci Blvd	From Pleasant Grove Blvd to Vista Grande	0				66	55	118	253	65	50	108	232
Westbrook Blvd	From Pleasant Grove Blvd to Vista Grande	0				65	47	102	220	64	42	91	197
Market St	From Pleasant Grove Blvd to Vista Grande	0				55	10	22	47	55	10	22	47
Santucci Blvd	From Vista Grande to Baseline Rd	0				66	55	118	254	66	51	109	236
Vista Grande	From Santucci Blvd to Westbrook Blvd	0				56	11	24	53	56	11	24	53
Vista Grande	From Westbrook Blvd to Market St	0				61	24	52	112	61	24	53	114
Westbrook Blvd	From Vista Grande to Baseline Rd	0				66	51	109	236	65	46	99	214
Market St	From Vista Grande to Baseline Rd	0				58	16	34	74	58	16	34	74
Vista Grande	From Market St to Upland Dr	0				61	26	55	119	61	26	57	122
Upland Dr	From Vista Grande to Baseline Rd	0				59	18	39	85	59	18	39	83
Upland Dr	From Vista Grande to Pleasant Grove Blvd	0				57	14	30	66	57	13	29	62
Baseline Rd	From Santucci Blvd to Westbrook Blvd	0				67	64	138	298	67	61	131	282
Baseline Rd	From Westbrook Blvd to Market St	0				67	67	145	312	67	65	140	302
Baseline Rd	From West of to Santucci Blvd	0				67	59	128	276	67	62	134	289

Notes: dB = A-weighted decibels; L_{dn} = Day-Night Average Noise Level

Source: Modeling conducted by AECOM in 2019

Road	Segment Description and Location Cross Street	2016 Noise Level				MTP/SCS Noise Level (2040)			
		dB, L_{dn}	Distance to Contour, (Feet)			dB, L_{dn}	Distance to Contour, (Feet)		
		at 100 feet	70 dBA	65 dBA	60 dBA	at 100 feet	70 dBA	65 dBA	60 dBA
I-80	East of Douglas Blvd	80.2	475	1023	2205	81.0	539	1162	2503
I-80	West of Douglas Blvd	80.8	524	1129	2432	81.4	573	1235	2661
State Route 65	North of I-80	73.6	174	374	806	75.0	214	461	994

Roseville General Plan Update- Traffic Noise Contours													
Roadway	Roadway Segment	Existing Conditions				GP_Constrained				GP_Unconstrained			
		dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet		
		at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
Blue Oaks Blvd	From Fiddyment Rd to West	57	5	16	51	68	63	199	631	68	71	223	707
Blue Oaks Blvd	From Fiddyment Rd to Del Webb Blvd	64	26	82	259	70	97	306	968	70	103	324	1025
Blue Oaks Blvd	From Del Webb Blvd to Woodcreek Oaks Blvd	67	46	146	460	71	116	366	1159	71	118	373	1179
Blue Oaks Blvd	From Woodcreek Oaks Blvd to Foothills Blvd	69	74	235	742	71	141	444	1405	72	144	454	1436
Blue Oaks Blvd	From Foothills Blvd to Washington Blvd	69	89	281	887	72	154	489	1545	72	157	495	1565
Fiddyment Rd	From Blue Oaks to North	63	18	58	183	69	74	235	745	69	74	233	736
Fiddyment Rd	From Blue Oaks Blvd to Pleasant Grove Blvd	65	35	110	347	69	75	236	747	69	73	229	725
Fiddyment Rd	From Pleasant Grove Blvd to Baseline Rd	67	56	177	561	71	119	376	1189	71	117	369	1165
Woodcreek Oaks Blvd	From Blue Oaks Blvd to North	63	22	70	222	66	41	131	414	66	38	120	379
Woodcreek Oaks Blvd	From Blue Oaks Blvd to Pleasant Grove Blvd	65	32	102	324	68	58	182	577	67	55	175	553
Woodcreek Oaks Blvd	From Pleasant Grove Blvd to Junction Blvd	65	32	102	321	68	70	223	705	68	68	214	676
Woodcreek Oaks Blvd	From Junction Blvd to Baseline Rd	62	16	52	163	65	33	105	332	65	31	97	308
Foothills Blvd	From Blue Oaks Blvd to North	62	17	54	171	69	78	246	777	68	59	187	590
Foothills Blvd	From Blue Oaks Blvd to Pleasant Grove Blvd	65	35	110	349	69	71	226	713	68	70	221	697
Foothills Blvd	From Pleasant Grove Blvd to Junction Blvd	68	69	217	686	70	96	304	962	70	93	295	934
Foothills Blvd	From Junction Blvd to Main St	68	65	207	654	70	96	304	962	70	93	293	925
Foothills Blvd	From Baseline Rd to Vineyard	69	80	252	795	70	110	349	1103	70	109	346	1094
Foothills Blvd	From Vineyard to Cirby Way	69	81	255	807	70	102	324	1023	70	104	329	1039
Washington Blvd	From Blue Oaks Blvd to Roseville Pkwy	66	38	121	382	69	82	260	822	69	82	259	817
Washington Blvd	From Roseville Pkwy to Pleasant Grove Blvd	65	30	96	303	67	54	169	536	67	55	173	548
Washington Blvd	From Pleasant Grove Blvd to Junction Blvd	66	40	128	403	68	63	199	630	68	61	194	614
Washington Blvd	From Junction Blvd to Main St	66	43	136	429	69	73	230	727	69	72	227	717
Washington Blvd	From Main St to Oak St	67	46	146	460	69	79	251	794	69	78	245	775
Pleasant Grove Blvd	From Fiddyment Rd to West	63	22	68	216	68	66	210	664	68	66	208	658
Pleasant Grove Blvd	From Fiddyment Rd to Woodcreek Oaks Blvd	67	50	159	504	69	82	258	815	69	82	260	824
Pleasant Grove Blvd	From Woodcreek Oaks Blvd to Foothills Blvd	69	71	225	710	71	116	368	1164	71	116	367	1160
Pleasant Grove Blvd	From Foothills Blvd to Washington Blvd	70	90	283	895	71	119	376	1189	71	119	377	1194
Pleasant Grove Blvd	From Washington Blvd to Roseville Pkwy	70	98	310	981	71	129	407	1286	71	127	401	1269
Pleasant Grove Blvd	From Roseville Pkwy to SR65 SB Ramps	70	105	332	1051	72	148	467	1477	72	148	467	1475
Pleasant Grove Blvd	From Fairway Dr to SR 65 NB Ramps	70	91	288	910	71	115	364	1149	71	117	369	1168
Pleasant Grove Blvd	From Fairway Dr to North	67	50	159	502	68	65	206	651	68	64	202	639
Junction Blvd	From Woodcreek Oaks Blvd to West	63	22	69	217	68	61	192	606	68	61	192	606
Junction Blvd	From Woodcreek Oaks Blvd to Foothills Blvd	64	24	76	241	66	44	139	439	66	44	141	444
Junction Blvd	From Foothills Blvd to Washington Blvd	64	28	88	279	67	56	176	557	67	56	176	557
Baseline Rd	From Fiddyment Rd to West	65	31	98	309	70	101	320	1010	70	97	308	974
Baseline Rd	From Fiddyment Rd to Junction Blvd	65	33	103	327	71	115	363	1149	71	114	362	1144
Baseline Rd	From Junction Blvd to Woodcreek Oaks Blvd	65	33	104	330	68	71	223	707	68	71	223	707
Baseline Rd	From Woodcreek Oaks Blvd to Foothills Blvd	66	44	139	440	69	76	242	764	69	77	243	767
Main St	From Foothills Blvd to Washington Blvd	63	20	62	196	64	28	88	278	64	27	84	267
Roseville Pkwy	From Washington Blvd to Pleasant Grove Blvd	65	31	97	308	69	83	261	827	69	81	256	811
Roseville Pkwy	From Pleasant Grove Blvd to Galleria Blvd	70	99	312	985	72	166	525	1660	72	165	523	1653
Roseville Pkwy	From Galleria Blvd to Taylor Rd	70	108	342	1080	71	139	440	1393	71	139	438	1386

Roseville General Plan Update- Traffic Noise Contours													
Roadway	Roadway Segment	Existing Conditions				GP_Constrained				GP_Unconstrained			
		dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet		
		at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
Roseville Pkwy	From Taylor Rd to Sunrise Ave	71	116	368	1164	72	142	449	1420	72	142	450	1422
Roseville Pkwy	From Sunrise Blvd to Secret Ravine	70	98	309	978	72	144	455	1438	72	141	447	1413
Roseville Pkwy	From Secrete Ravine to Rocky Ridge Dr	69	79	250	790	70	111	350	1105	70	109	344	1089
Roseville Pkwy	From Rocky Ridge Dr to Douglas Blvd	68	69	218	689	70	100	317	1003	70	98	310	981
Roseville Pkwy	From Douglas Blvd to Eureka Rd	66	38	120	380	68	61	194	614	68	60	188	596
Roseville Pkwy	From Eureka Rd to Sierra College Blvd	67	49	154	487	68	63	198	627	68	61	193	612
Fairway Dr	From Pleasant Grove Blvd to Northwest	66	43	137	433	68	63	198	626	67	56	178	562
Fiarway Dr	From Pleasant Grove Blvd to Stanford Ranch Rd	66	44	140	444	68	61	194	614	68	60	191	603
Stanford Ranch Rd	From Fairway Dr to North	67	46	145	458	67	47	149	470	67	46	145	458
Stanford Ranch Rd	From Fairway Dr to SR 65 NB Ramps	70	90	284	898	70	90	284	898	70	90	284	898
Galleria Blvd	From Roseville Pkwy to SR 65 SB Ramps	70	100	317	1004	71	122	385	1217	71	122	386	1219
Galleria Blvd	From Roseville Pkwy to Berry Rd	67	53	169	535	69	78	246	778	69	78	247	780
Harding Blvd	From Wills Rd to Lead Hill Blvd	67	51	161	510	69	73	230	728	69	73	230	728
Harding Blvd	From Lead Hill Blvd to Estates Dr	66	41	130	411	68	66	210	663	68	67	211	669
Harding Blvd	From Douglas Blvd to Estates Dr	65	35	112	354	67	56	176	557	67	56	177	559
Vernon St	From Lincoln St to Grant St	62	16	51	162	64	24	76	240	64	26	81	255
Atlantic St	From Wills Rd to Yosemite St	67	45	142	449	68	64	201	635	68	63	199	629
Eureka Rd	From I-80 EB Ramps to Sunrise Ave	70	94	299	945	72	150	475	1502	72	151	476	1507
Eureka Rd	From Sunrise Ave to Rocky Ridge Dr	69	74	233	738	70	111	351	1110	70	111	350	1108
Eureka Rd	From Rocky Ridge Dr to Douglas Blvd	68	57	179	566	69	77	244	773	69	76	239	755
Eureka Rd	From Douglas Blvd to Roseville Pkwy	67	45	143	451	68	68	216	684	68	67	211	668
Douglas Blvd	From Harding Blvd to Vernon	68	62	195	615	69	80	253	800	69	79	249	788
Douglas Blvd	From Sunrise Blvd to Rocky Ridge Dr	70	107	339	1071	71	121	381	1206	71	117	369	1166
Douglas Blvd	From Rocky Ridge Dr to Eureka Rd	70	100	317	1002	70	107	339	1073	70	107	338	1068
Douglas Blvd	From Eureka Rd to Roseville Pkwy	70	91	288	911	71	116	367	1162	71	114	362	1144
Douglas Blvd	From Roseville Pkwy to Sierra College Blvd	70	110	349	1104	71	133	420	1328	71	131	416	1315
Sunrise Ave	From Roseville Pkwy to Eureka Rd	66	41	129	409	68	62	195	615	68	59	185	585
Sunrise Ave	From Eureka Rd to Lead Hill Blvd	67	49	155	490	68	67	213	673	68	68	216	683
Sunrise Ave	From Lead Hill Blvd to Douglas Blvd	67	53	169	534	69	71	224	708	69	72	226	715
Sunrise Ave	From Douglas Blvd to Oak Ridge Dr	67	50	159	502	68	63	199	629	68	65	207	655
Sunrise Ave	From Cirby Way to Coloma Way	69	87	274	866	70	98	311	984	70	101	321	1015
Taylor Rd	From Roseville Pkwy to North	66	36	113	358	68	63	198	625	68	64	201	636
Taylor Rd	From Roseville Pkwy to EB I-80 Ramps	67	47	150	473	67	47	150	473	67	47	150	473
Lead Hill Blvd	From Sunrise Ave to Harding Blvd	66	42	133	420	68	69	217	687	68	69	219	692
Lead Hill Blvd	From Sunrise Ave to Rocky Ridge Dr	65	29	90	286	66	42	131	416	66	41	129	409
Rocky Ridge Dr	From Eureka Rd to Roseville Pkwy	63	21	65	207	64	23	72	229	63	22	70	222
Rocky Ridge Dr	From Eureka Rd to Lead Hill Blvd	64	28	88	280	64	28	88	280	64	28	88	280
Rocky Ridge Dr	From Lead Hill Blvd to Douglas Blvd	66	40	126	398	67	56	177	560	68	56	178	564
Rocky Ridge Dr	From Douglas Blvd to Cirby Way	67	45	143	451	67	53	166	526	68	60	191	604
Cirby Way	From Foothills Blvd to Riverside Ave	70	92	290	916	70	109	343	1086	70	109	346	1093
Cirby Way	From Riverside Ave to Sunrise Ave	69	72	227	717	69	80	252	797	69	85	269	849
Cirby Way	From Sunrise Ave to Rocky Ridge Dr	67	54	170	537	68	67	212	672	68	68	216	684

Roseville General Plan Update- Traffic Noise Contours													
Roadway	Roadway Segment	Existing Conditions				GP_Constrained				GP_Unconstrained			
		dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet			dB, L_{dn}	Distance to Contours, feet		
		at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}	at 100 feet	70 dB L_{dn}	65 dB L_{dn}	60 dB L_{dn}
Riverside Ave	From Cirby Way to North	66	39	124	393	68	58	183	580	68	58	184	582
Riverside Ave	From Cirby Way to I-80 WB Ramps	70	99	314	994	70	107	340	1074	70	104	330	1043
Riverside Ave	From I-80 EB Ramps to South	68	64	203	643	69	85	269	849	69	85	269	852
Secrete Ravine Pkwy	From Roseville Pkwy to Sierra College Blvd	65	30	95	301	66	42	132	419	66	41	129	408
Sierra College Blvd	From Douglas Blvd to Eureka Rd	69	72	229	725	70	93	293	926	70	92	292	924
Sierra College Blvd	From Douglas Blvd to North	68	59	187	593	69	86	272	861	69	86	273	864
Baseline Rd	From Fiddyment Rd to West	64	27	87	274	70	90	283	896	69	86	273	864
Blue Oaks Blvd	From Hayden Parkway to Westbrook Blvd	0				68	67	211	668	69	79	249	787
Westbrook Blvd	From North of to Blue Oaks	0				68	57	179	565	67	53	169	534
Blue Oaks Blvd	From West of to Westbrook Blvd	0				64	23	73	229	67	46	147	464
Santucci Blvd	From Blue Oaks Blvd to Pleasant Grove Blvd	0				67	50	157	498	66	44	140	443
Westbrook Blvd	From Blue Oaks Blvd to Pleasant Grove Blvd	0				68	70	220	696	68	61	193	609
Pleasant Grove Blvd	From Westbrook Blvd to Santucci Blvd	0				65	30	96	305	65	29	92	290
Pleasant Grove Blvd	From Market St to Westbrook Blvd	0				66	41	130	410	66	41	128	406
Santucci Blvd	From Pleasant Grove Blvd to Vista Grande	0				69	75	239	754	68	66	209	662
Westbrook Blvd	From Pleasant Grove Blvd to Vista Grande	0				68	61	193	612	67	52	163	517
Market St	From Pleasant Grove Blvd to Vista Grande	0				58	6	19	60	58	6	19	60
Santucci Blvd	From Vista Grande to Baseline Rd	0				69	76	240	759	68	68	214	677
Vista Grande	From Santucci Blvd to Westbrook Blvd	0				59	7	23	71	59	7	23	71
Vista Grande	From Westbrook Blvd to Market St	0				63	22	70	222	64	23	72	227
Westbrook Blvd	From Vista Grande to Baseline Rd	0				68	68	214	677	68	58	185	584
Market St	From Vista Grande to Baseline Rd	0				61	12	38	120	61	12	38	120
Vista Grande	From Market St to Upland Dr	0				64	24	77	244	64	25	80	252
Upland Dr	From Vista Grande to Baseline Rd	0				62	15	46	147	62	14	45	142
Upland Dr	From Vista Grande to Pleasant Grove Blvd	0				60	10	31	99	60	9	29	91
Baseline Rd	From Santucci Blvd to Westbrook Blvd	0				70	96	305	964	69	89	280	887
Baseline Rd	From Westbrook Blvd to Market St	0				70	103	325	1029	70	98	311	982
Baseline Rd	From West of to Santucci Blvd	0				69	86	271	857	70	92	291	919

Notes: dB = A-weighted decibels; L_{dn} = Day-Night Average Noise Level

Source: Modeling conducted by AECOM in 2019

Road	Segment Description and Location Cross Street	2016 Noise Level				MTP/SCS Noise Level (2040)			
		dB, L_{dn}	Distance to Contour, (Feet)			dB, L_{dn}	Distance to Contour, (Feet)		
		at 100 feet	70 dBA	65 dBA	60 dBA	at 100 feet	70 dBA	65 dBA	60 dBA
I-80	East of Douglas Blvd	82.9	1937	6124	19367	84	2343	7408	23427
I-80	West of Douglas Blvd	83.5	2243	7094	22434	84	2569	8122	25685
State Route 65	North of I-80	76.3	428	1354	4281	78	586	1853	5861

APPENDIX D

Traffic Impact Report

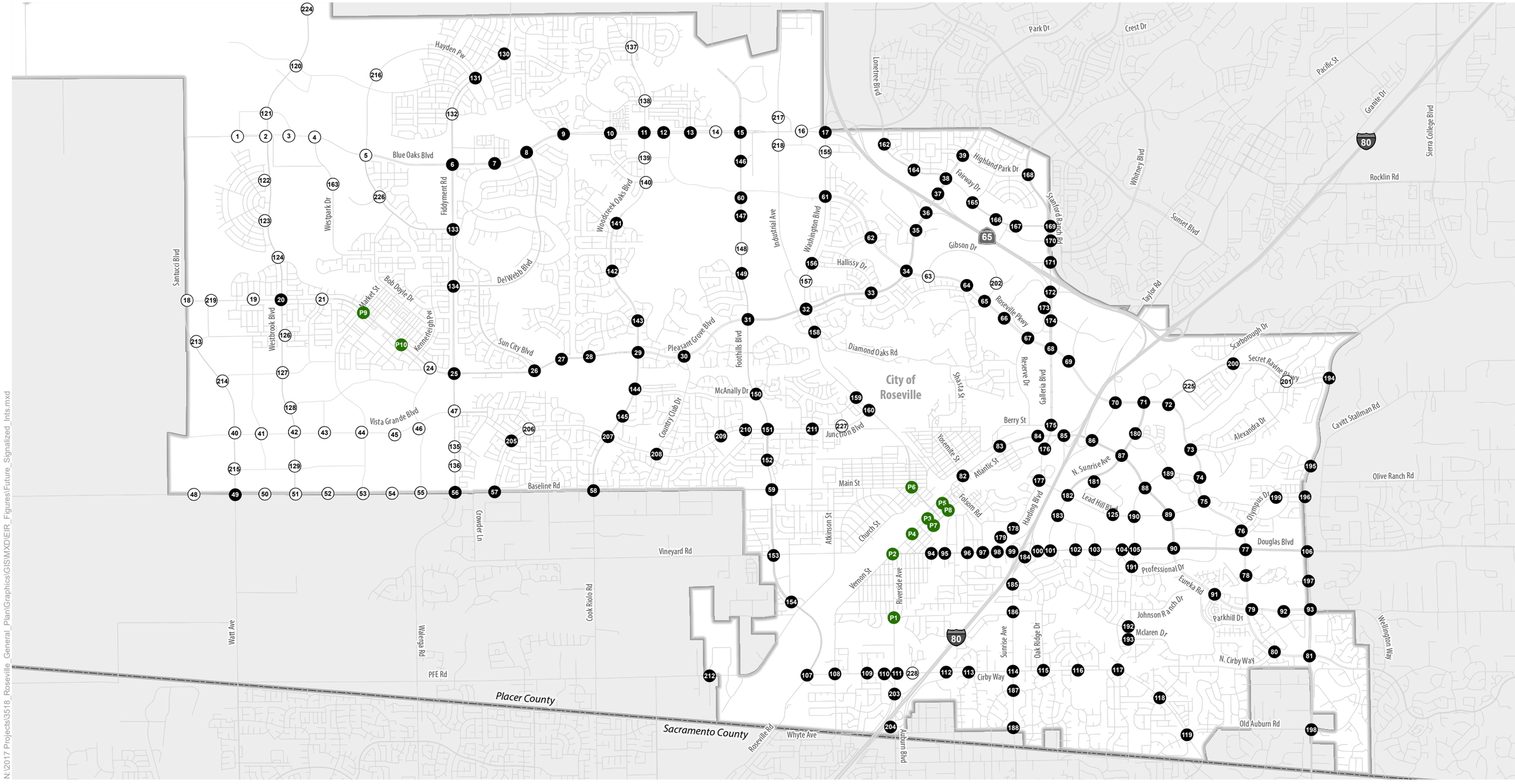
Technical Appendix

Roseville General Plan
City of Roseville

July 2020

RS17-3518

FEHR PEERS



Existing Study Intersection

Future Study Intersections by 2035

Existing Study Intersection in Pedestrian Overlay Zone

Note: This map represents signals added over the baseline (2014) conditions.

N

Figure 4.3-A1

Future Signalized Study Intersections

N:\2017 Projects\3518_Roseville_General_Plan\Graphics\GIS\MXD\EIR_Figures\Future_Signalized_Ints.mxd

Table 4.3-A1 –
City of Roseville Employment Estimates – Existing (2014) Conditions

Land Use Category	Amount	Unit Values	Total Employees
Retail	9,233 ksf	@ 2 per ksf	18,466
Mall	1,183 ksf	@ 2 per ksf	2,366
Office	7,250 ksf	@ 3 per ksf	21,750
Industrial	6,356 ksf	@ 1 per ksf	6,356
High Tech Industrial	2,376 ksf	@ 2 per ksf	4,752
Church/Worship Center	734 ksf	@ 1 per ksf	734
Medical Office	848 ksf	@ 3 per ksf	2,544
Hospital	1,708 ksf	@ 2 per ksf	3,416
Convalescent Home	279 ksf	@ 3 per ksf	838
Hotel	1,474 rooms	@ 0.5 per room	737
Public/Quasi-Public Low	183 ksf	@ 3 per ksf	548
Public/Quasi-Public High	576 ksf	@ 3 per ksf	1,727
School (K-12)	22,622 students	3,296[1]	3,296[1]
Total Employees Based on Unit Values			67,530

Notes:

[1] Source: US Census, Longitudinal Employer-Household Dynamics Data, 2014

ksf = thousand square feet of occupied space

Table 4.3-A2 –
City of Roseville Employment Estimates – General Plan (2035) Conditions

Land Use Category	Amount	Unit Values	Total Employees
Retail	18,666 ksf	@ 2 per ksf	37,332
Mall	1,755 ksf	@ 2 per ksf	3,510
Office	13,152 ksf	@ 3 per ksf	39,456
Industrial	13,208 ksf	@ 1 per ksf	13,208
High Tech Industrial	5,025 ksf	@ 2 per ksf	10,050
Church/Worship Center	1,006 ksf	@ 1 per ksf	1,006
Medical Office	1,007 ksf	@ 3 per ksf	3,021
Hospital	1,803 ksf	@ 2 per ksf	3,606
Convalescent Home	340 ksf	@ 3 per ksf	1,020
Hotel	1,862 rooms	@ 0.5 per room	931
Public/Quasi-Public Low	409 ksf	@ 3 per ksf	1,227
Public/Quasi-Public High	1,362 ksf	@ 3 per ksf	4,086
School (K-12)	32,422 students	4,724	4,724
Total Employees Based on Unit Values			123,177

Notes:

ksf = thousand square feet of occupied space

Existing Conditions

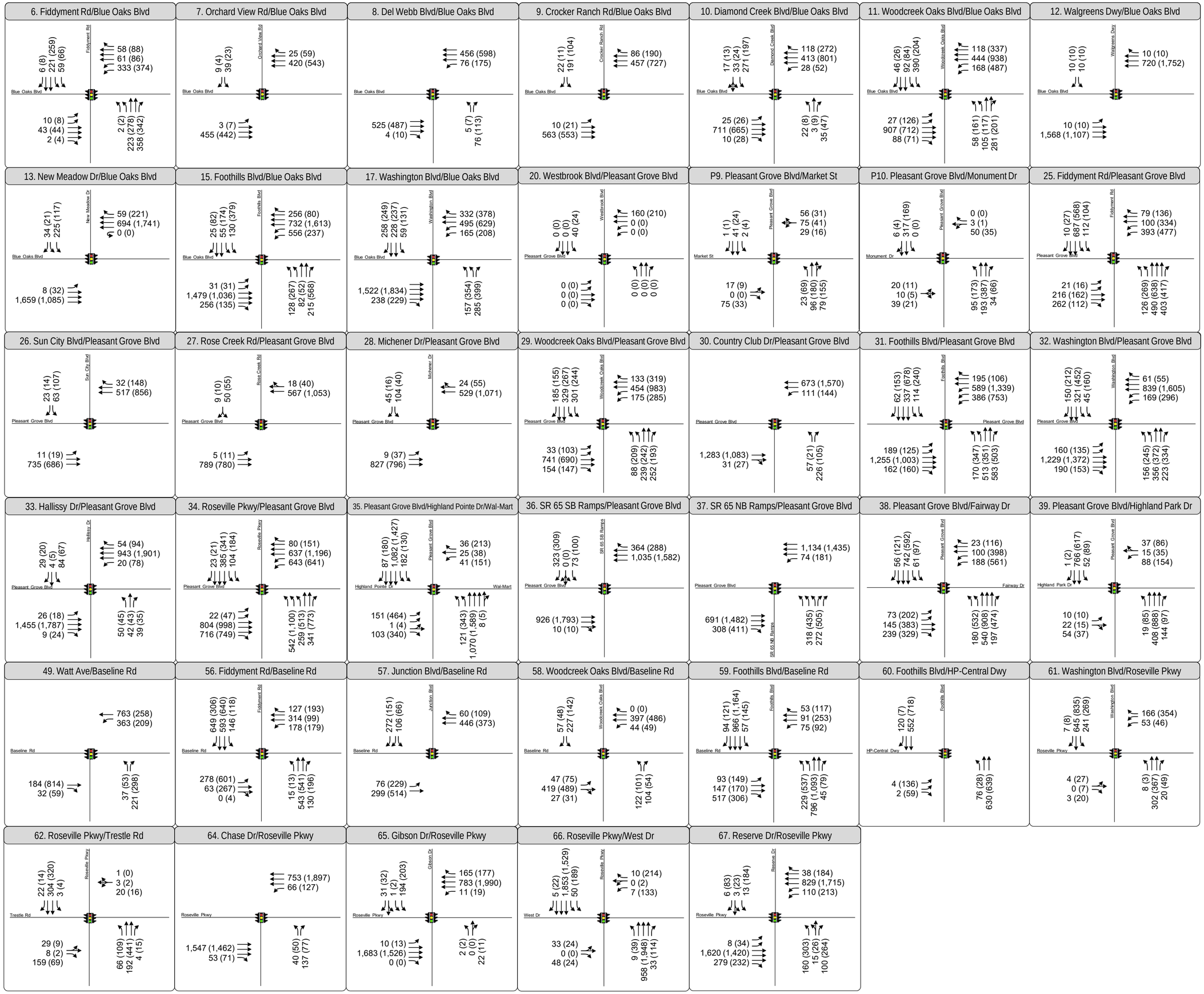


FIGURE 4.3-A2-a

Peak Hour Traffic Volumes and Lane Configurations
Existing Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

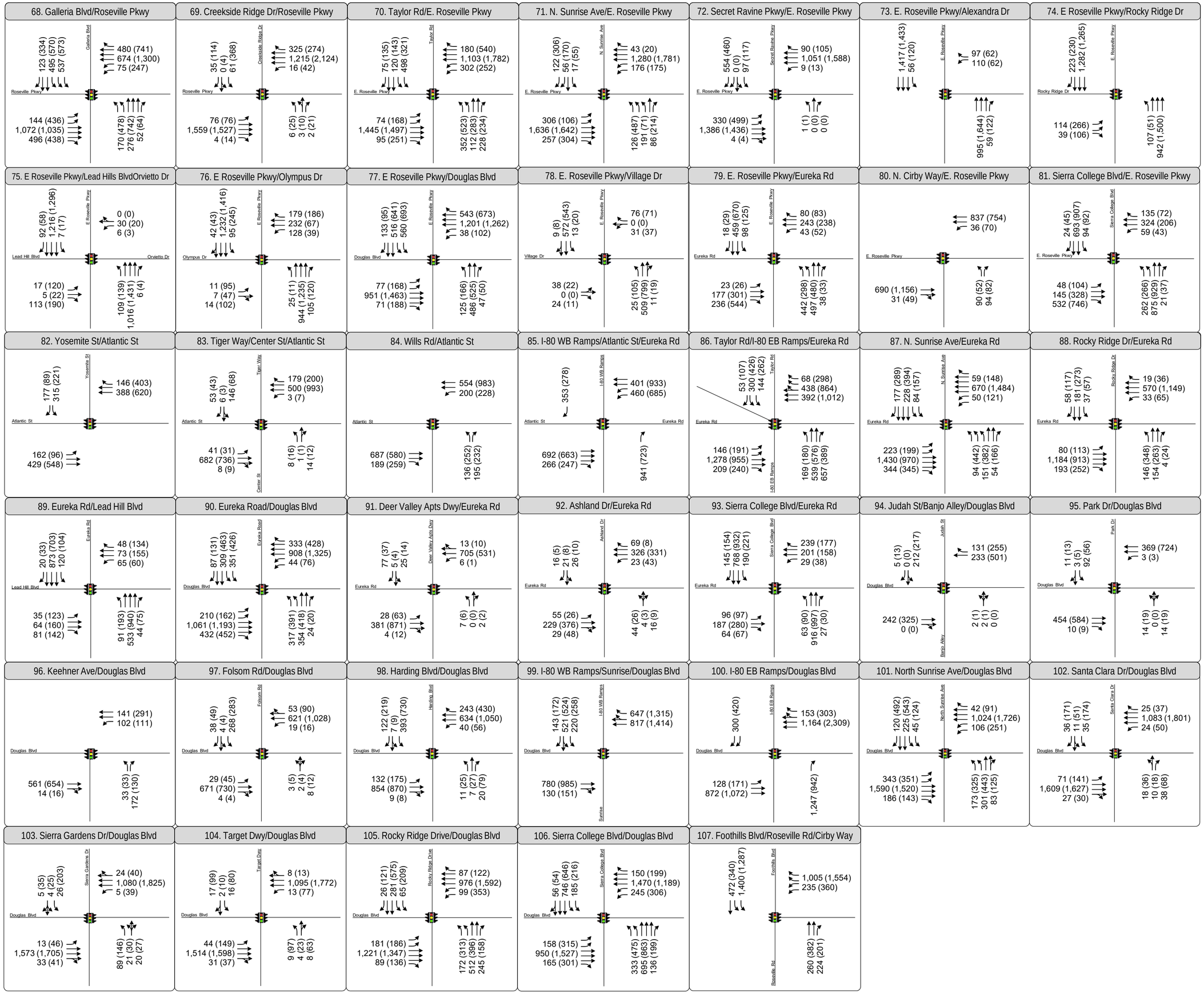
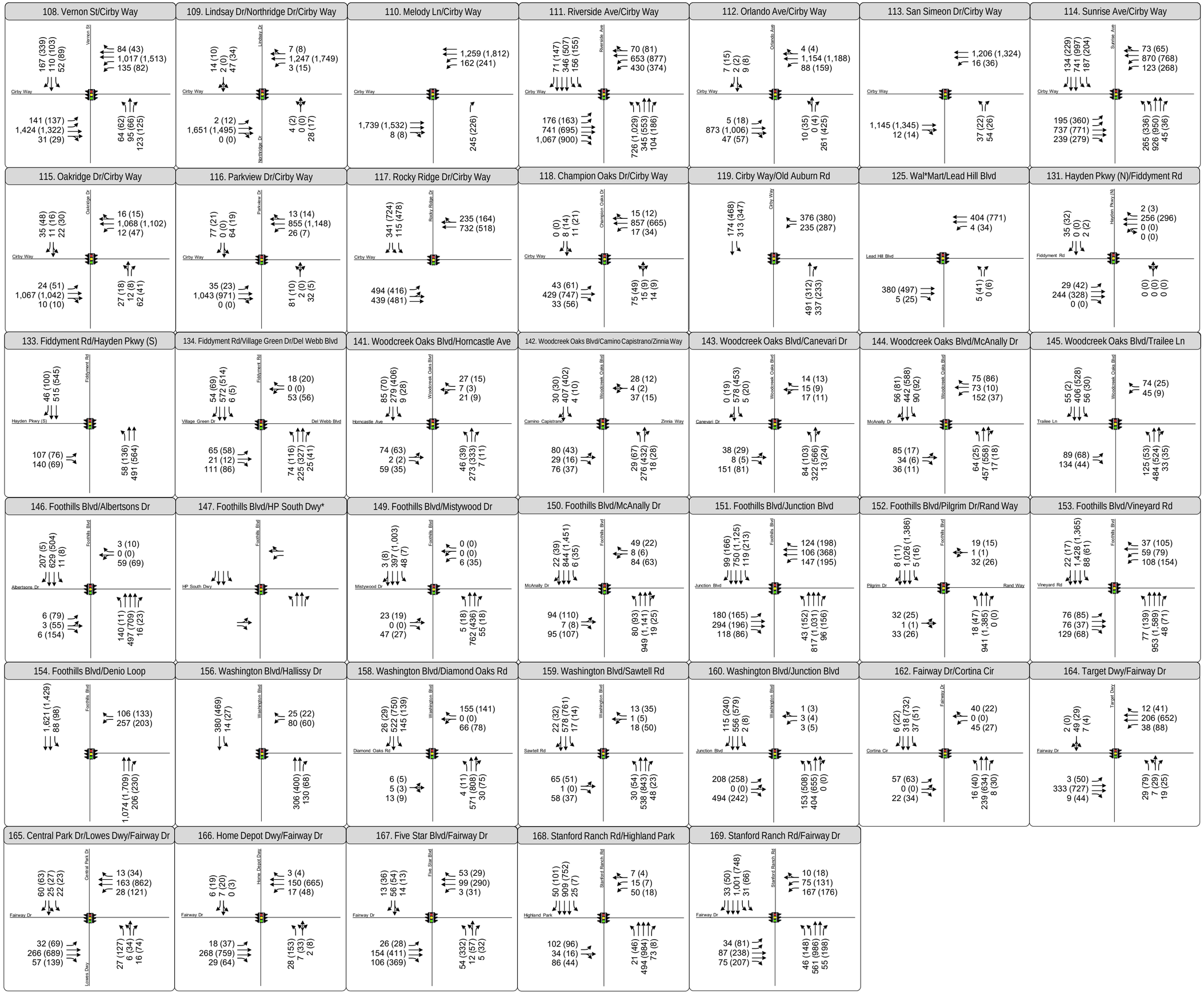


FIGURE 4.3-A2-b

Peak Hour Traffic Volumes and Lane Configurations
Existing Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN



*Count data not available

FEHR PEERS

FIGURE 4.3-A2-c

Peak Hour Traffic Volumes and Lane Configurations
Existing Conditions

ROSEVILLE GENERAL PLAN

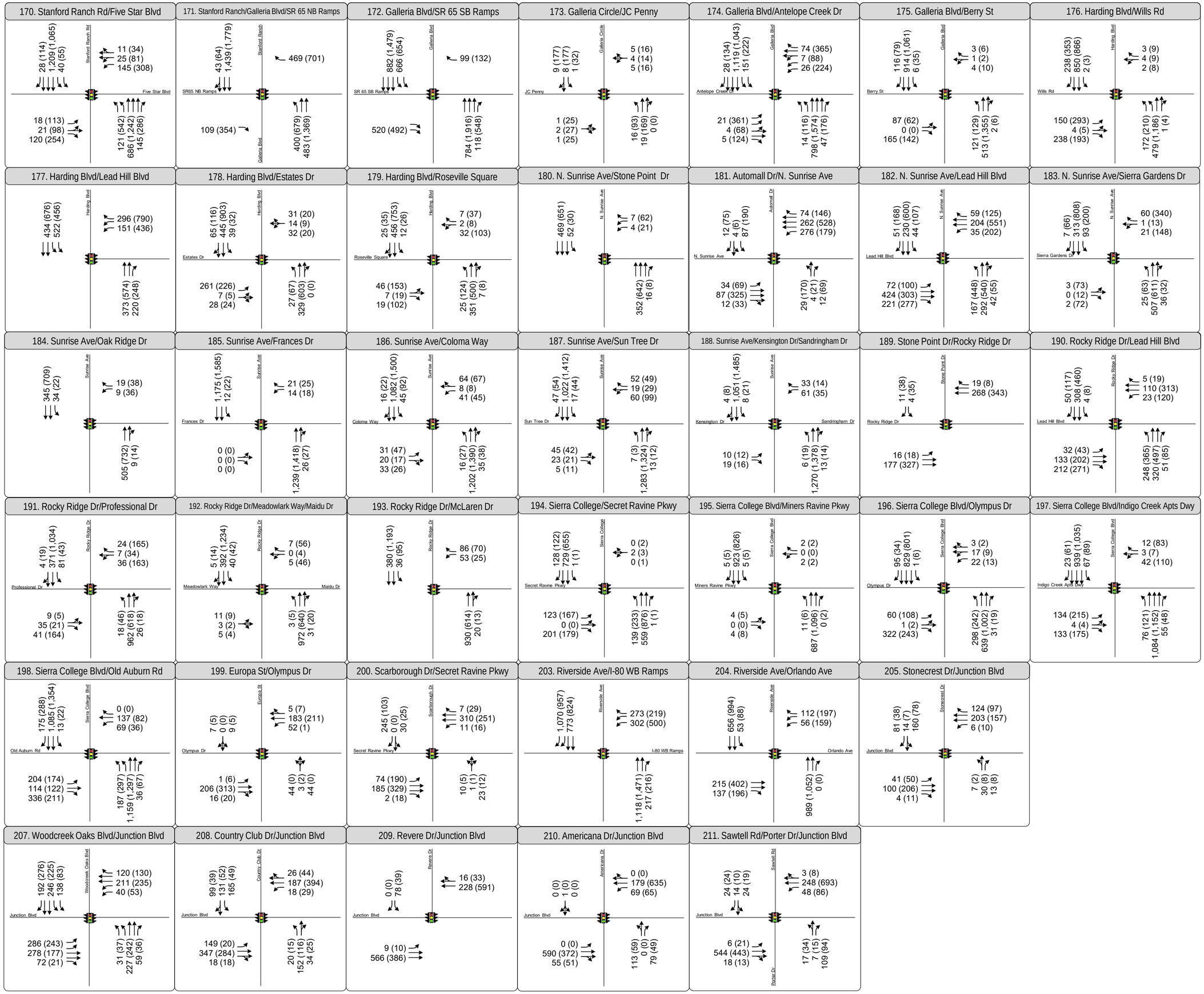
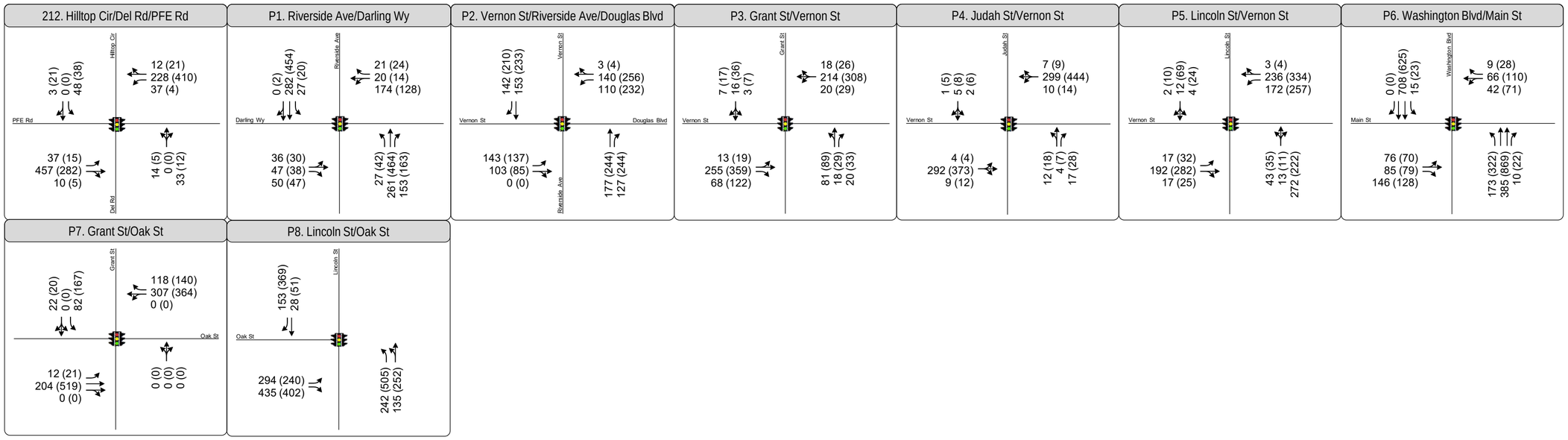


FIGURE 4.3-A2-d

Peak Hour Traffic Volumes and Lane Configurations
Existing Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN



*Peak hour counts not available

FIGURE 4.3-A2-e

Peak Hour Traffic Volumes and Lane Configurations
Existing Conditions

ROSEVILLE GENERAL PLAN

FEHR PEERS

Table 4.3A-3 Roseville Signalized Intersection Operations – Existing Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
6	Blue Oaks Blvd/Fiddyment Rd	18	B	17	B
7	Blue Oaks Blvd/Orchard View Rd	5	A	5	A
8	Blue Oaks Blvd/Del Webb Blvd	6	A	7	A
9	Blue Oaks Blvd/Crocker Ranch Rd	9	A	8	A
10	Blue Oaks Blvd/Diamond Creek Blvd/Prairie Woods Wy[3]	33	C	20	B
11	Blue Oaks Blvd/Woodcreek Oaks Blvd[3]	***39***	***D***[4]	***37***	***D***[4]
12	Blue Oaks Blvd/Walgreens Dwy[3]	5	A	11	B
13	Blue Oaks Blvd/New Meadow Dr[3]	7	A	19	B
15	Blue Oaks Blvd/Foothills Blvd[3]	25	C	33	C
17	Blue Oaks Blvd/Washington Blvd/SR 65 Ramps[3]	30	C	***42***	***D***[4]
20	Pleasant Grove Blvd/Westbrook Blvd	12	B	13	B
25	Pleasant Grove Blvd/Fiddyment Rd	24	C	25	C
26	Pleasant Grove Blvd/Sun City Blvd	6	A	8	A
27	Pleasant Grove Blvd/Rose Creek Rd	6	A	7	A
28	Pleasant Grove Blvd/Michener Dr	8	A	7	A
29	Pleasant Grove Blvd/Woodcreek Oaks Blvd	***40***	***D***[4]	***39***	***D***[4]
30	Pleasant Grove Blvd/Country Club Dr	20	B	18	B
31	Pleasant Grove Blvd/Foothills Blvd[3]	***44***	***D***[4]	***52***	***D***[4]
32	Pleasant Grove Blvd/Washington Blvd[3]	***38***	***D***[4]	***41***	***D***[4]
33	Pleasant Grove Blvd/Hallissy Dr/Gold Coast Dr[3]	9	A	25	C
34	Pleasant Grove Blvd/Roseville Pkwy[3]	***46***	***D***[4]	***67***	***E***[4]
35	Pleasant Grove Blvd/Highland Pointe Dr[3]	25	C	***47***	***D***[4]
36	Pleasant Grove Blvd/SR 65 SB Ramps[3]	9	A	11	B
37	Pleasant Grove Blvd/SR 65 NB Ramps[3]	15	B	21	C
38	Pleasant Grove Blvd/Fairway Dr[3]	***42***	***D***[4]	***41***	***D***[4]
39	Pleasant Grove Blvd/Highland Park Dr	14	B	22	C
49	Baseline Rd/Watt Ave	13	B	29	C
56	Baseline Rd/Fiddyment Rd/Walerga Rd	28	C	***37***	***D***[4]
57	Baseline Rd/Junction Blvd	9	A	9	A
58	Baseline Rd/Woodcreek Oaks Blvd/Cook Riolo Rd	13	B	13	B
59	Baseline Rd/Foothills Blvd	34	C	***38***	***D***[4]
60	Foothills Blvd/HP Central Dwy/Roseville Pkwy	5	A	8	A
61	Roseville Pkwy/Washington Blvd	9	A	13	B
62	Roseville Pkwy/Trestle Dr	11	B	9	A
64	Roseville Pkwy/Chase Dr[3]	14	B	12	B
65	Roseville Pkwy/Gibson Dr (E)[3]	10	B	13	B
66	Roseville Pkwy/West Dr[3]	6	A	25	C
67	Roseville Pkwy/Reserve Dr[3]	33	C	***37***	***D***[4]
68	Roseville Pkwy/Galleria Blvd[3]	***51***	***D***[4]	***53***	***D***[4]
69	Roseville Pkwy/Creekside Ridge Dr[3]	24	C	***37***	***D***[4]
70	Roseville Pkwy/Taylor Rd[3]	***36***	***D***[4]	***57***	***E***[4]
71	E Roseville Pkwy/N Sunrise Ave[3]	13	B	***39***	***D***[4]
72	E Roseville Pkwy/Secret Ravine Pkwy[3]	20	B	32	C
73	E Roseville Pkwy/Alexandra Dr[3]	6	A	16	B
74	E Roseville Pkwy/Rocky Ridge Dr[3]	8	A	17	B
75	E Roseville Pkwy/Orvietto Dr/Lead Hill Blvd[3]	***37***	***D***[4]	28	C
76	E Roseville Pkwy/Olympus Dr[3]	18	B	28	C
77	E Roseville Pkwy/Douglas Blvd[3]	***38***	***D***[4]	***48***	***D***[4]
78	E Roseville Pkwy/Village Dr	13	B	14	B
79	E Roseville Pkwy/Eureka Rd	22	C	28	C

Table 4.3A-3 Roseville Signalized Intersection Operations – Existing Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
80	E Roseville Pkwy/N Cirby Way	9	A	9	A
81	E Roseville Pkwy/Sierra College Blvd	***35***	***D***[4]	***38***	***D***[4]
82	Atlantic St/Yosemite St	12	B	11	B
83	Atlantic St/Tiger Way/Center St	12	B	10	B
84	Atlantic St/Wills Rd	22	C	17	B
85	Atlantic St/I-80 WB Ramps[3,5]	9	A	10	B
86	Eureka Rd/Taylor Rd/I-80 EB Ramps[3,5]	28	C	***44***	***D***[4]
87	Eureka Rd/N Sunrise Ave[3]	***36***	***D***[4]	***35***	***D***[4]
88	Eureka Rd/Rocky Ridge Dr[3]	34	C	33	C
89	Lead Hill Blvd/Eureka Rd	35	C	***40***	***D***[4]
90	Douglas Blvd/Eureka Road[3]	34	C	***43***	***D***[4]
91	Eureka Rd/Deer Valley Apts Dwy	10	B	10	A
92	Eureka Rd/Ashland Dr	14	B	12	B
93	Eureka Rd/Sierra College Blvd	***43***	***D***[4]	***52***	***D***[4]
94	Douglas Blvd/Judah St/Barjo Alley	8	A	15	B
95	Douglas Blvd/Park Dr	9	A	3	A
96	Douglas Blvd/Keehner Ave	7	A	10	B
97	Douglas Blvd/Folsom Rd	15	B	21	C
98	Douglas Blvd/Harding Blvd[3]	28	C	***48***	***D***[4]
99	Douglas Blvd/I-80 WB Ramps	23	C	26	C
100	Douglas Blvd/I-80 EB Ramps[5]	7	A	12	B
101	Douglas Blvd/N Sunrise Ave[3]	***36***	***D***[4]	***61***	***E***[4]
102	Douglas Blvd/Santa Clara Dr[3]	34	C	28	C
103	Douglas Blvd/Sierra Gardens Dr[3]	***53***	***D***[4]	***43***	***D***[4]
104	Douglas Blvd/Target Dwy[3]	20	C	30	C
105	Douglas Blvd/Rocky Ridge Dr[3]	***37***	***D***[4]	***59***	***E***[4]
106	Douglas Blvd/Sierra College Blvd	***42***	***D***[4]	***59***	***E***[4]
107	Cirby Wy/Foothills Blvd/Roseville Rd[3]	21	C	***40***	***D***[4]
108	Cirby Wy/Vernon St[3]	41	D	34	C
109	Cirby Wy/Northridge Dr/Lindsay Dr[3]	4	A	6	A
110	Cirby Wy/Melody Ln[3,5]	11	B	9	A
111	Cirby Wy/Riverside Ave[3]	***54***	***D***[4]	***60***	***E***[4]
112	Cirby Wy/Orlando Ave/Marlin Dr	30	C	***36***	***D***[4]
113	Cirby Wy/San Simeon Dr	25	C	30	C
114	Cirby Wy/Sunrise Ave	***70***	***E***[4]	***76***	***E***[4]
115	Cirby Wy/Oakridge Dr	29	C	11	B
116	Cirby Wy/Parkview Dr	9	A	4	A
117	Cirby Wy/Rocky Ridge Dr	29	C	30	C
118	Cirby Wy/Champion Oaks Dr	9	A	10	A
119	Cirby Wy/Old Auburn Rd	19	B	14	B
125	Lead Hill Blvd/Wal*Mart	4	A	5	A
131	Fiddyment Rd/Hayden Pkwy (N)	5	A	5	A
133	Fiddyment Rd/Hayden Pkwy (South)	8	A	8	A
134	Fiddyment Rd/Village Green Dr	17	B	17	B
141	Woodcreek Oaks Blvd/Horncastle Ave	13	B	14	B
142	Woodcreek Oaks Blvd/Camino Capistrano/Zinnia Way	15	B	15	B
143	Woodcreek Oaks Blvd/Canevari Dr/Arsenault Dr	16	B	15	B
144	Woodcreek Oaks Blvd/McAnally Dr	21	C	15	B
145	Woodcreek Oaks Blvd/Trailee Ln	11	B	9	A
146	Foothills Blvd/Albertsons Dr	12	B	14	B

Table 4.3A-3 Roseville Signalized Intersection Operations – Existing Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
147	Foothills Blvd/HP South Dwy[6]	-	C	-	C
149	Foothills Blvd/Mistywood Dr	9	A	10	B
150	Foothills Blvd/McAnally Dr	14	B	17	B
151	Foothills Blvd/Junction Blvd	30	C	***38***	***D***[4]
152	Foothills Blvd/Pilgrim Dr/Rand Wy	24	C	6	A
153	Foothills Blvd/Vineyard Rd	33	C	20	C
154	Foothills Blvd/Denio Loop	14	B	17	B
156	Washington Blvd/Hallisy Dr	7	A	7	A
158	Washington Blvd/Diamond Oaks Rd/Emerald Oak Rd	11	B	12	B
159	Washington Blvd/Sawtell Rd/Derek Pl	23	C	11	B
160	Washington Blvd/Junction Blvd	16	B	22	C
162	Fairway Dr/Cortina Cir	12	B	13	B
164	Fairway Dr/Target Dwy/Rosehall Dr	10	B	12	B
165	Fairway Dr/Central Park Dr/Lowes Dwy	11	B	15	B
166	Fairway Dr/Home Depot Dwy	9	A	30	C
167	Fairway Dr/Five Star Blvd	12	B	29	C
168	Stanford Ranch Rd/Highland Park Dr	13	B	11	B
169	Stanford Ranch Rd/Fairway Dr[3]	18	B	27	C
170	Stanford Ranch Rd/Five Star Blvd[3]	26	C	***41***	***D***[4]
171	Stanford Ranch Rd/SR 65 NB Ramps[3,5]	9	A	***43***	***D***[4]
172	Galleria Blvd/SR 65 SB Ramps[3,5]	7	A	23	C
173	Galleria Cir/JC Penny Dwy	14	B	8	A
174	Galleria Blvd/Antelope Creek Dr[3]	18	B	34	C
175	Galleria Blvd/Berry St	14	B	18	B
176	Harding Blvd/Wills Rd	12	B	15	B
177	Harding Blvd/Lead Hill Blvd	10	A	23	C
178	Harding Blvd/Estates Dr[3]	13	B	20	B
179	Harding Blvd/Roseville Sq[3]	10	A	25	C
180	N Sunrise Ave/Stone Point Dr	4	A	4	A
181	N Sunrise Ave/Automall Dr	16	B	21	C
182	N Sunrise Ave/Lead Hill Blvd	19	B	***42***	***D***[4]
183	N Sunrise Ave/Sierra Gardens Dr	10	A	20	C
184	Sunrise Ave/Oak Ridge Dr	5	A	5	A
185	Sunrise Ave/Frances Dr	2	A	2	A
186	Sunrise Ave/Coloma Wy	14	B	19	B
187	Sunrise Ave/Sun Tree Dr/Kensington Dr	12	B	***81***	***F***[4]
188	Sunrise Ave/Sandringham Dr/Kensington Dr[5]	11	B	10	A
189	Rocky Ridge Dr/Stone Point Dr	6	A	6	A
190	Rocky Ridge Dr/Lead Hill Blvd	16	B	23	C
191	Rocky Ridge Dr/Professional Dr	16	B	20	C
192	Rocky Ridge Dr/Meadowlark Wy/Maidu Dr	5	A	6	A
193	Rocky Ridge Dr/McLaren Dr	8	A	4	A
194	Sierra College Blvd/Secret Ravine Pkwy	14	B	16	B
195	Sierra College Blvd/Miners Ravine Pkwy	7	A	7	A
196	Sierra College Blvd/Olympus Dr	20	C	18	B
197	Sierra College Blvd/Renaissance Creek SC Dwy/Granite Bay Business Park Dwy	26	C	30	C
198	Sierra College Blvd/Old Auburn Rd	30	C	29	C
199	Olympus Dr/Europa St	11	B	7	A
200	Secret Ravine Pkwy/Scarborough Dr/Poppy Field Dr	13	B	12	B

Table 4.3A-3 Roseville Signalized Intersection Operations – Existing Conditions

Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
203	Riverside Ave/I-80 WB Ramps[3]	9	A	26	C
204	Riverside Ave/I-80 EB Ramps/Orlando Dr[3]	15	B	32	C
205	Junction Blvd/Stonecrest Dr/Magenta Dr	15	B	12	B
207	Junction Blvd/Woodcreek Oaks Blvd	20	C	19	B
208	Junction Blvd/Country Club Dr	18	B	15	B
209	Junction Blvd/Revere Dr	5	A	6	A
210	Junction Blvd/Americana Dr	13	B	7	A
211	Junction Blvd/Sawtell Rd/Porter Dr	9	A	9	A
212	PFE Rd/Hilltop Cir/Del Rd	13	B	11	B
P1	Riverside Ave/Darling Way[7]	15	B	15	B
P2	Douglas Blvd/Riverside Ave/Vernon St[7]	14	B	16	B
P3	Vernon St/Grant St[7]	4	A	7	A
P4	Vernon St/Judah St[7]	4	A	3	A
P5	Vernon St/Lincoln St[7]	10	A	27	C
P6	Washington Blvd/Main St[7]	27	C	31	C
P7	Oak St/Grant St[7]	8	A	8	A
P8	Oak St/Lincoln St[7]	7	A	7	A
P9	Pleasant Grove Blvd/Market St[7]	14	B	13	B
P10	Pleasant Grove Blvd/Monument Dr/Kirkhill Dr[7]	12	B	10	A

Notes:

1. Delay is reported as seconds per vehicle and represent the average delay for the overall intersection.
2. "LOS" represents level of service, calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).
3. For the PM peak hour, this intersection was analyzed in a SimTraffic 10 microsimulation model to account for interaction between traffic signals, queue spillback, etc. SimTraffic results represent the average of 10 runs.
4. Bold and italicized text signifies that the intersection operates unacceptably according to the City's LOS policy.
5. Because of restrictions in Synchro 10, *Highway Capacity Manual 2000* (Transportation Research Board, 2000) methodologies for calculating delay and level of service are applied at this intersection.
6. Traffic count data not available at this signalized intersection. Results shown as LOS C or better based on field observations.
7. Intersection is located in City's Pedestrian Overlay District (POD), which is exempt from the City's LOS policies.

Source: Fehr & Peers, 2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	43	2	333	61	58	2	223	358	59	221	6
Future Volume (veh/h)	10	43	2	333	61	58	2	223	358	59	221	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	48	0	370	68	10	2	248	94	66	246	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	462	143	581	614	189	235	737	326	382	737	326
Arrive On Green	0.10	0.09	0.00	0.17	0.12	0.12	0.07	0.21	0.21	0.11	0.21	0.21
Sat Flow, veh/h	3456	5106	1585	3456	5106	1571	3456	3554	1574	3456	3554	1574
Grp Volume(v), veh/h	11	48	0	370	68	10	2	248	94	66	246	3
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1571	1728	1777	1574	1728	1777	1574
Q Serve(g_s), s	0.1	0.4	0.0	4.7	0.6	0.2	0.0	2.8	2.4	0.8	2.8	0.1
Cycle Q Clear(g_c), s	0.1	0.4	0.0	4.7	0.6	0.2	0.0	2.8	2.4	0.8	2.8	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	462	143	581	614	189	235	737	326	382	737	326
V/C Ratio(X)	0.03	0.10	0.00	0.64	0.11	0.05	0.01	0.34	0.29	0.17	0.33	0.01
Avail Cap(c_a), veh/h	1464	2163	671	1610	4218	1298	1464	2484	1100	1464	2484	1100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	19.7	0.0	18.3	18.5	7.4	20.5	15.9	15.8	19.0	15.9	14.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.4	0.1	0.2	0.0	0.5	0.9	0.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	1.5	0.2	0.1	0.0	0.9	0.7	0.3	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	19.9	0.0	18.7	18.6	7.6	20.5	16.5	16.7	19.1	16.4	14.9
LnGrp LOS	B	B	A	B	B	A	C	B	B	B	B	B
Approach Vol, veh/h		59			448			344			315	
Approach Delay, s/veh		19.8			18.5			16.6			17.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	15.8	11.9	10.3	9.2	15.8	10.5	11.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	6.0	* 6
Max Green Setting (Gmax), s	20.0	33.0	22.0	20.0	20.0	* 33	20.0	* 39
Max Q Clear Time (g_c+I1), s	2.8	4.8	6.7	2.4	2.0	4.8	2.1	2.6
Green Ext Time (p_c), s	0.1	2.8	0.8	0.2	0.0	2.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	455	420	25	39	9
Future Volume (veh/h)	3	455	420	25	39	9
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	506	467	17	43	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	9	2442	1584	492	203	181
Arrive On Green	0.00	0.48	0.31	0.31	0.11	0.00
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	3	506	467	17	43	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.0	1.4	1.7	0.2	0.5	0.0
Cycle Q Clear(g_c), s	0.0	1.4	1.7	0.2	0.5	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	9	2442	1584	492	203	181
V/C Ratio(X)	0.34	0.21	0.29	0.03	0.21	0.00
Avail Cap(c_a), veh/h	1453	13119	8954	2780	1961	1745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.2	3.7	6.4	5.9	9.9	0.0
Incr Delay (d2), s/veh	8.2	0.1	0.2	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.3	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.4	3.8	6.6	5.9	10.1	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		509	484		43	
Approach Delay, s/veh		3.9	6.6		10.1	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	17.7	6.8	4.1	13.6
Change Period (Y+Rc), s	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	63.0	27.0	20.0	43.0
Max Q Clear Time (g_c+I1), s	3.4	2.5	2.0	3.7
Green Ext Time (p_c), s	4.2	0.1	0.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	525	4	76	456	5	76
Future Volume (veh/h)	525	4	76	456	5	76
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	583	2	84	507	6	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1569	487	271	3043	57	50
Arrive On Green	0.31	0.31	0.15	0.60	0.03	0.03
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	583	2	84	507	6	6
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	2.6	0.0	1.2	1.3	0.1	0.1
Cycle Q Clear(g_c), s	2.6	0.0	1.2	1.3	0.1	0.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1569	487	271	3043	57	50
V/C Ratio(X)	0.37	0.00	0.31	0.17	0.11	0.12
Avail Cap(c_a), veh/h	4882	1515	1946	10461	1825	1624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.9	7.0	11.0	2.7	13.8	13.8
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.0	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	0.1	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.1	7.0	11.3	2.7	14.1	14.2
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	585			591	12	
Approach Delay, s/veh	8.1			3.9	14.1	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		5.8	8.5	15.0		23.5
Change Period (Y+Rc), s		4.9	4.0	6.0		6.0
Max Green Setting (Gmax), s		30.0	32.0	28.0		60.0
Max Q Clear Time (g_c+I1), s		2.1	3.2	4.6		3.3
Green Ext Time (p_c), s		0.0	0.2	4.4		4.2

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	563	457	86	191	22
Future Volume (veh/h)	10	563	457	86	191	22
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	626	508	34	212	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	31	2038	1350	415	501	446
Arrive On Green	0.02	0.40	0.26	0.26	0.28	0.28
Sat Flow, veh/h	1781	5274	5274	1570	1781	1585
Grp Volume(v), veh/h	11	626	508	34	212	6
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1570	1781	1585
Q Serve(g_s), s	0.2	2.9	2.8	0.6	3.3	0.1
Cycle Q Clear(g_c), s	0.2	2.9	2.8	0.6	3.3	0.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	31	2038	1350	415	501	446
V/C Ratio(X)	0.35	0.31	0.38	0.08	0.42	0.01
Avail Cap(c_a), veh/h	1148	8529	5237	1610	1723	1533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	7.0	10.3	9.4	10.0	8.8
Incr Delay (d2), s/veh	2.5	0.1	0.3	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.7	0.1	1.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.1	7.1	10.5	9.6	10.2	8.8
LnGrp LOS	B	A	B	A	B	A
Approach Vol, veh/h		637	542		218	
Approach Delay, s/veh		7.4	10.4		10.2	
Approach LOS		A	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		19.6		14.5	4.6	15.0
Change Period (Y+Rc), s		6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s		57.0		33.0	22.0	35.0
Max Q Clear Time (g_c+I1), s		4.9		5.3	2.2	4.8
Green Ext Time (p_c), s		5.0		0.5	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	711	10	28	413	118	22	3	35	271	33	17
Future Volume (veh/h)	25	711	10	28	413	118	22	3	35	271	33	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	790	5	31	459	71	24	3	0	341	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	1674	520	67	1659	515	106	111	94	429	225	0
Arrive On Green	0.04	0.33	0.33	0.08	0.65	0.65	0.06	0.06	0.00	0.12	0.00	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	3563	1870	0
Grp Volume(v), veh/h	28	790	5	31	459	71	24	3	0	341	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	0
Q Serve(g_s), s	1.8	14.8	0.3	2.0	4.6	2.1	1.5	0.2	0.0	11.2	0.0	0.0
Cycle Q Clear(g_c), s	1.8	14.8	0.3	2.0	4.6	2.1	1.5	0.2	0.0	11.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	72	1674	520	67	1659	515	106	111	94	429	225	0
V/C Ratio(X)	0.39	0.47	0.01	0.46	0.28	0.14	0.23	0.03	0.00	0.80	0.00	0.00
Avail Cap(c_a), veh/h	238	1674	520	238	1659	515	303	318	269	745	391	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	56.1	32.1	27.2	54.3	15.0	14.5	53.8	53.2	0.0	51.3	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.6	0.0	1.8	0.4	0.6	1.8	0.2	0.0	3.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	6.0	0.1	0.9	1.6	0.8	0.7	0.1	0.0	5.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.4	32.7	27.2	56.2	15.4	15.1	55.7	53.3	0.0	54.9	0.0	0.0
LnGrp LOS	E	C	C	E	B	B	E	D	A	D	A	A
Approach Vol, veh/h		823			561			27			341	
Approach Delay, s/veh		33.5			17.6			55.4			54.9	
Approach LOS		C			B			E			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.7	8.5	45.3		19.3	8.9	45.0				
Change Period (Y+Rc), s		4.6	4.0	6.0		4.9	4.0	6.0				
Max Green Setting (Gmax), s		20.4	16.0	39.0		25.1	16.0	39.0				
Max Q Clear Time (g_c+I1), s		3.5	4.0	16.8		13.2	3.8	6.6				
Green Ext Time (p_c), s		0.1	0.0	8.7		1.3	0.0	6.3				

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	907	88	168	444	118	58	105	281	390	92	46
Future Volume (veh/h)	27	907	88	168	444	118	58	105	281	390	92	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	1008	44	187	493	63	64	117	59	433	102	7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	1899	590	250	2000	621	305	233	111	497	552	246
Arrive On Green	0.05	0.37	0.37	0.07	0.39	0.39	0.09	0.10	0.10	0.14	0.16	0.16
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	2334	1113	3456	3554	1585
Grp Volume(v), veh/h	30	1008	44	187	493	63	64	87	89	433	102	7
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1670	1728	1777	1585
Q Serve(g_s), s	1.0	18.5	2.2	6.4	7.8	3.0	2.1	5.6	6.0	14.7	3.0	0.4
Cycle Q Clear(g_c), s	1.0	18.5	2.2	6.4	7.8	3.0	2.1	5.6	6.0	14.7	3.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	182	1899	590	250	2000	621	305	177	167	497	552	246
V/C Ratio(X)	0.16	0.53	0.07	0.75	0.25	0.10	0.21	0.49	0.53	0.87	0.18	0.03
Avail Cap(c_a), veh/h	461	1899	590	605	2000	621	518	241	227	605	572	255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	29.5	24.3	54.6	24.6	23.1	50.8	51.1	51.4	50.3	44.1	43.0
Incr Delay (d2), s/veh	0.1	0.7	0.1	1.6	0.3	0.3	0.1	2.8	3.5	10.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.4	0.8	2.8	3.1	1.2	0.9	2.6	2.7	6.9	1.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	30.1	24.5	56.2	24.9	23.4	51.0	54.0	54.8	60.3	44.3	43.1
LnGrp LOS	D	C	C	E	C	C	D	D	D	E	D	D
Approach Vol, veh/h		1082			743			240			542	
Approach Delay, s/veh		30.6			32.6			53.5			57.1	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	17.7	12.7	50.6	14.6	24.3	10.3	53.0
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	21.0	16.3	21.0	42.0	18.0	19.3	16.0	47.0
Max Q Clear Time (g_c+I1), s	16.7	8.0	8.4	20.5	4.1	5.0	3.0	9.8
Green Ext Time (p_c), s	0.5	0.5	0.3	11.3	0.1	0.4	0.0	6.9

Intersection Summary	
HCM 6th Ctrl Delay	38.8
HCM 6th LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	1568	720	10	10	10
Future Volume (veh/h)	10	1568	720	10	10	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	1742	800	5	11	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	21	3153	2397	744	195	173
Arrive On Green	0.01	0.62	0.47	0.47	0.11	0.11
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	11	1742	800	5	11	1
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.2	7.2	3.6	0.1	0.2	0.0
Cycle Q Clear(g_c), s	0.2	7.2	3.6	0.1	0.2	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	21	3153	2397	744	195	173
V/C Ratio(X)	0.53	0.55	0.33	0.01	0.06	0.01
Avail Cap(c_a), veh/h	535	4603	2397	744	827	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	4.1	6.1	5.2	14.6	14.5
Incr Delay (d2), s/veh	19.8	0.2	0.1	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.6	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.8	4.2	6.2	5.2	14.7	14.5
LnGrp LOS	D	A	A	A	B	B
Approach Vol, veh/h		1753	805		12	
Approach Delay, s/veh		4.4	6.2		14.7	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	27.6	9.0	5.4	22.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	33.0	17.0	11.0	17.0
Max Q Clear Time (g_c+I1), s	9.2	2.2	2.2	5.6
Green Ext Time (p_c), s	13.4	0.0	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	8	1659	0	694	59	225	34
Future Volume (veh/h)	8	1659	0	694	59	225	34
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	9	1843		771	49	250	1
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	23	4132		3895	1209	346	159
Arrive On Green	0.01	0.81		1.00	1.00	0.10	0.10
Sat Flow, veh/h	1781	5274		5274	1585	3456	1585
Grp Volume(v), veh/h	9	1843		771	49	250	1
Grp Sat Flow(s),veh/h/ln	1781	1702		1702	1585	1728	1585
Q Serve(g_s), s	0.6	12.9		0.0	0.0	8.4	0.1
Cycle Q Clear(g_c), s	0.6	12.9		0.0	0.0	8.4	0.1
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	23	4132		3895	1209	346	159
V/C Ratio(X)	0.39	0.45		0.20	0.04	0.72	0.01
Avail Cap(c_a), veh/h	238	4132		3895	1209	579	265
HCM Platoon Ratio	1.00	1.00		2.00	2.00	1.00	1.00
Upstream Filter(I)	0.79	0.79		0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	58.8	3.4		0.0	0.0	52.4	48.6
Incr Delay (d2), s/veh	3.1	0.3		0.0	0.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.8		0.0	0.0	3.7	0.1
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	61.9	3.7		0.0	0.0	53.5	48.6
LnGrp LOS	E	A		A	A	D	D
Approach Vol, veh/h		1852		820		251	
Approach Delay, s/veh		4.0		0.0		53.5	
Approach LOS		A		A		D	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		103.1		16.9	5.6	97.5
Change Period (Y+Rc), s		6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s		69.0		20.1	16.0	69.0
Max Q Clear Time (g_c+I1), s		14.9		10.4	2.6	2.0
Green Ext Time (p_c), s		30.6		0.5	0.0	9.2

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1479	256	556	732	256	128	82	215	130	55	25
Future Volume (veh/h)	31	1479	256	556	732	256	128	82	215	130	55	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	1643	126	618	813	161	142	91	0	144	61	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	2450	761	605	3055	948	285	282		343	341	152
Arrive On Green	0.11	0.96	0.96	0.17	0.60	0.60	0.08	0.08	0.00	0.10	0.10	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	34	1643	126	618	813	161	142	91	0	144	61	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.1	4.4	0.5	21.0	9.1	5.4	4.7	2.9	0.0	4.7	1.9	0.0
Cycle Q Clear(g_c), s	1.1	4.4	0.5	21.0	9.1	5.4	4.7	2.9	0.0	4.7	1.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	195	2450	761	605	3055	948	285	282		343	341	152
V/C Ratio(X)	0.17	0.67	0.17	1.02	0.27	0.17	0.50	0.32		0.42	0.18	0.00
Avail Cap(c_a), veh/h	461	2450	761	605	3055	948	461	444		461	465	207
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	0.99	0.99	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.7	1.3	1.3	49.5	11.5	10.8	52.7	52.2	0.0	50.8	49.9	0.0
Incr Delay (d2), s/veh	0.1	1.0	0.3	42.3	0.2	0.4	0.5	0.8	0.0	0.3	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.8	0.2	12.3	3.2	1.9	2.0	1.3	0.0	2.0	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.8	2.3	1.5	91.8	11.7	11.2	53.2	53.0	0.0	51.1	50.8	0.0
LnGrp LOS	D	A	A	F	B	B	D	D		D	D	A
Approach Vol, veh/h		1803			1592			233	A		205	
Approach Delay, s/veh		3.2			42.7			53.1			51.0	
Approach LOS		A			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	17.5	10.8	77.8	15.9	15.5	25.0	63.6
Change Period (Y+Rc), s	4.0	* 6	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	16.0	* 16	16.0	53.0	16.0	15.0	21.0	48.0
Max Q Clear Time (g_c+I1), s	6.7	3.9	3.1	11.1	6.7	4.9	23.0	6.4
Green Ext Time (p_c), s	0.2	0.3	0.0	13.9	0.2	0.2	0.0	29.2

Intersection Summary	
HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1522	238	165	495	332	157	0	285	59	228	258
Future Volume (veh/h)	0	1522	238	165	495	332	157	0	285	59	228	258
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1691	110	183	550	0	174	0	317	66	253	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	0	2759	680	246	1895		0	0	0	174	347	
Arrive On Green	0.00	0.43	0.43	0.07	0.53	0.00	0.00	0.00	0.00	0.10	0.10	0.00
Sat Flow, veh/h	0	6696	1585	3456	3554	1585		0		1781	3554	1585
Grp Volume(v), veh/h	0	1691	110	183	550	0		0.0		66	253	0
Grp Sat Flow(s),veh/h/ln	0	1609	1585	1728	1777	1585				1781	1777	1585
Q Serve(g_s), s	0.0	24.4	5.1	6.2	10.3	0.0				4.2	8.3	0.0
Cycle Q Clear(g_c), s	0.0	24.4	5.1	6.2	10.3	0.0				4.2	8.3	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2759	680	246	1895					174	347	
V/C Ratio(X)	0.00	0.61	0.16	0.74	0.29					0.38	0.73	
Avail Cap(c_a), veh/h	0	2759	680	605	1895					282	563	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	26.6	21.0	54.7	15.5	0.0				50.7	52.6	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.2	1.7	0.4	0.0				2.5	5.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.0	1.9	2.7	4.0	0.0				1.9	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	27.1	21.2	56.3	15.8	0.0				53.2	58.0	0.0
LnGrp LOS	A	C	C	E	B					D	E	
Approach Vol, veh/h		1801			733	A					319	A
Approach Delay, s/veh		26.8			26.0						57.0	
Approach LOS		C			C						E	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		17.7	12.5	57.5				70.0				
Change Period (Y+Rc), s		6.0	4.0	6.0				6.0				
Max Green Setting (Gmax), s		19.0	21.0	39.0				64.0				
Max Q Clear Time (g_c+I1), s		10.3	8.2	26.4				12.3				
Green Ext Time (p_c), s		1.4	0.3	10.2				5.5				

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	160	0	0	0	40	0	0
Future Volume (veh/h)	0	0	0	0	0	160	0	0	0	40	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	0	0	21	0	0	0	44	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	81	36	40	81	36	21	41	18	83	165	74
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.05	0.00	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	0	0	21	0	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	81	36	40	81	36	21	41	18	83	165	74
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.53	0.00	0.00
Avail Cap(c_a), veh/h	1608	9510	4242	1608	9510	4242	829	9510	4242	3316	9510	4242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	4.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0	0.0	5.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	18.1	0.0	0.0	0.0	9.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	B	A	A	A	A	A	A
Approach Vol, veh/h		0			21			0			44	
Approach Delay, s/veh		0.0			18.1			0.0			9.2	
Approach LOS					B						A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	0.0	0.0	4.2	0.0	4.4	0.0	4.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	23.0	4.0	23.0	4.0	23.0	4.0	23.0
Max Q Clear Time (g_c+I1), s	2.2	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	75	29	75	56	23	96	79	2	41	1
Future Volume (veh/h)	17	0	75	29	75	56	23	96	79	2	41	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	0	4	32	83	45	26	107	17	2	46	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	0	99	82	212	115	78	673	105	7	634	283
Arrive On Green	0.06	0.00	0.06	0.23	0.23	0.23	0.04	0.22	0.22	0.00	0.18	0.00
Sat Flow, veh/h	1781	0	1585	353	915	496	1781	3081	480	1781	3554	1585
Grp Volume(v), veh/h	19	0	4	160	0	0	26	61	63	2	46	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1763	0	0	1781	1777	1784	1781	1777	1585
Q Serve(g_s), s	0.4	0.0	0.1	3.0	0.0	0.0	0.6	1.1	1.1	0.0	0.4	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.1	3.0	0.0	0.0	0.6	1.1	1.1	0.0	0.4	0.0
Prop In Lane	1.00		1.00	0.20		0.28	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	111	0	99	408	0	0	78	388	390	7	634	283
V/C Ratio(X)	0.17	0.00	0.04	0.39	0.00	0.00	0.33	0.16	0.16	0.29	0.07	0.00
Avail Cap(c_a), veh/h	908	0	808	899	0	0	908	1811	1818	908	3622	1616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.4	0.0	17.3	12.8	0.0	0.0	18.2	12.4	12.4	19.5	13.4	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.2	0.0	0.0	0.9	0.3	0.3	8.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	1.0	0.0	0.0	0.2	0.4	0.4	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	0.0	17.4	13.0	0.0	0.0	19.1	12.7	12.8	28.0	13.5	0.0
LnGrp LOS	B	A	B	B	A	A	B	B	B	C	B	A
Approach Vol, veh/h		23			160			150			48	
Approach Delay, s/veh		17.7			13.0			13.8			14.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.1	5.7	12.7		7.7	4.2	14.3				
Change Period (Y+Rc), s		4.0	4.0	5.7		5.3	4.0	5.7				
Max Green Setting (Gmax), s		20.0	20.0	40.0		20.0	20.0	40.0				
Max Q Clear Time (g_c+I1), s		5.0	2.6	2.4		2.4	2.0	3.1				
Green Ext Time (p_c), s		0.3	0.0	0.3		0.0	0.0	0.9				

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	39	50	3	0	95	193	34	0	317	6
Future Volume (veh/h)	20	10	39	50	3	0	95	193	34	0	317	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	11	1	56	3	0	106	214	19	0	352	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	19	2	86	5	81	136	1540	687	6	831	14
Arrive On Green	0.03	0.03	0.03	0.05	0.05	0.00	0.08	0.43	0.43	0.00	0.23	0.23
Sat Flow, veh/h	1166	583	53	1695	91	1585	1781	3554	1585	1781	3575	61
Grp Volume(v), veh/h	34	0	0	59	0	0	106	214	19	0	175	183
Grp Sat Flow(s),veh/h/ln	1803	0	0	1786	0	1585	1781	1777	1585	1781	1777	1859
Q Serve(g_s), s	0.6	0.0	0.0	1.0	0.0	0.0	1.9	1.2	0.2	0.0	2.7	2.7
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.0	0.0	0.0	1.9	1.2	0.2	0.0	2.7	2.7
Prop In Lane	0.65		0.03	0.95		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	59	0	0	91	0	81	136	1540	687	6	413	432
V/C Ratio(X)	0.58	0.00	0.00	0.65	0.00	0.00	0.78	0.14	0.03	0.00	0.42	0.42
Avail Cap(c_a), veh/h	1123	0	0	1113	0	988	1110	4430	1976	1110	2215	2318
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	0.0	14.9	0.0	0.0	14.6	5.5	5.2	0.0	10.5	10.5
Incr Delay (d2), s/veh	3.3	0.0	0.0	2.9	0.0	0.0	3.7	0.1	0.0	0.0	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.4	0.0	0.0	0.7	0.3	0.0	0.0	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	0.0	17.8	0.0	0.0	18.2	5.6	5.2	0.0	11.7	11.6
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	B	B
Approach Vol, veh/h		34			59			339			358	
Approach Delay, s/veh		18.6			17.8			9.5			11.6	
Approach LOS		B			B			A			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.5	6.4	13.2		5.9	0.0	19.6				
Change Period (Y+Rc), s		4.9	4.0	5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		20.0	20.0	40.0		20.0	20.0	40.0				
Max Q Clear Time (g_c+I1), s		3.0	3.9	4.7		2.6	0.0	3.2				
Green Ext Time (p_c), s		0.1	0.1	2.8		0.1	0.0	1.9				

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	216	262	393	100	79	126	490	403	112	687	10
Future Volume (veh/h)	21	216	262	393	100	79	126	490	403	112	687	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	240	40	437	111	25	140	544	120	124	763	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	510	227	560	902	402	372	1540	478	362	1062	474
Arrive On Green	0.05	0.14	0.14	0.16	0.25	0.25	0.11	0.30	0.30	0.10	0.30	0.30
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	3554	1585
Grp Volume(v), veh/h	23	240	40	437	111	25	140	544	120	124	763	3
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1777	1585
Q Serve(g_s), s	0.4	4.3	1.5	8.4	1.7	0.8	2.6	5.8	4.0	2.3	13.3	0.1
Cycle Q Clear(g_c), s	0.4	4.3	1.5	8.4	1.7	0.8	2.6	5.8	4.0	2.3	13.3	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	510	227	560	902	402	372	1540	478	362	1062	474
V/C Ratio(X)	0.13	0.47	0.18	0.78	0.12	0.06	0.38	0.35	0.25	0.34	0.72	0.01
Avail Cap(c_a), veh/h	996	1024	457	996	1024	457	996	2208	685	996	1537	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	27.3	26.1	27.9	19.9	19.6	28.8	18.9	18.3	28.8	21.7	17.1
Incr Delay (d2), s/veh	0.1	1.2	0.6	0.9	0.1	0.1	0.2	0.3	0.5	0.2	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	0.6	3.2	0.6	0.3	1.0	2.0	1.3	0.9	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	28.5	26.7	28.8	20.0	19.7	29.0	19.2	18.8	29.0	23.5	17.1
LnGrp LOS	C	C	C	C	C	B	C	B	B	C	C	B
Approach Vol, veh/h		303			573			804			890	
Approach Delay, s/veh		28.5			26.7			20.9			24.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	26.9	15.2	16.0	11.5	26.7	7.6	23.6
Change Period (Y+Rc), s	4.0	6.0	4.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	* 20	20.0	30.0	20.0	20.0
Max Q Clear Time (g_c+I1), s	4.3	7.8	10.4	6.3	4.6	15.3	2.4	3.7
Green Ext Time (p_c), s	0.2	5.5	0.8	1.6	0.2	5.4	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	735	517	32	63	23
Future Volume (veh/h)	11	735	517	32	63	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	817	574	0	70	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	45	1887	1319		237	
Arrive On Green	0.03	0.53	0.37	0.00	0.13	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	12	817	574	0	70	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.2	4.2	3.6	0.0	1.1	0.0
Cycle Q Clear(g_c), s	0.2	4.2	3.6	0.0	1.1	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	45	1887	1319		237	
V/C Ratio(X)	0.27	0.43	0.44		0.30	
Avail Cap(c_a), veh/h	1197	7644	5255		1557	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	14.2	4.2	7.0	0.0	11.6	0.0
Incr Delay (d2), s/veh	1.1	0.2	0.4	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.9	0.0	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.4	4.5	7.4	0.0	11.9	0.0
LnGrp LOS	B	A	A		B	
Approach Vol, veh/h		829	574	A	70	A
Approach Delay, s/veh		4.6	7.4		11.9	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		21.8		8.0	4.8	17.0
Change Period (Y+Rc), s		6.0		4.0	4.0	* 6
Max Green Setting (Gmax), s		64.0		26.0	20.0	* 44
Max Q Clear Time (g_c+I1), s		6.2		3.1	2.2	5.6
Green Ext Time (p_c), s		7.6		0.1	0.0	5.4

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	789	567	18	50	9
Future Volume (veh/h)	5	789	567	18	50	9
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	6	877	630	19	56	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	20	1949	1402	42	204	0
Arrive On Green	0.01	0.55	0.40	0.40	0.11	0.00
Sat Flow, veh/h	1781	3647	3615	106	1779	0
Grp Volume(v), veh/h	6	877	318	331	57	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1851	1811	0
Q Serve(g_s), s	0.1	4.3	3.8	3.8	0.8	0.0
Cycle Q Clear(g_c), s	0.1	4.3	3.8	3.8	0.8	0.0
Prop In Lane	1.00			0.06	0.98	0.00
Lane Grp Cap(c), veh/h	20	1949	708	737	207	0
V/C Ratio(X)	0.30	0.45	0.45	0.45	0.28	0.00
Avail Cap(c_a), veh/h	1238	6173	1852	1930	1258	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.1	3.9	6.3	6.3	11.7	0.0
Incr Delay (d2), s/veh	3.0	0.3	0.8	0.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.9	0.9	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.1	4.2	7.1	7.1	11.9	0.0
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h		883	649		57	
Approach Delay, s/veh		4.3	7.1		11.9	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	21.5	7.3	4.3	17.2
Change Period (Y+Rc), s	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	50.0	20.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	6.3	2.8	2.1	5.8
Green Ext Time (p_c), s	9.5	0.1	0.0	5.1

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	9	827	529	24	104	45
Future Volume (veh/h)	9	827	529	24	104	45
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	919	588	24	116	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	33	1797	1286	52	322	287
Arrive On Green	0.02	0.51	0.37	0.37	0.18	0.18
Sat Flow, veh/h	1781	3647	3571	142	1781	1585
Grp Volume(v), veh/h	10	919	300	312	116	6
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1843	1781	1585
Q Serve(g_s), s	0.2	5.9	4.4	4.4	1.9	0.1
Cycle Q Clear(g_c), s	0.2	5.9	4.4	4.4	1.9	0.1
Prop In Lane	1.00			0.08	1.00	1.00
Lane Grp Cap(c), veh/h	33	1797	657	681	322	287
V/C Ratio(X)	0.30	0.51	0.46	0.46	0.36	0.02
Avail Cap(c_a), veh/h	1044	5208	1562	1620	1044	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	5.6	8.2	8.2	12.2	11.5
Incr Delay (d2), s/veh	1.9	0.4	0.8	0.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.2	1.3	1.3	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	6.0	8.9	8.9	12.5	11.5
LnGrp LOS	B	A	A	A	B	B
Approach Vol, veh/h		929	612		122	
Approach Delay, s/veh		6.1	8.9		12.4	
Approach LOS		A	A		B	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			23.9		10.2	4.6	19.3
Change Period (Y+Rc), s			6.7		4.0	4.0	6.7
Max Green Setting (Gmax), s			50.0		20.0	20.0	30.0
Max Q Clear Time (g_c+I1), s			7.9		3.9	2.2	6.4
Green Ext Time (p_c), s			9.4		0.2	0.0	4.4

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	741	154	175	454	133	88	239	252	301	329	185
Future Volume (veh/h)	33	741	154	175	454	133	88	239	252	301	329	185
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	37	823	0	194	504	0	98	266	0	334	366	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	1047		737	1786		146	378		396	680	
Arrive On Green	0.02	0.33	0.00	0.24	0.56	0.00	0.05	0.12	0.00	0.13	0.21	0.00
Sat Flow, veh/h	3110	3198	1427	3110	3198	1427	3110	3198	1427	3110	3198	1427
Grp Volume(v), veh/h	37	823	0	194	504	0	98	266	0	334	366	0
Grp Sat Flow(s),veh/h/ln	1555	1599	1427	1555	1599	1427	1555	1599	1427	1555	1599	1427
Q Serve(g_s), s	1.4	28.0	0.0	6.1	9.9	0.0	3.7	9.6	0.0	12.6	12.2	0.0
Cycle Q Clear(g_c), s	1.4	28.0	0.0	6.1	9.9	0.0	3.7	9.6	0.0	12.6	12.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	63	1047		737	1786		146	378		396	680	
V/C Ratio(X)	0.58	0.79		0.26	0.28		0.67	0.70		0.84	0.54	
Avail Cap(c_a), veh/h	415	1047		737	1786		518	488		700	680	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.3	36.5	0.0	37.3	13.9	0.0	56.3	50.9	0.0	51.2	42.0	0.0
Incr Delay (d2), s/veh	3.2	5.9	0.0	0.1	0.1	0.0	2.0	4.7	0.0	1.9	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	11.1	0.0	2.2	3.3	0.0	1.5	4.0	0.0	4.9	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.4	42.5	0.0	37.3	14.0	0.0	58.2	55.5	0.0	53.1	43.3	0.0
LnGrp LOS	E	D		D	B		E	E		D	D	
Approach Vol, veh/h		860	A		698	A		364	A		700	A
Approach Delay, s/veh		43.3			20.5			56.3			48.0	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	19.9	34.1	45.0	9.6	31.2	6.4	72.7
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	27.0	* 18	16.0	* 39	20.0	25.3	16.0	39.3
Max Q Clear Time (g_c+I1), s	14.6	11.6	8.1	30.0	5.7	14.2	3.4	11.9
Green Ext Time (p_c), s	0.7	0.9	0.3	4.1	0.1	1.9	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1283	31	111	673	57	226
Future Volume (veh/h)	1283	31	111	673	57	226
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1426	33	123	748	63	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2075	48	151	2496	85	75
Arrive On Green	0.58	0.58	0.08	0.70	0.05	0.05
Sat Flow, veh/h	3643	82	1781	3647	1781	1585
Grp Volume(v), veh/h	713	746	123	748	63	1
Grp Sat Flow(s),veh/h/ln	1777	1855	1781	1777	1781	1585
Q Serve(g_s), s	33.4	33.5	8.1	9.5	4.2	0.1
Cycle Q Clear(g_c), s	33.4	33.5	8.1	9.5	4.2	0.1
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1039	1084	151	2496	85	75
V/C Ratio(X)	0.69	0.69	0.82	0.30	0.74	0.01
Avail Cap(c_a), veh/h	1039	1084	386	2496	373	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	17.3	54.0	6.7	56.4	54.5
Incr Delay (d2), s/veh	3.7	3.6	4.1	0.3	4.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	13.6	3.7	3.0	2.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.0	20.9	58.1	7.0	61.2	54.5
LnGrp LOS	C	C	E	A	E	D
Approach Vol, veh/h	1459			871	64	
Approach Delay, s/veh	20.9			14.2	61.1	
Approach LOS	C			B	E	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		10.6	14.1	75.9		90.0
Change Period (Y+Rc), s		4.9	4.0	5.7		5.7
Max Green Setting (Gmax), s		25.1	26.0	38.3		84.3
Max Q Clear Time (g_c+I1), s		6.2	10.1	35.5		11.5
Green Ext Time (p_c), s		0.3	0.2	2.7		24.4

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	1255	162	386	589	195	170	513	583	114	337	62
Future Volume (veh/h)	189	1255	162	386	589	195	170	513	583	114	337	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	210	1394	0	429	654	0	189	570	0	127	374	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1816		527	1371		248	654		183	844	
Arrive On Green	0.08	0.36	0.00	0.10	0.39	0.00	0.07	0.18	0.00	0.05	0.17	0.00
Sat Flow, veh/h	3456	5106	1585	5023	3554	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	210	1394	0	429	654	0	189	570	0	127	374	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	7.2	29.0	0.0	10.0	16.6	0.0	6.4	18.7	0.0	4.3	7.9	0.0
Cycle Q Clear(g_c), s	7.2	29.0	0.0	10.0	16.6	0.0	6.4	18.7	0.0	4.3	7.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	1816		527	1371		248	654		183	844	
V/C Ratio(X)	0.79	0.77		0.81	0.48		0.76	0.87		0.69	0.44	
Avail Cap(c_a), veh/h	354	1816		795	1371		461	711		461	1004	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.4	34.3	0.0	52.6	27.7	0.0	54.7	47.6	0.0	55.9	45.1	0.0
Incr Delay (d2), s/veh	5.9	2.3	0.0	2.2	1.2	0.0	1.8	11.4	0.0	1.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	11.8	0.0	4.2	7.0	0.0	2.8	9.1	0.0	1.9	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.3	36.5	0.0	54.8	28.9	0.0	56.5	59.0	0.0	57.6	45.6	0.0
LnGrp LOS	E	D		D	C		E	E		E	D	
Approach Vol, veh/h		1604	A		1083	A		759	A		501	A
Approach Delay, s/veh		39.6			39.2			58.4			48.6	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	28.5	18.6	48.4	12.6	26.2	15.0	52.0
Change Period (Y+Rc), s	4.0	* 6.4	6.0	5.7	4.0	6.4	5.7	5.7
Max Green Setting (Gmax), s	16.0	* 24	19.0	39.3	16.0	23.6	12.3	46.3
Max Q Clear Time (g_c+I1), s	6.3	20.7	12.0	31.0	8.4	9.9	9.2	18.6
Green Ext Time (p_c), s	0.1	1.4	0.6	6.5	0.2	2.3	0.1	7.2

Intersection Summary	
HCM 6th Ctrl Delay	44.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1229	190	169	839	61	156	356	223	45	321	150
Future Volume (veh/h)	160	1229	190	169	839	61	156	356	223	45	321	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	1366	100	188	932	0	173	396	0	50	357	15
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	1659	515	941	2783		233	599		164	456	204
Arrive On Green	0.07	0.32	0.32	0.27	0.55	0.00	0.07	0.17	0.00	0.05	0.13	0.13
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	178	1366	100	188	932	0	173	396	0	50	357	15
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	6.1	29.6	5.5	5.0	12.2	0.0	5.9	12.5	0.0	1.7	11.7	0.8
Cycle Q Clear(g_c), s	6.1	29.6	5.5	5.0	12.2	0.0	5.9	12.5	0.0	1.7	11.7	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1659	515	941	2783		233	599		164	456	204
V/C Ratio(X)	0.75	0.82	0.19	0.20	0.33		0.74	0.66		0.31	0.78	0.07
Avail Cap(c_a), veh/h	461	1659	515	941	2783		461	699		461	699	312
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.96	0.96	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	37.3	29.2	33.6	15.2	0.0	54.9	46.7	0.0	55.3	50.7	31.0
Incr Delay (d2), s/veh	1.8	4.8	0.8	0.0	0.1	0.0	1.7	2.5	0.0	0.4	4.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	12.5	2.1	2.1	4.4	0.0	2.6	5.6	0.0	0.7	5.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.6	42.1	30.0	33.6	15.3	0.0	56.7	49.1	0.0	55.6	55.5	31.3
LnGrp LOS	E	D	C	C	B		E	D		E	E	C
Approach Vol, veh/h		1644			1120	A		569	A		422	
Approach Delay, s/veh		42.9			18.4			51.4			54.6	
Approach LOS		D			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	26.6	38.7	45.0	14.5	21.8	12.3	71.4
Change Period (Y+Rc), s	4.0	6.4	6.0	6.0	6.4	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	16.0	23.6	19.0	39.0	16.0	* 24	16.0	44.0
Max Q Clear Time (g_c+I1), s	3.7	14.5	7.0	31.6	7.9	13.7	8.1	14.2
Green Ext Time (p_c), s	0.1	1.8	0.3	5.2	0.2	1.7	0.2	7.5

Intersection Summary	
HCM 6th Ctrl Delay	38.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1455	9	20	943	54	50	42	39	84	4	29
Future Volume (veh/h)	26	1455	9	20	943	54	50	42	39	84	4	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	1617	0	22	1048	0	56	47	0	93	4	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	2225		527	3705		72	63		117	109	
Arrive On Green	0.04	0.87	0.00	0.59	1.00	0.00	0.04	0.03	0.00	0.07	0.06	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	29	1617	0	22	1048	0	56	47	0	93	4	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.9	13.3	0.0	0.6	0.0	0.0	3.7	3.0	0.0	6.2	0.2	0.0
Cycle Q Clear(g_c), s	1.9	13.3	0.0	0.6	0.0	0.0	3.7	3.0	0.0	6.2	0.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	36	2225		527	3705		72	63		117	109	
V/C Ratio(X)	0.80	0.73		0.04	0.28		0.77	0.75		0.80	0.04	
Avail Cap(c_a), veh/h	238	2225		527	3705		238	296		238	298	
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.3	5.2	0.0	17.4	0.0	0.0	57.0	57.5	0.0	55.3	53.3	0.0
Incr Delay (d2), s/veh	12.1	1.8	0.0	0.0	0.1	0.0	6.4	12.4	0.0	4.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.4	0.0	0.3	0.0	0.0	1.8	1.6	0.0	2.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	7.0	0.0	17.4	0.1	0.0	63.4	69.9	0.0	59.9	53.5	0.0
LnGrp LOS	E	A		B	A		E	E		E	D	
Approach Vol, veh/h		1646	A		1070	A		103	A		97	A
Approach Delay, s/veh		8.1			0.4			66.4			59.6	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	8.9	41.2	58.0	8.9	11.9	6.4	92.8
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	16.0	* 19	14.0	* 52	16.0	19.1	16.0	50.3
Max Q Clear Time (g_c+I1), s	8.2	5.0	2.6	15.3	5.7	2.2	3.9	2.0
Green Ext Time (p_c), s	0.1	0.1	0.0	23.5	0.0	0.0	0.0	15.0

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	804	716	643	637	80	542	259	341	104	385	23
Future Volume (veh/h)	22	804	716	643	637	80	542	259	341	104	385	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	893	0	714	708	0	602	288	0	116	428	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1071		772	1757		765	620		254	603	
Arrive On Green	0.15	0.42	0.00	0.22	0.34	0.00	0.15	0.17	0.00	0.07	0.12	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	5023	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	24	893	0	714	708	0	602	288	0	116	428	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1674	1777	1585	1728	1702	1585
Q Serve(g_s), s	0.7	18.7	0.0	24.3	12.7	0.0	13.9	8.7	0.0	3.9	9.7	0.0
Cycle Q Clear(g_c), s	0.7	18.7	0.0	24.3	12.7	0.0	13.9	8.7	0.0	3.9	9.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	1071		772	1757		765	620		254	603	
V/C Ratio(X)	0.09	0.83		0.92	0.40		0.79	0.46		0.46	0.71	
Avail Cap(c_a), veh/h	461	1234		806	1757		1047	620		527	936	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.5	33.0	0.0	45.6	30.0	0.0	49.0	44.5	0.0	53.3	50.9	0.0
Incr Delay (d2), s/veh	0.1	4.9	0.0	15.9	0.7	0.0	3.5	0.8	0.0	1.9	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	6.2	0.0	11.7	5.1	0.0	5.9	3.8	0.0	1.7	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.5	37.9	0.0	61.5	30.7	0.0	52.5	45.3	0.0	55.2	53.2	0.0
LnGrp LOS	D	D		E	C		D	D		E	D	
Approach Vol, veh/h		917	A		1422	A		890	A		544	A
Approach Delay, s/veh		38.1			46.1			50.2			53.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	28.9	30.8	31.2	21.3	22.2	15.0	47.0
Change Period (Y+Rc), s	5.7	8.0	4.0	6.0	3.0	* 8	6.0	* 5.7
Max Green Setting (Gmax), s	18.3	20.0	28.0	29.0	25.0	* 22	16.0	* 41
Max Q Clear Time (g_c+I1), s	5.9	10.7	26.3	20.7	15.9	11.7	2.7	14.7
Green Ext Time (p_c), s	0.4	1.5	0.6	4.4	2.4	2.5	0.0	7.7

Intersection Summary	
HCM 6th Ctrl Delay	46.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	1	103	41	25	36	121	1070	8	182	1082	87
Future Volume (veh/h)	151	1	103	41	25	36	121	1070	8	182	1082	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	169	0	0	46	28	0	134	1189	9	202	1202	58
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	0	84	71	74	63	200	2378	18	1264	3487	1083
Arrive On Green	0.05	0.00	0.00	0.04	0.04	0.00	0.06	0.36	0.36	0.37	0.68	0.68
Sat Flow, veh/h	5344	0	1585	1781	1870	1585	3456	6637	50	3456	5106	1585
Grp Volume(v), veh/h	169	0	0	46	28	0	134	864	334	202	1202	58
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	1585	1728	1609	1861	1728	1702	1585
Q Serve(g_s), s	3.7	0.0	0.0	3.1	1.8	0.0	4.6	16.8	16.8	4.7	11.7	1.4
Cycle Q Clear(g_c), s	3.7	0.0	0.0	3.1	1.8	0.0	4.6	16.8	16.8	4.7	11.7	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	283	0	84	71	74	63	200	1729	667	1264	3487	1083
V/C Ratio(X)	0.60	0.00	0.00	0.65	0.38	0.00	0.67	0.50	0.50	0.16	0.34	0.05
Avail Cap(c_a), veh/h	1024	0	304	282	296	251	749	1729	667	1264	3487	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	0.0	0.0	56.8	56.2	0.0	55.4	30.1	30.1	25.6	7.9	6.3
Incr Delay (d2), s/veh	2.0	0.0	0.0	9.6	3.1	0.0	3.9	1.0	2.7	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	1.6	0.9	0.0	2.0	6.4	7.7	1.9	3.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.6	0.0	0.0	66.4	59.3	0.0	59.3	31.1	32.8	25.7	7.9	6.3
LnGrp LOS	E	A	A	E	E	A	E	C	C	C	A	A
Approach Vol, veh/h		169			74			1332			1462	
Approach Delay, s/veh		57.6			63.7			34.4			10.3	
Approach LOS		E			E			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	50.9	49.0		10.3	10.9	89.0		9.8
Change Period (Y+Rc), s	7.0	6.0		4.0	4.0	* 7		5.0
Max Green Setting (Gmax), s	13.0	43.0		23.0	26.0	* 33		19.0
Max Q Clear Time (g_c+I1), s	6.7	18.8		5.7	6.6	13.7		5.1
Green Ext Time (p_c), s	0.4	18.6		0.7	0.5	15.7		0.2

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	926	10	0	1035	364	0	0	0	73	0	323
Future Volume (veh/h)	0	926	10	0	1035	364	0	0	0	73	0	323
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2067	2067	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	1029	11	0	1150	0				54	0	293
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	4565	49	0	4050					205	0	365
Arrive On Green	0.00	0.79	0.79	0.00	1.00	0.00				0.12	0.00	0.12
Sat Flow, veh/h	0	5941	62	0	5274	1585				1781	0	3170
Grp Volume(v), veh/h	0	672	368	0	1150	0				54	0	293
Grp Sat Flow(s),veh/h/ln	0	1881	2056	0	1702	1585				1781	0	1585
Q Serve(g_s), s	0.0	5.4	5.4	0.0	0.0	0.0				3.3	0.0	10.8
Cycle Q Clear(g_c), s	0.0	5.4	5.4	0.0	0.0	0.0				3.3	0.0	10.8
Prop In Lane	0.00		0.03	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2983	1630	0	4050					205	0	365
V/C Ratio(X)	0.00	0.23	0.23	0.00	0.28					0.26	0.00	0.80
Avail Cap(c_a), veh/h	0	2983	1630	0	4050					515	0	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.93	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	3.1	3.1	0.0	0.0	0.0				48.4	0.0	51.8
Incr Delay (d2), s/veh	0.0	0.2	0.3	0.0	0.0	0.0				0.3	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.4	1.6	0.0	0.0	0.0				1.5	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	3.3	3.4	0.0	0.0	0.0				48.7	0.0	53.3
LnGrp LOS	A	A	A	A	A					D	A	D
Approach Vol, veh/h		1040			1150	A					347	
Approach Delay, s/veh		3.4			0.0						52.6	
Approach LOS		A			A						D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		100.9		19.1		100.9
Change Period (Y+Rc), s		5.7		5.3		5.7
Max Green Setting (Gmax), s		74.3		34.7		74.3
Max Q Clear Time (g_c+I1), s		7.4		12.8		2.0
Green Ext Time (p_c), s		9.7		1.0		10.3

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	691	308	74	1134	318	272
Future Volume (veh/h)	691	308	74	1134	318	272
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	2067	2067	1870	1870	1870	1870
Adj Flow Rate, veh/h	768	0	82	1260	353	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3208		105	3374	469	260
Arrive On Green	1.00	0.00	0.06	0.66	0.09	0.09
Sat Flow, veh/h	5828	1751	1781	5274	5023	2790
Grp Volume(v), veh/h	768	0	82	1260	353	5
Grp Sat Flow(s),veh/h/ln	1881	1751	1781	1702	1674	1395
Q Serve(g_s), s	0.0	0.0	5.4	13.3	8.2	0.2
Cycle Q Clear(g_c), s	0.0	0.0	5.4	13.3	8.2	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	3208		105	3374	469	260
V/C Ratio(X)	0.24		0.78	0.37	0.75	0.02
Avail Cap(c_a), veh/h	3208		386	3374	1160	644
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	55.7	9.2	53.0	49.4
Incr Delay (d2), s/veh	0.0	0.0	4.7	0.3	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.5	4.4	3.5	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	0.0	60.4	9.5	54.0	49.4
LnGrp LOS	A		E	A	D	D
Approach Vol, veh/h	768	A		1342	358	
Approach Delay, s/veh	0.0			12.6	53.9	
Approach LOS	A			B	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	11.1	73.9				85.0	18.5
Change Period (Y+Rc), s	4.0	5.7				5.7	7.3
Max Green Setting (Gmax), s	26.0	49.3				79.3	27.7
Max Q Clear Time (g_c+I1), s	7.4	2.0				15.3	10.2
Green Ext Time (p_c), s	0.1	5.6				14.2	1.0

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	145	239	188	100	23	180	540	197	61	742	56
Future Volume (veh/h)	73	145	239	188	100	23	180	540	197	61	742	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	2067	2067	2067	1870	1870	1870
Adj Flow Rate, veh/h	81	161	12	209	111	3	200	600	131	68	824	23
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	254	113	276	402	179	271	1623	644	115	1199	372
Arrive On Green	0.04	0.07	0.07	0.08	0.11	0.11	0.07	0.29	0.29	0.03	0.23	0.23
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3818	5642	1751	3456	5106	1585
Grp Volume(v), veh/h	81	161	12	209	111	3	200	600	131	68	824	23
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1909	1881	1751	1728	1702	1585
Q Serve(g_s), s	2.6	4.9	0.3	6.6	3.2	0.2	5.8	9.5	5.7	2.2	16.5	0.5
Cycle Q Clear(g_c), s	2.6	4.9	0.3	6.6	3.2	0.2	5.8	9.5	5.7	2.2	16.5	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	132	254	113	276	402	179	271	1623	644	115	1199	372
V/C Ratio(X)	0.61	0.63	0.11	0.76	0.28	0.02	0.74	0.37	0.20	0.59	0.69	0.06
Avail Cap(c_a), veh/h	494	771	344	802	1101	491	545	1623	644	494	1199	372
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	50.6	9.1	50.5	45.5	44.1	51.0	31.8	24.2	53.4	39.1	4.6
Incr Delay (d2), s/veh	1.7	3.5	0.5	1.6	0.6	0.1	1.5	0.6	0.7	1.8	3.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.3	0.3	2.9	1.4	0.1	2.7	4.3	2.5	0.9	7.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	54.0	9.6	52.1	46.0	44.2	52.5	32.4	24.9	55.2	42.3	5.0
LnGrp LOS	D	D	A	D	D	D	D	C	C	E	D	A
Approach Vol, veh/h		254			323			931			915	
Approach Delay, s/veh		52.2			49.9			35.7			42.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	37.9	13.0	13.7	13.6	32.0	8.3	18.4
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	* 5.7
Max Green Setting (Gmax), s	16.0	26.3	26.0	24.3	16.0	* 26	16.0	* 35
Max Q Clear Time (g_c+I1), s	4.2	11.5	8.6	6.9	7.8	18.5	4.6	5.2
Green Ext Time (p_c), s	0.1	5.6	0.3	1.1	0.2	4.3	0.1	1.0

Intersection Summary	
HCM 6th Ctrl Delay	41.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	22	54	88	15	37	19	408	144	52	766	1
Future Volume (veh/h)	10	22	54	88	15	37	19	408	144	52	766	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	24	0	98	17	3	21	453	96	58	851	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	14	34	0	123	123	22	26	3636	1129	75	2630	1173
Arrive On Green	0.01	0.02	0.00	0.07	0.08	0.08	0.01	0.71	0.71	0.04	0.74	0.74
Sat Flow, veh/h	1781	1870	0	1781	1548	273	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	11	24	0	98	0	20	21	453	96	58	851	1
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1821	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	0.7	1.5	0.0	6.5	0.0	1.2	1.4	3.4	2.2	3.9	9.8	0.0
Cycle Q Clear(g_c), s	0.7	1.5	0.0	6.5	0.0	1.2	1.4	3.4	2.2	3.9	9.8	0.0
Prop In Lane	1.00		0.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	14	34	0	123	0	145	26	3636	1129	75	2630	1173
V/C Ratio(X)	0.80	0.70	0.00	0.80	0.00	0.14	0.82	0.12	0.09	0.77	0.32	0.00
Avail Cap(c_a), veh/h	252	281	0	252	0	273	238	3636	1129	238	2630	1173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.4	58.6	0.0	55.0	0.0	51.4	59.0	5.5	5.3	56.9	5.3	4.1
Incr Delay (d2), s/veh	31.9	19.7	0.0	4.4	0.0	0.4	20.6	0.1	0.1	6.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.9	0.0	3.1	0.0	0.6	0.8	1.1	0.7	1.9	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.4	78.2	0.0	59.5	0.0	51.8	79.6	5.5	5.4	63.0	5.5	4.1
LnGrp LOS	F	E	A	E	A	D	E	A	A	E	A	A
Approach Vol, veh/h		35			118			570			910	
Approach Delay, s/veh		82.4			58.2			8.2			9.1	
Approach LOS		F			E			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	91.5	12.3	7.2	5.7	94.8	4.9	14.6
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	16.0	50.0	17.0	18.0	16.0	50.0	17.0	18.0
Max Q Clear Time (g_c+I1), s	5.9	5.4	8.5	3.5	3.4	11.8	2.7	3.2
Green Ext Time (p_c), s	0.1	5.2	0.1	0.0	0.0	8.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	184	32	363	763	37	221
Future Volume (veh/h)	184	32	363	763	37	221
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	204	7	403	848	41	129
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	584	495	466	1218	276	660
Arrive On Green	0.31	0.31	0.26	0.65	0.16	0.16
Sat Flow, veh/h	1870	1585	1781	1870	1781	1585
Grp Volume(v), veh/h	204	7	403	848	41	129
Grp Sat Flow(s),veh/h/ln	1870	1585	1781	1870	1781	1585
Q Serve(g_s), s	4.3	0.2	11.1	14.9	1.0	2.7
Cycle Q Clear(g_c), s	4.3	0.2	11.1	14.9	1.0	2.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	584	495	466	1218	276	660
V/C Ratio(X)	0.35	0.01	0.87	0.70	0.15	0.20
Avail Cap(c_a), veh/h	1740	1475	725	2501	898	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	12.3	18.2	5.7	18.9	9.6
Incr Delay (d2), s/veh	0.9	0.0	4.3	1.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	4.0	2.1	0.4	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.6	12.3	22.4	7.5	18.9	9.6
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	211			1251	170	
Approach Delay, s/veh	14.5			12.3	11.9	
Approach LOS	B			B	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		12.0	17.5	22.1		39.6
Change Period (Y+Rc), s		4.0	4.0	6.0		6.0
Max Green Setting (Gmax), s		26.0	21.0	48.0		69.0
Max Q Clear Time (g_c+I1), s		4.7	13.1	6.3		16.9
Green Ext Time (p_c), s		0.2	0.4	2.4		16.7

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	63	0	178	314	127	15	543	130	146	593	649
Future Volume (veh/h)	278	63	0	178	314	127	15	543	130	146	593	649
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1841	1841	1870	1870	1870	1841	1870	1841
Adj Flow Rate, veh/h	309	70	0	198	349	10	17	603	33	162	659	563
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	2	4	4	2	2	2	4	2	4
Cap, veh/h	359	878	0	240	633	282	48	944	421	199	1251	868
Arrive On Green	0.20	0.25	0.00	0.13	0.18	0.18	0.03	0.27	0.27	0.11	0.35	0.35
Sat Flow, veh/h	1753	3589	0	1781	3497	1560	1781	3554	1585	1753	3554	1560
Grp Volume(v), veh/h	309	70	0	198	349	10	17	603	33	162	659	563
Grp Sat Flow(s),veh/h/ln	1753	1749	0	1781	1749	1560	1781	1777	1585	1753	1777	1560
Q Serve(g_s), s	14.5	1.3	0.0	9.2	7.7	0.4	0.8	12.8	1.3	7.7	12.6	21.3
Cycle Q Clear(g_c), s	14.5	1.3	0.0	9.2	7.7	0.4	0.8	12.8	1.3	7.7	12.6	21.3
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	878	0	240	633	282	48	944	421	199	1251	868
V/C Ratio(X)	0.86	0.08	0.00	0.83	0.55	0.04	0.35	0.64	0.08	0.81	0.53	0.65
Avail Cap(c_a), veh/h	639	987	0	649	987	440	335	1420	633	433	1420	943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	24.3	0.0	35.9	31.7	28.7	40.6	27.6	23.4	36.8	21.9	13.1
Incr Delay (d2), s/veh	6.1	0.1	0.0	2.8	1.5	0.1	1.6	1.4	0.2	3.1	0.6	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.5	0.0	4.0	3.2	0.2	0.4	5.4	0.5	3.2	4.7	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	24.4	0.0	38.6	33.2	28.8	42.2	29.0	23.6	39.9	22.6	15.0
LnGrp LOS	D	C	A	D	C	C	D	C	C	D	C	B
Approach Vol, veh/h		379			557			653			1384	
Approach Delay, s/veh		36.1			35.0			29.1			21.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	28.6	15.4	27.4	6.3	36.0	21.4	21.4
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	21.0	34.0	31.0	24.0	16.0	34.0	31.0	24.0
Max Q Clear Time (g_c+I1), s	9.7	14.8	11.2	3.3	2.8	23.3	16.5	9.7
Green Ext Time (p_c), s	0.2	5.5	0.3	1.0	0.0	6.6	0.9	5.7

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	299	0	0	446	60	5	0	0	106	0	272
Future Volume (veh/h)	76	299	0	0	446	60	5	0	0	106	0	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	0	1870	0	1870
Adj Flow Rate, veh/h	84	332	0	0	496	17	6	0	0	118	0	94
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	0	2	0	2
Cap, veh/h	208	1149	0	0	1442	643	95	0	0	279	0	0
Arrive On Green	0.12	0.61	0.00	0.00	0.41	0.41	0.05	0.00	0.00	0.16	0.00	0.00
Sat Flow, veh/h	1781	1870	0	0	3647	1585	1781	6		1781	118	
Grp Volume(v), veh/h	84	332	0	0	496	17	6	19.7		118	17.0	
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1585	1781	B		1781	B	
Q Serve(g_s), s	1.9	3.6	0.0	0.0	4.2	0.3	0.1			2.6		
Cycle Q Clear(g_c), s	1.9	3.6	0.0	0.0	4.2	0.3	0.1			2.6		
Prop In Lane	1.00		0.00	0.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	208	1149	0	0	1442	643	95			279		
V/C Ratio(X)	0.40	0.29	0.00	0.00	0.34	0.03	0.06			0.42		
Avail Cap(c_a), veh/h	1223	2996	0	0	4066	1814	815			815		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00			1.00		
Uniform Delay (d), s/veh	17.9	4.0	0.0	0.0	9.0	7.8	19.6			16.6		
Incr Delay (d2), s/veh	0.5	0.2	0.0	0.0	0.2	0.0	0.1			0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.6	0.4	0.0	0.0	1.0	0.1	0.1			0.9		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.3	4.2	0.0	0.0	9.2	7.8	19.7			17.0		
LnGrp LOS	B	A	A	A	A	A	B			B		
Approach Vol, veh/h		416			513							
Approach Delay, s/veh		7.0			9.1							
Approach LOS		A			A							

Timer - Assigned Phs	1			4	5		7	8
Phs Duration (G+Y+Rc), s	10.9			32.8	6.3		9.1	23.7
Change Period (Y+Rc), s	4.0			6.0	4.0		4.0	6.0
Max Green Setting (Gmax), s	20.0			70.0	20.0		30.0	50.0
Max Q Clear Time (g_c+I1), s	4.6			5.6	2.1		3.9	6.2
Green Ext Time (p_c), s	0.2			7.7	0.0		0.1	11.5

Intersection Summary			
HCM 6th Ctrl Delay			9.2
HCM 6th LOS			A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	419	27	44	397	0	122	0	104	227	0	57
Future Volume (veh/h)	47	419	27	44	397	0	122	0	104	227	0	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	52	466	28	49	441	0	136	0	8	252	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	78	664	40	75	1344		313	0	0	328	0	
Arrive On Green	0.04	0.38	0.38	0.04	0.38	0.00	0.18	0.00	0.00	0.18	0.00	0.00
Sat Flow, veh/h	1781	1746	105	1781	3554	1585	1781	136		1781	252	
Grp Volume(v), veh/h	52	0	494	49	441	0	136	15.0		252	16.9	
Grp Sat Flow(s),veh/h/ln	1781	0	1851	1781	1777	1585	1781	B		1781	B	
Q Serve(g_s), s	1.1	0.0	9.0	1.1	3.5	0.0	2.7			5.4		
Cycle Q Clear(g_c), s	1.1	0.0	9.0	1.1	3.5	0.0	2.7			5.4		
Prop In Lane	1.00		0.06	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	78	0	703	75	1344		313			328		
V/C Ratio(X)	0.66	0.00	0.70	0.65	0.33		0.43			0.77		
Avail Cap(c_a), veh/h	894	0	1393	894	2675		894			894		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	18.8	0.0	10.4	18.8	8.8	0.0	14.7			15.5		
Incr Delay (d2), s/veh	3.6	0.0	2.5	3.6	0.3	0.0	0.4			1.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.5	0.0	3.2	0.5	1.1	0.0	0.9			1.9		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	0.0	12.9	22.4	9.1	0.0	15.0			16.9		
LnGrp LOS	C	A	B	C	A		B			B		
Approach Vol, veh/h		546			490	A						
Approach Delay, s/veh		13.8			10.4							
Approach LOS		B			B							

Timer - Assigned Phs	1		3	4	5		7	8
Phs Duration (G+Y+Rc), s	13.0		5.7	21.1	11.0		5.8	21.1
Change Period (Y+Rc), s	5.7		4.0	6.0	4.0		4.0	6.0
Max Green Setting (Gmax), s	20.0		20.0	30.0	20.0		20.0	30.0
Max Q Clear Time (g_c+I1), s	7.4		3.1	11.0	4.7		3.1	5.5
Green Ext Time (p_c), s	0.5		0.1	4.1	0.2		0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	147	517	75	91	53	229	796	45	57	966	94
Future Volume (veh/h)	93	147	517	75	91	53	229	796	45	57	966	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	163	258	83	101	7	254	884	23	63	1073	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	592	264	105	546	244	326	1996	890	81	2620	
Arrive On Green	0.07	0.17	0.17	0.06	0.15	0.15	0.09	0.56	0.56	0.05	0.51	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	103	163	258	83	101	7	254	884	23	63	1073	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1781	1702	1585
Q Serve(g_s), s	6.8	4.8	19.4	5.5	3.0	0.5	8.6	17.4	0.8	4.2	15.5	0.0
Cycle Q Clear(g_c), s	6.8	4.8	19.4	5.5	3.0	0.5	8.6	17.4	0.8	4.2	15.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	129	592	264	105	546	244	326	1996	890	81	2620	
V/C Ratio(X)	0.80	0.28	0.98	0.79	0.18	0.03	0.78	0.44	0.03	0.77	0.41	
Avail Cap(c_a), veh/h	327	592	264	238	546	244	605	1996	890	238	2620	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.8	43.7	49.8	55.7	44.2	43.2	53.1	15.3	11.7	56.6	18.0	0.0
Incr Delay (d2), s/veh	4.3	0.4	48.9	4.8	0.3	0.1	4.0	0.7	0.1	5.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	2.1	11.0	2.5	1.3	0.2	3.8	6.5	0.3	2.0	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	44.1	98.7	60.5	44.6	43.3	57.1	16.1	11.7	62.4	18.2	0.0
LnGrp LOS	E	D	F	E	D	D	E	B	B	E	B	
Approach Vol, veh/h		524			191			1161			1136	A
Approach Delay, s/veh		73.9			51.5			25.0			20.6	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	73.4	11.1	26.0	15.3	67.6	12.7	24.4
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	16.0	48.0	16.0	20.0	21.0	43.0	22.0	* 15
Max Q Clear Time (g_c+I1), s	6.2	19.4	7.5	21.4	10.6	17.5	8.8	5.0
Green Ext Time (p_c), s	0.0	5.2	0.1	0.0	0.7	8.3	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	33.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	0	2	0	0	0	76	630	0	0	552	120
Future Volume (veh/h)	4	0	2	0	0	0	76	630	0	0	552	120
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	4	0	0				84	700	0	0	613	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2				2	2	0	0	2	2
Cap, veh/h	34	0					186	2189	0	0	1287	
Arrive On Green	0.01	0.00	0.00				0.10	0.62	0.00	0.00	0.36	0.00
Sat Flow, veh/h	3456	0	1585				1781	3647	0	0	3647	1585
Grp Volume(v), veh/h	4	0	0				84	700	0	0	613	0
Grp Sat Flow(s),veh/h/ln	1728	0	1585				1781	1777	0	0	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0				1.2	2.5	0.0	0.0	3.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				1.2	2.5	0.0	0.0	3.6	0.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	34	0					186	2189	0	0	1287	
V/C Ratio(X)	0.12	0.00					0.45	0.32	0.00	0.00	0.48	
Avail Cap(c_a), veh/h	2586	0					1333	6648	0	0	3989	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	13.1	0.0	0.0				11.3	2.5	0.0	0.0	6.6	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0				0.6	0.1	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.3	0.0	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	0.0				11.9	2.6	0.0	0.0	6.9	0.0
LnGrp LOS	B	A					B	A	A	A	A	
Approach Vol, veh/h		4	A					784			613	A
Approach Delay, s/veh		13.7						3.6			6.9	
Approach LOS		B						A			A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		22.5		4.3	6.8	15.7
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		50.0		20.0	20.0	30.0
Max Q Clear Time (g_c+I1), s		4.5		2.0	3.2	5.6
Green Ext Time (p_c), s		4.9		0.0	0.1	3.9

Intersection Summary	
HCM 6th Ctrl Delay	5.1
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	0	3	53	0	166	8	302	20	241	645	7
Future Volume (veh/h)	4	0	3	53	0	166	8	302	20	241	645	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	0	0	59	0	0	9	336	0	268	717	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	19	0	17	0	0		34	1021		494	1020	860
Arrive On Green	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.29	0.00	0.28	0.55	0.55
Sat Flow, veh/h	1781	0	1585		0		1781	3554	1585	1781	1870	1578
Grp Volume(v), veh/h	4	0	0		0.0		9	336	0	268	717	5
Grp Sat Flow(s),veh/h/ln	1781	0	1585				1781	1777	1585	1781	1870	1578
Q Serve(g_s), s	0.1	0.0	0.0				0.2	2.5	0.0	4.2	9.3	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0				0.2	2.5	0.0	4.2	9.3	0.0
Prop In Lane	1.00		1.00				1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	19	0	17				34	1021		494	1020	860
V/C Ratio(X)	0.21	0.00	0.00				0.26	0.33		0.54	0.70	0.01
Avail Cap(c_a), veh/h	1081	0	962				1081	3773		1081	1702	1436
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	0.0	0.0				15.9	9.3	0.0	10.1	5.5	3.4
Incr Delay (d2), s/veh	1.9	0.0	0.0				1.5	0.4	0.0	0.3	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.1	0.7	0.0	1.2	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	0.0	0.0				17.4	9.6	0.0	10.5	7.3	3.4
LnGrp LOS	B	A	A				B	A		B	A	A
Approach Vol, veh/h		4						345	A		990	
Approach Delay, s/veh		18.1						9.8			8.1	
Approach LOS		B						A			A	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	13.1	15.5		4.4	4.6	24.0
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s	20.0	35.0		20.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	6.2	4.5		2.1	2.2	11.3
Green Ext Time (p_c), s	0.5	3.1		0.0	0.0	6.6

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	8	159	20	3	1	66	192	4	3	304	22
Future Volume (veh/h)	29	8	159	20	3	1	66	192	4	3	304	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	9	16	22	3	0	73	213	2	3	338	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	20	78	39	5	0	90	1294	577	5	1124	501
Arrive On Green	0.05	0.05	0.05	0.02	0.02	0.00	0.05	0.36	0.36	0.00	0.32	0.32
Sat Flow, veh/h	1405	395	1585	1577	215	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	41	0	16	25	0	0	73	213	2	3	338	8
Grp Sat Flow(s),veh/h/ln	1800	0	1585	1792	0	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	0.0	0.3	0.4	0.0	0.0	1.3	1.3	0.0	0.1	2.3	0.1
Cycle Q Clear(g_c), s	0.7	0.0	0.3	0.4	0.0	0.0	1.3	1.3	0.0	0.1	2.3	0.1
Prop In Lane	0.78		1.00	0.88		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	89	0	78	45	0	0	90	1294	577	5	1124	501
V/C Ratio(X)	0.46	0.00	0.20	0.56	0.00	0.00	0.81	0.16	0.00	0.55	0.30	0.02
Avail Cap(c_a), veh/h	874	0	769	605	0	0	875	3166	1412	602	3166	1412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	14.9	15.7	0.0	0.0	15.3	7.0	6.6	16.2	8.4	7.6
Incr Delay (d2), s/veh	1.4	0.0	0.5	4.1	0.0	0.0	6.5	0.1	0.0	28.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	0.2	0.0	0.0	0.5	0.2	0.0	0.1	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.4	0.0	15.3	19.8	0.0	0.0	21.8	7.1	6.6	44.4	8.6	7.7
LnGrp LOS	B	A	B	B	A	A	C	A	A	D	A	A
Approach Vol, veh/h		57			25			288			349	
Approach Delay, s/veh		16.1			19.8			10.8			8.9	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	17.9		4.8	5.6	16.3		5.8
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.2
Max Green Setting (Gmax), s	11.0	29.0		11.0	16.0	29.0		15.8
Max Q Clear Time (g_c+I1), s	2.1	3.3		2.4	3.3	4.3		2.7
Green Ext Time (p_c), s	0.0	3.6		0.0	0.1	6.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.6
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1547	53	66	753	40	137
Future Volume (veh/h)	1547	53	66	753	40	137
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1719	0	73	837	44	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3134		94	3574	114	
Arrive On Green	0.61	0.00	0.05	0.70	0.06	0.00
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	1719	0	73	837	44	0
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	23.5	0.0	4.9	7.1	2.8	0.0
Cycle Q Clear(g_c), s	23.5	0.0	4.9	7.1	2.8	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	3134		94	3574	114	
V/C Ratio(X)	0.55		0.78	0.23	0.39	
Avail Cap(c_a), veh/h	3134		386	3574	377	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.98	0.98	1.00	0.00
Uniform Delay (d), s/veh	13.5	0.0	56.1	6.5	53.9	0.0
Incr Delay (d2), s/veh	0.7	0.0	5.0	0.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	2.3	2.2	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.2	0.0	61.1	6.6	54.7	0.0
LnGrp LOS	B		E	A	D	
Approach Vol, veh/h	1719	A		910	44	A
Approach Delay, s/veh	14.2			11.0	54.7	
Approach LOS	B			B	D	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		12.3	10.3	79.7			90.0
Change Period (Y+Rc), s		4.6	4.0	6.0			6.0
Max Green Setting (Gmax), s		25.4	26.0	38.0			84.0
Max Q Clear Time (g_c+I1), s		4.8	6.9	25.5			9.1
Green Ext Time (p_c), s		0.1	0.1	9.0			7.2

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1683	0	11	783	165	2	0	22	194	1	31
Future Volume (veh/h)	10	1683	0	11	783	165	2	0	22	194	1	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	1870	0	12	870	0	2	0	0	217	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	14	3853	1196	15	3856		4	4	0	321	0	
Arrive On Green	0.01	0.75	0.00	0.01	0.76	0.00	0.00	0.00	0.00	0.06	0.00	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	0	5344	0	1585
Grp Volume(v), veh/h	11	1870	0	12	870	0	2	0	0	217	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	0	1781	0	1585
Q Serve(g_s), s	0.7	17.0	0.0	0.8	6.0	0.0	0.1	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	0.7	17.0	0.0	0.8	6.0	0.0	0.1	0.0	0.0	4.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	14	3853	1196	15	3856		4	4	0	321	0	
V/C Ratio(X)	0.80	0.49	0.00	0.82	0.23		0.52	0.00	0.00	0.68	0.00	
Avail Cap(c_a), veh/h	178	3853	1196	178	3856		233	245	0	534	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.00	0.97	0.97	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.4	5.7	0.0	59.4	4.3	0.0	59.8	0.0	0.0	55.3	0.0	0.0
Incr Delay (d2), s/veh	62.4	0.4	0.0	64.4	0.0	0.0	80.7	0.0	0.0	2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.7	0.0	0.6	1.6	0.0	0.1	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	121.8	6.1	0.0	123.9	4.4	0.0	140.5	0.0	0.0	57.8	0.0	0.0
LnGrp LOS	F	A	A	F	A		F	A	A	E	A	
Approach Vol, veh/h		1881			882	A		2			217	A
Approach Delay, s/veh		6.8			6.0			140.5			57.8	
Approach LOS		A			A			F			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.2	5.0	96.3		7.6	4.9	96.3				
Change Period (Y+Rc), s		4.0	4.0	5.7		7.3	4.0	5.7				
Max Green Setting (Gmax), s		12.0	12.0	59.3		15.7	12.0	59.3				
Max Q Clear Time (g_c+I1), s		6.8	2.8	19.0		2.1	2.7	8.0				
Green Ext Time (p_c), s		0.4	0.0	35.8		0.0	0.0	19.6				

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	0	48	7	0	10	9	958	33	50	1853	5
Future Volume (veh/h)	33	0	48	7	0	10	9	958	33	50	1853	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	0	0	8	0	0	10	1064	27	56	2059	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	47	0	42	28	0		17	4004	1243	97	4099	1272
Arrive On Green	0.03	0.00	0.00	0.01	0.00	0.00	0.01	0.78	0.78	0.03	0.80	0.80
Sat Flow, veh/h	1781	0	1585	3563	0	1585	1781	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	37	0	0	8	0	0	10	1064	27	56	2059	5
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.5	0.0	0.0	0.3	0.0	0.0	0.7	6.8	0.4	1.9	16.0	0.1
Cycle Q Clear(g_c), s	2.5	0.0	0.0	0.3	0.0	0.0	0.7	6.8	0.4	1.9	16.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	47	0	42	28	0		17	4004	1243	97	4099	1272
V/C Ratio(X)	0.78	0.00	0.00	0.29	0.00		0.59	0.27	0.02	0.58	0.50	0.00
Avail Cap(c_a), veh/h	238	0	211	475	0		238	4004	1243	461	4099	1272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.97	0.97	0.97	0.85	0.85	0.85
Uniform Delay (d), s/veh	58.1	0.0	0.0	59.2	0.0	0.0	59.2	3.5	2.8	57.6	3.9	2.3
Incr Delay (d2), s/veh	9.8	0.0	0.0	5.0	0.0	0.0	11.5	0.0	0.0	1.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	0.1	0.0	0.0	0.3	1.6	0.1	0.8	3.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	0.0	0.0	64.2	0.0	0.0	70.7	3.6	2.9	59.3	4.3	2.3
LnGrp LOS	E	A	A	E	A		E	A	A	E	A	A
Approach Vol, veh/h		37			8	A		1101			2120	
Approach Delay, s/veh		67.9			64.2			4.2			5.7	
Approach LOS		E			E			A			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.2	5.1	102.7		4.9	7.4	100.5				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		16.0	16.0	53.6		16.0	16.0	53.6				
Max Q Clear Time (g_c+I1), s		4.5	2.7	18.0		2.3	3.9	8.8				
Green Ext Time (p_c), s		0.0	0.0	20.2		0.0	0.1	8.3				

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1620	279	110	829	38	160	15	100	13	3	6
Future Volume (veh/h)	8	1620	279	110	829	38	160	15	100	13	3	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	1800	310	122	921	0	190	0	111	16	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1748	2196	682	1082	1212		320	0	142	49	0	
Arrive On Green	0.51	0.43	0.43	0.63	0.47	0.00	0.09	0.00	0.09	0.01	0.00	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3563	0	1585	3563	0	1585
Grp Volume(v), veh/h	9	1800	310	122	921	0	190	0	111	16	0	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1781	0	1585	1781	0	1585
Q Serve(g_s), s	0.2	37.2	16.6	1.7	17.8	0.0	6.2	0.0	8.2	0.5	0.0	0.0
Cycle Q Clear(g_c), s	0.2	37.2	16.6	1.7	17.8	0.0	6.2	0.0	8.2	0.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1748	2196	682	1082	1212		320	0	142	49	0	
V/C Ratio(X)	0.01	0.82	0.45	0.11	0.76		0.59	0.00	0.78	0.33	0.00	
Avail Cap(c_a), veh/h	1748	2196	682	1082	2196		475	0	211	475	0	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	0.92	0.92	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.7	30.1	24.2	15.7	28.7	0.0	52.5	0.0	53.5	58.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.1	1.9	0.0	1.2	0.0	1.3	0.0	8.4	3.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.9	6.3	0.7	5.4	0.0	2.8	0.0	3.5	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	33.2	26.1	15.7	29.9	0.0	53.8	0.0	61.8	62.4	0.0	0.0
LnGrp LOS	B	C	C	B	C		D	A	E	E	A	
Approach Vol, veh/h		2119			1043	A		301			16	A
Approach Delay, s/veh		32.1			28.2			56.8			62.4	
Approach LOS		C			C			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.8	41.6	58.0		5.7	64.7	34.9				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		16.0	18.0	51.6		16.0	18.0	51.6				
Max Q Clear Time (g_c+I1), s		10.2	3.7	39.2		2.5	2.2	19.8				
Green Ext Time (p_c), s		0.6	0.1	10.4		0.0	0.0	8.7				

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	1072	496	75	674	480	170	276	52	537	495	123
Future Volume (veh/h)	144	1072	496	75	674	480	170	276	52	537	495	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	1191	0	83	749	0	189	307	0	597	550	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	1406		131	1174		248	485		863	752	
Arrive On Green	0.02	0.09	0.00	0.08	0.46	0.00	0.07	0.09	0.00	0.06	0.07	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	5023	3554	1585
Grp Volume(v), veh/h	160	1191	0	83	749	0	189	307	0	597	550	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1674	1777	1585
Q Serve(g_s), s	5.5	27.6	0.0	2.8	13.5	0.0	6.4	6.9	0.0	14.0	18.2	0.0
Cycle Q Clear(g_c), s	5.5	27.6	0.0	2.8	13.5	0.0	6.4	6.9	0.0	14.0	18.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	1406		131	1174		248	485		863	752	
V/C Ratio(X)	0.73	0.85		0.63	0.64		0.76	0.63		0.69	0.73	
Avail Cap(c_a), veh/h	392	1406		461	1174		461	1234		975	1164	
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.82	0.82	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.96	0.96	0.00
Uniform Delay (d), s/veh	57.7	52.1	0.0	54.6	28.6	0.0	54.7	52.3	0.0	53.5	52.5	0.0
Incr Delay (d2), s/veh	1.4	4.3	0.0	1.9	2.7	0.0	1.8	2.0	0.0	1.7	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	13.1	0.0	1.2	4.6	0.0	2.8	3.0	0.0	6.4	8.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2	56.3	0.0	56.5	31.2	0.0	56.5	54.3	0.0	55.2	54.7	0.0
LnGrp LOS	E	E		E	C		E	D		E	D	
Approach Vol, veh/h		1351	A		832	A		496	A		1147	A
Approach Delay, s/veh		56.7			33.8			55.1			55.0	
Approach LOS		E			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.3	17.4	8.6	39.4	12.6	33.1	14.0	34.0
Change Period (Y+Rc), s	7.7	6.0	4.0	6.4	4.0	* 7.7	6.4	6.4
Max Green Setting (Gmax), s	23.3	29.0	16.0	27.6	16.0	* 39	13.6	27.6
Max Q Clear Time (g_c+I1), s	16.0	8.9	4.8	29.6	8.4	20.2	7.5	15.5
Green Ext Time (p_c), s	1.4	2.4	0.1	0.0	0.2	5.2	0.1	4.9

Intersection Summary	
HCM 6th Ctrl Delay	51.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	1559	4	16	1215	325	6	3	2	61	0	35
Future Volume (veh/h)	76	1559	4	16	1215	325	6	3	2	61	0	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	1732	3	18	1350	225	5	6	0	68	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	2711	842	22	2383	740	18	19	16	117	0	52
Arrive On Green	0.06	0.53	0.53	0.01	0.47	0.47	0.01	0.01	0.00	0.03	0.00	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	84	1732	3	18	1350	225	5	6	0	68	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	5.6	28.9	0.1	1.2	23.0	10.6	0.3	0.4	0.0	2.3	0.0	0.0
Cycle Q Clear(g_c), s	5.6	28.9	0.1	1.2	23.0	10.6	0.3	0.4	0.0	2.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	2711	842	22	2383	740	18	19	16	117	0	52
V/C Ratio(X)	0.79	0.64	0.00	0.84	0.57	0.30	0.27	0.31	0.00	0.58	0.00	0.00
Avail Cap(c_a), veh/h	238	2711	842	238	2383	740	208	218	185	457	0	203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	55.7	20.0	13.2	59.2	23.2	19.9	58.9	59.0	0.0	57.2	0.0	0.0
Incr Delay (d2), s/veh	4.8	0.6	0.0	22.5	0.8	0.9	3.0	3.4	0.0	5.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	10.7	0.0	0.7	8.9	3.9	0.2	0.2	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.5	20.6	13.2	81.7	24.0	20.8	61.9	62.4	0.0	62.8	0.0	0.0
LnGrp LOS	E	C	B	F	C	C	E	E	A	E	A	A
Approach Vol, veh/h		1819			1593			11			68	
Approach Delay, s/veh		22.4			24.2			62.2			62.8	
Approach LOS		C			C			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.2	5.5	69.7		8.5	13.2	62.0				
Change Period (Y+Rc), s		4.0	4.0	6.0		4.6	6.0	* 6				
Max Green Setting (Gmax), s		14.0	16.0	56.0		15.4	16.0	* 56				
Max Q Clear Time (g_c+I1), s		2.4	3.2	30.9		4.3	7.6	25.0				
Green Ext Time (p_c), s		0.0	0.0	17.8		0.1	0.0	17.3				

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	1445	95	302	1103	180	352	112	228	498	120	75
Future Volume (veh/h)	74	1445	95	302	1103	180	352	112	228	498	120	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1988	1988	1988	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	1606	59	336	1226	91	391	124	43	553	133	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	2171	966	644	2889	897	599	194	87	607	203	90
Arrive On Green	0.04	0.40	0.40	0.19	0.57	0.57	0.17	0.05	0.05	0.18	0.06	0.00
Sat Flow, veh/h	3673	5427	1685	3456	5106	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	82	1606	59	336	1226	91	391	124	43	553	133	0
Grp Sat Flow(s),veh/h/ln	1837	1809	1685	1728	1702	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	2.6	30.3	0.0	10.5	16.5	1.3	12.7	4.1	3.2	18.8	4.4	0.0
Cycle Q Clear(g_c), s	2.6	30.3	0.0	10.5	16.5	1.3	12.7	4.1	3.2	18.8	4.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	2171	966	644	2889	897	599	194	87	607	203	90
V/C Ratio(X)	0.60	0.74	0.06	0.52	0.42	0.10	0.65	0.64	0.50	0.91	0.66	0.00
Avail Cap(c_a), veh/h	490	2171	966	644	2889	897	599	415	185	634	533	238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.9	30.7	11.3	44.0	14.9	2.0	46.2	55.6	55.1	48.5	55.4	0.0
Incr Delay (d2), s/veh	3.5	2.1	0.1	0.5	0.2	0.1	2.3	4.0	5.0	16.8	4.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	12.9	0.7	4.4	5.9	1.0	5.5	1.9	1.4	9.4	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	32.8	11.4	44.5	15.0	2.0	48.6	59.6	60.2	65.3	59.6	0.0
LnGrp LOS	E	C	B	D	B	A	D	E	E	E	E	A
Approach Vol, veh/h		1747			1653			558			686	
Approach Delay, s/veh		33.4			20.3			51.9			64.2	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.1	12.6	28.4	54.0	24.8	12.8	8.4	73.9
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	22.0	14.0	16.0	* 48	18.0	18.0	16.0	48.0
Max Q Clear Time (g_c+I1), s	20.8	6.1	12.5	32.3	14.7	6.4	4.6	18.5
Green Ext Time (p_c), s	0.2	0.5	0.3	12.9	0.4	0.5	0.1	16.8

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1636	257	176	1280	43	126	191	86	17	56	122
Future Volume (veh/h)	306	1636	257	176	1280	43	126	191	86	17	56	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	340	1818	0	196	1422	21	140	212	0	19	62	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	3095		252	2887	896	501	254		23	82	122
Arrive On Green	0.23	1.00	0.00	0.15	1.00	1.00	0.10	0.14	0.00	0.01	0.04	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	5023	1870	1585	1781	1870	2790
Grp Volume(v), veh/h	340	1818	0	196	1422	21	140	212	0	19	62	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1674	1870	1585	1781	1870	1395
Q Serve(g_s), s	11.4	0.0	0.0	6.6	0.0	0.0	3.1	13.3	0.0	1.3	3.9	0.0
Cycle Q Clear(g_c), s	11.4	0.0	0.0	6.6	0.0	0.0	3.1	13.3	0.0	1.3	3.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	3095		252	2887	896	501	254		23	82	122
V/C Ratio(X)	0.86	0.59		0.78	0.49	0.02	0.28	0.84		0.83	0.76	0.00
Avail Cap(c_a), veh/h	518	3095		518	2887	896	975	379		208	209	312
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.57	0.57	0.00	0.84	0.84	0.84	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.5	0.0	0.0	50.3	0.0	0.0	50.0	50.6	0.0	59.1	56.8	0.0
Incr Delay (d2), s/veh	5.6	0.5	0.0	1.6	0.2	0.0	0.1	13.0	0.0	23.7	5.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.1	0.0	2.7	0.0	0.0	1.3	7.1	0.0	0.7	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	0.5	0.0	51.9	0.2	0.0	50.1	63.5	0.0	82.8	62.1	0.0
LnGrp LOS	D	A		D	A	A	D	E		F	E	A
Approach Vol, veh/h		2158	A		1639			352	A		81	
Approach Delay, s/veh		8.4			6.4			58.2			66.9	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	23.0	12.8	78.7	18.7	9.8	17.6	73.8
Change Period (Y+Rc), s	4.0	* 6.7	4.0	6.0	6.7	4.6	4.0	6.0
Max Green Setting (Gmax), s	14.0	* 24	18.0	44.0	23.3	13.4	18.0	44.0
Max Q Clear Time (g_c+I1), s	3.3	15.3	8.6	2.0	5.1	5.9	13.4	2.0
Green Ext Time (p_c), s	0.0	1.0	0.2	26.7	0.2	0.1	0.3	19.5

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	1386	4	9	1051	90	1	0	0	97	0	554
Future Volume (veh/h)	330	1386	4	9	1051	90	1	0	0	97	0	554
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	367	1540	4	10	1168	50	1	0	0	108	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	425	2669	7	13	1898	589	2	2	2	164	0	146
Arrive On Green	0.25	1.00	1.00	0.01	0.37	0.37	0.00	0.00	0.00	0.05	0.00	0.00
Sat Flow, veh/h	3456	5258	14	1781	5106	1585	1781	1870	1585	3563	0	3170
Grp Volume(v), veh/h	367	997	547	10	1168	50	1	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1868	1781	1702	1585	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	12.2	0.0	0.0	0.7	22.4	2.5	0.1	0.0	0.0	3.6	0.0	0.0
Cycle Q Clear(g_c), s	12.2	0.0	0.0	0.7	22.4	2.5	0.1	0.0	0.0	3.6	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	425	1728	948	13	1898	589	2	2	2	164	0	146
V/C Ratio(X)	0.86	0.58	0.58	0.79	0.62	0.08	0.51	0.00	0.00	0.66	0.00	0.00
Avail Cap(c_a), veh/h	778	1728	948	208	1898	589	208	218	185	416	0	370
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.3	0.0	0.0	59.5	30.7	24.5	59.9	0.0	0.0	56.3	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.4	0.8	31.4	1.4	0.3	61.2	0.0	0.0	1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.1	0.2	0.4	9.0	0.9	0.1	0.0	0.0	1.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.9	0.4	0.8	90.8	32.2	24.7	121.1	0.0	0.0	58.0	0.0	0.0
LnGrp LOS	D	A	A	F	C	C	F	A	A	E	A	A
Approach Vol, veh/h		1911			1228			1			108	
Approach Delay, s/veh		9.2			32.3			121.1			58.0	
Approach LOS		A			C			F			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		4.1	4.9	67.3		11.5	21.2	51.0				
Change Period (Y+Rc), s		4.0	4.0	6.4		6.0	6.4	* 6.4				
Max Green Setting (Gmax), s		14.0	14.0	57.6		14.0	27.0	* 45				
Max Q Clear Time (g_c+I1), s		2.1	2.7	2.0		5.6	14.2	24.4				
Green Ext Time (p_c), s		0.0	0.0	19.8		0.1	0.6	9.7				

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	110	97	995	59	56	1417
Future Volume (veh/h)	110	97	995	59	56	1417
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	2	1106	43	62	1574
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	150	133	3762	1168	80	4162
Arrive On Green	0.08	0.08	1.00	1.00	0.05	0.82
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	122	2	1106	43	62	1574
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	8.1	0.1	0.0	0.0	4.1	9.9
Cycle Q Clear(g_c), s	8.1	0.1	0.0	0.0	4.1	9.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	150	133	3762	1168	80	4162
V/C Ratio(X)	0.81	0.01	0.29	0.04	0.77	0.38
Avail Cap(c_a), veh/h	361	321	3762	1168	386	4162
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	0.93	0.93
Uniform Delay (d), s/veh	54.0	50.4	0.0	0.0	56.7	3.0
Incr Delay (d2), s/veh	7.7	0.0	0.2	0.1	5.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.1	0.1	0.0	1.9	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	61.7	50.4	0.2	0.1	62.1	3.2
LnGrp LOS	E	D	A	A	E	A
Approach Vol, veh/h	124		1149			1636
Approach Delay, s/veh	61.6		0.2			5.4
Approach LOS	E		A			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				104.2		15.8	9.4	94.8
Change Period (Y+Rc), s				6.4		5.7	4.0	6.4
Max Green Setting (Gmax), s				83.6		24.3	26.0	37.6
Max Q Clear Time (g_c+I1), s				11.9		10.1	6.1	2.0
Green Ext Time (p_c), s				23.4		0.2	0.1	10.8

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	114	39	107	942	1282	223
Future Volume (veh/h)	114	39	107	942	1282	223
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	0	119	1047	1424	179
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	185	85	146	3587	2999	931
Arrive On Green	0.05	0.00	0.08	0.70	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	5274	5274	1585
Grp Volume(v), veh/h	127	0	119	1047	1424	179
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1702	1702	1585
Q Serve(g_s), s	4.3	0.0	7.9	9.2	0.0	0.0
Cycle Q Clear(g_c), s	4.3	0.0	7.9	9.2	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	185	85	146	3587	2999	931
V/C Ratio(X)	0.69	0.00	0.82	0.29	0.47	0.19
Avail Cap(c_a), veh/h	700	321	386	3587	2999	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.97	0.97	0.92	0.92
Uniform Delay (d), s/veh	55.8	0.0	54.2	6.7	0.0	0.0
Incr Delay (d2), s/veh	1.7	0.0	4.1	0.2	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	3.6	2.8	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.5	0.0	58.3	6.9	0.5	0.4
LnGrp LOS	E	A	E	A	A	A
Approach Vol, veh/h	127			1166	1603	
Approach Delay, s/veh	57.5			12.1	0.5	
Approach LOS	E			B	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		12.1	13.8	76.5		90.3
Change Period (Y+Rc), s		5.7	4.0	6.0		* 6
Max Green Setting (Gmax), s		24.3	26.0	38.0		* 84
Max Q Clear Time (g_c+I1), s		6.3	9.9	2.0		11.2
Green Ext Time (p_c), s		0.2	0.1	19.6		13.9

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	5	113	6	30	0	109	1016	6	7	1216	92
Future Volume (veh/h)	17	5	113	6	30	0	109	1016	6	7	1216	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	6	0	7	33	0	121	1129	5	8	1351	61
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	27	59	50	12	44	0	146	2133	662	14	1754	544
Arrive On Green	0.02	0.03	0.00	0.01	0.02	0.00	0.08	0.42	0.42	0.01	0.34	0.34
Sat Flow, veh/h	1781	1870	1585	1781	1870	0	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	19	6	0	7	33	0	121	1129	5	8	1351	61
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	0	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.4	0.4	0.0	0.5	2.3	0.0	8.7	21.5	0.2	0.6	30.7	3.4
Cycle Q Clear(g_c), s	1.4	0.4	0.0	0.5	2.3	0.0	8.7	21.5	0.2	0.6	30.7	3.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	27	59	50	12	44	0	146	2133	662	14	1754	544
V/C Ratio(X)	0.70	0.10	0.00	0.57	0.76	0.00	0.83	0.53	0.01	0.58	0.77	0.11
Avail Cap(c_a), veh/h	219	201	171	219	374	0	301	2133	662	219	1897	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.96	0.96	0.96	0.91	0.91	0.91
Uniform Delay (d), s/veh	63.7	61.1	0.0	64.4	63.1	0.0	58.8	28.3	22.1	64.3	38.1	29.1
Incr Delay (d2), s/veh	11.3	1.0	0.0	14.6	17.7	0.0	4.3	0.9	0.0	12.5	2.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.2	0.0	0.3	1.3	0.0	4.0	8.6	0.1	0.3	12.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.0	62.1	0.0	79.0	80.8	0.0	63.1	29.2	22.1	76.8	40.1	29.3
LnGrp LOS	E	E	A	E	F	A	E	C	C	E	D	C
Approach Vol, veh/h		25			40			1255			1420	
Approach Delay, s/veh		71.9			80.5			32.4			39.8	
Approach LOS		E			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	10.1	14.7	50.3	6.0	9.0	5.0	60.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	16.0	14.0	22.0	48.3	16.0	* 26	16.0	54.3
Max Q Clear Time (g_c+I1), s	2.5	2.4	10.7	32.7	3.4	4.3	2.6	23.5
Green Ext Time (p_c), s	0.0	0.0	0.1	11.0	0.0	0.1	0.0	14.0

Intersection Summary	
HCM 6th Ctrl Delay	37.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	7	14	128	232	179	25	944	105	95	1232	42
Future Volume (veh/h)	11	7	14	128	232	179	25	944	105	95	1232	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	8	0	142	258	0	28	1049	0	106	1369	45
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	27	0	170	351		36	3343		131	3596	118
Arrive On Green	0.01	0.01	0.00	0.10	0.10	0.00	0.02	0.65	0.00	0.07	0.71	0.71
Sat Flow, veh/h	1781	1870	0	1781	3554	1585	1781	5106	1585	1781	5077	167
Grp Volume(v), veh/h	12	8	0	142	258	0	28	1049	0	106	918	496
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	1777	1585	1781	1702	1585	1781	1702	1840
Q Serve(g_s), s	0.8	0.5	0.0	9.4	8.5	0.0	1.9	10.7	0.0	7.0	12.9	12.9
Cycle Q Clear(g_c), s	0.8	0.5	0.0	9.4	8.5	0.0	1.9	10.7	0.0	7.0	12.9	12.9
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	20	27	0	170	351		36	3343		131	2411	1303
V/C Ratio(X)	0.61	0.29	0.00	0.84	0.73		0.78	0.31		0.81	0.38	0.38
Avail Cap(c_a), veh/h	312	312	0	312	572		312	3343		312	2411	1303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.76	0.76	0.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	59.1	58.5	0.0	53.4	52.5	0.0	58.5	9.0	0.0	54.7	7.0	7.0
Incr Delay (d2), s/veh	11.0	16.2	0.0	4.1	4.7	0.0	9.7	0.1	0.0	4.0	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.0	4.4	4.0	0.0	0.9	3.5	0.0	3.2	4.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.1	74.7	0.0	57.5	57.2	0.0	68.2	9.1	0.0	58.8	7.4	7.8
LnGrp LOS	E	E	A	E	E		E	A		E	A	A
Approach Vol, veh/h		20			400	A		1077	A		1520	
Approach Delay, s/veh		71.9			57.3			10.6			11.1	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	7.5	6.4	90.7	5.3	17.6	12.8	84.3
Change Period (Y+Rc), s	4.0	* 5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	21.0	* 20	21.0	39.3	21.0	19.3	21.0	39.3
Max Q Clear Time (g_c+I1), s	11.4	2.5	3.9	14.9	2.8	10.5	9.0	12.7
Green Ext Time (p_c), s	0.1	0.0	0.0	14.5	0.0	1.4	0.1	11.4

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	951	71	38	1201	543	125	486	47	560	516	133
Future Volume (veh/h)	77	951	71	38	1201	543	125	486	47	560	516	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	1057	28	42	1334	0	139	540	4	622	573	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	2236	694	75	2146		166	595	265	672	1006	
Arrive On Green	0.04	0.44	0.44	0.02	0.42	0.00	0.09	0.17	0.17	0.32	0.47	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	86	1057	28	42	1334	0	139	540	4	622	573	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	2.9	17.6	1.2	1.4	24.6	0.0	9.2	17.9	0.2	20.8	14.0	0.0
Cycle Q Clear(g_c), s	2.9	17.6	1.2	1.4	24.6	0.0	9.2	17.9	0.2	20.8	14.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	2236	694	75	2146		166	595	265	672	1006	
V/C Ratio(X)	0.63	0.47	0.04	0.56	0.62		0.84	0.91	0.02	0.93	0.57	
Avail Cap(c_a), veh/h	461	2236	694	461	2146		238	601	268	749	1006	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.89	0.89	0.00
Uniform Delay (d), s/veh	56.8	23.9	19.3	58.1	27.3	0.0	53.5	49.0	32.1	39.7	26.4	0.0
Incr Delay (d2), s/veh	1.8	0.7	0.1	2.4	0.6	0.0	11.5	18.0	0.0	14.3	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	7.2	0.5	0.7	10.0	0.0	4.6	9.2	0.1	8.7	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.6	24.6	19.4	60.5	27.9	0.0	65.1	67.1	32.1	53.9	27.3	0.0
LnGrp LOS	E	C	B	E	C		E	E	C	D	C	
Approach Vol, veh/h		1171			1376	A		683			1195	A
Approach Delay, s/veh		27.0			28.9			66.4			41.2	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	58.6	15.2	39.7	8.7	56.4	29.0	25.8
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	5.7	* 5.7
Max Green Setting (Gmax), s	16.0	38.0	16.0	30.3	16.0	38.0	26.0	* 20
Max Q Clear Time (g_c+I1), s	3.4	19.6	11.2	16.0	4.9	26.6	22.8	19.9
Green Ext Time (p_c), s	0.0	9.4	0.1	4.3	0.1	8.0	0.5	0.2

Intersection Summary	
HCM 6th Ctrl Delay	37.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	0	24	31	0	76	25	509	11	13	572	9
Future Volume (veh/h)	38	0	24	31	0	76	25	509	11	13	572	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	0	0	34	0	10	28	566	11	14	636	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	0	147	189	0	168	83	1222	24	45	1153	16
Arrive On Green	0.09	0.00	0.00	0.11	0.00	0.11	0.05	0.34	0.34	0.03	0.32	0.32
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3565	69	1781	3587	51
Grp Volume(v), veh/h	42	0	0	34	0	10	28	282	295	14	315	330
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1858	1781	1777	1861
Q Serve(g_s), s	0.9	0.0	0.0	0.7	0.0	0.2	0.6	5.1	5.1	0.3	6.0	6.0
Cycle Q Clear(g_c), s	0.9	0.0	0.0	0.7	0.0	0.2	0.6	5.1	5.1	0.3	6.0	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.03
Lane Grp Cap(c), veh/h	165	0	147	189	0	168	83	609	637	45	571	598
V/C Ratio(X)	0.25	0.00	0.00	0.18	0.00	0.06	0.34	0.46	0.46	0.31	0.55	0.55
Avail Cap(c_a), veh/h	872	0	776	1788	0	1591	872	1740	1820	872	1740	1823
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	0.0	16.6	0.0	16.4	18.9	10.5	10.5	19.6	11.4	11.4
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.2	0.0	0.1	0.9	0.9	0.9	1.5	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.3	0.0	0.1	0.2	1.5	1.6	0.1	1.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	0.0	0.0	16.8	0.0	16.5	19.7	11.4	11.4	21.0	12.9	12.8
LnGrp LOS	B	A	A	B	A	B	B	B	B	C	B	B
Approach Vol, veh/h		42			44			605			659	
Approach Delay, s/veh		17.5			16.7			11.8			13.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.8	5.9	18.8		8.3	5.0	19.7				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		20.0	20.0	40.0		41.0	20.0	40.0				
Max Q Clear Time (g_c+I1), s		2.9	2.6	8.0		2.7	2.3	7.1				
Green Ext Time (p_c), s		0.0	0.0	5.1		0.1	0.0	4.5				

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	177	236	43	243	80	442	497	38	98	459	18
Future Volume (veh/h)	23	177	236	43	243	80	442	497	38	98	459	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2001	1924	1924	2001	1924	1924	2001	1924	1924	1954	1879	1879
Adj Flow Rate, veh/h	26	197	115	48	270	17	491	552	14	109	510	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	110	574	550	170	690	305	671	1177	523	247	975	432
Arrive On Green	0.06	0.16	0.16	0.09	0.19	0.19	0.18	0.32	0.32	0.13	0.27	0.27
Sat Flow, veh/h	1906	3656	1615	1906	3656	1618	3698	3656	1623	1861	3571	1584
Grp Volume(v), veh/h	26	197	115	48	270	17	491	552	14	109	510	4
Grp Sat Flow(s),veh/h/ln	1906	1828	1615	1906	1828	1618	1849	1828	1623	1861	1785	1584
Q Serve(g_s), s	0.8	3.1	3.3	1.5	4.2	0.6	8.1	7.8	0.4	3.5	7.9	0.1
Cycle Q Clear(g_c), s	0.8	3.1	3.3	1.5	4.2	0.6	8.1	7.8	0.4	3.5	7.9	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	110	574	550	170	690	305	671	1177	523	247	975	432
V/C Ratio(X)	0.24	0.34	0.21	0.28	0.39	0.06	0.73	0.47	0.03	0.44	0.52	0.01
Avail Cap(c_a), veh/h	323	806	652	323	1934	856	1198	1934	859	316	1338	594
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	24.3	15.3	27.6	23.0	21.6	25.0	17.6	15.0	25.9	20.0	17.2
Incr Delay (d2), s/veh	0.4	0.6	0.3	0.3	0.6	0.1	0.6	0.5	0.0	0.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.2	1.1	0.6	1.6	0.2	3.2	2.8	0.1	1.4	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	25.0	15.6	27.9	23.7	21.7	25.6	18.1	15.1	26.4	20.7	17.2
LnGrp LOS	C	C	B	C	C	C	C	B	B	C	C	B
Approach Vol, veh/h		338			335			1057			623	
Approach Delay, s/veh		22.1			24.2			21.5			21.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	15.9	15.8	23.4	7.7	17.9	12.6	26.6
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	11.0	14.3	21.0	24.3	11.0	34.3	11.0	34.3
Max Q Clear Time (g_c+I1), s	3.5	5.1	10.1	9.9	2.8	6.2	5.5	9.8
Green Ext Time (p_c), s	0.0	1.5	1.6	6.9	0.0	5.1	0.1	10.4

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	690	31	36	837	90	94
Future Volume (veh/h)	690	31	36	837	90	94
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	767	31	40	930	100	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1331	54	128	1974	354	315
Arrive On Green	0.38	0.38	0.07	0.56	0.20	0.20
Sat Flow, veh/h	3575	141	1781	3647	1781	1585
Grp Volume(v), veh/h	391	407	40	930	100	14
Grp Sat Flow(s),veh/h/ln	1777	1845	1781	1777	1781	1585
Q Serve(g_s), s	6.9	6.9	0.8	6.2	1.9	0.3
Cycle Q Clear(g_c), s	6.9	6.9	0.8	6.2	1.9	0.3
Prop In Lane		0.08	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	679	705	128	1974	354	315
V/C Ratio(X)	0.58	0.58	0.31	0.47	0.28	0.04
Avail Cap(c_a), veh/h	1589	1650	947	5581	1128	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.7	9.7	17.4	5.3	13.4	12.8
Incr Delay (d2), s/veh	1.3	1.3	0.5	0.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.8	0.3	0.8	0.7	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	10.9	17.9	5.6	13.6	12.8
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	798			970	114	
Approach Delay, s/veh	11.0			6.1	13.5	
Approach LOS	B			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		11.8	6.8	20.8		27.6
Change Period (Y+Rc), s		4.0	4.0	5.7		* 5.7
Max Green Setting (Gmax), s		25.0	21.0	35.3		* 62
Max Q Clear Time (g_c+I1), s		3.9	2.8	8.9		8.2
Green Ext Time (p_c), s		0.2	0.0	6.2		9.7

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	145	532	59	324	135	262	875	21	94	693	24
Future Volume (veh/h)	48	145	532	59	324	135	262	875	21	94	693	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	161	0	66	360	0	291	972	0	104	770	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	414		132	456		360	1451		392	1923	
Arrive On Green	0.06	0.12	0.00	0.07	0.13	0.00	0.10	0.41	0.00	0.22	0.54	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	53	161	0	66	360	0	291	972	0	104	770	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.5	5.0	0.0	4.3	11.8	0.0	9.9	26.7	0.0	5.8	15.2	0.0
Cycle Q Clear(g_c), s	3.5	5.0	0.0	4.3	11.8	0.0	9.9	26.7	0.0	5.8	15.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	414		132	456		360	1451		392	1923	
V/C Ratio(X)	0.48	0.39		0.50	0.79		0.81	0.67		0.27	0.40	
Avail Cap(c_a), veh/h	238	572		238	583		893	1451		392	1923	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.4	49.1	0.0	53.4	50.7	0.0	52.6	28.9	0.0	38.7	16.1	0.0
Incr Delay (d2), s/veh	1.2	1.0	0.0	1.1	7.1	0.0	1.7	2.5	0.0	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.2	0.0	1.9	5.6	0.0	4.2	11.0	0.0	2.4	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.6	50.1	0.0	54.5	57.8	0.0	54.2	31.4	0.0	38.9	16.3	0.0
LnGrp LOS	E	D		D	E		D	C		D	B	
Approach Vol, veh/h		214	A		426	A		1263	A		874	A
Approach Delay, s/veh		51.4			57.3			36.7			19.0	
Approach LOS		D			E			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.4	55.0	12.9	19.7	16.5	70.9	11.5	21.1
Change Period (Y+Rc), s	6.0	* 6	4.0	5.7	4.0	6.0	4.0	* 5.7
Max Green Setting (Gmax), s	16.0	* 49	16.0	19.3	31.0	34.0	16.0	* 20
Max Q Clear Time (g_c+I1), s	7.8	28.7	6.3	7.0	11.9	17.2	5.5	13.8
Green Ext Time (p_c), s	0.1	6.8	0.1	0.7	0.6	4.8	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	35.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	429	0	5	388	146	0	0	0	315	0	177
Future Volume (veh/h)	162	429	0	5	388	146	0	0	0	315	0	177
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1841	1841	0	1841	1841	1841				1841	0	1841
Adj Flow Rate, veh/h	180	477	0	6	431	48				350	0	97
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	4	4	0	4	4	4				4	0	4
Cap, veh/h	235	1625	0	0	787	347				462	0	620
Arrive On Green	0.13	0.46	0.00	0.00	0.23	0.23				0.26	0.00	0.26
Sat Flow, veh/h	1753	3589	0	0	3497	1543				1753	0	1560
Grp Volume(v), veh/h	180	477	0	0	431	48				350	0	97
Grp Sat Flow(s),veh/h/ln	1753	1749	0	0	1749	1543				1753	0	1560
Q Serve(g_s), s	3.8	3.2	0.0	0.0	4.1	0.9				7.0	0.0	1.5
Cycle Q Clear(g_c), s	3.8	3.2	0.0	0.0	4.1	0.9				7.0	0.0	1.5
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	235	1625	0	0	787	347				462	0	620
V/C Ratio(X)	0.77	0.29	0.00	0.00	0.55	0.14				0.76	0.00	0.16
Avail Cap(c_a), veh/h	694	2770	0	0	2770	1222				1389	0	1445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	6.3	0.0	0.0	13.0	11.7				12.8	0.0	7.3
Incr Delay (d2), s/veh	2.0	0.1	0.0	0.0	0.6	0.2				1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.6	0.0	0.0	1.2	0.2				2.3	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	6.4	0.0	0.0	13.6	11.9				13.8	0.0	7.4
LnGrp LOS	B	A	A	A	B	B				B	A	A
Approach Vol, veh/h		657			479						447	
Approach Delay, s/veh		9.5			13.4						12.4	
Approach LOS		A			B						B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	23.3		14.6	9.1	14.2
Change Period (Y+Rc), s	4.0	5.7		4.6	4.0	5.7
Max Green Setting (Gmax), s	24.0	30.0		30.0	15.0	30.0
Max Q Clear Time (g_c+I1), s	0.0	5.2		9.0	5.8	6.1
Green Ext Time (p_c), s	0.0	2.0		1.1	0.2	2.0

Intersection Summary			
HCM 6th Ctrl Delay			11.5
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	682	8	3	500	179	8	1	14	146	6	53
Future Volume (veh/h)	41	682	8	3	500	179	8	1	14	146	6	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1885	1826	1826	1885	1885	1885	1791	1791	1732
Adj Flow Rate, veh/h	46	758	8	3	556	62	9	1	0	162	7	59
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	5	5	5	1	5	5	1	1	1	1	1	5
Cap, veh/h	54	1386	15	4	1268	558	19	20	0	280	12	246
Arrive On Green	0.03	0.39	0.39	0.00	0.37	0.37	0.01	0.01	0.00	0.17	0.17	0.17
Sat Flow, veh/h	1739	3517	37	1795	3469	1526	1795	1885	0	1638	71	1442
Grp Volume(v), veh/h	46	374	392	3	556	62	9	1	0	169	0	59
Grp Sat Flow(s),veh/h/ln	1739	1735	1819	1795	1735	1526	1795	1885	0	1709	0	1442
Q Serve(g_s), s	1.1	7.0	7.0	0.1	5.1	1.1	0.2	0.0	0.0	3.8	0.0	1.5
Cycle Q Clear(g_c), s	1.1	7.0	7.0	0.1	5.1	1.1	0.2	0.0	0.0	3.8	0.0	1.5
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.00	0.96		1.00
Lane Grp Cap(c), veh/h	54	684	717	4	1268	558	19	20	0	292	0	246
V/C Ratio(X)	0.85	0.55	0.55	0.68	0.44	0.11	0.48	0.05	0.00	0.58	0.00	0.24
Avail Cap(c_a), veh/h	622	1241	1301	642	2482	1092	642	674	0	1386	0	1169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.2	9.8	9.8	20.9	10.1	8.8	20.6	20.5	0.0	16.0	0.0	15.0
Incr Delay (d2), s/veh	12.9	0.7	0.7	51.3	0.2	0.1	6.8	0.4	0.0	1.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.8	1.9	0.1	1.3	0.3	0.1	0.0	0.0	1.5	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	10.5	10.5	72.2	10.3	8.9	27.5	20.9	0.0	17.8	0.0	15.5
LnGrp LOS	C	B	B	E	B	A	C	C	A	B	A	B
Approach Vol, veh/h		812			621			10			228	
Approach Delay, s/veh		11.8			10.5			26.8			17.2	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	22.2		4.4	5.3	21.0		11.2
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	15.0	30.0		15.0	15.0	30.0		34.0
Max Q Clear Time (g_c+I1), s	2.1	9.0		2.2	3.1	7.1		5.8
Green Ext Time (p_c), s	0.0	7.5		0.0	0.0	6.1		1.9

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	687	189	200	554	136	195
Future Volume (veh/h)	687	189	200	554	136	195
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	763	100	222	616	151	205
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	829	563	416	2014	222	567
Arrive On Green	0.23	0.23	0.23	0.57	0.12	0.12
Sat Flow, veh/h	3647	1568	1781	3647	1781	1585
Grp Volume(v), veh/h	763	100	222	616	151	205
Grp Sat Flow(s),veh/h/ln	1777	1568	1781	1777	1781	1585
Q Serve(g_s), s	12.6	2.6	6.5	5.5	4.9	0.0
Cycle Q Clear(g_c), s	12.6	2.6	6.5	5.5	4.9	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	829	563	416	2014	222	567
V/C Ratio(X)	0.92	0.18	0.53	0.31	0.68	0.36
Avail Cap(c_a), veh/h	829	563	475	2014	475	793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.99	0.99	1.00	1.00
Uniform Delay (d), s/veh	22.5	13.2	20.1	6.8	25.1	14.2
Incr Delay (d2), s/veh	15.3	0.1	0.4	0.4	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.0	2.4	1.4	2.0	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.8	13.4	20.5	7.2	26.5	14.3
LnGrp LOS	D	B	C	A	C	B
Approach Vol, veh/h	863			838	356	
Approach Delay, s/veh	35.0			10.7	19.5	
Approach LOS	C			B	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.0	20.0		11.5		40.0
Change Period (Y+Rc), s	6.0	* 6		4.0		6.0
Max Green Setting (Gmax), s	16.0	* 14		16.0		34.0
Max Q Clear Time (g_c+I1), s	8.5	14.6		6.9		7.5
Green Ext Time (p_c), s	0.2	0.0		0.6		2.3

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	692	266	460	401	0	0	0	941	0	0	353
Future Volume (vph)	0	692	266	460	401	0	0	0	941	0	0	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7	5.7	4.0	4.0				4.0			4.0
Lane Util. Factor		0.91	1.00	0.97	0.95				1.00			1.00
Frpb, ped/bikes		1.00	0.98	1.00	1.00				1.00			1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00				1.00			1.00
Frt		1.00	0.85	1.00	1.00				0.86			0.86
Flt Protected		1.00	1.00	0.95	1.00				1.00			1.00
Satd. Flow (prot)		5085	1554	3433	3539				1611			1611
Flt Permitted		1.00	1.00	0.95	1.00				1.00			1.00
Satd. Flow (perm)		5085	1554	3433	3539				1611			1611
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	769	296	511	446	0	0	0	1046	0	0	392
RTOR Reduction (vph)	0	0	90	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	769	206	511	446	0	0	0	1046	0	0	392
Confl. Peds. (#/hr)			5									
Turn Type		NA	Perm	Prot	NA				Free			Free
Protected Phases		2		1	6							
Permitted Phases			2						Free			Free
Actuated Green, G (s)		36.8	36.8	13.5	60.0				60.0			60.0
Effective Green, g (s)		36.8	36.8	13.5	60.0				60.0			60.0
Actuated g/C Ratio		0.61	0.61	0.22	1.00				1.00			1.00
Clearance Time (s)		5.7	5.7	4.0	4.0							
Vehicle Extension (s)		3.4	3.4	2.0	3.0							
Lane Grp Cap (vph)		3118	953	772	3539				1611			1611
v/s Ratio Prot		0.15		0.15	0.13							
v/s Ratio Perm			0.13						c0.65			0.24
v/c Ratio		0.25	0.22	0.66	0.13				0.65			0.24
Uniform Delay, d1		5.3	5.2	21.2	0.0				0.0			0.0
Progression Factor		2.25	4.94	1.00	1.00				1.00			1.00
Incremental Delay, d2		0.2	0.4	1.7	0.0				2.0			0.4
Delay (s)		12.0	26.0	22.8	0.0				2.0			0.4
Level of Service		B	C	C	A				A			A
Approach Delay (s)		15.9			12.2			2.0			0.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBT	WBR	WBR2	NBL2	NBT	NBR	SBL	SBR	SBR2
Lane Configurations												
Traffic Volume (vph)	146	1278	209	392	438	68	169	539	657	144	300	53
Future Volume (vph)	146	1278	209	392	438	68	169	539	657	144	300	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.7	4.0	5.7	5.7	5.7	4.0	5.3	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.86	0.86	1.00	1.00	0.95	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	0.99	0.98	1.00	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	0.95	0.85	0.85	1.00	1.00	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1548	4519	1338	1583	1770	3539	1562	3433	1583	
Flt Permitted	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1548	4519	1338	1583	1770	3539	1562	3433	1583	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	162	1420	232	436	487	76	188	599	730	160	333	59
RTOR Reduction (vph)	0	0	0	0	0	44	0	0	0	0	37	0
Lane Group Flow (vph)	162	1420	232	680	243	32	188	599	730	160	355	0
Confl. Peds. (#/hr)			5		5				5		5	
Turn Type	Prot	NA	Free	NA	Perm	Perm	Prot	NA	Free	Prot	pt+ov	
Protected Phases	5	2		6			3	8		7	4 5	
Permitted Phases			Free		6	6			Free			
Actuated Green, G (s)	10.4	68.9	130.0	54.5	54.5	54.5	18.5	34.9	130.0	11.2	43.3	
Effective Green, g (s)	10.4	68.9	130.0	54.5	54.5	54.5	18.5	34.9	130.0	11.2	43.3	
Actuated g/C Ratio	0.08	0.53	1.00	0.42	0.42	0.42	0.14	0.27	1.00	0.09	0.33	
Clearance Time (s)	4.0	5.7		5.7	5.7	5.7	4.0	5.3		4.0		
Vehicle Extension (s)	2.0	3.4		3.4	3.4	3.4	4.0	4.0		2.0		
Lane Grp Cap (vph)	274	1875	1548	1894	560	663	251	950	1562	295	527	
v/s Ratio Prot	0.05	c0.40		0.15			c0.11	0.17		0.05	c0.22	
v/s Ratio Perm			0.15		0.18	0.02			0.47			
v/c Ratio	0.59	0.76	0.15	0.36	0.43	0.05	0.75	0.63	0.47	0.54	0.67	
Uniform Delay, d1	57.7	24.0	0.0	25.8	26.8	22.4	53.5	41.9	0.0	56.9	37.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.3	2.9	0.2	0.1	0.6	0.0	12.3	1.5	1.0	1.1	2.7	
Delay (s)	60.0	26.9	0.2	25.9	27.4	22.4	65.8	43.4	1.0	58.0	39.9	
Level of Service	E	C	A	C	C	C	E	D	A	E	D	
Approach Delay (s)		26.4		26.0				25.8				
Approach LOS		C		C				C				

Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	1430	344	50	670	59	94	151	54	84	228	177
Future Volume (veh/h)	223	1430	344	50	670	59	94	151	54	84	228	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	248	1589	0	56	744	0	104	168	0	93	253	197
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	2218		219	2536		406	573		275	745	229
Arrive On Green	0.09	0.43	0.00	0.06	0.39	0.00	0.08	0.16	0.00	0.08	0.15	0.15
Sat Flow, veh/h	3456	5106	1585	3456	6434	1585	5023	3554	1585	3456	5106	1569
Grp Volume(v), veh/h	248	1589	0	56	744	0	104	168	0	93	253	197
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1609	1585	1674	1777	1585	1728	1702	1569
Q Serve(g_s), s	8.4	30.7	0.0	1.9	9.5	0.0	2.3	5.0	0.0	3.1	5.3	14.7
Cycle Q Clear(g_c), s	8.4	30.7	0.0	1.9	9.5	0.0	2.3	5.0	0.0	3.1	5.3	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	309	2218		219	2536		406	573		275	745	229
V/C Ratio(X)	0.80	0.72		0.26	0.29		0.26	0.29		0.34	0.34	0.86
Avail Cap(c_a), veh/h	461	2218		461	2536		670	583		461	821	252
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	27.9	0.0	53.5	24.9	0.0	51.8	44.3	0.0	52.2	46.1	50.1
Incr Delay (d2), s/veh	2.4	0.8	0.0	0.2	0.3	0.0	0.1	0.4	0.0	0.3	0.3	23.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	12.1	0.0	0.8	3.6	0.0	1.0	2.2	0.0	1.3	2.3	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.0	28.7	0.0	53.7	25.2	0.0	51.9	44.7	0.0	52.5	46.4	73.9
LnGrp LOS	E	C		D	C		D	D		D	D	E
Approach Vol, veh/h		1837	A		800	A		272	A		543	
Approach Delay, s/veh		32.4			27.2			47.4			57.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	24.6	11.6	57.8	15.0	23.2	16.4	53.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.7	5.3	* 5.7	5.7	* 5.7
Max Green Setting (Gmax), s	16.0	19.7	16.0	49.3	16.0	* 19	16.0	* 47
Max Q Clear Time (g_c+I1), s	5.1	7.0	3.9	32.7	4.3	16.7	10.4	11.5
Green Ext Time (p_c), s	0.1	0.7	0.1	9.1	0.2	0.6	0.3	4.7

Intersection Summary	
HCM 6th Ctrl Delay	36.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1184	193	33	570	19	146	154	4	37	181	58
Future Volume (veh/h)	80	1184	193	33	570	19	146	154	4	37	181	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	1316	0	37	633	0	162	171	0	41	201	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	1885		477	3000		191	552		53	277	
Arrive On Green	0.06	0.37	0.00	0.27	0.59	0.00	0.11	0.16	0.00	0.03	0.08	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	89	1316	0	37	633	0	162	171	0	41	201	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	5.9	26.3	0.0	1.9	7.0	0.0	10.7	5.1	0.0	2.7	6.6	0.0
Cycle Q Clear(g_c), s	5.9	26.3	0.0	1.9	7.0	0.0	10.7	5.1	0.0	2.7	6.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	1885		477	3000		191	552		53	277	
V/C Ratio(X)	0.79	0.70		0.08	0.21		0.85	0.31		0.78	0.73	
Avail Cap(c_a), veh/h	312	1885		477	3000		312	572		312	563	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.4	32.2	0.0	32.9	11.7	0.0	52.6	45.0	0.0	57.8	54.1	0.0
Incr Delay (d2), s/veh	4.6	2.2	0.0	0.0	0.1	0.0	5.7	0.5	0.0	8.7	4.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	10.7	0.0	0.8	2.5	0.0	5.0	2.2	0.0	1.3	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.0	34.3	0.0	32.9	11.7	0.0	58.4	45.5	0.0	66.5	59.0	0.0
LnGrp LOS	E	C		C	B		E	D		E	E	
Approach Vol, veh/h		1405	A		670	A		333	A		242	A
Approach Delay, s/veh		36.0			12.9			51.8			60.3	
Approach LOS		D			B			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	24.6	37.8	50.0	16.8	15.4	11.6	76.2
Change Period (Y+Rc), s	4.0	* 6	5.7	* 5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	21.0	* 19	16.0	* 44	21.0	19.0	21.0	39.3
Max Q Clear Time (g_c+I1), s	4.7	7.1	3.9	28.3	12.7	8.6	7.9	9.0
Green Ext Time (p_c), s	0.0	0.8	0.0	8.9	0.2	0.7	0.1	5.2

Intersection Summary	
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	64	81	65	73	48	91	533	44	120	873	20
Future Volume (veh/h)	35	64	81	65	73	48	91	533	44	120	873	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	71	0	72	81	0	101	592	0	133	970	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	122		93	207		126	1885		160	2055	
Arrive On Green	0.03	0.03	0.00	0.05	0.06	0.00	0.07	0.37	0.00	0.09	0.40	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	39	71	0	72	81	0	101	592	0	133	970	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	2.6	2.4	0.0	4.8	2.6	0.0	6.7	9.9	0.0	8.8	16.8	0.0
Cycle Q Clear(g_c), s	2.6	2.4	0.0	4.8	2.6	0.0	6.7	9.9	0.0	8.8	16.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	50	122		93	207		126	1885		160	2055	
V/C Ratio(X)	0.78	0.58		0.78	0.39		0.80	0.31		0.83	0.47	
Avail Cap(c_a), veh/h	252	492		312	610		327	1885		267	2055	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.9	57.1	0.0	56.2	54.5	0.0	54.9	27.0	0.0	53.7	26.5	0.0
Incr Delay (d2), s/veh	9.3	5.3	0.0	5.1	1.7	0.0	4.3	0.4	0.0	4.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.1	0.0	2.2	1.2	0.0	3.1	4.0	0.0	4.0	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	62.4	0.0	61.3	56.1	0.0	59.2	27.4	0.0	57.8	26.7	0.0
LnGrp LOS	E	E		E	E		E	C		E	C	
Approach Vol, veh/h		110	A		153	A		693	A		1103	A
Approach Delay, s/veh		64.1			58.6			32.1			30.5	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	10.5	12.5	54.0	7.4	13.4	16.5	50.0
Change Period (Y+Rc), s	4.0	6.4	4.0	5.7	4.0	6.4	5.7	* 5.7
Max Green Setting (Gmax), s	21.0	16.6	22.0	40.3	17.0	20.6	18.0	* 44
Max Q Clear Time (g_c+I1), s	6.8	4.4	8.7	18.8	4.6	4.6	10.8	11.9
Green Ext Time (p_c), s	0.1	0.2	0.1	7.6	0.0	0.3	0.1	4.8

Intersection Summary	
HCM 6th Ctrl Delay	34.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1061	432	44	908	333	317	354	24	351	309	87
Future Volume (veh/h)	210	1061	432	44	908	333	317	354	24	351	309	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	233	1179	254	49	1009	0	352	393	1	390	343	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	2087	648	86	1702		440	474	212	454	429	
Arrive On Green	0.17	0.82	0.82	0.02	0.33	0.00	0.13	0.13	0.13	0.13	0.12	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	233	1179	254	49	1009	0	352	393	1	390	343	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	7.8	9.4	2.0	1.7	19.7	0.0	11.9	12.9	0.1	13.3	11.3	0.0
Cycle Q Clear(g_c), s	7.8	9.4	2.0	1.7	19.7	0.0	11.9	12.9	0.1	13.3	11.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	2087	648	86	1702		440	474	212	454	429	
V/C Ratio(X)	0.81	0.56	0.39	0.57	0.59		0.80	0.83	0.00	0.86	0.80	
Avail Cap(c_a), veh/h	518	2087	648	461	1702		662	563	251	662	563	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.0	7.3	1.0	57.9	33.2	0.0	50.9	50.7	45.1	51.0	51.3	0.0
Incr Delay (d2), s/veh	1.7	0.4	0.5	2.2	1.5	0.0	2.2	9.4	0.0	5.4	7.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	2.2	1.4	0.7	8.1	0.0	5.2	6.3	0.0	6.0	5.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.7	7.7	1.6	60.0	34.8	0.0	53.1	60.1	45.1	56.5	58.3	0.0
LnGrp LOS	D	A	A	E	C		D	E	D	E	E	
Approach Vol, veh/h		1666			1058	A		746			733	A
Approach Delay, s/veh		12.8			35.9			56.8			57.3	
Approach LOS		B			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	55.0	21.3	20.5	16.0	46.0	19.8	22.0
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	16.0	42.0	23.0	* 19	18.0	* 40	23.0	19.0
Max Q Clear Time (g_c+I1), s	3.7	11.4	13.9	13.3	9.8	21.7	15.3	14.9
Green Ext Time (p_c), s	0.0	16.0	0.5	1.2	0.3	8.9	0.5	1.1

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	381	4	6	705	13	7	0	2	25	5	77
Future Volume (veh/h)	28	381	4	6	705	13	7	0	2	25	5	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	423	4	7	783	13	8	0	0	28	6	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	1546	15	23	1397	23	38	40	0	133	28	142
Arrive On Green	0.05	0.43	0.43	0.01	0.39	0.39	0.02	0.00	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1781	3607	34	1781	3577	59	1781	1870	0	1479	317	1585
Grp Volume(v), veh/h	31	208	219	7	389	407	8	0	0	34	0	6
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1860	1781	1870	0	1796	0	1585
Q Serve(g_s), s	0.7	3.0	3.0	0.2	6.8	6.8	0.2	0.0	0.0	0.7	0.0	0.1
Cycle Q Clear(g_c), s	0.7	3.0	3.0	0.2	6.8	6.8	0.2	0.0	0.0	0.7	0.0	0.1
Prop In Lane	1.00		0.02	1.00		0.03	1.00		0.00	0.82		1.00
Lane Grp Cap(c), veh/h	91	761	799	23	694	726	38	40	0	161	0	142
V/C Ratio(X)	0.34	0.27	0.27	0.30	0.56	0.56	0.21	0.00	0.00	0.21	0.00	0.04
Avail Cap(c_a), veh/h	900	1571	1649	900	1571	1645	900	945	0	908	0	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	7.3	7.3	19.4	9.4	9.4	19.0	0.0	0.0	16.7	0.0	16.5
Incr Delay (d2), s/veh	0.8	0.3	0.3	2.6	1.2	1.2	1.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.9	0.9	0.1	2.1	2.2	0.1	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	7.7	7.6	22.0	10.6	10.6	20.1	0.0	0.0	16.9	0.0	16.5
LnGrp LOS	B	A	A	C	B	B	C	A	A	B	A	B
Approach Vol, veh/h		458			803			8			40	
Approach Delay, s/veh		8.4			10.7			20.1			16.9	
Approach LOS		A			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	22.7		4.8	6.0	21.2		7.6
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	35.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	2.2	5.0		2.2	2.7	8.8		2.7
Green Ext Time (p_c), s	0.0	3.3		0.0	0.0	6.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	229	29	23	326	69	44	4	16	26	21	16
Future Volume (veh/h)	55	229	29	23	326	69	44	4	16	26	21	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	254	23	26	362	31	49	4	4	29	23	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	968	87	56	893	398	196	16	16	111	88	173
Arrive On Green	0.07	0.29	0.29	0.03	0.25	0.25	0.13	0.13	0.13	0.11	0.11	0.00
Sat Flow, veh/h	1781	3298	296	1781	3554	1585	1523	124	124	1015	805	1585
Grp Volume(v), veh/h	61	136	141	26	362	31	57	0	0	52	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1817	1781	1777	1585	1772	0	0	1820	0	1585
Q Serve(g_s), s	1.3	2.4	2.4	0.6	3.4	0.6	1.2	0.0	0.0	1.1	0.0	0.0
Cycle Q Clear(g_c), s	1.3	2.4	2.4	0.6	3.4	0.6	1.2	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		0.16	1.00		1.00	0.86		0.07	0.56		1.00
Lane Grp Cap(c), veh/h	131	522	534	56	893	398	228	0	0	199	0	173
V/C Ratio(X)	0.47	0.26	0.26	0.47	0.41	0.08	0.25	0.00	0.00	0.26	0.00	0.00
Avail Cap(c_a), veh/h	924	1593	1629	484	2308	1029	481	0	0	944	0	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.0	10.9	11.0	19.3	12.6	11.6	15.9	0.0	0.0	16.5	0.0	0.0
Incr Delay (d2), s/veh	1.0	1.2	1.2	2.2	1.3	0.4	0.2	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.9	0.9	0.2	1.2	0.2	0.4	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	12.1	12.1	21.5	14.0	11.9	16.1	0.0	0.0	16.8	0.0	0.0
LnGrp LOS	B	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		338			419			57			52	
Approach Delay, s/veh		13.4			14.3			16.1			16.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		9.2	5.3	17.6		8.4	7.0	15.9
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		11.0	11.0	36.3		21.0	21.0	26.3
Max Q Clear Time (g_c+I1), s		3.2	2.6	4.4		3.1	3.3	5.4
Green Ext Time (p_c), s		0.0	0.0	3.5		0.1	0.1	4.7

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	187	64	29	201	239	63	916	27	190	768	145
Future Volume (veh/h)	96	187	64	29	201	239	63	916	27	190	768	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	208	0	32	223	0	70	1018	0	211	853	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	242		97	389		121	1271		240	1460	
Arrive On Green	0.07	0.13	0.00	0.05	0.11	0.00	0.07	0.36	0.00	0.13	0.41	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	107	208	0	32	223	0	70	1018	0	211	853	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.1	13.1	0.0	2.1	7.2	0.0	4.6	30.9	0.0	13.9	22.3	0.0
Cycle Q Clear(g_c), s	7.1	13.1	0.0	2.1	7.2	0.0	4.6	30.9	0.0	13.9	22.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	132	242		97	389		121	1271		240	1460	
V/C Ratio(X)	0.81	0.86		0.33	0.57		0.58	0.80		0.88	0.58	
Avail Cap(c_a), veh/h	238	301		238	572		238	1271		386	1460	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.7	51.2	0.0	54.6	50.8	0.0	54.3	34.7	0.0	50.9	27.4	0.0
Incr Delay (d2), s/veh	4.4	21.1	0.0	0.7	2.3	0.0	1.6	4.1	0.0	7.8	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	7.4	0.0	0.9	3.2	0.0	2.0	13.1	0.0	6.5	9.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	72.3	0.0	55.3	53.1	0.0	55.9	38.8	0.0	58.7	29.1	0.0
LnGrp LOS	E	E		E	D		E	D		E	C	
Approach Vol, veh/h		315	A		255	A		1088	A		1064	A
Approach Delay, s/veh		67.8			53.3			39.9			35.0	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.2	48.6	10.6	21.2	13.8	55.0	12.9	18.8
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	5.7
Max Green Setting (Gmax), s	26.0	39.3	16.0	19.3	16.0	* 49	16.0	19.3
Max Q Clear Time (g_c+I1), s	15.9	32.9	4.1	15.1	6.6	24.3	9.1	9.2
Green Ext Time (p_c), s	0.3	3.7	0.0	0.4	0.1	7.2	0.1	1.0

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	242	0	0	233	131	2	2	0	212	0	5
Future Volume (veh/h)	5	242	0	0	233	131	2	2	0	212	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	269	0	0	259	88	2	2	0	236	0	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	1057	0	0	557	761	4	4	0	325	0	289
Arrive On Green	0.00	0.30	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.18	0.00	0.18
Sat Flow, veh/h	0	3647	0	0	1870	1585	912	912	0	1781	0	1585
Grp Volume(v), veh/h	0	269	0	0	259	88	4	0	0	236	0	2
Grp Sat Flow(s),veh/h/ln	0	1777	0	0	1870	1585	1825	0	0	1781	0	1585
Q Serve(g_s), s	0.0	1.4	0.0	0.0	2.8	0.8	0.1	0.0	0.0	3.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.4	0.0	0.0	2.8	0.8	0.1	0.0	0.0	3.1	0.0	0.0
Prop In Lane	0.00		0.00	0.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1057	0	0	557	761	8	0	0	325	0	289
V/C Ratio(X)	0.00	0.25	0.00	0.00	0.47	0.12	0.50	0.00	0.00	0.73	0.00	0.01
Avail Cap(c_a), veh/h	0	8523	0	0	2318	2253	1021	0	0	2207	0	1964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.7	0.0	0.0	7.2	3.6	12.4	0.0	0.0	9.6	0.0	8.4
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.6	0.1	16.8	0.0	0.0	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.0	0.0	0.6	0.2	0.1	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.8	0.0	0.0	7.8	3.7	29.2	0.0	0.0	10.8	0.0	8.4
LnGrp LOS	A	A	A	A	A	A	C	A	A	B	A	A
Approach Vol, veh/h		269			347			4			238	
Approach Delay, s/veh		6.8			6.7			29.2			10.8	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		12.3		4.1	0.0	12.3		8.6				
Change Period (Y+Rc), s		4.9		4.0	4.0	4.9		4.0				
Max Green Setting (Gmax), s		60.0		14.0	22.0	31.0		31.0				
Max Q Clear Time (g_c+I1), s		3.4		2.1	0.0	4.8		5.1				
Green Ext Time (p_c), s		1.4		0.0	0.0	2.6		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			8.0									
HCM 6th LOS			A									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	454	10	3	369	0	14	0	14	92	3	11
Future Volume (veh/h)	0	454	10	3	369	0	14	0	14	92	3	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	504	0	3	410	0	16	0	0	102	3	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1167		12	1598	0	59	0	0	262	198	66
Arrive On Green	0.00	0.33	0.00	0.01	0.45	0.00	0.03	0.00	0.00	0.15	0.15	0.15
Sat Flow, veh/h	0	3647	1585	1781	3647	0	1781	0	0	1781	1342	447
Grp Volume(v), veh/h	0	504	0	3	410	0	16	0	0	102	0	4
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0	1781	0	0	1781	0	1790
Q Serve(g_s), s	0.0	3.9	0.0	0.1	2.5	0.0	0.3	0.0	0.0	1.8	0.0	0.1
Cycle Q Clear(g_c), s	0.0	3.9	0.0	0.1	2.5	0.0	0.3	0.0	0.0	1.8	0.0	0.1
Prop In Lane	0.00		1.00	1.00		0.00	1.00		0.00	1.00		0.25
Lane Grp Cap(c), veh/h	0	1167		12	1598	0	59	0	0	262	0	264
V/C Ratio(X)	0.00	0.43		0.26	0.26	0.00	0.27	0.00	0.00	0.39	0.00	0.02
Avail Cap(c_a), veh/h	0	4690		1022	4690	0	1073	0	0	1022	0	1027
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.2	0.0	17.2	6.0	0.0	16.4	0.0	0.0	13.4	0.0	12.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	4.2	0.1	0.0	0.9	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.4	0.0	21.4	6.1	0.0	17.4	0.0	0.0	13.8	0.0	12.7
LnGrp LOS	A	A		C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		504	A		413			16			106	
Approach Delay, s/veh		9.4			6.2			17.4			13.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	4.2	16.3		5.1		20.6		9.1
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s	20.0	46.0		21.0		46.0		20.0
Max Q Clear Time (g_c+I1), s	2.1	5.9		2.3		4.5		3.8
Green Ext Time (p_c), s	0.0	5.6		0.0		4.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	561	14	102	141	33	172
Future Volume (veh/h)	561	14	102	141	33	172
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	623	14	113	157	37	11
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1431	32	144	2250	60	53
Arrive On Green	0.40	0.40	0.08	0.63	0.03	0.03
Sat Flow, veh/h	3647	80	1781	3647	1781	1585
Grp Volume(v), veh/h	311	326	113	157	37	11
Grp Sat Flow(s),veh/h/ln	1777	1856	1781	1777	1781	1585
Q Serve(g_s), s	3.4	3.4	1.7	0.5	0.5	0.2
Cycle Q Clear(g_c), s	3.4	3.4	1.7	0.5	0.5	0.2
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	716	747	144	2250	60	53
V/C Ratio(X)	0.44	0.44	0.79	0.07	0.62	0.21
Avail Cap(c_a), veh/h	1663	1738	1001	5323	1001	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.8	5.8	12.1	1.9	12.7	12.6
Incr Delay (d2), s/veh	0.4	0.4	3.6	0.0	3.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.6	0.0	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.2	6.2	15.6	1.9	16.5	13.3
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	637			270	48	
Approach Delay, s/veh	6.2			7.6	15.8	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.2	15.7		4.9		21.8
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9
Max Green Setting (Gmax), s	15.0	25.0		15.0		40.0
Max Q Clear Time (g_c+I1), s	3.7	5.4		2.5		2.5
Green Ext Time (p_c), s	0.1	5.4		0.0		1.7

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	671	4	19	621	53	3	2	8	268	4	38
Future Volume (veh/h)	29	671	4	19	621	53	3	2	8	268	4	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	746	4	21	690	55	3	2	0	301	0	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	2524	14	25	2294	183	6	4	0	389	0	173
Arrive On Green	0.02	0.70	0.70	0.01	0.69	0.69	0.01	0.01	0.00	0.11	0.00	0.11
Sat Flow, veh/h	1781	3624	19	1781	3334	266	1090	726	0	3563	0	1585
Grp Volume(v), veh/h	32	366	384	21	368	377	5	0	0	301	0	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1867	1781	1777	1823	1816	0	0	1781	0	1585
Q Serve(g_s), s	1.8	7.9	7.9	1.2	8.1	8.1	0.3	0.0	0.0	8.2	0.0	0.1
Cycle Q Clear(g_c), s	1.8	7.9	7.9	1.2	8.1	8.1	0.3	0.0	0.0	8.2	0.0	0.1
Prop In Lane	1.00		0.01	1.00		0.15	0.60		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	1238	1300	25	1223	1254	9	0	0	389	0	173
V/C Ratio(X)	0.80	0.30	0.30	0.84	0.30	0.30	0.53	0.00	0.00	0.77	0.00	0.01
Avail Cap(c_a), veh/h	214	1238	1300	214	1223	1254	218	0	0	691	0	307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	5.8	5.8	49.2	6.1	6.1	49.6	0.0	0.0	43.3	0.0	39.7
Incr Delay (d2), s/veh	12.6	0.6	0.6	21.4	0.1	0.1	16.1	0.0	0.0	2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.6	2.7	0.7	2.7	2.7	0.2	0.0	0.0	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.3	6.4	6.4	70.6	6.3	6.3	65.7	0.0	0.0	45.8	0.0	39.7
LnGrp LOS	E	A	A	E	A	A	E	A	A	D	A	D
Approach Vol, veh/h		782			766			5			303	
Approach Delay, s/veh		8.6			8.0			65.7			45.8	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	74.6		4.5	6.2	73.7		15.5
Change Period (Y+Rc), s	4.0	4.9		4.0	4.0	4.9		4.6
Max Green Setting (Gmax), s	12.0	39.1		12.0	12.0	39.1		19.4
Max Q Clear Time (g_c+I1), s	3.2	9.9		2.3	3.8	10.1		10.2
Green Ext Time (p_c), s	0.0	14.0		0.0	0.0	14.2		0.7

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	854	9	40	634	243	11	7	20	393	7	122
Future Volume (veh/h)	132	854	9	40	634	243	11	7	20	393	7	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	147	949	10	44	704	110	12	8	0	443	0	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	2083	22	56	1978	882	30	32	27	523	0	233
Arrive On Green	0.03	0.21	0.21	0.03	0.56	0.56	0.02	0.02	0.00	0.15	0.00	0.15
Sat Flow, veh/h	1781	3325	35	1781	3554	1585	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	147	427	532	44	704	110	12	8	0	443	0	14
Grp Sat Flow(s),veh/h/ln	1781	1496	1864	1781	1777	1585	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	8.2	25.0	25.0	2.5	11.0	3.3	0.7	0.4	0.0	12.1	0.0	0.8
Cycle Q Clear(g_c), s	8.2	25.0	25.0	2.5	11.0	3.3	0.7	0.4	0.0	12.1	0.0	0.8
Prop In Lane	1.00		0.02	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	937	1168	56	1978	882	30	32	27	523	0	233
V/C Ratio(X)	0.81	0.46	0.46	0.78	0.36	0.12	0.40	0.25	0.00	0.85	0.00	0.06
Avail Cap(c_a), veh/h	321	937	1168	321	1978	882	214	224	190	680	0	303
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	1.00	1.00	1.00	1.00	1.00	0.00	0.98	0.00	0.98
Uniform Delay (d), s/veh	47.4	24.7	24.7	48.1	12.3	10.6	48.6	48.5	0.0	41.6	0.0	36.7
Incr Delay (d2), s/veh	3.2	1.5	1.2	8.5	0.1	0.1	3.1	1.5	0.0	6.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	10.2	12.7	1.2	3.9	1.1	0.3	0.2	0.0	5.8	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.6	26.2	25.9	56.6	12.4	10.6	51.7	50.0	0.0	48.2	0.0	36.8
LnGrp LOS	D	C	C	E	B	B	D	D	A	D	A	D
Approach Vol, veh/h		1106			858			20			457	
Approach Delay, s/veh		29.3			14.4			51.0			47.9	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	67.5		5.7	14.1	60.6		19.6
Change Period (Y+Rc), s	4.0	4.9		4.0	4.0	4.9		4.9
Max Green Setting (Gmax), s	18.0	33.1		12.0	18.0	33.1		19.1
Max Q Clear Time (g_c+I1), s	4.5	27.0		2.7	10.2	13.0		14.1
Green Ext Time (p_c), s	0.0	3.0		0.0	0.1	5.6		0.6

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	780	130	0	817	647	0	0	0	220	521	143
Future Volume (veh/h)	0	780	130	0	817	647	0	0	0	220	521	143
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	867	0	0	1151	0				244	579	159
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	2100		0	2211					547	574	487
Arrive On Green	0.00	1.00	0.00	0.00	0.59	0.00				0.31	0.31	0.31
Sat Flow, veh/h	0	3741	0	0	3741	1585				1781	1870	1585
Grp Volume(v), veh/h	0	867	0	0	1151	0				244	579	159
Grp Sat Flow(s),veh/h/ln	0	1777	0	0	1870	1585				1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	18.2	0.0				11.0	30.7	7.7
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	18.2	0.0				11.0	30.7	7.7
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2100		0	2211					547	574	487
V/C Ratio(X)	0.00	0.41		0.00	0.52					0.45	1.01	0.33
Avail Cap(c_a), veh/h	0	2100		0	2211					547	574	487
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.90	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	12.1	0.0				27.8	34.7	26.7
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.3	0.0				0.2	39.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	0.0	6.8	0.0				4.7	19.9	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.6	0.0	0.0	12.3	0.0				28.0	74.3	26.8
LnGrp LOS	A	A		A	B					C	F	C
Approach Vol, veh/h		867	A		1151	A					982	
Approach Delay, s/veh		0.6			12.3						55.1	
Approach LOS		A			B						E	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		64.0		36.0		64.0
Change Period (Y+Rc), s		4.9		5.3		4.9
Max Green Setting (Gmax), s		59.1		30.7		59.1
Max Q Clear Time (g_c+I1), s		2.0		32.7		20.2
Green Ext Time (p_c), s		7.0		0.0		9.9

Intersection Summary	
HCM 6th Ctrl Delay	22.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	872	0	0	1164	153	0	0	1247	0	0	300
Future Volume (vph)	128	872	0	0	1164	153	0	0	1247	0	0	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.9			4.9	4.9			4.0			4.0
Lane Util. Factor	1.00	0.95			0.86	0.86			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	3539			4797	1362			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	3539			4797	1362			1611			2787
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	142	969	0	0	1293	170	0	0	1386	0	0	333
RTOR Reduction (vph)	0	0	0	0	2	47	0	0	0	0	0	83
Lane Group Flow (vph)	142	969	0	0	1308	106	0	0	1386	0	0	250
Turn Type	Prot	NA			NA	Perm			Free			Over
Protected Phases	5	2			6							5
Permitted Phases						6			Free			
Actuated Green, G (s)	9.6	60.0			41.5	41.5			60.0			9.6
Effective Green, g (s)	9.6	60.0			41.5	41.5			60.0			9.6
Actuated g/C Ratio	0.16	1.00			0.69	0.69			1.00			0.16
Clearance Time (s)	4.0	4.9			4.9	4.9						4.0
Vehicle Extension (s)	2.0	3.9			3.8	3.8						2.0
Lane Grp Cap (vph)	283	3539			3317	942			1611			445
v/s Ratio Prot	0.08	0.27			0.27							0.09
v/s Ratio Perm						0.08			c0.86			
v/c Ratio	0.50	0.27			0.39	0.11			0.86			0.56
Uniform Delay, d1	23.0	0.0			3.9	3.1			0.0			23.3
Progression Factor	1.00	1.00			1.36	3.63			1.00			1.00
Incremental Delay, d2	0.5	0.1			0.3	0.2			6.3			1.0
Delay (s)	23.5	0.1			5.7	11.5			6.3			24.2
Level of Service	C	A			A	B			A			C
Approach Delay (s)		3.1			6.3			6.3			24.2	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.9
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	343	1590	186	106	1024	42	173	301	83	45	225	120
Future Volume (veh/h)	343	1590	186	106	1024	42	173	301	83	45	225	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	381	1767	119	118	1138	19	192	334	69	50	250	55
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	443	2132	775	846	2765	856	251	411	84	107	376	369
Arrive On Green	0.13	0.42	0.42	0.24	0.54	0.54	0.07	0.14	0.14	0.03	0.11	0.11
Sat Flow, veh/h	3456	5106	1579	3456	5106	1581	3456	2934	598	3456	3554	1563
Grp Volume(v), veh/h	381	1767	119	118	1138	19	192	201	202	50	250	55
Grp Sat Flow(s),veh/h/ln	1728	1702	1579	1728	1702	1581	1728	1777	1755	1728	1777	1563
Q Serve(g_s), s	13.0	37.0	1.5	3.2	15.8	0.5	6.5	13.1	13.5	1.7	8.1	3.4
Cycle Q Clear(g_c), s	13.0	37.0	1.5	3.2	15.8	0.5	6.5	13.1	13.5	1.7	8.1	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	443	2132	775	846	2765	856	251	249	246	107	376	369
V/C Ratio(X)	0.86	0.83	0.15	0.14	0.41	0.02	0.76	0.81	0.82	0.47	0.66	0.15
Avail Cap(c_a), veh/h	605	2132	775	846	2765	856	461	298	294	461	583	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	31.1	6.8	35.4	16.2	7.1	54.6	50.0	50.1	57.2	51.6	36.5
Incr Delay (d2), s/veh	5.5	3.0	0.3	0.0	0.2	0.0	1.8	15.0	17.0	1.2	4.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	15.3	0.9	1.4	6.1	0.2	2.9	6.8	7.0	0.8	3.8	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	34.1	7.1	35.5	16.4	7.1	56.5	65.0	67.1	58.4	56.0	36.9
LnGrp LOS	E	C	A	D	B	A	E	E	E	E	E	D
Approach Vol, veh/h		2267			1275			595			355	
Approach Delay, s/veh		36.5			18.0			63.0			53.4	
Approach LOS		D			B			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.3	55.0	12.7	18.0	19.4	69.9	9.0	21.7
Change Period (Y+Rc), s	4.9	* 4.9	4.0	5.3	4.0	4.9	5.3	* 4.9
Max Green Setting (Gmax), s	16.0	* 50	16.0	19.7	21.0	45.1	16.0	* 20
Max Q Clear Time (g_c+I1), s	5.2	39.0	8.5	10.1	15.0	17.8	3.7	15.5
Green Ext Time (p_c), s	0.1	9.9	0.2	2.0	0.4	14.4	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	36.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	1609	27	24	1083	25	18	10	38	35	11	36
Future Volume (veh/h)	71	1609	27	24	1083	25	18	10	38	35	11	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	1788	29	27	1203	17	20	11	0	26	31	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	1729	28	771	3667	1134	44	24	60	84	88	75
Arrive On Green	0.11	0.67	0.67	0.58	0.96	0.96	0.04	0.04	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1781	5175	84	1781	5106	1580	1169	643	1585	1781	1870	1585
Grp Volume(v), veh/h	79	1176	641	27	1203	17	31	0	0	26	31	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1855	1781	1702	1580	1812	0	1585	1781	1870	1585
Q Serve(g_s), s	5.2	40.1	40.1	0.8	1.8	0.1	2.0	0.0	0.0	1.7	1.9	0.0
Cycle Q Clear(g_c), s	5.2	40.1	40.1	0.8	1.8	0.1	2.0	0.0	0.0	1.7	1.9	0.0
Prop In Lane	1.00		0.05	1.00		1.00	0.65		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	1138	620	771	3667	1134	68	0	60	84	88	75
V/C Ratio(X)	0.79	1.03	1.03	0.04	0.33	0.01	0.46	0.00	0.00	0.31	0.35	0.00
Avail Cap(c_a), veh/h	312	1138	620	771	3667	1134	242	0	211	460	483	409
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	0.93	0.93	0.93	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.6	19.9	19.9	14.6	0.8	0.8	56.5	0.0	0.0	55.3	55.4	0.0
Incr Delay (d2), s/veh	3.8	32.0	40.1	0.0	0.1	0.0	3.5	0.0	0.0	0.8	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	13.3	15.9	0.3	0.5	0.0	1.0	0.0	0.0	0.8	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	51.9	60.0	14.6	0.9	0.8	60.0	0.0	0.0	56.0	56.3	0.0
LnGrp LOS	E	F	F	B	A	A	E	A	A	E	E	A
Approach Vol, veh/h		1896			1247			31			57	
Approach Delay, s/veh		54.8			1.2			60.0			56.2	
Approach LOS		D			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	56.8	45.0		8.5	10.7	91.1		9.7
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.0
Max Green Setting (Gmax), s	16.0	* 40		16.0	21.0	35.1		31.0
Max Q Clear Time (g_c+I1), s	2.8	42.1		4.0	7.2	3.8		3.9
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	19.9		0.1

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	1573	33	5	1080	24	89	21	20	26	4	5
Future Volume (veh/h)	13	1573	33	5	1080	24	89	21	20	26	4	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1748	36	6	1200	26	64	72	5	32	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	1677	35	17	1674	36	105	102	7	316	166	0
Arrive On Green	0.02	0.65	0.65	0.01	0.33	0.33	0.06	0.06	0.06	0.09	0.00	0.00
Sat Flow, veh/h	1781	5145	106	1781	5139	111	1781	1729	120	3563	1870	0
Grp Volume(v), veh/h	14	1156	628	6	795	431	64	0	77	32	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1847	1781	1702	1846	1781	0	1849	1781	1870	0
Q Serve(g_s), s	0.9	39.1	39.1	0.4	24.6	24.7	4.2	0.0	4.9	1.0	0.0	0.0
Cycle Q Clear(g_c), s	0.9	39.1	39.1	0.4	24.6	24.7	4.2	0.0	4.9	1.0	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.06	1.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	17	1109	602	17	1109	602	105	0	109	316	166	0
V/C Ratio(X)	0.84	1.04	1.04	0.36	0.72	0.72	0.61	0.00	0.70	0.10	0.00	0.00
Avail Cap(c_a), veh/h	238	1109	602	238	1109	602	238	0	247	932	489	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.96	0.96	0.96	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.8	20.9	20.9	59.1	35.6	35.6	55.1	0.0	55.4	50.3	0.0	0.0
Incr Delay (d2), s/veh	28.3	36.7	45.6	4.6	3.8	6.9	4.1	0.0	6.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	14.2	16.9	0.2	10.6	12.0	2.0	0.0	2.5	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.1	57.6	66.5	63.7	39.4	42.5	59.2	0.0	61.4	50.3	0.0	0.0
LnGrp LOS	F	F	F	E	D	D	E	A	E	D	A	A
Approach Vol, veh/h		1798			1232			141			32	
Approach Delay, s/veh		60.9			40.6			60.4			50.3	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	44.0		11.1	5.1	44.0		15.2
Change Period (Y+Rc), s	4.0	4.9		4.0	4.0	4.9		4.6
Max Green Setting (Gmax), s	16.0	39.1		16.0	16.0	39.1		31.4
Max Q Clear Time (g_c+I1), s	2.4	41.1		6.9	2.9	26.7		3.0
Green Ext Time (p_c), s	0.0	0.0		0.3	0.0	9.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1514	31	13	1095	8	9	4	8	16	2	17
Future Volume (veh/h)	44	1514	31	13	1095	8	9	4	8	16	2	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	1682	33	14	1217	9	10	4	0	18	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	2367	46	651	4166	31	13	27	0	22	37	0
Arrive On Green	0.04	0.46	0.46	0.37	0.80	0.80	0.01	0.01	0.00	0.01	0.02	0.00
Sat Flow, veh/h	1781	5154	101	1781	5229	39	1781	1870	0	1781	1870	0
Grp Volume(v), veh/h	49	1111	604	14	792	434	10	4	0	18	2	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1852	1781	1702	1863	1781	1870	0	1781	1870	0
Q Serve(g_s), s	3.3	31.4	31.4	0.6	7.4	7.4	0.7	0.3	0.0	1.2	0.1	0.0
Cycle Q Clear(g_c), s	3.3	31.4	31.4	0.6	7.4	7.4	0.7	0.3	0.0	1.2	0.1	0.0
Prop In Lane	1.00		0.05	1.00		0.02	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	63	1563	850	651	2712	1485	13	27	0	22	37	0
V/C Ratio(X)	0.77	0.71	0.71	0.02	0.29	0.29	0.79	0.15	0.00	0.83	0.05	0.00
Avail Cap(c_a), veh/h	312	1563	850	651	2712	1485	238	249	0	238	249	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	0.89	0.89	0.89	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.4	26.0	26.1	24.3	3.2	3.2	59.5	58.4	0.0	59.2	57.7	0.0
Incr Delay (d2), s/veh	6.1	2.3	4.2	0.0	0.2	0.3	68.0	2.4	0.0	53.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	12.8	14.4	0.3	2.0	2.2	0.5	0.1	0.0	0.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.5	28.4	30.2	24.3	3.4	3.5	127.5	60.8	0.0	112.1	58.3	0.0
LnGrp LOS	E	C	C	C	A	A	F	E	A	F	E	A
Approach Vol, veh/h		1764			1240			14			20	
Approach Delay, s/veh		30.0			3.7			108.4			106.7	
Approach LOS		C			A			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	48.8	60.0	4.9	6.4	8.3	100.5	5.5	5.8
Change Period (Y+Rc), s	4.9	* 4.9	4.0	4.0	4.0	4.9	4.0	4.0
Max Green Setting (Gmax), s	16.0	* 55	16.0	16.0	21.0	50.1	16.0	16.0
Max Q Clear Time (g_c+I1), s	2.6	33.4	2.7	2.1	5.3	9.4	3.2	2.3
Green Ext Time (p_c), s	0.0	19.1	0.0	0.0	0.0	24.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	1221	89	99	976	87	172	512	245	65	281	26
Future Volume (veh/h)	181	1221	89	99	976	87	172	512	245	65	281	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	201	1357	0	110	1084	0	191	569	29	72	312	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1207	1494		1107	1345		342	644	285	119	426	188
Arrive On Green	0.70	0.58	0.00	0.64	0.53	0.00	0.10	0.18	0.18	0.03	0.12	0.12
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1572	3456	3554	1565
Grp Volume(v), veh/h	201	1357	0	110	1084	0	191	569	29	72	312	1
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1572	1728	1777	1565
Q Serve(g_s), s	2.4	28.3	0.0	1.5	20.9	0.0	6.3	18.7	1.8	2.5	10.2	0.1
Cycle Q Clear(g_c), s	2.4	28.3	0.0	1.5	20.9	0.0	6.3	18.7	1.8	2.5	10.2	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1207	1494		1107	1345		342	644	285	119	426	188
V/C Ratio(X)	0.17	0.91		0.10	0.81		0.56	0.88	0.10	0.61	0.73	0.01
Avail Cap(c_a), veh/h	1207	1494		1107	1494		576	690	305	576	702	309
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.00	0.86	0.86	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	23.5	0.0	14.9	25.9	0.0	51.6	47.9	41.0	57.1	50.9	46.5
Incr Delay (d2), s/veh	0.0	9.0	0.0	0.0	3.7	0.0	0.5	12.3	0.1	1.8	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.6	0.0	0.6	6.1	0.0	2.7	9.2	0.7	1.1	4.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	32.4	0.0	14.9	29.5	0.0	52.1	60.2	41.1	59.0	53.5	46.5
LnGrp LOS	B	C		B	C		D	E	D	E	D	D
Approach Vol, veh/h		1558	A		1194	A		789			385	
Approach Delay, s/veh		29.8			28.2			57.6			54.5	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	42.4	40.0	16.9	20.7	45.9	36.5	9.1	28.4
Change Period (Y+Rc), s	4.0	4.9	5.0	6.3	4.0	4.9	5.0	6.7
Max Green Setting (Gmax), s	21.0	35.1	20.0	23.7	21.0	35.1	20.0	23.3
Max Q Clear Time (g_c+I1), s	3.5	30.3	8.3	12.2	4.4	22.9	4.5	20.7
Green Ext Time (p_c), s	0.1	4.3	0.2	1.4	0.3	8.7	0.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	37.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	950	165	245	1470	150	333	695	136	185	746	56
Future Volume (veh/h)	158	950	165	245	1470	150	333	695	136	185	746	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	176	1056	50	272	1633	0	370	772	0	206	829	54
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1659	510	585	2227		435	1234		288	975	63
Arrive On Green	0.07	0.32	0.32	0.17	0.44	0.00	0.13	0.24	0.00	0.08	0.20	0.20
Sat Flow, veh/h	3456	5106	1570	3456	5106	1585	3456	5106	1585	3456	4894	318
Grp Volume(v), veh/h	176	1056	50	272	1633	0	370	772	0	206	576	307
Grp Sat Flow(s),veh/h/ln	1728	1702	1570	1728	1702	1585	1728	1702	1585	1728	1702	1807
Q Serve(g_s), s	6.0	21.1	1.8	8.5	31.8	0.0	12.6	16.2	0.0	7.0	19.6	19.7
Cycle Q Clear(g_c), s	6.0	21.1	1.8	8.5	31.8	0.0	12.6	16.2	0.0	7.0	19.6	19.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	258	1659	510	585	2227		435	1234		288	678	360
V/C Ratio(X)	0.68	0.64	0.10	0.47	0.73		0.85	0.63		0.72	0.85	0.85
Avail Cap(c_a), veh/h	461	1659	510	585	2227		605	1234		605	689	366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	34.5	13.5	45.0	28.1	0.0	51.4	40.6	0.0	53.6	46.3	46.4
Incr Delay (d2), s/veh	1.2	1.9	0.4	0.2	1.3	0.0	6.2	1.2	0.0	1.3	10.3	18.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	8.7	1.0	3.6	12.5	0.0	5.6	6.6	0.0	3.0	8.8	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	36.3	13.8	45.2	29.4	0.0	57.5	41.8	0.0	54.9	56.6	64.6
LnGrp LOS	E	D	B	D	C		E	D		D	E	E
Approach Vol, veh/h		1282			1905	A		1142	A		1089	
Approach Delay, s/veh		38.1			31.6			46.9			58.5	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.3	45.0	19.1	29.6	13.0	58.3	14.0	34.7
Change Period (Y+Rc), s	6.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	14.0	39.0	21.0	24.3	16.0	39.0	21.0	24.3
Max Q Clear Time (g_c+I1), s	10.5	23.1	14.6	21.7	8.0	33.8	9.0	18.2
Green Ext Time (p_c), s	0.2	12.6	0.5	2.1	0.2	4.9	0.3	4.4

Intersection Summary	
HCM 6th Ctrl Delay	41.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	235	1005	260	224	1400	472
Future Volume (veh/h)	235	1005	260	224	1400	472
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	0	289	10	1556	524
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	333		381	170	2254	1514
Arrive On Green	0.10	0.00	0.11	0.11	0.65	0.81
Sat Flow, veh/h	3456	2790	3647	1585	3456	1870
Grp Volume(v), veh/h	261	0	289	10	1556	524
Grp Sat Flow(s),veh/h/ln	1728	1395	1777	1585	1728	1870
Q Serve(g_s), s	8.9	0.0	9.5	0.7	34.2	8.9
Cycle Q Clear(g_c), s	8.9	0.0	9.5	0.7	34.2	8.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	333		381	170	2254	1514
V/C Ratio(X)	0.78		0.76	0.06	0.69	0.35
Avail Cap(c_a), veh/h	711		731	326	2254	1514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	0.0	52.1	48.1	13.2	3.0
Incr Delay (d2), s/veh	3.4	0.0	3.1	0.1	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	4.3	0.3	12.0	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.4	0.0	55.2	48.3	14.1	3.2
LnGrp LOS	E		E	D	B	A
Approach Vol, veh/h	261	A	299			2080
Approach Delay, s/veh	56.4		55.0			11.3
Approach LOS	E		D			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	84.3	18.9				103.1	16.9
Change Period (Y+Rc), s	6.0	* 6				6.0	5.3
Max Green Setting (Gmax), s	54.0	* 25				84.0	24.7
Max Q Clear Time (g_c+I1), s	36.2	11.5				10.9	10.9
Green Ext Time (p_c), s	6.7	1.4				3.5	0.7

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1424	31	135	1017	84	64	95	123	52	110	167
Future Volume (veh/h)	141	1424	31	135	1017	84	64	95	123	52	110	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	1582	33	150	1130	51	71	106	3	58	122	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	1593	33	867	2299	1025	91	169	143	75	152	129
Arrive On Green	0.06	0.45	0.45	0.25	0.65	0.65	0.05	0.09	0.09	0.04	0.08	0.08
Sat Flow, veh/h	3456	3560	74	3456	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	157	788	827	150	1130	51	71	106	3	58	122	2
Grp Sat Flow(s),veh/h/ln	1728	1777	1857	1728	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.4	52.9	53.2	4.1	19.8	1.4	4.7	6.6	0.1	3.9	7.7	0.1
Cycle Q Clear(g_c), s	5.4	52.9	53.2	4.1	19.8	1.4	4.7	6.6	0.1	3.9	7.7	0.1
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	795	831	867	2299	1025	91	169	143	75	152	129
V/C Ratio(X)	0.73	0.99	0.99	0.17	0.49	0.05	0.78	0.63	0.02	0.77	0.80	0.02
Avail Cap(c_a), veh/h	461	795	831	867	2299	1025	238	240	203	238	223	189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.61	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	32.9	33.0	35.2	11.0	7.7	56.3	52.6	19.3	56.9	54.2	50.7
Incr Delay (d2), s/veh	1.1	23.0	23.1	0.0	0.2	0.0	5.3	6.1	0.1	6.2	13.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	26.4	27.8	1.7	7.0	0.5	2.3	3.4	0.1	1.9	4.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.4	55.9	56.2	35.2	11.2	7.8	61.6	58.7	19.4	63.1	68.1	50.7
LnGrp LOS	E	E	E	D	B	A	E	E	B	E	E	D
Approach Vol, veh/h		1772			1331			180			182	
Approach Delay, s/veh		56.1			13.8			59.2			66.3	
Approach LOS		E			B			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	16.6	35.4	59.0	10.1	15.5	11.5	82.9
Change Period (Y+Rc), s	4.0	* 5.7	5.3	* 5.3	4.0	5.7	4.0	5.3
Max Green Setting (Gmax), s	16.0	* 15	17.0	* 54	16.0	14.3	16.0	54.7
Max Q Clear Time (g_c+I1), s	5.9	8.6	6.1	55.2	6.7	9.7	7.4	21.8
Green Ext Time (p_c), s	0.0	0.3	0.2	0.0	0.0	0.2	0.2	13.3

Intersection Summary	
HCM 6th Ctrl Delay	40.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1651	0	3	1247	7	4	0	28	47	2	14
Future Volume (veh/h)	2	1651	0	3	1247	7	4	0	28	47	2	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	1834	0	3	1386	8	4	0	0	52	2	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	2885	0	4	2944	17	144	0	0	119	2	7
Arrive On Green	0.00	1.00	0.00	0.00	0.81	0.81	0.05	0.00	0.00	0.05	0.05	0.05
Sat Flow, veh/h	1781	3647	0	1781	3623	21	1673	0	0	1265	49	146
Grp Volume(v), veh/h	2	1834	0	3	680	714	4	0	0	60	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1867	1673	0	0	1460	0	0
Q Serve(g_s), s	0.1	0.0	0.0	0.2	13.9	13.9	0.0	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.2	13.9	13.9	0.3	0.0	0.0	4.9	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.01	1.00		0.00	0.87		0.10
Lane Grp Cap(c), veh/h	3	2885	0	4	1444	1517	144	0	0	129	0	0
V/C Ratio(X)	0.70	0.64	0.00	0.71	0.47	0.47	0.03	0.00	0.00	0.47	0.00	0.00
Avail Cap(c_a), veh/h	238	2885	0	238	1444	1517	226	0	0	213	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.8	0.0	0.0	59.8	3.4	3.4	54.3	0.0	0.0	56.4	0.0	0.0
Incr Delay (d2), s/veh	74.6	1.1	0.0	57.5	0.3	0.3	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.4	0.0	0.2	3.3	3.5	0.1	0.0	0.0	1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	134.4	1.1	0.0	117.3	3.7	3.7	54.3	0.0	0.0	57.4	0.0	0.0
LnGrp LOS	F	A	A	F	A	A	D	A	A	E	A	A
Approach Vol, veh/h		1836			1397			4			60	
Approach Delay, s/veh		1.2			4.0			54.3			57.4	
Approach LOS		A			A			D			E	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.0	4.3	102.7		13.0	4.2	102.8
Change Period (Y+Rc), s		7.0	4.0	5.3		7.0	4.0	5.3
Max Green Setting (Gmax), s		13.0	16.0	74.7		13.0	16.0	74.7
Max Q Clear Time (g_c+I1), s		2.3	2.2	2.0		6.9	2.1	15.9
Green Ext Time (p_c), s		0.0	0.0	26.5		0.1	0.0	20.2

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1739	8	162	1259	0	245
Future Volume (vph)	1739	8	162	1259	0	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		6.0	5.3		6.0
Lane Util. Factor	0.91		0.97	0.95		1.00
Frt	1.00		1.00	1.00		0.86
Flt Protected	1.00		0.95	1.00		1.00
Satd. Flow (prot)	5082		3433	3539		1611
Flt Permitted	1.00		0.95	1.00		1.00
Satd. Flow (perm)	5082		3433	3539		1611
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1932	9	180	1399	0	272
RTOR Reduction (vph)	1	0	0	0	0	6
Lane Group Flow (vph)	1940	0	180	1399	0	266
Turn Type	NA		Prot	NA		Over
Protected Phases	4		3	8		3
Permitted Phases						
Actuated Green, G (s)	34.2		12.5	60.0		12.5
Effective Green, g (s)	34.2		12.5	60.0		12.5
Actuated g/C Ratio	0.57		0.21	1.00		0.21
Clearance Time (s)	7.3		6.0	5.3		6.0
Vehicle Extension (s)	3.5		2.0	3.5		2.0
Lane Grp Cap (vph)	2896		715	3539		335
v/s Ratio Prot	c0.38		0.05	0.40		c0.16
v/s Ratio Perm						
v/c Ratio	0.67		0.25	0.40		0.79
Uniform Delay, d1	9.0		19.8	0.0		22.5
Progression Factor	1.47		1.10	1.00		1.00
Incremental Delay, d2	1.0		0.0	0.2		11.4
Delay (s)	14.3		21.9	0.2		33.9
Level of Service	B		C	A		C
Approach Delay (s)	14.3			2.7	33.9	
Approach LOS	B			A	C	

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	741	1067	430	653	70	726	345	104	156	346	71
Future Volume (veh/h)	176	741	1067	430	653	70	726	345	104	156	346	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	196	823	0	478	726	70	807	383	25	173	384	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	894		539	1045	101	868	1050	468	232	514	159
Arrive On Green	0.02	0.08	0.00	0.16	0.32	0.32	0.25	0.30	0.30	0.07	0.10	0.10
Sat Flow, veh/h	3456	3554	2790	3456	3275	316	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	196	823	0	478	394	402	807	383	25	173	384	2
Grp Sat Flow(s),veh/h/ln	1728	1777	1395	1728	1777	1814	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	6.8	27.6	0.0	16.3	23.3	23.3	27.4	10.2	1.4	5.9	8.8	0.1
Cycle Q Clear(g_c), s	6.8	27.6	0.0	16.3	23.3	23.3	27.4	10.2	1.4	5.9	8.8	0.1
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	894		539	567	579	868	1050	468	232	514	159
V/C Ratio(X)	0.76	0.92		0.89	0.69	0.69	0.93	0.36	0.05	0.74	0.75	0.01
Avail Cap(c_a), veh/h	403	894		662	567	579	950	1050	468	490	668	207
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	53.8	0.0	49.6	35.7	35.7	43.9	33.4	30.3	55.0	52.5	48.6
Incr Delay (d2), s/veh	1.2	10.8	0.0	10.5	6.9	6.8	13.8	0.3	0.1	1.8	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	14.5	0.0	7.7	10.9	11.1	13.1	4.4	0.5	2.6	3.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	64.6	0.0	60.1	42.6	42.5	57.7	33.7	30.3	56.7	56.5	48.6
LnGrp LOS	E	E		E	D	D	E	C	C	E	E	D
Approach Vol, veh/h		1019	A		1274			1215			559	
Approach Delay, s/veh		63.5			49.1			49.6			56.6	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	40.7	22.7	35.5	35.4	17.4	14.2	44.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	5.3	* 5.3	5.3	* 5.7
Max Green Setting (Gmax), s	17.0	31.7	23.0	29.7	33.0	* 16	14.0	* 38
Max Q Clear Time (g_c+I1), s	7.9	12.2	18.3	29.6	29.4	10.8	8.8	25.3
Green Ext Time (p_c), s	0.2	3.1	0.5	0.1	0.8	1.3	0.2	4.5

Intersection Summary	
HCM 6th Ctrl Delay	53.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	873	47	88	1154	4	10	0	261	9	2	7
Future Volume (veh/h)	5	873	47	88	1154	4	10	0	261	9	2	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2106	2106	2106	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	970	51	98	1282	4	11	0	52	10	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	9	1637	86	130	1787	6	73	0	181	16	3	17
Arrive On Green	0.00	0.42	0.42	0.07	0.49	0.49	0.04	0.00	0.04	0.01	0.01	0.00
Sat Flow, veh/h	2006	3867	203	1781	3634	11	1781	0	1585	1496	299	1585
Grp Volume(v), veh/h	6	502	519	98	627	659	11	0	52	12	0	0
Grp Sat Flow(s),veh/h/ln	2006	2001	2069	1781	1777	1868	1781	0	1585	1796	0	1585
Q Serve(g_s), s	0.4	23.2	23.2	6.5	33.2	33.3	0.7	0.0	3.6	0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.4	23.2	23.2	6.5	33.2	33.3	0.7	0.0	3.6	0.8	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.01	1.00		1.00	0.83		1.00
Lane Grp Cap(c), veh/h	9	847	876	130	874	919	73	0	181	20	0	17
V/C Ratio(X)	0.66	0.59	0.59	0.76	0.72	0.72	0.15	0.00	0.29	0.61	0.00	0.00
Avail Cap(c_a), veh/h	251	847	876	386	874	919	223	0	314	199	0	176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.89	0.89	0.89	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.6	26.6	26.6	54.6	24.0	24.0	55.5	0.0	48.7	59.1	0.0	0.0
Incr Delay (d2), s/veh	26.3	1.3	1.2	3.0	4.5	4.3	0.3	0.0	0.3	10.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	10.9	11.3	3.0	14.3	15.0	0.3	0.0	1.4	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.0	27.9	27.9	57.6	28.5	28.2	55.8	0.0	49.0	69.8	0.0	0.0
LnGrp LOS	F	C	C	E	C	C	E	A	D	E	A	A
Approach Vol, veh/h		1027			1384			63			12	
Approach Delay, s/veh		28.2			30.4			50.2			69.8	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.7	56.5		7.0	4.5	64.7		9.0
Change Period (Y+Rc), s	4.0	5.7		5.7	4.0	* 5.7		4.0
Max Green Setting (Gmax), s	26.0	46.3		13.3	15.0	* 59		15.0
Max Q Clear Time (g_c+I1), s	8.5	25.2		2.8	2.4	35.3		5.6
Green Ext Time (p_c), s	0.6	17.8		0.0	0.0	23.4		0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1145	12	16	1206	0	37	0	54	0	5	0
Future Volume (veh/h)	0	1145	12	16	1206	0	37	0	54	0	5	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	0	1870	0
Adj Flow Rate, veh/h	0	1272	13	18	1340	0	41	0	60	0	6	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	0	2	0
Cap, veh/h	0	1813	19	22	1950	0	53	0	0	0	8	0
Arrive On Green	0.00	0.50	0.50	0.01	0.55	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3697	37	1781	3647	0	1781	41		0	1870	0
Grp Volume(v), veh/h	0	627	658	18	1340	0	41	73.3		0	6	0
Grp Sat Flow(s),veh/h/ln	0	1777	1864	1781	1777	0	1781	E		0	1870	0
Q Serve(g_s), s	0.0	32.3	32.3	1.2	32.5	0.0	2.7			0.0	0.4	0.0
Cycle Q Clear(g_c), s	0.0	32.3	32.3	1.2	32.5	0.0	2.7			0.0	0.4	0.0
Prop In Lane	0.00		0.02	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	894	938	22	1950	0	53			0	8	0
V/C Ratio(X)	0.00	0.70	0.70	0.84	0.69	0.00	0.77			0.00	0.71	0.00
Avail Cap(c_a), veh/h	0	894	938	240	1950	0	314			0	299	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.90	0.90	1.00	1.00	0.00	1.00			0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	22.7	22.7	58.7	19.5	0.0	57.3			0.0	59.2	0.0
Incr Delay (d2), s/veh	0.0	2.5	2.4	25.4	2.0	0.0	16.0			0.0	32.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	13.3	13.9	0.7	13.0	0.0	1.5			0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.3	25.1	84.1	21.4	0.0	73.3			0.0	92.1	0.0
LnGrp LOS	A	C	C	F	C	A	E			A	F	A
Approach Vol, veh/h		1285			1358						6	
Approach Delay, s/veh		25.2			22.3						92.1	
Approach LOS		C			C						F	

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	5.4	65.6	7.5	4.5		71.0
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0		5.7
Max Green Setting (Gmax), s	16.0	45.3	21.0	19.0		65.3
Max Q Clear Time (g_c+I1), s	3.2	34.3	4.7	2.4		34.5
Green Ext Time (p_c), s	0.0	6.6	0.1	0.0		13.7

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	737	239	123	870	73	265	926	45	187	741	134
Future Volume (veh/h)	195	737	239	123	870	73	265	926	45	187	741	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	217	819	0	137	967	75	294	1029	10	208	823	38
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	921		333	965	75	358	957	418	320	968	423
Arrive On Green	0.08	0.26	0.00	0.10	0.29	0.29	0.03	0.09	0.09	0.09	0.27	0.27
Sat Flow, veh/h	3456	3554	1585	3456	3336	259	3456	3554	1553	3456	3554	1553
Grp Volume(v), veh/h	217	819	0	137	515	527	294	1029	10	208	823	38
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1818	1728	1777	1553	1728	1777	1553
Q Serve(g_s), s	7.4	26.6	0.0	4.5	34.7	34.7	10.1	32.3	0.7	7.0	26.3	2.2
Cycle Q Clear(g_c), s	7.4	26.6	0.0	4.5	34.7	34.7	10.1	32.3	0.7	7.0	26.3	2.2
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	278	921		333	514	526	358	957	418	320	968	423
V/C Ratio(X)	0.78	0.89		0.41	1.00	1.00	0.82	1.08	0.02	0.65	0.85	0.09
Avail Cap(c_a), veh/h	461	957		518	514	526	461	957	418	518	1028	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.72	0.72	0.72	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	42.8	0.0	51.0	42.7	42.7	56.8	54.7	40.3	52.6	41.3	32.6
Incr Delay (d2), s/veh	1.8	10.2	0.0	0.3	40.3	39.9	5.2	47.8	0.1	0.8	6.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	12.7	0.0	1.9	20.5	20.9	4.9	21.7	0.3	3.0	12.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.9	53.0	0.0	51.3	82.9	82.5	62.1	102.5	40.4	53.4	48.3	32.7
LnGrp LOS	E	D		D	F	F	E	F	D	D	D	C
Approach Vol, veh/h		1036	A		1179			1333			1069	
Approach Delay, s/veh		53.6			79.1			93.1			48.7	
Approach LOS		D			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	36.8	16.4	38.0	13.7	40.0	16.4	38.0
Change Period (Y+Rc), s	5.3	* 5.7	4.0	5.3	4.0	5.3	5.3	* 5.7
Max Green Setting (Gmax), s	18.0	* 32	16.0	34.7	16.0	34.7	18.0	* 32
Max Q Clear Time (g_c+I1), s	6.5	28.6	12.1	28.3	9.4	36.7	9.0	34.3
Green Ext Time (p_c), s	0.2	2.5	0.3	4.4	0.3	0.0	0.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	70.4
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	1067	10	12	1068	16	27	12	62	22	11	35
Future Volume (veh/h)	24	1067	10	12	1068	16	27	12	62	22	11	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1186	11	13	1187	18	30	13	69	24	12	39
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	1840	17	16	1753	27	87	38	107	46	23	60
Arrive On Green	0.02	0.51	0.51	0.01	0.49	0.49	0.07	0.07	0.07	0.04	0.04	0.04
Sat Flow, veh/h	1781	3608	33	1781	3583	54	1261	546	1550	1207	603	1585
Grp Volume(v), veh/h	27	584	613	13	589	616	43	0	69	36	0	39
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1860	1807	0	1550	1810	0	1585
Q Serve(g_s), s	1.8	28.8	28.8	0.9	30.4	30.4	2.7	0.0	5.2	2.3	0.0	2.9
Cycle Q Clear(g_c), s	1.8	28.8	28.8	0.9	30.4	30.4	2.7	0.0	5.2	2.3	0.0	2.9
Prop In Lane	1.00		0.02	1.00		0.03	0.70		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	34	906	951	16	869	910	124	0	107	68	0	60
V/C Ratio(X)	0.80	0.64	0.64	0.83	0.68	0.68	0.35	0.00	0.65	0.53	0.00	0.65
Avail Cap(c_a), veh/h	238	988	1036	119	869	910	301	0	258	121	0	106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.6	21.4	21.5	59.4	23.4	23.4	53.3	0.0	54.5	56.7	0.0	56.9
Incr Delay (d2), s/veh	14.8	1.9	1.8	31.8	4.2	4.0	0.6	0.0	2.4	2.3	0.0	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	11.8	12.3	0.5	13.1	13.6	1.3	0.0	2.1	1.1	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	23.3	23.2	91.2	27.6	27.5	53.9	0.0	56.9	59.0	0.0	61.3
LnGrp LOS	E	C	C	F	C	C	D	A	E	E	A	E
Approach Vol, veh/h		1224			1218			112			75	
Approach Delay, s/veh		24.4			28.2			55.8			60.2	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	66.5		8.5	7.6	64.0		12.2
Change Period (Y+Rc), s	4.0	5.3		4.0	5.3	* 5.3		4.0
Max Green Setting (Gmax), s	8.0	66.7		8.0	16.0	* 59		20.0
Max Q Clear Time (g_c+I1), s	2.9	30.8		4.9	3.8	32.4		7.2
Green Ext Time (p_c), s	0.0	13.7		0.0	0.0	12.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1043	0	26	855	13	81	2	32	64	0	77
Future Volume (veh/h)	35	1043	0	26	855	13	81	2	32	64	0	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	1159	0	29	950	13	90	2	23	71	0	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	47	2218	0	34	2215	30	207	14	27	320	0	200
Arrive On Green	0.03	0.62	0.00	0.02	0.62	0.62	0.13	0.13	0.13	0.13	0.00	0.13
Sat Flow, veh/h	1781	3647	0	1781	3589	49	758	110	217	1546	0	1585
Grp Volume(v), veh/h	39	1159	0	29	470	493	115	0	0	71	0	13
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1862	1085	0	0	1546	0	1585
Q Serve(g_s), s	1.3	10.5	0.0	0.9	8.0	8.0	3.9	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	1.3	10.5	0.0	0.9	8.0	8.0	6.3	0.0	0.0	2.4	0.0	0.4
Prop In Lane	1.00		0.00	1.00		0.03	0.78		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	47	2218	0	34	1097	1149	248	0	0	320	0	200
V/C Ratio(X)	0.83	0.52	0.00	0.84	0.43	0.43	0.46	0.00	0.00	0.22	0.00	0.06
Avail Cap(c_a), veh/h	339	3978	0	339	1989	2084	1013	0	0	1056	0	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.0	6.1	0.0	28.3	5.8	5.8	25.5	0.0	0.0	23.1	0.0	22.2
Incr Delay (d2), s/veh	12.8	0.2	0.0	17.9	0.3	0.3	1.0	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.4	0.0	0.5	1.9	2.0	1.5	0.0	0.0	0.9	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.8	6.3	0.0	46.2	6.1	6.1	26.5	0.0	0.0	23.4	0.0	22.3
LnGrp LOS	D	A	A	D	A	A	C	A	A	C	A	C
Approach Vol, veh/h		1198			992			115			84	
Approach Delay, s/veh		7.4			7.2			26.5			23.2	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	41.0		11.3	5.1	41.4		11.3
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	11.0	64.7		38.0	11.0	64.7		38.0
Max Q Clear Time (g_c+I1), s	3.3	10.0		8.3	2.9	12.5		4.4
Green Ext Time (p_c), s	0.0	17.1		0.3	0.0	23.6		0.2

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	494	439	732	235	115	341
Future Volume (veh/h)	494	439	732	235	115	341
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	578	447	813	232	128	361
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1109	582	900	257	650	792
Arrive On Green	0.31	0.31	0.33	0.33	0.19	0.19
Sat Flow, veh/h	3563	1870	2822	778	3456	1585
Grp Volume(v), veh/h	578	447	529	516	128	361
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1730	1728	1585
Q Serve(g_s), s	10.4	16.9	22.2	22.2	2.4	11.5
Cycle Q Clear(g_c), s	10.4	16.9	22.2	22.2	2.4	11.5
Prop In Lane	1.00			0.45	1.00	1.00
Lane Grp Cap(c), veh/h	1109	582	586	571	650	792
V/C Ratio(X)	0.52	0.77	0.90	0.90	0.20	0.46
Avail Cap(c_a), veh/h	1372	720	684	666	1330	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	24.3	24.9	24.9	26.7	12.6
Incr Delay (d2), s/veh	0.6	4.9	12.9	13.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	7.6	10.5	10.3	0.9	6.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.7	29.2	37.8	38.1	26.7	12.8
LnGrp LOS	C	C	D	D	C	B
Approach Vol, veh/h		1025	1045		489	
Approach Delay, s/veh		25.5	38.0		16.4	
Approach LOS		C	D		B	

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	29.7				29.6	18.7
Change Period (Y+Rc), s	4.0				5.3	4.0
Max Green Setting (Gmax), s	30.0				30.0	30.0
Max Q Clear Time (g_c+I1), s	24.2				18.9	13.5
Green Ext Time (p_c), s	1.5				5.4	1.2

Intersection Summary	
HCM 6th Ctrl Delay	28.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	429	33	17	857	15	75	15	14	11	8	0
Future Volume (veh/h)	43	429	33	17	857	15	75	15	14	11	8	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	477	21	19	952	16	83	17	9	12	9	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	919	778	51	1636	27	307	50	18	244	140	225
Arrive On Green	0.06	0.49	0.49	0.03	0.46	0.46	0.14	0.14	0.14	0.14	0.14	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3576	60	1028	356	125	705	985	1585
Grp Volume(v), veh/h	48	477	21	19	473	495	109	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1860	1509	0	0	1690	0	1585
Q Serve(g_s), s	1.0	6.8	0.3	0.4	7.7	7.7	2.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	6.8	0.3	0.4	7.7	7.7	2.6	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	0.76		0.08	0.57		1.00
Lane Grp Cap(c), veh/h	111	919	778	51	813	851	375	0	0	384	0	225
V/C Ratio(X)	0.43	0.52	0.03	0.37	0.58	0.58	0.29	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	907	2143	1816	907	2036	2131	918	0	0	956	0	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.7	6.8	5.2	18.7	7.9	7.9	15.5	0.0	0.0	14.6	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.7	0.0	1.7	1.1	1.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.6	0.1	0.2	1.9	2.0	0.8	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	7.6	5.2	20.4	8.9	8.9	15.7	0.0	0.0	14.7	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		546			987			109			21	
Approach Delay, s/veh		8.4			9.1			15.7			14.7	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	24.6		9.6	6.4	23.3		9.6
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	45.0		20.0
Max Q Clear Time (g_c+I1), s	2.4	8.8		4.6	3.0	9.7		2.4
Green Ext Time (p_c), s	0.0	3.9		0.2	0.1	8.2		0.0

Intersection Summary		
HCM 6th Ctrl Delay		9.4
HCM 6th LOS		A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	235	376	491	337	313	174
Future Volume (veh/h)	235	376	491	337	313	174
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	356	546	271	348	193
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	382	701	671	908	406	1209
Arrive On Green	0.21	0.21	0.36	0.36	0.23	0.65
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	261	356	546	271	348	193
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	9.0	10.8	17.7	5.9	12.5	2.7
Cycle Q Clear(g_c), s	9.0	10.8	17.7	5.9	12.5	2.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	382	701	671	908	406	1209
V/C Ratio(X)	0.68	0.51	0.81	0.30	0.86	0.16
Avail Cap(c_a), veh/h	800	1073	840	1051	800	1680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	13.4	19.4	7.3	24.7	4.7
Incr Delay (d2), s/veh	0.8	0.2	5.9	0.3	2.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	3.5	8.0	3.0	5.2	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.0	13.6	25.3	7.6	26.8	4.8
LnGrp LOS	C	B	C	A	C	A
Approach Vol, veh/h	617		817			541
Approach Delay, s/veh	18.4		19.4			18.9
Approach LOS	B		B			B

Timer - Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		48.5			19.2	29.3		18.3
Change Period (Y+Rc), s		5.3			4.0	5.3		4.0
Max Green Setting (Gmax), s		60.0			30.0	30.0		30.0
Max Q Clear Time (g_c+I1), s		4.7			14.5	19.7		12.8
Green Ext Time (p_c), s		1.4			0.7	4.3		1.5

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	380	5	4	404	5	0
Future Volume (veh/h)	380	5	4	404	5	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	422	4	4	449	6	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1829	816	10	2278	26	23
Arrive On Green	0.51	0.51	0.01	0.64	0.01	0.00
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	422	4	4	449	6	0
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	2.2	0.0	0.1	1.7	0.1	0.0
Cycle Q Clear(g_c), s	2.2	0.0	0.1	1.7	0.1	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1829	816	10	2278	26	23
V/C Ratio(X)	0.23	0.00	0.41	0.20	0.23	0.00
Avail Cap(c_a), veh/h	5369	2395	1076	5369	1076	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.4	3.9	16.4	2.4	16.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	10.0	0.1	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	0.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.5	3.9	26.4	2.5	17.8	0.0
LnGrp LOS	A	A	C	A	B	A
Approach Vol, veh/h	426			453	6	
Approach Delay, s/veh	4.5			2.7	17.8	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	4.2	22.7			26.9	6.2
Change Period (Y+Rc), s	4.0	5.7			* 5.7	5.7
Max Green Setting (Gmax), s	20.0	50.0			* 50	20.0
Max Q Clear Time (g_c+I1), s	2.1	4.2			3.7	2.1
Green Ext Time (p_c), s	0.0	12.9			13.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	244	0	0	256	2	0	0	0	2	0	35
Future Volume (veh/h)	29	244	0	0	256	2	0	0	0	2	0	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	32	271	0	0	284	1	0	0	0	2	0	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	1657	739	342	920	410	0	8	0	8	13	11
Arrive On Green	0.04	0.52	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.00	0.00	0.01
Sat Flow, veh/h	1603	3198	1427	997	3198	1427	0	-66459	0	1603	1683	1427
Grp Volume(v), veh/h	32	271	0	0	284	1	0	0	0	2	0	3
Grp Sat Flow(s),veh/h/ln	1603	1599	1427	997	1599	1427	0	1683	0	1603	1683	1427
Q Serve(g_s), s	0.4	0.9	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.9	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	65	1657	739	342	920	410	0	8	0	8	13	11
V/C Ratio(X)	0.49	0.16	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.25	0.00	0.28
Avail Cap(c_a), veh/h	1521	6070	2708	1948	6070	2708	0	879	0	1521	1597	1354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.9	2.7	0.0	0.0	5.9	5.3	0.0	0.0	0.0	10.4	0.0	10.4
Incr Delay (d2), s/veh	2.1	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	6.0	0.0	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	2.8	0.0	0.0	6.2	5.4	0.0	0.0	0.0	16.4	0.0	15.7
LnGrp LOS	B	A	A	A	A	A	A	A	A	B	A	B
Approach Vol, veh/h		303			285			0			5	
Approach Delay, s/veh		3.7			6.2			0.0			16.0	
Approach LOS		A			A						B	

Timer - Assigned Phs		2		4	5	6	7	8
Phs Duration (G+Y+Rc), s		16.9		4.2	4.9	12.1	4.1	0.1
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0	4.0	4.0
Max Green Setting (Gmax), s		40.0		20.0	20.0	40.0	20.0	11.0
Max Q Clear Time (g_c+I1), s		2.9		2.0	2.4	3.5	2.0	0.0
Green Ext Time (p_c), s		2.5		0.0	0.0	2.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	107	140	58	491	515	46
Future Volume (veh/h)	107	140	58	491	515	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	25	64	546	572	21
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	341	304	117	1878	1246	556
Arrive On Green	0.19	0.19	0.07	0.53	0.35	0.35
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	119	25	64	546	572	21
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	2.1	0.5	1.2	3.1	4.4	0.3
Cycle Q Clear(g_c), s	2.1	0.5	1.2	3.1	4.4	0.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	341	304	117	1878	1246	556
V/C Ratio(X)	0.35	0.08	0.55	0.29	0.46	0.04
Avail Cap(c_a), veh/h	997	887	997	5969	3980	1775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	11.9	16.2	4.7	9.0	7.6
Incr Delay (d2), s/veh	0.2	0.0	1.5	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.6	1.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.7	11.9	17.6	4.9	9.5	7.7
LnGrp LOS	B	B	B	A	A	A
Approach Vol, veh/h	144			610	593	
Approach Delay, s/veh	12.6			6.2	9.4	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		24.9		10.8	6.4	18.5
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		60.0		20.0	20.0	40.0
Max Q Clear Time (g_c+I1), s		5.1		4.1	3.2	6.4
Green Ext Time (p_c), s		5.9		0.2	0.1	6.1

Intersection Summary	
HCM 6th Ctrl Delay	8.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	21	111	53	0	18	74	225	25	6	572	54
Future Volume (veh/h)	65	21	111	53	0	18	74	225	25	6	572	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	23	4	59	0	0	82	250	14	7	636	24
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	244	207	156	0	139	189	1365	609	26	1041	464
Arrive On Green	0.13	0.13	0.13	0.09	0.00	0.00	0.11	0.38	0.38	0.01	0.29	0.29
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	72	23	4	59	0	0	82	250	14	7	636	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.9	0.6	0.1	1.6	0.0	0.0	2.3	2.5	0.3	0.2	8.1	0.6
Cycle Q Clear(g_c), s	1.9	0.6	0.1	1.6	0.0	0.0	2.3	2.5	0.3	0.2	8.1	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	244	207	156	0	139	189	1365	609	26	1041	464
V/C Ratio(X)	0.31	0.09	0.02	0.38	0.00	0.00	0.43	0.18	0.02	0.27	0.61	0.05
Avail Cap(c_a), veh/h	675	709	601	675	0	601	675	2020	901	675	2020	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	20.2	20.0	22.7	0.0	0.0	22.1	10.8	10.1	25.7	16.1	13.4
Incr Delay (d2), s/veh	0.8	0.2	0.0	0.6	0.0	0.0	0.6	0.1	0.0	2.0	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.2	0.0	0.7	0.0	0.0	0.8	0.7	0.1	0.1	2.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	20.4	20.0	23.3	0.0	0.0	22.7	10.9	10.1	27.7	17.2	13.5
LnGrp LOS	C	C	C	C	A	A	C	B	B	C	B	B
Approach Vol, veh/h		99			59			346			667	
Approach Delay, s/veh		21.2			23.3			13.7			17.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	26.3		9.9	9.6	21.5		11.8				
Change Period (Y+Rc), s	4.0	6.0		5.3	4.0	6.0		4.9				
Max Green Setting (Gmax), s	20.0	30.0		20.0	20.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s	2.2	4.5		3.6	4.3	10.1		3.9				
Green Ext Time (p_c), s	0.0	2.1		0.1	0.1	5.3		0.3				

Intersection Summary			
HCM 6th Ctrl Delay			16.8
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	2	59	21	7	27	46	273	7	9	279	85
Future Volume (veh/h)	74	2	59	21	7	27	46	273	7	9	279	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	2	5	23	8	0	51	303	4	10	310	48
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	6	220	87	30	103	95	678	575	19	598	507
Arrive On Green	0.14	0.14	0.14	0.07	0.07	0.00	0.05	0.36	0.36	0.01	0.32	0.32
Sat Flow, veh/h	1741	42	1585	1338	465	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	84	0	5	31	0	0	51	303	4	10	310	48
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1803	0	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.8	0.0	0.1	0.7	0.0	0.0	1.2	5.2	0.1	0.2	5.7	0.9
Cycle Q Clear(g_c), s	1.8	0.0	0.1	0.7	0.0	0.0	1.2	5.2	0.1	0.2	5.7	0.9
Prop In Lane	0.98		1.00	0.74		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	0	220	117	0	103	95	678	575	19	598	507
V/C Ratio(X)	0.34	0.00	0.02	0.26	0.00	0.00	0.54	0.45	0.01	0.54	0.52	0.09
Avail Cap(c_a), veh/h	853	0	758	862	0	758	852	2683	2274	852	2683	2274
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	15.6	18.6	0.0	0.0	19.3	10.1	8.5	20.6	11.6	10.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.4	0.0	0.0	1.7	0.6	0.0	8.5	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.3	0.0	0.0	0.4	1.5	0.0	0.1	1.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	0.0	15.6	19.0	0.0	0.0	21.0	10.8	8.5	29.1	12.5	10.1
LnGrp LOS	B	A	B	B	A	A	C	B	A	C	B	B
Approach Vol, veh/h		89			31			358			368	
Approach Delay, s/veh		16.5			19.0			12.2			12.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	20.9		6.7	6.2	19.1		9.8
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	60.0		20.0	20.0	60.0		20.0
Max Q Clear Time (g_c+I1), s	2.2	7.2		2.7	3.2	7.7		3.8
Green Ext Time (p_c), s	0.0	5.4		0.0	0.1	5.7		0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	29	76	37	4	28	29	276	18	4	407	30
Future Volume (veh/h)	80	29	76	37	4	28	29	276	18	4	407	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	32	3	41	4	0	32	307	18	4	452	31
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	66	220	140	14	0	65	665	39	12	606	42
Arrive On Green	0.14	0.14	0.14	0.09	0.09	0.00	0.04	0.38	0.38	0.01	0.35	0.35
Sat Flow, veh/h	1327	477	1585	1630	159	0	1781	1749	103	1781	1730	119
Grp Volume(v), veh/h	121	0	3	45	0	0	32	0	325	4	0	483
Grp Sat Flow(s),veh/h/ln	1804	0	1585	1789	0	0	1781	0	1852	1781	0	1849
Q Serve(g_s), s	2.8	0.0	0.1	1.1	0.0	0.0	0.8	0.0	6.0	0.1	0.0	10.5
Cycle Q Clear(g_c), s	2.8	0.0	0.1	1.1	0.0	0.0	0.8	0.0	6.0	0.1	0.0	10.5
Prop In Lane	0.74		1.00	0.91		0.00	1.00		0.06	1.00		0.06
Lane Grp Cap(c), veh/h	251	0	220	153	0	0	65	0	704	12	0	647
V/C Ratio(X)	0.48	0.00	0.01	0.29	0.00	0.00	0.49	0.00	0.46	0.35	0.00	0.75
Avail Cap(c_a), veh/h	554	0	487	550	0	0	547	0	1232	547	0	1230
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	16.9	19.5	0.0	0.0	21.5	0.0	10.6	22.5	0.0	13.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	2.1	0.0	0.6	6.4	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.4	0.0	0.0	0.3	0.0	2.1	0.1	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	16.9	19.9	0.0	0.0	23.7	0.0	11.2	29.0	0.0	15.1
LnGrp LOS	B	A	B	B	A	A	C	A	B	C	A	B
Approach Vol, veh/h		124			45			357			487	
Approach Delay, s/veh		18.6			19.9			12.3			15.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	23.0		10.3	5.7	21.6		7.9
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	14.0	30.3		14.0	14.0	30.3		14.0
Max Q Clear Time (g_c+I1), s	2.1	8.0		4.8	2.8	12.5		3.1
Green Ext Time (p_c), s	0.0	2.3		0.2	0.0	3.5		0.1

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	8	151	17	15	14	84	322	13	5	578	0
Future Volume (veh/h)	38	8	151	17	15	14	84	322	13	5	578	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	9	6	19	17	0	93	358	13	6	642	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	31	153	67	60	111	150	883	32	14	778	0
Arrive On Green	0.10	0.10	0.10	0.07	0.07	0.00	0.08	0.49	0.49	0.01	0.42	0.00
Sat Flow, veh/h	1479	317	1585	962	861	1585	1781	1794	65	1781	1870	0
Grp Volume(v), veh/h	51	0	6	36	0	0	93	0	371	6	642	0
Grp Sat Flow(s),veh/h/ln	1796	0	1585	1822	0	1585	1781	0	1859	1781	1870	0
Q Serve(g_s), s	1.4	0.0	0.2	1.0	0.0	0.0	2.7	0.0	6.7	0.2	16.2	0.0
Cycle Q Clear(g_c), s	1.4	0.0	0.2	1.0	0.0	0.0	2.7	0.0	6.7	0.2	16.2	0.0
Prop In Lane	0.82		1.00	0.53		1.00	1.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	173	0	153	127	0	111	150	0	915	14	778	0
V/C Ratio(X)	0.29	0.00	0.04	0.28	0.00	0.00	0.62	0.00	0.41	0.42	0.83	0.00
Avail Cap(c_a), veh/h	677	0	597	687	0	597	671	0	1226	671	1234	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.3	0.0	21.7	23.4	0.0	0.0	23.5	0.0	8.5	26.2	13.8	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.1	1.2	0.0	0.0	1.5	0.0	0.4	7.2	3.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	0.4	0.0	0.0	1.1	0.0	2.2	0.1	6.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	0.0	21.9	24.6	0.0	0.0	25.0	0.0	8.9	33.4	17.1	0.0
LnGrp LOS	C	A	C	C	A	A	C	A	A	C	B	A
Approach Vol, veh/h		57			36			464			648	
Approach Delay, s/veh		23.1			24.6			12.2			17.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	27.8		9.1	4.4	31.8		7.7
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	35.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	4.7	18.2		3.4	2.2	8.7		3.0
Green Ext Time (p_c), s	0.1	3.9		0.1	0.0	2.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	34	36	152	73	75	64	457	17	90	442	56
Future Volume (veh/h)	85	34	36	152	73	75	64	457	17	90	442	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	38	3	169	81	10	71	508	17	100	491	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	244	99	291	253	265	225	128	840	28	152	815	88
Arrive On Green	0.19	0.19	0.19	0.14	0.14	0.14	0.07	0.24	0.24	0.09	0.25	0.25
Sat Flow, veh/h	1286	520	1535	1781	1870	1585	1781	3503	117	1781	3222	346
Grp Volume(v), veh/h	132	0	3	169	81	10	71	257	268	100	270	274
Grp Sat Flow(s),veh/h/ln	1806	0	1535	1781	1870	1585	1781	1777	1843	1781	1777	1791
Q Serve(g_s), s	3.5	0.0	0.1	5.0	2.1	0.3	2.1	7.1	7.1	3.0	7.4	7.5
Cycle Q Clear(g_c), s	3.5	0.0	0.1	5.0	2.1	0.3	2.1	7.1	7.1	3.0	7.4	7.5
Prop In Lane	0.71		1.00	1.00		1.00	1.00		0.06	1.00		0.19
Lane Grp Cap(c), veh/h	343	0	291	253	265	225	128	426	442	152	449	453
V/C Ratio(X)	0.39	0.00	0.01	0.67	0.31	0.04	0.55	0.60	0.61	0.66	0.60	0.61
Avail Cap(c_a), veh/h	849	0	721	795	835	707	354	812	843	354	780	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	18.2	22.5	21.3	20.5	24.8	18.7	18.7	24.5	18.2	18.2
Incr Delay (d2), s/veh	0.5	0.0	0.0	2.3	0.5	0.1	1.4	1.8	1.8	1.8	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	2.1	0.9	0.1	0.8	2.6	2.7	1.2	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	0.0	18.2	24.8	21.8	20.6	26.2	20.5	20.5	26.4	19.9	20.0
LnGrp LOS	C	A	B	C	C	C	C	C	C	C	B	B
Approach Vol, veh/h		135			260			596			644	
Approach Delay, s/veh		20.1			23.7			21.2			20.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.7	19.0		13.2	8.0	19.7		14.5
Change Period (Y+Rc), s	4.0	5.7		5.3	4.0	5.7		4.0
Max Green Setting (Gmax), s	11.0	25.3		24.7	11.0	24.3		26.0
Max Q Clear Time (g_c+I1), s	5.0	9.1		7.0	4.1	9.5		5.5
Green Ext Time (p_c), s	0.1	2.5		0.7	0.0	2.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	0	134	45	0	74	125	484	33	56	406	55
Future Volume (veh/h)	89	0	134	45	0	74	125	484	33	56	406	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	0	11	50	0	2	139	538	33	62	451	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	291	0	0	179	0	0	235	1188	73	117	1007	449
Arrive On Green	0.16	0.00	0.00	0.10	0.00	0.00	0.13	0.35	0.35	0.07	0.28	0.28
Sat Flow, veh/h	1781	99		1781	50		1781	3401	208	1781	3554	1585
Grp Volume(v), veh/h	99	12.3		50	13.8		139	281	290	62	451	14
Grp Sat Flow(s),veh/h/ln	1781	B		1781	B		1781	1777	1833	1781	1777	1585
Q Serve(g_s), s	1.6			0.8			2.4	4.0	4.0	1.1	3.4	0.2
Cycle Q Clear(g_c), s	1.6			0.8			2.4	4.0	4.0	1.1	3.4	0.2
Prop In Lane	1.00			1.00			1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	291			179			235	621	640	117	1007	449
V/C Ratio(X)	0.34			0.28			0.59	0.45	0.45	0.53	0.45	0.03
Avail Cap(c_a), veh/h	1095			1095			1095	1639	1690	1095	3277	1462
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.0			13.5			13.3	8.2	8.2	14.7	9.6	8.4
Incr Delay (d2), s/veh	0.3			0.3			0.9	0.9	0.9	1.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5			0.3			0.8	1.1	1.2	0.4	1.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3			13.8			14.2	9.1	9.0	16.1	10.1	8.5
LnGrp LOS	B			B			B	A	A	B	B	A
Approach Vol, veh/h								710			527	
Approach Delay, s/veh								10.1			10.8	
Approach LOS								B			B	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	6.1	17.1	9.3	8.3	14.9	7.3
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0	5.7	4.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	20.0	30.0	20.0
Max Q Clear Time (g_c+I1), s	3.1	6.0	3.6	4.4	5.4	2.8
Green Ext Time (p_c), s	0.1	4.4	0.1	0.2	3.8	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	3	6	59	0	3	140	497	16	11	629	207
Future Volume (veh/h)	6	3	6	59	0	3	140	497	16	11	629	207
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	6	0	66	0	0	156	552	0	12	699	103
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	48		199	0		205	2297		39	1267	565
Arrive On Green	0.03	0.03	0.00	0.11	0.00	0.00	0.11	0.45	0.00	0.02	0.36	0.36
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	5	6	0	66	0	0	156	552	0	12	699	103
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	0.1	0.1	0.0	1.6	0.0	0.0	3.9	3.1	0.0	0.3	7.2	2.1
Cycle Q Clear(g_c), s	0.1	0.1	0.0	1.6	0.0	0.0	3.9	3.1	0.0	0.3	7.2	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	46	48		199	0		205	2297		39	1267	565
V/C Ratio(X)	0.11	0.13		0.33	0.00		0.76	0.24		0.31	0.55	0.18
Avail Cap(c_a), veh/h	775	814		775	0		775	4442		775	3091	1379
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	21.9	0.0	18.8	0.0	0.0	19.7	7.8	0.0	22.2	11.8	10.2
Incr Delay (d2), s/veh	0.8	0.9	0.0	1.0	0.0	0.0	2.2	0.1	0.0	4.5	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.0	0.6	0.0	0.0	1.4	0.6	0.0	0.2	1.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.7	22.8	0.0	19.8	0.0	0.0	22.0	7.9	0.0	26.7	12.5	10.5
LnGrp LOS	C	C		B	A		C	A		C	B	B
Approach Vol, veh/h		11	A		66	A		708	A		814	
Approach Delay, s/veh		22.7			19.8			11.0			12.5	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	26.7		5.2	9.3	22.4		9.1
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.3	5.1		2.1	5.9	9.2		3.6
Green Ext Time (p_c), s	0.0	4.8		0.0	0.2	7.2		0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	0	47	6	0	0	5	762	55	48	397	3
Future Volume (veh/h)	23	0	47	6	0	0	5	762	55	48	397	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	0	2	7	0	0	6	847	30	53	441	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	0	107	60	0	27	17	1393	621	81	2237	15
Arrive On Green	0.07	0.00	0.07	0.02	0.00	0.00	0.01	0.39	0.39	0.05	0.43	0.43
Sat Flow, veh/h	1781	0	1585	3563	0	1585	1781	3554	1585	1781	5232	36
Grp Volume(v), veh/h	26	0	2	7	0	0	6	847	30	53	287	157
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1702	1864
Q Serve(g_s), s	0.5	0.0	0.0	0.1	0.0	0.0	0.1	7.2	0.4	1.1	2.0	2.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.1	0.0	0.0	0.1	7.2	0.4	1.1	2.0	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	120	0	107	60	0	27	17	1393	621	81	1455	797
V/C Ratio(X)	0.22	0.00	0.02	0.12	0.00	0.00	0.35	0.61	0.05	0.66	0.20	0.20
Avail Cap(c_a), veh/h	710	0	632	1894	0	843	710	2834	1264	710	2714	1486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	16.4	18.2	0.0	0.0	18.5	9.1	7.1	17.7	6.7	6.7
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	0.0	0.0	4.4	0.6	0.0	3.4	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.0	0.0	0.0	0.1	1.4	0.1	0.4	0.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.9	0.0	16.4	18.5	0.0	0.0	22.9	9.7	7.1	21.1	6.8	6.9
LnGrp LOS	B	A	B	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		28			7			883			497	
Approach Delay, s/veh		16.9			18.5			9.7			8.4	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	20.7		6.5	4.4	22.1		4.6				
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0				
Max Green Setting (Gmax), s	15.0	30.0		15.0	15.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s	3.1	9.2		2.5	2.1	4.0		2.1				
Green Ext Time (p_c), s	0.0	5.6		0.0	0.0	2.5		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	7	95	84	8	49	80	949	19	6	844	22
Future Volume (veh/h)	94	7	95	84	8	49	80	949	19	6	844	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	8	8	93	9	2	89	1054	20	7	938	22
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	14	163	124	12	120	115	2154	41	10	1841	43
Arrive On Green	0.11	0.11	0.11	0.08	0.08	0.08	0.06	0.42	0.42	0.01	0.36	0.36
Sat Flow, veh/h	1660	128	1540	1631	158	1585	1781	5158	98	1781	5131	120
Grp Volume(v), veh/h	112	0	8	102	0	2	89	695	379	7	622	338
Grp Sat Flow(s),veh/h/ln	1787	0	1540	1789	0	1585	1781	1702	1851	1781	1702	1847
Q Serve(g_s), s	2.9	0.0	0.2	2.7	0.0	0.1	2.4	7.3	7.3	0.2	7.0	7.0
Cycle Q Clear(g_c), s	2.9	0.0	0.2	2.7	0.0	0.1	2.4	7.3	7.3	0.2	7.0	7.0
Prop In Lane	0.93		1.00	0.91		1.00	1.00		0.05	1.00		0.07
Lane Grp Cap(c), veh/h	189	0	163	135	0	120	115	1422	773	10	1222	663
V/C Ratio(X)	0.59	0.00	0.05	0.75	0.00	0.02	0.78	0.49	0.49	0.71	0.51	0.51
Avail Cap(c_a), veh/h	732	0	631	732	0	649	547	2090	1137	510	2090	1134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	19.6	22.1	0.0	20.9	22.5	10.4	10.4	24.2	12.3	12.3
Incr Delay (d2), s/veh	1.1	0.0	0.0	3.2	0.0	0.0	4.2	0.6	1.1	28.8	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.1	1.2	0.0	0.0	0.9	1.8	2.1	0.1	1.9	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	19.7	25.3	0.0	20.9	26.7	11.0	11.5	53.0	13.0	13.7
LnGrp LOS	C	A	B	C	A	C	C	B	B	D	B	B
Approach Vol, veh/h		120			104			1163			967	
Approach Delay, s/veh		21.8			25.2			12.4			13.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	23.5		7.7	4.3	26.4		10.5
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		5.3
Max Green Setting (Gmax), s	15.0	30.0		20.0	14.0	30.0		20.0
Max Q Clear Time (g_c+I1), s	4.4	9.0		4.7	2.2	9.3		4.9
Green Ext Time (p_c), s	0.1	8.5		0.2	0.0	9.5		0.2

Intersection Summary			
HCM 6th Ctrl Delay			13.9
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	294	118	147	106	124	43	817	96	119	750	99
Future Volume (veh/h)	180	294	118	147	106	124	43	817	96	119	750	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	327	10	163	118	7	48	908	0	132	833	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	430	187	192	355	153	83	2642		160	2862	
Arrive On Green	0.13	0.12	0.12	0.11	0.10	0.10	0.05	0.52	0.00	0.09	0.56	0.00
Sat Flow, veh/h	1781	3554	1546	1781	3554	1537	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	200	327	10	163	118	7	48	908	0	132	833	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1546	1781	1777	1537	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	13.2	10.7	0.7	10.8	3.7	0.5	3.2	12.5	0.0	8.7	10.3	0.0
Cycle Q Clear(g_c), s	13.2	10.7	0.7	10.8	3.7	0.5	3.2	12.5	0.0	8.7	10.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	430	187	192	355	153	83	2642		160	2862	
V/C Ratio(X)	0.87	0.76	0.05	0.85	0.33	0.05	0.58	0.34		0.83	0.29	
Avail Cap(c_a), veh/h	401	572	249	386	542	234	267	2642		297	2862	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.3	51.1	46.7	52.6	50.3	48.8	56.1	17.0	0.0	53.7	13.8	0.0
Incr Delay (d2), s/veh	4.0	4.8	0.1	4.0	0.7	0.2	2.4	0.1	0.0	4.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	4.9	0.3	4.9	1.6	0.2	1.4	4.6	0.0	4.0	3.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.2	55.9	46.8	56.5	51.0	49.0	58.4	17.1	0.0	57.8	14.1	0.0
LnGrp LOS	E	E	D	E	D	D	E	B		E	B	
Approach Vol, veh/h		537			288			956	A		965	A
Approach Delay, s/veh		55.5			54.1			19.2			20.1	
Approach LOS		E			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	73.3	19.5	17.7	14.7	68.1	16.9	20.2
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	18.0	37.0	27.0	18.3	20.0	* 35	26.0	19.3
Max Q Clear Time (g_c+I1), s	5.2	12.3	15.2	5.7	10.7	14.5	12.8	12.7
Green Ext Time (p_c), s	0.0	6.1	0.3	0.4	0.1	7.2	0.2	0.9

Intersection Summary	
HCM 6th Ctrl Delay	30.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1	33	32	1	19	18	941	0	5	1026	8
Future Volume (veh/h)	32	1	33	32	1	19	18	941	0	5	1026	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	1	0	36	1	0	20	1046	0	6	1140	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	1	0	104	1	0	995	3037	1354	8	1496	12
Arrive On Green	0.03	0.03	0.00	0.03	0.03	0.00	0.56	0.85	0.00	0.00	0.29	0.29
Sat Flow, veh/h	1655	46	0	1655	46	0	1781	3554	1585	1781	5226	41
Grp Volume(v), veh/h	37	0	0	37	0	0	20	1046	0	6	743	406
Grp Sat Flow(s),veh/h/ln	1701	0	0	1701	0	0	1781	1777	1585	1781	1702	1863
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.6	7.3	0.0	0.4	23.9	23.9
Cycle Q Clear(g_c), s	2.5	0.0	0.0	2.5	0.0	0.0	0.6	7.3	0.0	0.4	23.9	23.9
Prop In Lane	0.97		0.00	0.97		0.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	105	0	0	105	0	0	995	3037	1354	8	974	533
V/C Ratio(X)	0.35	0.00	0.00	0.35	0.00	0.00	0.02	0.34	0.00	0.74	0.76	0.76
Avail Cap(c_a), veh/h	316	0	0	316	0	0	995	3037	1354	238	1966	1076
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	0.0	0.0	58.0	0.0	0.0	11.8	1.8	0.0	59.7	39.1	39.1
Incr Delay (d2), s/veh	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.3	0.0	38.8	1.7	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.2	0.0	0.0	0.2	1.0	0.0	0.3	9.8	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.0	0.0	0.0	60.0	0.0	0.0	11.8	2.1	0.0	98.4	40.8	42.1
LnGrp LOS	E	A	A	E	A	A	B	A	A	F	D	D
Approach Vol, veh/h		37			37			1066			1155	
Approach Delay, s/veh		60.0			60.0			2.3			41.5	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	108.2		7.2	72.7	40.0		7.2
Change Period (Y+Rc), s	4.0	5.7		4.0	5.7	* 5.7		4.0
Max Green Setting (Gmax), s	16.0	69.3		21.0	16.0	* 69		21.0
Max Q Clear Time (g_c+I1), s	2.4	9.3		4.5	2.6	25.9		4.5
Green Ext Time (p_c), s	0.0	8.5		0.1	0.0	8.4		0.1

Intersection Summary	
HCM 6th Ctrl Delay	23.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	76	129	108	59	37	77	953	48	88	1428	22
Future Volume (veh/h)	76	76	129	108	59	37	77	953	48	88	1428	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	84	4	120	66	0	86	1059	0	98	1587	23
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	217	94	177	98		109	2259		123	2333	34
Arrive On Green	0.06	0.06	0.06	0.05	0.05	0.00	0.06	0.44	0.00	0.07	0.45	0.45
Sat Flow, veh/h	1781	3554	1546	3456	1870	1585	1781	5106	1585	1781	5185	75
Grp Volume(v), veh/h	84	84	4	120	66	0	86	1059	0	98	1042	568
Grp Sat Flow(s),veh/h/ln	1781	1777	1546	1728	1870	1585	1781	1702	1585	1781	1702	1857
Q Serve(g_s), s	5.6	2.7	0.3	4.1	4.2	0.0	5.7	17.5	0.0	6.5	29.1	29.1
Cycle Q Clear(g_c), s	5.6	2.7	0.3	4.1	4.2	0.0	5.7	17.5	0.0	6.5	29.1	29.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	107	217	94	177	98		109	2259		123	1532	835
V/C Ratio(X)	0.79	0.39	0.04	0.68	0.67		0.79	0.47		0.80	0.68	0.68
Avail Cap(c_a), veh/h	238	423	184	461	223		238	2298		238	1532	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	54.2	53.0	55.9	55.8	0.0	55.6	23.5	0.0	55.1	26.2	26.2
Incr Delay (d2), s/veh	4.8	1.5	0.2	1.7	10.2	0.0	4.7	0.2	0.0	4.5	2.5	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	1.3	0.1	1.8	2.2	0.0	2.7	6.8	0.0	3.0	11.8	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	55.7	53.3	57.6	66.0	0.0	60.3	23.7	0.0	59.5	28.6	30.6
LnGrp LOS	E	E	D	E	E		E	C		E	C	C
Approach Vol, veh/h		172			186	A		1145	A		1708	
Approach Delay, s/veh		57.9			60.6			26.5			31.0	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	12.0	12.3	59.1	10.2	13.0	11.3	60.0
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	16.0	14.3	16.0	54.0	16.0	14.3	16.0	54.0
Max Q Clear Time (g_c+I1), s	7.6	6.2	8.5	19.5	6.1	4.7	7.7	31.1
Green Ext Time (p_c), s	0.1	0.1	0.1	7.0	0.2	0.2	0.1	9.9

Intersection Summary	
HCM 6th Ctrl Delay	32.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	257	106	1074	206	88	1621
Future Volume (veh/h)	257	106	1074	206	88	1621
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	0	1193	180	98	1801
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	351		1825	814	128	2273
Arrive On Green	0.20	0.00	0.51	0.51	0.07	0.64
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	286	0	1193	180	98	1801
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	11.3	0.0	18.1	4.6	4.0	27.2
Cycle Q Clear(g_c), s	11.3	0.0	18.1	4.6	4.0	27.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	351		1825	814	128	2273
V/C Ratio(X)	0.81		0.65	0.22	0.77	0.79
Avail Cap(c_a), veh/h	1090		2900	1294	485	3867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	0.0	13.1	9.8	33.5	9.7
Incr Delay (d2), s/veh	4.6	0.0	0.5	0.2	3.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	5.8	1.3	1.7	7.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.8	0.0	13.6	10.0	37.1	10.4
LnGrp LOS	C		B	A	D	B
Approach Vol, veh/h	286	A	1373			1899
Approach Delay, s/veh	32.8		13.1			11.8
Approach LOS	C		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.3	43.8				53.0	20.5
Change Period (Y+Rc), s	4.0	6.0				* 6	6.0
Max Green Setting (Gmax), s	20.0	60.0				* 80	45.0
Max Q Clear Time (g_c+I1), s	6.0	20.1				29.2	13.3
Green Ext Time (p_c), s	0.1	9.9				17.8	1.3

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	80	25	306	130	14	380
Future Volume (veh/h)	80	25	306	130	14	380
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	4	340	75	16	422
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	297	264	1056	471	45	876
Arrive On Green	0.17	0.17	0.30	0.30	0.03	0.47
Sat Flow, veh/h	1781	1585	3647	1585	1781	1870
Grp Volume(v), veh/h	89	4	340	75	16	422
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1870
Q Serve(g_s), s	1.2	0.1	2.0	1.0	0.2	4.2
Cycle Q Clear(g_c), s	1.2	0.1	2.0	1.0	0.2	4.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	297	264	1056	471	45	876
V/C Ratio(X)	0.30	0.02	0.32	0.16	0.36	0.48
Avail Cap(c_a), veh/h	1561	1389	5838	2604	1301	4507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	9.5	7.5	7.1	13.1	5.0
Incr Delay (d2), s/veh	0.6	0.0	0.3	0.3	1.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.5	0.2	0.1	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.6	9.6	7.8	7.4	14.9	5.8
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h	93		415			438
Approach Delay, s/veh	10.5		7.7			6.1
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	4.7	14.1				18.8	8.6
Change Period (Y+Rc), s	4.0	6.0				6.0	4.0
Max Green Setting (Gmax), s	20.0	45.0				66.0	24.0
Max Q Clear Time (g_c+I1), s	2.2	4.0				6.2	3.2
Green Ext Time (p_c), s	0.0	4.1				4.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	5	13	66	0	155	4	571	30	145	522	26
Future Volume (veh/h)	6	5	13	66	0	155	4	571	30	145	522	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	6	2	73	0	25	4	634	29	161	580	15
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	124	30	344	0	216	13	1684	77	209	1116	942
Arrive On Green	0.14	0.14	0.14	0.14	0.00	0.14	0.01	0.49	0.49	0.12	0.60	0.60
Sat Flow, veh/h	526	893	218	1510	0	1562	1781	3460	158	1781	1870	1578
Grp Volume(v), veh/h	15	0	0	73	0	25	4	325	338	161	580	15
Grp Sat Flow(s),veh/h/ln	1637	0	0	1510	0	1562	1781	1777	1841	1781	1870	1578
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.7	0.1	6.1	6.1	4.7	9.7	0.2
Cycle Q Clear(g_c), s	0.4	0.0	0.0	2.0	0.0	0.7	0.1	6.1	6.1	4.7	9.7	0.2
Prop In Lane	0.47		0.13	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	326	0	0	344	0	216	13	865	896	209	1116	942
V/C Ratio(X)	0.05	0.00	0.00	0.21	0.00	0.12	0.30	0.38	0.38	0.77	0.52	0.02
Avail Cap(c_a), veh/h	696	0	0	678	0	586	669	2002	2074	669	2107	1778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	0.0	0.0	20.6	0.0	20.1	26.3	8.6	8.6	22.8	6.3	4.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.1	4.5	0.5	0.4	2.3	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.8	0.0	0.3	0.1	1.6	1.7	1.8	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	0.0	20.7	0.0	20.2	30.8	9.0	9.0	25.1	6.9	4.4
LnGrp LOS	B	A	A	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h		15			98			667			756	
Approach Delay, s/veh		19.9			20.6			9.2			10.7	
Approach LOS		B			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.3	31.6		11.4	4.4	37.5		11.4
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	60.0		20.0	20.0	60.0		20.0
Max Q Clear Time (g_c+I1), s	6.7	8.1		4.0	2.1	11.7		2.4
Green Ext Time (p_c), s	0.2	17.7		0.2	0.0	16.5		0.0

Intersection Summary		
HCM 6th Ctrl Delay		10.8
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	1	58	18	1	13	30	538	48	17	578	22
Future Volume (veh/h)	65	1	58	18	1	13	30	538	48	17	578	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	1	0	20	1	0	33	598	33	19	642	22
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	1	85	31	2	29	788	2555	1138	22	946	32
Arrive On Green	0.05	0.05	0.00	0.02	0.02	0.00	0.44	0.72	0.72	0.01	0.27	0.27
Sat Flow, veh/h	1758	24	1585	1700	85	1585	1781	3554	1583	1781	3505	120
Grp Volume(v), veh/h	73	0	0	21	0	0	33	598	33	19	325	339
Grp Sat Flow(s),veh/h/ln	1782	0	1585	1785	0	1585	1781	1777	1583	1781	1777	1848
Q Serve(g_s), s	3.6	0.0	0.0	1.1	0.0	0.0	0.9	5.1	0.5	1.0	14.7	14.7
Cycle Q Clear(g_c), s	3.6	0.0	0.0	1.1	0.0	0.0	0.9	5.1	0.5	1.0	14.7	14.7
Prop In Lane	0.99		1.00	0.95		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	96	0	85	32	0	29	788	2555	1138	22	480	499
V/C Ratio(X)	0.76	0.00	0.00	0.65	0.00	0.00	0.04	0.23	0.03	0.85	0.68	0.68
Avail Cap(c_a), veh/h	317	0	282	317	0	282	788	2555	1138	317	480	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	0.0	0.0	43.9	0.0	0.0	14.2	4.3	3.6	44.3	29.4	29.4
Incr Delay (d2), s/veh	4.6	0.0	0.0	7.8	0.0	0.0	0.0	0.1	0.0	25.8	7.5	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.5	0.0	0.0	0.3	1.1	0.1	0.6	6.7	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.7	0.0	0.0	51.7	0.0	0.0	14.3	4.4	3.7	70.1	36.9	36.6
LnGrp LOS	D	A	A	D	A	A	B	A	A	E	D	D
Approach Vol, veh/h		73			21			664			683	
Approach Delay, s/veh		46.7			51.7			4.8			37.7	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	45.5	30.0		5.6	5.1	70.4		8.8				
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	16.0	* 24		16.0	16.0	24.3		16.0				
Max Q Clear Time (g_c+I1), s	2.9	16.7		3.1	3.0	7.1		5.6				
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	10.6		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	23.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	0	494	3	3	1	153	404	0	2	556	115
Future Volume (veh/h)	208	0	494	3	3	1	153	404	0	2	556	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	231	0	0	3	3	0	170	449	0	2	618	68
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	395	0		25	26	0	250	2398	0	7	2194	978
Arrive On Green	0.11	0.00	0.00	0.01	0.01	0.00	0.07	0.67	0.00	0.00	0.62	0.62
Sat Flow, veh/h	3563	0	1585	1781	1870	0	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	231	0	0	3	3	0	170	449	0	2	618	68
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	5.5	0.0	0.0	0.1	0.1	0.0	4.3	4.2	0.0	0.1	7.3	1.5
Cycle Q Clear(g_c), s	5.5	0.0	0.0	0.1	0.1	0.0	4.3	4.2	0.0	0.1	7.3	1.5
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	395	0		25	26	0	250	2398	0	7	2194	978
V/C Ratio(X)	0.59	0.00		0.12	0.12	0.00	0.68	0.19	0.00	0.30	0.28	0.07
Avail Cap(c_a), veh/h	633	0		238	249	0	653	2398	0	238	2194	978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	0.0	0.0	43.8	43.8	0.0	40.7	5.4	0.0	44.7	8.0	6.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.8	0.7	0.0	1.2	0.2	0.0	8.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	0.1	0.1	0.0	1.9	1.4	0.0	0.1	2.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.6	0.0	0.0	44.6	44.5	0.0	41.9	5.6	0.0	53.5	8.1	6.9
LnGrp LOS	D	A		D	D	A	D	A	A	D	A	A
Approach Vol, veh/h		231	A		6			619			688	
Approach Delay, s/veh		38.6			44.6			15.6			8.1	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	66.4		5.3	9.5	61.3		14.0
Change Period (Y+Rc), s	4.0	5.7		4.0	3.0	* 5.7		4.0
Max Green Setting (Gmax), s	12.0	32.3		12.0	17.0	* 29		16.0
Max Q Clear Time (g_c+I1), s	2.1	6.2		2.1	6.3	9.3		7.5
Green Ext Time (p_c), s	0.0	3.1		0.0	0.3	4.7		0.4

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	0	22	45	0	40	16	239	8	37	318	6
Future Volume (veh/h)	57	0	22	45	0	40	16	239	8	37	318	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	0	1	50	0	2	18	266	3	41	353	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	0	190	183	0	162	57	775	346	101	862	384
Arrive On Green	0.12	0.00	0.12	0.10	0.00	0.10	0.03	0.22	0.22	0.06	0.24	0.24
Sat Flow, veh/h	3563	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	63	0	1	50	0	2	18	266	3	41	353	3
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.5	0.0	0.0	0.9	0.0	0.0	0.3	2.2	0.1	0.8	2.9	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.9	0.0	0.0	0.3	2.2	0.1	0.8	2.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	426	0	190	183	0	162	57	775	346	101	862	384
V/C Ratio(X)	0.15	0.00	0.01	0.27	0.00	0.01	0.31	0.34	0.01	0.41	0.41	0.01
Avail Cap(c_a), veh/h	3523	0	1567	1036	0	922	1036	4134	1844	1036	4134	1844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	13.3	14.2	0.0	13.9	16.3	11.4	10.5	15.7	11.0	9.9
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	0.0	1.2	0.4	0.0	1.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.3	0.0	0.0	0.1	0.7	0.0	0.3	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	13.3	14.5	0.0	13.9	17.4	11.7	10.5	16.6	11.4	9.9
LnGrp LOS	B	A	B	B	A	B	B	B	B	B	B	A
Approach Vol, veh/h		64			52			287			397	
Approach Delay, s/veh		13.6			14.5			12.1			11.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	12.8		7.5	5.1	13.6		8.1
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		34.0
Max Q Clear Time (g_c+I1), s	2.8	4.2		2.9	2.3	4.9		2.5
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	3.5		0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	333	9	38	206	12	29	7	19	7	49	2
Future Volume (veh/h)	3	333	9	38	206	12	29	7	19	7	49	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	370	4	42	229	6	20	25	0	8	54	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	860	384	71	992	443	75	79	67	13	88	2
Arrive On Green	0.00	0.24	0.24	0.04	0.28	0.28	0.04	0.04	0.00	0.06	0.06	0.06
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	235	1589	29
Grp Volume(v), veh/h	3	370	4	42	229	6	20	25	0	63	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1853	0	0
Q Serve(g_s), s	0.0	2.5	0.1	0.7	1.4	0.1	0.3	0.4	0.0	0.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.5	0.1	0.7	1.4	0.1	0.3	0.4	0.0	0.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.13		0.02
Lane Grp Cap(c), veh/h	6	860	384	71	992	443	75	79	67	102	0	0
V/C Ratio(X)	0.48	0.43	0.01	0.59	0.23	0.01	0.27	0.32	0.00	0.62	0.00	0.00
Avail Cap(c_a), veh/h	938	3741	1669	1250	4365	1947	875	919	779	976	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.2	9.1	8.2	13.5	7.9	7.4	13.2	13.3	0.0	13.2	0.0	0.0
Incr Delay (d2), s/veh	19.7	0.5	0.0	2.9	0.2	0.0	0.7	0.9	0.0	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.0	0.2	0.3	0.0	0.1	0.1	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	9.6	8.2	16.4	8.1	7.4	13.9	14.1	0.0	15.4	0.0	0.0
LnGrp LOS	C	A	A	B	A	A	B	B	A	B	A	A
Approach Vol, veh/h		377			277			45			63	
Approach Delay, s/veh		9.8			9.3			14.0			15.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.6	5.1	12.6		5.2	4.1	13.7				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		15.0	20.0	30.0		14.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s		2.9	2.7	4.5		2.4	2.0	3.4				
Green Ext Time (p_c), s		0.1	0.0	2.4		0.0	0.0	1.5				

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	266	57	28	163	13	27	6	16	22	25	60
Future Volume (veh/h)	32	266	57	28	163	13	27	6	16	22	25	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	296	25	31	181	5	18	23	0	24	28	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	1023	456	40	1012	451	69	72	61	87	91	77
Arrive On Green	0.03	0.29	0.29	0.02	0.28	0.28	0.04	0.04	0.00	0.05	0.05	0.05
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	36	296	25	31	181	5	18	23	0	24	28	3
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.6	2.0	0.3	0.5	1.2	0.1	0.3	0.4	0.0	0.4	0.4	0.1
Cycle Q Clear(g_c), s	0.6	2.0	0.3	0.5	1.2	0.1	0.3	0.4	0.0	0.4	0.4	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	46	1023	456	40	1012	451	69	72	61	87	91	77
V/C Ratio(X)	0.78	0.29	0.05	0.77	0.18	0.01	0.26	0.32	0.00	0.28	0.31	0.04
Avail Cap(c_a), veh/h	879	3507	1564	1172	4092	1825	1172	1231	1043	879	923	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	8.4	7.8	14.8	8.2	7.8	14.2	14.2	0.0	13.9	14.0	13.8
Incr Delay (d2), s/veh	10.1	0.2	0.1	10.6	0.1	0.0	0.7	0.9	0.0	2.4	2.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.1	0.3	0.3	0.0	0.1	0.1	0.0	0.2	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	8.6	7.9	25.4	8.3	7.8	14.9	15.2	0.0	16.3	16.6	14.1
LnGrp LOS	C	A	A	C	A	A	B	B	A	B	B	B
Approach Vol, veh/h		357			217			41			55	
Approach Delay, s/veh		10.2			10.7			15.1			16.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.2	4.7	14.5		6.1	4.8	14.4				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.6	4.0	5.7				
Max Green Setting (Gmax), s		20.0	20.0	30.0		15.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s		2.4	2.5	4.0		2.4	2.6	3.2				
Green Ext Time (p_c), s		0.0	0.0	4.8		0.2	0.0	2.9				

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	268	29	17	150	3	28	7	2	0	7	6
Future Volume (veh/h)	18	268	29	17	150	3	28	7	2	0	7	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	298	15	19	167	2	19	24	0	0	8	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	1134	506	26	1131	505	73	76	0	0	16	14
Arrive On Green	0.02	0.32	0.32	0.01	0.32	0.32	0.04	0.04	0.00	0.00	0.01	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	0	0	1870	1585
Grp Volume(v), veh/h	20	298	15	19	167	2	19	24	0	0	8	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	0	0	1870	1585
Q Serve(g_s), s	0.3	1.7	0.2	0.3	0.9	0.0	0.3	0.3	0.0	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.3	1.7	0.2	0.3	0.9	0.0	0.3	0.3	0.0	0.0	0.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	28	1134	506	26	1131	505	73	76	0	0	16	14
V/C Ratio(X)	0.73	0.26	0.03	0.72	0.15	0.00	0.26	0.32	0.00	0.00	0.50	0.00
Avail Cap(c_a), veh/h	970	3869	1726	970	3869	1726	1616	1697	0	0	1018	863
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	13.5	7.0	6.5	13.5	6.7	6.4	12.8	12.8	0.0	0.0	13.6	0.0
Incr Delay (d2), s/veh	12.6	0.2	0.0	13.1	0.1	0.0	2.3	2.8	0.0	0.0	8.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.0	0.2	0.2	0.0	0.1	0.2	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	7.2	6.5	26.6	6.8	6.4	15.1	15.7	0.0	0.0	22.1	0.0
LnGrp LOS	C	A	A	C	A	A	B	B	A	A	C	A
Approach Vol, veh/h		333			188			43			8	
Approach Delay, s/veh		8.3			8.8			15.4			22.1	
Approach LOS		A			A			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		4.2	4.4	13.8		5.1	4.4	13.8				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	4.0	5.0				
Max Green Setting (Gmax), s		15.0	15.0	30.0		25.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s		2.1	2.3	3.7		2.3	2.3	2.9				
Green Ext Time (p_c), s		0.0	0.0	5.1		0.1	0.0	3.0				

Intersection Summary	
HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	154	106	3	99	53	54	12	5	14	56	13
Future Volume (veh/h)	26	154	106	3	99	53	54	12	5	14	56	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	29	171	61	3	110	19	69	0	0	16	62	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	680	390	6	495	221	194	0	86	23	89	96
Arrive On Green	0.02	0.21	0.21	0.00	0.15	0.15	0.06	0.00	0.00	0.07	0.07	0.07
Sat Flow, veh/h	1603	3198	1427	1603	3198	1427	3206	0	1427	342	1324	1427
Grp Volume(v), veh/h	29	171	61	3	110	19	69	0	0	78	0	1
Grp Sat Flow(s),veh/h/ln	1603	1599	1427	1603	1599	1427	1603	0	1427	1666	0	1427
Q Serve(g_s), s	0.5	1.2	0.8	0.0	0.8	0.3	0.5	0.0	0.0	1.2	0.0	0.0
Cycle Q Clear(g_c), s	0.5	1.2	0.8	0.0	0.8	0.3	0.5	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.21		1.00
Lane Grp Cap(c), veh/h	35	680	390	6	495	221	194	0	86	112	0	96
V/C Ratio(X)	0.83	0.25	0.16	0.48	0.22	0.09	0.36	0.00	0.00	0.70	0.00	0.01
Avail Cap(c_a), veh/h	930	3710	1741	930	3710	1655	3100	0	1379	967	0	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.6	8.5	7.1	12.9	9.6	9.4	11.7	0.0	0.0	11.8	0.0	11.3
Incr Delay (d2), s/veh	16.5	0.3	0.3	20.1	0.4	0.3	1.3	0.0	0.0	2.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.2	0.0	0.2	0.1	0.2	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.1	8.8	7.4	33.0	9.9	9.6	13.0	0.0	0.0	14.7	0.0	11.3
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		261			132			69			79	
Approach Delay, s/veh		10.7			10.4			13.0			14.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.6	4.1	10.5		5.7	5.6	9.0				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	5.0	* 5				
Max Green Setting (Gmax), s		25.0	15.0	30.0		15.0	15.0	* 30				
Max Q Clear Time (g_c+I1), s		2.5	2.0	3.2		3.2	2.5	2.8				
Green Ext Time (p_c), s		0.3	0.0	1.6		0.1	0.0	0.8				

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	34	86	50	15	7	21	494	73	25	909	50
Future Volume (veh/h)	102	34	86	50	15	7	21	494	73	25	909	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1870	1870	1870	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	113	38	10	56	17	0	23	549	39	28	1010	27
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	119	31	370	92	0	44	2350	728	59	2706	838
Arrive On Green	0.14	0.08	0.08	0.11	0.05	0.00	0.03	0.48	0.48	0.03	0.49	0.49
Sat Flow, veh/h	1776	1421	374	3456	1870	0	1692	4849	1502	1931	5535	1715
Grp Volume(v), veh/h	113	0	48	56	17	0	23	549	39	28	1010	27
Grp Sat Flow(s),veh/h/ln	1776	0	1795	1728	1870	0	1692	1616	1502	1931	1845	1715
Q Serve(g_s), s	3.8	0.0	1.7	1.0	0.6	0.0	0.9	4.3	0.9	0.9	7.5	0.2
Cycle Q Clear(g_c), s	3.8	0.0	1.7	1.0	0.6	0.0	0.9	4.3	0.9	0.9	7.5	0.2
Prop In Lane	1.00		0.21	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	0	151	370	92	0	44	2350	728	59	2706	838
V/C Ratio(X)	0.45	0.00	0.32	0.15	0.18	0.00	0.52	0.23	0.05	0.48	0.37	0.03
Avail Cap(c_a), veh/h	540	0	546	1052	569	0	515	2951	914	588	3369	1044
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	28.3	26.6	30.0	0.0	31.6	9.8	9.0	31.3	10.5	1.3
Incr Delay (d2), s/veh	0.5	0.0	1.0	0.1	0.4	0.0	3.5	0.1	0.1	2.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.7	0.4	0.3	0.0	0.4	1.1	0.3	0.4	2.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	29.3	26.7	30.3	0.0	35.1	9.9	9.0	33.6	10.7	1.3
LnGrp LOS	C	A	C	C	C	A	D	A	A	C	B	A
Approach Vol, veh/h		161			73			611			1065	
Approach Delay, s/veh		27.2			27.5			10.8			11.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	37.8	11.0	10.8	5.7	38.1	14.6	7.2
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	5.3	* 4
Max Green Setting (Gmax), s	20.0	40.0	20.0	20.0	20.0	40.0	20.0	* 20
Max Q Clear Time (g_c+I1), s	2.9	6.3	3.0	3.7	2.9	9.5	5.8	2.6
Green Ext Time (p_c), s	0.0	14.0	0.1	0.2	0.0	22.6	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	87	75	167	75	10	46	561	55	31	1001	33
Future Volume (veh/h)	34	87	75	167	75	10	46	561	55	31	1001	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	97	0	186	83	7	51	623	35	34	1112	20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	162	72	247	165	14	89	2490	1111	62	3538	1098
Arrive On Green	0.02	0.05	0.00	0.07	0.10	0.10	0.03	0.70	0.70	0.02	0.69	0.69
Sat Flow, veh/h	3456	3554	1585	3456	1701	143	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	38	97	0	186	0	90	51	623	35	34	1112	20
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	0	1845	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	1.3	3.2	0.0	6.3	0.0	5.6	1.8	7.6	0.8	1.2	10.3	0.5
Cycle Q Clear(g_c), s	1.3	3.2	0.0	6.3	0.0	5.6	1.8	7.6	0.8	1.2	10.3	0.5
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	162	72	247	0	179	89	2490	1111	62	3538	1098
V/C Ratio(X)	0.55	0.60	0.00	0.75	0.00	0.50	0.57	0.25	0.03	0.54	0.31	0.02
Avail Cap(c_a), veh/h	605	583	260	605	0	303	605	2490	1111	605	3538	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	56.2	0.0	54.7	0.0	51.4	57.8	6.5	5.5	58.4	7.2	5.7
Incr Delay (d2), s/veh	2.5	4.6	0.0	1.8	0.0	2.9	2.1	0.2	0.1	2.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.5	0.0	2.8	0.0	2.7	0.8	2.6	0.3	0.5	3.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	60.8	0.0	56.4	0.0	54.3	59.8	6.8	5.5	61.2	7.3	5.7
LnGrp LOS	E	E	A	E	A	D	E	A	A	E	A	A
Approach Vol, veh/h		135			276			709			1166	
Approach Delay, s/veh		60.8			55.7			10.5			8.9	
Approach LOS		E			E			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	90.5	12.6	10.8	7.1	89.5	6.4	17.0
Change Period (Y+Rc), s	4.0	* 6.4	4.0	5.3	4.0	6.4	4.0	5.3
Max Green Setting (Gmax), s	21.0	* 40	21.0	19.7	21.0	38.6	21.0	19.7
Max Q Clear Time (g_c+I1), s	3.2	9.6	8.3	5.2	3.8	12.3	3.3	7.6
Green Ext Time (p_c), s	0.0	9.8	0.3	0.5	0.0	12.5	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	21	120	145	25	11	121	686	145	40	1209	28
Future Volume (veh/h)	18	21	120	145	25	11	121	686	145	40	1209	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	23	2	161	28	1	134	762	61	44	1343	18
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	55	46	250	126	4	212	860	267	1817	3814	1184
Arrive On Green	0.03	0.03	0.03	0.07	0.07	0.07	0.17	0.17	0.17	0.53	0.75	0.75
Sat Flow, veh/h	1781	1870	1585	3563	1795	64	776	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	20	23	2	161	0	29	134	762	61	44	1343	18
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1859	388	1702	1585	1728	1702	1585
Q Serve(g_s), s	1.0	1.1	0.1	4.2	0.0	1.4	7.4	13.9	3.2	0.6	8.6	0.3
Cycle Q Clear(g_c), s	1.0	1.1	0.1	4.2	0.0	1.4	16.0	13.9	3.2	0.6	8.6	0.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	55	46	250	0	130	212	860	267	1817	3814	1184
V/C Ratio(X)	0.38	0.42	0.04	0.64	0.00	0.22	0.63	0.89	0.23	0.02	0.35	0.02
Avail Cap(c_a), veh/h	369	388	329	739	0	385	212	860	267	1817	3814	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	0.93	0.93	0.93
Uniform Delay (d), s/veh	45.3	45.3	44.8	43.0	0.0	41.7	45.8	38.6	34.2	10.8	4.1	3.1
Incr Delay (d2), s/veh	4.6	5.1	0.4	2.8	0.0	0.9	13.2	12.8	1.9	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.6	0.1	1.9	0.0	0.7	2.0	6.7	1.4	0.2	2.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.8	50.4	45.2	45.8	0.0	42.6	59.0	51.4	36.1	10.8	4.2	3.1
LnGrp LOS	D	D	D	D	A	D	E	D	D	B	A	A
Approach Vol, veh/h		45			190			957			1405	
Approach Delay, s/veh		49.9			45.3			51.5			4.4	
Approach LOS		D			D			D			A	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	54.0	21.0		8.1		75.0		12.0
Change Period (Y+Rc), s	4.0	5.0		5.3		4.0		5.3
Max Green Setting (Gmax), s	16.0	16.0		19.7		41.0		19.7
Max Q Clear Time (g_c+I1), s	2.6	18.0		3.1		10.6		6.2
Green Ext Time (p_c), s	0.1	0.0		0.1		16.7		0.5

Intersection Summary	
HCM 6th Ctrl Delay	25.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	109	0	0	469	400	483	0	0	1439	43
Future Volume (vph)	0	0	109	0	0	469	400	483	0	0	1439	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			4.0	4.0	5.3			5.3	
Lane Util. Factor			1.00			1.00	1.00	0.95			0.91	
Frt			0.86			0.86	1.00	1.00			1.00	
Flt Protected			1.00			1.00	0.95	1.00			1.00	
Satd. Flow (prot)			1611			1611	1770	3539			5063	
Flt Permitted			1.00			1.00	0.95	1.00			1.00	
Satd. Flow (perm)			1611			1611	1770	3539			5063	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	121	0	0	521	444	537	0	0	1599	48
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	0	121	0	0	521	444	537	0	0	1643	0
Turn Type			Free			Free	Prot	NA			NA	
Protected Phases							5	2			6	
Permitted Phases			Free			Free						
Actuated Green, G (s)			60.0			60.0	20.0	60.0			30.7	
Effective Green, g (s)			60.0			60.0	20.0	60.0			30.7	
Actuated g/C Ratio			1.00			1.00	0.33	1.00			0.51	
Clearance Time (s)							4.0	5.3			5.3	
Vehicle Extension (s)							3.0	3.0			3.0	
Lane Grp Cap (vph)			1611			1611	590	3539			2590	
v/s Ratio Prot							c0.25	0.15			c0.32	
v/s Ratio Perm			0.08			0.32						
v/c Ratio			0.08			0.32	0.75	0.15			0.63	
Uniform Delay, d1			0.0			0.0	17.8	0.0			10.6	
Progression Factor			1.00			1.00	0.95	1.00			1.00	
Incremental Delay, d2			0.1			0.5	5.0	0.1			1.2	
Delay (s)			0.1			0.5	21.9	0.1			11.8	
Level of Service			A			A	C	A			B	
Approach Delay (s)		0.1			0.5			10.0			11.8	
Approach LOS		A			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	520	0	0	99	0	784	118	666	882	0
Future Volume (vph)	0	0	520	0	0	99	0	784	118	666	882	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.3			4.0		5.7	5.7	5.7	5.7	
Lane Util. Factor			0.88			1.00		0.91	1.00	0.97	0.91	
Frt			0.85			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			2787			1611		5085	1583	3433	5085	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			2787			1611		5085	1583	3433	5085	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	578	0	0	110	0	871	131	740	980	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	58	0	0	0
Lane Group Flow (vph)	0	0	578	0	0	110	0	871	73	740	980	0
Turn Type			Perm			Free		NA	Perm	Prot	NA	
Protected Phases								2		1	6	
Permitted Phases			5			Free			2			
Actuated Green, G (s)			17.8			60.0		24.3	24.3	24.3	31.2	
Effective Green, g (s)			17.8			60.0		24.3	24.3	24.3	31.2	
Actuated g/C Ratio			0.30			1.00		0.41	0.41	0.41	0.52	
Clearance Time (s)			5.3					5.7	5.7	5.7	5.7	
Vehicle Extension (s)			3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)			826			1611		2059	641	1390	2644	
v/s Ratio Prot								0.17		c0.22	c0.19	
v/s Ratio Perm			c0.21			0.07			0.05			
v/c Ratio			0.70			0.07		0.42	0.11	0.53	0.37	
Uniform Delay, d1			18.7			0.0		12.8	11.1	13.5	8.6	
Progression Factor			1.00			1.00		0.67	0.74	0.18	0.13	
Incremental Delay, d2			2.6			0.1		0.6	0.4	0.3	0.3	
Delay (s)			21.3			0.1		9.2	8.6	2.8	1.4	
Level of Service			C			A		A	A	A	A	
Approach Delay (s)		21.3			0.1			9.1			2.0	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	11.4
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	2	1	5	4	5	16	19	0	1	8	9
Future Volume (veh/h)	1	2	1	5	4	5	16	19	0	1	8	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	2	0	6	4	0	18	21	0	1	9	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	6	0	9	6	0	25	741	0	9	158	175
Arrive On Green	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.21	0.00	0.00	0.20	0.20
Sat Flow, veh/h	613	1226	0	1090	726	0	1781	3647	0	1781	809	899
Grp Volume(v), veh/h	3	0	0	10	0	0	18	21	0	1	0	19
Grp Sat Flow(s),veh/h/ln	1840	0	0	1816	0	0	1781	1777	0	1781	0	1709
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2
Prop In Lane	0.33		0.00	0.60		0.00	1.00		0.00	1.00		0.53
Lane Grp Cap(c), veh/h	9	0	0	15	0	0	25	741	0	9	0	333
V/C Ratio(X)	0.33	0.00	0.00	0.68	0.00	0.00	0.71	0.03	0.00	0.12	0.00	0.06
Avail Cap(c_a), veh/h	897	0	0	1771	0	0	1737	6931	0	695	0	2916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.2	0.0	0.0	10.1	0.0	0.0	10.1	6.5	0.0	10.2	0.0	6.7
Incr Delay (d2), s/veh	7.9	0.0	0.0	18.5	0.0	0.0	12.6	0.0	0.0	2.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	0.0	0.0	28.6	0.0	0.0	22.7	6.5	0.0	12.4	0.0	6.8
LnGrp LOS	B	A	A	C	A	A	C	A	A	B	A	A
Approach Vol, veh/h		3			10			39			20	
Approach Delay, s/veh		18.1			28.6			14.0			7.1	
Approach LOS		B			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.0	8.3		4.2	4.3	8.0		4.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	40.0		20.0	20.0	35.0		10.0
Max Q Clear Time (g_c+I1), s	2.0	2.1		2.1	2.2	2.2		2.0
Green Ext Time (p_c), s	0.0	0.1		0.0	0.0	0.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	4	5	26	7	74	14	798	47	151	1119	28
Future Volume (veh/h)	21	4	5	26	7	74	14	798	47	151	1119	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	23	4	0	29	8	0	16	887	0	168	1243	23
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	5	5	5
Cap, veh/h	106	37		126	44		46	1986		229	2256	696
Arrive On Green	0.02	0.02	0.00	0.02	0.02	0.00	0.01	0.40	0.00	0.14	0.90	0.90
Sat Flow, veh/h	5344	1870	1585	5344	1870	1585	3374	4985	1547	3374	4985	1537
Grp Volume(v), veh/h	23	4	0	29	8	0	16	887	0	168	1243	23
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1687	1662	1547	1687	1662	1537
Q Serve(g_s), s	0.5	0.3	0.0	0.6	0.5	0.0	0.6	15.6	0.0	5.7	5.7	0.2
Cycle Q Clear(g_c), s	0.5	0.3	0.0	0.6	0.5	0.0	0.6	15.6	0.0	5.7	5.7	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	37		126	44		46	1986		229	2256	696
V/C Ratio(X)	0.22	0.11		0.23	0.18		0.34	0.45		0.73	0.55	0.03
Avail Cap(c_a), veh/h	713	249		672	235		450	2256		450	2256	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.93	0.93	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	57.8	0.0	57.5	57.4	0.0	58.6	26.4	0.0	50.8	3.4	3.1
Incr Delay (d2), s/veh	1.0	1.3	0.0	1.3	2.7	0.0	1.5	0.3	0.0	1.7	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.3	0.3	0.0	0.2	6.1	0.0	2.3	1.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.9	59.0	0.0	58.8	60.1	0.0	60.1	26.7	0.0	52.6	4.4	3.2
LnGrp LOS	E	E		E	E		E	C		D	A	A
Approach Vol, veh/h		27	A		37	A		903	A		1434	
Approach Delay, s/veh		58.9			59.1			27.3			10.0	
Approach LOS		E			E			C			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	53.5		7.7	5.7	60.0		6.4
Change Period (Y+Rc), s	4.0	5.7		4.9	4.0	5.7		4.0
Max Green Setting (Gmax), s	16.0	54.3		15.1	16.0	54.3		16.0
Max Q Clear Time (g_c+I1), s	7.7	17.6		2.6	2.6	7.7		2.5
Green Ext Time (p_c), s	0.4	22.7		0.1	0.0	36.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	0	165	4	1	3	121	513	2	6	914	116
Future Volume (veh/h)	87	0	165	4	1	3	121	513	2	6	914	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	0	15	4	1	0	134	570	2	7	1016	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	0	231	17	4	19	176	1822	6	16	1465	653
Arrive On Green	0.15	0.00	0.15	0.01	0.01	0.00	0.10	0.50	0.50	0.01	0.41	0.41
Sat Flow, veh/h	1781	0	1585	1439	360	1585	1781	3632	13	1781	3554	1585
Grp Volume(v), veh/h	97	0	15	5	0	0	134	279	293	7	1016	53
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1798	0	1585	1781	1777	1868	1781	1777	1585
Q Serve(g_s), s	2.8	0.0	0.5	0.2	0.0	0.0	4.2	5.3	5.3	0.2	13.4	1.2
Cycle Q Clear(g_c), s	2.8	0.0	0.5	0.2	0.0	0.0	4.2	5.3	5.3	0.2	13.4	1.2
Prop In Lane	1.00		1.00	0.80		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	259	0	231	22	0	19	176	891	937	16	1465	653
V/C Ratio(X)	0.37	0.00	0.06	0.23	0.00	0.00	0.76	0.31	0.31	0.43	0.69	0.08
Avail Cap(c_a), veh/h	625	0	556	379	0	334	625	1091	1147	375	2182	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	0.0	21.0	27.9	0.0	0.0	25.0	8.4	8.4	28.1	13.8	10.2
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.0	0.0	0.0	2.6	0.3	0.3	6.4	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.2	0.1	0.0	0.0	1.8	1.7	1.8	0.1	4.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	0.0	21.0	29.9	0.0	0.0	27.6	8.7	8.7	34.5	14.7	10.3
LnGrp LOS	C	A	C	C	A	A	C	A	A	C	B	B
Approach Vol, veh/h		112			5			706			1076	
Approach Delay, s/veh		22.2			29.9			12.3			14.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	34.6		4.7	9.6	29.5		13.2
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	12.0	35.0		12.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	2.2	7.3		2.2	6.2	15.4		4.8
Green Ext Time (p_c), s	0.0	3.9		0.0	0.2	8.1		0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	4	238	2	4	3	172	479	1	2	850	238
Future Volume (veh/h)	150	4	238	2	4	3	172	479	1	2	850	238
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	170	0	60	2	4	0	191	532	1	2	944	184
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	0	302	3	6	8	319	2078	4	3	1706	761
Arrive On Green	0.10	0.00	0.10	0.00	0.00	0.00	0.09	0.57	0.57	0.00	0.48	0.48
Sat Flow, veh/h	3563	0	1585	613	1226	1585	3456	3639	7	1781	3554	1585
Grp Volume(v), veh/h	170	0	60	6	0	0	191	260	273	2	944	184
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1840	0	1585	1728	1777	1869	1781	1777	1585
Q Serve(g_s), s	2.4	0.0	1.7	0.2	0.0	0.0	2.9	4.0	4.0	0.1	10.1	3.7
Cycle Q Clear(g_c), s	2.4	0.0	1.7	0.2	0.0	0.0	2.9	4.0	4.0	0.1	10.1	3.7
Prop In Lane	1.00		1.00	0.33		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	0	302	9	0	8	319	1014	1067	3	1706	761
V/C Ratio(X)	0.49	0.00	0.20	0.68	0.00	0.00	0.60	0.26	0.26	0.61	0.55	0.24
Avail Cap(c_a), veh/h	1981	0	1028	512	0	441	1601	1383	1455	396	2964	1322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	0.0	18.4	26.8	0.0	0.0	23.5	5.8	5.8	26.9	9.9	8.2
Incr Delay (d2), s/veh	1.0	0.0	0.3	29.2	0.0	0.0	0.7	0.3	0.3	52.0	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.6	0.1	0.0	0.0	1.1	1.0	1.1	0.1	3.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	0.0	18.7	56.0	0.0	0.0	24.2	6.1	6.1	78.9	10.6	8.6
LnGrp LOS	C	A	B	E	A	A	C	A	A	E	B	A
Approach Vol, veh/h		230			6			724			1130	
Approach Delay, s/veh		22.7			56.0			10.9			10.4	
Approach LOS		C			E			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	36.3		4.3	9.0	31.4		9.3
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		4.0
Max Green Setting (Gmax), s	12.0	42.0		15.0	25.0	45.0		30.0
Max Q Clear Time (g_c+I1), s	2.1	6.0		2.2	4.9	12.1		4.4
Green Ext Time (p_c), s	0.0	5.2		0.0	0.4	13.8		1.0

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	151	296	373	220	522	434
Future Volume (veh/h)	151	296	373	220	522	434
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	175	414	65	580	482
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	511	627	872	389	856	2137
Arrive On Green	0.15	0.15	0.25	0.25	0.25	0.60
Sat Flow, veh/h	3456	1585	3647	1585	3456	3647
Grp Volume(v), veh/h	168	175	414	65	580	482
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1728	1777
Q Serve(g_s), s	1.6	2.8	3.7	1.2	5.6	2.3
Cycle Q Clear(g_c), s	1.6	2.8	3.7	1.2	5.6	2.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	511	627	872	389	856	2137
V/C Ratio(X)	0.33	0.28	0.47	0.17	0.68	0.23
Avail Cap(c_a), veh/h	2238	1419	3836	1711	2238	3836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.1	7.6	11.9	11.0	12.6	3.4
Incr Delay (d2), s/veh	0.1	0.1	0.6	0.3	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.9	1.2	0.4	1.7	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.3	7.7	12.5	11.3	12.9	3.5
LnGrp LOS	B	A	B	B	B	A
Approach Vol, veh/h	343		479			1062
Approach Delay, s/veh	10.9		12.3			8.6
Approach LOS	B		B			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				27.6		9.5	13.2	14.4
Change Period (Y+Rc), s				5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				40.0		24.0	24.0	40.0
Max Q Clear Time (g_c+I1), s				4.3		4.8	7.6	5.7
Green Ext Time (p_c), s				3.0		0.9	1.6	3.4

Intersection Summary	
HCM 6th Ctrl Delay	10.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	261	7	28	32	14	31	27	329	0	39	445	65
Future Volume (veh/h)	261	7	28	32	14	31	27	329	0	39	445	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	316	0	0	36	16	10	30	366	0	43	494	60
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	526	276	0	53	23	15	38	1031	0	52	950	115
Arrive On Green	0.15	0.00	0.00	0.05	0.05	0.05	0.02	0.29	0.00	0.03	0.30	0.30
Sat Flow, veh/h	3563	1870	0	1026	456	285	1781	3647	0	1781	3192	386
Grp Volume(v), veh/h	316	0	0	62	0	0	30	366	0	43	274	280
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1768	0	0	1781	1777	0	1781	1777	1801
Q Serve(g_s), s	3.0	0.0	0.0	1.2	0.0	0.0	0.6	2.9	0.0	0.9	4.6	4.6
Cycle Q Clear(g_c), s	3.0	0.0	0.0	1.2	0.0	0.0	0.6	2.9	0.0	0.9	4.6	4.6
Prop In Lane	1.00		0.00	0.58		0.16	1.00		0.00	1.00		0.21
Lane Grp Cap(c), veh/h	526	276	0	91	0	0	38	1031	0	52	529	536
V/C Ratio(X)	0.60	0.00	0.00	0.68	0.00	0.00	0.78	0.35	0.00	0.83	0.52	0.52
Avail Cap(c_a), veh/h	2479	1302	0	591	0	0	694	4155	0	694	2077	2106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	0.0	16.8	0.0	0.0	17.5	10.1	0.0	17.3	10.5	10.5
Incr Delay (d2), s/veh	0.4	0.0	0.0	3.3	0.0	0.0	11.9	0.3	0.0	11.7	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.5	0.0	0.0	0.3	0.9	0.0	0.5	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	0.0	0.0	20.1	0.0	0.0	29.3	10.4	0.0	29.0	11.3	11.3
LnGrp LOS	B	A	A	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		316			62			396			597	
Approach Delay, s/veh		14.7			20.1			11.8			12.6	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	15.7		5.8	4.8	16.0		9.3
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	14.0	* 42		12.0	14.0	42.0		25.0
Max Q Clear Time (g_c+I1), s	2.9	4.9		3.2	2.6	6.6		5.0
Green Ext Time (p_c), s	0.0	4.0		0.1	0.0	4.1		0.6

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	7	19	32	2	7	25	351	7	12	456	25
Future Volume (veh/h)	46	7	19	32	2	7	25	351	7	12	456	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	8	0	36	2	0	28	390	7	13	507	25
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	12	81	61	3	57	37	1283	23	18	1202	59
Arrive On Green	0.05	0.05	0.00	0.04	0.04	0.00	0.02	0.36	0.36	0.01	0.35	0.35
Sat Flow, veh/h	1550	243	1585	1692	94	1585	1781	3572	64	1781	3447	170
Grp Volume(v), veh/h	59	0	0	38	0	0	28	194	203	13	261	271
Grp Sat Flow(s),veh/h/ln	1793	0	1585	1786	0	1585	1781	1777	1859	1781	1777	1840
Q Serve(g_s), s	1.0	0.0	0.0	0.7	0.0	0.0	0.5	2.4	2.4	0.2	3.5	3.5
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.7	0.0	0.0	0.5	2.4	2.4	0.2	3.5	3.5
Prop In Lane	0.86		1.00	0.95		1.00	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	92	0	81	64	0	57	37	638	668	18	619	641
V/C Ratio(X)	0.64	0.00	0.00	0.59	0.00	0.00	0.76	0.30	0.30	0.71	0.42	0.42
Avail Cap(c_a), veh/h	1499	0	1325	1033	0	917	916	2056	2151	916	2056	2129
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	0.0	14.8	0.0	0.0	15.2	7.2	7.2	15.3	7.7	7.7
Incr Delay (d2), s/veh	2.8	0.0	0.0	3.2	0.0	0.0	11.1	0.4	0.4	17.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.3	0.0	0.0	0.3	0.6	0.7	0.2	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.2	0.0	0.0	18.0	0.0	0.0	26.3	7.6	7.6	32.6	8.4	8.4
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		59			38			425			545	
Approach Delay, s/veh		17.2			18.0			8.8			9.0	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	16.1		5.1	4.6	15.7		5.6
Change Period (Y+Rc), s	4.0	4.9		4.0	4.0	4.9		4.0
Max Green Setting (Gmax), s	16.0	36.0		18.0	16.0	36.0		26.0
Max Q Clear Time (g_c+I1), s	2.2	4.4		2.7	2.5	5.5		3.0
Green Ext Time (p_c), s	0.0	3.8		0.1	0.0	5.3		0.2

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	7	352	16	52	469
Future Volume (veh/h)	4	7	352	16	52	469
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	0	391	10	58	521
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	38	17	2197	682	138	3311
Arrive On Green	0.01	0.00	0.43	0.43	0.08	0.65
Sat Flow, veh/h	3456	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	4	0	391	10	58	521
Grp Sat Flow(s),veh/h/ln	1728	1585	1702	1585	1781	1702
Q Serve(g_s), s	0.0	0.0	1.3	0.1	0.9	1.1
Cycle Q Clear(g_c), s	0.0	0.0	1.3	0.1	0.9	1.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	38	17	2197	682	138	3311
V/C Ratio(X)	0.11	0.00	0.18	0.01	0.42	0.16
Avail Cap(c_a), veh/h	2428	1113	7174	2227	1251	7174
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	5.0	4.6	12.5	2.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.4	0.0	5.1	4.7	13.3	2.0
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h	4		401			579
Approach Delay, s/veh	14.4		5.1			3.1
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.2	18.0				24.2	4.3
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0
Max Green Setting (Gmax), s	20.0	40.0				40.0	20.0
Max Q Clear Time (g_c+I1), s	2.9	3.3				3.1	2.0
Green Ext Time (p_c), s	0.1	8.9				12.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	87	12	276	262	74	29	4	12	87	4	12
Future Volume (veh/h)	34	87	12	276	262	74	29	4	12	87	4	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	97	3	307	291	33	32	4	0	100	0	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	884	27	380	1635	508	128	16	127	561	0	250
Arrive On Green	0.07	0.17	0.17	0.21	0.32	0.32	0.08	0.08	0.00	0.16	0.00	0.16
Sat Flow, veh/h	1781	5090	156	1781	5106	1585	1592	199	1585	3563	0	1585
Grp Volume(v), veh/h	38	65	35	307	291	33	36	0	0	100	0	1
Grp Sat Flow(s),veh/h/ln	1781	1702	1842	1781	1702	1585	1791	0	1585	1781	0	1585
Q Serve(g_s), s	0.9	0.7	0.7	7.5	1.9	0.7	0.9	0.0	0.0	1.1	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.7	0.7	7.5	1.9	0.7	0.9	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		0.08	1.00		1.00	0.89		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	591	320	380	1635	508	143	0	127	561	0	250
V/C Ratio(X)	0.32	0.11	0.11	0.81	0.18	0.07	0.25	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	773	2216	1199	773	3324	1032	777	0	688	1546	0	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.5	16.0	16.0	17.2	11.3	10.9	19.9	0.0	0.0	16.8	0.0	16.4
Incr Delay (d2), s/veh	0.6	0.2	0.3	1.6	0.1	0.1	0.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.3	0.3	2.7	0.6	0.2	0.3	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	16.2	16.4	18.8	11.4	11.0	20.2	0.0	0.0	16.9	0.0	16.4
LnGrp LOS	C	B	B	B	B	B	C	A	A	B	A	B
Approach Vol, veh/h		138			631			36			101	
Approach Delay, s/veh		17.6			15.0			20.2			16.9	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	13.3		11.3	7.1	20.1		7.7
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	20.0	30.0		20.0	20.0	30.0		20.0
Max Q Clear Time (g_c+I1), s	9.5	2.7		3.1	2.9	3.9		2.9
Green Ext Time (p_c), s	0.5	0.7		0.2	0.0	2.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	424	221	35	204	59	167	292	42	44	230	51
Future Volume (veh/h)	72	424	221	35	204	59	167	292	42	44	230	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	2145	2145	2145
Adj Flow Rate, veh/h	80	471	53	39	227	12	186	324	36	49	256	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	921	411	119	780	348	259	747	82	160	671	299
Arrive On Green	0.11	0.26	0.26	0.07	0.22	0.22	0.15	0.23	0.23	0.08	0.16	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3227	356	2043	4076	1818
Grp Volume(v), veh/h	80	471	53	39	227	12	186	177	183	49	256	9
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1806	2043	2038	1818
Q Serve(g_s), s	2.1	5.8	1.3	1.1	2.7	0.3	5.1	4.4	4.4	1.2	2.9	0.2
Cycle Q Clear(g_c), s	2.1	5.8	1.3	1.1	2.7	0.3	5.1	4.4	4.4	1.2	2.9	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	189	921	411	119	780	348	259	411	418	160	671	299
V/C Ratio(X)	0.42	0.51	0.13	0.33	0.29	0.03	0.72	0.43	0.44	0.31	0.38	0.03
Avail Cap(c_a), veh/h	488	1391	621	523	1391	621	1151	1739	1768	800	2553	1139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	16.2	14.5	22.8	16.6	15.7	20.8	16.8	16.8	22.2	19.0	17.9
Incr Delay (d2), s/veh	0.6	0.9	0.3	0.6	0.3	0.1	1.4	1.1	1.1	0.4	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.2	0.4	0.4	1.0	0.1	1.9	1.6	1.7	0.5	1.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	17.1	14.8	23.3	16.9	15.7	22.2	17.9	17.9	22.6	19.6	18.0
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		604			278			546			314	
Approach Delay, s/veh		17.5			17.8			19.4			20.0	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	18.5	11.4	13.7	9.4	16.5	8.0	17.1
Change Period (Y+Rc), s	4.0	* 5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	15.0	* 20	33.0	32.0	14.0	20.0	20.0	50.0
Max Q Clear Time (g_c+I1), s	3.1	7.8	7.1	4.9	4.1	4.7	3.2	6.4
Green Ext Time (p_c), s	0.0	5.5	0.4	3.5	0.1	2.5	0.1	5.4

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	2	21	1	60	25	507	36	93	313	7
Future Volume (veh/h)	3	0	2	21	1	60	25	507	36	93	313	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1988	1988	1988	1870	1945	1870	2145	2231	2145
Adj Flow Rate, veh/h	3	0	0	23	1	10	28	563	36	103	348	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	0	12	117	5	247	71	1560	100	168	2057	882
Arrive On Green	0.01	0.00	0.00	0.06	0.06	0.06	0.04	0.44	0.44	0.08	0.49	0.49
Sat Flow, veh/h	1781	0	1585	1818	79	1682	1781	3525	225	2043	4239	1818
Grp Volume(v), veh/h	3	0	0	24	0	10	28	295	304	103	348	4
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1897	0	1682	1781	1848	1902	2043	2120	1818
Q Serve(g_s), s	0.1	0.0	0.0	0.5	0.0	0.2	0.7	4.5	4.6	2.1	2.0	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.5	0.0	0.2	0.7	4.5	4.6	2.1	2.0	0.0
Prop In Lane	1.00		1.00	0.96		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	13	0	12	122	0	247	71	818	842	168	2057	882
V/C Ratio(X)	0.23	0.00	0.00	0.20	0.00	0.04	0.40	0.36	0.36	0.61	0.17	0.00
Avail Cap(c_a), veh/h	830	0	739	884	0	923	830	1895	1951	952	4347	1864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	0.0	19.0	0.0	15.7	20.1	7.9	7.9	19.0	6.2	5.7
Incr Delay (d2), s/veh	3.2	0.0	0.0	0.3	0.0	0.0	1.3	0.6	0.6	1.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.1	0.3	1.3	1.3	0.9	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	0.0	0.0	19.3	0.0	15.7	21.4	8.5	8.5	20.4	6.3	5.7
LnGrp LOS	C	A	A	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		3			34			627			455	
Approach Delay, s/veh		24.4			18.3			9.1			9.5	
Approach LOS		C			B			A			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		4.3	5.7	26.1		6.8	7.5	24.3				
Change Period (Y+Rc), s		4.0	4.0	5.3		4.0	4.0	5.3				
Max Green Setting (Gmax), s		20.0	20.0	44.0		20.0	20.0	44.0				
Max Q Clear Time (g_c+I1), s		2.1	2.7	4.0		2.5	4.1	6.6				
Green Ext Time (p_c), s		0.0	0.0	7.2		0.0	0.2	12.3				

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	19	505	9	34	345
Future Volume (veh/h)	9	19	505	9	34	345
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	0	561	9	38	383
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	38	34	1279	21	117	2115
Arrive On Green	0.02	0.00	0.36	0.36	0.07	0.60
Sat Flow, veh/h	1781	1585	3673	57	1781	3647
Grp Volume(v), veh/h	10	0	278	292	38	383
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1860	1781	1777
Q Serve(g_s), s	0.1	0.0	2.8	2.8	0.5	1.1
Cycle Q Clear(g_c), s	0.1	0.0	2.8	2.8	0.5	1.1
Prop In Lane	1.00	1.00		0.03	1.00	
Lane Grp Cap(c), veh/h	38	34	635	665	117	2115
V/C Ratio(X)	0.26	0.00	0.44	0.44	0.33	0.18
Avail Cap(c_a), veh/h	1918	1707	3291	3445	1688	9948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.2	0.0	5.7	5.7	10.4	2.1
Incr Delay (d2), s/veh	1.3	0.0	0.7	0.6	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	0.4	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.5	0.0	6.3	6.3	11.0	2.2
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h	10		570			421
Approach Delay, s/veh	12.5		6.3			3.0
Approach LOS	B		A			A

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			18.7		4.5	5.5	13.2
Change Period (Y+Rc), s			4.9		4.0	4.0	* 4.9
Max Green Setting (Gmax), s			65.0		25.0	22.0	* 43
Max Q Clear Time (g_c+I1), s			3.1		2.1	2.5	4.8
Green Ext Time (p_c), s			1.6		0.0	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	14	0	21	0	1239	26	12	1175	0
Future Volume (veh/h)	0	0	0	14	0	21	0	1239	26	12	1175	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	0	0	16	0	0	0	1377	28	13	1306	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	0	5	4	0	0	0	0	2664	54	18	3081	0
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.75	0.01	0.87	0.00
Sat Flow, veh/h	0	1870	1585		0		0	3655	72	1781	3647	0
Grp Volume(v), veh/h	0	0	0		0.0		0	686	719	13	1306	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585				0	1777	1857	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0				0.0	5.8	5.9	0.3	2.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				0.0	5.8	5.9	0.3	2.8	0.0
Prop In Lane	0.00		1.00				0.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	0	5	4				0	1329	1389	18	3081	0
V/C Ratio(X)	0.00	0.00	0.00				0.00	0.52	0.52	0.72	0.42	0.00
Avail Cap(c_a), veh/h	0	1219	1033				0	1931	2018	774	3862	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0				0.0	1.9	1.9	18.2	0.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.0	0.9	0.8	17.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.0	0.3	0.3	0.2	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0				0.0	2.8	2.7	36.1	0.7	0.0
LnGrp LOS	A	A	A				A	A	A	D	A	A
Approach Vol, veh/h		0						1405			1319	
Approach Delay, s/veh		0.0						2.7			1.1	
Approach LOS								A			A	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	4.4	32.4				36.8		0.0				
Change Period (Y+Rc), s	4.0	4.9				4.9		4.0				
Max Green Setting (Gmax), s	16.0	40.0				40.0		24.0				
Max Q Clear Time (g_c+I1), s	2.3	7.9				4.8		0.0				
Green Ext Time (p_c), s	0.0	19.7				18.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	1.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	20	33	41	8	64	16	1202	35	45	1082	16
Future Volume (veh/h)	31	20	33	41	8	64	16	1202	35	45	1082	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	22	0	46	9	0	18	1336	38	50	1202	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	143	0	160	169	0	53	1836	52	111	1985	28
Arrive On Green	0.08	0.08	0.00	0.09	0.09	0.00	0.03	0.52	0.52	0.06	0.55	0.55
Sat Flow, veh/h	1781	1870	0	1781	1870	0	1781	3528	100	1781	3587	51
Grp Volume(v), veh/h	34	22	0	46	9	0	18	672	702	50	595	624
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	1870	0	1781	1777	1851	1781	1777	1861
Q Serve(g_s), s	1.2	0.8	0.0	1.7	0.3	0.0	0.7	20.1	20.2	1.9	15.5	15.5
Cycle Q Clear(g_c), s	1.2	0.8	0.0	1.7	0.3	0.0	0.7	20.1	20.2	1.9	15.5	15.5
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	136	143	0	160	169	0	53	925	963	111	983	1030
V/C Ratio(X)	0.25	0.15	0.00	0.29	0.05	0.00	0.34	0.73	0.73	0.45	0.61	0.61
Avail Cap(c_a), veh/h	413	434	0	413	434	0	413	1468	1529	413	1468	1537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	29.8	0.0	29.3	28.7	0.0	32.8	12.8	12.8	31.2	10.4	10.4
Incr Delay (d2), s/veh	0.8	0.4	0.0	0.8	0.1	0.0	1.4	1.8	1.7	1.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.4	0.0	0.7	0.1	0.0	0.3	6.6	6.9	0.8	4.8	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.8	30.2	0.0	30.2	28.8	0.0	34.2	14.5	14.5	32.2	11.2	11.2
LnGrp LOS	C	C	A	C	C	A	C	B	B	C	B	B
Approach Vol, veh/h		56			55			1392			1269	
Approach Delay, s/veh		30.6			29.9			14.8			12.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	43.5		9.3	8.3	41.2		10.2
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	16.0	* 57		16.0	16.0	57.0		16.0
Max Q Clear Time (g_c+I1), s	2.7	17.5		3.2	3.9	22.2		3.7
Green Ext Time (p_c), s	0.0	9.8		0.1	0.0	13.7		0.1

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	23	5	60	19	52	7	1283	13	17	1022	47
Future Volume (veh/h)	45	23	5	60	19	52	7	1283	13	17	1022	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1945	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	50	26	0	67	21	1	8	1426	13	19	1136	26
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	66	34	84	90	28	99	11	2043	19	24	2037	922
Arrive On Green	0.05	0.05	0.00	0.06	0.06	0.06	0.01	0.58	0.58	0.01	0.58	0.58
Sat Flow, veh/h	1239	644	1585	1427	447	1571	1781	3551	32	1781	3497	1582
Grp Volume(v), veh/h	76	0	0	88	0	1	8	702	737	19	1136	26
Grp Sat Flow(s),veh/h/ln	1883	0	1585	1874	0	1571	1781	1749	1835	1781	1749	1582
Q Serve(g_s), s	2.4	0.0	0.0	2.8	0.0	0.0	0.3	17.1	17.1	0.6	12.0	0.4
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.8	0.0	0.0	0.3	17.1	17.1	0.6	12.0	0.4
Prop In Lane	0.66		1.00	0.76		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	100	0	84	118	0	99	11	1006	1055	24	2037	922
V/C Ratio(X)	0.76	0.00	0.00	0.74	0.00	0.01	0.72	0.70	0.70	0.79	0.56	0.03
Avail Cap(c_a), veh/h	251	0	211	250	0	209	238	1006	1055	238	2037	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.80	0.80	0.80	0.78	0.78	0.78
Uniform Delay (d), s/veh	28.0	0.0	0.0	27.6	0.0	26.3	29.8	9.0	9.0	29.5	7.7	5.3
Incr Delay (d2), s/veh	4.5	0.0	0.0	3.4	0.0	0.0	22.6	3.2	3.1	14.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.3	0.0	0.0	0.2	5.3	5.5	0.4	3.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	0.0	31.0	0.0	26.4	52.4	12.3	12.1	44.3	8.1	5.3
LnGrp LOS	C	A	A	C	A	C	D	B	B	D	A	A
Approach Vol, veh/h		76			89			1447			1181	
Approach Delay, s/veh		32.5			31.0			12.4			8.6	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.2	4.8	40.2		7.8	4.4	40.7				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		8.0	8.0	18.3		8.0	8.0	18.3				
Max Q Clear Time (g_c+I1), s		4.4	2.6	19.1		4.8	2.3	14.0				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0	0.0	3.7				

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	19	61	0	33	6	1270	13	8	1051	4
Future Volume (vph)	10	0	19	61	0	33	6	1270	13	8	1051	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00		0.97	1.00		0.97	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Frt	1.00		0.85	1.00		0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1536	1770		1536	1770	3533		1770	3537	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770		1536	1770		1536	1770	3533		1770	3537	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	0	21	68	0	37	7	1411	14	9	1168	4
RTOR Reduction (vph)	0	0	19	0	0	34	0	0	0	0	0	0
Lane Group Flow (vph)	11	0	2	68	0	3	7	1425	0	9	1172	0
Confl. Peds. (#/hr)	4		4	4		4	4		4	4		4
Confl. Bikes (#/hr)			2			2			2			2
Turn Type	Prot		Perm	Prot		Perm	Prot	NA		Prot	NA	
Protected Phases	6			5			7	4		3	8	
Permitted Phases			6			5						
Actuated Green, G (s)	5.4		5.4	5.4		5.4	1.1	35.4		1.1	35.4	
Effective Green, g (s)	5.4		5.4	5.4		5.4	1.1	35.4		1.1	35.4	
Actuated g/C Ratio	0.09		0.09	0.09		0.09	0.02	0.58		0.02	0.58	
Clearance Time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Vehicle Extension (s)	2.0		2.0	2.0		2.0	2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	156		135	156		135	31	2050		31	2052	
v/s Ratio Prot	0.01			c0.04			0.00	c0.40		c0.01	0.33	
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.07		0.01	0.44		0.02	0.23	0.69		0.29	0.57	
Uniform Delay, d1	25.5		25.4	26.4		25.4	29.5	9.0		29.6	8.0	
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1		0.0	0.7		0.0	1.3	2.0		1.9	0.4	
Delay (s)	25.6		25.4	27.1		25.4	30.9	11.0		31.5	8.5	
Level of Service	C		C	C		C	C	B		C	A	
Approach Delay (s)		25.4			26.5			11.1			8.7	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	61.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	177	268	19	4	11
Future Volume (veh/h)	16	177	268	19	4	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	197	298	12	4	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	25	1752	1025	457	8	8
Arrive On Green	0.01	0.49	0.29	0.29	0.00	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	18	197	298	12	4	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.2	0.6	1.4	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.6	1.4	0.1	0.0	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	25	1752	1025	457	8	8
V/C Ratio(X)	0.71	0.11	0.29	0.03	0.47	0.00
Avail Cap(c_a), veh/h	1693	10978	7432	3315	2117	1883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.3	2.9	5.8	5.4	10.5	0.0
Incr Delay (d2), s/veh	12.7	0.0	0.3	0.0	14.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.0	2.9	6.1	5.4	24.9	0.0
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h		215	310		4	
Approach Delay, s/veh		4.6	6.1		24.9	
Approach LOS		A	A		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	16.1	5.0	4.3	11.8
Change Period (Y+Rc), s	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	65.0	25.0	20.0	44.0
Max Q Clear Time (g_c+I1), s	2.6	2.0	2.2	3.4
Green Ext Time (p_c), s	1.7	0.0	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	133	212	23	110	5	248	320	51	4	308	50
Future Volume (veh/h)	32	133	212	23	110	5	248	320	51	4	308	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	148	0	26	122	0	276	356	0	4	342	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	453		77	435		353	1406		14	728	
Arrive On Green	0.05	0.13	0.00	0.04	0.12	0.00	0.20	0.40	0.00	0.01	0.20	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	36	148	0	26	122	0	276	356	0	4	342	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.9	1.7	0.0	0.6	1.4	0.0	6.6	3.0	0.0	0.1	3.8	0.0
Cycle Q Clear(g_c), s	0.9	1.7	0.0	0.6	1.4	0.0	6.6	3.0	0.0	0.1	3.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	86	453		77	435		353	1406		14	728	
V/C Ratio(X)	0.42	0.33		0.34	0.28		0.78	0.25		0.30	0.47	
Avail Cap(c_a), veh/h	799	1593		799	1593		1198	3983		799	3187	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.6	17.7	0.0	20.7	17.8	0.0	17.0	9.1	0.0	22.0	15.6	0.0
Incr Delay (d2), s/veh	1.2	0.7	0.0	1.0	0.7	0.0	1.4	0.2	0.0	4.4	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.0	0.3	0.5	0.0	2.4	0.9	0.0	0.1	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	18.4	0.0	21.7	18.5	0.0	18.4	9.2	0.0	26.4	16.6	0.0
LnGrp LOS	C	B		C	B		B	A		C	B	
Approach Vol, veh/h		184	A		148	A		632	A		346	A
Approach Delay, s/veh		19.0			19.1			13.2			16.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	11.4	12.9	14.4	6.2	11.2	4.3	23.0
Change Period (Y+Rc), s	4.0	5.7	4.0	5.3	4.0	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	20.0	20.0	30.0	40.0	20.0	* 20	20.0	50.0
Max Q Clear Time (g_c+I1), s	2.6	3.7	8.6	5.8	2.9	3.4	2.1	5.0
Green Ext Time (p_c), s	0.0	0.8	0.6	3.4	0.0	0.7	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	35	41	36	7	24	18	962	26	81	371	4
Future Volume (veh/h)	9	35	41	36	7	24	18	962	26	81	371	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	39	2	40	8	0	20	1069	27	90	412	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	52	55	51	10		639	2157	54	116	1043	
Arrive On Green	0.03	0.03	0.03	0.03	0.03	0.00	0.36	0.61	0.61	0.07	0.29	0.00
Sat Flow, veh/h	378	1474	1585	1496	299	1585	1781	3542	89	1781	3647	0
Grp Volume(v), veh/h	49	0	2	48	0	0	20	536	560	90	412	0
Grp Sat Flow(s),veh/h/ln	1851	0	1585	1796	0	1585	1781	1777	1854	1781	1777	0
Q Serve(g_s), s	2.0	0.0	0.1	2.0	0.0	0.0	0.6	12.8	12.8	3.8	7.0	0.0
Cycle Q Clear(g_c), s	2.0	0.0	0.1	2.0	0.0	0.0	0.6	12.8	12.8	3.8	7.0	0.0
Prop In Lane	0.20		1.00	0.83		1.00	1.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	65	0	55	61	0		639	1082	1129	116	1043	
V/C Ratio(X)	0.76	0.00	0.04	0.79	0.00		0.03	0.50	0.50	0.77	0.40	
Avail Cap(c_a), veh/h	270	0	232	262	0		639	1082	1129	281	1043	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.3	0.0	35.4	36.4	0.0	0.0	15.8	8.3	8.3	35.0	21.5	0.0
Incr Delay (d2), s/veh	12.4	0.0	0.2	15.1	0.0	0.0	0.0	0.5	0.4	4.1	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.1	0.0	0.0	0.2	3.8	3.9	1.7	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	0.0	35.6	51.5	0.0	0.0	15.8	8.8	8.8	39.0	22.6	0.0
LnGrp LOS	D	A	D	D	A		B	A	A	D	C	
Approach Vol, veh/h		51			48	A		1116			502	A
Approach Delay, s/veh		48.3			51.5			8.9			25.5	
Approach LOS		D			D			A			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.6	33.0	28.0		7.5	9.0	52.0				
Change Period (Y+Rc), s		4.9	5.7	* 5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		11.1	12.0	* 22		11.1	12.0	22.3				
Max Q Clear Time (g_c+I1), s		4.0	2.6	9.0		4.0	5.8	14.8				
Green Ext Time (p_c), s		0.0	0.0	2.0		0.0	0.1	3.7				

Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	3	5	5	0	7	3	972	31	40	392	5
Future Volume (veh/h)	11	3	5	5	0	7	3	972	31	40	392	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	3	0	6	0	0	3	1080	33	44	436	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	4	0	103	0	22	4	2825	86	56	2984	41
Arrive On Green	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.80	0.80	0.03	0.83	0.83
Sat Flow, veh/h	1251	313	0	1661	0	1585	1781	3520	108	1781	3589	49
Grp Volume(v), veh/h	15	0	0	6	0	0	3	545	568	44	216	226
Grp Sat Flow(s),veh/h/ln	1564	0	0	1661	0	1585	1781	1777	1851	1781	1777	1861
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	0.0	0.2	7.9	7.9	2.2	2.1	2.1
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.3	0.0	0.0	0.2	7.9	7.9	2.2	2.1	2.1
Prop In Lane	0.80		0.00	1.00		1.00	1.00		0.06	1.00		0.03
Lane Grp Cap(c), veh/h	94	0	0	103	0	22	4	1426	1485	56	1477	1548
V/C Ratio(X)	0.16	0.00	0.00	0.06	0.00	0.00	0.70	0.38	0.38	0.78	0.15	0.15
Avail Cap(c_a), veh/h	503	0	0	492	0	458	396	1426	1485	396	1477	1548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.92	0.92	0.92	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	0.0	0.0	43.9	0.0	0.0	44.9	2.5	2.5	43.3	1.5	1.5
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.1	0.0	0.0	52.0	0.2	0.2	8.6	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.1	0.0	0.0	0.1	1.3	1.4	1.1	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.4	0.0	0.0	44.0	0.0	0.0	96.9	2.8	2.8	51.9	1.7	1.7
LnGrp LOS	D	A	A	D	A	A	F	A	A	D	A	A
Approach Vol, veh/h		15			6			1116			486	
Approach Delay, s/veh		44.4			44.0			3.0			6.2	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	80.5		5.3	6.8	77.9		5.3
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	30.3		26.0	20.0	30.3		26.0
Max Q Clear Time (g_c+I1), s	2.2	4.1		2.8	4.2	9.9		2.3
Green Ext Time (p_c), s	0.0	2.9		0.0	0.0	8.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	53	86	930	20	36	380
Future Volume (veh/h)	53	86	930	20	36	380
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	3	1033	21	40	422
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	78	70	2761	56	51	3014
Arrive On Green	0.04	0.04	0.78	0.78	0.01	0.28
Sat Flow, veh/h	1781	1585	3655	72	1781	3647
Grp Volume(v), veh/h	59	3	515	539	40	422
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1857	1781	1777
Q Serve(g_s), s	2.9	0.2	8.3	8.3	2.0	8.0
Cycle Q Clear(g_c), s	2.9	0.2	8.3	8.3	2.0	8.0
Prop In Lane	1.00	1.00		0.04	1.00	
Lane Grp Cap(c), veh/h	78	70	1378	1440	51	3014
V/C Ratio(X)	0.75	0.04	0.37	0.37	0.79	0.14
Avail Cap(c_a), veh/h	396	352	1378	1440	396	3014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.99	0.99
Uniform Delay (d), s/veh	42.5	41.2	3.2	3.2	44.3	7.8
Incr Delay (d2), s/veh	5.4	0.1	0.2	0.2	9.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.1	2.1	2.2	1.0	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.9	41.3	3.4	3.4	53.8	7.9
LnGrp LOS	D	D	A	A	D	A
Approach Vol, veh/h	62		1054			462
Approach Delay, s/veh	47.6		3.4			11.9
Approach LOS	D		A			B

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		8.0	6.6	75.5
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		60.3		20.0	20.0	36.3
Max Q Clear Time (g_c+I1), s		10.0		4.9	4.0	10.3
Green Ext Time (p_c), s		2.7		0.1	0.0	6.8

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	0	201	0	2	0	139	559	1	1	729	128
Future Volume (veh/h)	123	0	201	0	2	0	139	559	1	1	729	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1856	1870	1870	1870	1664	1708	1723	2067	2007	2052
Adj Flow Rate, veh/h	137	0	23	0	2	0	154	621	1	1	810	50
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	2	3	2	2	2	6	3	2	2	6	3
Cap, veh/h	417	0	182	0	9	0	191	1803	811	4	1666	760
Arrive On Green	0.12	0.00	0.12	0.00	0.00	0.00	0.12	0.56	0.56	0.00	0.44	0.44
Sat Flow, veh/h	3534	0	1540	0	1870	0	1585	3246	1460	1968	3813	1739
Grp Volume(v), veh/h	137	0	23	0	2	0	154	621	1	1	810	50
Grp Sat Flow(s),veh/h/ln	1767	0	1540	0	1870	0	1585	1623	1460	1968	1906	1739
Q Serve(g_s), s	2.3	0.0	0.9	0.0	0.1	0.0	6.0	6.7	0.0	0.0	9.7	1.1
Cycle Q Clear(g_c), s	2.3	0.0	0.9	0.0	0.1	0.0	6.0	6.7	0.0	0.0	9.7	1.1
Prop In Lane	1.00		1.00	0.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	417	0	182	0	9	0	191	1803	811	4	1666	760
V/C Ratio(X)	0.33	0.00	0.13	0.00	0.22	0.00	0.80	0.34	0.00	0.23	0.49	0.07
Avail Cap(c_a), veh/h	1107	0	482	0	586	0	496	2033	915	616	2388	1089
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	25.2	0.0	31.7	0.0	27.3	7.8	6.3	31.8	12.9	10.4
Incr Delay (d2), s/veh	0.7	0.0	0.5	0.0	4.3	0.0	3.0	0.2	0.0	9.7	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.3	0.0	0.0	0.0	2.1	1.5	0.0	0.0	3.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	0.0	25.7	0.0	36.0	0.0	30.3	8.0	6.3	41.5	13.2	10.5
LnGrp LOS	C	A	C	A	D	A	C	A	A	D	B	B
Approach Vol, veh/h		160			2			776			861	
Approach Delay, s/veh		26.4			36.0			12.4			13.1	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	41.9		4.3	11.7	34.3		13.5
Change Period (Y+Rc), s	4.0	6.4		4.0	4.0	6.4		6.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.0	8.7		2.1	8.0	11.7		4.3
Green Ext Time (p_c), s	0.0	12.8		0.0	0.2	16.2		0.8

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	0	4	2	0	2	11	687	0	5	923	5
Future Volume (veh/h)	4	0	4	2	0	2	11	687	0	5	923	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	0	0	2	0	0	12	763	0	6	1026	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	0	17	10	0	9	22	1832	817	14	1816	810
Arrive On Green	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.52	0.00	0.01	0.51	0.51
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	4	0	0	2	0	0	12	763	0	6	1026	4
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.0	0.3	5.3	0.0	0.1	7.9	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.0	0.0	0.0	0.3	5.3	0.0	0.1	7.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	19	0	17	10	0	9	22	1832	817	14	1816	810
V/C Ratio(X)	0.21	0.00	0.00	0.20	0.00	0.00	0.54	0.42	0.00	0.42	0.56	0.00
Avail Cap(c_a), veh/h	891	0	793	891	0	793	891	3999	1784	891	3999	1784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	0.0	19.8	0.0	0.0	19.6	6.0	0.0	19.7	6.7	4.8
Incr Delay (d2), s/veh	1.9	0.0	0.0	3.8	0.0	0.0	7.4	0.2	0.0	7.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.3	0.0	0.1	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	0.0	0.0	23.5	0.0	0.0	27.0	6.2	0.0	26.8	7.2	4.8
LnGrp LOS	C	A	A	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		4			2			775			1036	
Approach Delay, s/veh		21.5			23.5			6.5			7.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.4	4.5	26.8		4.2	4.3	27.0
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4
Max Green Setting (Gmax), s		20.0	20.0	45.0		20.0	20.0	45.0
Max Q Clear Time (g_c+I1), s		2.1	2.3	9.9		2.0	2.1	7.3
Green Ext Time (p_c), s		0.0	0.0	10.5		0.0	0.0	7.2

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1	322	22	17	3	298	639	31	1	829	95
Future Volume (veh/h)	60	1	322	22	17	3	298	639	31	1	829	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	0	30	14	33	0	331	710	17	1	921	27
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	362	0	161	131	276	0	379	1932	862	3	1699	527
Arrive On Green	0.10	0.00	0.10	0.07	0.07	0.00	0.21	0.54	0.54	0.00	0.33	0.33
Sat Flow, veh/h	3563	0	1585	1781	3741	0	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	68	0	30	14	33	0	331	710	17	1	921	27
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	1.4	0.0	1.4	0.6	0.6	0.0	14.0	8.9	0.4	0.0	11.5	0.9
Cycle Q Clear(g_c), s	1.4	0.0	1.4	0.6	0.6	0.0	14.0	8.9	0.4	0.0	11.5	0.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	362	0	161	131	276	0	379	1932	862	3	1699	527
V/C Ratio(X)	0.19	0.00	0.19	0.11	0.12	0.00	0.87	0.37	0.02	0.34	0.54	0.05
Avail Cap(c_a), veh/h	913	0	406	457	959	0	685	1932	862	457	1964	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	0.0	32.1	33.7	33.8	0.0	29.7	10.2	8.2	38.9	21.2	17.7
Incr Delay (d2), s/veh	0.4	0.0	0.9	0.6	0.3	0.0	2.5	0.2	0.0	23.5	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.6	0.3	0.3	0.0	5.7	2.8	0.1	0.0	4.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	33.0	34.3	34.1	0.0	32.3	10.4	8.2	62.4	21.6	17.7
LnGrp LOS	C	A	C	C	C	A	C	B	A	E	C	B
Approach Vol, veh/h		98			47			1058			949	
Approach Delay, s/veh		32.6			34.1			17.2			21.5	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	48.8		13.6	20.6	32.4		11.4
Change Period (Y+Rc), s	4.0	* 6.4		5.7	4.0	6.4		5.7
Max Green Setting (Gmax), s	20.0	* 40		20.0	30.0	30.0		20.0
Max Q Clear Time (g_c+I1), s	2.0	10.9		3.4	16.0	13.5		2.6
Green Ext Time (p_c), s	0.0	17.3		0.4	0.6	12.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	4	133	42	3	12	76	1084	55	67	939	23
Future Volume (veh/h)	134	4	133	42	3	12	76	1084	55	67	939	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	152	0	2	47	3	0	84	1204	33	74	1043	15
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	325	0	144	125	8	118	107	1885	585	541	3201	994
Arrive On Green	0.09	0.00	0.09	0.07	0.07	0.00	0.06	0.37	0.37	0.30	0.63	0.63
Sat Flow, veh/h	3563	0	1585	1679	107	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	152	0	2	50	0	0	84	1204	33	74	1043	15
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1786	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	4.9	0.0	0.1	3.2	0.0	0.0	5.6	23.4	1.6	3.6	11.5	0.4
Cycle Q Clear(g_c), s	4.9	0.0	0.1	3.2	0.0	0.0	5.6	23.4	1.6	3.6	11.5	0.4
Prop In Lane	1.00		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	0	144	133	0	118	107	1885	585	541	3201	994
V/C Ratio(X)	0.47	0.00	0.01	0.38	0.00	0.00	0.79	0.64	0.06	0.14	0.33	0.02
Avail Cap(c_a), veh/h	623	0	277	313	0	277	312	1885	585	541	3201	994
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	0.0	49.6	52.9	0.0	0.0	55.6	31.2	24.4	30.4	10.5	8.4
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.7	0.0	0.0	4.7	1.7	0.2	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.1	1.5	0.0	0.0	2.6	9.4	0.6	1.5	3.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.2	0.0	49.6	53.5	0.0	0.0	60.3	32.9	24.6	30.4	10.6	8.4
LnGrp LOS	D	A	D	D	A	A	E	C	C	C	B	A
Approach Vol, veh/h		154			50			1321			1132	
Approach Delay, s/veh		52.1			53.5			34.5			11.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	42.1	50.0		12.9	11.2	80.9		14.9
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	16.0	* 44		21.0	21.0	39.3		21.0
Max Q Clear Time (g_c+I1), s	5.6	25.4		5.2	7.6	13.5		6.9
Green Ext Time (p_c), s	0.1	11.4		0.1	0.1	11.8		0.3

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	114	336	69	137	0	187	1159	36	13	1085	175
Future Volume (veh/h)	204	114	336	69	137	0	187	1159	36	13	1085	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	227	127	57	77	152	0	208	1288	20	14	1206	113
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	308	261	137	182	154	272	2013	898	50	1833	818
Arrive On Green	0.14	0.16	0.16	0.08	0.10	0.00	0.08	0.57	0.57	0.03	0.52	0.52
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	227	127	57	77	152	0	208	1288	20	14	1206	113
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	15.0	7.3	3.7	5.0	9.6	0.0	7.1	29.6	0.7	0.9	29.8	4.5
Cycle Q Clear(g_c), s	15.0	7.3	3.7	5.0	9.6	0.0	7.1	29.6	0.7	0.9	29.8	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	257	308	261	137	182	154	272	2013	898	50	1833	818
V/C Ratio(X)	0.88	0.41	0.22	0.56	0.83	0.00	0.77	0.64	0.02	0.28	0.66	0.14
Avail Cap(c_a), veh/h	386	308	261	312	223	189	605	2013	898	312	1833	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	44.9	43.5	53.4	53.2	0.0	54.2	17.7	11.4	57.1	21.3	15.1
Incr Delay (d2), s/veh	10.8	1.4	0.7	1.3	22.3	0.0	1.7	1.6	0.0	1.1	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	3.4	1.5	2.2	5.5	0.0	3.0	11.2	0.2	0.4	11.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.2	46.3	44.1	54.8	75.5	0.0	55.9	19.3	11.5	58.3	22.4	15.3
LnGrp LOS	E	D	D	D	E	A	E	B	B	E	C	B
Approach Vol, veh/h		411			229			1516			1333	
Approach Delay, s/veh		54.2			68.6			24.2			22.1	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	74.0	13.2	25.4	13.4	67.9	21.3	17.4
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	21.0	39.0	21.0	19.3	21.0	39.0	26.0	14.3
Max Q Clear Time (g_c+I1), s	2.9	31.6	7.0	9.3	9.1	31.8	17.0	11.6
Green Ext Time (p_c), s	0.0	5.3	0.1	0.7	0.4	5.1	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	206	16	52	183	5	44	3	44	9	0	7
Future Volume (veh/h)	1	206	16	52	183	5	44	3	44	9	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	229	14	58	203	5	49	3	10	10	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	843	51	134	1137	28	146	9	30	43	0	0
Arrive On Green	0.00	0.25	0.25	0.08	0.32	0.32	0.11	0.11	0.11	0.02	0.00	0.00
Sat Flow, veh/h	1781	3403	207	1781	3544	87	1383	85	282	1781	0	0
Grp Volume(v), veh/h	1	119	124	58	102	106	62	0	0	10	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1833	1781	1777	1855	1750	0	0	1781	0	0
Q Serve(g_s), s	0.0	1.7	1.8	1.0	1.3	1.3	1.1	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.7	1.8	1.0	1.3	1.3	1.1	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.05	0.79		0.16	1.00		0.00
Lane Grp Cap(c), veh/h	6	440	454	134	570	595	185	0	0	43	0	0
V/C Ratio(X)	0.18	0.27	0.27	0.43	0.18	0.18	0.34	0.00	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	1102	1484	1531	1102	1484	1549	1245	0	0	1102	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.1	9.8	9.8	14.3	7.9	7.9	13.4	0.0	0.0	15.5	0.0	0.0
Incr Delay (d2), s/veh	5.7	0.6	0.6	0.8	0.3	0.2	0.4	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.5	0.3	0.3	0.3	0.4	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	10.4	10.4	15.1	8.2	8.2	13.8	0.0	0.0	16.5	0.0	0.0
LnGrp LOS	C	B	B	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		244			266			62			10	
Approach Delay, s/veh		10.4			9.7			13.8			16.5	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		7.4	6.4	13.7		4.8	4.1	16.1
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		23.0	20.0	27.0		20.0	20.0	27.0
Max Q Clear Time (g_c+I1), s		3.1	3.0	3.8		2.2	2.0	3.3
Green Ext Time (p_c), s		0.1	0.1	4.2		0.0	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	185	2	11	310	7	10	1	23	30	0	245
Future Volume (veh/h)	74	185	2	11	310	7	10	1	23	30	0	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	206	1	12	344	2	11	1	0	33	0	49
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	960	428	28	682	304	46	4	0	223	0	199
Arrive On Green	0.09	0.27	0.27	0.02	0.19	0.19	0.03	0.03	0.00	0.13	0.00	0.13
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1639	149	0	1781	0	1585
Grp Volume(v), veh/h	82	206	1	12	344	2	12	0	0	33	0	49
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1788	0	0	1781	0	1585
Q Serve(g_s), s	1.5	1.6	0.0	0.2	3.0	0.0	0.2	0.0	0.0	0.6	0.0	1.0
Cycle Q Clear(g_c), s	1.5	1.6	0.0	0.2	3.0	0.0	0.2	0.0	0.0	0.6	0.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	0.92		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	168	960	428	28	682	304	51	0	0	223	0	199
V/C Ratio(X)	0.49	0.21	0.00	0.43	0.50	0.01	0.24	0.00	0.00	0.15	0.00	0.25
Avail Cap(c_a), veh/h	1013	3033	1353	1013	3033	1353	1017	0	0	1368	0	1217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	9.9	9.4	17.1	12.7	11.5	16.7	0.0	0.0	13.7	0.0	13.9
Incr Delay (d2), s/veh	0.8	0.1	0.0	3.8	0.7	0.0	0.9	0.0	0.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.4	0.0	0.1	0.9	0.0	0.1	0.0	0.0	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	10.1	9.4	21.0	13.4	11.5	17.6	0.0	0.0	13.8	0.0	14.1
LnGrp LOS	B	B	A	C	B	B	B	A	A	B	A	B
Approach Vol, veh/h		289			358			12			82	
Approach Delay, s/veh		11.7			13.6			17.6			14.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		5.0	4.6	15.5		10.1	7.3	12.7
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0
Max Green Setting (Gmax), s		20.0	20.0	30.0		27.0	20.0	30.0
Max Q Clear Time (g_c+I1), s		2.2	2.2	3.6		3.0	3.5	5.0
Green Ext Time (p_c), s		0.0	0.0	1.0		0.2	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	302	0	273	0	1118	217	0	773	1070
Future Volume (veh/h)	0	0	0	302	0	273	0	1118	217	0	773	1070
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				336	0	244	0	1242	0	0	859	0
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				709	0	325	0	2078		0	2078	
Arrive On Green				0.21	0.00	0.21	0.00	0.58	0.00	0.00	0.58	0.00
Sat Flow, veh/h				3456	0	1585	0	3647	1585	0	3647	2790
Grp Volume(v), veh/h				336	0	244	0	1242	0	0	859	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1777	1585	0	1777	1395
Q Serve(g_s), s				4.3	0.0	7.3	0.0	11.3	0.0	0.0	6.7	0.0
Cycle Q Clear(g_c), s				4.3	0.0	7.3	0.0	11.3	0.0	0.0	6.7	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				709	0	325	0	2078		0	2078	
V/C Ratio(X)				0.47	0.00	0.75	0.00	0.60		0.00	0.41	
Avail Cap(c_a), veh/h				2055	0	943	0	4227		0	4227	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				17.6	0.0	18.8	0.0	6.7	0.0	0.0	5.7	0.0
Incr Delay (d2), s/veh				0.2	0.0	1.3	0.0	0.4	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	2.5	0.0	2.5	0.0	0.0	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				17.8	0.0	20.1	0.0	7.1	0.0	0.0	5.9	0.0
LnGrp LOS				B	A	C	A	A		A	A	
Approach Vol, veh/h					580			1242	A		859	A
Approach Delay, s/veh					18.8			7.1			5.9	
Approach LOS					B			A			A	

Timer - Assigned Phs	2		6		8						
Phs Duration (G+Y+Rc), s	34.8		34.8		15.7						
Change Period (Y+Rc), s	5.3		5.3		5.3						
Max Green Setting (Gmax), s	60.0		60.0		30.0						
Max Q Clear Time (g_c+I1), s	13.3		8.7		9.3						
Green Ext Time (p_c), s	16.2		9.9		1.1						

Intersection Summary	
HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	215	137	56	0	112	0	989	0	53	656	0
Future Volume (veh/h)	0	215	137	56	0	112	0	989	0	53	656	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	0	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	239	9	62	0	124	0	1099	0	59	729	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	0	423	189	319	0	0	0	1584	706	124	2045	0
Arrive On Green	0.00	0.12	0.12	0.09	0.00	0.00	0.00	0.45	0.00	0.07	0.58	0.00
Sat Flow, veh/h	0	3647	1585	3456	62		0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	0	239	9	62	28.0		0	1099	0	59	729	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1728	C		0	1777	1585	1781	1777	0
Q Serve(g_s), s	0.0	4.2	0.3	1.1			0.0	16.5	0.0	2.1	7.3	0.0
Cycle Q Clear(g_c), s	0.0	4.2	0.3	1.1			0.0	16.5	0.0	2.1	7.3	0.0
Prop In Lane	0.00		1.00	1.00			0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	423	189	319			0	1584	706	124	2045	0
V/C Ratio(X)	0.00	0.57	0.05	0.19			0.00	0.69	0.00	0.47	0.36	0.00
Avail Cap(c_a), veh/h	0	1601	714	1298			0	2669	1190	535	2669	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00			0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	27.7	26.0	27.9			0.0	14.8	0.0	29.8	7.5	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.1	0.1			0.0	0.7	0.0	1.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.8	0.1	0.4			0.0	5.7	0.0	0.9	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	28.8	26.1	28.0			0.0	15.5	0.0	30.8	7.7	0.0
LnGrp LOS	A	C	C	C			A	B	A	C	A	A
Approach Vol, veh/h		248						1099			788	
Approach Delay, s/veh		28.7						15.5			9.4	
Approach LOS		C						B			A	

Timer - Assigned Phs	1	2				6	7	8				
Phs Duration (G+Y+Rc), s	8.6	34.6				43.2	10.1	13.2				
Change Period (Y+Rc), s	4.0	4.9				4.9	4.0	5.3				
Max Green Setting (Gmax), s	20.0	50.0				50.0	25.0	30.0				
Max Q Clear Time (g_c+I1), s	4.1	18.5				9.3	3.1	6.2				
Green Ext Time (p_c), s	0.0	11.1				6.9	0.1	1.4				

Intersection Summary												
HCM 6th Ctrl Delay			15.2									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	100	4	6	203	124	7	30	13	160	14	81
Future Volume (veh/h)	41	100	4	6	203	124	7	30	13	160	14	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	111	1	7	226	27	8	33	1	178	16	21
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	743	332	13	627	280	34	140	148	378	34	365
Arrive On Green	0.04	0.21	0.21	0.01	0.18	0.18	0.09	0.09	0.09	0.23	0.23	0.23
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	361	1491	1585	1641	147	1585
Grp Volume(v), veh/h	46	111	1	7	226	27	41	0	1	194	0	21
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1852	0	1585	1788	0	1585
Q Serve(g_s), s	1.0	1.0	0.0	0.2	2.2	0.6	0.8	0.0	0.0	3.7	0.0	0.4
Cycle Q Clear(g_c), s	1.0	1.0	0.0	0.2	2.2	0.6	0.8	0.0	0.0	3.7	0.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	0.20		1.00	0.92		1.00
Lane Grp Cap(c), veh/h	72	743	332	13	627	280	173	0	148	412	0	365
V/C Ratio(X)	0.64	0.15	0.00	0.52	0.36	0.10	0.24	0.00	0.01	0.47	0.00	0.06
Avail Cap(c_a), veh/h	500	2176	970	500	2176	970	1701	0	1456	1642	0	1456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.5	12.7	12.3	19.4	14.2	13.5	16.5	0.0	16.1	13.0	0.0	11.8
Incr Delay (d2), s/veh	3.5	0.1	0.0	11.4	0.4	0.2	0.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.3	0.0	0.1	0.7	0.2	0.3	0.0	0.0	1.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.1	12.8	12.3	30.7	14.6	13.7	16.7	0.0	16.1	13.3	0.0	11.8
LnGrp LOS	C	B	B	C	B	B	B	A	B	B	A	B
Approach Vol, veh/h		158			260			42			215	
Approach Delay, s/veh		15.5			14.9			16.7			13.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	14.2		7.7	5.6	12.9		13.0
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	11.0	24.0		36.0	11.0	24.0		36.0
Max Q Clear Time (g_c+I1), s	2.2	3.0		2.8	3.0	4.2		5.7
Green Ext Time (p_c), s	0.0	1.2		0.1	0.0	2.7		0.5

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	278	72	40	211	120	31	227	59	138	246	192
Future Volume (veh/h)	286	278	72	40	211	120	31	227	59	138	246	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	318	309	0	44	234	0	34	252	0	153	273	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	524	557		511	544		206	530		472	939	
Arrive On Green	0.15	0.16	0.00	0.15	0.15	0.00	0.06	0.15	0.00	0.14	0.26	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	318	309	0	44	234	0	34	252	0	153	273	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	4.5	4.2	0.0	0.6	3.1	0.0	0.5	3.4	0.0	2.1	3.2	0.0
Cycle Q Clear(g_c), s	4.5	4.2	0.0	0.6	3.1	0.0	0.5	3.4	0.0	2.1	3.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	524	557		511	544		206	530		472	939	
V/C Ratio(X)	0.61	0.55		0.09	0.43		0.16	0.48		0.32	0.29	
Avail Cap(c_a), veh/h	1058	1653		1058	1653		1058	952		1058	973	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.7	20.3	0.0	19.2	20.1	0.0	23.3	20.4	0.0	20.4	15.3	0.0
Incr Delay (d2), s/veh	0.4	1.5	0.0	0.0	0.9	0.0	0.1	1.0	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.5	0.0	0.2	1.1	0.0	0.2	1.3	0.0	0.7	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	21.8	0.0	19.2	21.0	0.0	23.5	21.3	0.0	20.5	15.6	0.0
LnGrp LOS	C	C		B	C		C	C		C	B	
Approach Vol, veh/h		627	A		278	A		286	A		426	A
Approach Delay, s/veh		21.5			20.7			21.6			17.4	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	13.9	7.1	19.5	11.9	13.7	12.8	13.8
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	5.7	* 6
Max Green Setting (Gmax), s	16.0	24.3	16.0	14.3	16.0	24.3	16.0	* 14
Max Q Clear Time (g_c+I1), s	2.6	6.2	2.5	5.2	6.5	5.1	4.1	5.4
Green Ext Time (p_c), s	0.0	2.0	0.0	1.2	0.5	1.5	0.2	0.9

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	347	18	18	187	26	20	152	34	165	131	99
Future Volume (veh/h)	149	347	18	18	187	26	20	152	34	165	131	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	166	386	16	20	208	16	22	169	28	183	146	82
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	790	33	53	451	34	76	257	43	287	318	178
Arrive On Green	0.12	0.23	0.23	0.03	0.13	0.13	0.04	0.16	0.16	0.16	0.28	0.28
Sat Flow, veh/h	1781	3478	144	1781	3346	255	1781	1564	259	1781	1125	632
Grp Volume(v), veh/h	166	197	205	20	110	114	22	0	197	183	0	228
Grp Sat Flow(s),veh/h/ln	1781	1777	1844	1781	1777	1824	1781	0	1824	1781	0	1757
Q Serve(g_s), s	4.0	4.3	4.3	0.5	2.5	2.6	0.5	0.0	4.5	4.3	0.0	4.8
Cycle Q Clear(g_c), s	4.0	4.3	4.3	0.5	2.5	2.6	0.5	0.0	4.5	4.3	0.0	4.8
Prop In Lane	1.00		0.08	1.00		0.14	1.00		0.14	1.00		0.36
Lane Grp Cap(c), veh/h	217	404	419	53	240	246	76	0	299	287	0	496
V/C Ratio(X)	0.76	0.49	0.49	0.38	0.46	0.46	0.29	0.00	0.66	0.64	0.00	0.46
Avail Cap(c_a), veh/h	641	1210	1256	440	1010	1037	440	0	1029	440	0	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.9	14.9	14.9	21.2	17.7	17.8	20.6	0.0	17.4	17.4	0.0	13.2
Incr Delay (d2), s/veh	2.1	1.2	1.2	1.7	1.8	1.8	0.8	0.0	3.4	0.9	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.5	1.6	0.2	1.0	1.0	0.2	0.0	1.9	1.5	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	16.2	16.1	22.9	19.6	19.6	21.4	0.0	20.8	18.3	0.0	14.1
LnGrp LOS	C	B	B	C	B	B	C	A	C	B	A	B
Approach Vol, veh/h		568			244			219			411	
Approach Delay, s/veh		17.6			19.8			20.9			16.0	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	12.2	5.3	15.8	5.9	17.5	9.4	11.7
Change Period (Y+Rc), s	4.0	4.9	4.0	5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	11.0	25.1	11.0	30.3	11.0	15.1	16.0	25.3
Max Q Clear Time (g_c+I1), s	6.3	6.5	2.5	6.3	2.5	6.8	6.0	4.6
Green Ext Time (p_c), s	0.1	1.0	0.0	2.1	0.0	0.7	0.2	1.0

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	9	566	228	16	78	0
Future Volume (veh/h)	9	566	228	16	78	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	629	253	14	87	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	29	1643	917	50	266	237
Arrive On Green	0.02	0.46	0.27	0.27	0.15	0.00
Sat Flow, veh/h	1781	3647	3518	189	1781	1585
Grp Volume(v), veh/h	10	629	131	136	87	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1836	1781	1585
Q Serve(g_s), s	0.1	2.6	1.3	1.3	1.0	0.0
Cycle Q Clear(g_c), s	0.1	2.6	1.3	1.3	1.0	0.0
Prop In Lane	1.00			0.10	1.00	1.00
Lane Grp Cap(c), veh/h	29	1643	476	492	266	237
V/C Ratio(X)	0.35	0.38	0.27	0.28	0.33	0.00
Avail Cap(c_a), veh/h	1272	8612	4306	4450	2146	1910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.9	3.9	6.5	6.5	8.5	0.0
Incr Delay (d2), s/veh	2.6	0.2	0.4	0.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.2	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.6	4.1	6.9	6.9	8.8	0.0
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h		639	267		87	
Approach Delay, s/veh		4.3	6.9		8.8	
Approach LOS		A	A		A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		16.1		6.3	4.4	11.7
Change Period (Y+Rc), s		5.7		3.0	4.0	5.7
Max Green Setting (Gmax), s		54.3		27.0	16.0	54.3
Max Q Clear Time (g_c+I1), s		4.6		3.0	2.1	3.3
Green Ext Time (p_c), s		4.3		0.2	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	590	55	69	179	0	113	0	79	0	1	0
Future Volume (veh/h)	0	590	55	69	179	0	113	0	79	0	1	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	656	55	77	199	0	126	0	12	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	1068	89	127	1743	0	310	0	275	0	5	0
Arrive On Green	0.00	0.32	0.32	0.07	0.49	0.00	0.17	0.00	0.17	0.00	0.00	0.00
Sat Flow, veh/h	1781	3319	278	1781	3647	0	1781	0	1585	0	1870	0
Grp Volume(v), veh/h	0	351	360	77	199	0	126	0	12	0	1	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1820	1781	1777	0	1781	0	1585	0	1870	0
Q Serve(g_s), s	0.0	6.9	6.9	1.7	1.2	0.0	2.6	0.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.9	6.9	1.7	1.2	0.0	2.6	0.0	0.3	0.0	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	4	572	586	127	1743	0	310	0	275	0	5	0
V/C Ratio(X)	0.00	0.61	0.61	0.61	0.11	0.00	0.41	0.00	0.04	0.00	0.22	0.00
Avail Cap(c_a), veh/h	867	1731	1773	867	3461	0	867	0	772	0	911	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	11.8	11.8	18.5	5.6	0.0	15.1	0.0	14.1	0.0	20.4	0.0
Incr Delay (d2), s/veh	0.0	1.4	1.4	1.7	0.0	0.0	0.3	0.0	0.0	0.0	8.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.2	2.2	0.6	0.3	0.0	0.9	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.2	13.2	20.3	5.7	0.0	15.4	0.0	14.1	0.0	29.2	0.0
LnGrp LOS	A	B	B	C	A	A	B	A	B	A	C	A
Approach Vol, veh/h		711			276			138			1	
Approach Delay, s/veh		13.2			9.8			15.3			29.2	
Approach LOS		B			A			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	18.9		11.1	0.0	25.8		4.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	3.7	8.9		4.6	0.0	3.2		2.0
Green Ext Time (p_c), s	0.1	4.3		0.2	0.0	1.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	544	18	48	248	3	17	7	109	24	14	24
Future Volume (veh/h)	6	544	18	48	248	3	17	7	109	24	14	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	604	18	53	276	3	19	8	17	27	16	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	1119	33	268	1646	18	195	22	153	186	13	153
Arrive On Green	0.01	0.32	0.32	0.15	0.46	0.46	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1781	3523	105	1781	3601	39	0	233	1585	0	134	1585
Grp Volume(v), veh/h	7	304	318	53	136	143	27	0	17	43	0	4
Grp Sat Flow(s),veh/h/ln	1781	1777	1851	1781	1777	1863	233	0	1585	134	0	1585
Q Serve(g_s), s	0.1	4.4	4.4	0.8	1.4	1.4	0.0	0.0	0.3	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.1	4.4	4.4	0.8	1.4	1.4	3.0	0.0	0.3	3.0	0.0	0.1
Prop In Lane	1.00		0.06	1.00		0.02	0.70		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	20	564	588	268	812	852	217	0	153	199	0	153
V/C Ratio(X)	0.35	0.54	0.54	0.20	0.17	0.17	0.12	0.00	0.11	0.22	0.00	0.03
Avail Cap(c_a), veh/h	1132	2371	2471	1358	2597	2724	1221	0	1209	1221	0	1209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	8.8	8.8	11.7	5.0	5.0	13.4	0.0	13.0	14.9	0.0	12.9
Incr Delay (d2), s/veh	3.8	1.1	1.0	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.0	1.0	0.2	0.2	0.2	0.1	0.0	0.1	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	9.9	9.9	11.8	5.2	5.1	13.5	0.0	13.1	15.1	0.0	12.9
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	B
Approach Vol, veh/h		629			332			44			47	
Approach Delay, s/veh		10.0			6.2			13.3			14.9	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.7	15.7		7.0	4.4	20.1		7.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	24.0	42.0		24.0	20.0	46.0		24.0
Max Q Clear Time (g_c+I1), s	2.8	6.4		5.0	2.1	3.4		5.0
Green Ext Time (p_c), s	0.1	3.5		0.1	0.0	1.4		0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	457	10	37	228	12	14	0	33	48	0	3
Future Volume (veh/h)	37	457	10	37	228	12	14	0	33	48	0	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	508	11	41	253	12	16	0	0	53	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	675	15	114	639	30	58	0	0	177	186	0
Arrive On Green	0.07	0.37	0.37	0.06	0.36	0.36	0.03	0.00	0.00	0.10	0.00	0.00
Sat Flow, veh/h	1781	1824	39	1781	1771	84	1781	0	0	1781	1870	0
Grp Volume(v), veh/h	41	0	519	41	0	265	16	0	0	53	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1863	1781	0	1855	1781	0	0	1781	1870	0
Q Serve(g_s), s	0.9	0.0	9.9	0.9	0.0	4.3	0.4	0.0	0.0	1.1	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	9.9	0.9	0.0	4.3	0.4	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.05	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	130	0	689	114	0	669	58	0	0	177	186	0
V/C Ratio(X)	0.32	0.00	0.75	0.36	0.00	0.40	0.28	0.00	0.00	0.30	0.00	0.00
Avail Cap(c_a), veh/h	874	0	2057	874	0	2048	874	0	0	874	918	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.9	0.0	11.2	18.3	0.0	9.7	19.3	0.0	0.0	17.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	2.2	0.7	0.0	0.5	1.9	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.9	0.3	0.0	1.2	0.2	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	0.0	13.5	19.0	0.0	10.2	21.1	0.0	0.0	17.4	0.0	0.0
LnGrp LOS	B	A	B	B	A	B	C	A	A	B	A	A
Approach Vol, veh/h		560			306			16			53	
Approach Delay, s/veh		13.8			11.4			21.1			17.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	20.8		5.3	7.0	20.4		8.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	45.0		20.0
Max Q Clear Time (g_c+I1), s	2.9	11.9		2.4	2.9	6.3		3.1
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	1.4		0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	47	50	174	20	21	27	261	153	27	282	0
Future Volume (veh/h)	36	47	50	174	20	21	27	261	153	27	282	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	52	3	193	22	4	30	290	39	30	313	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	135	207	293	33	289	63	398	337	76	781	0
Arrive On Green	0.13	0.13	0.13	0.18	0.18	0.18	0.04	0.21	0.21	0.04	0.22	0.00
Sat Flow, veh/h	796	1035	1585	1607	183	1585	1781	1870	1585	1781	3647	0
Grp Volume(v), veh/h	92	0	3	215	0	4	30	290	39	30	313	0
Grp Sat Flow(s),veh/h/ln	1831	0	1585	1790	0	1585	1781	1870	1585	1781	1777	0
Q Serve(g_s), s	1.8	0.0	0.1	4.5	0.0	0.1	0.7	5.8	0.8	0.7	3.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	0.1	4.5	0.0	0.1	0.7	5.8	0.8	0.7	3.0	0.0
Prop In Lane	0.43		1.00	0.90		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	239	0	207	326	0	289	63	398	337	76	781	0
V/C Ratio(X)	0.39	0.00	0.01	0.66	0.00	0.01	0.48	0.73	0.12	0.40	0.40	0.00
Avail Cap(c_a), veh/h	503	0	436	1163	0	1030	490	2089	1770	490	4066	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.9	0.0	15.2	15.2	0.0	13.4	18.9	14.7	12.7	18.7	13.4	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.8	0.0	0.0	2.1	1.0	0.1	1.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	1.6	0.0	0.0	0.3	2.1	0.2	0.3	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	0.0	15.2	16.1	0.0	13.4	21.0	15.7	12.8	19.9	13.7	0.0
LnGrp LOS	B	A	B	B	A	B	C	B	B	B	B	A
Approach Vol, veh/h		95			219			359			343	
Approach Delay, s/veh		16.3			16.0			15.8			14.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	13.8		9.2	5.4	14.1		11.3
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	11.0	44.7		11.0	11.0	* 46		26.0
Max Q Clear Time (g_c+I1), s	2.7	7.8		3.8	2.7	5.0		6.5
Green Ext Time (p_c), s	0.0	0.7		0.1	0.0	1.4		0.4

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	103	0	110	140	3	0	177	127	0	153	142
Future Volume (veh/h)	143	103	0	110	140	3	0	177	127	0	153	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	159	114	0	122	156	2	0	197	20	0	170	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	365	384	0	367	380	5	0	364	309	0	364	
Arrive On Green	0.21	0.21	0.00	0.21	0.21	0.21	0.00	0.19	0.19	0.00	0.19	0.00
Sat Flow, veh/h	1781	1870	0	1781	1842	24	0	1870	1585	0	1870	1585
Grp Volume(v), veh/h	159	114	0	122	0	158	0	197	20	0	170	0
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1866	0	1870	1585	0	1870	1585
Q Serve(g_s), s	2.8	1.9	0.0	2.1	0.0	2.7	0.0	3.5	0.4	0.0	2.9	0.0
Cycle Q Clear(g_c), s	2.8	1.9	0.0	2.1	0.0	2.7	0.0	3.5	0.4	0.0	2.9	0.0
Prop In Lane	1.00		0.00	1.00		0.01	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	365	384	0	367	0	385	0	364	309	0	364	
V/C Ratio(X)	0.44	0.30	0.00	0.33	0.00	0.41	0.00	0.54	0.06	0.00	0.47	
Avail Cap(c_a), veh/h	1121	1177	0	1511	0	1583	0	1842	1561	0	1842	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	12.7	12.3	0.0	12.4	0.0	12.6	0.0	13.2	12.0	0.0	13.0	0.0
Incr Delay (d2), s/veh	0.6	0.3	0.0	0.4	0.0	0.5	0.0	2.7	0.2	0.0	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.7	0.0	0.7	0.0	0.9	0.0	1.4	0.1	0.0	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.3	12.6	0.0	12.8	0.0	13.1	0.0	15.9	12.2	0.0	15.0	0.0
LnGrp LOS	B	B	A	B	A	B	A	B	B	A	B	
Approach Vol, veh/h		273			280			217			170	A
Approach Delay, s/veh		13.0			13.0			15.6			15.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.4		11.3		12.8		11.3				
Change Period (Y+Rc), s		4.9		* 4.2		5.3		* 4.2				
Max Green Setting (Gmax), s		31.0		* 36		23.0		* 36				
Max Q Clear Time (g_c+I1), s		4.7		4.9		4.8		5.5				
Green Ext Time (p_c), s		0.8		1.4		0.7		1.9				

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	255	68	20	214	18	81	18	20	3	16	7
Future Volume (veh/h)	13	255	68	20	214	18	81	18	20	3	16	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	283	40	22	238	16	90	20	3	3	18	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	606	535	294	542	35	588	31	160	291	61	3
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	44	1797	1585	80	1606	104	1388	308	1585	101	606	34
Grp Volume(v), veh/h	297	0	40	276	0	0	110	0	3	22	0	0
Grp Sat Flow(s),veh/h/ln	1841	0	1585	1790	0	0	1697	0	1585	740	0	0
Q Serve(g_s), s	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	0.3	1.7	0.0	0.0	0.9	0.0	0.0	1.0	0.0	0.0
Prop In Lane	0.05		1.00	0.08		0.06	0.82		1.00	0.14		0.05
Lane Grp Cap(c), veh/h	879	0	535	870	0	0	620	0	160	355	0	0
V/C Ratio(X)	0.34	0.00	0.07	0.32	0.00	0.00	0.18	0.00	0.02	0.06	0.00	0.00
Avail Cap(c_a), veh/h	3997	0	3259	3870	0	0	2675	0	2390	2848	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.8	0.0	3.3	3.8	0.0	0.0	6.3	0.0	5.9	6.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.0	0.0	3.3	3.9	0.0	0.0	6.3	0.0	5.9	6.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		337			276			113			22	
Approach Delay, s/veh		3.9			3.9			6.3			6.8	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	9.1	5.5	9.1	5.5
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 30	22.0	* 30	22.0
Max Q Clear Time (g_c+I1), s	3.8	2.9	3.7	3.0
Green Ext Time (p_c), s	1.1	0.2	0.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	292	9	10	299	7	12	4	17	2	5	1
Future Volume (veh/h)	4	292	9	10	299	7	12	4	17	2	5	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	324	9	11	332	7	13	4	0	2	6	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	670	18	286	663	14	493	7	29	342	25	0
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.02	0.02	0.00	0.02	0.02	0.00
Sat Flow, veh/h	10	1794	49	29	1775	37	1199	369	1585	449	1348	0
Grp Volume(v), veh/h	337	0	0	350	0	0	17	0	0	8	0	0
Grp Sat Flow(s),veh/h/ln	1853	0	0	1841	0	0	1568	0	1585	1797	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	2.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Prop In Lane	0.01		0.03	0.03		0.02	0.76		1.00	0.25		0.00
Lane Grp Cap(c), veh/h	962	0	0	963	0	0	500	0	29	367	0	0
V/C Ratio(X)	0.35	0.00	0.00	0.36	0.00	0.00	0.03	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	4377	0	0	4331	0	0	2915	0	2587	3158	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	0.0	0.0	3.3	0.0	0.0	6.6	0.0	0.0	6.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.4	0.0	0.0	3.4	0.0	0.0	6.6	0.0	0.0	6.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		337			350			17			8	
Approach Delay, s/veh		3.4			3.4			6.6			6.5	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	9.2	4.2	9.2	4.2
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 30	22.0	* 30	22.0
Max Q Clear Time (g_c+I1), s	3.9	2.1	4.0	2.1
Green Ext Time (p_c), s	1.0	0.0	1.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	192	17	172	236	3	43	13	272	4	12	2
Future Volume (veh/h)	17	192	17	172	236	3	43	13	272	4	12	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	213	16	191	262	3	48	14	109	4	13	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	26	379	28	260	649	7	243	22	137	220	212	0
Arrive On Green	0.01	0.22	0.22	0.15	0.35	0.35	0.14	0.14	0.14	0.14	0.14	0.00
Sat Flow, veh/h	1781	1718	129	1781	1845	21	407	157	992	284	1533	0
Grp Volume(v), veh/h	19	0	229	191	0	265	171	0	0	17	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1847	1781	0	1867	1556	0	0	1817	0	0
Q Serve(g_s), s	0.3	0.0	2.7	2.5	0.0	2.6	2.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	2.7	2.5	0.0	2.6	2.6	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.01	0.28		0.64	0.24		0.00
Lane Grp Cap(c), veh/h	26	0	408	260	0	656	402	0	0	431	0	0
V/C Ratio(X)	0.72	0.00	0.56	0.74	0.00	0.40	0.43	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	868	0	2776	2026	0	3412	1445	0	0	1566	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.1	0.0	8.5	10.1	0.0	6.0	10.3	0.0	0.0	9.2	0.0	0.0
Incr Delay (d2), s/veh	12.7	0.0	1.0	1.5	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	0.7	0.0	0.5	0.6	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	0.0	9.5	11.6	0.0	6.4	10.5	0.0	0.0	9.2	0.0	0.0
LnGrp LOS	C	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		248			456			171			17	
Approach Delay, s/veh		10.7			8.5			10.5			9.2	
Approach LOS		B			A			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	9.6		7.4	4.4	12.9		7.4
Change Period (Y+Rc), s	4.0	* 4.2		4.0	4.0	* 4.2		4.0
Max Green Setting (Gmax), s	28.0	* 37		20.0	12.0	* 45		20.0
Max Q Clear Time (g_c+I1), s	4.5	4.7		4.6	2.3	4.6		2.2
Green Ext Time (p_c), s	0.4	0.7		0.3	0.0	0.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	85	146	42	66	9	173	385	10	15	708	0
Future Volume (veh/h)	76	85	146	42	66	9	173	385	10	15	708	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	94	15	47	73	1	192	428	4	17	787	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	180	296	125	195	277	238	635	283	409	1068	
Arrive On Green	0.19	0.19	0.19	0.17	0.17	0.17	0.13	0.18	0.18	0.23	0.30	0.00
Sat Flow, veh/h	862	965	1585	718	1116	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	178	0	15	120	0	1	192	428	4	17	787	0
Grp Sat Flow(s),veh/h/ln	1827	0	1585	1834	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	6.4	0.0	0.6	4.2	0.0	0.0	7.7	8.3	0.2	0.5	14.6	0.0
Cycle Q Clear(g_c), s	6.4	0.0	0.6	4.2	0.0	0.0	7.7	8.3	0.2	0.5	14.6	0.0
Prop In Lane	0.47		1.00	0.39		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	342	0	296	320	0	277	238	635	283	409	1068	
V/C Ratio(X)	0.52	0.00	0.05	0.37	0.00	0.00	0.81	0.67	0.01	0.04	0.74	
Avail Cap(c_a), veh/h	498	0	432	500	0	432	607	1937	864	485	1937	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.9	0.0	24.5	26.8	0.0	25.0	30.9	28.2	24.8	22.0	23.1	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.3	0.0	0.0	2.5	1.7	0.0	0.0	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.2	1.8	0.0	0.0	3.2	3.4	0.1	0.2	5.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	0.0	24.5	27.0	0.0	25.0	33.4	29.9	24.8	22.0	24.5	0.0
LnGrp LOS	C	A	C	C	A	C	C	C	C	C	C	
Approach Vol, veh/h		193			121			624			804	A
Approach Delay, s/veh		27.1			27.0			30.9			24.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.8	18.0		16.8	12.8	26.1		17.7				
Change Period (Y+Rc), s	4.0	4.9		4.0	3.0	* 4		4.0				
Max Green Setting (Gmax), s	20.0	40.0		20.0	25.0	* 40		20.0				
Max Q Clear Time (g_c+I1), s	2.5	10.3		6.2	9.7	16.6		8.4				
Green Ext Time (p_c), s	0.0	2.8		0.2	0.3	5.4		0.3				

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	204	0	0	307	118	0	0	0	82	0	22
Future Volume (veh/h)	12	204	0	0	307	118	0	0	0	82	0	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	227	0	0	341	30	0	0	0	91	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	1662	0	0	581	493	0	0	0	948	498	0
Arrive On Green	0.02	0.47	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.27	0.00	0.00
Sat Flow, veh/h	1781	3647	0	0	1870	1585		0		3563	1870	0
Grp Volume(v), veh/h	13	227	0	0	341	30		0.0		91	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1585				1781	1870	0
Q Serve(g_s), s	0.2	1.1	0.0	0.0	4.6	0.4				0.6	0.0	0.0
Cycle Q Clear(g_c), s	0.2	1.1	0.0	0.0	4.6	0.4				0.6	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00				1.00		0.00
Lane Grp Cap(c), veh/h	43	1662	0	0	581	493				948	498	0
V/C Ratio(X)	0.30	0.14	0.00	0.00	0.59	0.06				0.10	0.00	0.00
Avail Cap(c_a), veh/h	889	3546	0	0	1866	1582				2607	1369	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	14.4	4.5	0.0	0.0	8.7	7.3				8.3	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.0	1.3	0.1				0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.2	0.0	0.0	1.3	0.1				0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	4.6	0.0	0.0	10.0	7.3				8.3	0.0	0.0
LnGrp LOS	B	A	A	A	A	A				A	A	A
Approach Vol, veh/h		240			371						91	
Approach Delay, s/veh		5.2			9.8						8.3	
Approach LOS		A			A						A	

Timer - Assigned Phs				4		6	7	8				
Phs Duration (G+Y+Rc), s				18.1		12.0	4.7	13.3				
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s				30.0		22.0	15.0	30.0				
Max Q Clear Time (g_c+I1), s				3.1		2.6	2.2	6.6				
Green Ext Time (p_c), s				1.9		0.1	0.0	2.8				

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	294	435	242	135	28	153
Future Volume (veh/h)	294	435	242	135	28	153
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	327	170	210	233	31	47
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	582	518	723	588	588	498
Arrive On Green	0.33	0.33	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	1585	1321	1870	1870	1585
Grp Volume(v), veh/h	327	170	210	233	31	47
Grp Sat Flow(s),veh/h/ln	1781	1585	1321	1870	1870	1585
Q Serve(g_s), s	3.4	1.8	2.9	2.2	0.3	0.5
Cycle Q Clear(g_c), s	3.4	1.8	3.2	2.2	0.3	0.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	582	518	723	588	588	498
V/C Ratio(X)	0.56	0.33	0.29	0.40	0.05	0.09
Avail Cap(c_a), veh/h	1999	1779	1790	2099	2351	1992
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.2	5.7	6.4	6.0	5.3	5.4
Incr Delay (d2), s/veh	1.1	0.5	0.1	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.3	0.4	0.4	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.3	6.1	6.5	6.1	5.3	5.4
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	497			443	78	
Approach Delay, s/veh	6.9			6.3	5.4	
Approach LOS	A			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		11.0		11.3		11.0
Change Period (Y+Rc), s		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		25.0		28.0
Max Q Clear Time (g_c+I1), s		5.2		5.4		2.5
Green Ext Time (p_c), s		1.1		2.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	44	4	374	86	88	2	278	342	66	259	8
Future Volume (veh/h)	8	44	4	374	86	88	2	278	342	66	259	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	49	0	416	96	15	2	309	92	73	288	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	429	465	144	596	713	219	259	724	321	403	724	321
Arrive On Green	0.12	0.09	0.00	0.17	0.14	0.14	0.07	0.20	0.20	0.12	0.20	0.20
Sat Flow, veh/h	3456	5106	1585	3456	5106	1571	3456	3554	1573	3456	3554	1573
Grp Volume(v), veh/h	9	49	0	416	96	15	2	309	92	73	288	9
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1571	1728	1777	1573	1728	1777	1573
Q Serve(g_s), s	0.1	0.4	0.0	5.4	0.8	0.2	0.0	3.6	1.2	0.9	3.4	0.2
Cycle Q Clear(g_c), s	0.1	0.4	0.0	5.4	0.8	0.2	0.0	3.6	1.2	0.9	3.4	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	465	144	596	713	219	259	724	321	403	724	321
V/C Ratio(X)	0.02	0.11	0.00	0.70	0.13	0.07	0.01	0.43	0.29	0.18	0.40	0.03
Avail Cap(c_a), veh/h	1437	2124	659	1581	2336	719	1437	2439	1080	1437	2439	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	20.1	0.0	18.7	18.1	7.0	20.6	16.7	4.4	19.2	16.6	15.3
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.6	0.1	0.2	0.0	0.8	0.9	0.1	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	1.7	0.3	0.1	0.0	1.2	0.7	0.3	1.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	20.2	0.0	19.3	18.3	7.2	20.6	17.5	5.4	19.2	17.3	15.4
LnGrp LOS	B	C	A	B	B	A	C	B	A	B	B	B
Approach Vol, veh/h		58			527			403			370	
Approach Delay, s/veh		19.9			18.7			14.7			17.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	15.8	12.3	10.4	9.6	15.8	10.0	12.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	20.0	33.0	22.0	20.0	20.0	* 33	20.0	22.0
Max Q Clear Time (g_c+I1), s	2.9	5.6	7.4	2.4	2.0	5.4	2.1	2.8
Green Ext Time (p_c), s	0.1	3.3	0.9	0.2	0.0	2.4	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	442	543	59	23	4
Future Volume (veh/h)	7	442	543	59	23	4
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	491	603	40	26	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	23	2752	1892	587	129	115
Arrive On Green	0.01	0.54	0.37	0.37	0.07	0.00
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	8	491	603	40	26	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.1	1.3	2.2	0.4	0.4	0.0
Cycle Q Clear(g_c), s	0.1	1.3	2.2	0.4	0.4	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	23	2752	1892	587	129	115
V/C Ratio(X)	0.35	0.18	0.32	0.07	0.20	0.00
Avail Cap(c_a), veh/h	1384	12499	8531	2648	1869	1663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.6	3.0	5.8	5.2	11.2	0.0
Incr Delay (d2), s/veh	3.3	0.0	0.1	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.4	0.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.9	3.1	5.9	5.3	11.5	0.0
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h		499	643		26	
Approach Delay, s/veh		3.3	5.9		11.5	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	19.9	5.9	4.3	15.5
Change Period (Y+Rc), s	6.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	63.0	27.0	20.0	43.0
Max Q Clear Time (g_c+I1), s	3.3	2.4	2.1	4.2
Green Ext Time (p_c), s	4.1	0.0	0.0	5.4

Intersection Summary	
HCM 6th Ctrl Delay	4.9
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	487	10	175	598	7	113
Future Volume (veh/h)	487	10	175	598	7	113
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	541	3	194	664	8	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1375	427	401	3135	106	95
Arrive On Green	0.27	0.27	0.22	0.61	0.06	0.06
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	541	3	194	664	8	16
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	2.9	0.0	3.2	1.9	0.1	0.3
Cycle Q Clear(g_c), s	2.9	0.0	3.2	1.9	0.1	0.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1375	427	401	3135	106	95
V/C Ratio(X)	0.39	0.01	0.48	0.21	0.08	0.17
Avail Cap(c_a), veh/h	4279	1328	1706	9170	1600	1423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	8.9	11.3	2.9	14.8	14.9
Incr Delay (d2), s/veh	0.3	0.0	0.3	0.0	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.0	0.2	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.2	8.9	11.6	2.9	14.9	15.2
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h	544			858	24	
Approach Delay, s/veh	10.2			4.9	15.1	
Approach LOS	B			A	B	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		6.9	11.5	15.0			26.5
Change Period (Y+Rc), s		4.9	4.0	6.0			6.0
Max Green Setting (Gmax), s		30.0	32.0	28.0			60.0
Max Q Clear Time (g_c+I1), s		2.3	5.2	4.9			3.9
Green Ext Time (p_c), s		0.0	0.4	4.0			5.8

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	553	727	190	104	11
Future Volume (veh/h)	21	553	727	190	104	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	614	808	105	116	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	61	2570	1853	571	369	328
Arrive On Green	0.03	0.50	0.36	0.36	0.21	0.21
Sat Flow, veh/h	1781	5274	5274	1574	1781	1585
Grp Volume(v), veh/h	23	614	808	105	116	2
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1574	1781	1585
Q Serve(g_s), s	0.5	2.6	4.5	1.7	2.1	0.0
Cycle Q Clear(g_c), s	0.5	2.6	4.5	1.7	2.1	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	61	2570	1853	571	369	328
V/C Ratio(X)	0.38	0.24	0.44	0.18	0.31	0.01
Avail Cap(c_a), veh/h	1041	7733	4477	1380	1562	1390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	5.3	9.1	8.2	12.7	11.8
Incr Delay (d2), s/veh	1.4	0.1	0.2	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.4	1.0	0.4	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.2	5.3	9.3	8.4	12.8	11.8
LnGrp LOS	B	A	A	A	B	B
Approach Vol, veh/h		637	913		118	
Approach Delay, s/veh		5.8	9.2		12.8	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		24.9		12.7	5.3	19.7
Change Period (Y+Rc), s		6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s		57.0		33.0	22.0	33.0
Max Q Clear Time (g_c+I1), s		4.6		4.1	2.5	6.5
Green Ext Time (p_c), s		4.9		0.2	0.0	7.0

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	210	0	0	0	24	0	0
Future Volume (veh/h)	0	0	0	0	0	210	0	0	0	24	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	0	0	29	0	0	0	27	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	111	49	41	111	49	21	42	19	52	103	46
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.03	0.00	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	0	0	29	0	0	0	27	0	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	41	111	49	41	111	49	21	42	19	52	103	46
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.52	0.00	0.00
Avail Cap(c_a), veh/h	1624	9602	4283	1624	9602	4283	837	9602	4283	3348	9602	4283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	4.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	7.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	14.7	0.0	0.0	0.0	12.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	B	A	A	A	B	A	A
Approach Vol, veh/h		0			29			0			27	
Approach Delay, s/veh		0.0			14.7			0.0			12.0	
Approach LOS					B						B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.2	0.0	0.0	4.3	0.0	4.2	0.0	4.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	23.0	4.0	23.0	4.0	23.0	4.0	23.0
Max Q Clear Time (g_c+I1), s	2.1	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	33	16	41	31	69	180	155	4	24	1
Future Volume (veh/h)	9	0	33	16	41	31	69	180	155	4	24	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	0	1	18	46	15	77	200	68	4	27	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	0	50	67	172	56	184	746	246	14	670	299
Arrive On Green	0.03	0.00	0.03	0.17	0.17	0.17	0.10	0.28	0.28	0.01	0.19	0.19
Sat Flow, veh/h	1781	0	1585	408	1042	340	1781	2625	866	1781	3554	1585
Grp Volume(v), veh/h	10	0	1	79	0	0	77	133	135	4	27	1
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1789	0	0	1781	1777	1714	1781	1777	1585
Q Serve(g_s), s	0.2	0.0	0.0	1.4	0.0	0.0	1.5	2.2	2.3	0.1	0.2	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	1.4	0.0	0.0	1.5	2.2	2.3	0.1	0.2	0.0
Prop In Lane	1.00		1.00	0.23		0.19	1.00		0.51	1.00		1.00
Lane Grp Cap(c), veh/h	57	0	50	295	0	0	184	505	487	14	670	299
V/C Ratio(X)	0.18	0.00	0.02	0.27	0.00	0.00	0.42	0.26	0.28	0.29	0.04	0.00
Avail Cap(c_a), veh/h	959	0	853	963	0	0	959	1913	1846	959	3826	1707
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	17.4	13.5	0.0	0.0	15.6	10.3	10.3	18.3	12.3	12.2
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.2	0.0	0.0	0.6	0.5	0.5	4.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.5	0.0	0.0	0.5	0.7	0.7	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	0.0	17.5	13.7	0.0	0.0	16.2	10.8	10.9	22.7	12.4	12.2
LnGrp LOS	B	A	B	B	A	A	B	B	B	C	B	B
Approach Vol, veh/h		11			79			345			32	
Approach Delay, s/veh		18.0			13.7			12.0			13.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.1	7.8	12.7		6.5	4.3	16.3				
Change Period (Y+Rc), s		4.0	4.0	5.7		5.3	4.0	5.7				
Max Green Setting (Gmax), s		20.0	20.0	40.0		20.0	20.0	40.0				
Max Q Clear Time (g_c+I1), s		3.4	3.5	2.2		2.2	2.1	4.3				
Green Ext Time (p_c), s		0.1	0.1	0.1		0.0	0.0	2.1				

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	5	21	35	1	0	173	387	66	0	169	4
Future Volume (veh/h)	11	5	21	35	1	0	173	387	66	0	169	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	6	0	39	1	0	192	430	39	0	188	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	11	0	66	2	60	253	1536	685	6	567	9
Arrive On Green	0.02	0.02	0.00	0.04	0.04	0.00	0.14	0.43	0.43	0.00	0.16	0.16
Sat Flow, veh/h	1207	603	0	1739	45	1585	1781	3554	1585	1781	3580	57
Grp Volume(v), veh/h	18	0	0	40	0	0	192	430	39	0	93	98
Grp Sat Flow(s),veh/h/ln	1810	0	0	1783	0	1585	1781	1777	1585	1781	1777	1860
Q Serve(g_s), s	0.3	0.0	0.0	0.7	0.0	0.0	3.1	2.4	0.4	0.0	1.4	1.4
Cycle Q Clear(g_c), s	0.3	0.0	0.0	0.7	0.0	0.0	3.1	2.4	0.4	0.0	1.4	1.4
Prop In Lane	0.67		0.00	0.97		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	34	0	0	67	0	60	253	1536	685	6	281	295
V/C Ratio(X)	0.54	0.00	0.00	0.59	0.00	0.00	0.76	0.28	0.06	0.00	0.33	0.33
Avail Cap(c_a), veh/h	1195	0	0	1177	0	1046	1176	4690	2092	1176	2345	2455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	0.0	14.4	0.0	0.0	12.5	5.6	5.0	0.0	11.3	11.3
Incr Delay (d2), s/veh	4.9	0.0	0.0	3.1	0.0	0.0	1.8	0.2	0.1	0.0	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.3	0.0	0.0	1.1	0.5	0.1	0.0	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	0.0	0.0	17.4	0.0	0.0	14.3	5.7	5.1	0.0	12.5	12.5
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	B	B
Approach Vol, veh/h		18			40			661			191	
Approach Delay, s/veh		19.6			17.4			8.2			12.5	
Approach LOS		B			B			A			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.0	8.3	10.5		5.5	0.0	18.8				
Change Period (Y+Rc), s		4.9	4.0	5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		20.0	20.0	40.0		20.0	20.0	40.0				
Max Q Clear Time (g_c+I1), s		2.7	5.1	3.4		2.3	0.0	4.4				
Green Ext Time (p_c), s		0.1	0.2	1.4		0.0	0.0	4.2				

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	162	112	477	334	136	269	638	417	104	568	27
Future Volume (veh/h)	16	162	112	477	334	136	269	638	417	104	568	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	180	14	530	371	43	299	709	141	116	631	7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	503	224	655	1026	458	415	1405	436	358	919	410
Arrive On Green	0.04	0.14	0.14	0.19	0.29	0.29	0.12	0.28	0.28	0.10	0.26	0.26
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	3554	1585
Grp Volume(v), veh/h	18	180	14	530	371	43	299	709	141	116	631	7
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1777	1585
Q Serve(g_s), s	0.3	3.2	0.5	10.1	5.7	1.4	5.7	8.1	4.9	2.1	11.0	0.2
Cycle Q Clear(g_c), s	0.3	3.2	0.5	10.1	5.7	1.4	5.7	8.1	4.9	2.1	11.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	503	224	655	1026	458	415	1405	436	358	919	410
V/C Ratio(X)	0.12	0.36	0.06	0.81	0.36	0.09	0.72	0.50	0.32	0.32	0.69	0.02
Avail Cap(c_a), veh/h	1003	1032	460	1003	1032	460	1003	2223	690	1003	1547	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	26.7	25.6	26.7	19.5	17.9	29.2	21.0	19.9	28.6	23.0	19.0
Incr Delay (d2), s/veh	0.1	0.7	0.2	1.5	0.3	0.1	0.9	0.5	0.8	0.2	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.3	0.2	3.8	2.1	0.5	2.2	2.8	1.7	0.8	4.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	27.5	25.8	28.2	19.8	18.0	30.1	21.6	20.7	28.8	24.8	19.1
LnGrp LOS	C	C	C	C	B	B	C	C	C	C	C	B
Approach Vol, veh/h		212			944			1149			754	
Approach Delay, s/veh		27.7			24.5			23.7			25.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	25.0	17.1	15.8	12.3	23.8	6.9	25.9
Change Period (Y+Rc), s	4.0	6.0	4.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	* 20	20.0	30.0	20.0	20.0
Max Q Clear Time (g_c+I1), s	4.1	10.1	12.1	5.2	7.7	13.0	2.3	7.7
Green Ext Time (p_c), s	0.2	6.9	0.9	1.0	0.6	4.8	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	686	856	148	107	14
Future Volume (veh/h)	19	686	856	148	107	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	762	951	0	119	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	74	2159	1681		283	
Arrive On Green	0.04	0.61	0.47	0.00	0.16	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	21	762	951	0	119	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.5	4.6	8.3	0.0	2.6	0.0
Cycle Q Clear(g_c), s	0.5	4.6	8.3	0.0	2.6	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	74	2159	1681		283	
V/C Ratio(X)	0.29	0.35	0.57		0.42	
Avail Cap(c_a), veh/h	831	5308	3649		1081	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	19.9	4.2	8.1	0.0	16.2	0.0
Incr Delay (d2), s/veh	0.8	0.1	0.5	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.9	2.3	0.0	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.7	4.3	8.6	0.0	16.6	0.0
LnGrp LOS	C	A	A		B	
Approach Vol, veh/h		783	951	A	119	A
Approach Delay, s/veh		4.8	8.6		16.6	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		32.0		10.8	5.8	26.3
Change Period (Y+Rc), s		6.0		4.0	4.0	* 6
Max Green Setting (Gmax), s		64.0		26.0	20.0	* 44
Max Q Clear Time (g_c+I1), s		6.6		4.6	2.5	10.3
Green Ext Time (p_c), s		6.9		0.2	0.0	10.0

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	780	1053	40	55	10
Future Volume (veh/h)	11	780	1053	40	55	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	12	867	1170	42	61	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	39	2296	1837	66	198	3
Arrive On Green	0.02	0.65	0.52	0.52	0.11	0.11
Sat Flow, veh/h	1781	3647	3593	126	1750	29
Grp Volume(v), veh/h	12	867	594	618	63	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1848	1807	0
Q Serve(g_s), s	0.3	4.6	9.6	9.6	1.3	0.0
Cycle Q Clear(g_c), s	0.3	4.6	9.6	9.6	1.3	0.0
Prop In Lane	1.00			0.07	0.97	0.02
Lane Grp Cap(c), veh/h	39	2296	933	970	204	0
V/C Ratio(X)	0.31	0.38	0.64	0.64	0.31	0.00
Avail Cap(c_a), veh/h	885	4412	1324	1376	898	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.4	3.3	6.8	6.8	16.4	0.0
Incr Delay (d2), s/veh	1.6	0.2	1.2	1.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.7	2.5	2.6	0.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.0	3.5	8.1	8.0	16.7	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		879	1212		63	
Approach Delay, s/veh		3.8	8.0		16.7	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	31.7	8.6	4.9	26.8
Change Period (Y+Rc), s	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	50.0	20.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	6.6	3.3	2.3	11.6
Green Ext Time (p_c), s	9.4	0.1	0.0	9.5

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	796	1071	55	40	16
Future Volume (veh/h)	37	796	1071	55	40	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	884	1190	59	44	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	112	2368	1759	87	152	136
Arrive On Green	0.06	0.67	0.51	0.51	0.09	0.00
Sat Flow, veh/h	1781	3647	3537	171	1781	1585
Grp Volume(v), veh/h	41	884	614	635	44	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1838	1781	1585
Q Serve(g_s), s	1.0	4.8	11.1	11.2	1.0	0.0
Cycle Q Clear(g_c), s	1.0	4.8	11.1	11.2	1.0	0.0
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	112	2368	908	939	152	136
V/C Ratio(X)	0.37	0.37	0.68	0.68	0.29	0.00
Avail Cap(c_a), veh/h	826	4119	1236	1278	826	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.4	3.2	7.9	7.9	18.5	0.0
Incr Delay (d2), s/veh	0.7	0.2	1.4	1.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	3.1	3.3	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.1	3.3	9.3	9.3	18.9	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		925	1249		44	
Approach Delay, s/veh		4.1	9.3		18.9	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	35.4	7.7	6.7	28.7
Change Period (Y+Rc), s	6.7	4.0	4.0	6.7
Max Green Setting (Gmax), s	50.0	20.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	6.8	3.0	3.0	13.2
Green Ext Time (p_c), s	8.9	0.0	0.0	8.9

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	690	147	285	983	319	209	242	193	244	267	155
Future Volume (veh/h)	103	690	147	285	983	319	209	242	193	244	267	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	114	767	0	317	1092	0	232	269	0	271	297	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	967		830	1698		288	433		327	518	
Arrive On Green	0.05	0.30	0.00	0.27	0.53	0.00	0.09	0.14	0.00	0.11	0.16	0.00
Sat Flow, veh/h	3110	3198	1427	3110	3198	1427	3110	3198	1427	3110	3198	1427
Grp Volume(v), veh/h	114	767	0	317	1092	0	232	269	0	271	297	0
Grp Sat Flow(s),veh/h/ln	1555	1599	1427	1555	1599	1427	1555	1599	1427	1555	1599	1427
Q Serve(g_s), s	4.3	26.4	0.0	10.0	29.2	0.0	8.8	9.5	0.0	10.2	10.3	0.0
Cycle Q Clear(g_c), s	4.3	26.4	0.0	10.0	29.2	0.0	8.8	9.5	0.0	10.2	10.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	967		830	1698		288	433		327	518	
V/C Ratio(X)	0.70	0.79		0.38	0.64		0.81	0.62		0.83	0.57	
Avail Cap(c_a), veh/h	415	967		830	1698		492	648		492	648	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.9	38.4	0.0	35.9	20.0	0.0	53.4	49.0	0.0	52.6	46.4	0.0
Incr Delay (d2), s/veh	2.0	6.6	0.0	0.1	1.0	0.0	2.0	2.5	0.0	4.4	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	10.7	0.0	3.6	10.0	0.0	3.4	3.8	0.0	4.1	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	45.0	0.0	36.0	21.1	0.0	55.4	51.5	0.0	57.0	48.2	0.0
LnGrp LOS	E	D		D	C		E	D		E	D	
Approach Vol, veh/h		881	A		1409	A		501	A		568	A
Approach Delay, s/veh		46.7			24.4			53.3			52.4	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	21.9	37.7	42.0	15.1	25.1	10.3	69.4
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	19.0	* 24	21.0	* 36	19.0	24.3	16.0	41.3
Max Q Clear Time (g_c+I1), s	12.2	11.5	12.0	28.4	10.8	12.3	6.3	31.2
Green Ext Time (p_c), s	0.4	1.4	0.5	3.4	0.3	1.6	0.1	5.7

Intersection Summary	
HCM 6th Ctrl Delay	39.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1083	27	144	1570	21	105
Future Volume (veh/h)	1083	27	144	1570	21	105
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1203	29	160	1744	23	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1996	48	189	2496	32	28
Arrive On Green	0.56	0.56	0.11	0.70	0.02	0.00
Sat Flow, veh/h	3639	85	1781	3647	1781	1585
Grp Volume(v), veh/h	603	629	160	1744	23	0
Grp Sat Flow(s),veh/h/ln	1777	1854	1781	1777	1781	1585
Q Serve(g_s), s	26.9	26.9	10.6	34.4	1.5	0.0
Cycle Q Clear(g_c), s	26.9	26.9	10.6	34.4	1.5	0.0
Prop In Lane		0.05	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1000	1044	189	2496	32	28
V/C Ratio(X)	0.60	0.60	0.85	0.70	0.72	0.00
Avail Cap(c_a), veh/h	1000	1044	386	2496	386	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.3	17.3	52.7	10.4	58.6	0.0
Incr Delay (d2), s/veh	2.7	2.6	4.0	1.7	10.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	11.0	4.8	11.0	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.0	19.9	56.6	12.1	69.6	0.0
LnGrp LOS	C	B	E	B	E	A
Approach Vol, veh/h	1232			1904	23	
Approach Delay, s/veh	20.0			15.8	69.6	
Approach LOS	B			B	E	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		6.1	16.7	73.3			90.0
Change Period (Y+Rc), s		4.0	4.0	5.7			5.7
Max Green Setting (Gmax), s		26.0	26.0	38.3			84.3
Max Q Clear Time (g_c+I1), s		3.5	12.6	28.9			36.4
Green Ext Time (p_c), s		0.1	0.2	8.5			44.6

Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	15	37	154	35	86	85	888	97	89	617	2
Future Volume (veh/h)	10	15	37	154	35	86	85	888	97	89	617	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	11	17	0	171	39	20	94	987	56	99	686	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	24	0	195	135	69	115	2896	899	121	2027	904
Arrive On Green	0.01	0.01	0.00	0.12	0.13	0.13	0.07	0.63	0.63	0.08	0.63	0.63
Sat Flow, veh/h	1603	1683	0	1603	1049	538	1603	4595	1427	1603	3198	1427
Grp Volume(v), veh/h	11	17	0	171	0	59	94	987	56	99	686	1
Grp Sat Flow(s),veh/h/ln	1603	1683	0	1603	0	1587	1603	1532	1427	1603	1599	1427
Q Serve(g_s), s	0.8	1.2	0.0	12.6	0.0	4.0	6.9	12.1	1.8	7.3	12.0	0.0
Cycle Q Clear(g_c), s	0.8	1.2	0.0	12.6	0.0	4.0	6.9	12.1	1.8	7.3	12.0	0.0
Prop In Lane	1.00		0.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	24	0	195	0	204	115	2896	899	121	2027	904
V/C Ratio(X)	0.89	0.70	0.00	0.88	0.00	0.29	0.81	0.34	0.06	0.82	0.34	0.00
Avail Cap(c_a), veh/h	307	309	0	214	0	204	240	2896	899	240	2027	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.5	58.9	0.0	51.8	0.0	47.4	54.9	10.4	8.5	54.7	10.2	8.1
Incr Delay (d2), s/veh	48.9	26.7	0.0	27.8	0.0	0.7	5.2	0.3	0.1	5.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.7	0.0	6.6	0.0	1.6	3.0	4.0	0.6	3.1	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	108.4	85.6	0.0	79.6	0.0	48.0	60.1	10.8	8.7	59.7	10.4	8.1
LnGrp LOS	F	F	A	E	A	D	E	B	A	E	B	A
Approach Vol, veh/h		28			230			1137			786	
Approach Delay, s/veh		94.6			71.5			14.7			16.6	
Approach LOS		F			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	81.6	18.6	6.7	12.6	82.0	4.9	20.4
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	18.0	45.0	16.0	22.0	18.0	45.0	23.0	15.0
Max Q Clear Time (g_c+I1), s	9.3	14.1	14.6	3.2	8.9	14.0	2.8	6.0
Green Ext Time (p_c), s	0.1	10.6	0.0	0.0	0.1	6.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	814	59	209	258	53	298
Future Volume (veh/h)	814	59	209	258	53	298
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	904	42	232	287	59	277
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	974	825	269	1341	305	511
Arrive On Green	0.52	0.52	0.15	0.72	0.17	0.17
Sat Flow, veh/h	1870	1585	1781	1870	1781	1585
Grp Volume(v), veh/h	904	42	232	287	59	277
Grp Sat Flow(s),veh/h/ln	1870	1585	1781	1870	1781	1585
Q Serve(g_s), s	39.9	1.2	11.3	4.6	2.5	12.8
Cycle Q Clear(g_c), s	39.9	1.2	11.3	4.6	2.5	12.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	974	825	269	1341	305	511
V/C Ratio(X)	0.93	0.05	0.86	0.21	0.19	0.54
Avail Cap(c_a), veh/h	1008	854	420	1449	540	720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	10.5	36.9	4.2	31.7	24.8
Incr Delay (d2), s/veh	14.8	0.1	6.7	0.2	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.7	0.4	5.0	1.1	1.0	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.6	10.6	43.6	4.4	31.8	25.1
LnGrp LOS	C	B	D	A	C	C
Approach Vol, veh/h	946			519	336	
Approach Delay, s/veh	33.5			21.9	26.3	
Approach LOS	C			C	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		19.2	17.5	52.4		69.9
Change Period (Y+Rc), s		4.0	4.0	6.0		6.0
Max Green Setting (Gmax), s		27.0	21.0	48.0		69.0
Max Q Clear Time (g_c+I1), s		14.8	13.3	41.9		6.6
Green Ext Time (p_c), s		0.4	0.2	4.4		3.7

Intersection Summary	
HCM 6th Ctrl Delay	28.8
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	601	267	4	179	99	193	13	541	196	118	640	306
Future Volume (veh/h)	601	267	4	179	99	193	13	541	196	118	640	306
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1870	1841	1841	1870	1870	1870	1841	1870	1841
Adj Flow Rate, veh/h	668	297	3	199	110	2	14	601	41	131	711	243
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	2	4	4	2	2	2	4	2	4
Cap, veh/h	700	1239	13	235	287	128	40	787	351	162	1034	1077
Arrive On Green	0.40	0.35	0.35	0.13	0.08	0.08	0.02	0.22	0.22	0.09	0.29	0.29
Sat Flow, veh/h	1753	3547	36	1781	3497	1560	1781	3554	1585	1753	3554	1560
Grp Volume(v), veh/h	668	146	154	199	110	2	14	601	41	131	711	243
Grp Sat Flow(s),veh/h/ln	1753	1749	1834	1781	1749	1560	1781	1777	1585	1753	1777	1560
Q Serve(g_s), s	36.1	5.8	5.8	10.7	2.9	0.1	0.8	15.5	2.0	7.2	17.3	5.6
Cycle Q Clear(g_c), s	36.1	5.8	5.8	10.7	2.9	0.1	0.8	15.5	2.0	7.2	17.3	5.6
Prop In Lane	1.00		0.02	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	700	611	641	235	287	128	40	787	351	162	1034	1077
V/C Ratio(X)	0.95	0.24	0.24	0.85	0.38	0.02	0.35	0.76	0.12	0.81	0.69	0.23
Avail Cap(c_a), veh/h	736	627	658	474	502	224	292	1056	471	287	1056	1087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	22.6	22.6	41.4	42.5	41.2	47.0	35.6	30.4	43.5	30.7	5.5
Incr Delay (d2), s/veh	22.0	0.4	0.4	3.2	1.6	0.1	1.9	3.6	0.3	3.7	2.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.5	2.2	2.4	4.7	1.3	0.0	0.4	7.0	0.8	3.1	7.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.5	22.9	22.9	44.6	44.1	41.3	48.9	39.2	30.7	47.1	33.0	5.7
LnGrp LOS	D	C	C	D	D	D	D	D	C	D	C	A
Approach Vol, veh/h		968			311			656			1085	
Approach Delay, s/veh		41.9			44.4			38.9			28.6	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	27.6	16.9	40.1	6.2	34.4	43.0	14.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	16.0	29.0	26.0	35.0	16.0	29.0	41.0	14.0
Max Q Clear Time (g_c+I1), s	9.2	17.5	12.7	7.8	2.8	19.3	38.1	4.9
Green Ext Time (p_c), s	0.1	4.2	0.3	6.2	0.0	4.9	0.9	1.1

Intersection Summary	
HCM 6th Ctrl Delay	36.7
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	514	0	0	373	109	0	0	0	66	0	151
Future Volume (veh/h)	229	514	0	0	373	109	0	0	0	66	0	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	0	1870	0	1870
Adj Flow Rate, veh/h	254	571	0	0	414	30	0	0	0	73	0	56
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	0	2	0	2
Cap, veh/h	328	1194	0	0	1274	568	4	0	0	219	0	0
Arrive On Green	0.18	0.64	0.00	0.00	0.36	0.36	0.00	0.00	0.00	0.12	0.00	0.00
Sat Flow, veh/h	1781	1870	0	0	3647	1585	1781	0		1781	73	
Grp Volume(v), veh/h	254	571	0	0	414	30	0	0.0		73	17.1	
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1585	1781			1781	B	
Q Serve(g_s), s	5.7	6.7	0.0	0.0	3.5	0.5	0.0			1.6		
Cycle Q Clear(g_c), s	5.7	6.7	0.0	0.0	3.5	0.5	0.0			1.6		
Prop In Lane	1.00		0.00	0.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	328	1194	0	0	1274	568	4			219		
V/C Ratio(X)	0.77	0.48	0.00	0.00	0.33	0.05	0.00			0.33		
Avail Cap(c_a), veh/h	1276	3126	0	0	4242	1892	851			851		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00			1.00		
Uniform Delay (d), s/veh	16.2	3.9	0.0	0.0	9.8	8.8	0.0			16.8		
Incr Delay (d2), s/veh	1.5	0.4	0.0	0.0	0.2	0.1	0.0			0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	1.8	0.5	0.0	0.0	0.9	0.1	0.0			0.5		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	4.4	0.0	0.0	10.0	8.8	0.0			17.1		
LnGrp LOS	B	A	A	A	A	A	A			B		
Approach Vol, veh/h		825			444							
Approach Delay, s/veh		8.5			9.9							
Approach LOS		A			A							

Timer - Assigned Phs	1			4	5		7	8
Phs Duration (G+Y+Rc), s	9.2			32.7	0.0		11.7	21.0
Change Period (Y+Rc), s	4.0			6.0	4.0		4.0	6.0
Max Green Setting (Gmax), s	20.0			70.0	20.0		30.0	50.0
Max Q Clear Time (g_c+I1), s	3.6			8.7	0.0		7.7	5.5
Green Ext Time (p_c), s	0.1			15.8	0.0		0.5	9.5

Intersection Summary			
HCM 6th Ctrl Delay			9.4
HCM 6th LOS			A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	489	31	49	486	0	101	0	54	142	0	48
Future Volume (veh/h)	75	489	31	49	486	0	101	0	54	142	0	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	83	543	32	54	540	0	112	0	3	158	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	196	729	43	81	1067		291	0	0	227	0	
Arrive On Green	0.11	0.42	0.42	0.05	0.30	0.00	0.16	0.00	0.00	0.13	0.00	0.00
Sat Flow, veh/h	1781	1748	103	1781	3554	1585	1781	112		1781	158	
Grp Volume(v), veh/h	83	0	575	54	540	0	112	14.6		158	17.4	
Grp Sat Flow(s),veh/h/ln	1781	0	1851	1781	1777	1585	1781	B		1781	B	
Q Serve(g_s), s	1.7	0.0	10.1	1.1	4.8	0.0	2.1			3.3		
Cycle Q Clear(g_c), s	1.7	0.0	10.1	1.1	4.8	0.0	2.1			3.3		
Prop In Lane	1.00		0.06	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	196	0	771	81	1067		291			227		
V/C Ratio(X)	0.42	0.00	0.75	0.66	0.51		0.38			0.70		
Avail Cap(c_a), veh/h	1117	0	1160	651	2228		1210			572		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	15.9	0.0	9.4	18.0	11.1	0.0	14.3			16.0		
Incr Delay (d2), s/veh	0.5	0.0	2.8	3.4	0.7	0.0	0.3			1.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.4	0.5	1.6	0.0	0.7			1.2		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.4	0.0	12.3	21.4	11.8	0.0	14.6			17.4		
LnGrp LOS	B	A	B	C	B		B			B		
Approach Vol, veh/h		658			594	A						
Approach Delay, s/veh		12.8			12.7							
Approach LOS		B			B							

Timer - Assigned Phs	1		3	4	5		7	8
Phs Duration (G+Y+Rc), s	10.6		5.7	22.0	10.3		10.2	17.5
Change Period (Y+Rc), s	5.7		4.0	6.0	4.0		6.0	* 6
Max Green Setting (Gmax), s	12.3		14.0	24.0	26.0		24.0	* 24
Max Q Clear Time (g_c+I1), s	5.3		3.1	12.1	4.1		3.7	6.8
Green Ext Time (p_c), s	0.2		0.0	3.9	0.2		0.1	4.3

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	170	306	92	253	117	537	1093	79	145	1164	121
Future Volume (veh/h)	149	170	306	92	253	117	537	1093	79	145	1164	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	166	189	27	102	281	7	597	1214	39	161	1293	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	489	218	127	355	158	678	1843	822	189	2187	
Arrive On Green	0.11	0.14	0.14	0.07	0.10	0.10	0.20	0.52	0.52	0.11	0.43	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	166	189	27	102	281	7	597	1214	39	161	1293	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1781	1702	1585
Q Serve(g_s), s	11.0	5.8	1.8	6.8	9.3	0.5	20.1	30.0	1.5	10.7	23.3	0.0
Cycle Q Clear(g_c), s	11.0	5.8	1.8	6.8	9.3	0.5	20.1	30.0	1.5	10.7	23.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	489	218	127	355	158	678	1843	822	189	2187	
V/C Ratio(X)	0.86	0.39	0.12	0.80	0.79	0.04	0.88	0.66	0.05	0.85	0.59	
Avail Cap(c_a), veh/h	267	489	218	238	444	198	806	1843	822	267	2187	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.5	47.1	45.4	54.9	52.8	48.8	46.9	21.1	14.3	52.7	26.3	0.0
Incr Delay (d2), s/veh	13.8	0.9	0.4	4.4	10.5	0.2	9.8	1.9	0.1	12.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	2.6	0.7	3.1	4.5	0.2	9.2	11.7	0.5	5.2	8.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.4	48.0	45.8	59.3	63.2	49.1	56.7	23.0	14.4	65.2	26.8	0.0
LnGrp LOS	E	D	D	E	E	D	E	C	B	E	C	
Approach Vol, veh/h		382			390			1850			1454	A
Approach Delay, s/veh		55.8			62.0			33.7			31.0	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	68.2	12.6	22.5	27.5	57.4	17.1	18.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	18.0	50.0	16.0	16.0	28.0	40.0	18.0	* 15
Max Q Clear Time (g_c+I1), s	12.7	32.0	8.8	7.8	22.1	25.3	13.0	11.3
Green Ext Time (p_c), s	0.1	6.8	0.1	0.8	1.4	7.7	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	37.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	0	59	0	0	0	28	639	0	0	718	7
Future Volume (veh/h)	136	0	59	0	0	0	28	639	0	0	718	7
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h	151	0	0				31	710	0	0	798	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2				2	2	0	0	2	2
Cap, veh/h	667	0					79	1897	0	0	1351	
Arrive On Green	0.19	0.00	0.00				0.04	0.53	0.00	0.00	0.38	0.00
Sat Flow, veh/h	3456	0	1585				1781	3647	0	0	3647	1585
Grp Volume(v), veh/h	151	0	0				31	710	0	0	798	0
Grp Sat Flow(s),veh/h/ln	1728	0	1585				1781	1777	0	0	1777	1585
Q Serve(g_s), s	1.3	0.0	0.0				0.6	4.3	0.0	0.0	6.6	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.0				0.6	4.3	0.0	0.0	6.6	0.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	667	0					79	1897	0	0	1351	
V/C Ratio(X)	0.23	0.00					0.39	0.37	0.00	0.00	0.59	
Avail Cap(c_a), veh/h	1889	0					973	4855	0	0	2913	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	12.5	0.0	0.0				17.0	5.0	0.0	0.0	9.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0				1.2	0.2	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0				0.2	0.4	0.0	0.0	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.5	0.0	0.0				18.2	5.1	0.0	0.0	9.6	0.0
LnGrp LOS	B	A					B	A	A	A	A	
Approach Vol, veh/h		151	A					741			798	A
Approach Delay, s/veh		12.5						5.7			9.6	
Approach LOS		B						A			A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		25.5		11.1	5.6	19.9
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		50.0		20.0	20.0	30.0
Max Q Clear Time (g_c+I1), s		6.3		3.3	2.6	8.6
Green Ext Time (p_c), s		5.0		0.3	0.0	5.1

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	7	20	46	0	354	3	367	49	269	835	8
Future Volume (veh/h)	27	7	20	46	0	354	3	367	49	269	835	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	8	0	51	0	0	3	408	0	299	928	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	120	32	134	0	0		12	1328		396	1102	930
Arrive On Green	0.08	0.08	0.00	0.00	0.00	0.00	0.01	0.37	0.00	0.22	0.59	0.59
Sat Flow, veh/h	1421	379	1585		0		1781	3554	1585	1781	1870	1578
Grp Volume(v), veh/h	38	0	0		0.0		3	408	0	299	928	5
Grp Sat Flow(s),veh/h/ln	1799	0	1585				1781	1777	1585	1781	1870	1578
Q Serve(g_s), s	0.9	0.0	0.0				0.1	3.6	0.0	6.9	17.7	0.1
Cycle Q Clear(g_c), s	0.9	0.0	0.0				0.1	3.6	0.0	6.9	17.7	0.1
Prop In Lane	0.79		1.00				1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	0	134				12	1328		396	1102	930
V/C Ratio(X)	0.25	0.00	0.00				0.26	0.31		0.76	0.84	0.01
Avail Cap(c_a), veh/h	821	0	724				813	2433		813	1281	1081
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	0.0	0.0				21.7	9.7	0.0	15.9	7.3	3.7
Incr Delay (d2), s/veh	0.3	0.0	0.0				4.2	0.3	0.0	1.1	5.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0				0.0	1.1	0.0	2.5	5.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	0.0	0.0				25.9	10.0	0.0	17.0	12.8	3.7
LnGrp LOS	B	A	A				C	A		B	B	A
Approach Vol, veh/h		38						411	A		1232	
Approach Delay, s/veh		19.1						10.1			13.8	
Approach LOS		B						B			B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	13.7	22.4		7.7	4.3	31.8
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s	20.0	30.0		20.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	8.9	5.6		2.9	2.1	19.7
Green Ext Time (p_c), s	0.5	3.6		0.0	0.0	6.1

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	2	69	16	2	0	109	441	15	4	320	14
Future Volume (veh/h)	9	2	69	16	2	0	109	441	15	4	320	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	2	1	18	2	0	121	490	9	4	356	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	4	22	33	4	0	157	1476	658	6	1175	524
Arrive On Green	0.01	0.01	0.01	0.02	0.02	0.00	0.09	0.42	0.42	0.00	0.33	0.33
Sat Flow, veh/h	1496	299	1585	1611	179	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	12	0	1	20	0	0	121	490	9	4	356	6
Grp Sat Flow(s),veh/h/ln	1796	0	1585	1790	0	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.2	0.0	0.0	0.4	0.0	0.0	2.2	3.1	0.1	0.1	2.5	0.1
Cycle Q Clear(g_c), s	0.2	0.0	0.0	0.4	0.0	0.0	2.2	3.1	0.1	0.1	2.5	0.1
Prop In Lane	0.83		1.00	0.90		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	24	0	22	36	0	0	157	1476	658	6	1175	524
V/C Ratio(X)	0.49	0.00	0.05	0.55	0.00	0.00	0.77	0.33	0.01	0.69	0.30	0.01
Avail Cap(c_a), veh/h	853	0	753	592	0	0	857	3100	1383	589	3100	1383
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	16.2	16.1	0.0	0.0	14.8	6.6	5.7	16.5	8.3	7.5
Incr Delay (d2), s/veh	5.6	0.0	0.3	4.8	0.0	0.0	3.0	0.2	0.0	41.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.2	0.0	0.0	0.7	0.5	0.0	0.1	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	0.0	16.5	20.9	0.0	0.0	17.8	6.8	5.7	58.4	8.5	7.5
LnGrp LOS	C	A	B	C	A	A	B	A	A	E	A	A
Approach Vol, veh/h		13			20			620			366	
Approach Delay, s/veh		21.4			20.9			8.9			9.0	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	19.8		4.7	6.9	17.0		4.7
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.2
Max Green Setting (Gmax), s	11.0	29.0		11.0	16.0	29.0		15.8
Max Q Clear Time (g_c+I1), s	2.1	5.1		2.4	4.2	4.5		2.2
Green Ext Time (p_c), s	0.0	8.7		0.0	0.1	6.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	0	11	37	0	71	105	799	19	20	543	8
Future Volume (veh/h)	22	0	11	37	0	71	105	799	19	20	543	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	0	0	41	0	7	117	888	20	22	603	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	0	91	195	0	174	211	1456	33	66	1179	18
Arrive On Green	0.06	0.00	0.00	0.11	0.00	0.11	0.12	0.41	0.41	0.04	0.33	0.33
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3553	80	1781	3584	53
Grp Volume(v), veh/h	24	0	0	41	0	7	117	444	464	22	299	313
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1856	1781	1777	1861
Q Serve(g_s), s	0.6	0.0	0.0	1.0	0.0	0.2	2.8	9.0	9.0	0.6	6.2	6.2
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.0	0.0	0.2	2.8	9.0	9.0	0.6	6.2	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.03
Lane Grp Cap(c), veh/h	102	0	91	195	0	174	211	728	761	66	584	612
V/C Ratio(X)	0.23	0.00	0.00	0.21	0.00	0.04	0.56	0.61	0.61	0.33	0.51	0.51
Avail Cap(c_a), veh/h	776	0	691	1592	0	1416	776	1549	1618	776	1549	1622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	0.0	0.0	18.6	0.0	18.3	19.1	10.7	10.7	21.5	12.4	12.4
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	0.9	1.4	1.4	1.1	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.4	0.0	0.1	1.0	2.8	2.9	0.2	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	0.0	18.8	0.0	18.3	19.9	12.1	12.0	22.6	13.6	13.6
LnGrp LOS	C	A	A	B	A	B	B	B	B	C	B	B
Approach Vol, veh/h		24			48			1025			634	
Approach Delay, s/veh		21.1			18.7			12.9			13.9	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.6	9.4	20.8		9.0	5.7	24.5				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		20.0	20.0	40.0		41.0	20.0	40.0				
Max Q Clear Time (g_c+I1), s		2.6	4.8	8.2		3.0	2.6	11.0				
Green Ext Time (p_c), s		0.0	0.2	4.8		0.1	0.0	7.8				

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	301	544	52	238	83	298	480	33	125	670	29
Future Volume (veh/h)	26	301	544	52	238	83	298	480	33	125	670	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2001	1924	1924	2001	1924	1924	2001	1924	1924	1954	1879	1879
Adj Flow Rate, veh/h	29	334	410	58	264	14	331	533	11	139	744	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	114	544	451	175	662	293	477	1413	628	228	1357	603
Arrive On Green	0.06	0.15	0.15	0.09	0.18	0.18	0.13	0.39	0.39	0.12	0.38	0.38
Sat Flow, veh/h	1906	3656	1614	1906	3656	1617	3698	3656	1624	1861	3571	1586
Grp Volume(v), veh/h	29	334	410	58	264	14	331	533	11	139	744	10
Grp Sat Flow(s),veh/h/ln	1906	1828	1614	1906	1828	1617	1849	1828	1624	1861	1785	1586
Q Serve(g_s), s	1.1	6.6	11.5	2.2	4.9	0.6	6.6	8.1	0.3	5.5	12.7	0.3
Cycle Q Clear(g_c), s	1.1	6.6	11.5	2.2	4.9	0.6	6.6	8.1	0.3	5.5	12.7	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	544	451	175	662	293	477	1413	628	228	1357	603
V/C Ratio(X)	0.25	0.61	0.91	0.33	0.40	0.05	0.69	0.38	0.02	0.61	0.55	0.02
Avail Cap(c_a), veh/h	492	943	627	492	943	417	954	1886	838	480	1842	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	30.9	27.1	33.0	28.0	26.2	32.3	17.1	14.7	32.3	18.8	15.0
Incr Delay (d2), s/veh	0.4	1.9	16.3	0.4	0.7	0.1	0.7	0.3	0.0	1.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.8	8.5	1.0	2.0	0.2	2.8	3.0	0.1	2.3	4.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	32.8	43.4	33.4	28.7	26.3	33.0	17.4	14.7	33.2	19.4	15.0
LnGrp LOS	D	C	D	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		773			336			875			893	
Approach Delay, s/veh		38.5			29.4			23.2			21.5	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	17.2	14.0	35.2	8.6	19.7	13.5	35.7
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	20.0	20.0	20.0	40.0	20.0	20.0	20.0	40.0
Max Q Clear Time (g_c+I1), s	4.2	8.6	8.6	14.7	3.1	6.9	7.5	10.1
Green Ext Time (p_c), s	0.1	2.4	1.0	14.3	0.0	3.2	0.3	11.2

Intersection Summary	
HCM 6th Ctrl Delay	27.5
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1156	49	70	754	52	82
Future Volume (veh/h)	1156	49	70	754	52	82
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1284	52	78	838	58	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1822	74	181	2482	221	197
Arrive On Green	0.52	0.52	0.10	0.70	0.12	0.12
Sat Flow, veh/h	3575	141	1781	3647	1781	1585
Grp Volume(v), veh/h	655	681	78	838	58	5
Grp Sat Flow(s),veh/h/ln	1777	1845	1781	1777	1781	1585
Q Serve(g_s), s	15.2	15.2	2.2	5.1	1.6	0.2
Cycle Q Clear(g_c), s	15.2	15.2	2.2	5.1	1.6	0.2
Prop In Lane		0.08	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	930	966	181	2482	221	197
V/C Ratio(X)	0.70	0.71	0.43	0.34	0.26	0.03
Avail Cap(c_a), veh/h	1302	1352	653	3906	653	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.8	9.8	23.0	3.3	21.7	21.0
Incr Delay (d2), s/veh	1.7	1.7	0.6	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	4.2	0.8	0.5	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.5	11.5	23.6	3.4	21.9	21.0
LnGrp LOS	B	B	C	A	C	C
Approach Vol, veh/h	1336			916	63	
Approach Delay, s/veh	11.5			5.1	21.8	
Approach LOS	B			A	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		10.8	9.5	34.3		43.8
Change Period (Y+Rc), s		4.0	4.0	5.7		* 5.7
Max Green Setting (Gmax), s		20.0	20.0	40.0		* 60
Max Q Clear Time (g_c+I1), s		3.6	4.2	17.2		7.1
Green Ext Time (p_c), s		0.1	0.1	11.3		8.4

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	328	746	43	206	72	266	929	37	92	907	45
Future Volume (veh/h)	104	328	746	43	206	72	266	929	37	92	907	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	364	0	48	229	0	296	1032	0	102	1008	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	450		116	399		361	1393		433	1942	
Arrive On Green	0.08	0.13	0.00	0.06	0.11	0.00	0.10	0.39	0.00	0.24	0.55	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	116	364	0	48	229	0	296	1032	0	102	1008	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	8.0	12.5	0.0	3.2	7.6	0.0	10.5	31.1	0.0	5.7	22.4	0.0
Cycle Q Clear(g_c), s	8.0	12.5	0.0	3.2	7.6	0.0	10.5	31.1	0.0	5.7	22.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	141	450		116	399		361	1393		433	1942	
V/C Ratio(X)	0.82	0.81		0.42	0.57		0.82	0.74		0.24	0.52	
Avail Cap(c_a), veh/h	228	549		228	560		719	1393		433	1942	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.7	53.1	0.0	56.2	52.7	0.0	54.8	32.6	0.0	38.0	17.9	0.0
Incr Delay (d2), s/veh	5.3	8.8	0.0	0.9	2.2	0.0	1.8	3.6	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	5.9	0.0	1.5	3.5	0.0	4.5	13.1	0.0	2.4	8.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.9	62.0	0.0	57.0	54.9	0.0	56.6	36.1	0.0	38.1	18.3	0.0
LnGrp LOS	E	E		E	D		E	D		D	B	
Approach Vol, veh/h		480	A		277	A		1328	A		1110	A
Approach Delay, s/veh		62.0			55.3			40.7			20.1	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.4	55.0	12.1	21.5	17.1	74.3	13.9	19.7
Change Period (Y+Rc), s	6.0	* 6	4.0	5.7	4.0	6.0	4.0	* 5.7
Max Green Setting (Gmax), s	21.0	* 49	16.0	19.3	26.0	39.0	16.0	* 20
Max Q Clear Time (g_c+I1), s	7.7	33.1	5.2	14.5	12.5	24.4	10.0	9.6
Green Ext Time (p_c), s	0.1	6.5	0.0	1.1	0.6	6.0	0.1	1.0

Intersection Summary	
HCM 6th Ctrl Delay	38.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	548	0	5	620	403	0	0	0	221	0	89
Future Volume (veh/h)	96	548	0	5	620	403	0	0	0	221	0	89
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1841	1841	0	1841	1841	1841				1841	0	1841
Adj Flow Rate, veh/h	107	609	0	6	1074	-76				246	0	38
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	4	4	0	4	4	4				4	0	4
Cap, veh/h	137	1983	0	0	1449	614				330	0	416
Arrive On Green	0.08	0.57	0.00	0.00	0.39	0.00				0.19	0.00	0.19
Sat Flow, veh/h	1753	3589	0	0	3681	1560				1753	0	1560
Grp Volume(v), veh/h	107	609	0	0	1074	-76				246	0	38
Grp Sat Flow(s),veh/h/ln	1753	1749	0	0	1841	1560				1753	0	1560
Q Serve(g_s), s	2.5	3.8	0.0	0.0	10.5	0.0				5.6	0.0	0.8
Cycle Q Clear(g_c), s	2.5	3.8	0.0	0.0	10.5	0.0				5.6	0.0	0.8
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	137	1983	0	0	1449	614				330	0	416
V/C Ratio(X)	0.78	0.31	0.00	0.00	0.74	-0.12				0.74	0.00	0.09
Avail Cap(c_a), veh/h	500	2351	0	0	2012	852				1166	0	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	19.0	4.8	0.0	0.0	10.9	0.0				16.1	0.0	11.6
Incr Delay (d2), s/veh	3.6	0.1	0.0	0.0	0.9	0.0				1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.6	0.0	0.0	2.9	0.0				2.1	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.7	4.9	0.0	0.0	11.9	0.0				17.4	0.0	11.6
LnGrp LOS	C	A	A	A	B	A				B	A	B
Approach Vol, veh/h		716			998						284	
Approach Delay, s/veh		7.5			12.8						16.6	
Approach LOS		A			B						B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	29.6		12.5	7.3	22.3
Change Period (Y+Rc), s	4.0	5.7		4.6	4.0	5.7
Max Green Setting (Gmax), s	24.0	28.3		28.0	12.0	23.0
Max Q Clear Time (g_c+I1), s	0.0	5.8		7.6	4.5	12.5
Green Ext Time (p_c), s	0.0	2.6		0.6	0.1	3.9

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	736	9	7	993	200	16	1	12	68	3	43
Future Volume (veh/h)	31	736	9	7	993	200	16	1	12	68	3	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1885	1826	1826	1885	1885	1885	1791	1791	1732
Adj Flow Rate, veh/h	34	818	10	8	1103	114	18	1	0	76	3	48
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	5	5	5	1	5	5	1	1	1	1	1	5
Cap, veh/h	40	1809	22	11	1731	764	34	35	0	143	6	123
Arrive On Green	0.02	0.52	0.52	0.01	0.50	0.50	0.02	0.02	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1739	3510	43	1795	3469	1532	1795	1885	0	1644	65	1417
Grp Volume(v), veh/h	34	404	424	8	1103	114	18	1	0	79	0	48
Grp Sat Flow(s),veh/h/ln	1739	1735	1818	1795	1735	1532	1795	1885	0	1709	0	1417
Q Serve(g_s), s	0.9	7.0	7.0	0.2	11.1	1.9	0.5	0.0	0.0	2.1	0.0	1.5
Cycle Q Clear(g_c), s	0.9	7.0	7.0	0.2	11.1	1.9	0.5	0.0	0.0	2.1	0.0	1.5
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.00	0.96		1.00
Lane Grp Cap(c), veh/h	40	894	937	11	1731	764	34	35	0	149	0	123
V/C Ratio(X)	0.86	0.45	0.45	0.70	0.64	0.15	0.54	0.03	0.00	0.53	0.00	0.39
Avail Cap(c_a), veh/h	549	1095	1148	567	2191	967	567	595	0	1223	0	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.1	7.3	7.3	23.6	8.7	6.4	23.1	22.9	0.0	20.8	0.0	20.5
Incr Delay (d2), s/veh	17.1	0.4	0.3	25.4	0.4	0.1	4.9	0.1	0.0	2.9	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.6	1.7	0.2	2.6	0.4	0.2	0.0	0.0	0.9	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.3	7.6	7.6	49.0	9.1	6.5	28.0	23.0	0.0	23.7	0.0	22.5
LnGrp LOS	D	A	A	D	A	A	C	C	A	C	A	C
Approach Vol, veh/h		862			1225			19			127	
Approach Delay, s/veh		8.9			9.2			27.7			23.2	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	30.2		4.9	5.1	29.4		8.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	15.0	30.0		15.0	15.0	30.0		34.0
Max Q Clear Time (g_c+I1), s	2.2	9.0		2.5	2.9	13.1		4.1
Green Ext Time (p_c), s	0.0	8.2		0.0	0.0	10.6		1.0

Intersection Summary	
HCM 6th Ctrl Delay	10.0
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	580	259	228	983	252	232
Future Volume (veh/h)	580	259	228	983	252	232
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	644	135	253	1092	280	237
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	774	650	443	2014	347	704
Arrive On Green	0.22	0.22	0.25	0.57	0.19	0.19
Sat Flow, veh/h	3647	1567	1781	3647	1781	1585
Grp Volume(v), veh/h	644	135	253	1092	280	237
Grp Sat Flow(s),veh/h/ln	1777	1567	1781	1777	1781	1585
Q Serve(g_s), s	10.4	3.3	7.5	11.5	9.0	0.0
Cycle Q Clear(g_c), s	10.4	3.3	7.5	11.5	9.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	774	650	443	2014	347	704
V/C Ratio(X)	0.83	0.21	0.57	0.54	0.81	0.34
Avail Cap(c_a), veh/h	829	675	475	2014	475	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	22.4	11.3	19.7	8.1	23.1	10.9
Incr Delay (d2), s/veh	6.9	0.2	0.7	1.0	5.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	1.4	2.7	3.1	4.0	4.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.3	11.5	20.5	9.2	28.1	11.0
LnGrp LOS	C	B	C	A	C	B
Approach Vol, veh/h	779			1345	517	
Approach Delay, s/veh	26.2			11.3	20.2	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.9	19.1		15.7		40.0
Change Period (Y+Rc), s	6.0	* 6		4.0		6.0
Max Green Setting (Gmax), s	16.0	* 14		16.0		34.0
Max Q Clear Time (g_c+I1), s	9.5	12.4		11.0		13.5
Green Ext Time (p_c), s	0.3	0.6		0.7		4.5

Intersection Summary	
HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	160	142	60	155	134	193	940	75	104	703	33
Future Volume (veh/h)	123	160	142	60	155	134	193	940	75	104	703	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	178	0	67	172	0	214	1044	0	116	781	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	400		86	244		244	1885		143	1666	
Arrive On Green	0.09	0.11	0.00	0.05	0.07	0.00	0.14	0.37	0.00	0.08	0.33	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	137	178	0	67	172	0	214	1044	0	116	781	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	9.1	5.6	0.0	4.5	5.7	0.0	14.1	19.5	0.0	7.7	14.6	0.0
Cycle Q Clear(g_c), s	9.1	5.6	0.0	4.5	5.7	0.0	14.1	19.5	0.0	7.7	14.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	400		86	244		244	1885		143	1666	
V/C Ratio(X)	0.83	0.45		0.77	0.70		0.88	0.55		0.81	0.47	
Avail Cap(c_a), veh/h	267	521		267	521		445	1885		297	1666	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.5	49.8	0.0	56.4	54.7	0.0	50.8	30.0	0.0	54.3	32.2	0.0
Incr Delay (d2), s/veh	5.3	0.9	0.0	5.5	5.0	0.0	3.9	1.2	0.0	4.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	2.5	0.0	2.1	2.7	0.0	6.4	7.9	0.0	3.5	5.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.8	50.7	0.0	61.9	59.7	0.0	54.7	31.2	0.0	58.5	32.5	0.0
LnGrp LOS	E	D		E	E		D	C		E	C	
Approach Vol, veh/h		315	A		239	A		1258	A		897	A
Approach Delay, s/veh		54.2			60.3			35.2			35.8	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	19.9	20.5	44.8	15.1	14.6	15.3	50.0
Change Period (Y+Rc), s	4.0	6.4	4.0	5.7	4.0	6.4	5.7	* 5.7
Max Green Setting (Gmax), s	18.0	17.6	30.0	34.3	18.0	17.6	20.0	* 44
Max Q Clear Time (g_c+I1), s	6.5	7.6	16.1	16.6	11.1	7.7	9.7	21.5
Green Ext Time (p_c), s	0.1	0.5	0.3	5.5	0.1	0.6	0.1	8.4

Intersection Summary	
HCM 6th Ctrl Delay	39.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	871	12	1	531	10	6	0	2	14	4	37
Future Volume (veh/h)	63	871	12	1	531	10	6	0	2	14	4	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	968	13	1	590	10	7	0	0	16	4	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	1688	23	5	1346	23	33	35	0	75	19	83
Arrive On Green	0.10	0.47	0.47	0.00	0.38	0.38	0.02	0.00	0.00	0.05	0.05	0.05
Sat Flow, veh/h	1781	3590	48	1781	3576	61	1781	1870	0	1439	360	1585
Grp Volume(v), veh/h	70	479	502	1	293	307	7	0	0	20	0	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1862	1781	1777	1859	1781	1870	0	1798	0	1585
Q Serve(g_s), s	1.4	7.6	7.6	0.0	4.8	4.8	0.1	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	1.4	7.6	7.6	0.0	4.8	4.8	0.1	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.03	1.00		0.00	0.80		1.00
Lane Grp Cap(c), veh/h	170	835	875	5	669	700	33	35	0	94	0	83
V/C Ratio(X)	0.41	0.57	0.57	0.22	0.44	0.44	0.21	0.00	0.00	0.21	0.00	0.01
Avail Cap(c_a), veh/h	920	1606	1682	920	1606	1680	920	966	0	929	0	819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	7.4	7.4	19.3	9.0	9.0	18.7	0.0	0.0	17.6	0.0	17.4
Incr Delay (d2), s/veh	0.6	1.1	1.0	8.5	0.8	0.7	1.1	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.1	2.2	0.0	1.5	1.6	0.1	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	8.5	8.5	27.8	9.8	9.8	19.9	0.0	0.0	18.0	0.0	17.4
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		1051			601			7			21	
Approach Delay, s/veh		9.1			9.8			19.9			18.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	23.9		4.7	7.7	20.3		6.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	35.0		20.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	2.0	9.6		2.1	3.4	6.8		2.4
Green Ext Time (p_c), s	0.0	8.6		0.0	0.1	4.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	376	48	43	331	8	26	3	9	10	8	5
Future Volume (veh/h)	26	376	48	43	331	8	26	3	9	10	8	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	418	46	48	368	5	29	3	0	11	9	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	1053	115	94	1198	534	135	14	0	50	41	80
Arrive On Green	0.04	0.33	0.33	0.05	0.34	0.34	0.08	0.08	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1781	3230	354	1781	3554	1585	1622	168	0	1001	819	1585
Grp Volume(v), veh/h	29	229	235	48	368	5	32	0	0	20	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1807	1781	1777	1585	1789	0	0	1820	0	1585
Q Serve(g_s), s	0.6	3.6	3.7	1.0	2.8	0.1	0.6	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	0.6	3.6	3.7	1.0	2.8	0.1	0.6	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		0.20	1.00		1.00	0.91		0.00	0.55		1.00
Lane Grp Cap(c), veh/h	75	579	589	94	1198	534	150	0	0	92	0	80
V/C Ratio(X)	0.39	0.40	0.40	0.51	0.31	0.01	0.21	0.00	0.00	0.22	0.00	0.00
Avail Cap(c_a), veh/h	981	1712	1741	981	3424	1527	985	0	0	1002	0	873
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.0	9.5	9.5	16.7	8.9	8.0	15.5	0.0	0.0	16.6	0.0	0.0
Incr Delay (d2), s/veh	1.2	2.0	2.0	1.6	0.7	0.0	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.2	1.3	0.3	0.8	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	11.5	11.5	18.3	9.6	8.0	15.8	0.0	0.0	17.0	0.0	0.0
LnGrp LOS	B	B	B	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		493			421			32			20	
Approach Delay, s/veh		11.9			10.5			15.8			17.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		7.0	5.9	17.5		5.8	5.5	17.9
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		20.0	20.0	35.0		20.0	20.0	35.0
Max Q Clear Time (g_c+I1), s		2.6	3.0	5.7		2.4	2.6	4.8
Green Ext Time (p_c), s		0.0	0.1	6.2		0.0	0.0	5.2

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	280	67	38	158	177	90	997	30	221	932	154
Future Volume (veh/h)	97	280	67	38	158	177	90	997	30	221	932	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	311	0	42	176	0	100	1108	0	246	1036	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	332		112	586		135	1169		276	1401	
Arrive On Green	0.08	0.18	0.00	0.06	0.16	0.00	0.08	0.33	0.00	0.15	0.39	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	108	311	0	42	176	0	100	1108	0	246	1036	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.2	19.7	0.0	2.7	5.2	0.0	6.6	36.5	0.0	16.2	29.9	0.0
Cycle Q Clear(g_c), s	7.2	19.7	0.0	2.7	5.2	0.0	6.6	36.5	0.0	16.2	29.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	134	332		112	586		135	1169		276	1401	
V/C Ratio(X)	0.80	0.94		0.38	0.30		0.74	0.95		0.89	0.74	
Avail Cap(c_a), veh/h	238	332		238	631		238	1193		341	1401	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.6	48.7	0.0	54.0	44.0	0.0	54.3	39.3	0.0	49.7	31.1	0.0
Incr Delay (d2), s/veh	10.6	33.3	0.0	2.1	0.3	0.0	7.8	15.1	0.0	21.0	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	12.0	0.0	1.3	2.3	0.0	3.1	17.2	0.0	8.5	12.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.2	82.0	0.0	56.1	44.3	0.0	62.1	54.4	0.0	70.7	34.6	0.0
LnGrp LOS	E	F		E	D		E	D		E	C	
Approach Vol, veh/h		419	A		218	A		1208	A		1282	A
Approach Delay, s/veh		77.7			46.6			55.0			41.6	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.6	45.2	11.5	27.0	14.8	53.0	13.1	25.5
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	5.7
Max Green Setting (Gmax), s	23.0	40.3	16.0	21.3	16.0	* 47	16.0	21.3
Max Q Clear Time (g_c+I1), s	18.2	38.5	4.7	21.7	8.6	31.9	9.2	7.2
Green Ext Time (p_c), s	0.3	1.0	0.1	0.0	0.1	4.3	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	51.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	325	0	0	501	255	1	1	0	217	0	13
Future Volume (veh/h)	5	325	0	0	501	255	1	1	0	217	0	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	361	0	0	557	229	1	1	0	241	0	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	2534	0	0	1333	1377	2	2	0	278	0	247
Arrive On Green	0.00	0.71	0.00	0.00	0.48	0.48	0.00	0.00	0.00	0.16	0.00	0.16
Sat Flow, veh/h	0	3647	0	0	1870	1585	912	912	0	1781	0	1585
Grp Volume(v), veh/h	0	361	0	0	557	229	2	0	0	241	0	2
Grp Sat Flow(s),veh/h/ln	0	1777	0	0	1870	1585	1825	0	0	1781	0	1585
Q Serve(g_s), s	0.0	3.2	0.0	0.0	19.4	3.8	0.1	0.0	0.0	13.2	0.0	0.1
Cycle Q Clear(g_c), s	0.0	3.2	0.0	0.0	19.4	3.8	0.1	0.0	0.0	13.2	0.0	0.1
Prop In Lane	0.00		0.00	0.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2534	0	0	1333	1377	4	0	0	278	0	247
V/C Ratio(X)	0.00	0.14	0.00	0.00	0.42	0.17	0.51	0.00	0.00	0.87	0.00	0.01
Avail Cap(c_a), veh/h	0	2534	0	0	1333	1377	219	0	0	463	0	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	4.6	0.0	0.0	12.6	2.0	49.8	0.0	0.0	41.2	0.0	35.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.2	0.1	32.8	0.0	0.0	4.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.0	0.0	8.7	2.7	0.1	0.0	0.0	6.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	4.7	0.0	0.0	12.8	2.1	82.6	0.0	0.0	45.8	0.0	35.7
LnGrp LOS	A	A	A	A	B	A	F	A	A	D	A	D
Approach Vol, veh/h		361			786			2			243	
Approach Delay, s/veh		4.7			9.7			82.6			45.8	
Approach LOS		A			A			F			D	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		76.2		19.6	0.0	76.2		4.2				
Change Period (Y+Rc), s		4.9		4.0	4.0	4.9		4.0				
Max Green Setting (Gmax), s		49.1		26.0	22.0	19.1		12.0				
Max Q Clear Time (g_c+I1), s		5.2		15.2	0.0	21.4		2.1				
Green Ext Time (p_c), s		1.9		0.4	0.0	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	584	9	3	724	0	19	0	19	56	5	13
Future Volume (veh/h)	0	584	9	3	724	0	19	0	19	56	5	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	649	0	3	804	0	21	0	0	62	6	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	2077		11	2242	0	63	0	0	121	127	0
Arrive On Green	0.00	1.00	0.00	0.01	1.00	0.00	0.04	0.00	0.00	0.07	0.07	0.00
Sat Flow, veh/h	0	3647	1585	1781	3647	0	1781	0	0	1781	1870	0
Grp Volume(v), veh/h	0	649	0	3	804	0	21	0	0	62	6	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	0	1781	0	0	1781	1870	0
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	1.2	0.0	0.0	3.4	0.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.2	0.0	0.0	1.2	0.0	0.0	3.4	0.3	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	2077		11	2242	0	63	0	0	121	127	0
V/C Ratio(X)	0.00	0.31		0.26	0.36	0.00	0.33	0.00	0.00	0.51	0.05	0.00
Avail Cap(c_a), veh/h	0	2077		214	2242	0	214	0	0	214	224	0
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.96	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	49.1	0.0	0.0	47.1	0.0	0.0	45.0	43.6	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	4.5	0.4	0.0	1.1	0.0	0.0	1.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.1	0.0	0.5	0.0	0.0	1.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.1	0.0	53.6	0.4	0.0	48.2	0.0	0.0	46.3	43.6	0.0
LnGrp LOS	A	A		D	A	A	D	A	A	D	D	A
Approach Vol, veh/h		649	A		807			21			68	
Approach Delay, s/veh		0.1			0.6			48.2			46.0	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	4.6	63.4		7.5		68.0		10.8
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s	12.0	47.1		12.0		63.1		12.0
Max Q Clear Time (g_c+I1), s	2.2	2.0		3.2		2.0		5.4
Green Ext Time (p_c), s	0.0	7.7		0.0		10.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.1
HCM 6th LOS	A

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	654	16	111	291	33	130
Future Volume (veh/h)	654	16	111	291	33	130
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	727	15	123	323	37	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1683	35	159	2281	46	41
Arrive On Green	0.47	0.47	0.09	0.64	0.03	0.03
Sat Flow, veh/h	3654	73	1781	3647	1781	1585
Grp Volume(v), veh/h	363	379	123	323	37	3
Grp Sat Flow(s),veh/h/ln	1777	1857	1781	1777	1781	1585
Q Serve(g_s), s	6.8	6.8	3.4	1.8	1.0	0.1
Cycle Q Clear(g_c), s	6.8	6.8	3.4	1.8	1.0	0.1
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	840	878	159	2281	46	41
V/C Ratio(X)	0.43	0.43	0.77	0.14	0.80	0.07
Avail Cap(c_a), veh/h	840	878	356	2281	321	285
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.7	8.7	22.3	3.5	24.2	23.8
Incr Delay (d2), s/veh	0.4	0.4	3.0	0.1	11.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.0	1.4	0.4	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.1	9.1	25.3	3.7	35.3	24.0
LnGrp LOS	A	A	C	A	D	C
Approach Vol, veh/h	742			446	40	
Approach Delay, s/veh	9.1			9.6	34.5	
Approach LOS	A			A	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.5	28.5		5.3		37.0
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9
Max Green Setting (Gmax), s	10.0	18.1		9.0		32.1
Max Q Clear Time (g_c+I1), s	5.4	8.8		3.0		3.8
Green Ext Time (p_c), s	0.1	4.1		0.0		3.6

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	730	4	16	1028	90	5	4	12	283	4	49
Future Volume (veh/h)	45	730	4	16	1028	90	5	4	12	283	4	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	811	4	18	1142	96	6	4	0	317	0	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	1418	7	537	2207	185	11	7	0	406	0	180
Arrive On Green	0.04	0.39	0.39	0.30	0.67	0.67	0.01	0.01	0.00	0.11	0.00	0.11
Sat Flow, veh/h	1781	3626	18	1781	3318	279	1090	726	0	3563	0	1585
Grp Volume(v), veh/h	50	397	418	18	611	627	10	0	0	317	0	3
Grp Sat Flow(s),veh/h/ln	1781	1777	1867	1781	1777	1820	1816	0	0	1781	0	1585
Q Serve(g_s), s	2.8	17.5	17.5	0.7	17.5	17.6	0.5	0.0	0.0	8.7	0.0	0.2
Cycle Q Clear(g_c), s	2.8	17.5	17.5	0.7	17.5	17.6	0.5	0.0	0.0	8.7	0.0	0.2
Prop In Lane	1.00		0.01	1.00		0.15	0.60		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	65	695	730	537	1182	1211	18	0	0	406	0	180
V/C Ratio(X)	0.77	0.57	0.57	0.03	0.52	0.52	0.57	0.00	0.00	0.78	0.00	0.02
Avail Cap(c_a), veh/h	214	695	730	537	1182	1211	218	0	0	691	0	307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.8	23.9	23.9	24.6	8.5	8.6	49.3	0.0	0.0	43.1	0.0	39.3
Incr Delay (d2), s/veh	7.1	3.4	3.2	0.0	0.4	0.4	10.2	0.0	0.0	2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	7.7	8.0	0.3	6.0	6.2	0.3	0.0	0.0	3.9	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	27.3	27.1	24.7	9.0	9.0	59.5	0.0	0.0	45.6	0.0	39.4
LnGrp LOS	D	C	C	C	A	A	E	A	A	D	A	D
Approach Vol, veh/h		865			1256			10			320	
Approach Delay, s/veh		28.8			9.2			59.5			45.5	
Approach LOS		C			A			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	35.0	44.0		5.0	7.6	71.4		16.0
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.6
Max Green Setting (Gmax), s	12.0	* 39		12.0	12.0	39.1		19.4
Max Q Clear Time (g_c+I1), s	2.7	19.5		2.5	4.8	19.6		10.7
Green Ext Time (p_c), s	0.0	11.7		0.0	0.1	16.3		0.7

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	985	151	0	1414	1315	0	0	0	258	524	172
Future Volume (veh/h)	0	985	151	0	1414	1315	0	0	0	258	524	172
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	1094	168	0	1832	0				287	582	165
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	1825	280	0	2211					547	574	487
Arrive On Green	0.00	0.59	0.59	0.00	0.59	0.00				0.31	0.31	0.31
Sat Flow, veh/h	0	3182	473	0	3741	1585				1781	1870	1585
Grp Volume(v), veh/h	0	628	634	0	1832	0				287	582	165
Grp Sat Flow(s),veh/h/ln	0	1777	1785	0	1870	1585				1781	1870	1585
Q Serve(g_s), s	0.0	22.4	22.5	0.0	39.3	0.0				13.3	30.7	8.1
Cycle Q Clear(g_c), s	0.0	22.4	22.5	0.0	39.3	0.0				13.3	30.7	8.1
Prop In Lane	0.00		0.27	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1050	1055	0	2211					547	574	487
V/C Ratio(X)	0.00	0.60	0.60	0.00	0.83					0.52	1.01	0.34
Avail Cap(c_a), veh/h	0	1050	1055	0	2211					547	574	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.43	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	12.9	13.0	0.0	16.4	0.0				28.6	34.7	26.8
Incr Delay (d2), s/veh	0.0	2.5	2.5	0.0	1.3	0.0				0.5	41.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.7	8.8	0.0	15.0	0.0				5.7	20.1	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.5	15.5	0.0	17.7	0.0				29.1	75.6	27.0
LnGrp LOS	A	B	B	A	B					C	F	C
Approach Vol, veh/h		1262			1832	A					1034	
Approach Delay, s/veh		15.5			17.7						54.9	
Approach LOS		B			B						D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		64.0		36.0		64.0
Change Period (Y+Rc), s		4.9		5.3		4.9
Max Green Setting (Gmax), s		59.1		30.7		59.1
Max Q Clear Time (g_c+I1), s		24.5		32.7		41.3
Green Ext Time (p_c), s		10.2		0.0		12.5

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	1072	0	0	2309	303	0	0	942	0	0	420
Future Volume (vph)	171	1072	0	0	2309	303	0	0	942	0	0	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.9			4.9	4.9			4.0			4.0
Lane Util. Factor	1.00	0.95			0.86	0.86			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	3539			4796	1362			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	3539			4796	1362			1611			2787
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	190	1191	0	0	2566	337	0	0	1047	0	0	467
RTOR Reduction (vph)	0	0	0	0	2	112	0	0	0	0	0	27
Lane Group Flow (vph)	190	1191	0	0	2598	191	0	0	1047	0	0	440
Turn Type	Prot	NA			NA	Perm			Free			Over
Protected Phases	5	2			6							5
Permitted Phases						6			Free			
Actuated Green, G (s)	13.2	60.0			37.9	37.9			60.0			13.2
Effective Green, g (s)	13.2	60.0			37.9	37.9			60.0			13.2
Actuated g/C Ratio	0.22	1.00			0.63	0.63			1.00			0.22
Clearance Time (s)	4.0	4.9			4.9	4.9						4.0
Vehicle Extension (s)	2.0	3.9			3.8	3.8						2.0
Lane Grp Cap (vph)	389	3539			3029	860			1611			613
v/s Ratio Prot	0.11	0.34			c0.54							0.16
v/s Ratio Perm						0.14			c0.65			
v/c Ratio	0.49	0.34			0.86	0.22			0.65			0.72
Uniform Delay, d1	20.4	0.0			8.9	4.7			0.0			21.7
Progression Factor	1.00	1.00			1.95	1.60			1.00			1.00
Incremental Delay, d2	0.4	0.1			1.4	0.2			2.0			3.3
Delay (s)	20.8	0.1			18.7	7.8			2.0			25.0
Level of Service	C	A			B	A			A			C
Approach Delay (s)		2.9			17.6			2.0			25.0	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.9
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	315	1527	301	306	1189	199	475	863	199	216	646	54
Future Volume (veh/h)	315	1527	301	306	1189	199	475	863	199	216	646	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	350	1697	0	340	1321	0	528	959	0	240	718	51
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	1574		572	1896		591	1314		304	847	60
Arrive On Green	0.12	0.31	0.00	0.17	0.37	0.00	0.17	0.26	0.00	0.09	0.17	0.17
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	4862	343
Grp Volume(v), veh/h	350	1697	0	340	1321	0	528	959	0	240	501	268
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1801
Q Serve(g_s), s	11.9	37.0	0.0	10.9	26.3	0.0	17.9	20.6	0.0	8.2	17.1	17.3
Cycle Q Clear(g_c), s	11.9	37.0	0.0	10.9	26.3	0.0	17.9	20.6	0.0	8.2	17.1	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	411	1574		572	1896		591	1314		304	593	314
V/C Ratio(X)	0.85	1.08		0.59	0.70		0.89	0.73		0.79	0.85	0.85
Avail Cap(c_a), veh/h	518	1574		572	1896		691	1314		605	604	320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	41.5	0.0	46.3	32.0	0.0	48.7	40.7	0.0	53.6	48.0	48.0
Incr Delay (d2), s/veh	8.9	46.9	0.0	1.2	1.2	0.0	11.6	2.3	0.0	1.7	11.2	20.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	21.6	0.0	4.7	10.5	0.0	8.3	8.5	0.0	3.5	7.8	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.7	88.4	0.0	47.5	33.2	0.0	60.2	43.1	0.0	55.4	59.2	68.2
LnGrp LOS	E	F		D	C		E	D		E	E	E
Approach Vol, veh/h		2047	A		1661	A		1487	A		1009	
Approach Delay, s/veh		83.6			36.1			49.2			60.7	
Approach LOS		F			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.9	43.0	24.5	26.6	18.3	50.6	14.6	36.6
Change Period (Y+Rc), s	6.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	16.0	37.0	24.0	21.3	18.0	37.0	21.0	24.3
Max Q Clear Time (g_c+I1), s	12.9	39.0	19.9	19.3	13.9	28.3	10.2	22.6
Green Ext Time (p_c), s	0.3	0.0	0.6	1.6	0.4	7.7	0.4	1.4

Intersection Summary	
HCM 6th Ctrl Delay	58.9
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1006	57	159	1188	4	35	4	425	8	2	15
Future Volume (veh/h)	18	1006	57	159	1188	4	35	4	425	8	2	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2106	2106	2106	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	1118	61	177	1320	4	39	4	243	9	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	26	1464	80	223	1787	5	203	21	397	15	3	16
Arrive On Green	0.01	0.38	0.38	0.13	0.49	0.49	0.13	0.13	0.13	0.01	0.01	0.00
Sat Flow, veh/h	2006	3858	210	1781	3634	11	1623	166	1585	1470	327	1585
Grp Volume(v), veh/h	20	579	600	177	645	679	43	0	243	11	0	0
Grp Sat Flow(s),veh/h/ln	2006	2001	2068	1781	1777	1868	1789	0	1585	1797	0	1585
Q Serve(g_s), s	1.2	30.4	30.4	11.6	34.8	34.8	2.6	0.0	15.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	1.2	30.4	30.4	11.6	34.8	34.8	2.6	0.0	15.0	0.7	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.01	0.91		1.00	0.82		1.00
Lane Grp Cap(c), veh/h	26	759	785	223	874	919	224	0	397	18	0	16
V/C Ratio(X)	0.76	0.76	0.76	0.79	0.74	0.74	0.19	0.00	0.61	0.60	0.00	0.00
Avail Cap(c_a), veh/h	251	759	785	534	874	919	224	0	397	199	0	176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.0	32.5	32.5	51.0	24.3	24.3	47.1	0.0	39.8	59.1	0.0	0.0
Incr Delay (d2), s/veh	15.3	4.8	4.7	2.1	4.8	4.6	0.2	0.0	2.0	11.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	15.1	15.7	5.2	15.0	15.7	1.1	0.0	6.4	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.3	37.3	37.2	53.1	29.2	28.9	47.2	0.0	41.9	70.2	0.0	0.0
LnGrp LOS	E	D	D	D	C	C	D	A	D	E	A	A
Approach Vol, veh/h		1199			1501			286			11	
Approach Delay, s/veh		37.9			31.9			42.7			70.2	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.0	51.2		6.9	5.6	64.7		19.0
Change Period (Y+Rc), s	4.0	5.7		5.7	4.0	* 5.7		4.0
Max Green Setting (Gmax), s	36.0	36.3		13.3	15.0	* 59		15.0
Max Q Clear Time (g_c+I1), s	13.6	32.4		2.7	3.2	36.8		17.0
Green Ext Time (p_c), s	1.5	3.7		0.0	0.0	22.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1345	14	36	1324	0	22	0	26	0	5	0
Future Volume (veh/h)	0	1345	14	36	1324	0	22	0	26	0	5	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	0	1870	0
Adj Flow Rate, veh/h	0	1494	16	40	1471	0	24	0	0	0	6	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	0	2	0
Cap, veh/h	0	1751	19	51	1950	0	33	0	0	0	8	0
Arrive On Green	0.00	0.49	0.49	0.03	0.55	0.00	0.02	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3695	39	1781	3647	0	1781	24		0	1870	0
Grp Volume(v), veh/h	0	737	773	40	1471	0	24	78.6		0	6	0
Grp Sat Flow(s),veh/h/ln	0	1777	1863	1781	1777	0	1781	E		0	1870	0
Q Serve(g_s), s	0.0	43.3	43.4	2.7	37.9	0.0	1.6			0.0	0.4	0.0
Cycle Q Clear(g_c), s	0.0	43.3	43.4	2.7	37.9	0.0	1.6			0.0	0.4	0.0
Prop In Lane	0.00		0.02	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	864	906	51	1950	0	33			0	8	0
V/C Ratio(X)	0.00	0.85	0.85	0.78	0.75	0.00	0.73			0.00	0.71	0.00
Avail Cap(c_a), veh/h	0	864	906	240	1950	0	314			0	299	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.76	0.76	1.00	1.00	0.00	1.00			0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	26.8	26.8	57.4	20.7	0.0	58.1			0.0	59.2	0.0
Incr Delay (d2), s/veh	0.0	6.7	6.5	9.0	2.8	0.0	20.5			0.0	32.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.8	19.7	1.3	15.3	0.0	0.9			0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	33.5	33.3	66.4	23.4	0.0	78.6			0.0	92.1	0.0
LnGrp LOS	A	C	C	E	C	A	E			A	F	A
Approach Vol, veh/h		1510			1511						6	
Approach Delay, s/veh		33.4			24.6						92.1	
Approach LOS		C			C						F	

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	7.4	63.6	6.2	4.5		71.0
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0		5.7
Max Green Setting (Gmax), s	16.0	45.3	21.0	19.0		65.3
Max Q Clear Time (g_c+I1), s	4.7	45.4	3.6	2.4		39.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0		14.0

Intersection Summary	
HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	771	279	268	768	65	336	950	36	204	997	229
Future Volume (veh/h)	360	771	279	268	768	65	336	950	36	204	997	229
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	400	857	0	298	853	66	373	1056	8	227	1108	125
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	919		376	826	64	428	986	431	449	1057	462
Arrive On Green	0.13	0.26	0.00	0.11	0.25	0.25	0.12	0.28	0.28	0.13	0.30	0.30
Sat Flow, veh/h	3456	3554	1585	3456	3336	258	3456	3554	1553	3456	3554	1554
Grp Volume(v), veh/h	400	857	0	298	454	465	373	1056	8	227	1108	125
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1817	1728	1777	1553	1728	1777	1554
Q Serve(g_s), s	13.6	28.3	0.0	10.1	29.7	29.7	12.7	33.3	0.4	7.3	35.7	7.4
Cycle Q Clear(g_c), s	13.6	28.3	0.0	10.1	29.7	29.7	12.7	33.3	0.4	7.3	35.7	7.4
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	919		376	440	450	428	986	431	449	1057	462
V/C Ratio(X)	0.86	0.93		0.79	1.03	1.03	0.87	1.07	0.02	0.51	1.05	0.27
Avail Cap(c_a), veh/h	576	927		518	440	450	461	986	431	518	1057	462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.72	0.72	0.72	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	43.5	0.0	52.2	45.2	45.2	51.6	43.4	31.5	48.6	42.1	32.2
Incr Delay (d2), s/veh	9.3	15.8	0.0	3.8	51.7	51.2	11.1	45.7	0.1	0.3	41.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	14.1	0.0	4.5	19.0	19.4	6.1	20.4	0.2	3.1	21.1	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	59.3	0.0	56.0	96.8	96.4	62.7	89.1	31.5	49.0	83.3	32.6
LnGrp LOS	E	E		E	F	F	E	F	C	D	F	C
Approach Vol, veh/h		1257	A		1217			1437			1460	
Approach Delay, s/veh		59.6			86.7			81.9			73.6	
Approach LOS		E			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	36.7	18.9	41.0	20.1	35.0	20.9	39.0
Change Period (Y+Rc), s	5.3	* 5.7	4.0	5.3	4.0	5.3	5.3	* 5.7
Max Green Setting (Gmax), s	18.0	* 31	16.0	35.7	20.0	29.7	18.0	* 33
Max Q Clear Time (g_c+I1), s	12.1	30.3	14.7	37.7	15.6	31.7	9.3	35.3
Green Ext Time (p_c), s	0.4	0.8	0.2	0.0	0.5	0.0	0.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	75.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1042	10	47	1102	15	18	8	41	30	16	48
Future Volume (veh/h)	51	1042	10	47	1102	15	18	8	41	30	16	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	1158	11	52	1224	16	20	9	0	33	18	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	2712	26	67	2687	35	37	17	47	43	23	58
Arrive On Green	0.04	0.75	0.75	0.04	0.75	0.75	0.03	0.03	0.00	0.04	0.04	0.00
Sat Flow, veh/h	1781	3607	34	1781	3592	47	1247	561	1585	1172	639	1585
Grp Volume(v), veh/h	57	570	599	52	605	635	29	0	0	51	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1862	1808	0	1585	1812	0	1585
Q Serve(g_s), s	3.8	14.1	14.1	3.5	15.6	15.6	1.9	0.0	0.0	3.3	0.0	0.0
Cycle Q Clear(g_c), s	3.8	14.1	14.1	3.5	15.6	15.6	1.9	0.0	0.0	3.3	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.03	0.69		1.00	0.65		1.00
Lane Grp Cap(c), veh/h	74	1336	1401	67	1329	1393	53	0	47	67	0	58
V/C Ratio(X)	0.77	0.43	0.43	0.77	0.46	0.46	0.54	0.00	0.00	0.77	0.00	0.00
Avail Cap(c_a), veh/h	238	1336	1401	238	1329	1393	241	0	211	242	0	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.0	5.4	5.4	57.2	5.8	5.8	57.4	0.0	0.0	57.3	0.0	0.0
Incr Delay (d2), s/veh	6.2	1.0	1.0	6.8	0.5	0.5	3.2	0.0	0.0	6.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.5	4.7	1.7	4.8	5.1	0.9	0.0	0.0	1.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.2	6.4	6.4	64.0	6.3	6.2	60.6	0.0	0.0	64.0	0.0	0.0
LnGrp LOS	E	A	A	E	A	A	E	A	A	E	A	A
Approach Vol, veh/h		1226			1292			29			51	
Approach Delay, s/veh		9.1			8.6			60.6			64.0	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	95.5		8.4	9.0	95.1		7.5
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	16.0	54.7		16.0	16.0	54.7		16.0
Max Q Clear Time (g_c+I1), s	5.5	16.1		5.3	5.8	17.6		3.9
Green Ext Time (p_c), s	0.0	13.5		0.0	0.0	15.1		0.0

Intersection Summary		
HCM 6th Ctrl Delay		10.5
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	971	0	7	1148	14	10	0	5	19	0	21
Future Volume (veh/h)	23	971	0	7	1148	14	10	0	5	19	0	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	1079	0	8	1276	10	11	0	0	21	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	3079	0	10	3087	24	89	0	0	86	0	27
Arrive On Green	0.02	0.87	0.00	0.01	0.85	0.85	0.02	0.00	0.00	0.02	0.00	0.00
Sat Flow, veh/h	1781	3647	0	1781	3614	28	1704	0	0	1550	0	1585
Grp Volume(v), veh/h	26	1079	0	8	627	659	11	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1865	1704	0	0	1550	0	1585
Q Serve(g_s), s	1.7	7.0	0.0	0.5	9.5	9.6	0.0	0.0	0.0	0.9	0.0	0.0
Cycle Q Clear(g_c), s	1.7	7.0	0.0	0.5	9.5	9.6	0.7	0.0	0.0	1.6	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.02	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	32	3079	0	10	1518	1593	89	0	0	86	0	27
V/C Ratio(X)	0.80	0.35	0.00	0.77	0.41	0.41	0.12	0.00	0.00	0.24	0.00	0.00
Avail Cap(c_a), veh/h	312	3079	0	312	1518	1593	372	0	0	369	0	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.7	1.5	0.0	59.6	2.0	2.0	58.4	0.0	0.0	58.7	0.0	0.0
Incr Delay (d2), s/veh	15.4	0.3	0.0	34.4	0.8	0.8	0.5	0.0	0.0	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.0	0.0	0.3	1.8	1.9	0.3	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.1	1.8	0.0	94.0	2.8	2.8	58.8	0.0	0.0	59.8	0.0	0.0
LnGrp LOS	E	A	A	F	A	A	E	A	A	E	A	A
Approach Vol, veh/h		1105			1294			11			21	
Approach Delay, s/veh		3.6			3.3			58.8			59.8	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	107.8		6.0	4.7	109.3		6.0
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	21.0	59.7		26.0	21.0	59.7		26.0
Max Q Clear Time (g_c+I1), s	3.7	11.6		2.7	2.5	9.0		3.6
Green Ext Time (p_c), s	0.0	25.2		0.0	0.0	21.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.2
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	416	481	518	164	478	724
Future Volume (veh/h)	416	481	518	164	478	724
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	332	716	576	151	531	775
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	522	1096	817	213	1012	929
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1781	3741	2881	729	3456	1585
Grp Volume(v), veh/h	332	716	367	360	531	775
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1739	1728	1585
Q Serve(g_s), s	16.0	16.6	18.2	18.3	12.7	29.0
Cycle Q Clear(g_c), s	16.0	16.6	18.2	18.3	12.7	29.0
Prop In Lane	1.00			0.42	1.00	1.00
Lane Grp Cap(c), veh/h	522	1096	520	509	1012	929
V/C Ratio(X)	0.64	0.65	0.70	0.71	0.52	0.83
Avail Cap(c_a), veh/h	522	1096	520	509	1012	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	30.6	31.2	31.2	29.2	14.5
Incr Delay (d2), s/veh	5.8	3.0	3.7	3.8	0.2	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	7.6	8.0	7.9	5.1	20.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.2	33.6	34.8	35.1	29.5	20.8
LnGrp LOS	D	C	C	D	C	C
Approach Vol, veh/h		1048	727		1306	
Approach Delay, s/veh		34.5	34.9		24.3	
Approach LOS		C	C		C	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	33.0	33.0	33.0
Change Period (Y+Rc), s	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	29.0	29.0
Max Q Clear Time (g_c+I1), s	20.3	18.6	31.0
Green Ext Time (p_c), s	1.2	2.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	747	56	34	665	12	49	9	9	21	14	0
Future Volume (veh/h)	61	747	56	34	665	12	49	9	9	21	14	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	830	40	38	739	12	54	10	3	23	16	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	1054	893	89	1925	31	252	33	7	193	97	158
Arrive On Green	0.08	0.56	0.56	0.05	0.54	0.54	0.10	0.10	0.10	0.10	0.10	0.00
Sat Flow, veh/h	1781	1870	1585	1781	3579	58	1125	336	68	701	973	1585
Grp Volume(v), veh/h	68	830	40	38	367	384	67	0	0	39	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1860	1529	0	0	1674	0	1585
Q Serve(g_s), s	1.7	16.2	0.5	1.0	5.6	5.6	0.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.7	16.2	0.5	1.0	5.6	5.6	1.8	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	0.81		0.04	0.59		1.00
Lane Grp Cap(c), veh/h	134	1054	893	89	956	1001	293	0	0	290	0	158
V/C Ratio(X)	0.51	0.79	0.04	0.43	0.38	0.38	0.23	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	768	1815	1538	768	1724	1805	777	0	0	808	0	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.6	7.9	4.5	21.4	6.2	6.2	19.5	0.0	0.0	19.2	0.0	0.0
Incr Delay (d2), s/veh	1.1	2.1	0.0	1.2	0.4	0.4	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.1	0.1	0.4	1.3	1.4	0.6	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	10.1	4.6	22.6	6.6	6.6	19.7	0.0	0.0	19.3	0.0	0.0
LnGrp LOS	C	B	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		938			789			67			39	
Approach Delay, s/veh		10.7			7.4			19.7			19.3	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	31.4		8.6	7.5	30.3		8.6
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	45.0		20.0
Max Q Clear Time (g_c+I1), s	3.0	18.2		3.8	3.7	7.6		2.9
Green Ext Time (p_c), s	0.0	8.0		0.1	0.1	5.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	287	380	312	233	347	468
Future Volume (veh/h)	287	380	312	233	347	468
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	319	296	347	163	386	520
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	413	775	500	791	458	1117
Arrive On Green	0.23	0.23	0.27	0.27	0.26	0.60
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	319	296	347	163	386	520
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	9.1	6.4	9.1	3.1	11.2	8.4
Cycle Q Clear(g_c), s	9.1	6.4	9.1	3.1	11.2	8.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	413	775	500	791	458	1117
V/C Ratio(X)	0.77	0.38	0.69	0.21	0.84	0.47
Avail Cap(c_a), veh/h	980	1280	1029	1240	980	2059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	8.8	18.0	7.6	19.2	6.1
Incr Delay (d2), s/veh	1.2	0.1	2.8	0.2	1.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	1.8	3.9	1.5	4.3	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.8	8.9	20.7	7.8	20.9	6.6
LnGrp LOS	C	A	C	A	C	A
Approach Vol, veh/h	615		510			906
Approach Delay, s/veh	15.0		16.6			12.7
Approach LOS	B		B			B

Timer - Assigned Phs		2			5	6	8
Phs Duration (G+Y+Rc), s		37.9			18.0	19.9	16.6
Change Period (Y+Rc), s		5.3			4.0	5.3	4.0
Max Green Setting (Gmax), s		60.0			30.0	30.0	30.0
Max Q Clear Time (g_c+I1), s		10.4			13.2	11.1	11.1
Green Ext Time (p_c), s		4.5			0.8	3.5	1.5

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	497	25	34	771	41	6
Future Volume (veh/h)	497	25	34	771	41	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	552	16	38	857	46	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2004	894	73	2436	152	135
Arrive On Green	0.56	0.56	0.04	0.69	0.09	0.00
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	552	16	38	857	46	0
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	4.0	0.2	1.0	5.0	1.2	0.0
Cycle Q Clear(g_c), s	4.0	0.2	1.0	5.0	1.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2004	894	73	2436	152	135
V/C Ratio(X)	0.28	0.02	0.52	0.35	0.30	0.00
Avail Cap(c_a), veh/h	3575	1595	717	3575	717	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.6	4.8	23.3	3.2	21.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	2.1	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.1	0.4	0.9	0.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.7	4.8	25.5	3.4	21.8	0.0
LnGrp LOS	A	A	C	A	C	A
Approach Vol, veh/h	568			895	46	
Approach Delay, s/veh	5.7			4.3	21.8	
Approach LOS	A			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.0	33.7				39.8	9.9
Change Period (Y+Rc), s	4.0	5.7				* 5.7	5.7
Max Green Setting (Gmax), s	20.0	50.0				* 50	20.0
Max Q Clear Time (g_c+I1), s	3.0	6.0				7.0	3.2
Green Ext Time (p_c), s	0.0	17.2				27.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	328	0	0	296	3	0	0	0	2	0	32
Future Volume (veh/h)	42	328	0	0	296	3	0	0	0	2	0	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	47	364	0	0	329	2	0	0	0	2	0	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	1734	774	322	980	437	0	8	0	8	17	14
Arrive On Green	0.06	0.54	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.00	0.00	0.01
Sat Flow, veh/h	1603	3198	1427	916	3198	1427	0	-65488	0	1603	1683	1427
Grp Volume(v), veh/h	47	364	0	0	329	2	0	0	0	2	0	4
Grp Sat Flow(s),veh/h/ln	1603	1599	1427	916	1599	1427	0	1683	0	1603	1683	1427
Q Serve(g_s), s	0.6	1.3	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.6	1.3	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	91	1734	774	322	980	437	0	8	0	8	17	14
V/C Ratio(X)	0.52	0.21	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.25	0.00	0.28
Avail Cap(c_a), veh/h	1436	5730	2556	1683	5730	2556	0	2865	0	1436	1508	1278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.2	2.6	0.0	0.0	6.0	5.4	0.0	0.0	0.0	11.1	0.0	11.0
Incr Delay (d2), s/veh	1.7	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	6.0	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.9	2.8	0.0	0.0	6.4	5.4	0.0	0.0	0.0	17.0	0.0	15.0
LnGrp LOS	B	A	A	A	A	A	A	A	A	B	A	B
Approach Vol, veh/h		411			331			0			6	
Approach Delay, s/veh		3.8			6.4			0.0			15.7	
Approach LOS		A			A						B	

Timer - Assigned Phs		2		4	5	6	7	8
Phs Duration (G+Y+Rc), s		18.1		4.2	5.3	12.8	4.1	0.1
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0	4.0	4.0
Max Green Setting (Gmax), s		40.0		20.0	20.0	40.0	20.0	38.0
Max Q Clear Time (g_c+I1), s		3.3		2.1	2.6	3.8	2.0	0.0
Green Ext Time (p_c), s		3.4		0.0	0.1	3.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	76	69	136	564	545	100
Future Volume (veh/h)	76	69	136	564	545	100
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	6	151	627	606	50
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	261	232	201	2082	1300	580
Arrive On Green	0.15	0.15	0.11	0.59	0.37	0.37
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	84	6	151	627	606	50
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	1.6	0.1	3.1	3.3	4.9	0.8
Cycle Q Clear(g_c), s	1.6	0.1	3.1	3.3	4.9	0.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	261	232	201	2082	1300	580
V/C Ratio(X)	0.32	0.03	0.75	0.30	0.47	0.09
Avail Cap(c_a), veh/h	954	849	954	5712	3808	1699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	13.7	16.1	3.9	9.0	7.7
Incr Delay (d2), s/veh	0.3	0.0	2.1	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.2	0.6	1.4	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.5	13.7	18.2	4.0	9.6	7.9
LnGrp LOS	B	B	B	A	A	A
Approach Vol, veh/h	90			778	656	
Approach Delay, s/veh	14.5			6.8	9.4	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		27.9		9.5	8.2	19.7
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		60.0		20.0	20.0	40.0
Max Q Clear Time (g_c+I1), s		5.3		3.6	5.1	6.9
Green Ext Time (p_c), s		7.0		0.1	0.3	6.8

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	12	86	56	0	20	116	327	41	5	514	69
Future Volume (veh/h)	58	12	86	56	0	20	116	327	41	5	514	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	13	3	62	0	0	129	363	23	6	571	28
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	222	188	162	0	144	232	1381	616	23	964	430
Arrive On Green	0.12	0.12	0.12	0.09	0.00	0.00	0.13	0.39	0.39	0.01	0.27	0.27
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	64	13	3	62	0	0	129	363	23	6	571	28
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.7	0.3	0.1	1.7	0.0	0.0	3.5	3.6	0.5	0.2	7.2	0.7
Cycle Q Clear(g_c), s	1.7	0.3	0.1	1.7	0.0	0.0	3.5	3.6	0.5	0.2	7.2	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	222	188	162	0	144	232	1381	616	23	964	430
V/C Ratio(X)	0.30	0.06	0.02	0.38	0.00	0.00	0.56	0.26	0.04	0.26	0.59	0.07
Avail Cap(c_a), veh/h	686	720	610	686	0	610	686	2053	916	686	2053	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	20.3	20.2	22.2	0.0	0.0	21.2	10.8	9.9	25.4	16.4	14.0
Incr Delay (d2), s/veh	0.8	0.1	0.0	0.5	0.0	0.0	0.8	0.2	0.0	2.3	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	0.0	0.7	0.0	0.0	1.2	1.0	0.1	0.1	2.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	20.4	20.2	22.8	0.0	0.0	22.0	11.0	9.9	27.7	17.6	14.2
LnGrp LOS	C	C	C	C	A	A	C	B	A	C	B	B
Approach Vol, veh/h		80			62			515			605	
Approach Delay, s/veh		21.5			22.8			13.7			17.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	26.2		10.0	10.8	20.1		11.1
Change Period (Y+Rc), s	4.0	6.0		5.3	4.0	6.0		4.9
Max Green Setting (Gmax), s	20.0	30.0		20.0	20.0	30.0		20.0
Max Q Clear Time (g_c+I1), s	2.2	5.6		3.7	5.5	9.2		3.7
Green Ext Time (p_c), s	0.0	3.1		0.1	0.2	4.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	2	35	9	3	15	39	333	11	28	406	70
Future Volume (veh/h)	63	2	35	9	3	15	39	333	11	28	406	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	2	39	10	3	17	43	370	12	31	451	78
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	243	7	222	85	25	97	80	792	671	50	760	644
Arrive On Green	0.14	0.14	0.14	0.06	0.06	0.06	0.04	0.42	0.42	0.03	0.41	0.41
Sat Flow, veh/h	1734	50	1585	1385	416	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	72	0	39	13	0	17	43	370	12	31	451	78
Grp Sat Flow(s),veh/h/ln	1784	0	1585	1801	0	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.8	0.0	1.1	0.3	0.0	0.5	1.2	7.2	0.2	0.9	9.6	1.6
Cycle Q Clear(g_c), s	1.8	0.0	1.1	0.3	0.0	0.5	1.2	7.2	0.2	0.9	9.6	1.6
Prop In Lane	0.97		1.00	0.77		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	0	222	110	0	97	80	792	671	50	760	644
V/C Ratio(X)	0.29	0.00	0.18	0.12	0.00	0.18	0.54	0.47	0.02	0.62	0.59	0.12
Avail Cap(c_a), veh/h	1191	0	1059	708	0	623	700	2204	1868	700	2204	1868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	19.3	22.6	0.0	22.7	23.8	10.6	8.5	24.5	11.8	9.4
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.2	0.0	0.3	2.1	0.6	0.0	4.7	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.4	0.1	0.0	0.2	0.5	2.2	0.1	0.4	3.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	19.4	22.8	0.0	23.0	25.9	11.1	8.5	29.2	12.8	9.5
LnGrp LOS	B	A	B	C	A	C	C	B	A	C	B	A
Approach Vol, veh/h		111			30			425			560	
Approach Delay, s/veh		19.7			22.9			12.5			13.3	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	27.3		7.1	6.3	26.4		11.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	60.0		20.0	20.0	60.0		34.0
Max Q Clear Time (g_c+I1), s	2.9	9.2		2.5	3.2	11.6		3.8
Green Ext Time (p_c), s	0.0	6.9		0.0	0.0	9.1		0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	16	37	15	2	12	67	432	28	10	402	30
Future Volume (veh/h)	43	16	37	15	2	12	67	432	28	10	402	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	18	41	17	2	13	74	480	31	11	447	33
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	64	205	59	7	45	118	700	45	30	608	45
Arrive On Green	0.13	0.13	0.13	0.07	0.07	0.07	0.07	0.40	0.40	0.02	0.35	0.35
Sat Flow, veh/h	1313	492	1585	904	106	691	1781	1738	112	1781	1720	127
Grp Volume(v), veh/h	66	0	41	32	0	0	74	0	511	11	0	480
Grp Sat Flow(s),veh/h/ln	1805	0	1585	1701	0	0	1781	0	1850	1781	0	1847
Q Serve(g_s), s	1.5	0.0	1.1	0.8	0.0	0.0	1.9	0.0	10.5	0.3	0.0	10.4
Cycle Q Clear(g_c), s	1.5	0.0	1.1	0.8	0.0	0.0	1.9	0.0	10.5	0.3	0.0	10.4
Prop In Lane	0.73		1.00	0.53		0.41	1.00		0.06	1.00		0.07
Lane Grp Cap(c), veh/h	234	0	205	112	0	0	118	0	746	30	0	653
V/C Ratio(X)	0.28	0.00	0.20	0.29	0.00	0.00	0.63	0.00	0.69	0.36	0.00	0.73
Avail Cap(c_a), veh/h	1255	0	1102	739	0	0	774	0	1448	774	0	1446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	17.9	20.5	0.0	0.0	20.9	0.0	11.3	22.4	0.0	13.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.5	0.0	0.0	2.0	0.0	1.4	2.7	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	0.3	0.0	0.0	0.8	0.0	3.6	0.1	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.3	0.0	18.1	21.0	0.0	0.0	22.9	0.0	12.7	25.0	0.0	14.9
LnGrp LOS	B	A	B	C	A	A	C	A	B	C	A	B
Approach Vol, veh/h		107			32			585			491	
Approach Delay, s/veh		18.2			21.0			14.0			15.2	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	24.2		7.0	7.1	22.0		10.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	36.0		20.0	20.0	36.0		32.0
Max Q Clear Time (g_c+I1), s	2.3	12.5		2.8	3.9	12.4		3.5
Green Ext Time (p_c), s	0.0	4.1		0.1	0.1	3.8		0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	5	81	11	9	13	103	566	24	20	453	19
Future Volume (veh/h)	29	5	81	11	9	13	103	566	24	20	453	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	6	1	12	10	0	114	629	26	22	503	20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	22	123	48	40	76	183	792	33	48	658	26
Arrive On Green	0.08	0.08	0.08	0.05	0.05	0.00	0.10	0.44	0.44	0.03	0.37	0.37
Sat Flow, veh/h	1511	283	1585	993	828	1585	1781	1783	74	1781	1787	71
Grp Volume(v), veh/h	38	0	1	22	0	0	114	0	655	22	0	523
Grp Sat Flow(s),veh/h/ln	1795	0	1585	1821	0	1585	1781	0	1857	1781	0	1858
Q Serve(g_s), s	0.9	0.0	0.0	0.5	0.0	0.0	2.7	0.0	13.3	0.5	0.0	10.9
Cycle Q Clear(g_c), s	0.9	0.0	0.0	0.5	0.0	0.0	2.7	0.0	13.3	0.5	0.0	10.9
Prop In Lane	0.84		1.00	0.55		1.00	1.00		0.04	1.00		0.04
Lane Grp Cap(c), veh/h	139	0	123	88	0	76	183	0	825	48	0	684
V/C Ratio(X)	0.27	0.00	0.01	0.25	0.00	0.00	0.62	0.00	0.79	0.46	0.00	0.76
Avail Cap(c_a), veh/h	1472	0	1300	456	0	397	852	0	1451	446	0	1029
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.1	0.0	18.7	20.1	0.0	0.0	18.9	0.0	10.5	21.0	0.0	12.2
Incr Delay (d2), s/veh	1.0	0.0	0.0	1.5	0.0	0.0	1.3	0.0	2.4	2.6	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.2	0.0	0.0	1.0	0.0	4.5	0.2	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	0.0	18.7	21.6	0.0	0.0	20.2	0.0	12.8	23.6	0.0	14.7
LnGrp LOS	C	A	B	C	A	A	C	A	B	C	A	B
Approach Vol, veh/h		39			22			769			545	
Approach Delay, s/veh		20.1			21.6			13.9			15.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	21.9		7.4	5.2	25.2		6.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	21.0	24.3		36.0	11.0	34.3		11.0
Max Q Clear Time (g_c+I1), s	4.7	12.9		2.9	2.5	15.3		2.5
Green Ext Time (p_c), s	0.2	2.5		0.1	0.0	4.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	6	11	37	10	86	25	558	18	92	588	81
Future Volume (veh/h)	17	6	11	37	10	86	25	558	18	92	588	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	7	0	41	11	2	28	620	18	102	653	82
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	57	186	154	162	137	70	1025	30	169	1096	137
Arrive On Green	0.12	0.12	0.00	0.09	0.09	0.09	0.04	0.29	0.29	0.09	0.35	0.35
Sat Flow, veh/h	1319	486	1585	1781	1870	1585	1781	3522	102	1781	3165	397
Grp Volume(v), veh/h	26	0	0	41	11	2	28	313	325	102	366	369
Grp Sat Flow(s),veh/h/ln	1804	0	1585	1781	1870	1585	1781	1777	1848	1781	1777	1785
Q Serve(g_s), s	0.6	0.0	0.0	1.0	0.3	0.1	0.7	7.0	7.0	2.5	7.9	7.9
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.0	0.3	0.1	0.7	7.0	7.0	2.5	7.9	7.9
Prop In Lane	0.73		1.00	1.00		1.00	1.00		0.06	1.00		0.22
Lane Grp Cap(c), veh/h	212	0	186	154	162	137	70	517	538	169	616	618
V/C Ratio(X)	0.12	0.00	0.00	0.27	0.07	0.01	0.40	0.60	0.61	0.60	0.59	0.60
Avail Cap(c_a), veh/h	1013	0	890	950	998	846	423	971	1010	423	933	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	0.0	0.0	19.8	19.4	19.3	21.7	14.1	14.1	20.1	12.5	12.5
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.7	0.1	0.0	1.4	1.5	1.5	1.3	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.4	0.1	0.0	0.3	2.3	2.4	0.9	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	0.0	0.0	20.4	19.6	19.4	23.1	15.6	15.6	21.4	13.7	13.7
LnGrp LOS	B	A	A	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		26			54			666			837	
Approach Delay, s/veh		18.5			20.2			15.9			14.6	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	19.2		9.3	5.8	21.7		9.4
Change Period (Y+Rc), s	4.0	5.7		5.3	4.0	5.7		4.0
Max Green Setting (Gmax), s	11.0	25.3		24.7	11.0	24.3		26.0
Max Q Clear Time (g_c+I1), s	4.5	9.0		3.0	2.7	9.9		2.6
Green Ext Time (p_c), s	0.1	3.1		0.1	0.0	3.5		0.0

Intersection Summary			
HCM 6th Ctrl Delay			15.4
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	0	44	9	0	25	53	524	35	30	528	2
Future Volume (veh/h)	68	0	44	9	0	25	53	524	35	30	528	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	0	5	10	0	0	59	582	36	33	587	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	247	0	0	43	0	0	137	1317	81	71	1246	556
Arrive On Green	0.14	0.00	0.00	0.02	0.00	0.00	0.08	0.39	0.39	0.04	0.35	0.35
Sat Flow, veh/h	1781	76		1781	10		1781	3399	210	1781	3554	1585
Grp Volume(v), veh/h	76	12.5		10	16.2		59	304	314	33	587	1
Grp Sat Flow(s),veh/h/ln	1781	B		1781	B		1781	1777	1833	1781	1777	1585
Q Serve(g_s), s	1.2			0.2			1.0	4.0	4.0	0.6	4.1	0.0
Cycle Q Clear(g_c), s	1.2			0.2			1.0	4.0	4.0	0.6	4.1	0.0
Prop In Lane	1.00			1.00			1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	247			43			137	689	710	71	1246	556
V/C Ratio(X)	0.31			0.23			0.43	0.44	0.44	0.47	0.47	0.00
Avail Cap(c_a), veh/h	1129			1129			1129	1689	1742	1129	3377	1506
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2			15.1			13.9	7.1	7.1	14.8	8.0	6.7
Incr Delay (d2), s/veh	0.3			1.0			0.8	0.8	0.7	1.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4			0.1			0.3	1.1	1.1	0.2	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.5			16.2			14.7	7.9	7.9	16.6	8.5	6.7
LnGrp LOS	B			B			B	A	A	B	A	A
Approach Vol, veh/h								677			621	
Approach Delay, s/veh								8.5			8.9	
Approach LOS								A			A	

Timer - Assigned Phs	1	2	3		5	6	7
Phs Duration (G+Y+Rc), s	5.3	17.9	8.4		6.4	16.8	4.8
Change Period (Y+Rc), s	4.0	5.7	4.0		4.0	5.7	4.0
Max Green Setting (Gmax), s	20.0	30.0	20.0		20.0	30.0	20.0
Max Q Clear Time (g_c+I1), s	2.6	6.0	3.2		3.0	6.1	2.2
Green Ext Time (p_c), s	0.0	4.8	0.1		0.0	5.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	55	154	69	0	10	11	709	23	8	504	5
Future Volume (veh/h)	79	55	154	69	0	10	11	709	23	8	504	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	80	0	77	0	0	12	788	0	9	560	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	308		215	0		27	1624		29	1134	506
Arrive On Green	0.16	0.16	0.00	0.12	0.00	0.00	0.02	0.32	0.00	0.02	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	74	80	0	77	0	0	12	788	0	9	560	3
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	1.7	1.8	0.0	1.9	0.0	0.0	0.3	5.9	0.0	0.2	6.0	0.1
Cycle Q Clear(g_c), s	1.7	1.8	0.0	1.9	0.0	0.0	0.3	5.9	0.0	0.2	6.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	308		215	0		27	1624		29	1134	506
V/C Ratio(X)	0.25	0.26		0.36	0.00		0.44	0.49		0.31	0.49	0.01
Avail Cap(c_a), veh/h	751	789		751	0		751	4307		751	2998	1337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	17.3	0.0	19.1	0.0	0.0	23.1	13.0	0.0	23.1	13.0	11.0
Incr Delay (d2), s/veh	0.3	0.3	0.0	1.0	0.0	0.0	4.0	0.4	0.0	5.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	0.0	0.8	0.0	0.0	0.1	1.6	0.0	0.1	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	17.6	0.0	20.1	0.0	0.0	27.2	13.4	0.0	28.8	13.6	11.0
LnGrp LOS	B	B		C	A		C	B		C	B	B
Approach Vol, veh/h		154	A		77	A		800	A		572	
Approach Delay, s/veh		17.6			20.1			13.6			13.9	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	21.1		11.8	4.7	21.1		9.7
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.2	7.9		3.8	2.3	8.0		3.9
Green Ext Time (p_c), s	0.0	7.2		0.4	0.0	4.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	0	27	35	0	0	18	436	18	7	1003	8
Future Volume (veh/h)	19	0	27	35	0	0	18	436	18	7	1003	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	0	0	39	0	0	20	484	11	8	1114	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	0	82	282	0	125	53	1462	652	15	2038	16
Arrive On Green	0.05	0.00	0.00	0.08	0.00	0.00	0.03	0.41	0.41	0.01	0.39	0.39
Sat Flow, veh/h	1781	0	1585	3563	0	1585	1781	3554	1585	1781	5225	42
Grp Volume(v), veh/h	21	0	0	39	0	0	20	484	11	8	726	397
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1702	1863
Q Serve(g_s), s	0.5	0.0	0.0	0.4	0.0	0.0	0.4	3.7	0.2	0.2	6.6	6.6
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.4	0.0	0.0	0.4	3.7	0.2	0.2	6.6	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	93	0	82	282	0	125	53	1462	652	15	1328	726
V/C Ratio(X)	0.23	0.00	0.00	0.14	0.00	0.00	0.38	0.33	0.02	0.53	0.55	0.55
Avail Cap(c_a), veh/h	667	0	593	1777	0	791	667	2659	1186	667	2548	1394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	17.2	0.0	0.0	19.1	8.0	7.0	19.8	9.5	9.5
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	0.0	0.0	1.6	0.2	0.0	10.2	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.7	0.0	0.1	1.4	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	0.0	0.0	17.3	0.0	0.0	20.7	8.2	7.0	30.0	10.0	10.4
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	B
Approach Vol, veh/h		21			39			515			1131	
Approach Delay, s/veh		18.7			17.3			8.7			10.2	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.3	22.5		6.1	5.2	21.6		7.2				
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0				
Max Green Setting (Gmax), s	15.0	30.0		15.0	15.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s	2.2	5.7		2.5	2.4	8.6		2.4				
Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	7.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	10.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	8	107	63	6	22	93	1141	25	35	1451	39
Future Volume (veh/h)	110	8	107	63	6	22	93	1141	25	35	1451	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	9	3	70	7	0	103	1268	27	39	1612	41
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	11	143	90	9	87	128	3407	73	50	3167	81
Arrive On Green	0.09	0.09	0.09	0.06	0.06	0.00	0.07	0.66	0.66	0.03	0.62	0.62
Sat Flow, veh/h	1664	123	1534	1626	163	1585	1781	5144	110	1781	5120	130
Grp Volume(v), veh/h	131	0	3	77	0	0	103	839	456	39	1072	581
Grp Sat Flow(s),veh/h/ln	1787	0	1534	1789	0	1585	1781	1702	1850	1781	1702	1846
Q Serve(g_s), s	8.6	0.0	0.2	5.1	0.0	0.0	6.8	13.3	13.3	2.6	21.0	21.0
Cycle Q Clear(g_c), s	8.6	0.0	0.2	5.1	0.0	0.0	6.8	13.3	13.3	2.6	21.0	21.0
Prop In Lane	0.93		1.00	0.91		1.00	1.00		0.06	1.00		0.07
Lane Grp Cap(c), veh/h	167	0	143	99	0	87	128	2255	1225	50	2106	1142
V/C Ratio(X)	0.78	0.00	0.02	0.78	0.00	0.00	0.80	0.37	0.37	0.78	0.51	0.51
Avail Cap(c_a), veh/h	219	0	188	239	0	211	238	2255	1225	238	2106	1142
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	0.0	49.4	56.0	0.0	0.0	54.9	9.1	9.1	57.9	12.7	12.7
Incr Delay (d2), s/veh	9.3	0.0	0.0	4.9	0.0	0.0	4.4	0.2	0.4	9.3	0.9	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.1	2.5	0.0	0.0	3.1	4.1	4.5	1.3	7.1	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	0.0	49.4	60.9	0.0	0.0	59.3	9.3	9.5	67.3	13.6	14.4
LnGrp LOS	E	A	D	E	A	A	E	A	A	E	B	B
Approach Vol, veh/h		134			77			1398			1692	
Approach Delay, s/veh		62.2			60.9			13.1			15.1	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.6	80.2		10.6	7.4	85.5		16.5
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		5.3
Max Green Setting (Gmax), s	16.0	54.0		16.0	16.0	54.0		14.7
Max Q Clear Time (g_c+I1), s	8.8	23.0		7.1	4.6	15.3		10.6
Green Ext Time (p_c), s	0.1	19.4		0.1	0.0	16.1		0.1

Intersection Summary			
HCM 6th Ctrl Delay			17.2
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	196	86	195	368	198	152	1031	156	213	1125	166
Future Volume (veh/h)	165	196	86	195	368	198	152	1031	156	213	1125	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	218	7	217	409	19	169	1146	0	237	1250	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	419	182	246	487	212	198	2198		266	2394	
Arrive On Green	0.12	0.12	0.12	0.14	0.14	0.14	0.11	0.43	0.00	0.15	0.47	0.00
Sat Flow, veh/h	1781	3554	1545	1781	3554	1550	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	183	218	7	217	409	19	169	1146	0	237	1250	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1545	1781	1777	1550	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	12.1	6.9	0.5	14.3	13.5	1.3	11.2	19.8	0.0	15.7	20.7	0.0
Cycle Q Clear(g_c), s	12.1	6.9	0.5	14.3	13.5	1.3	11.2	19.8	0.0	15.7	20.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	419	182	246	487	212	198	2198		266	2394	
V/C Ratio(X)	0.86	0.52	0.04	0.88	0.84	0.09	0.85	0.52		0.89	0.52	
Avail Cap(c_a), veh/h	327	512	223	341	542	236	341	2198		371	2394	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.9	49.7	46.9	50.8	50.5	45.2	52.4	25.1	0.0	50.1	22.4	0.0
Incr Delay (d2), s/veh	9.0	1.2	0.1	14.3	10.8	0.2	4.0	0.9	0.0	14.3	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	3.0	0.2	7.1	6.5	0.5	5.1	7.7	0.0	7.8	7.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.9	51.0	47.0	65.1	61.3	45.5	56.4	26.0	0.0	64.4	23.2	0.0
LnGrp LOS	E	D	D	E	E	D	E	C		E	C	
Approach Vol, veh/h		408			645			1315	A		1487	A
Approach Delay, s/veh		55.4			62.1			29.9			29.8	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	62.3	18.3	22.1	21.9	57.7	20.6	19.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	23.0	37.0	22.0	18.3	25.0	* 35	23.0	17.3
Max Q Clear Time (g_c+I1), s	13.2	22.7	14.1	15.5	17.7	21.8	16.3	8.9
Green Ext Time (p_c), s	0.2	7.4	0.2	0.6	0.3	7.2	0.2	0.7

Intersection Summary	
HCM 6th Ctrl Delay	37.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1	26	26	1	15	47	1385	0	16	1386	11
Future Volume (veh/h)	25	1	26	26	1	15	47	1385	0	16	1386	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	1	0	29	1	0	52	1539	0	18	1540	11
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	2	0	214	2	0	63	2240	999	24	3184	23
Arrive On Green	0.03	0.03	0.00	0.03	0.03	0.00	0.04	0.63	0.00	0.01	0.61	0.61
Sat Flow, veh/h	1584	57	0	1577	54	0	1781	3554	1585	1781	5230	37
Grp Volume(v), veh/h	29	0	0	30	0	0	52	1539	0	18	1002	549
Grp Sat Flow(s),veh/h/ln	1640	0	0	1631	0	0	1781	1777	1585	1781	1702	1864
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.2	11.8	0.0	0.4	6.8	6.8
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.7	0.0	0.0	1.2	11.8	0.0	0.4	6.8	6.8
Prop In Lane	0.97		0.00	0.97		0.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	216	0	0	215	0	0	63	2240	999	24	2072	1134
V/C Ratio(X)	0.13	0.00	0.00	0.14	0.00	0.00	0.83	0.69	0.00	0.75	0.48	0.48
Avail Cap(c_a), veh/h	688	0	0	688	0	0	639	3402	1517	639	3259	1784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	0.0	20.1	0.0	0.0	20.0	5.0	0.0	20.5	4.5	4.5
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	0.0	0.0	9.8	0.5	0.0	15.5	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.3	0.0	0.0	0.6	0.9	0.0	0.2	0.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	0.0	20.4	0.0	0.0	29.8	5.5	0.0	36.1	4.8	5.0
LnGrp LOS	C	A	A	C	A	A	C	A	A	D	A	A
Approach Vol, veh/h		29			30			1591			1569	
Approach Delay, s/veh		20.3			20.4			6.3			5.2	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	32.0		5.2	5.5	31.1		5.2
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	15.0	40.0		15.0	15.0	40.0		15.0
Max Q Clear Time (g_c+I1), s	2.4	13.8		2.7	3.2	8.8		2.7
Green Ext Time (p_c), s	0.0	12.5		0.0	0.0	12.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	37	68	154	79	105	139	1589	71	61	1365	17
Future Volume (veh/h)	85	37	68	154	79	105	139	1589	71	61	1365	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	41	2	171	88	0	154	1766	0	68	1517	18
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	230	100	232	122		181	3344		88	3132	37
Arrive On Green	0.07	0.06	0.06	0.07	0.07	0.00	0.10	0.65	0.00	0.05	0.60	0.60
Sat Flow, veh/h	1781	3554	1548	3456	1870	1585	1781	5106	1585	1781	5201	62
Grp Volume(v), veh/h	94	41	2	171	88	0	154	1766	0	68	993	542
Grp Sat Flow(s),veh/h/ln	1781	1777	1548	1728	1870	1585	1781	1702	1585	1781	1702	1859
Q Serve(g_s), s	6.2	1.3	0.1	5.8	5.5	0.0	10.2	21.9	0.0	4.5	19.7	19.7
Cycle Q Clear(g_c), s	6.2	1.3	0.1	5.8	5.5	0.0	10.2	21.9	0.0	4.5	19.7	19.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	118	230	100	232	122		181	3344		88	2050	1119
V/C Ratio(X)	0.80	0.18	0.02	0.74	0.72		0.85	0.53		0.78	0.48	0.48
Avail Cap(c_a), veh/h	238	423	185	461	223		238	3344		238	2050	1119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	53.1	52.6	54.9	55.0	0.0	53.0	10.9	0.0	56.4	13.4	13.4
Incr Delay (d2), s/veh	4.5	0.5	0.1	1.7	10.0	0.0	15.9	0.6	0.0	5.4	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.6	0.1	2.6	3.0	0.0	5.3	7.5	0.0	2.1	7.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.7	53.6	52.7	56.7	65.0	0.0	68.9	11.5	0.0	61.8	13.6	13.8
LnGrp LOS	E	D	D	E	E		E	B		E	B	B
Approach Vol, veh/h		137			259	A		1920	A		1603	
Approach Delay, s/veh		57.8			59.5			16.1			15.7	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	13.6	9.9	84.6	12.1	13.5	16.2	78.3
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	16.0	14.3	16.0	54.0	16.0	14.3	16.0	54.0
Max Q Clear Time (g_c+I1), s	8.2	7.5	6.5	23.9	7.8	3.3	12.2	21.7
Green Ext Time (p_c), s	0.1	0.2	0.1	13.6	0.3	0.1	0.1	10.5

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	203	133	1709	230	98	1429
Future Volume (veh/h)	203	133	1709	230	98	1429
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	226	0	1899	230	109	1588
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	274		2123	947	139	2552
Arrive On Green	0.15	0.00	0.60	0.60	0.08	0.72
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	226	0	1899	230	109	1588
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	11.5	0.0	43.3	6.4	5.6	21.4
Cycle Q Clear(g_c), s	11.5	0.0	43.3	6.4	5.6	21.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	274		2123	947	139	2552
V/C Ratio(X)	0.82		0.89	0.24	0.78	0.62
Avail Cap(c_a), veh/h	855		2273	1014	380	3031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	0.0	16.3	8.9	42.5	6.7
Incr Delay (d2), s/veh	6.2	0.0	4.9	0.2	3.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	15.6	1.9	2.5	5.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.6	0.0	21.2	9.0	46.1	7.1
LnGrp LOS	D		C	A	D	A
Approach Vol, veh/h	226	A	2129			1697
Approach Delay, s/veh	44.6		19.9			9.6
Approach LOS	D		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	11.3	62.0				73.4	20.4
Change Period (Y+Rc), s	4.0	6.0				* 6	6.0
Max Green Setting (Gmax), s	20.0	60.0				* 80	45.0
Max Q Clear Time (g_c+I1), s	7.6	45.3				23.4	13.5
Green Ext Time (p_c), s	0.1	10.7				14.2	1.0

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	60	22	400	68	27	469
Future Volume (veh/h)	60	22	400	68	27	469
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	2	444	45	30	521
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	236	210	1197	534	79	973
Arrive On Green	0.13	0.13	0.34	0.34	0.04	0.52
Sat Flow, veh/h	1781	1585	3647	1585	1781	1870
Grp Volume(v), veh/h	67	2	444	45	30	521
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1870
Q Serve(g_s), s	1.0	0.0	2.7	0.6	0.5	5.3
Cycle Q Clear(g_c), s	1.0	0.0	2.7	0.6	0.5	5.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	236	210	1197	534	79	973
V/C Ratio(X)	0.28	0.01	0.37	0.08	0.38	0.54
Avail Cap(c_a), veh/h	1485	1321	5554	2477	1237	4287
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.3	10.8	7.2	6.5	13.4	4.6
Incr Delay (d2), s/veh	0.7	0.0	0.4	0.1	1.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.7	0.1	0.2	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.9	10.9	7.6	6.6	14.5	5.5
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	69		489			551
Approach Delay, s/veh	11.9		7.5			6.0
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.3	15.7				21.0	7.8
Change Period (Y+Rc), s	4.0	6.0				6.0	4.0
Max Green Setting (Gmax), s	20.0	45.0				66.0	24.0
Max Q Clear Time (g_c+I1), s	2.5	4.7				7.3	3.0
Green Ext Time (p_c), s	0.0	5.0				5.6	0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	3	9	78	0	141	11	808	75	139	750	29
Future Volume (veh/h)	5	3	9	78	0	141	11	808	75	139	750	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	3	1	87	0	16	12	898	75	154	833	20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	64	15	288	0	186	37	1911	160	196	1243	1050
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.02	0.58	0.58	0.11	0.66	0.66
Sat Flow, veh/h	565	540	123	1553	0	1554	1781	3319	277	1781	1870	1579
Grp Volume(v), veh/h	10	0	0	87	0	16	12	481	492	154	833	20
Grp Sat Flow(s),veh/h/ln	1227	0	0	1553	0	1554	1781	1777	1819	1781	1870	1579
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.5	11.1	11.1	5.9	18.9	0.3
Cycle Q Clear(g_c), s	3.2	0.0	0.0	3.2	0.0	0.6	0.5	11.1	11.1	5.9	18.9	0.3
Prop In Lane	0.60		0.10	1.00		1.00	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	229	0	0	288	0	186	37	1023	1047	196	1243	1050
V/C Ratio(X)	0.04	0.00	0.00	0.30	0.00	0.09	0.32	0.47	0.47	0.79	0.67	0.02
Avail Cap(c_a), veh/h	479	0	0	521	0	443	507	1518	1554	507	1598	1349
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	0.0	0.0	28.6	0.0	27.5	33.9	8.7	8.7	30.5	7.1	4.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.1	1.9	0.6	0.6	2.7	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	1.3	0.0	0.2	0.2	3.1	3.2	2.4	4.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.0	0.0	28.8	0.0	27.6	35.8	9.2	9.2	33.1	8.3	4.0
LnGrp LOS	C	A	A	C	A	C	D	A	A	C	A	A
Approach Vol, veh/h		10			103			985			1007	
Approach Delay, s/veh		27.4			28.7			9.6			12.0	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.7	46.1		12.4	5.5	52.4		12.4
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	60.0		20.0	20.0	60.0		20.0
Max Q Clear Time (g_c+I1), s	7.9	13.1		5.2	2.5	20.9		5.2
Green Ext Time (p_c), s	0.2	27.4		0.2	0.0	24.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	0	37	50	5	35	54	843	23	14	761	32
Future Volume (veh/h)	51	0	37	50	5	35	54	843	23	14	761	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	0	0	56	6	0	60	937	15	16	846	34
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	0	66	73	8	72	78	2506	1116	20	2340	94
Arrive On Green	0.04	0.00	0.00	0.05	0.05	0.00	0.04	0.71	0.71	0.01	0.67	0.67
Sat Flow, veh/h	1781	0	1585	1616	173	1585	1781	3554	1583	1781	3482	140
Grp Volume(v), veh/h	57	0	0	62	0	0	60	937	15	16	432	448
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1790	0	1585	1781	1777	1583	1781	1777	1845
Q Serve(g_s), s	2.9	0.0	0.0	3.1	0.0	0.0	3.0	9.5	0.3	0.8	9.5	9.5
Cycle Q Clear(g_c), s	2.9	0.0	0.0	3.1	0.0	0.0	3.0	9.5	0.3	0.8	9.5	9.5
Prop In Lane	1.00		1.00	0.90		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	74	0	66	81	0	72	78	2506	1116	20	1194	1240
V/C Ratio(X)	0.77	0.00	0.00	0.76	0.00	0.00	0.76	0.37	0.01	0.82	0.36	0.36
Avail Cap(c_a), veh/h	317	0	282	318	0	282	317	2506	1116	317	1194	1240
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	0.0	0.0	42.5	0.0	0.0	42.6	5.3	3.9	44.4	6.4	6.4
Incr Delay (d2), s/veh	6.1	0.0	0.0	5.5	0.0	0.0	5.7	0.2	0.0	25.3	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	1.5	0.0	0.0	1.4	2.2	0.1	0.5	2.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	0.0	0.0	47.9	0.0	0.0	48.2	5.5	4.0	69.7	7.2	7.2
LnGrp LOS	D	A	A	D	A	A	D	A	A	E	A	A
Approach Vol, veh/h		57			62			1012			896	
Approach Delay, s/veh		48.7			47.9			8.0			8.3	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	66.2		8.1	5.0	69.2		7.8
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	16.0	24.3		16.0	16.0	24.3		16.0
Max Q Clear Time (g_c+I1), s	5.0	11.5		5.1	2.8	11.5		4.9
Green Ext Time (p_c), s	0.1	10.4		0.1	0.0	10.8		0.1

Intersection Summary		
HCM 6th Ctrl Delay		10.5
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	0	242	5	4	3	508	655	0	8	579	240
Future Volume (veh/h)	258	0	242	5	4	3	508	655	0	8	579	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	287	0	0	6	4	0	564	728	0	9	643	267
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	396	0		39	41	0	680	2326	0	28	1722	768
Arrive On Green	0.11	0.00	0.00	0.02	0.02	0.00	0.20	0.65	0.00	0.02	0.48	0.48
Sat Flow, veh/h	3563	0	1585	1781	1870	0	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	287	0	0	6	4	0	564	728	0	9	643	267
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	7.0	0.0	0.0	0.3	0.2	0.0	14.1	8.0	0.0	0.4	10.2	9.4
Cycle Q Clear(g_c), s	7.0	0.0	0.0	0.3	0.2	0.0	14.1	8.0	0.0	0.4	10.2	9.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	396	0		39	41	0	680	2326	0	28	1722	768
V/C Ratio(X)	0.73	0.00		0.15	0.10	0.00	0.83	0.31	0.00	0.32	0.37	0.35
Avail Cap(c_a), veh/h	633	0		238	249	0	883	2326	0	238	1722	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.7	0.0	0.0	43.2	43.1	0.0	34.7	6.8	0.0	43.8	14.6	14.4
Incr Delay (d2), s/veh	2.5	0.0	0.0	1.8	1.0	0.0	5.2	0.4	0.0	6.5	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.0	0.1	0.1	0.0	6.3	2.7	0.0	0.2	3.5	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.2	0.0	0.0	44.9	44.1	0.0	39.9	7.1	0.0	50.3	14.7	14.7
LnGrp LOS	D	A		D	D	A	D	A	A	D	B	B
Approach Vol, veh/h		287	A		10			1292			919	
Approach Delay, s/veh		41.2			44.6			21.4			15.1	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	64.6		14.0	20.7	49.3		6.0
Change Period (Y+Rc), s	4.0	5.7		4.0	3.0	* 5.7		4.0
Max Green Setting (Gmax), s	12.0	32.3		16.0	23.0	* 23		12.0
Max Q Clear Time (g_c+I1), s	2.4	10.0		9.0	16.1	12.2		2.3
Green Ext Time (p_c), s	0.0	3.6		0.7	1.6	3.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	0	34	27	0	22	40	634	30	51	732	22
Future Volume (veh/h)	63	0	34	27	0	22	40	634	30	51	732	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	0	1	30	0	0	44	704	13	57	813	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	407	0	181	110	115	0	115	1421	634	118	1428	637
Arrive On Green	0.11	0.00	0.11	0.06	0.00	0.00	0.06	0.40	0.40	0.07	0.40	0.40
Sat Flow, veh/h	3563	0	1585	1781	1870	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	70	0	1	30	0	0	44	704	13	57	813	10
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.9	0.0	0.0	0.8	0.0	0.0	1.1	7.2	0.2	1.5	8.6	0.2
Cycle Q Clear(g_c), s	0.9	0.0	0.0	0.8	0.0	0.0	1.1	7.2	0.2	1.5	8.6	0.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	407	0	181	110	115	0	115	1421	634	118	1428	637
V/C Ratio(X)	0.17	0.00	0.01	0.27	0.00	0.00	0.38	0.50	0.02	0.48	0.57	0.02
Avail Cap(c_a), veh/h	1473	0	655	736	773	0	736	2938	1311	736	2938	1311
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	19.0	21.7	0.0	0.0	21.7	10.9	8.8	21.8	11.2	8.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.5	0.0	0.0	0.8	0.4	0.0	1.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.3	0.0	0.0	0.5	2.4	0.1	0.6	2.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	0.0	19.0	22.2	0.0	0.0	22.5	11.2	8.8	22.9	11.7	8.7
LnGrp LOS	B	A	B	C	A	A	C	B	A	C	B	A
Approach Vol, veh/h		71			30			761			880	
Approach Delay, s/veh		19.4			22.2			11.8			12.4	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	24.6		7.0	7.1	24.7		9.5
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	3.5	9.2		2.8	3.1	10.6		2.9
Green Ext Time (p_c), s	0.0	7.6		0.0	0.0	8.8		0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	727	44	88	652	41	79	29	25	4	29	0
Future Volume (veh/h)	50	727	44	88	652	41	79	29	25	4	29	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	808	21	98	724	22	60	71	0	4	32	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	1333	594	127	1450	647	137	144	122	7	55	0
Arrive On Green	0.04	0.37	0.37	0.07	0.41	0.41	0.08	0.08	0.00	0.03	0.03	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	207	1653	0
Grp Volume(v), veh/h	56	808	21	98	724	22	60	71	0	36	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1860	0	0
Q Serve(g_s), s	1.2	7.3	0.3	2.2	6.0	0.3	1.3	1.5	0.0	0.8	0.0	0.0
Cycle Q Clear(g_c), s	1.2	7.3	0.3	2.2	6.0	0.3	1.3	1.5	0.0	0.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.11		0.00
Lane Grp Cap(c), veh/h	68	1333	594	127	1450	647	137	144	122	61	0	0
V/C Ratio(X)	0.82	0.61	0.04	0.77	0.50	0.03	0.44	0.49	0.00	0.59	0.00	0.00
Avail Cap(c_a), veh/h	670	2675	1193	894	3120	1392	670	704	596	700	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.0	10.1	7.9	18.2	8.8	7.1	17.6	17.7	0.0	19.0	0.0	0.0
Incr Delay (d2), s/veh	8.9	0.6	0.0	3.7	0.4	0.0	0.8	1.0	0.0	3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.9	0.1	0.8	1.4	0.1	0.5	0.6	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	10.7	7.9	21.9	9.2	7.1	18.4	18.6	0.0	22.3	0.0	0.0
LnGrp LOS	C	B	A	C	A	A	B	B	A	C	A	A
Approach Vol, veh/h		885			844			131			36	
Approach Delay, s/veh		11.7			10.6			18.5			22.3	
Approach LOS		B			B			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.3	6.8	20.6		7.1	5.5	22.0				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		15.0	20.0	30.0		15.0	15.0	35.0				
Max Q Clear Time (g_c+I1), s		2.8	4.2	9.3		3.5	3.2	8.0				
Green Ext Time (p_c), s		0.0	0.1	5.6		0.2	0.0	5.4				

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	689	139	121	862	34	127	34	74	23	27	63
Future Volume (veh/h)	69	689	139	121	862	34	127	34	74	23	27	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	766	58	134	958	16	90	110	2	26	30	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	1541	687	175	1583	706	167	175	148	75	79	67
Arrive On Green	0.06	0.43	0.43	0.10	0.45	0.45	0.09	0.09	0.09	0.04	0.04	0.04
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	77	766	58	134	958	16	90	110	2	26	30	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.3	8.6	1.2	4.0	11.3	0.3	2.7	3.1	0.1	0.8	0.9	0.0
Cycle Q Clear(g_c), s	2.3	8.6	1.2	4.0	11.3	0.3	2.7	3.1	0.1	0.8	0.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	99	1541	687	175	1583	706	167	175	148	75	79	67
V/C Ratio(X)	0.78	0.50	0.08	0.77	0.61	0.02	0.54	0.63	0.01	0.35	0.38	0.01
Avail Cap(c_a), veh/h	453	1763	786	518	1892	844	518	544	461	401	421	357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	11.2	9.2	24.2	11.6	8.6	23.8	24.0	22.6	25.6	25.7	25.3
Incr Delay (d2), s/veh	4.9	0.4	0.1	2.7	0.6	0.0	1.0	1.4	0.0	3.8	4.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.6	0.3	1.6	3.3	0.1	1.0	1.3	0.0	0.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.6	11.6	9.2	26.9	12.1	8.6	24.8	25.4	22.7	29.4	29.9	25.4
LnGrp LOS	C	B	A	C	B	A	C	C	C	C	C	C
Approach Vol, veh/h		901			1108			202			57	
Approach Delay, s/veh		13.1			13.9			25.1			29.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.9	9.4	29.6		9.1	8.8	30.2				
Change Period (Y+Rc), s		4.6	4.0	5.7		4.0	5.7	* 5.7				
Max Green Setting (Gmax), s		12.4	16.0	27.3		16.0	14.0	* 29				
Max Q Clear Time (g_c+I1), s		2.9	6.0	10.6		5.1	4.3	13.3				
Green Ext Time (p_c), s		0.2	0.2	9.9		0.3	0.1	11.2				

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	759	64	48	665	4	153	33	8	3	20	19
Future Volume (veh/h)	37	759	64	48	665	4	153	33	8	3	20	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	843	18	53	739	1	107	125	7	3	22	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	1137	507	68	1209	539	317	312	17	59	432	419
Arrive On Green	0.03	0.32	0.32	0.04	0.34	0.34	0.18	0.18	0.18	0.26	0.26	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1754	98	223	1636	1585
Grp Volume(v), veh/h	41	843	18	53	739	1	107	0	132	25	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1853	1859	0	1585
Q Serve(g_s), s	2.1	19.0	0.7	2.7	15.6	0.0	4.7	0.0	5.7	0.9	0.0	0.0
Cycle Q Clear(g_c), s	2.1	19.0	0.7	2.7	15.6	0.0	4.7	0.0	5.7	0.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	0.12		1.00
Lane Grp Cap(c), veh/h	52	1137	507	68	1209	539	317	0	329	491	0	419
V/C Ratio(X)	0.79	0.74	0.04	0.78	0.61	0.00	0.34	0.00	0.40	0.05	0.00	0.00
Avail Cap(c_a), veh/h	238	1264	564	257	1303	581	317	0	329	491	0	419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.4	27.3	21.1	42.9	24.7	19.6	32.4	0.0	32.8	24.7	0.0	0.0
Incr Delay (d2), s/veh	9.6	2.5	0.0	6.9	1.0	0.0	2.9	0.0	3.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	7.8	0.3	1.3	6.5	0.0	2.3	0.0	2.9	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	29.8	21.1	49.8	25.7	19.6	35.2	0.0	36.4	24.7	0.0	0.0
LnGrp LOS	D	C	C	D	C	B	D	A	D	C	A	A
Approach Vol, veh/h		902			793			239			25	
Approach Delay, s/veh		30.7			27.3			35.9			24.7	
Approach LOS		C			C			D			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		27.8	8.4	33.8		20.0	6.6	35.6				
Change Period (Y+Rc), s		4.0	5.0	* 5		4.0	4.0	5.0				
Max Green Setting (Gmax), s		12.0	13.0	* 32		16.0	12.0	33.0				
Max Q Clear Time (g_c+I1), s		2.9	4.7	21.0		7.7	4.1	17.6				
Green Ext Time (p_c), s		0.0	0.0	7.7		0.7	0.0	10.0				

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	411	369	31	290	29	332	57	32	13	54	36
Future Volume (veh/h)	28	411	369	31	290	29	332	57	32	13	54	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	457	277	34	322	14	414	0	5	14	60	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	1137	746	42	1106	493	537	0	239	18	79	83
Arrive On Green	0.02	0.32	0.32	0.02	0.31	0.31	0.15	0.00	0.15	0.05	0.05	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	351	1502	1585
Grp Volume(v), veh/h	31	457	277	34	322	14	414	0	5	74	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1853	0	1585
Q Serve(g_s), s	1.6	9.0	10.1	1.7	6.2	0.6	10.0	0.0	0.2	3.5	0.0	0.0
Cycle Q Clear(g_c), s	1.6	9.0	10.1	1.7	6.2	0.6	10.0	0.0	0.2	3.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.19		1.00
Lane Grp Cap(c), veh/h	38	1137	746	42	1106	493	537	0	239	97	0	83
V/C Ratio(X)	0.81	0.40	0.37	0.81	0.29	0.03	0.77	0.00	0.02	0.76	0.00	0.00
Avail Cap(c_a), veh/h	257	1145	750	238	1106	493	792	0	352	247	0	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.9	23.9	15.3	43.7	23.5	21.5	36.7	0.0	32.6	42.1	0.0	0.0
Incr Delay (d2), s/veh	14.0	0.4	0.5	12.4	0.7	0.1	3.2	0.0	0.0	4.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	3.6	4.7	0.9	2.6	0.2	4.6	0.0	0.1	1.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	24.2	15.8	56.1	24.2	21.7	39.9	0.0	32.6	46.6	0.0	0.0
LnGrp LOS	E	C	B	E	C	C	D	A	C	D	A	A
Approach Vol, veh/h		765			370			419			74	
Approach Delay, s/veh		22.5			27.0			39.9			46.6	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.6	6.1	33.8		8.7	6.9	33.0				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	5.0	* 5				
Max Green Setting (Gmax), s		20.0	12.0	29.0		12.0	13.0	* 28				
Max Q Clear Time (g_c+I1), s		12.0	3.7	12.1		5.5	3.6	8.2				
Green Ext Time (p_c), s		1.5	0.0	4.9		0.1	0.0	2.2				

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	16	44	18	7	4	46	984	8	7	752	101
Future Volume (veh/h)	96	16	44	18	7	4	46	984	8	7	752	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1870	1870	1870	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	107	18	1	20	8	0	51	1093	6	8	836	61
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	157	9	175	50	0	76	2760	855	20	2957	916
Arrive On Green	0.11	0.09	0.09	0.05	0.03	0.00	0.05	0.57	0.57	0.01	0.53	0.53
Sat Flow, veh/h	1776	1749	97	3456	1870	0	1692	4849	1503	1931	5535	1715
Grp Volume(v), veh/h	107	0	19	20	8	0	51	1093	6	8	836	61
Grp Sat Flow(s),veh/h/ln	1776	0	1846	1728	1870	0	1692	1616	1503	1931	1845	1715
Q Serve(g_s), s	3.9	0.0	0.7	0.4	0.3	0.0	2.0	8.6	0.1	0.3	5.7	0.5
Cycle Q Clear(g_c), s	3.9	0.0	0.7	0.4	0.3	0.0	2.0	8.6	0.1	0.3	5.7	0.5
Prop In Lane	1.00		0.05	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	202	0	166	175	50	0	76	2760	855	20	2957	916
V/C Ratio(X)	0.53	0.00	0.11	0.11	0.16	0.00	0.67	0.40	0.01	0.40	0.28	0.07
Avail Cap(c_a), veh/h	541	0	394	802	434	0	393	3447	1068	448	3935	1219
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	28.9	31.2	32.8	0.0	32.4	8.3	6.4	33.9	8.8	1.3
Incr Delay (d2), s/veh	0.8	0.0	0.3	0.1	0.6	0.0	3.7	0.2	0.0	4.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.3	0.2	0.1	0.0	0.8	2.0	0.0	0.1	1.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	29.1	31.3	33.3	0.0	36.1	8.4	6.4	38.7	8.9	1.3
LnGrp LOS	C	A	C	C	C	A	D	A	A	D	A	A
Approach Vol, veh/h		126			28			1150			905	
Approach Delay, s/veh		29.5			31.9			9.7			8.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	45.2	7.5	11.5	7.1	42.8	13.1	5.8
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	5.3	* 4
Max Green Setting (Gmax), s	16.0	49.0	16.0	14.7	16.0	49.0	21.0	* 16
Max Q Clear Time (g_c+I1), s	2.3	10.6	2.4	2.7	4.0	7.7	5.9	2.3
Green Ext Time (p_c), s	0.0	28.6	0.0	0.0	0.0	24.1	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	27	25	16	14	16	93	169	0	32	177	177
Future Volume (veh/h)	25	27	25	16	14	16	93	169	0	32	177	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	30	8	18	16	0	103	188	0	36	197	161
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	35	9	284	38	0	127	1431	0	48	341	279
Arrive On Green	0.04	0.04	0.04	0.04	0.04	0.00	0.07	0.40	0.00	0.03	0.36	0.36
Sat Flow, veh/h	720	771	206	945	840	0	1781	3647	0	1781	952	778
Grp Volume(v), veh/h	66	0	0	34	0	0	103	188	0	36	0	358
Grp Sat Flow(s),veh/h/ln	1696	0	0	1784	0	0	1781	1777	0	1781	0	1730
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	0.0	1.3	0.8	0.0	0.5	0.0	3.8
Cycle Q Clear(g_c), s	0.9	0.0	0.0	0.4	0.0	0.0	1.3	0.8	0.0	0.5	0.0	3.8
Prop In Lane	0.42		0.12	0.53		0.00	1.00		0.00	1.00		0.45
Lane Grp Cap(c), veh/h	301	0	0	321	0	0	127	1431	0	48	0	619
V/C Ratio(X)	0.22	0.00	0.00	0.11	0.00	0.00	0.81	0.13	0.00	0.75	0.00	0.58
Avail Cap(c_a), veh/h	931	0	0	1623	0	0	1560	6225	0	624	0	2652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.8	0.0	0.0	10.6	0.0	0.0	10.4	4.3	0.0	11.0	0.0	5.9
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	4.5	0.0	0.0	8.6	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.1	0.0	0.0	0.5	0.1	0.0	0.2	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.0	0.0	0.0	10.7	0.0	0.0	15.0	4.3	0.0	19.6	0.0	6.8
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		66			34			291			394	
Approach Delay, s/veh		11.0			10.7			8.1			7.9	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	13.2		5.0	5.6	12.2		5.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	40.0		20.0	20.0	35.0		10.0
Max Q Clear Time (g_c+I1), s	2.5	2.8		2.4	3.3	5.8		2.9
Green Ext Time (p_c), s	0.0	1.2		0.1	0.1	2.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	0	142	10	2	6	129	1355	6	35	1061	79
Future Volume (veh/h)	62	0	142	10	2	6	129	1355	6	35	1061	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	0	10	11	2	0	143	1506	7	39	1179	37
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	0	190	44	8	46	186	1840	9	70	1572	701
Arrive On Green	0.12	0.00	0.12	0.03	0.03	0.00	0.10	0.51	0.51	0.04	0.44	0.44
Sat Flow, veh/h	1781	0	1585	1518	276	1585	1781	3627	17	1781	3554	1585
Grp Volume(v), veh/h	69	0	10	13	0	0	143	738	775	39	1179	37
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1794	0	1585	1781	1777	1867	1781	1777	1585
Q Serve(g_s), s	2.2	0.0	0.3	0.4	0.0	0.0	4.9	21.7	21.7	1.3	17.2	0.8
Cycle Q Clear(g_c), s	2.2	0.0	0.3	0.4	0.0	0.0	4.9	21.7	21.7	1.3	17.2	0.8
Prop In Lane	1.00		1.00	0.85		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	213	0	190	52	0	46	186	901	947	70	1572	701
V/C Ratio(X)	0.32	0.00	0.05	0.25	0.00	0.00	0.77	0.82	0.82	0.56	0.75	0.05
Avail Cap(c_a), veh/h	574	0	511	347	0	306	574	1002	1053	344	2003	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	0.0	24.2	29.5	0.0	0.0	27.1	12.9	12.9	29.3	14.4	9.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.9	0.0	0.0	2.5	5.4	5.2	2.5	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.1	0.2	0.0	0.0	2.1	8.4	8.8	0.6	6.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	24.2	30.4	0.0	0.0	29.6	18.3	18.1	31.8	15.9	9.9
LnGrp LOS	C	A	C	C	A	A	C	B	B	C	B	A
Approach Vol, veh/h		79			13			1656			1255	
Approach Delay, s/veh		25.2			30.4			19.2			16.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	37.5		5.8	10.5	33.5		12.3
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	12.0	35.0		12.0	20.0	35.0		20.0
Max Q Clear Time (g_c+I1), s	3.3	23.7		2.4	6.9	19.2		4.2
Green Ext Time (p_c), s	0.0	7.7		0.0	0.2	8.3		0.1

Intersection Summary		
HCM 6th Ctrl Delay		18.2
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	5	193	8	9	9	210	1186	4	3	866	353
Future Volume (veh/h)	293	5	193	8	9	9	210	1186	4	3	866	353
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	330	0	54	9	10	0	233	1318	4	3	962	269
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	523	0	396	12	13	21	356	2042	6	4	1640	731
Arrive On Green	0.15	0.00	0.15	0.01	0.01	0.00	0.10	0.56	0.56	0.00	0.46	0.46
Sat Flow, veh/h	3563	0	1585	865	962	1585	3456	3634	11	1781	3554	1585
Grp Volume(v), veh/h	330	0	54	19	0	0	233	644	678	3	962	269
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1827	0	1585	1728	1777	1868	1781	1777	1585
Q Serve(g_s), s	5.5	0.0	1.7	0.7	0.0	0.0	4.1	15.8	15.8	0.1	12.7	7.0
Cycle Q Clear(g_c), s	5.5	0.0	1.7	0.7	0.0	0.0	4.1	15.8	15.8	0.1	12.7	7.0
Prop In Lane	1.00		1.00	0.47		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	523	0	396	25	0	21	356	998	1050	4	1640	731
V/C Ratio(X)	0.63	0.00	0.14	0.77	0.00	0.00	0.66	0.65	0.65	0.69	0.59	0.37
Avail Cap(c_a), veh/h	1682	0	911	431	0	374	1359	1174	1235	336	2516	1122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	18.5	31.3	0.0	0.0	27.4	9.6	9.6	31.7	12.6	11.1
Incr Delay (d2), s/veh	1.3	0.0	0.2	17.1	0.0	0.0	0.8	1.7	1.7	53.8	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.6	0.4	0.0	0.0	1.6	4.9	5.2	0.1	4.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	18.7	48.4	0.0	0.0	28.2	11.3	11.2	85.5	13.4	11.8
LnGrp LOS	C	A	B	D	A	A	C	B	B	F	B	B
Approach Vol, veh/h		384			19			1555			1234	
Approach Delay, s/veh		25.6			48.4			13.8			13.2	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	41.2		4.9	10.5	34.8		13.3
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		4.0
Max Green Setting (Gmax), s	12.0	42.0		15.0	25.0	45.0		30.0
Max Q Clear Time (g_c+I1), s	2.1	17.8		2.7	6.1	14.7		7.5
Green Ext Time (p_c), s	0.0	13.9		0.0	0.5	14.6		1.8

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	436	790	574	248	456	676
Future Volume (veh/h)	436	790	574	248	456	676
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	484	855	638	65	507	751
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	642	1028	777	347	1599	2610
Arrive On Green	0.19	0.19	0.22	0.22	0.46	0.73
Sat Flow, veh/h	3456	1585	3647	1585	3456	3647
Grp Volume(v), veh/h	484	855	638	65	507	751
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1728	1777
Q Serve(g_s), s	13.3	0.0	17.1	3.3	9.2	7.1
Cycle Q Clear(g_c), s	13.3	0.0	17.1	3.3	9.2	7.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	642	1028	777	347	1599	2610
V/C Ratio(X)	0.75	0.83	0.82	0.19	0.32	0.29
Avail Cap(c_a), veh/h	829	1114	949	423	1599	2610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	13.4	37.2	31.8	16.9	4.5
Incr Delay (d2), s/veh	2.0	4.7	5.4	0.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	25.1	7.9	1.3	3.6	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.5	18.1	42.6	32.2	17.0	4.8
LnGrp LOS	D	B	D	C	B	A
Approach Vol, veh/h	1339		703			1258
Approach Delay, s/veh	26.2		41.6			9.7
Approach LOS	C		D			A

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			77.4		22.6	50.3	27.2
Change Period (Y+Rc), s			4.0		4.0	4.0	5.3
Max Green Setting (Gmax), s			68.0		24.0	36.0	26.7
Max Q Clear Time (g_c+I1), s			9.1		15.3	11.2	19.1
Green Ext Time (p_c), s			5.2		3.3	1.5	2.8

Intersection Summary	
HCM 6th Ctrl Delay	23.2
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	21	62	642	8	30	651
Future Volume (veh/h)	21	62	642	8	30	651
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	7	713	5	33	723
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	245	112	2757	856	82	3503
Arrive On Green	0.07	0.07	0.54	0.54	0.05	0.69
Sat Flow, veh/h	3456	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	23	7	713	5	33	723
Grp Sat Flow(s),veh/h/ln	1728	1585	1702	1585	1781	1702
Q Serve(g_s), s	0.2	0.2	3.0	0.1	0.7	2.1
Cycle Q Clear(g_c), s	0.2	0.2	3.0	0.1	0.7	2.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	245	112	2757	856	82	3503
V/C Ratio(X)	0.09	0.06	0.26	0.01	0.40	0.21
Avail Cap(c_a), veh/h	1731	794	5116	1588	892	5116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	17.3	4.9	4.2	18.5	2.3
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.0	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.4	0.0	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.4	17.4	5.0	4.2	19.7	2.3
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	30		718			756
Approach Delay, s/veh	17.4		5.0			3.1
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.8	27.3				33.1	6.8
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0
Max Green Setting (Gmax), s	20.0	40.0				40.0	20.0
Max Q Clear Time (g_c+I1), s	2.7	5.0				4.1	2.2
Green Ext Time (p_c), s	0.0	16.6				17.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	325	33	179	528	146	170	21	69	190	6	75
Future Volume (veh/h)	69	325	33	179	528	146	170	21	69	190	6	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	361	24	199	587	43	189	23	9	216	0	7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	960	63	254	1216	377	279	34	277	622	0	277
Arrive On Green	0.10	0.20	0.20	0.14	0.24	0.24	0.17	0.17	0.17	0.17	0.00	0.17
Sat Flow, veh/h	1781	4895	322	1781	5106	1585	1596	194	1585	3563	0	1585
Grp Volume(v), veh/h	77	250	135	199	587	43	212	0	9	216	0	7
Grp Sat Flow(s),veh/h/ln	1781	1702	1812	1781	1702	1585	1791	0	1585	1781	0	1585
Q Serve(g_s), s	2.3	3.5	3.6	6.0	5.5	1.2	6.1	0.0	0.3	3.0	0.0	0.2
Cycle Q Clear(g_c), s	2.3	3.5	3.6	6.0	5.5	1.2	6.1	0.0	0.3	3.0	0.0	0.2
Prop In Lane	1.00		0.18	1.00		1.00	0.89		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	667	355	254	1216	377	313	0	277	622	0	277
V/C Ratio(X)	0.43	0.37	0.38	0.78	0.48	0.11	0.68	0.00	0.03	0.35	0.00	0.03
Avail Cap(c_a), veh/h	643	1844	982	643	2766	859	647	0	572	1286	0	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.4	19.3	19.3	22.9	18.2	16.5	21.4	0.0	19.0	20.1	0.0	18.9
Incr Delay (d2), s/veh	0.6	0.7	1.4	2.0	0.6	0.3	1.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.3	1.5	2.4	1.9	0.4	2.5	0.0	0.1	1.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	20.0	20.7	25.0	18.8	16.8	22.4	0.0	19.0	20.2	0.0	19.0
LnGrp LOS	C	C	C	C	B	B	C	A	B	C	A	B
Approach Vol, veh/h		462			829			221			223	
Approach Delay, s/veh		20.9			20.2			22.2			20.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	16.2		13.7	9.6	18.5		13.7
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	20.0	30.0		20.0	20.0	30.0		20.0
Max Q Clear Time (g_c+I1), s	8.0	5.6		5.0	4.3	7.5		8.1
Green Ext Time (p_c), s	0.3	3.2		0.5	0.1	5.7		0.4

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	303	277	202	551	125	448	540	55	107	600	168
Future Volume (veh/h)	100	303	277	202	551	125	448	540	55	107	600	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	2145	2145	2145
Adj Flow Rate, veh/h	111	337	25	224	612	28	498	600	54	119	667	33
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	494	221	254	724	323	529	1519	136	154	975	435
Arrive On Green	0.08	0.14	0.14	0.14	0.20	0.20	0.30	0.46	0.46	0.08	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3298	296	2043	4076	1818
Grp Volume(v), veh/h	111	337	25	224	612	28	498	323	331	119	667	33
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1817	2043	2038	1818
Q Serve(g_s), s	6.3	9.2	1.4	12.6	16.9	1.5	27.9	12.2	12.3	5.8	15.2	1.4
Cycle Q Clear(g_c), s	6.3	9.2	1.4	12.6	16.9	1.5	27.9	12.2	12.3	5.8	15.2	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	140	494	221	254	724	323	529	818	837	154	975	435
V/C Ratio(X)	0.80	0.68	0.11	0.88	0.85	0.09	0.94	0.39	0.40	0.77	0.68	0.08
Avail Cap(c_a), veh/h	261	695	310	261	724	323	575	869	889	400	1276	569
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	41.9	38.5	43.0	39.2	33.0	35.1	18.2	18.2	46.4	35.4	30.1
Incr Delay (d2), s/veh	3.9	3.4	0.5	25.9	9.6	0.2	22.4	0.5	0.5	3.0	1.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	4.2	0.6	7.3	8.3	0.6	14.8	4.8	5.0	3.0	7.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	45.2	39.0	68.9	48.7	33.2	57.5	18.7	18.7	49.4	36.9	30.3
LnGrp LOS	D	D	D	E	D	C	E	B	B	D	D	C
Approach Vol, veh/h		473			864			1152			819	
Approach Delay, s/veh		46.0			53.4			35.4			38.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	19.5	34.4	29.8	12.0	26.1	11.7	52.4
Change Period (Y+Rc), s	4.0	* 5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	15.0	* 20	33.0	32.0	15.0	20.0	20.0	50.0
Max Q Clear Time (g_c+I1), s	14.6	11.2	29.9	17.2	8.3	18.9	7.8	14.3
Green Ext Time (p_c), s	0.0	3.0	0.5	7.2	0.1	0.7	0.2	10.4

Intersection Summary	
HCM 6th Ctrl Delay	42.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	12	72	148	13	340	63	611	32	200	808	66
Future Volume (veh/h)	73	12	72	148	13	340	63	611	32	200	808	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1988	1988	1988	1870	1945	1870	2145	2231	2145
Adj Flow Rate, veh/h	81	13	3	164	14	206	70	679	33	222	898	23
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	27	171	247	21	467	113	1330	65	279	1883	807
Arrive On Green	0.11	0.11	0.11	0.14	0.14	0.14	0.06	0.37	0.37	0.14	0.44	0.44
Sat Flow, veh/h	1545	248	1585	1751	149	1681	1781	3585	174	2043	4239	1818
Grp Volume(v), veh/h	94	0	3	178	0	206	70	350	362	222	898	23
Grp Sat Flow(s),veh/h/ln	1793	0	1585	1900	0	1681	1781	1848	1912	2043	2120	1818
Q Serve(g_s), s	3.5	0.0	0.1	6.3	0.0	7.2	2.7	10.4	10.5	7.5	10.6	0.5
Cycle Q Clear(g_c), s	3.5	0.0	0.1	6.3	0.0	7.2	2.7	10.4	10.5	7.5	10.6	0.5
Prop In Lane	0.86		1.00	0.92		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	194	0	171	268	0	467	113	685	709	279	1883	807
V/C Ratio(X)	0.49	0.00	0.02	0.66	0.00	0.44	0.62	0.51	0.51	0.80	0.48	0.03
Avail Cap(c_a), veh/h	505	0	446	535	0	703	501	1144	1184	575	2625	1126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	28.3	28.9	0.0	21.1	32.5	17.3	17.4	29.7	13.9	11.1
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.1	0.0	0.2	2.1	1.3	1.3	2.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	2.8	0.0	2.6	1.2	4.2	4.3	3.6	4.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.0	28.3	30.0	0.0	21.4	34.5	18.7	18.6	31.7	14.4	11.2
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		97			384			782			1143	
Approach Delay, s/veh		30.5			25.4			20.1			17.7	
Approach LOS		C			C			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		11.7	8.5	36.9		14.0	13.7	31.7
Change Period (Y+Rc), s		4.0	4.0	5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s		20.0	20.0	44.0		20.0	20.0	44.0
Max Q Clear Time (g_c+I1), s		5.5	4.7	12.6		9.2	9.5	12.5
Green Ext Time (p_c), s		0.2	0.1	18.5		0.8	0.3	13.9

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	36	38	732	14	22	709
Future Volume (veh/h)	36	38	732	14	22	709
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	2	813	15	24	788
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	143	127	1389	26	76	2077
Arrive On Green	0.08	0.08	0.39	0.39	0.04	0.58
Sat Flow, veh/h	1781	1585	3663	66	1781	3647
Grp Volume(v), veh/h	40	2	405	423	24	788
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1859	1781	1777
Q Serve(g_s), s	0.6	0.0	4.7	4.7	0.3	3.1
Cycle Q Clear(g_c), s	0.6	0.0	4.7	4.7	0.3	3.1
Prop In Lane	1.00	1.00		0.04	1.00	
Lane Grp Cap(c), veh/h	143	127	692	723	76	2077
V/C Ratio(X)	0.28	0.02	0.59	0.59	0.31	0.38
Avail Cap(c_a), veh/h	1696	1509	2910	3044	1493	8921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	11.1	6.3	6.3	12.2	2.9
Incr Delay (d2), s/veh	1.0	0.0	0.8	0.8	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.7	0.8	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.4	11.2	7.1	7.1	14.5	3.0
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	42		828			812
Approach Delay, s/veh	12.3		7.1			3.4
Approach LOS	B		A			A

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			20.1		6.1	5.1	15.0
Change Period (Y+Rc), s			* 4.8		4.0	4.0	* 4.8
Max Green Setting (Gmax), s			* 66		25.0	22.0	* 43
Max Q Clear Time (g_c+I1), s			5.1		2.6	2.3	6.7
Green Ext Time (p_c), s			4.0		0.1	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	18	0	25	0	1418	27	22	1585	0
Future Volume (veh/h)	0	0	0	18	0	25	0	1418	27	22	1585	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	0	0	20	0	0	0	1576	29	24	1761	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	0	5	4	0	0	0	0	2737	50	31	3132	0
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.02	0.88	0.00
Sat Flow, veh/h	0	1870	1585		0		0	3663	66	1781	3647	0
Grp Volume(v), veh/h	0	0	0		0.0		0	783	822	24	1761	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585				0	1777	1859	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0				0.0	7.6	7.6	0.6	4.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				0.0	7.6	7.6	0.6	4.8	0.0
Prop In Lane	0.00		1.00				0.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	0	5	4				0	1362	1425	31	3132	0
V/C Ratio(X)	0.00	0.00	0.00				0.00	0.57	0.58	0.77	0.56	0.00
Avail Cap(c_a), veh/h	0	1088	922				0	1723	1802	691	3446	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0				0.0	2.0	2.0	20.2	0.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.0	1.1	1.0	13.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.0	0.4	0.4	0.3	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0				0.0	3.1	3.0	33.9	1.0	0.0
LnGrp LOS	A	A	A				A	A	A	C	A	A
Approach Vol, veh/h		0						1605			1785	
Approach Delay, s/veh		0.0						3.0			1.4	
Approach LOS								A			A	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	4.7	36.5				41.3		0.0				
Change Period (Y+Rc), s	4.0	4.9				4.9		4.0				
Max Green Setting (Gmax), s	16.0	40.0				40.0		24.0				
Max Q Clear Time (g_c+I1), s	2.6	9.6				6.8		0.0				
Green Ext Time (p_c), s	0.0	22.0				24.8		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	2.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	17	26	45	8	67	27	1390	38	92	1500	22
Future Volume (veh/h)	47	17	26	45	8	67	27	1390	38	92	1500	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	19	0	50	9	0	30	1544	41	102	1667	23
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	146	0	152	159	0	75	1949	52	136	2101	29
Arrive On Green	0.08	0.08	0.00	0.09	0.09	0.00	0.04	0.55	0.55	0.08	0.59	0.59
Sat Flow, veh/h	1781	1870	0	1781	1870	0	1781	3536	94	1781	3588	49
Grp Volume(v), veh/h	52	19	0	50	9	0	30	774	811	102	824	866
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	1870	0	1781	1777	1852	1781	1777	1861
Q Serve(g_s), s	2.3	0.8	0.0	2.2	0.4	0.0	1.4	28.7	28.9	4.6	29.7	29.8
Cycle Q Clear(g_c), s	2.3	0.8	0.0	2.2	0.4	0.0	1.4	28.7	28.9	4.6	29.7	29.8
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	139	146	0	152	159	0	75	979	1021	136	1040	1090
V/C Ratio(X)	0.38	0.13	0.00	0.33	0.06	0.00	0.40	0.79	0.79	0.75	0.79	0.79
Avail Cap(c_a), veh/h	345	362	0	345	362	0	345	1225	1277	345	1225	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	35.5	0.0	35.6	34.8	0.0	38.6	14.8	14.8	37.4	13.2	13.3
Incr Delay (d2), s/veh	1.4	0.3	0.0	1.1	0.1	0.0	1.3	3.5	3.4	3.1	3.4	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.4	0.0	1.0	0.2	0.0	0.6	10.3	10.8	2.0	10.2	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	35.9	0.0	36.7	34.9	0.0	39.9	18.2	18.2	40.5	16.7	16.6
LnGrp LOS	D	D	A	D	C	A	D	B	B	D	B	B
Approach Vol, veh/h		71			59			1615			1792	
Approach Delay, s/veh		37.2			36.4			18.6			18.0	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	53.7		10.4	10.3	50.9		11.0
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	16.0	* 57		16.0	16.0	57.0		16.0
Max Q Clear Time (g_c+I1), s	3.4	31.8		4.3	6.6	30.9		4.2
Green Ext Time (p_c), s	0.0	13.8		0.1	0.1	14.7		0.1

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	21	11	99	29	49	3	1324	12	44	1412	54
Future Volume (veh/h)	42	21	11	99	29	49	3	1324	12	44	1412	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1945	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	47	23	12	110	32	54	3	1471	13	49	1569	60
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	63	31	78	140	41	152	68	1472	13	63	1396	631
Arrive On Green	0.05	0.05	0.05	0.10	0.10	0.10	0.04	0.41	0.41	0.04	0.40	0.40
Sat Flow, veh/h	1264	618	1566	1451	422	1575	1781	3552	31	1781	3497	1581
Grp Volume(v), veh/h	70	0	12	142	0	54	3	724	760	49	1569	60
Grp Sat Flow(s),veh/h/ln	1882	0	1566	1873	0	1575	1781	1749	1835	1781	1749	1581
Q Serve(g_s), s	4.8	0.0	1.0	9.7	0.0	4.2	0.2	54.2	54.2	3.6	52.3	3.1
Cycle Q Clear(g_c), s	4.8	0.0	1.0	9.7	0.0	4.2	0.2	54.2	54.2	3.6	52.3	3.1
Prop In Lane	0.67		1.00	0.77		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	94	0	78	181	0	152	68	725	761	63	1396	631
V/C Ratio(X)	0.74	0.00	0.15	0.78	0.00	0.35	0.04	1.00	1.00	0.77	1.12	0.10
Avail Cap(c_a), veh/h	230	0	191	386	0	325	245	725	761	218	1396	631
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.82	0.82	0.82	0.49	0.49	0.49
Uniform Delay (d), s/veh	61.4	0.0	59.6	57.8	0.0	55.4	60.7	38.3	38.3	62.6	39.3	24.6
Incr Delay (d2), s/veh	4.3	0.0	0.3	2.8	0.0	0.5	0.1	29.9	29.4	3.6	60.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.4	4.8	0.0	1.7	0.1	28.2	29.5	1.7	33.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.7	0.0	59.9	60.7	0.0	55.9	60.8	68.2	67.7	66.3	100.3	24.7
LnGrp LOS	E	A	E	E	A	E	E	E	E	E	F	C
Approach Vol, veh/h		82			196			1487			1678	
Approach Delay, s/veh		64.9			59.4			68.0			96.6	
Approach LOS		E			E			E			F	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		10.5	8.7	60.0		16.7	10.7	58.0
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	5.7	* 5.7
Max Green Setting (Gmax), s		16.0	16.0	54.3		27.0	18.0	* 52
Max Q Clear Time (g_c+I1), s		6.8	5.6	56.2		11.7	2.2	54.3
Green Ext Time (p_c), s		0.1	0.0	0.0		0.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	81.3
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	0	16	35	0	14	19	1378	14	21	1485	8
Future Volume (vph)	12	0	16	35	0	14	19	1378	14	21	1485	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00		0.97	1.00		0.96	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Frt	1.00		0.85	1.00		0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1534	1770		1518	1770	3532		1770	3536	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770		1534	1770		1518	1770	3532		1770	3536	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	13	0	18	39	0	16	21	1531	16	23	1650	9
RTOR Reduction (vph)	0	0	17	0	0	15	0	0	0	0	0	0
Lane Group Flow (vph)	13	0	1	39	0	1	21	1547	0	23	1659	0
Confl. Peds. (#/hr)	4		4	4		4	4		4	4		4
Confl. Bikes (#/hr)			2			2			2			2
Turn Type	Prot		Perm	Prot		Perm	Prot	NA		Prot	NA	
Protected Phases	6			5			7	4		3	8	
Permitted Phases			6			5						
Actuated Green, G (s)	6.8		6.8	6.8		6.8	4.1	94.5		4.2	94.6	
Effective Green, g (s)	6.8		6.8	6.8		6.8	4.1	94.5		4.2	94.6	
Actuated g/C Ratio	0.05		0.05	0.05		0.05	0.03	0.76		0.03	0.76	
Clearance Time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Vehicle Extension (s)	2.0		2.0	2.0		2.0	2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	96		83	96		82	58	2670		59	2676	
v/s Ratio Prot	0.01			c0.02			0.01	0.44		c0.01	c0.47	
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.14		0.01	0.41		0.01	0.36	0.58		0.39	0.62	
Uniform Delay, d1	56.3		55.9	57.1		55.9	59.2	6.6		59.1	7.0	
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2		0.0	1.0		0.0	1.4	0.9		1.6	0.5	
Delay (s)	56.5		55.9	58.2		55.9	60.6	7.5		60.7	7.4	
Level of Service	E		E	E		E	E	A		E	A	
Approach Delay (s)		56.2			57.5			8.3			8.2	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	18	327	343	8	35	38
Future Volume (veh/h)	18	327	343	8	35	38
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	363	381	5	39	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	28	1808	1133	506	54	48
Arrive On Green	0.02	0.51	0.32	0.32	0.03	0.03
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	20	363	381	5	39	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.3	1.3	1.9	0.0	0.5	0.0
Cycle Q Clear(g_c), s	0.3	1.3	1.9	0.0	0.5	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	28	1808	1133	506	54	48
V/C Ratio(X)	0.72	0.20	0.34	0.01	0.73	0.04
Avail Cap(c_a), veh/h	1550	10052	6804	3035	1938	1724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.3	3.1	6.0	5.3	11.1	10.8
Incr Delay (d2), s/veh	12.0	0.1	0.3	0.0	6.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.4	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.3	3.2	6.3	5.4	17.9	11.0
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		383	386		41	
Approach Delay, s/veh		4.2	6.3		17.6	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	17.4	5.6	4.4	13.0
Change Period (Y+Rc), s	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	65.0	25.0	20.0	44.0
Max Q Clear Time (g_c+I1), s	3.3	2.5	2.3	3.9
Green Ext Time (p_c), s	3.3	0.1	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	202	271	120	313	19	365	497	85	8	460	117
Future Volume (veh/h)	43	202	271	120	313	19	365	497	85	8	460	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	224	0	133	348	0	406	552	0	9	511	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	399		174	556		466	1716		29	844	
Arrive On Green	0.05	0.11	0.00	0.10	0.16	0.00	0.26	0.48	0.00	0.02	0.24	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	48	224	0	133	348	0	406	552	0	9	511	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.7	3.9	0.0	4.8	6.0	0.0	14.2	6.2	0.0	0.3	8.4	0.0
Cycle Q Clear(g_c), s	1.7	3.9	0.0	4.8	6.0	0.0	14.2	6.2	0.0	0.3	8.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	95	399		174	556		466	1716		29	844	
V/C Ratio(X)	0.50	0.56		0.76	0.63		0.87	0.32		0.31	0.61	
Avail Cap(c_a), veh/h	546	1089		546	1089		819	2723		546	2178	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.0	27.4	0.0	28.7	25.7	0.0	23.0	10.3	0.0	31.7	22.2	0.0
Incr Delay (d2), s/veh	1.5	2.0	0.0	2.6	2.4	0.0	2.0	0.2	0.0	2.3	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.7	0.0	2.1	2.6	0.0	5.8	2.2	0.0	0.2	3.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	29.4	0.0	31.3	28.1	0.0	25.1	10.5	0.0	34.0	23.6	0.0
LnGrp LOS	C	C		C	C		C	B		C	C	
Approach Vol, veh/h		272	A		481	A		958	A		520	A
Approach Delay, s/veh		29.8			29.0			16.7			23.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	13.0	21.1	20.8	7.5	15.9	5.1	36.8
Change Period (Y+Rc), s	4.0	5.7	4.0	5.3	4.0	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	20.0	20.0	30.0	40.0	20.0	* 20	20.0	50.0
Max Q Clear Time (g_c+I1), s	6.8	5.9	16.2	10.4	3.7	8.0	2.3	8.2
Green Ext Time (p_c), s	0.2	1.2	0.8	5.1	0.1	2.2	0.0	6.0

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	21	164	163	34	165	46	618	18	43	1034	19
Future Volume (veh/h)	5	21	164	163	34	165	46	618	18	43	1034	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	23	26	181	38	0	51	687	17	48	1149	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	307	293	312	43		306	1908	47	59	1321	
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.00	0.17	0.54	0.54	0.03	0.37	0.00
Sat Flow, veh/h	189	1658	1585	1095	230	1585	1781	3544	88	1781	3647	0
Grp Volume(v), veh/h	29	0	26	219	0	0	51	344	360	48	1149	0
Grp Sat Flow(s),veh/h/ln	1847	0	1585	1325	0	1585	1781	1777	1855	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.8	9.0	0.0	0.0	1.5	6.7	6.7	1.6	18.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.8	9.8	0.0	0.0	1.5	6.7	6.7	1.6	18.0	0.0
Prop In Lane	0.21		1.00	0.83		1.00	1.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	414	0	293	355	0		306	956	998	59	1321	
V/C Ratio(X)	0.07	0.00	0.09	0.62	0.00		0.17	0.36	0.36	0.81	0.87	
Avail Cap(c_a), veh/h	414	0	293	355	0		356	956	998	356	1321	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.2	0.0	20.3	24.3	0.0	0.0	21.2	7.9	7.9	28.8	17.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.1	2.9	0.0	0.0	0.1	0.3	0.3	9.2	8.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.3	3.1	0.0	0.0	0.5	1.9	1.9	0.8	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	20.4	27.2	0.0	0.0	21.3	8.2	8.2	38.0	25.5	0.0
LnGrp LOS	C	A	C	C	A		C	A	A	D	C	
Approach Vol, veh/h		55			219	A		755			1197	A
Approach Delay, s/veh		20.3			27.2			9.1			26.0	
Approach LOS		C			C			A			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.0	16.0	28.0		16.0	6.0	38.0				
Change Period (Y+Rc), s		4.9	5.7	* 5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		11.1	12.0	* 22		11.1	12.0	22.3				
Max Q Clear Time (g_c+I1), s		2.8	3.5	20.0		11.8	3.6	8.7				
Green Ext Time (p_c), s		0.1	0.0	1.5		0.0	0.0	3.3				

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	2	4	46	4	56	5	640	20	42	1234	14
Future Volume (veh/h)	9	2	4	46	4	56	5	640	20	42	1234	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	2	1	51	4	3	6	711	21	47	1371	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	13	2	143	5	66	8	2721	80	61	2884	34
Arrive On Green	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.77	0.77	0.03	0.80	0.80
Sat Flow, veh/h	304	316	52	1578	124	1585	1781	3524	104	1781	3598	42
Grp Volume(v), veh/h	13	0	0	55	0	3	6	358	374	47	677	710
Grp Sat Flow(s),veh/h/ln	672	0	0	1702	0	1585	1781	1777	1852	1781	1777	1863
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.2	0.3	5.2	5.2	2.4	11.0	11.0
Cycle Q Clear(g_c), s	2.8	0.0	0.0	2.7	0.0	0.2	0.3	5.2	5.2	2.4	11.0	11.0
Prop In Lane	0.77		0.08	0.93		1.00	1.00		0.06	1.00		0.02
Lane Grp Cap(c), veh/h	99	0	0	148	0	66	8	1372	1430	61	1424	1493
V/C Ratio(X)	0.13	0.00	0.00	0.37	0.00	0.05	0.73	0.26	0.26	0.77	0.48	0.48
Avail Cap(c_a), veh/h	464	0	0	504	0	458	396	1372	1430	396	1424	1493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	0.0	42.7	0.0	41.4	44.7	2.9	2.9	43.1	2.9	2.9
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.6	0.0	0.3	34.9	0.2	0.1	18.6	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	1.3	0.0	0.1	0.2	1.1	1.2	1.3	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.4	0.0	0.0	44.2	0.0	41.7	79.6	3.1	3.1	61.7	4.0	4.0
LnGrp LOS	D	A	A	D	A	D	E	A	A	E	A	A
Approach Vol, veh/h		13			58			738			1434	
Approach Delay, s/veh		42.4			44.1			3.7			5.9	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	77.8		7.7	7.1	75.2		7.7
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	30.3		26.0	20.0	30.3		26.0
Max Q Clear Time (g_c+I1), s	2.3	13.0		4.8	4.4	7.2		4.7
Green Ext Time (p_c), s	0.0	9.8		0.0	0.1	5.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	70	614	13	95	1193
Future Volume (veh/h)	25	70	614	13	95	1193
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	2	682	13	106	1326
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	42	37	2669	51	136	3087
Arrive On Green	0.02	0.02	0.75	0.75	0.10	1.00
Sat Flow, veh/h	1781	1585	3661	68	1781	3647
Grp Volume(v), veh/h	28	2	340	355	106	1326
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1858	1781	1777
Q Serve(g_s), s	1.4	0.1	5.4	5.4	5.2	0.0
Cycle Q Clear(g_c), s	1.4	0.1	5.4	5.4	5.2	0.0
Prop In Lane	1.00	1.00		0.04	1.00	
Lane Grp Cap(c), veh/h	42	37	1329	1390	136	3087
V/C Ratio(X)	0.67	0.05	0.26	0.26	0.78	0.43
Avail Cap(c_a), veh/h	396	352	1329	1390	396	3087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.84	0.84
Uniform Delay (d), s/veh	43.6	43.0	3.5	3.5	39.7	0.0
Incr Delay (d2), s/veh	6.7	0.2	0.1	0.1	3.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	1.5	1.5	2.3	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.3	43.2	3.7	3.6	42.8	0.4
LnGrp LOS	D	D	A	A	D	A
Approach Vol, veh/h	30		695			1432
Approach Delay, s/veh	49.8		3.6			3.5
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		83.9		6.1	10.8	73.0
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		60.3		20.0	20.0	36.3
Max Q Clear Time (g_c+I1), s		2.0		3.4	7.2	7.4
Green Ext Time (p_c), s		12.7		0.0	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	4.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	0	179	1	3	2	233	876	1	1	655	122
Future Volume (veh/h)	167	0	179	1	3	2	233	876	1	1	655	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1856	1870	1870	1870	1664	1708	1723	2067	2007	2052
Adj Flow Rate, veh/h	186	0	19	1	3	0	259	973	1	1	728	136
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	2	3	2	2	2	6	3	2	2	6	3
Cap, veh/h	401	0	175	4	13	0	302	1881	846	4	1492	681
Arrive On Green	0.11	0.00	0.11	0.01	0.01	0.00	0.19	0.58	0.58	0.00	0.39	0.39
Sat Flow, veh/h	3534	0	1539	462	1385	0	1585	3246	1460	1968	3813	1739
Grp Volume(v), veh/h	186	0	19	4	0	0	259	973	1	1	728	136
Grp Sat Flow(s),veh/h/ln	1767	0	1539	1847	0	0	1585	1623	1460	1968	1906	1739
Q Serve(g_s), s	3.4	0.0	0.8	0.1	0.0	0.0	10.9	12.4	0.0	0.0	9.9	3.6
Cycle Q Clear(g_c), s	3.4	0.0	0.8	0.1	0.0	0.0	10.9	12.4	0.0	0.0	9.9	3.6
Prop In Lane	1.00		1.00	0.25		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	0	175	18	0	0	302	1881	846	4	1492	681
V/C Ratio(X)	0.46	0.00	0.11	0.22	0.00	0.00	0.86	0.52	0.00	0.23	0.49	0.20
Avail Cap(c_a), veh/h	1023	0	445	534	0	0	458	1881	846	569	2206	1006
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	0.0	27.5	34.0	0.0	0.0	27.1	8.7	6.1	34.4	15.8	13.9
Incr Delay (d2), s/veh	1.2	0.0	0.4	2.3	0.0	0.0	6.6	0.4	0.0	9.7	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.3	0.1	0.0	0.0	4.1	2.9	0.0	0.0	3.5	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	0.0	27.9	36.3	0.0	0.0	33.6	9.1	6.1	44.2	16.2	14.1
LnGrp LOS	C	A	C	D	A	A	C	A	A	D	B	B
Approach Vol, veh/h		205			4			1233			865	
Approach Delay, s/veh		29.7			36.3			14.3			15.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	46.5		4.7	17.2	33.5		13.8
Change Period (Y+Rc), s	4.0	6.4		4.0	4.0	6.4		6.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	2.0	14.4		2.1	12.9	11.9		5.4
Green Ext Time (p_c), s	0.0	17.4		0.0	0.3	15.1		1.1

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	8	2	0	2	6	1096	2	5	826	5
Future Volume (veh/h)	5	0	8	2	0	2	6	1096	2	5	826	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	0	0	2	0	0	7	1218	1	6	918	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	0	25	10	0	9	13	1994	889	14	1996	890
Arrive On Green	0.02	0.00	0.00	0.01	0.00	0.00	0.01	0.56	0.56	0.01	0.56	0.56
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	6	0	0	2	0	0	7	1218	1	6	918	4
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.1	0.0	0.0	0.1	0.0	0.0	0.2	10.3	0.0	0.2	6.9	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.1	0.0	0.0	0.2	10.3	0.0	0.2	6.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	29	0	25	10	0	9	13	1994	889	14	1996	890
V/C Ratio(X)	0.21	0.00	0.00	0.20	0.00	0.00	0.53	0.61	0.00	0.42	0.46	0.00
Avail Cap(c_a), veh/h	793	0	705	1149	0	1023	793	3558	1587	793	3558	1587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	0.0	22.3	0.0	0.0	22.2	6.6	4.3	22.2	5.8	4.3
Incr Delay (d2), s/veh	1.3	0.0	0.0	3.8	0.0	0.0	11.5	0.5	0.0	7.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.6	0.0	0.1	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	0.0	0.0	26.0	0.0	0.0	33.8	7.1	4.3	29.3	6.1	4.3
LnGrp LOS	C	A	A	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		6			2			1226			928	
Approach Delay, s/veh		23.2			26.0			7.2			6.2	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.7	4.3	31.6		4.2	4.4	31.6
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4
Max Green Setting (Gmax), s		20.0	20.0	45.0		29.0	20.0	45.0
Max Q Clear Time (g_c+I1), s		2.1	2.2	8.9		2.1	2.2	12.3
Green Ext Time (p_c), s		0.0	0.0	9.1		0.0	0.0	12.9

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	2	243	13	9	2	242	1002	19	6	801	34
Future Volume (veh/h)	108	2	243	13	9	2	242	1002	19	6	801	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	121	0	27	8	19	0	269	1113	11	7	890	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	422	0	188	93	195	0	320	1834	818	19	1775	551
Arrive On Green	0.12	0.00	0.12	0.05	0.05	0.00	0.18	0.52	0.52	0.01	0.35	0.35
Sat Flow, veh/h	3563	0	1585	1781	3741	0	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	121	0	27	8	19	0	269	1113	11	7	890	10
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	2.2	0.0	1.1	0.3	0.3	0.0	10.5	15.9	0.2	0.3	9.9	0.3
Cycle Q Clear(g_c), s	2.2	0.0	1.1	0.3	0.3	0.0	10.5	15.9	0.2	0.3	9.9	0.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	422	0	188	93	195	0	320	1834	818	19	1775	551
V/C Ratio(X)	0.29	0.00	0.14	0.09	0.10	0.00	0.84	0.61	0.01	0.36	0.50	0.02
Avail Cap(c_a), veh/h	989	0	440	494	1038	0	741	1972	880	494	2125	660
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	28.5	32.5	32.5	0.0	28.6	12.3	8.5	35.4	18.6	15.4
Incr Delay (d2), s/veh	0.6	0.0	0.6	0.6	0.3	0.0	2.3	0.7	0.0	4.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.4	0.1	0.2	0.0	4.2	5.0	0.1	0.1	3.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	29.0	33.1	32.9	0.0	30.9	13.0	8.5	39.5	18.9	15.5
LnGrp LOS	C	A	C	C	C	A	C	B	A	D	B	B
Approach Vol, veh/h		148			27			1393			907	
Approach Delay, s/veh		29.5			33.0			16.5			19.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	43.6		14.2	16.9	31.4		9.5
Change Period (Y+Rc), s	4.0	* 6.4		5.7	4.0	6.4		5.7
Max Green Setting (Gmax), s	20.0	* 40		20.0	30.0	30.0		20.0
Max Q Clear Time (g_c+I1), s	2.3	17.9		4.2	12.5	11.9		2.3
Green Ext Time (p_c), s	0.0	19.0		0.7	0.5	13.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	4	175	110	7	83	121	1152	48	89	1035	61
Future Volume (veh/h)	215	4	175	110	7	83	121	1152	48	89	1035	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	242	0	6	122	8	2	134	1280	25	99	1150	34
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	0	145	152	10	144	162	1885	585	522	2989	928
Arrive On Green	0.09	0.00	0.09	0.09	0.09	0.09	0.09	0.37	0.37	0.29	0.59	0.59
Sat Flow, veh/h	3563	0	1585	1677	110	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	242	0	6	130	0	2	134	1280	25	99	1150	34
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1787	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	7.9	0.0	0.4	8.6	0.0	0.1	8.9	25.3	1.2	5.0	14.5	1.1
Cycle Q Clear(g_c), s	7.9	0.0	0.4	8.6	0.0	0.1	8.9	25.3	1.2	5.0	14.5	1.1
Prop In Lane	1.00		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	0	145	162	0	144	162	1885	585	522	2989	928
V/C Ratio(X)	0.74	0.00	0.04	0.80	0.00	0.01	0.83	0.68	0.04	0.19	0.38	0.04
Avail Cap(c_a), veh/h	623	0	277	313	0	277	312	1885	585	522	2989	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	0.0	49.7	53.5	0.0	49.7	53.6	31.9	24.3	31.8	13.3	10.5
Incr Delay (d2), s/veh	1.3	0.0	0.0	3.5	0.0	0.0	4.1	2.0	0.1	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.2	4.0	0.0	0.1	4.0	10.2	0.5	2.1	5.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.4	0.0	49.7	57.0	0.0	49.7	57.7	33.9	24.4	31.8	13.5	10.6
LnGrp LOS	D	A	D	E	A	D	E	C	C	C	B	B
Approach Vol, veh/h		248			132			1439			1283	
Approach Delay, s/veh		54.3			56.9			35.9			14.9	
Approach LOS		D			E			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	40.1	50.0		14.9	14.9	75.2		15.0
Change Period (Y+Rc), s	5.0	* 5.7		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	16.0	* 44		21.0	21.0	40.0		21.0
Max Q Clear Time (g_c+I1), s	7.0	27.3		10.6	10.9	16.5		9.9
Green Ext Time (p_c), s	0.1	11.1		0.2	0.1	12.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	122	211	36	82	0	297	1297	67	22	1354	288
Future Volume (veh/h)	174	122	211	36	82	0	297	1297	67	22	1354	288
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	136	35	40	91	0	330	1441	37	24	1504	211
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	267	227	109	148	126	395	2098	936	74	1838	820
Arrive On Green	0.12	0.14	0.14	0.06	0.08	0.00	0.11	0.59	0.59	0.04	0.52	0.52
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	193	136	35	40	91	0	330	1441	37	24	1504	211
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	12.8	8.1	2.3	2.6	5.7	0.0	11.2	33.5	1.2	1.6	42.5	8.9
Cycle Q Clear(g_c), s	12.8	8.1	2.3	2.6	5.7	0.0	11.2	33.5	1.2	1.6	42.5	8.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	267	227	109	148	126	395	2098	936	74	1838	820
V/C Ratio(X)	0.87	0.51	0.15	0.37	0.61	0.00	0.83	0.69	0.04	0.33	0.82	0.26
Avail Cap(c_a), veh/h	386	301	255	312	223	189	605	2098	936	312	1838	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	47.5	45.1	54.1	53.5	0.0	52.0	16.9	10.3	55.9	24.3	16.1
Incr Delay (d2), s/veh	4.0	2.4	0.5	0.8	6.4	0.0	3.6	1.9	0.1	0.9	3.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	3.8	0.9	1.2	2.8	0.0	4.9	12.4	0.4	0.7	16.8	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	49.9	45.6	54.8	59.8	0.0	55.6	18.8	10.4	56.8	27.6	16.4
LnGrp LOS	E	D	D	D	E	A	E	B	B	E	C	B
Approach Vol, veh/h		364			131			1808			1739	
Approach Delay, s/veh		52.4			58.3			25.4			26.6	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	76.8	11.4	22.9	17.7	68.1	19.0	15.2
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	21.0	39.0	21.0	19.3	21.0	39.0	26.0	14.3
Max Q Clear Time (g_c+I1), s	3.6	35.5	4.6	10.1	13.2	44.5	14.8	7.7
Green Ext Time (p_c), s	0.0	2.9	0.0	0.6	0.5	0.0	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	313	20	1	211	7	0	2	0	5	0	5
Future Volume (veh/h)	6	313	20	1	211	7	0	2	0	5	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	348	20	1	234	7	0	2	0	6	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	27	1263	72	6	1255	37	0	8	0	26	0	0
Arrive On Green	0.02	0.37	0.37	0.00	0.36	0.36	0.00	0.00	0.00	0.01	0.00	0.00
Sat Flow, veh/h	1781	3416	196	1781	3523	105	0	1870	0	1781	0	0
Grp Volume(v), veh/h	7	180	188	1	118	123	0	2	0	6	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1835	1781	1777	1851	0	1870	0	1781	0	0
Q Serve(g_s), s	0.1	2.1	2.1	0.0	1.3	1.3	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.1	2.1	2.1	0.0	1.3	1.3	0.0	0.0	0.0	0.1	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.06	0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	27	657	678	6	633	659	0	8	0	26	0	0
V/C Ratio(X)	0.26	0.27	0.28	0.16	0.19	0.19	0.00	0.24	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	1227	1653	1707	1227	1653	1722	0	1482	0	1227	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.1	6.4	6.4	14.4	6.4	6.4	0.0	14.4	0.0	14.1	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.4	0.4	4.5	0.2	0.2	0.0	5.5	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	6.8	6.8	19.0	6.7	6.7	0.0	19.9	0.0	15.8	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	A	B	A	B	A	A
Approach Vol, veh/h		375			242			2			6	
Approach Delay, s/veh		7.0			6.7			19.9			15.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.1	4.0	16.4		4.4	4.4	16.0
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		23.0	20.0	27.0		20.0	20.0	27.0
Max Q Clear Time (g_c+I1), s		2.0	2.0	4.1		2.1	2.1	3.3
Green Ext Time (p_c), s		0.0	0.0	6.6		0.0	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	329	18	16	251	29	5	1	12	25	0	103
Future Volume (veh/h)	190	329	18	16	251	29	5	1	12	25	0	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	211	366	10	18	279	9	6	1	0	28	0	11
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	1084	483	41	607	271	26	4	0	129	0	115
Arrive On Green	0.16	0.30	0.30	0.02	0.17	0.17	0.02	0.02	0.00	0.07	0.00	0.07
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1537	256	0	1781	0	1585
Grp Volume(v), veh/h	211	366	10	18	279	9	7	0	0	28	0	11
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1793	0	0	1781	0	1585
Q Serve(g_s), s	3.8	2.7	0.1	0.3	2.4	0.2	0.1	0.0	0.0	0.5	0.0	0.2
Cycle Q Clear(g_c), s	3.8	2.7	0.1	0.3	2.4	0.2	0.1	0.0	0.0	0.5	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	0.86		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	1084	483	41	607	271	30	0	0	129	0	115
V/C Ratio(X)	0.75	0.34	0.02	0.44	0.46	0.03	0.23	0.00	0.00	0.22	0.00	0.10
Avail Cap(c_a), veh/h	1054	3153	1406	1054	3153	1406	1061	0	0	1422	0	1266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	9.1	8.2	16.3	12.6	11.7	16.4	0.0	0.0	14.8	0.0	14.6
Incr Delay (d2), s/veh	1.6	0.2	0.0	2.7	0.6	0.1	1.4	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.6	0.0	0.1	0.7	0.0	0.1	0.0	0.0	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	9.3	8.2	19.0	13.2	11.7	17.8	0.0	0.0	15.1	0.0	14.8
LnGrp LOS	B	A	A	B	B	B	B	A	A	B	A	B
Approach Vol, veh/h		587			306			7			39	
Approach Delay, s/veh		11.4			13.5			17.8			15.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.6	4.8	16.3		8.2	9.3	11.8
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0
Max Green Setting (Gmax), s		20.0	20.0	30.0		27.0	20.0	30.0
Max Q Clear Time (g_c+I1), s		2.1	2.3	4.7		2.5	5.8	4.4
Green Ext Time (p_c), s		0.0	0.0	1.9		0.1	0.3	1.4

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	206	11	10	157	97	2	8	8	78	7	38
Future Volume (veh/h)	50	206	11	10	157	97	2	8	8	78	7	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	229	4	11	174	35	2	9	0	87	8	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	784	350	21	652	291	10	44	46	302	28	292
Arrive On Green	0.05	0.22	0.22	0.01	0.18	0.18	0.03	0.03	0.00	0.18	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	337	1517	1585	1638	151	1585
Grp Volume(v), veh/h	56	229	4	11	174	35	11	0	0	95	0	6
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1854	0	1585	1788	0	1585
Q Serve(g_s), s	1.0	1.7	0.1	0.2	1.4	0.6	0.2	0.0	0.0	1.5	0.0	0.1
Cycle Q Clear(g_c), s	1.0	1.7	0.1	0.2	1.4	0.6	0.2	0.0	0.0	1.5	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	0.18		1.00	0.92		1.00
Lane Grp Cap(c), veh/h	87	784	350	21	652	291	54	0	46	329	0	292
V/C Ratio(X)	0.64	0.29	0.01	0.53	0.27	0.12	0.20	0.00	0.00	0.29	0.00	0.02
Avail Cap(c_a), veh/h	1097	4378	1953	1097	4378	1953	1142	0	976	1102	0	976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	10.5	9.9	16.0	11.4	11.1	15.4	0.0	0.0	11.4	0.0	10.8
Incr Delay (d2), s/veh	2.9	0.2	0.0	7.6	0.3	0.2	0.7	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.0	0.1	0.4	0.2	0.1	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	10.8	9.9	23.6	11.6	11.3	16.1	0.0	0.0	11.6	0.0	10.9
LnGrp LOS	B	B	A	C	B	B	B	A	A	B	A	B
Approach Vol, veh/h		289			220			11			101	
Approach Delay, s/veh		12.2			12.2			16.1			11.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.4	13.2		4.9	5.6	12.0		10.0				
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0				
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0				
Max Q Clear Time (g_c+I1), s	2.2	3.7		2.2	3.0	3.4		3.5				
Green Ext Time (p_c), s	0.0	3.4		0.0	0.1	2.6		0.2				

Intersection Summary			
HCM 6th Ctrl Delay			12.1
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	243	177	21	53	235	130	37	242	36	83	225	276
Future Volume (veh/h)	243	177	21	53	235	130	37	242	36	83	225	276
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	270	197	0	59	261	0	41	269	0	92	250	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	550	825		311	580		241	565		403	731	
Arrive On Green	0.16	0.23	0.00	0.09	0.16	0.00	0.07	0.16	0.00	0.12	0.21	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	270	197	0	59	261	0	41	269	0	92	250	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	3.5	2.2	0.0	0.8	3.3	0.0	0.5	3.4	0.0	1.2	2.9	0.0
Cycle Q Clear(g_c), s	3.5	2.2	0.0	0.8	3.3	0.0	0.5	3.4	0.0	1.2	2.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	550	825		311	580		241	565		403	731	
V/C Ratio(X)	0.49	0.24		0.19	0.45		0.17	0.48		0.23	0.34	
Avail Cap(c_a), veh/h	1410	2175		1410	2175		1410	1450		1410	1450	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.8	15.3	0.0	20.6	18.5	0.0	21.5	18.7	0.0	19.6	16.6	0.0
Incr Delay (d2), s/veh	0.3	0.3	0.0	0.1	0.9	0.0	0.1	0.9	0.0	0.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.7	0.0	0.3	1.1	0.0	0.2	1.2	0.0	0.4	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	15.5	0.0	20.7	19.5	0.0	21.6	19.7	0.0	19.8	17.1	0.0
LnGrp LOS	B	B		C	B		C	B		B	B	
Approach Vol, veh/h		467	A		320	A		310	A		342	A
Approach Delay, s/veh		17.6			19.7			19.9			17.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	17.1	7.4	16.1	11.8	13.7	9.7	13.8
Change Period (Y+Rc), s	4.0	5.7	4.0	* 6	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	20.0	30.0	20.0	* 20	20.0	30.0	20.0	20.0
Max Q Clear Time (g_c+I1), s	2.8	4.2	2.5	4.9	5.5	5.3	3.2	5.4
Green Ext Time (p_c), s	0.1	1.3	0.0	1.5	0.5	1.8	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	284	18	29	394	44	15	116	25	49	52	39
Future Volume (veh/h)	20	284	18	29	394	44	15	116	25	49	52	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	316	16	32	438	41	17	129	20	54	58	21
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	775	39	80	780	73	61	259	40	162	289	104
Arrive On Green	0.03	0.23	0.23	0.05	0.24	0.24	0.03	0.16	0.16	0.09	0.22	0.22
Sat Flow, veh/h	1781	3442	174	1781	3286	306	1781	1581	245	1781	1310	474
Grp Volume(v), veh/h	22	163	169	32	236	243	17	0	149	54	0	79
Grp Sat Flow(s),veh/h/ln	1781	1777	1839	1781	1777	1815	1781	0	1826	1781	0	1785
Q Serve(g_s), s	0.5	3.1	3.1	0.7	4.6	4.6	0.4	0.0	2.9	1.1	0.0	1.4
Cycle Q Clear(g_c), s	0.5	3.1	3.1	0.7	4.6	4.6	0.4	0.0	2.9	1.1	0.0	1.4
Prop In Lane	1.00		0.09	1.00		0.17	1.00		0.13	1.00		0.27
Lane Grp Cap(c), veh/h	58	400	414	80	422	431	61	0	299	162	0	393
V/C Ratio(X)	0.38	0.41	0.41	0.40	0.56	0.56	0.28	0.00	0.50	0.33	0.00	0.20
Avail Cap(c_a), veh/h	910	1589	1644	910	1589	1623	910	0	933	910	0	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.5	12.9	12.9	18.2	13.1	13.1	18.4	0.0	14.9	16.7	0.0	12.5
Incr Delay (d2), s/veh	1.5	0.9	0.9	1.2	1.5	1.5	0.9	0.0	1.8	0.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.0	1.0	0.3	1.5	1.6	0.1	0.0	1.2	0.4	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	13.8	13.8	19.4	14.7	14.7	19.3	0.0	16.7	17.1	0.0	12.8
LnGrp LOS	C	B	B	B	B	B	B	A	B	B	A	B
Approach Vol, veh/h		354			511			166			133	
Approach Delay, s/veh		14.2			15.0			16.9			14.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	11.3	5.8	14.5	5.4	13.5	5.3	15.0
Change Period (Y+Rc), s	4.0	4.9	4.0	5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	20.0	20.0	20.0	35.0	20.0	20.0	20.0	35.0
Max Q Clear Time (g_c+I1), s	3.1	4.9	2.7	5.1	2.4	3.4	2.5	6.6
Green Ext Time (p_c), s	0.1	0.6	0.0	1.8	0.0	0.3	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	386	591	33	39	0
Future Volume (veh/h)	10	386	591	33	39	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	429	657	34	43	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	31	1958	1312	68	146	130
Arrive On Green	0.02	0.55	0.38	0.38	0.08	0.00
Sat Flow, veh/h	1781	3647	3531	178	1781	1585
Grp Volume(v), veh/h	11	429	339	352	43	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1838	1781	1585
Q Serve(g_s), s	0.2	1.6	3.9	3.9	0.6	0.0
Cycle Q Clear(g_c), s	0.2	1.6	3.9	3.9	0.6	0.0
Prop In Lane	1.00			0.10	1.00	1.00
Lane Grp Cap(c), veh/h	31	1958	678	702	146	130
V/C Ratio(X)	0.35	0.22	0.50	0.50	0.29	0.00
Avail Cap(c_a), veh/h	1349	8072	4036	4176	1349	1200
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.8	3.0	6.2	6.2	11.4	0.0
Incr Delay (d2), s/veh	2.5	0.1	0.8	0.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.6	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.3	3.1	7.0	7.0	11.8	0.0
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h		440	691		43	
Approach Delay, s/veh		3.4	7.0		11.8	
Approach LOS		A	A		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		20.3		6.2	4.5	15.8
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		60.0		20.0	20.0	60.0
Max Q Clear Time (g_c+I1), s		3.6		2.6	2.2	5.9
Green Ext Time (p_c), s		2.8		0.0	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	372	51	65	635	0	59	0	49	0	0	0
Future Volume (veh/h)	0	372	51	65	635	0	59	0	49	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	413	49	72	706	0	66	0	7	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	7	818	97	139	1729	0	252	0	225	0	7	0
Arrive On Green	0.00	0.26	0.26	0.08	0.49	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Sat Flow, veh/h	1781	3201	378	1781	3647	0	1781	0	1585	0	1870	0
Grp Volume(v), veh/h	0	228	234	72	706	0	66	0	7	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1802	1781	1777	0	1781	0	1585	0	1870	0
Q Serve(g_s), s	0.0	2.9	2.9	1.0	3.3	0.0	0.9	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.9	2.9	1.0	3.3	0.0	0.9	0.0	0.1	0.0	0.0	0.0
Prop In Lane	1.00		0.21	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	7	454	461	139	1729	0	252	0	225	0	7	0
V/C Ratio(X)	0.00	0.50	0.51	0.52	0.41	0.00	0.26	0.00	0.03	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1365	2723	2762	1365	5446	0	1365	0	1215	0	1433	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.3	8.3	11.6	4.3	0.0	10.0	0.0	9.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.9	3.0	0.2	0.0	0.5	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.7	0.4	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.2	9.2	14.5	4.4	0.0	10.5	0.0	9.7	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		462			778			73			0	
Approach Delay, s/veh		9.2			5.4			10.5			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	12.4		7.7	0.0	18.4		0.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	20.0	40.0		20.0
Max Q Clear Time (g_c+I1), s	3.0	4.9		2.9	0.0	5.3		0.0
Green Ext Time (p_c), s	0.2	1.8		0.2	0.0	3.4		0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	443	13	86	693	8	34	15	94	19	10	24
Future Volume (veh/h)	21	443	13	86	693	8	34	15	94	19	10	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	492	12	96	770	9	38	17	12	21	11	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1174	29	163	1394	16	312	89	203	293	107	203
Arrive On Green	0.03	0.33	0.33	0.09	0.39	0.39	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1781	3545	86	1781	3598	42	878	697	1585	761	839	1585
Grp Volume(v), veh/h	23	246	258	96	380	399	55	0	12	32	0	3
Grp Sat Flow(s),veh/h/ln	1781	1777	1855	1781	1777	1863	1575	0	1585	1600	0	1585
Q Serve(g_s), s	0.4	3.3	3.3	1.6	5.1	5.1	0.2	0.0	0.2	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.4	3.3	3.3	1.6	5.1	5.1	0.8	0.0	0.2	0.5	0.0	0.1
Prop In Lane	1.00		0.05	1.00		0.02	0.69		1.00	0.66		1.00
Lane Grp Cap(c), veh/h	62	588	614	163	689	722	401	0	203	400	0	203
V/C Ratio(X)	0.37	0.42	0.42	0.59	0.55	0.55	0.14	0.00	0.06	0.08	0.00	0.01
Avail Cap(c_a), veh/h	1170	2450	2558	1404	2684	2813	1403	0	1249	1402	0	1249
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.4	7.9	7.9	13.3	7.3	7.3	11.9	0.0	11.7	11.8	0.0	11.6
Incr Delay (d2), s/veh	1.4	0.6	0.6	1.3	0.9	0.9	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.7	0.7	0.5	0.9	0.9	0.3	0.0	0.1	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	8.5	8.5	14.6	8.2	8.2	12.0	0.0	11.7	11.8	0.0	11.6
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	B
Approach Vol, veh/h		527			875			67			35	
Approach Delay, s/veh		8.8			8.9			11.9			11.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	15.8		7.9	5.1	17.5		7.9				
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	24.0	42.0		24.0	20.0	46.0		24.0				
Max Q Clear Time (g_c+I1), s	3.6	5.3		2.8	2.4	7.1		2.5				
Green Ext Time (p_c), s	0.1	2.8		0.1	0.0	4.7		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		9.1
HCM 6th LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	282	5	4	410	21	5	0	12	38	0	21
Future Volume (veh/h)	15	282	5	4	410	21	5	0	12	38	0	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	313	6	4	456	22	6	0	0	42	0	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	709	14	14	638	31	23	0	0	156	0	139
Arrive On Green	0.03	0.39	0.39	0.01	0.36	0.36	0.01	0.00	0.00	0.09	0.00	0.09
Sat Flow, veh/h	1781	1829	35	1781	1770	85	1781	0	0	1781	0	1585
Grp Volume(v), veh/h	17	0	319	4	0	478	6	0	0	42	0	1
Grp Sat Flow(s),veh/h/ln	1781	0	1864	1781	0	1855	1781	0	0	1781	0	1585
Q Serve(g_s), s	0.3	0.0	4.4	0.1	0.0	7.8	0.1	0.0	0.0	0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	4.4	0.1	0.0	7.8	0.1	0.0	0.0	0.8	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.05	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	62	0	723	14	0	669	23	0	0	156	0	139
V/C Ratio(X)	0.27	0.00	0.44	0.29	0.00	0.71	0.26	0.00	0.00	0.27	0.00	0.01
Avail Cap(c_a), veh/h	1014	0	2388	1014	0	2376	1014	0	0	1014	0	902
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	7.9	17.3	0.0	9.7	17.2	0.0	0.0	15.0	0.0	14.6
Incr Delay (d2), s/veh	0.9	0.0	0.6	4.4	0.0	1.9	4.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.0	0.0	0.0	2.0	0.1	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.4	0.0	8.5	21.7	0.0	11.6	21.5	0.0	0.0	15.3	0.0	14.6
LnGrp LOS	B	A	A	C	A	B	C	A	A	B	A	B
Approach Vol, veh/h		336			482			6			43	
Approach Delay, s/veh		9.0			11.7			21.5			15.3	
Approach LOS		A			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	19.3		4.5	5.2	18.4		7.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	20.0	45.0		20.0	20.0	45.0		20.0
Max Q Clear Time (g_c+I1), s	2.1	6.4		2.1	2.3	9.8		2.8
Green Ext Time (p_c), s	0.0	1.8		0.0	0.0	2.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	38	47	128	14	24	42	464	163	20	454	2
Future Volume (veh/h)	30	38	47	128	14	24	42	464	163	20	454	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	42	1	142	16	4	47	516	69	22	504	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	111	172	245	28	242	88	616	522	57	1134	4
Arrive On Green	0.11	0.11	0.11	0.15	0.15	0.15	0.05	0.33	0.33	0.03	0.31	0.31
Sat Flow, veh/h	805	1025	1585	1609	181	1585	1781	1870	1585	1781	3630	14
Grp Volume(v), veh/h	75	0	1	158	0	4	47	516	69	22	247	259
Grp Sat Flow(s),veh/h/ln	1830	0	1585	1790	0	1585	1781	1870	1585	1781	1777	1868
Q Serve(g_s), s	1.7	0.0	0.0	3.8	0.0	0.1	1.2	11.7	1.4	0.6	5.1	5.1
Cycle Q Clear(g_c), s	1.7	0.0	0.0	3.8	0.0	0.1	1.2	11.7	1.4	0.6	5.1	5.1
Prop In Lane	0.44		1.00	0.90		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	198	0	172	273	0	242	88	616	522	57	555	583
V/C Ratio(X)	0.38	0.00	0.01	0.58	0.00	0.02	0.54	0.84	0.13	0.39	0.44	0.44
Avail Cap(c_a), veh/h	639	0	554	1173	0	1038	622	1715	1454	622	1630	1713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	18.2	18.0	0.0	16.5	21.3	14.2	10.8	21.7	12.6	12.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.7	0.0	0.0	1.9	1.2	0.0	1.6	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	1.4	0.0	0.0	0.5	4.2	0.4	0.2	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	0.0	18.2	18.8	0.0	16.5	23.2	15.4	10.8	23.3	13.1	13.1
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		76			162			632			528	
Approach Delay, s/veh		19.4			18.7			15.5			13.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	20.4		9.0	6.3	19.6		11.0				
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	* 5.3		4.0				
Max Green Setting (Gmax), s	16.0	42.0		16.0	16.0	* 42		30.0				
Max Q Clear Time (g_c+I1), s	2.6	13.7		3.7	3.2	7.1		5.8				
Green Ext Time (p_c), s	0.0	1.4		0.1	0.0	2.0		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			15.3									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	85	0	232	256	4	0	244	244	0	233	210
Future Volume (veh/h)	137	85	0	232	256	4	0	244	244	0	233	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	152	94	0	258	284	4	0	271	39	0	259	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	335	352	0	515	532	7	0	392	333	0	392	
Arrive On Green	0.19	0.19	0.00	0.29	0.29	0.29	0.00	0.21	0.21	0.00	0.21	0.00
Sat Flow, veh/h	1781	1870	0	1781	1840	26	0	1870	1585	0	1870	1585
Grp Volume(v), veh/h	152	94	0	258	0	288	0	271	39	0	259	0
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1866	0	1870	1585	0	1870	1585
Q Serve(g_s), s	3.2	1.8	0.0	5.1	0.0	5.5	0.0	5.7	0.8	0.0	5.4	0.0
Cycle Q Clear(g_c), s	3.2	1.8	0.0	5.1	0.0	5.5	0.0	5.7	0.8	0.0	5.4	0.0
Prop In Lane	1.00		0.00	1.00		0.01	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	335	352	0	515	0	539	0	392	333	0	392	
V/C Ratio(X)	0.45	0.27	0.00	0.50	0.00	0.53	0.00	0.69	0.12	0.00	0.66	
Avail Cap(c_a), veh/h	1509	1585	0	1300	0	1361	0	1585	1343	0	1585	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	15.3	14.7	0.0	12.6	0.0	12.7	0.0	15.5	13.6	0.0	15.4	0.0
Incr Delay (d2), s/veh	0.7	0.3	0.0	1.6	0.0	1.8	0.0	2.2	0.2	0.0	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.7	0.0	1.8	0.0	2.0	0.0	2.3	0.3	0.0	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	15.0	0.0	14.2	0.0	14.5	0.0	17.7	13.8	0.0	16.8	0.0
LnGrp LOS	B	B	A	B	A	B	A	B	B	A	B	
Approach Vol, veh/h		246			546			310			259	A
Approach Delay, s/veh		15.6			14.3			17.2			16.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		17.2		13.1		12.2		13.1				
Change Period (Y+Rc), s		4.9		* 4.2		4.2		* 4.2				
Max Green Setting (Gmax), s		31.0		* 36		36.0		* 36				
Max Q Clear Time (g_c+I1), s		7.5		7.4		5.2		7.7				
Green Ext Time (p_c), s		4.8		0.8		0.7		1.2				

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	359	122	29	308	26	89	29	33	7	36	17
Future Volume (veh/h)	19	359	122	29	308	26	89	29	33	7	36	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	399	95	32	342	26	99	32	3	8	40	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	1343	1182	122	1175	86	226	39	186	76	139	3
Arrive On Green	0.75	0.75	0.75	0.75	0.75	0.75	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	38	1801	1585	77	1575	115	1023	331	1585	52	1177	26
Grp Volume(v), veh/h	420	0	95	400	0	0	131	0	3	49	0	0
Grp Sat Flow(s),veh/h/ln	1839	0	1585	1767	0	0	1354	0	1585	1255	0	0
Q Serve(g_s), s	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Cycle Q Clear(g_c), s	4.4	0.0	1.0	4.2	0.0	0.0	5.8	0.0	0.1	5.8	0.0	0.0
Prop In Lane	0.05		1.00	0.08		0.06	0.76		1.00	0.16		0.02
Lane Grp Cap(c), veh/h	1434	0	1182	1382	0	0	265	0	186	218	0	0
V/C Ratio(X)	0.29	0.00	0.08	0.29	0.00	0.00	0.49	0.00	0.02	0.23	0.00	0.00
Avail Cap(c_a), veh/h	1434	0	1182	1382	0	0	483	0	423	480	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.96	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.5	0.0	2.1	2.5	0.0	0.0	25.9	0.0	23.4	24.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.5	0.0	0.0	0.5	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.2	0.9	0.0	0.0	1.7	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.0	0.0	2.2	3.0	0.0	0.0	26.4	0.0	23.4	24.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	A
Approach Vol, veh/h		515			400			134			49	
Approach Delay, s/veh		2.9			3.0			26.4			24.2	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	48.9	11.1	48.9	11.1
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 36	16.0	* 36	16.0
Max Q Clear Time (g_c+I1), s	6.4	7.8	6.2	7.8
Green Ext Time (p_c), s	1.8	0.1	1.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	373	12	14	444	9	18	7	28	6	8	5
Future Volume (veh/h)	4	373	12	14	444	9	18	7	28	6	8	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	414	12	16	493	9	20	8	0	7	9	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	1520	44	77	1512	27	128	11	39	103	25	0
Arrive On Green	0.84	0.84	0.84	0.84	0.84	0.84	0.02	0.02	0.00	0.02	0.02	0.00
Sat Flow, veh/h	3	1803	52	20	1794	32	1154	462	1585	773	994	0
Grp Volume(v), veh/h	430	0	0	518	0	0	28	0	0	16	0	0
Grp Sat Flow(s),veh/h/ln	1858	0	0	1846	0	0	1615	0	1585	1767	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.9	0.0	0.0	3.7	0.0	0.0	1.0	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.01		0.03	0.03		0.02	0.71		1.00	0.44		0.00
Lane Grp Cap(c), veh/h	1625	0	0	1616	0	0	139	0	39	127	0	0
V/C Ratio(X)	0.26	0.00	0.00	0.32	0.00	0.00	0.20	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1625	0	0	1616	0	0	541	0	460	561	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	1.0	0.0	0.0	1.1	0.0	0.0	30.0	0.0	0.0	29.7	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.5	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1.4	0.0	0.0	1.6	0.0	0.0	30.2	0.0	0.0	29.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		430			518			28			16	
Approach Delay, s/veh		1.4			1.6			30.2			29.9	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	56.5	5.5	56.5	5.5
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 36	18.0	* 36	18.0
Max Q Clear Time (g_c+I1), s	4.9	3.0	5.7	2.5
Green Ext Time (p_c), s	1.4	0.0	1.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	2.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	282	25	257	334	4	35	11	222	24	69	10
Future Volume (veh/h)	32	282	25	257	334	4	35	11	222	24	69	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	313	22	286	371	4	39	12	18	27	77	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	380	27	335	709	8	163	30	35	104	105	4
Arrive On Green	0.02	0.22	0.22	0.19	0.38	0.38	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	1781	1727	121	1781	1847	20	887	390	451	371	1355	50
Grp Volume(v), veh/h	36	0	335	286	0	375	69	0	0	107	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1849	1781	0	1867	1727	0	0	1776	0	0
Q Serve(g_s), s	1.2	0.0	10.4	9.3	0.0	9.3	0.0	0.0	0.0	1.3	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	10.4	9.3	0.0	9.3	2.2	0.0	0.0	3.5	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.01	0.57		0.26	0.25		0.03
Lane Grp Cap(c), veh/h	43	0	407	335	0	716	228	0	0	213	0	0
V/C Ratio(X)	0.83	0.00	0.82	0.85	0.00	0.52	0.30	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	356	0	733	356	0	740	406	0	0	422	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.2	0.0	22.3	23.6	0.0	14.3	26.5	0.0	0.0	27.1	0.0	0.0
Incr Delay (d2), s/veh	13.5	0.0	3.3	16.1	0.0	2.7	0.3	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	4.5	5.1	0.0	4.0	0.9	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	0.0	25.6	39.7	0.0	17.0	26.8	0.0	0.0	27.8	0.0	0.0
LnGrp LOS	D	A	C	D	A	B	C	A	A	C	A	A
Approach Vol, veh/h		371			661			69			107	
Approach Delay, s/veh		27.2			26.8			26.8			27.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.3	17.4		8.6	5.5	27.2		8.6
Change Period (Y+Rc), s	4.0	* 4.2		4.0	4.0	* 4.2		4.0
Max Green Setting (Gmax), s	12.0	* 24		12.0	12.0	* 24		12.0
Max Q Clear Time (g_c+I1), s	11.3	12.4		4.2	3.2	11.3		5.5
Green Ext Time (p_c), s	0.1	0.8		0.1	0.0	1.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	79	128	71	110	28	322	869	22	23	625	0
Future Volume (veh/h)	70	79	128	71	110	28	322	869	22	23	625	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	88	11	79	122	2	358	966	10	26	694	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	161	263	121	187	266	401	1226	547	209	925	
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.22	0.34	0.34	0.12	0.26	0.00
Sat Flow, veh/h	859	969	1585	721	1113	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	166	0	11	201	0	2	358	966	10	26	694	0
Grp Sat Flow(s),veh/h/ln	1827	0	1585	1834	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	6.9	0.0	0.5	8.5	0.0	0.1	16.1	20.2	0.3	1.1	14.9	0.0
Cycle Q Clear(g_c), s	6.9	0.0	0.5	8.5	0.0	0.1	16.1	20.2	0.3	1.1	14.9	0.0
Prop In Lane	0.47		1.00	0.39		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	0	263	307	0	266	401	1226	547	209	925	
V/C Ratio(X)	0.55	0.00	0.04	0.65	0.00	0.01	0.89	0.79	0.02	0.12	0.75	
Avail Cap(c_a), veh/h	442	0	383	443	0	383	538	1717	766	430	1717	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.6	0.0	29.0	32.2	0.0	28.7	31.1	24.4	17.9	32.7	28.2	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.0	0.0	11.7	2.1	0.0	0.1	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.2	3.8	0.0	0.0	7.8	8.1	0.1	0.5	6.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	0.0	29.0	33.1	0.0	28.7	42.8	26.5	17.9	32.8	29.9	0.0
LnGrp LOS	C	A	C	C	A	C	D	C	B	C	C	
Approach Vol, veh/h		177			203			1334			720	A
Approach Delay, s/veh		32.0			33.1			30.8			30.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.7	33.5		17.9	21.6	25.5		17.8
Change Period (Y+Rc), s	4.0	4.9		4.0	3.0	* 4		4.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	25.0	* 40		20.0
Max Q Clear Time (g_c+I1), s	3.1	22.2		10.5	18.1	16.9		8.9
Green Ext Time (p_c), s	0.0	6.3		0.3	0.5	4.7		0.3

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	519	0	0	364	140	0	0	0	167	0	20
Future Volume (veh/h)	21	519	0	0	364	140	0	0	0	167	0	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	577	0	0	404	38	0	0	0	186	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1699	0	0	603	511	0	524	0	1433	524	0
Arrive On Green	0.03	0.48	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.28	0.00	0.00
Sat Flow, veh/h	1781	3647	0	0	1870	1585	0	1870	0	3563	1870	0
Grp Volume(v), veh/h	23	577	0	0	404	38	0	0	0	186	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1585	0	1870	0	1781	1870	0
Q Serve(g_s), s	0.4	3.3	0.0	0.0	6.2	0.6	0.0	0.0	0.0	1.3	0.0	0.0
Cycle Q Clear(g_c), s	0.4	3.3	0.0	0.0	6.2	0.6	0.0	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	62	1699	0	0	603	511	0	524	0	1433	524	0
V/C Ratio(X)	0.37	0.34	0.00	0.00	0.67	0.07	0.00	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	808	3225	0	0	1698	1439	0	679	0	2807	1245	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.6	5.4	0.0	0.0	9.7	7.8	0.0	0.0	0.0	9.0	0.0	0.0
Incr Delay (d2), s/veh	3.7	0.1	0.0	0.0	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.7	0.0	0.0	1.8	0.1	0.0	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.3	5.5	0.0	0.0	11.0	7.8	0.0	0.0	0.0	9.1	0.0	0.0
LnGrp LOS	B	A	A	A	B	A	A	A	A	A	A	A
Approach Vol, veh/h		600			442			0			186	
Approach Delay, s/veh		6.0			10.7			0.0			9.1	
Approach LOS		A			B						A	

Timer - Assigned Phs		2		4		6	7	8
Phs Duration (G+Y+Rc), s		13.3		19.8		13.3	5.1	14.7
Change Period (Y+Rc), s		4.0		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		12.0		30.0		22.0	15.0	30.0
Max Q Clear Time (g_c+I1), s		0.0		5.3		3.3	2.4	8.2
Green Ext Time (p_c), s		0.0		4.1		0.5	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	240	402	505	252	51	369
Future Volume (veh/h)	240	402	505	252	51	369
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	267	106	420	477	57	176
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	404	359	805	955	955	810
Arrive On Green	0.23	0.23	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1781	1585	1147	1870	1870	1585
Grp Volume(v), veh/h	267	106	420	477	57	176
Grp Sat Flow(s),veh/h/ln	1781	1585	1147	1870	1870	1585
Q Serve(g_s), s	4.2	1.7	8.9	5.1	0.5	1.9
Cycle Q Clear(g_c), s	4.2	1.7	9.3	5.1	0.5	1.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	404	359	805	955	955	810
V/C Ratio(X)	0.66	0.30	0.52	0.50	0.06	0.22
Avail Cap(c_a), veh/h	1461	1300	1160	1534	1718	1456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	9.8	6.1	4.9	3.8	4.1
Incr Delay (d2), s/veh	1.9	0.5	0.5	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.4	1.0	0.9	0.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.6	10.2	6.6	5.3	3.8	4.2
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	373			897	233	
Approach Delay, s/veh	11.9			5.9	4.1	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		19.6		10.9		19.6
Change Period (Y+Rc), s		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		25.0		28.0
Max Q Clear Time (g_c+I1), s		11.3		6.2		3.9
Green Ext Time (p_c), s		4.2		1.1		0.8

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR**
Average Results from 10 Runs | **Existing Condition**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 8 **New Meadow Dr/Blue Oaks Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	128	133	103.8%	40.4	5.8	D
	Through						
	Right Turn	24	30	126.7%	20.7	10.0	C
	Subtotal	**152**	**163**	**107.4%**	**36.9**	**5.5**	**D**
EB	Left Turn	36	31	86.7%	52.3	10.8	D
	Through	1,180	1,141	96.7%	9.9	3.0	A
	Right Turn						
	Subtotal	**1,216**	**1,172**	**96.4%**	**11.0**	**2.8**	**B**
WB	Left Turn						
	Through	1,892	1,664	87.9%	23.7	4.0	C
	Right Turn	240	212	88.5%	18.2	2.0	B
	Subtotal	**2,132**	**1,876**	**88.0%**	**23.1**	**3.7**	**C**
Total		**3,500**	**3,212**	**91.8%**	**19.4**	**2.7**	**B**

Intersection 10 **Diamond Creek Blvd/Blue Oaks Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	8	8	95.0%	38.2	30.1	D
	Through	8	11	140.0%	39.7	25.0	D
	Right Turn	52	48	93.1%	6.8	2.8	A
	Subtotal	**68**	**67**	**98.8%**	**18.2**	**7.7**	**B**
SB	Left Turn	216	216	100.0%	32.6	3.6	C
	Through	28	28	100.0%	36.3	16.6	D
	Right Turn	16	15	95.0%	34.9	16.9	C
	Subtotal	**260**	**259**	**99.7%**	**33.1**	**3.4**	**C**
EB	Left Turn	28	25	88.6%	46.6	12.5	D
	Through	724	714	98.6%	18.6	3.5	B
	Right Turn	32	27	85.0%	4.5	1.9	A
	Subtotal	**784**	**766**	**97.7%**	**18.9**	**3.3**	**B**
WB	Left Turn	56	53	94.3%	44.6	11.1	D
	Through	872	804	92.2%	18.8	3.7	B
	Right Turn	296	275	92.8%	10.0	1.4	A
	Subtotal	**1,224**	**1,131**	**92.4%**	**17.9**	**2.6**	**B**
Total		**2,336**	**2,224**	**95.2%**	**20.0**	**2.3**	**B**

Intersection 11 **Foothills Blvd/Blue Oaks Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	292	298	102.2%	53.7	6.0	D
	Through	56	52	93.6%	47.6	8.5	D
	Right Turn	616	590	95.8%	6.2	0.7	A
	Subtotal	**964**	**941**	**97.6%**	**23.6**	**2.8**	**C**
SB	Left Turn	412	428	104.0%	45.3	8.0	D
	Through	188	180	95.5%	43.4	6.6	D
	Right Turn	88	89	100.9%	29.3	4.3	C
	Subtotal	**688**	**697**	**101.3%**	**42.7**	**5.4**	**D**
EB	Left Turn	32	29	90.0%	61.0	16.6	E
	Through	1,128	1,081	95.9%	34.9	6.7	C
	Right Turn	148	148	100.3%	16.6	4.5	B
	Subtotal	**1,308**	**1,258**	**96.2%**	**33.2**	**6.0**	**C**
WB	Left Turn	256	242	94.7%	42.9	8.2	D
	Through	1,752	1,555	88.8%	35.1	3.1	D
	Right Turn	88	76	86.8%	2.2	0.7	A
	Subtotal	**2,096**	**1,874**	**89.4%**	**34.8**	**2.4**	**C**
Total		**5,056**	**4,770**	**94.4%**	**33.4**	**2.0**	**C**

Intersection 12 **Woodcreek Oaks Blvd/Blue Oaks Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	176	178	101.4%	42.2	6.5	D
	Through	128	125	97.5%	42.2	4.5	D
	Right Turn	220	212	96.2%	26.8	7.0	C
	Subtotal	**524**	**515**	**98.2%**	**35.8**	**4.0**	**D**
SB	Left Turn	220	209	94.9%	44.0	4.3	D
	Through	92	90	97.8%	41.7	8.4	D
	Right Turn	28	26	91.4%	11.1	6.4	B
	Subtotal	**340**	**324**	**95.4%**	**40.9**	**4.6**	**D**
EB	Left Turn	136	128	94.1%	49.7	6.7	D
	Through	772	754	97.7%	39.9	9.4	D
	Right Turn	76	79	104.2%	9.4	3.4	A
	Subtotal	**984**	**961**	**97.7%**	**38.8**	**7.5**	**D**
WB	Left Turn	528	490	92.7%	50.1	8.6	D
	Through	1,388	1,246	89.8%	29.9	4.9	C
	Right Turn						
	Subtotal	**1,916**	**1,736**	**90.6%**	**35.5**	**2.9**	**D**
Total		**3,764**	**3,536**	**93.9%**	**37.0**	**1.8**	**D**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR**
Average Results from 10 Runs | **Existing Condition**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 146 **Washington Blvd/Blue Oaks Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	384	400	104.3%	63.9	12.1	E
	Through						
	Right Turn	436	425	97.4%	70.9	29.5	E
	Subtotal	**820**	**825**	**100.6%**	**68.2**	**14.3**	**E**
SB	Left Turn	140	157	112.0%	48.6	8.8	D
	Through	256	252	98.3%	44.8	3.1	D
	Right Turn	272	274	100.6%	4.0	0.3	A
	Subtotal	**668**	**682**	**102.1%**	**29.4**	**2.3**	**C**
EB	Left Turn						
	Through	1,036	948	91.5%	41.5	7.4	D
	Right Turn	1,204	1,078	89.5%	57.0	10.2	E
	Subtotal	**2,240**	**2,026**	**90.4%**	**49.8**	**8.6**	**D**
WB	Left Turn	228	221	96.8%	48.0	4.6	D
	Through	684	638	93.3%	21.2	3.1	C
	Right Turn	412	410	99.4%	4.3	0.5	A
	Subtotal	**1,324**	**1,269**	**95.8%**	**20.4**	**2.3**	**C**
Total		**5,052**	**4,802**	**95.0%**	**42.3**	**5.0**	**D**

Intersection 12 **Woodmeadow Dr/Blue Oaks Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	12	6	53.3%	43.0	31.7	D
	Through						
	Right Turn	12	10	80.0%	17.0	14.3	B
	Subtotal	**24**	**16**	**66.7%**	**32.4**	**16.9**	**C**
EB	Left Turn	12	10	83.3%	75.4	44.3	E
	Through	1,204	1,187	98.6%	4.7	0.6	A
	Right Turn						
	Subtotal	**1,216**	**1,197**	**98.4%**	**5.3**	**0.6**	**A**
WB	Left Turn						
	Through	1,904	1,802	94.6%	13.8	3.9	B
	Right Turn	12	11	90.0%	10.5	6.9	B
	Subtotal	**1,916**	**1,813**	**94.6%**	**13.8**	**3.9**	**B**
Total		**3,156**	**3,026**	**95.9%**	**10.5**	**2.3**	**B**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR**
Average Results from 10 Runs | **Existing Condition**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 90 **Eureka Rd/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	420	417	99.2%	50.6	4.2	D
	Through	448	443	98.8%	51.6	6.4	D
	Right Turn	20	22	108.0%	23.7	11.0	C
	Subtotal	**888**	**881**	**99.2%**	**50.6**	**3.6**	**D**
SB	Left Turn	460	456	99.0%	49.1	4.1	D
	Through	496	484	97.7%	59.7	11.8	E
	Right Turn	140	130	93.1%	8.9	4.7	A
	Subtotal	**1,096**	**1,070**	**97.7%**	**49.1**	**7.5**	**D**
EB	Left Turn	176	173	98.4%	54.3	15.6	D
	Through	1,284	1,158	90.2%	33.7	8.8	C
	Right Turn	488	437	89.5%	30.2	4.8	C
	Subtotal	**1,948**	**1,768**	**90.8%**	**35.0**	**8.2**	**C**
WB	Left Turn	80	72	90.5%	63.4	11.0	E
	Through	1,424	1,418	99.6%	48.7	10.2	D
	Right Turn	460	434	94.3%	25.5	8.9	C
	Subtotal	**1,964**	**1,924**	**98.0%**	**44.0**	**9.6**	**D**
Total		**5,896**	**5,644**	**95.7%**	**43.2**	**4.2**	**D**

Intersection 105 **Rocky Ridge Dr/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	336	323	96.1%	61.5	5.6	E
	Through	424	444	104.6%	49.1	7.3	D
	Right Turn	168	164	97.9%	24.1	5.7	C
	Subtotal	**928**	**931**	**100.3%**	**49.1**	**5.4**	**D**
SB	Left Turn	224	212	94.6%	59.0	8.2	E
	Through	620	638	102.9%	67.1	15.6	E
	Right Turn	132	124	93.6%	31.7	5.9	C
	Subtotal	**976**	**974**	**99.8%**	**61.0**	**12.4**	**E**
EB	Left Turn	200	183	91.6%	59.1	8.2	E
	Through	1,448	1,364	94.2%	56.7	10.4	E
	Right Turn	148	126	84.9%	38.9	9.2	D
	Subtotal	**1,796**	**1,673**	**93.1%**	**55.6**	**9.5**	**E**
WB	Left Turn	380	377	99.3%	61.7	14.5	E
	Through	1,712	1,624	94.8%	67.9	12.6	E
	Right Turn	132	123	93.0%	44.8	15.3	D
	Subtotal	**2,224**	**2,124**	**95.5%**	**65.3**	**11.8**	**E**
Total		**5,924**	**5,701**	**96.2%**	**59.1**	**5.3**	**E**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR**
Average Results from 10 Runs | **Existing Condition**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 102 **Santa Clara Dr/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	40	33	83.0%	42.8	10.9	D
	Through	20	18	88.0%	42.2	13.5	D
	Right Turn	72	84	116.1%	20.4	3.5	C
	Subtotal	**132**	**134**	**101.8%**	**29.0**	**5.1**	**C**
SB	Left Turn	188	204	108.5%	34.3	3.0	C
	Through	56	54	95.7%	34.2	8.5	C
	Right Turn	184	176	95.9%	19.4	2.7	B
	Subtotal	**428**	**434**	**101.4%**	**28.2**	**2.6**	**C**
EB	Left Turn	152	140	92.1%	53.0	7.8	D
	Through	1,748	1,655	94.7%	29.1	2.9	C
	Right Turn	32	29	91.3%	33.8	8.2	C
	Subtotal	**1,932**	**1,824**	**94.4%**	**31.0**	**3.0**	**C**
WB	Left Turn	52	48	93.1%	51.5	15.6	D
	Through	1,936	1,738	89.8%	24.0	5.1	C
	Right Turn	40	36	90.0%	12.2	5.1	B
	Subtotal	**2,028**	**1,823**	**89.9%**	**24.5**	**5.3**	**C**
Total		**4,520**	**4,216**	**93.3%**	**27.8**	**3.7**	**C**

Intersection 103 **Sierra Gardens Dr/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	156	149	95.4%	42.3	6.8	D
	Through	32	34	105.0%	39.1	10.5	D
	Right Turn	28	36	127.1%	30.3	7.2	C
	Subtotal	**216**	**218**	**100.9%**	**39.8**	**5.6**	**D**
SB	Left Turn	220	224	102.0%	35.6	3.7	D
	Through	28	40	142.9%	36.5	7.5	D
	Right Turn	36	34	93.3%	32.6	10.7	C
	Subtotal	**284**	**298**	**104.9%**	**35.3**	**3.7**	**D**
EB	Left Turn	48	44	91.7%	62.2	17.3	E
	Through	1,832	1,730	94.4%	51.3	10.4	D
	Right Turn	44	45	101.8%	58.7	10.9	E
	Subtotal	**1,924**	**1,819**	**94.5%**	**51.7**	**10.3**	**D**
WB	Left Turn	40	39	98.0%	49.6	9.2	D
	Through	2,008	1,843	91.8%	34.7	10.8	C
	Right Turn						
	Subtotal	**2,048**	**1,882**	**91.9%**	**35.0**	**10.2**	**C**
Total		**4,472**	**4,217**	**94.3%**	**42.5**	**5.9**	**D**

Intersection 101 **N. Sunrise Ave/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	348	384	110.2%	50.0	2.9	D
	Through	476	497	104.4%	47.7	4.2	D
	Right Turn	136	136	100.3%	45.2	5.3	D
	Subtotal	**960**	**1,017**	**105.9%**	**48.2**	**3.2**	**D**
SB	Left Turn	132	121	91.5%	81.6	28.4	F
	Through	584	583	99.9%	84.2	28.8	F
	Right Turn	528	506	95.8%	45.7	18.5	D
	Subtotal	**1,244**	**1,210**	**97.3%**	**67.9**	**23.9**	**E**
EB	Left Turn	376	384	102.1%	72.9	11.7	E
	Through	1,636	1,531	93.6%	49.6	6.2	D
	Right Turn	152	150	98.9%	12.7	1.9	B
	Subtotal	**2,164**	**2,065**	**95.4%**	**51.3**	**6.8**	**D**
WB	Left Turn	268	226	84.3%	63.0	7.9	E
	Through	1,856	1,564	84.3%	76.7	9.3	E
	Right Turn	96	86	90.0%	53.9	13.0	D
	Subtotal	**2,220**	**1,876**	**84.5%**	**74.0**	**8.8**	**E**
Total		**6,588**	**6,168**	**93.6%**	**60.8**	**5.7**	**E**

Intersection 104 **Target Dwy/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	104	111	106.5%	51.4	10.6	D
	Through	24	24	100.0%	39.0	14.9	D
	Right Turn	68	69	101.8%	21.7	8.6	C
	Subtotal	**196**	**204**	**104.1%**	**40.3**	**8.6**	**D**
SB	Left Turn	88	79	89.5%	48.7	9.4	D
	Through	12	6	53.3%	47.9	36.6	D
	Right Turn	108	103	95.2%	21.9	6.9	C
	Subtotal	**208**	**188**	**90.4%**	**34.6**	**8.0**	**C**
EB	Left Turn	160	148	92.3%	65.9	8.1	E
	Through	1,720	1,656	96.3%	28.5	5.1	C
	Right Turn	40	44	109.0%	29.7	8.4	C
	Subtotal	**1,920**	**1,847**	**96.2%**	**31.5**	**5.4**	**C**
WB	Left Turn	84	76	90.5%	52.4	11.1	D
	Through	1,904	1,808	95.0%	26.1	5.6	C
	Right Turn	12	14	120.0%	28.1	15.7	C
	Subtotal	**2,000**	**1,898**	**94.9%**	**27.1**	**5.5**	**C**
Total		**4,324**	**4,138**	**95.7%**	**30.0**	**4.5**	**C**

Intersection 98 **Harding Blvd/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	Movement	Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	28	22	80.0%	43.6	11.5	D
	Through	28	26	92.9%	33.4	15.3	C
	Right Turn	84	86	101.9%	14.9	3.6	B
	Subtotal	**140**	**134**	**95.7%**	**24.2**	**4.0**	**C**
SB	Left Turn	784	735	93.7%	100.6	38.1	F
	Through	8	8	105.0%	110.8	51.1	F
	Right Turn	236	238	100.8%	50.0	23.8	D
	Subtotal	**1,028**	**981**	**95.4%**	**88.6**	**35.3**	**F**
EB	Left Turn	188	191	101.7%	52.7	5.7	D
	Through	936	927	99.1%	28.6	1.7	C
	Right Turn	8	10	125.0%	22.2	8.5	C
	Subtotal	**1,132**	**1,128**	**99.7%**	**32.7**	**1.8**	**C**
WB	Left Turn	60	62	104.0%	57.4	6.8	E
	Through	1,128	1,119	99.2%	41.0	8.7	D
	Right Turn	464	439	94.7%	21.5	7.7	C
	Subtotal	**1,652**	**1,620**	**98.1%**	**36.4**	**8.2**	**D**
Total		**3,952**	**3,864**	**97.8%**	**48.2**	**9.9**	**D**

Intersection 178 **Harding Blvd/Estates Dr** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	Movement	Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	72	72	100.6%	38.4	7.2	D
	Through	648	618	95.3%	9.0	2.7	A
	Right Turn						
	Subtotal	**720**	**690**	**95.8%**	**12.0**	**2.4**	**B**
SB	Left Turn	36	36	98.9%	45.9	9.1	D
	Through	972	977	100.5%	18.7	6.1	B
	Right Turn	124	144	115.8%	19.9	7.6	B
	Subtotal	**1,132**	**1,156**	**102.2%**	**19.7**	**6.3**	**B**
EB	Left Turn	244	259	106.1%	37.6	4.3	D
	Through	4	7	170.0%	32.1	22.2	C
	Right Turn	24	34	143.3%	41.6	17.3	D
	Subtotal	**272**	**300**	**110.3%**	**38.0**	**6.3**	**D**
WB	Left Turn	20	21	104.0%	45.1	10.8	D
	Through	8	9	115.0%	27.9	23.1	C
	Right Turn	20	20	100.0%	11.0	5.5	B
	Subtotal	**48**	**50**	**104.2%**	**27.4**	**4.5**	**C**
Total		**2,172**	**2,196**	**101.1%**	**19.9**	**4.3**	**B**

Intersection 179 **N Sunrise Ave/Roseville Square** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	Movement	Demand	Served	% Served	Average	Std. Dev.	LOS

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Amoruso Ranch Specific Plan EIR
Existing Condition
PM Peak Hour

NB	Left Turn	132	122	92.1%	37.2	6.4	D
	Through	536	512	95.6%	12.7	2.2	B
	Right Turn	8	11	135.0%	6.7	3.5	A
	Subtotal	**676**	**645**	**95.4%**	**17.3**	**2.4**	**B**
SB	Left Turn	28	26	92.9%	44.8	17.3	D
	Through	808	806	99.8%	27.2	14.0	C
	Right Turn	36	42	115.6%	25.0	13.6	C
	Subtotal	**872**	**874**	**100.2%**	**27.6**	**13.9**	**C**
EB	Left Turn	164	166	101.5%	39.1	6.1	D
	Through	20	24	120.0%	38.4	11.9	D
	Right Turn	108	106	97.8%	20.1	2.9	C
	Subtotal	**292**	**296**	**101.4%**	**32.5**	**4.2**	**C**
WB	Left Turn	112	100	89.3%	51.5	30.9	D
	Through	8	12	145.0%	40.7	26.2	D
	Right Turn	40	43	108.0%	4.3	1.2	A
	Subtotal	**160**	**155**	**96.8%**	**36.9**	**17.2**	**D**
Total		**2,000**	**1,970**	**98.5%**	**25.4**	**6.9**	**C**

SimTraffic Post-Processor | **Amoruso - Eureka PM**
Average Results from 10 Runs | **Existing Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 87 **N. Sunrise Ave./Eureka Rd** **Signalized**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	480	475	99.0%	63.2	14.2	E
	Through	416	401	96.4%	40.4	6.6	D
	Right Turn	180	162	90.0%	4.5	0.7	A
	Subtotal	**1076**	**1038**	**96.5%**	**45.4**	**7.5**	**D**
SB	Left Turn	172	174	101.2%	55.1	7.3	E
	Through	428	449	104.9%	45.2	3.8	D
	Right Turn	316	342	108.4%	21.3	4.2	C
	Subtotal	**916**	**965**	**105.4%**	**38.6**	**2.9**	**D**
EB	Left Turn	216	198	91.7%	52.6	3.5	D
	Through	1056	1059	100.3%	29.2	6.2	C
	Right Turn	376	374	99.6%	11.2	1.5	B
	Subtotal	**1648**	**1631**	**99.0%**	**27.9**	**4.8**	**C**
WB	Left Turn	132	124	93.9%	55.9	5.1	E
	Through	1612	1644	102.0%	35.8	6.6	D
	Right Turn	160	172	107.8%	9.8	2.9	A
	Subtotal	**1904**	**1941**	**101.9%**	**34.8**	**6.3**	**C**
Total		**5544**	**5576**	**100.6%**	**35.4**	**3.6**	**D**

Intersection 85 **I-80 WB Ramps/Atlantic St** **Signalized**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn	784	820	104.5%	1.6	0.3	A
	Subtotal	**784**	**820**	**104.5%**	**1.6**	**0.3**	**A**
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	720	737	102.4%	15.0	1.4	B
	Right Turn	268	267	99.7%	11.4	2.5	B
	Subtotal	**988**	**1004**	**101.7%**	**14.1**	**1.6**	**B**
WB	Left Turn	744	724	97.3%	25.1	1.7	C
	Through	1016	1014	99.8%	3.1	0.3	A
	Right Turn						
	Subtotal	**1760**	**1738**	**98.7%**	**12.2**	**0.8**	**B**
Total		**3532**	**3562**	**100.8%**	**10.3**	**0.8**	**B**

SimTraffic Post-Processor | **Amoruso - Eureka PM**
Average Results from 10 Runs | **Existing Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 86 **I-80 EB Ramps/Eureka Rd-Atlantic St** **Signalized**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	196	210	107.1%	61.5	15.4	E
	Through	628	588	93.6%	50.1	7.4	D
	Right Turn	424	408	96.3%	7.3	1.0	A
	Subtotal	**1248**	**1206**	**96.6%**	**37.7**	**4.8**	**D**
SB	Left Turn	284	271	95.4%	55.8	4.4	E
	Through						
	Right Turn	580	540	93.0%	55.1	14.6	E
	Subtotal	**864**	**810**	**93.8%**	**55.2**	**9.6**	**E**
EB	Left Turn	208	218	105.0%	51.9	5.8	D
	Through	1040	1094	105.2%	30.0	3.4	C
	Right Turn	260	258	99.2%	9.0	0.7	A
	Subtotal	**1508**	**1570**	**104.1%**	**29.6**	**2.9**	**C**
WB	Left Turn						
	Through	1100	1136	103.3%	53.9	11.9	D
	Right Turn	1264	1215	96.1%	49.8	10.2	D
	Subtotal	**2364**	**2351**	**99.4%**	**51.9**	**10.7**	**D**
Total		**5984**	**5937**	**99.2%**	**43.5**	**4.2**	**D**

Intersection 88 **Rocky Ridge Dr/Eureka Rd** **Signalized**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	384	374	97.4%	50.0	7.4	D
	Through	288	277	96.1%	26.7	4.4	C
	Right Turn	28	27	95.7%	3.0	0.6	A
	Subtotal	**700**	**678**	**96.8%**	**39.0**	**3.9**	**D**
SB	Left Turn	64	63	98.1%	49.9	6.4	D
	Through	300	286	95.3%	50.8	7.5	D
	Right Turn	128	136	106.3%	4.6	1.8	A
	Subtotal	**492**	**485**	**98.5%**	**37.8**	**7.1**	**D**
EB	Left Turn	124	128	102.9%	47.1	7.9	D
	Through	1004	1005	100.1%	26.7	4.0	C
	Right Turn	276	282	102.2%	2.8	0.4	A
	Subtotal	**1404**	**1414**	**100.7%**	**23.7**	**3.2**	**C**
WB	Left Turn	72	68	94.4%	55.1	6.7	E
	Through	1264	1257	99.5%	37.9	4.2	D
	Right Turn	40	41	103.0%	12.0	5.1	B
	Subtotal	**1376**	**1366**	**99.3%**	**38.0**	**4.1**	**D**
Total		**3972**	**3943**	**99.3%**	**33.1**	**2.9**	**C**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR**
Average Results from 10 Runs | **Existing Condition**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 77 **Roseville Pkwy-Roseville Rd/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	176	168	95.7%	71.6	7.6	E
	Through	560	538	96.0%	54.6	8.7	D
	Right Turn	52	52	100.0%	18.1	3.9	B
	Subtotal	**788**	**758**	**96.2%**	**55.9**	**5.8**	**E**
SB	Left Turn	736	640	87.0%	89.5	15.2	F
	Through	680	611	89.8%	49.2	8.1	D
	Right Turn	100	99	98.8%	9.9	3.9	A
	Subtotal	**1,516**	**1,350**	**89.0%**	**65.9**	**8.5**	**E**
EB	Left Turn	180	179	99.3%	55.9	7.0	E
	Through	1,556	1,547	99.4%	44.8	4.1	D
	Right Turn	200	208	104.0%	26.9	3.7	C
	Subtotal	**1,936**	**1,934**	**99.9%**	**43.9**	**3.6**	**D**
WB	Left Turn	108	107	98.9%	51.0	3.4	D
	Through	1,344	1,393	103.7%	46.4	8.6	D
	Right Turn	716	698	97.5%	21.8	7.6	C
	Subtotal	**2,168**	**2,198**	**101.4%**	**38.8**	**7.6**	**D**
Total		**6,408**	**6,240**	**97.4%**	**48.4**	**3.4**	**D**

Intersection 31 **Foothills Blvd/Pleasant Grove Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	368	338	92.0%	83.1	32.0	F
	Through	372	375	100.9%	46.9	4.4	D
	Right Turn	536	554	103.4%	9.1	1.2	A
	Subtotal	**1,276**	**1,268**	**99.3%**	**40.3**	**10.0**	**D**
SB	Left Turn	256	232	90.6%	64.1	6.5	E
	Through	720	693	96.3%	57.1	4.3	E
	Right Turn	164	160	97.8%	16.1	3.5	B
	Subtotal	**1,140**	**1,086**	**95.2%**	**52.5**	**4.7**	**D**
EB	Left Turn	132	116	87.9%	52.9	8.7	D
	Through	1,068	1,076	100.8%	50.5	7.3	D
	Right Turn	172	173	100.5%	13.7	4.8	B
	Subtotal	**1,372**	**1,365**	**99.5%**	**46.1**	**7.0**	**D**
WB	Left Turn	800	738	92.3%	50.0	7.4	D
	Through	1,424	1,299	91.2%	71.1	18.4	E
	Right Turn	112	106	94.6%	40.3	16.2	D
	Subtotal	**2,336**	**2,143**	**91.7%**	**62.3**	**11.4**	**E**
Total		**6,124**	**5,861**	**95.7%**	**52.0**	**5.8**	**D**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR**
Average Results from 10 Runs | **Existing Condition**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 174 **Galleria Blvd/Antelope Creek Dr** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	124	123	99.0%	44.7	6.9	D
	Through	1,676	1,573	93.9%	41.5	6.9	D
	Right Turn	188	170	90.4%	2.3	0.4	A
	Subtotal	**1,988**	**1,866**	**93.9%**	**38.1**	**6.0**	**D**
SB	Left Turn	236	222	93.9%	53.7	5.8	D
	Through	1,108	1,104	99.6%	32.9	4.9	C
	Right Turn	144	138	95.6%	11.7	3.7	B
	Subtotal	**1,488**	**1,463**	**98.3%**	**34.0**	**4.6**	**C**
EB	Left Turn	384	369	96.1%	42.4	4.3	D
	Through	72	76	105.0%	39.6	9.6	D
	Right Turn	132	136	103.0%	6.5	0.4	A
	Subtotal	**588**	**581**	**98.8%**	**33.5**	**2.9**	**C**
WB	Left Turn	240	236	98.5%	44.5	5.0	D
	Through	92	92	100.0%	43.9	7.3	D
	Right Turn	388	402	103.7%	8.7	0.6	A
	Subtotal	**720**	**731**	**101.5%**	**24.7**	**2.4**	**C**
Total		**4,784**	**4,640**	**97.0%**	**34.0**	**2.9**	**C**

Intersection 68 **Galleria Blvd/Roseville Pkwy** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	508	492	96.9%	96.3	33.3	F
	Through	788	770	97.7%	65.2	10.1	E
	Right Turn	68	67	98.8%	5.6	1.2	A
	Subtotal	**1,364**	**1,329**	**97.4%**	**74.4**	**15.1**	**E**
SB	Left Turn	608	574	94.3%	68.2	11.2	E
	Through	608	570	93.7%	62.2	13.9	E
	Right Turn	356	344	96.7%	11.0	3.8	B
	Subtotal	**1,572**	**1,488**	**94.6%**	**52.8**	**8.2**	**D**
EB	Left Turn	464	436	93.9%	70.6	20.5	E
	Through	1,100	1,019	92.7%	33.6	8.0	C
	Right Turn	464	440	94.8%	2.3	0.4	A
	Subtotal	**2,028**	**1,895**	**93.4%**	**34.9**	**7.8**	**C**
WB	Left Turn	264	226	85.5%	70.0	12.2	E
	Through	2,172	1,954	90.0%	55.7	16.8	E
	Right Turn						
	Subtotal	**2,436**	**2,180**	**89.5%**	**57.1**	**15.5**	**E**
Total		**7,400**	**6,892**	**93.1%**	**53.3**	**5.9**	**D**

Intersection 38 **Pleasant Grove Blvd/Faiway Dr** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	564	502	89.0%	52.2	6.8	D
	Through	964	908	94.1%	32.5	7.8	C
	Right Turn	504	466	92.5%	11.9	4.7	B
	Subtotal	**2,032**	**1,876**	**92.3%**	**32.7**	**6.0**	**C**
SB	Left Turn	104	100	96.2%	66.0	10.7	E
	Through	628	620	98.8%	54.9	8.7	D
	Right Turn	128	132	103.4%	18.0	2.9	B
	Subtotal	**860**	**853**	**99.2%**	**50.7**	**8.0**	**D**
EB	Left Turn	216	208	96.1%	58.7	5.2	E
	Through	408	403	98.7%	47.4	6.7	D
	Right Turn	352	347	98.5%	18.8	2.9	B
	Subtotal	**976**	**957**	**98.1%**	**39.5**	**3.5**	**D**
WB	Left Turn	596	568	95.3%	64.7	13.0	E
	Through	424	422	99.4%	35.6	4.1	D
	Right Turn	124	113	91.0%	10.2	2.8	B
	Subtotal	**1,144**	**1,102**	**96.4%**	**47.9**	**7.2**	**D**
Total		**5,012**	**4,788**	**95.5%**	**40.8**	**4.1**	**D**

Intersection 33 **Hallissy Dr/Pleasant Grove Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	48	45	94.2%	45.9	11.7	D
	Through	44	46	104.5%	34.4	6.5	C
	Right Turn	36	37	102.2%	11.4	10.2	B
	Subtotal	**128**	**128**	**100.0%**	**31.6**	**4.5**	**C**
SB	Left Turn	72	64	89.4%	62.1	25.4	E
	Through	4	2	60.0%	35.1	33.9	D
	Right Turn	20	25	124.0%	7.8	3.7	A
	Subtotal	**96**	**92**	**95.4%**	**47.1**	**18.8**	**D**
EB	Left Turn	20	22	112.0%	63.9	30.1	E
	Through	1,900	1,736	91.4%	37.4	23.6	D
	Right Turn	24	23	95.0%	17.4	14.5	B
	Subtotal	**1,944**	**1,781**	**91.6%**	**37.4**	**23.6**	**D**
WB	Left Turn	84	77	91.9%	35.5	6.8	D
	Through	2,024	1,818	89.8%	12.7	4.6	B
	Right Turn	100	87	87.2%	4.9	1.0	A
	Subtotal	**2,208**	**1,982**	**89.8%**	**13.2**	**4.3**	**B**
Total		**4,376**	**3,983**	**91.0%**	**25.0**	**11.6**	**C**

Intersection 34 **Roseville Pkwy/Pleasant Grove Blvd** **Signal**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR**
Average Results from 10 Runs | **Existing Condition**
Volume and Delay by Movement | **PM Peak Hour**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	1,172	1,067	91.1%	76.5	13.2	E
	Through	544	520	95.7%	39.5	6.0	D
	Right Turn	824	784	95.1%	4.2	0.3	A
	Subtotal	**2,540**	**2,372**	**93.4%**	**44.6**	**6.6**	**D**
SB	Left Turn	196	199	101.4%	52.6	6.5	D
	Through	364	364	100.0%	70.0	50.5	E
	Right Turn	24	25	105.0%	8.9	3.9	A
	Subtotal	**584**	**588**	**100.7%**	**59.6**	**25.6**	**E**
EB	Left Turn	52	40	76.2%	144.9	77.8	F
	Through	1,060	830	78.3%	171.9	84.8	F
	Right Turn	796	578	72.6%	69.3	40.6	E
	Subtotal	**1,908**	**1,447**	**75.8%**	**129.6**	**64.3**	**F**
WB	Left Turn	680	587	86.4%	123.0	116.0	F
	Through	1,272	1,126	88.5%	41.1	8.7	D
	Right Turn	160	142	89.0%	6.2	1.3	A
	Subtotal	**2,112**	**1,855**	**87.8%**	**57.4**	**16.8**	**E**
Total		**7,144**	**6,262**	**87.6%**	**67.4**	**15.2**	**E**

Intersection 35 **Pleasant Grove Blvd/Highland Pointe Dr** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	364	332	91.3%	50.5	8.4	D
	Through	1,692	1,460	86.3%	31.6	9.0	C
	Right Turn	4	5	120.0%	12.4	19.6	B
	Subtotal	**2,060**	**1,797**	**87.2%**	**35.0**	**7.8**	**C**
SB	Left Turn	140	126	90.0%	83.2	10.4	F
	Through	1,520	1,426	93.8%	56.6	14.5	E
	Right Turn	192	184	96.0%	12.5	4.1	B
	Subtotal	**1,852**	**1,737**	**93.8%**	**53.9**	**12.7**	**D**
EB	Left Turn	492	499	101.4%	65.2	13.3	E
	Through	4	3	80.0%	61.8	56.3	E
	Right Turn	360	353	98.0%	55.1	25.0	E
	Subtotal	**856**	**855**	**99.9%**	**60.8**	**18.0**	**E**
WB	Left Turn	160	166	103.8%	64.2	15.7	E
	Through	40	47	117.0%	49.5	8.4	D
	Right Turn	228	243	106.7%	16.3	5.2	B
	Subtotal	**428**	**456**	**106.5%**	**37.3**	**7.9**	**D**
Total		**5,196**	**4,845**	**93.2%**	**46.6**	**6.7**	**D**

Intersection 64 **Chase Dr/Roseville Pkwy** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**

NB	Left Turn	52	45	86.9%	40.4	4.2	D
	Through						
	Right Turn	80	80	100.5%	1.0	0.3	A
	Subtotal	**132**	**126**	**95.2%**	**15.1**	**2.3**	**B**
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,556	1,278	82.1%	11.1	2.4	B
	Right Turn	76	60	79.5%	4.7	0.8	A
	Subtotal	**1,632**	**1,338**	**82.0%**	**10.8**	**2.3**	**B**
WB	Left Turn	136	128	94.4%	50.8	7.5	D
	Through	2,020	1,902	94.1%	9.4	1.7	A
	Right Turn						
	Subtotal	**2,156**	**2,030**	**94.2%**	**12.0**	**1.8**	**B**
Total		**3,920**	**3,494**	**89.1%**	**11.6**	**1.8**	**B**

Intersection 69 **Creekside Ridge Dr/Roseville Pkwy** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	28	26	94.3%	51.4	10.3	D
	Through	12	12	96.7%	63.5	17.9	E
	Right Turn	24	20	85.0%	18.5	6.0	B
	Subtotal	**64**	**58**	**91.3%**	**42.2**	**6.7**	**D**
SB	Left Turn	392	384	98.1%	45.6	6.5	D
	Through	4	3	80.0%	31.0	28.1	C
	Right Turn	120	128	107.0%	27.4	4.6	C
	Subtotal	**516**	**516**	**100.0%**	**41.2**	**5.8**	**D**
EB	Left Turn	80	76	95.5%	40.4	8.9	D
	Through	1,624	1,527	94.0%	15.1	3.6	B
	Right Turn	16	13	82.5%	1.9	3.3	A
	Subtotal	**1,720**	**1,617**	**94.0%**	**16.2**	**3.6**	**B**
WB	Left Turn	44	40	90.9%	66.2	15.3	E
	Through	2,260	2,095	92.7%	50.2	13.8	D
	Right Turn	292	269	92.2%	43.6	21.8	D
	Subtotal	**2,596**	**2,404**	**92.6%**	**49.7**	**14.6**	**D**
Total		**4,896**	**4,595**	**93.9%**	**36.9**	**8.0**	**D**

Intersection 65 **Gibson Dr/Roseville Pkwy** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	4	1	20.0%	3.6	9.6	A
	Through						

NB	Right Turn	12	14	116.7%	9.2	4.0	A
	Subtotal	**16**	**15**	**92.5%**	**9.6**	**3.2**	**A**
SB	Left Turn	216	215	99.6%	47.5	6.2	D
	Through	4	2	60.0%	21.7	23.2	C
	Right Turn	36	29	80.0%	12.8	3.5	B
	Subtotal	**256**	**246**	**96.3%**	**43.3**	**6.0**	**D**
EB	Left Turn	12	10	86.7%	43.5	18.6	D
	Through	1,624	1,330	81.9%	9.1	2.5	A
	Right Turn						
	Subtotal	**1,636**	**1,340**	**81.9%**	**9.3**	**2.5**	**A**
WB	Left Turn	20	18	92.0%	55.9	13.9	E
	Through	2,116	2,012	95.1%	11.4	1.4	B
	Right Turn	188	173	91.9%	8.2	1.0	A
	Subtotal	**2,324**	**2,203**	**94.8%**	**11.5**	**1.4**	**B**
Total		**4,232**	**3,804**	**89.9%**	**12.8**	**1.2**	**B**

Intersection 71 **N Sunrise Ave/Roseville Pkwy** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	520	506	97.4%	56.6	11.0	E
	Through	76	82	107.4%	36.9	8.0	D
	Right Turn	228	232	101.6%	8.1	0.6	A
	Subtotal	**824**	**820**	**99.5%**	**41.2**	**7.3**	**D**
SB	Left Turn	60	61	102.0%	71.4	9.8	E
	Through	180	184	102.0%	55.4	6.7	E
	Right Turn	324	330	102.0%	31.0	4.5	C
	Subtotal	**564**	**575**	**102.0%**	**43.0**	**3.9**	**D**
EB	Left Turn	112	97	86.8%	63.3	6.7	E
	Through	1,748	1,614	92.3%	42.0	6.8	D
	Right Turn	324	311	95.9%	20.8	5.4	C
	Subtotal	**2,184**	**2,022**	**92.6%**	**39.8**	**6.2**	**D**
WB	Left Turn	188	190	101.1%	50.9	6.9	D
	Through	1,896	1,839	97.0%	33.8	4.1	C
	Right Turn	20	19	96.0%	7.4	3.0	A
	Subtotal	**2,104**	**2,048**	**97.3%**	**35.2**	**4.1**	**D**
Total		**5,676**	**5,464**	**96.3%**	**38.7**	**3.1**	**D**

Intersection 67 **Reserve Dr/Roseville Pkwy** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	324	306	94.3%	50.5	6.3	D
	Through	28	33	117.1%	49.6	10.8	D
	Right Turn	280	268	95.9%	8.0	1.2	A
	Subtotal	**632**	**607**	**96.0%**	**31.5**	**4.9**	**C**

SB	Left Turn	196	200	102.0%	49.7	10.7	D
	Through	24	18	76.7%	57.1	14.0	E
	Right Turn	88	83	94.5%	12.5	3.6	B
	Subtotal	**308**	**302**	**97.9%**	**39.6**	**6.7**	**D**
EB	Left Turn	36	32	88.9%	63.3	10.6	E
	Through	1,512	1,338	88.5%	45.2	6.2	D
	Right Turn	248	216	87.3%	17.8	4.8	B
	Subtotal	**1,796**	**1,586**	**88.3%**	**41.9**	**5.5**	**D**
WB	Left Turn	228	202	88.6%	74.6	32.8	E
	Through	1,824	1,631	89.4%	33.2	9.9	C
	Right Turn	196	168	85.5%	2.0	0.3	A
	Subtotal	**2,248**	**2,001**	**89.0%**	**34.7**	**10.1**	**C**
Total		**4,984**	**4,496**	**90.2%**	**37.1**	**5.9**	**D**

Intersection 72 **Secret Ravine Pkwy/Roseville Pkwy** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	124	120	97.1%	55.0	10.3	D
	Through						
	Right Turn	488	482	98.9%	29.3	5.7	C
	Subtotal	**612**	**603**	**98.5%**	**34.4**	**6.1**	**C**
EB	Left Turn	532	485	91.1%	45.6	7.5	D
	Through	1,528	1,407	92.1%	28.5	13.1	C
	Right Turn	4	2	60.0%	3.4	5.5	A
	Subtotal	**2,064**	**1,894**	**91.8%**	**32.9**	**10.5**	**C**
WB	Left Turn	12	10	86.7%	79.3	60.5	E
	Through	1,688	1,649	97.7%	31.8	7.7	C
	Right Turn	112	109	97.5%	16.0	3.0	B
	Subtotal	**1,812**	**1,768**	**97.6%**	**31.1**	**7.5**	**C**
Total		**4,488**	**4,266**	**95.0%**	**32.3**	**3.7**	**C**

Intersection 70 **Taylor Rd/Roseville Pkwy** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	556	551	99.1%	112.8	36.5	F
	Through	300	279	93.1%	76.8	14.5	E
	Right Turn	248	241	97.3%	51.2	15.5	D
	Subtotal	**1,104**	**1,071**	**97.0%**	**89.7**	**25.0**	**F**
SB	Left Turn	340	358	105.4%	74.8	9.1	E
	Through	152	146	96.3%	58.0	11.9	E

SB	Right Turn	144	132	91.7%	32.9	4.6	C
	Subtotal	**636**	**637**	**100.1%**	**62.3**	**7.1**	**E**
EB	Left Turn	180	166	92.4%	71.2	16.7	E
	Through	1,592	1,453	91.3%	44.7	8.3	D
	Right Turn	268	254	94.9%	23.6	8.2	C
	Subtotal	**2,040**	**1,874**	**91.9%**	**44.2**	**7.8**	**D**
WB	Left Turn	268	256	95.7%	67.7	12.3	E
	Through	1,896	1,814	95.7%	52.5	10.9	D
	Right Turn	576	558	96.9%	38.6	10.0	D
	Subtotal	**2,740**	**2,629**	**95.9%**	**51.1**	**10.7**	**D**
Total		**6,520**	**6,211**	**95.3%**	**57.0**	**6.5**	**E**

Intersection 66 **Roseville Pkwy/West Mall** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	40	33	82.0%	55.9	9.6	E
	Through	2,072	1,929	93.1%	29.7	11.5	C
	Right Turn	120	108	90.0%	8.4	1.0	A
	Subtotal	**2,232**	**2,070**	**92.7%**	**28.9**	**10.7**	**C**
SB	Left Turn	200	159	79.4%	50.9	10.3	D
	Through	1,628	1,403	86.2%	18.7	3.1	B
	Right Turn	24	21	88.3%	13.2	2.6	B
	Subtotal	**1,852**	**1,583**	**85.5%**	**21.9**	**3.0**	**C**
EB	Left Turn	24	29	120.0%	40.0	9.1	D
	Through						
	Right Turn	24	24	98.3%	11.5	4.9	B
	Subtotal	**48**	**52**	**109.2%**	**26.7**	**6.5**	**C**
WB	Left Turn	140	140	100.0%	34.9	4.2	C
	Through	4	2	40.0%	14.5	23.7	B
	Right Turn	228	234	102.8%	1.4	0.2	A
	Subtotal	**372**	**376**	**101.1%**	**14.0**	**1.7**	**B**
Total		**4,504**	**4,082**	**90.6%**	**24.7**	**6.0**	**C**

Intersection 73 **Roseville Pkwy/Alexandra Dr** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through	1,748	1,680	96.1%	11.5	1.6	B
	Right Turn	128	124	96.6%	8.2	2.1	A
	Subtotal	**1,876**	**1,804**	**96.1%**	**11.3**	**1.7**	**B**
SB	Left Turn	128	113	88.1%	55.4	9.8	E
	Through	1,524	1,415	92.9%	18.3	6.2	B
	Right Turn						
	Subtotal	**1,652**	**1,528**	**92.5%**	**21.1**	**6.3**	**C**

EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	64	64	99.4%	45.2	5.9	D
	Through						
	Right Turn	64	74	116.3%	12.2	3.5	B
	Subtotal	**128**	**138**	**107.8%**	**28.0**	**4.9**	**C**
Total		**3,656**	**3,470**	**94.9%**	**16.3**	**3.5**	**B**

Intersection 75 **Roseville Pkwy/Orvietto Dr** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	148	150	101.6%	45.5	12.9	D
	Through	1,524	1,464	96.0%	13.6	4.0	B
	Right Turn	4	2	50.0%	2.3	3.0	A
	Subtotal	**1,676**	**1,616**	**96.4%**	**16.7**	**3.8**	**B**
SB	Left Turn	20	18	92.0%	55.1	28.6	E
	Through	1,380	1,211	87.7%	41.8	36.8	D
	Right Turn	60	58	96.0%	25.6	32.3	C
	Subtotal	**1,460**	**1,287**	**88.1%**	**41.4**	**36.3**	**D**
EB	Left Turn	128	125	97.5%	43.9	8.1	D
	Through	24	28	118.3%	32.8	10.3	C
	Right Turn	204	204	100.0%	10.3	2.0	B
	Subtotal	**356**	**357**	**100.3%**	**24.1**	**5.0**	**C**
WB	Left Turn	4	5	120.0%	29.4	32.8	C
	Through	20	24	118.0%	46.5	11.9	D
	Right Turn						
	Subtotal	**24**	**28**	**118.3%**	**45.1**	**9.5**	**D**
Total		**3,516**	**3,288**	**93.5%**	**27.5**	**16.3**	**C**

Intersection 76 **Roseville Pkwy/Olympus Dr** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	12	12	100.0%	59.1	13.5	E
	Through	1,312	1,265	96.4%	23.9	6.2	C
	Right Turn	128	133	104.1%	1.5	0.1	A
	Subtotal	**1,452**	**1,410**	**97.1%**	**22.0**	**5.1**	**C**
SB	Left Turn	260	229	88.2%	61.3	16.8	E
	Through	1,508	1,385	91.9%	27.6	10.7	C
	Right Turn	44	38	87.3%	21.4	8.0	C
	Subtotal	**1,812**	**1,653**	**91.2%**	**32.2**	**11.2**	**C**
EB	Left Turn	100	91	90.8%	46.0	6.3	D
	Through	52	47	90.8%	41.9	11.3	D

EB	Right Turn	108	105	97.4%	23.5	6.2	C
	Subtotal	**260**	**243**	**93.5%**	**35.5**	**4.3**	**D**
WB	Left Turn	40	44	109.0%	59.0	29.2	E
	Through	72	78	108.3%	39.1	4.2	D
	Right Turn	196	194	99.0%	7.0	0.5	A
	Subtotal	**308**	**316**	**102.5%**	**22.3**	**6.3**	**C**
Total		**3,832**	**3,622**	**94.5%**	**27.5**	**6.3**	**C**

Intersection 74 **Roseville Pkwy/Rocky Ridge Dr** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	56	50	89.3%	54.1	6.4	D
	Through	1,596	1,530	95.9%	8.9	1.8	A
	Right Turn						
	Subtotal	**1,652**	**1,580**	**95.7%**	**10.4**	**2.0**	**B**
SB	Left Turn						
	Through	1,344	1,224	91.0%	19.4	7.7	B
	Right Turn	244	232	95.2%	14.3	5.5	B
	Subtotal	**1,588**	**1,456**	**91.7%**	**18.6**	**7.3**	**B**
EB	Left Turn	284	277	97.5%	44.6	4.7	D
	Through						
	Right Turn	112	113	100.7%	8.3	2.7	A
	Subtotal	**396**	**390**	**98.4%**	**34.0**	**3.7**	**C**
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		**3,636**	**3,426**	**94.2%**	**16.6**	**3.6**	**B**

Intersection 169 **Stanford Ranch Rd/Fairway Dr** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	156	146	93.8%	44.2	5.9	D
	Through	1,048	967	92.3%	21.5	3.4	C
	Right Turn	212	198	93.4%	5.5	1.8	A
	Subtotal	**1,416**	**1,312**	**92.6%**	**21.6**	**2.2**	**C**
SB	Left Turn	72	66	91.1%	49.0	5.0	D
	Through	796	830	104.3%	28.2	4.3	C
	Right Turn	52	48	92.3%	13.0	4.4	B
	Subtotal	**920**	**944**	**102.6%**	**28.8**	**4.3**	**C**
EB	Left Turn	88	85	96.8%	46.2	6.3	D
	Through	252	243	96.5%	34.9	4.7	C
	Right Turn	220	230	104.7%	17.8	5.3	B
	Subtotal	**560**	**559**	**99.8%**	**29.5**	**2.9**	**C**

WB	Left Turn	188	186	99.1%	41.4	10.4	D
	Through	140	139	99.4%	34.2	5.9	C
	Right Turn	20	18	92.0%	18.2	6.6	B
	Subtotal	**348**	**344**	**98.9%**	**37.1**	**4.8**	**D**
Total		**3,244**	**3,158**	**97.4%**	**26.9**	**1.8**	**C**

Intersection 170 **Stanford Ranch Rd/5 Star Blvd** **Signal**

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	576	553	96.0%	38.6	8.7	D
	Through	1,320	1,248	94.5%	25.9	6.1	C
	Right Turn	304	290	95.3%	4.2	1.3	A
	Subtotal	**2,200**	**2,091**	**95.0%**	**26.2**	**5.0**	**C**
SB	Left Turn	60	59	98.0%	82.6	17.9	F
	Through	1,132	1,097	96.9%	67.8	13.9	E
	Right Turn	120	124	103.7%	17.8	4.7	B
	Subtotal	**1,312**	**1,280**	**97.6%**	**63.7**	**12.4**	**E**
EB	Left Turn	120	116	97.0%	62.0	15.6	E
	Through	104	92	88.5%	62.4	14.1	E
	Right Turn	272	265	97.5%	13.2	3.9	B
	Subtotal	**496**	**474**	**95.5%**	**35.1**	**7.0**	**D**
WB	Left Turn	328	346	105.4%	50.2	14.3	D
	Through	88	85	96.4%	41.4	7.5	D
	Right Turn	36	35	97.8%	22.8	8.6	C
	Subtotal	**452**	**466**	**103.0%**	**46.5**	**11.0**	**D**
Total		**4,460**	**4,310**	**96.6%**	**40.5**	**4.4**	**D**

Intersection 32 **Washington Blvd/Pleasant Grove Blvd** **Signal**

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	260	262	100.6%	51.9	4.6	D
	Through	396	401	101.2%	39.3	3.3	D
	Right Turn	356	353	99.1%	10.7	1.9	B
	Subtotal	**1,012**	**1,015**	**100.3%**	**32.7**	**2.6**	**C**
SB	Left Turn	172	144	83.7%	66.0	6.3	E
	Through	480	480	100.1%	54.8	5.4	D
	Right Turn	224	216	96.4%	30.1	3.7	C
	Subtotal	**876**	**840**	**95.9%**	**50.4**	**4.5**	**D**
EB	Left Turn	144	160	111.1%	49.4	10.7	D
	Through	1,460	1,470	100.7%	46.3	11.9	D
	Right Turn	164	184	112.0%	30.9	8.9	C
	Subtotal	**1,768**	**1,814**	**102.6%**	**45.0**	**10.8**	**D**
WB	Left Turn	316	280	88.7%	49.7	7.2	D
	Through	1,708	1,548	90.6%	36.6	4.0	D

WB	Right Turn	60	57	95.3%	12.1	3.5	B
	Subtotal	**2,084**	**1,885**	**90.5%**	**37.8**	**4.2**	**D**
Total		**5,740**	**5,555**	**96.8%**	**41.2**	**3.9**	**D**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR**
Average Results from 10 Runs | **Existing Condition**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 37 **SR 65 NB Ramps/Pleasant Grove** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	464	426	91.9%	48.4	3.3	D
	Through						
	Right Turn	536	527	98.3%	24.3	3.3	C
	Subtotal	**1,000**	**953**	**95.3%**	**35.0**	**2.8**	**C**
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,576	1,474	93.5%	24.6	4.9	C
	Right Turn	436	409	93.9%	11.0	1.5	B
	Subtotal	**2,012**	**1,883**	**93.6%**	**21.7**	**4.2**	**C**
WB	Left Turn	192	205	106.9%	52.5	9.8	D
	Through	1,528	1,506	98.6%	7.3	1.6	A
	Right Turn						
	Subtotal	**1,720**	**1,711**	**99.5%**	**12.6**	**2.0**	**B**
Total		**4,732**	**4,548**	**96.1%**	**21.1**	**2.2**	**C**

Intersection 36 **SR 65 SB Ramps/Pleasant Grove Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	108	100	92.6%	46.2	30.9	D
	Through						
	Right Turn	328	302	92.1%	25.5	11.7	C
	Subtotal	**436**	**402**	**92.2%**	**30.6**	**16.1**	**C**
EB	Left Turn						
	Through	1,908	1,752	91.8%	6.5	1.7	A
	Right Turn	12	8	70.0%	6.2	8.0	A
	Subtotal	**1,920**	**1,760**	**91.7%**	**6.5**	**1.7**	**A**
WB	Left Turn						
	Through	1,684	1,667	99.0%	11.8	12.0	B
	Right Turn	308	307	99.7%	8.6	5.7	A
	Subtotal	**1,992**	**1,974**	**99.1%**	**11.3**	**11.1**	**B**
Total		**4,348**	**4,136**	**95.1%**	**11.1**	**7.2**	**B**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR**
Average Results from 10 Runs | **Existing Condition**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 171 **Galleria Blvd/SR 65 NB Ramps** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	724	680	93.9%	92.4	31.6	F
	Through	1,456	1,368	93.9%	8.0	2.8	A
	Right Turn						
	Subtotal	**2,180**	**2,047**	**93.9%**	**36.1**	**12.2**	**D**
SB	Left Turn						
	Through	1,892	1,778	94.0%	76.1	16.3	E
	Right Turn	68	54	79.4%	48.2	11.1	D
	Subtotal	**1,960**	**1,832**	**93.5%**	**75.3**	**16.0**	**E**
EB	Left Turn						
	Through						
	Right Turn	376	366	97.4%	2.7	0.9	A
	Subtotal	**376**	**366**	**97.4%**	**2.7**	**0.9**	**A**
WB	Left Turn						
	Through						
	Right Turn	744	743	99.9%	1.9	0.5	A
	Subtotal	**744**	**743**	**99.9%**	**1.9**	**0.5**	**A**
Total		**5,260**	**4,989**	**94.8%**	**42.9**	**7.1**	**D**

Intersection 172 **Galleria Blvd/SR 65 SB Ramps** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through	2,040	1,866	91.5%	14.8	4.0	B
	Right Turn	584	538	92.1%	14.2	3.4	B
	Subtotal	**2,624**	**2,404**	**91.6%**	**14.7**	**3.4**	**B**
SB	Left Turn	696	662	95.1%	66.1	3.4	E
	Through	1,572	1,502	95.6%	25.2	2.5	C
	Right Turn						
	Subtotal	**2,268**	**2,164**	**95.4%**	**37.7**	**2.6**	**D**
EB	Left Turn						
	Through						
	Right Turn	524	509	97.1%	5.1	1.3	A
	Subtotal	**524**	**509**	**97.1%**	**5.1**	**1.3**	**A**
WB	Left Turn						
	Through	140	132	94.0%	1.7	1.6	A
	Right Turn						
	Subtotal	**140**	**132**	**94.0%**	**1.7**	**1.6**	**A**
Total		**5,556**	**5,208**	**93.7%**	**23.0**	**2.0**	**C**

SimTraffic Post-Processor **Amoruso EIR**
Average Results from 10 Runs **Existing Conditions**
Volume and Delay by Movement **PM Peak Hour**

Intersection 107 **Foothills Blvd/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through	101	97	95.7%	49.3	3.6	D
	Right Turn	53	51	95.7%	26.4	5.6	C
	Subtotal	**154**	**147**	**95.7%**	**41.5**	**4.0**	**D**
SB	Left Turn	339	345	101.9%	42.4	5.7	D
	Through	89	112	126.1%	33.1	11.6	C
	Right Turn						
	Subtotal	**428**	**458**	**106.9%**	**39.9**	**5.4**	**D**
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	95	86	90.2%	65.0	9.2	E
	Through						
	Right Turn	409	360	88.0%	34.2	7.2	C
	Subtotal	**504**	**446**	**88.4%**	**40.1**	**6.9**	**D**
Total		**1,086**	**1,051**	**96.7%**	**40.2**	**4.0**	**D**

Intersection 110 **Melody Ln/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn	59	60	102.0%	15.4	8.9	B
	Subtotal	**59**	**60**	**102.0%**	**15.4**	**8.9**	**B**
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	403	382	94.9%	12.6	4.3	B
	Right Turn	2	2	100.0%	10.8	6.7	B
	Subtotal	**405**	**384**	**94.9%**	**12.6**	**4.3**	**B**
WB	Left Turn	63	61	96.5%	18.8	2.3	B
	Through	477	434	91.0%	2.9	0.1	A
	Right Turn						
	Subtotal	**540**	**495**	**91.7%**	**4.9**	**0.4**	**A**
Total		**1,004**	**940**	**93.6%**	**8.7**	**2.4**	**A**

SimTraffic Post-Processor **Amoruso EIR**
Average Results from 10 Runs **Existing Conditions**
Volume and Delay by Movement **PM Peak Hour**

Intersection 109 **Northridge Dr/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	1	0	40.0%	8.8	12.7	A
	Through						
	Right Turn	4	4	90.0%	13.5	9.8	B
	Subtotal	**5**	**4**	**80.0%**	**16.7**	**12.0**	**B**
SB	Left Turn	9	9	97.8%	64.0	6.5	E
	Through						
	Right Turn	3	3	90.0%	52.2	18.2	D
	Subtotal	**12**	**12**	**95.8%**	**61.0**	**6.5**	**E**
EB	Left Turn	3	6	193.3%	51.7	8.4	D
	Through	393	380	96.6%	6.0	1.5	A
	Right Turn						
	Subtotal	**396**	**385**	**97.3%**	**6.7**	**1.3**	**A**
WB	Left Turn	4	3	80.0%	55.0	20.1	D
	Through	460	415	90.3%	3.8	2.2	A
	Right Turn	2	2	100.0%	4.8	6.2	A
	Subtotal	**466**	**421**	**90.3%**	**4.2**	**2.2**	**A**
Total		**879**	**821**	**93.4%**	**6.2**	**1.6**	**A**

Intersection 111 **Riverside Ave/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	271	242	89.2%	94.3	14.3	F
	Through	146	141	96.6%	30.6	2.0	C
	Right Turn	49	50	101.0%	12.4	2.9	B
	Subtotal	**466**	**432**	**92.7%**	**64.3**	**8.4**	**E**
SB	Left Turn	41	44	107.1%	65.6	7.1	E
	Through	133	133	99.8%	75.5	14.8	E
	Right Turn	39	39	99.7%	51.3	9.3	D
	Subtotal	**213**	**216**	**101.2%**	**69.3**	**10.9**	**E**
EB	Left Turn	43	41	96.3%	57.8	10.8	E
	Through	183	167	91.1%	60.1	12.3	E
	Right Turn	237	226	95.4%	3.6	0.3	A
	Subtotal	**463**	**434**	**93.8%**	**30.7**	**7.1**	**C**
WB	Left Turn	98	97	99.4%	88.9	23.6	F
	Through	252	240	95.1%	81.9	25.7	F
	Right Turn						
	Subtotal	**350**	**337**	**96.3%**	**84.1**	**22.9**	**F**
Total		**1,492**	**1,419**	**95.1%**	**59.5**	**4.8**	**E**

SimTraffic Post-Processor **Amoruso EIR**
Average Results from 10 Runs **Existing Conditions**
Volume and Delay by Movement **PM Peak Hour**

Intersection 108 **Vernon St/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	16	13	81.3%	53.0	9.8	D
	Through	17	18	102.9%	45.8	8.2	D
	Right Turn	33	32	98.2%	17.8	3.8	B
	Subtotal	**66**	**63**	**95.3%**	**32.1**	**2.7**	**C**
SB	Left Turn	23	23	101.7%	58.5	6.7	E
	Through	27	25	94.1%	53.3	8.6	D
	Right Turn	89	85	95.2%	43.4	3.8	D
	Subtotal	**139**	**134**	**96.0%**	**48.0**	**4.3**	**D**
EB	Left Turn	36	35	96.1%	63.5	14.2	E
	Through	348	346	99.3%	32.1	10.0	C
	Right Turn	8	8	95.0%	27.9	13.1	C
	Subtotal	**392**	**388**	**99.0%**	**34.8**	**10.1**	**C**
WB	Left Turn	22	17	78.2%	49.7	6.4	D
	Through	398	367	92.3%	28.0	5.2	C
	Right Turn	11	10	88.2%	14.8	4.6	B
	Subtotal	**431**	**394**	**91.5%**	**28.6**	**5.2**	**C**
Total		**1,028**	**979**	**95.2%**	**33.8**	**5.7**	**C**

Intersection 203 **Riverside Ave/I-80 WB Ramps** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through	387	366	94.5%	29.8	12.9	C
	Right Turn	57	55	96.5%	9.4	3.6	A
	Subtotal	**444**	**421**	**94.7%**	**27.1**	**11.6**	**C**
SB	Left Turn						
	Through	217	209	96.1%	26.6	4.4	C
	Right Turn	252	247	98.2%	15.8	3.7	B
	Subtotal	**469**	**456**	**97.2%**	**20.7**	**3.6**	**C**
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	132	133	101.0%	43.9	17.8	D
	Through						
	Right Turn	58	59	101.6%	12.7	4.4	B
	Subtotal	**190**	**192**	**101.2%**	**34.2**	**11.8**	**C**
Total		**1,103**	**1,069**	**96.9%**	**25.7**	**5.7**	**C**

Intersection 204 **Riverside Ave/I-80 EB Ramps** **Signal**

SimTraffic Post-Processor **Amoruso EIR**
Average Results from 10 Runs **Existing Conditions**
Volume and Delay by Movement **PM Peak Hour**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through	277	271	97.7%	30.3	3.8	C
	Right Turn						
	Subtotal	**277**	**271**	**97.7%**	**30.3**	**3.8**	**C**
SB	Left Turn	23	24	103.9%	65.7	6.1	E
	Through	262	254	96.9%	30.8	4.3	C
	Right Turn						
	Subtotal	**285**	**278**	**97.4%**	**33.8**	**4.6**	**C**
EB	Left Turn						
	Through	106	103	96.8%	41.5	3.6	D
	Right Turn	52	48	93.1%	21.7	4.5	C
	Subtotal	**158**	**151**	**95.6%**	**35.2**	**3.3**	**D**
WB	Left Turn	42	44	104.5%	46.7	6.0	D
	Through						
	Right Turn	52	49	95.0%	5.1	3.0	A
	Subtotal	**94**	**93**	**99.3%**	**25.0**	**4.6**	**C**
Total		**814**	**793**	**97.4%**	**31.8**	**2.8**	**C**

Cumulative No Project Conditions

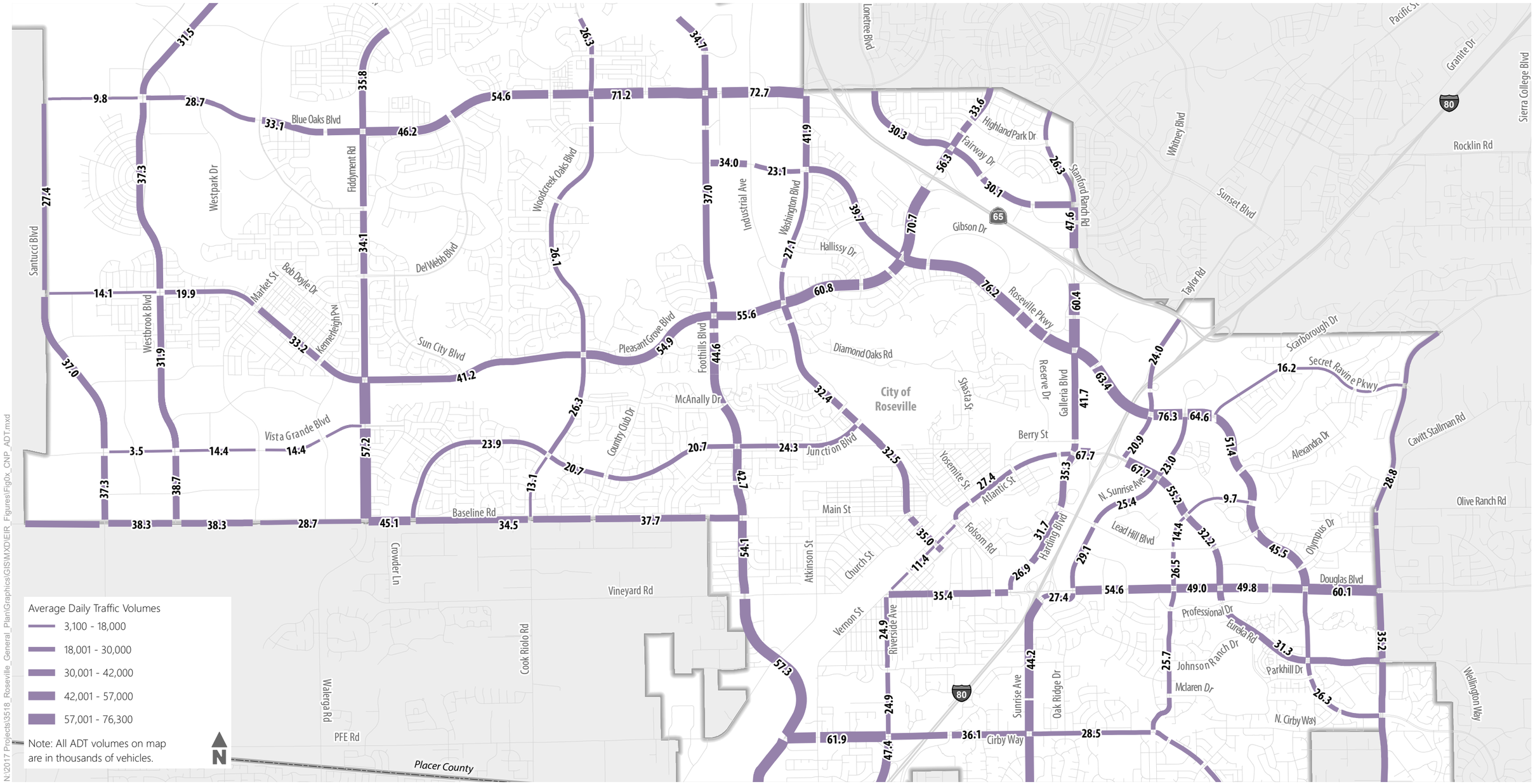


Figure 4.3-A3

Cumulative No Project Average Daily Traffic Volumes

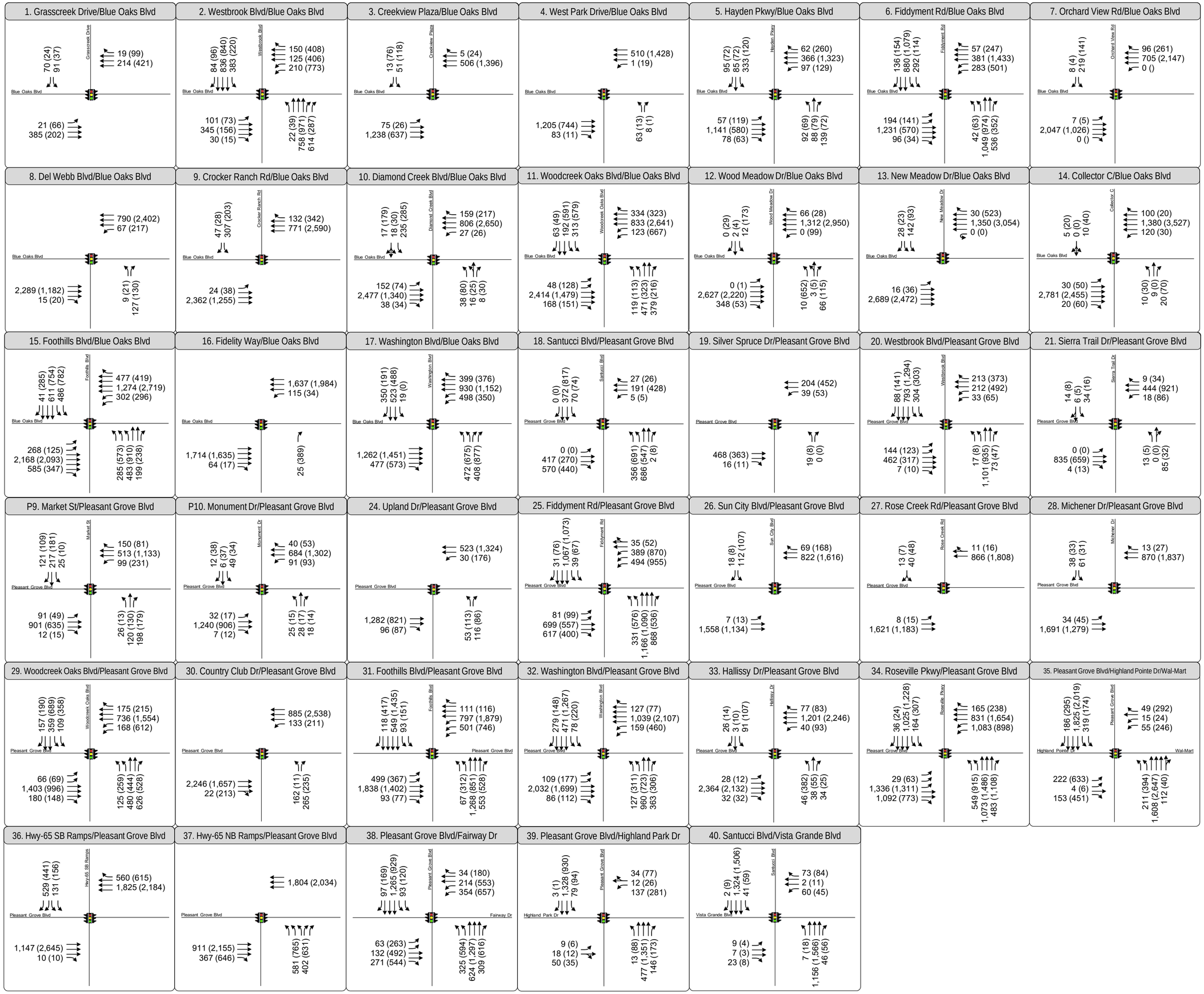


FIGURE 4.3-A4-a

Peak Hour Traffic Volumes and Lane Configurations
Cumulative No Project Conditions

FEHR PEERS

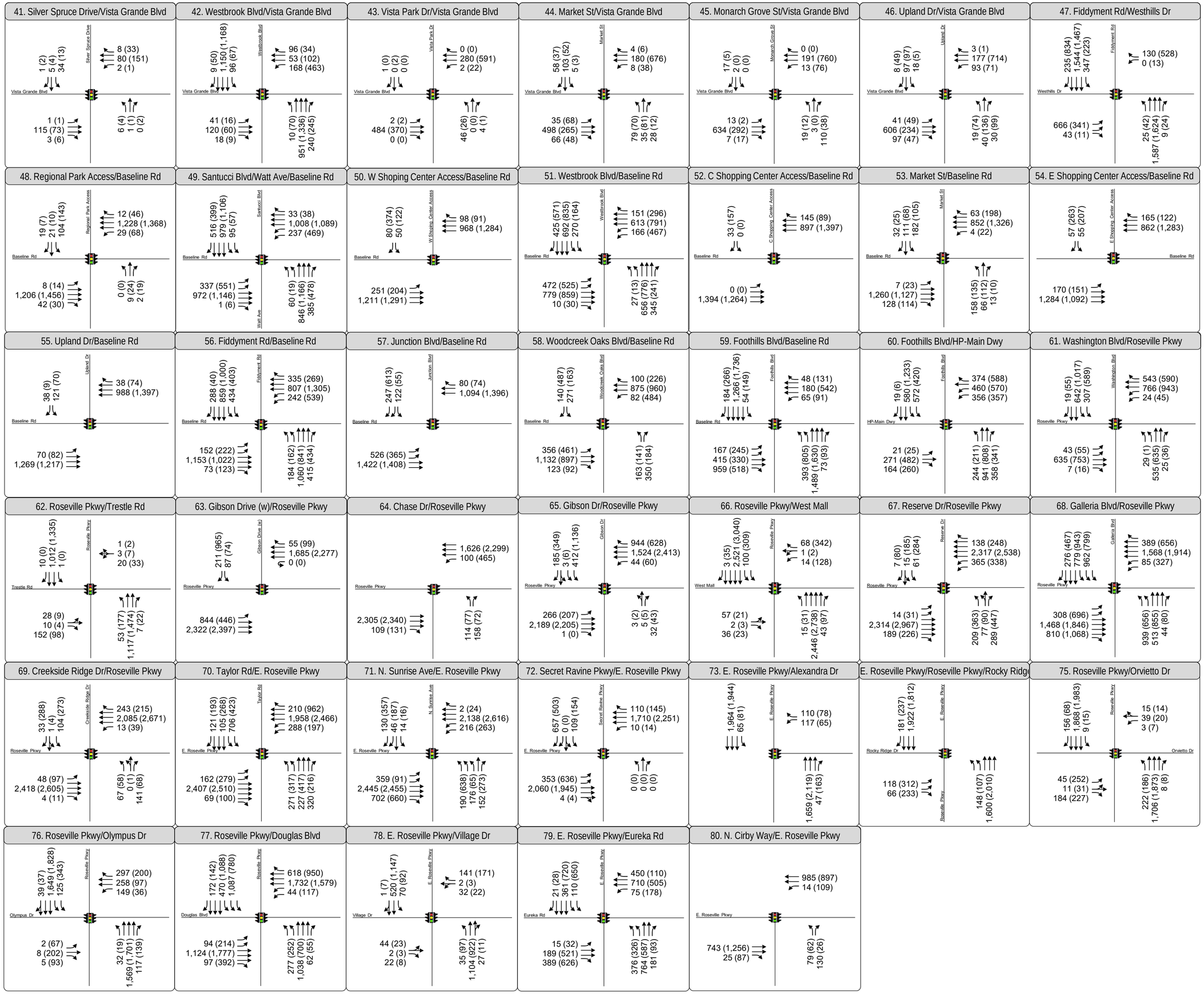


FIGURE 4.3-A4-b

Peak Hour Traffic Volumes and Lane Configurations
Cumulative No Project Conditions

FEHR PEERS

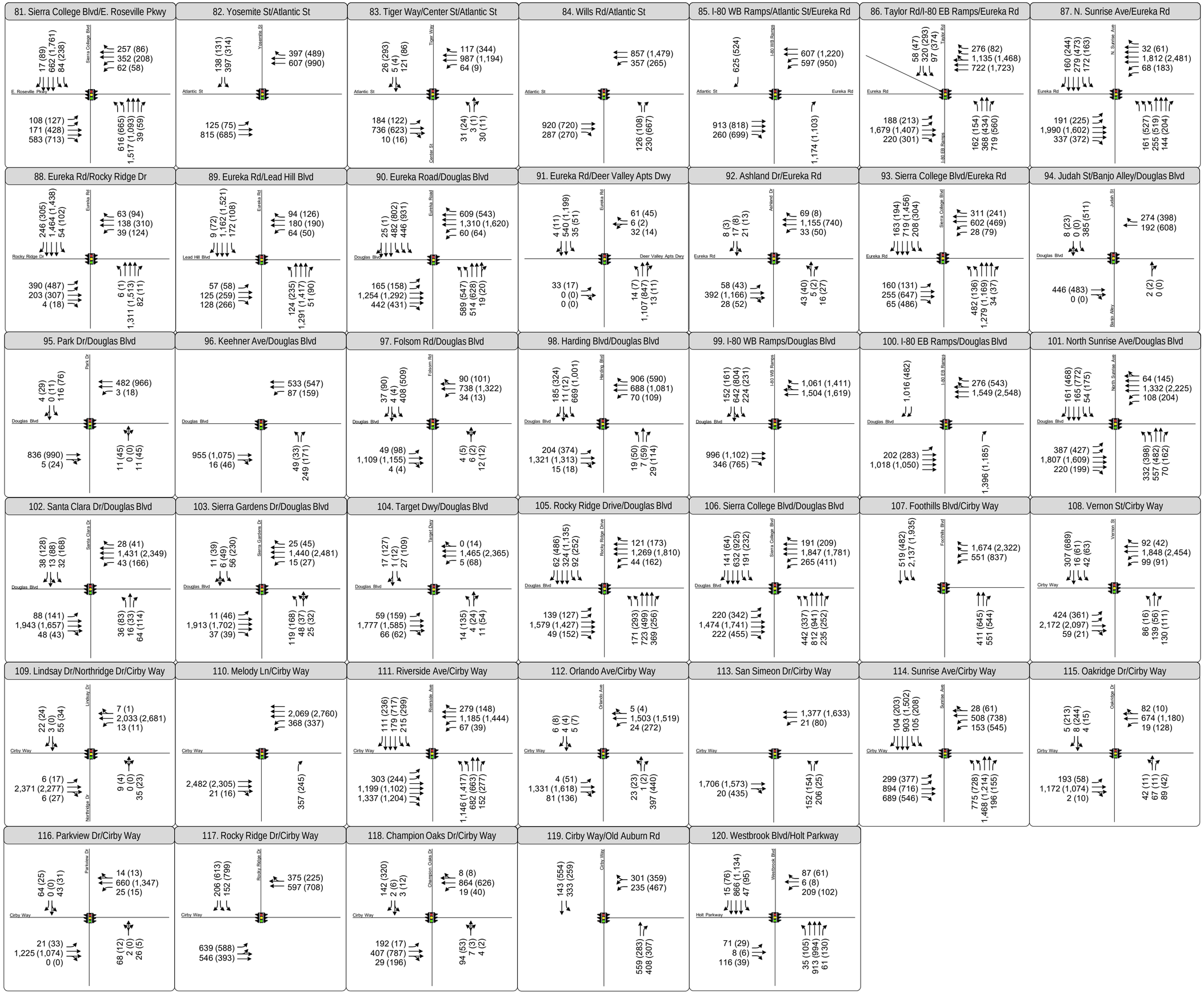


FIGURE 4.3-A4-c

Peak Hour Traffic Volumes and Lane Configurations
Cumulative No Project Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

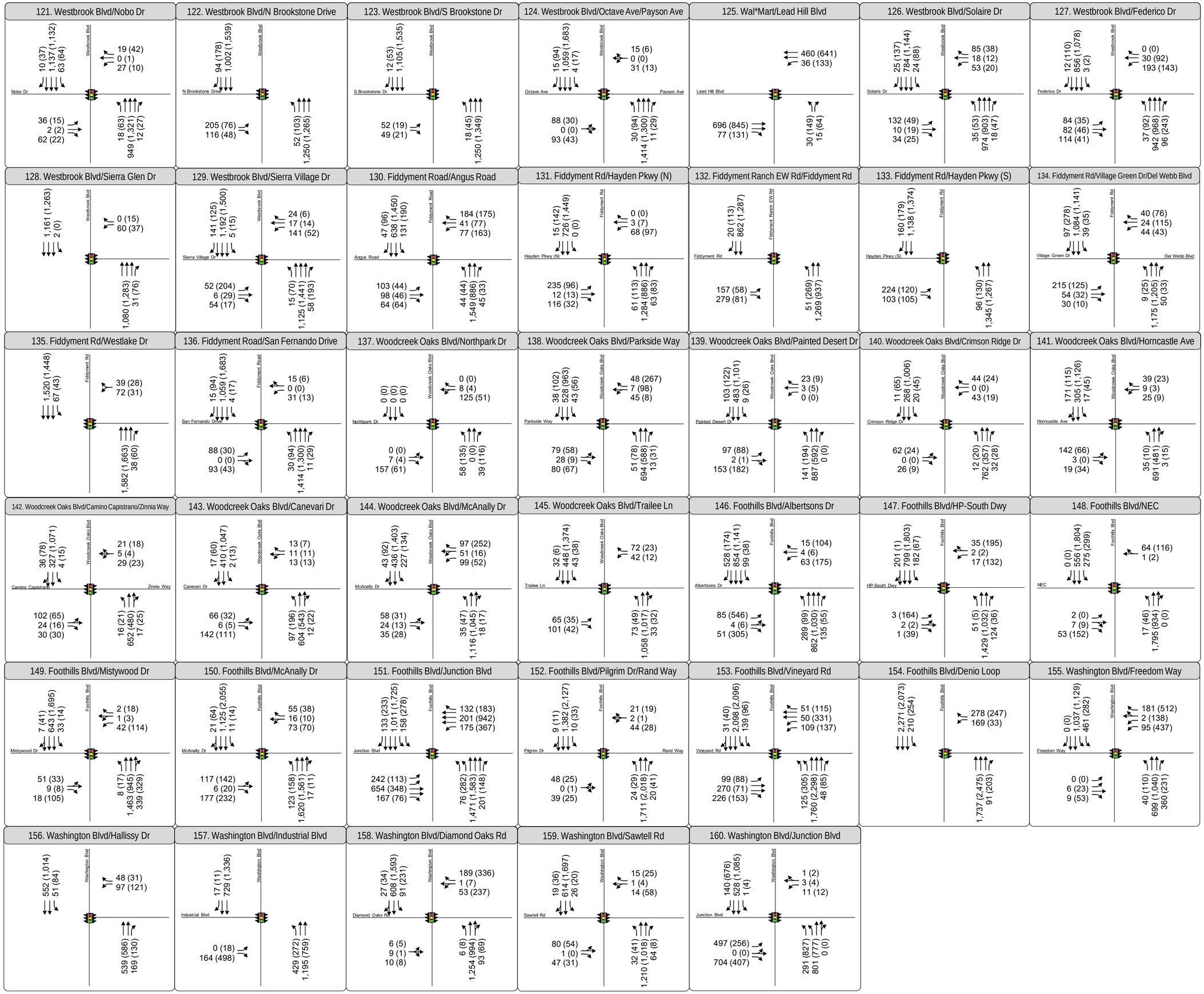


FIGURE 4.3-A4-d

Peak Hour Traffic Volumes and Lane Configurations
Cumulative No Project Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

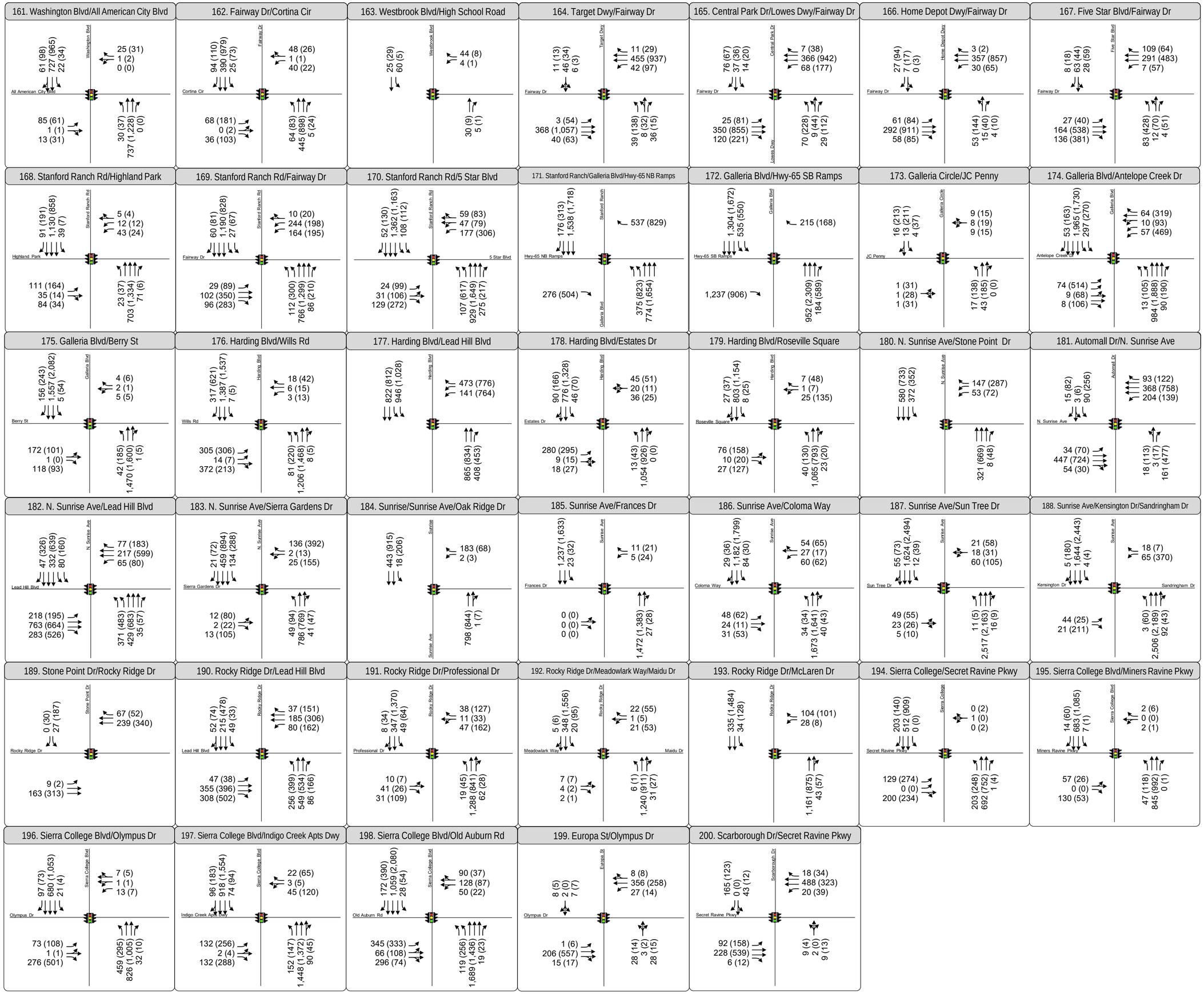
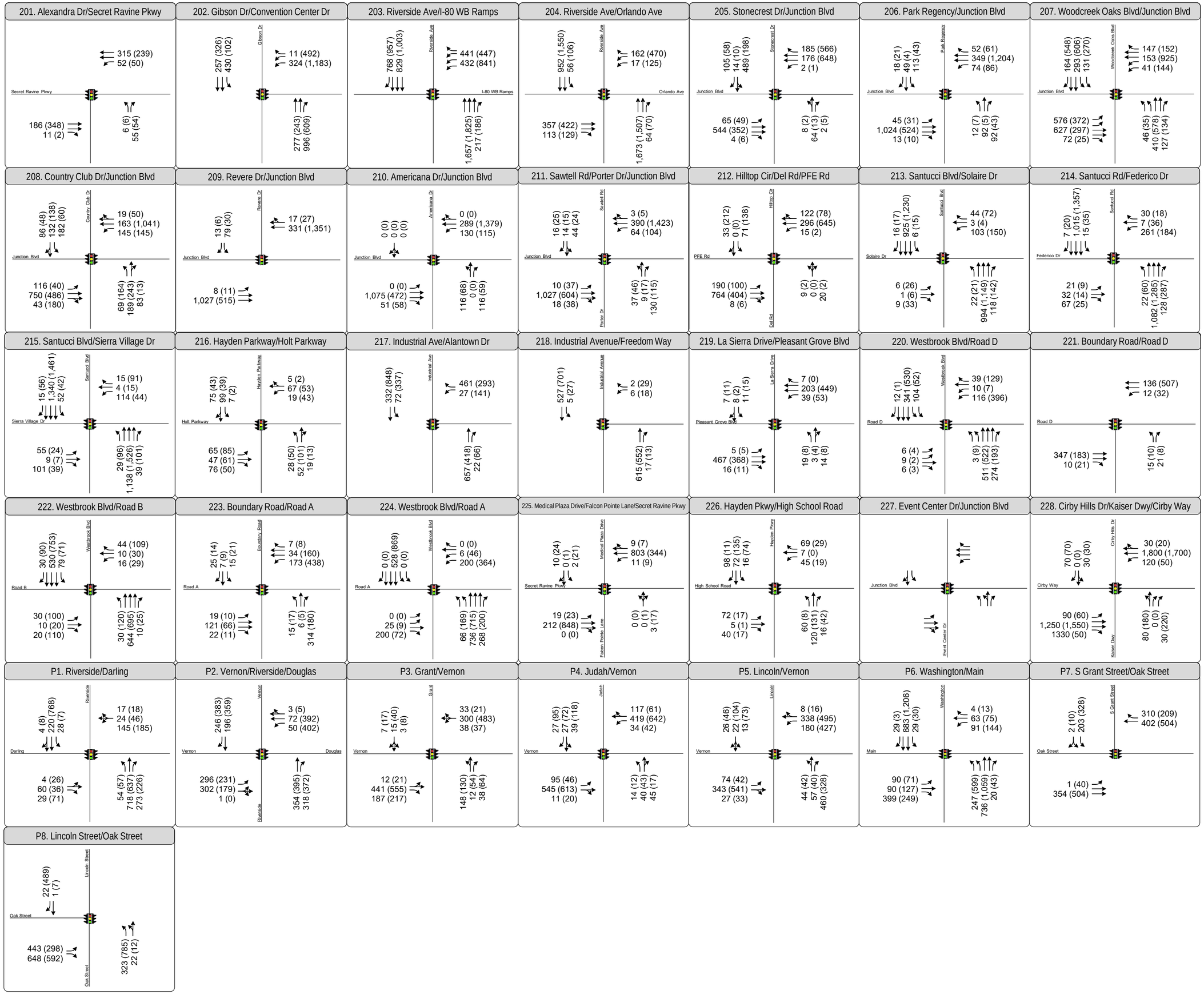


FIGURE 4.3-A4-e

Peak Hour Traffic Volumes and Lane Configurations
Cumulative No Project Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN



*Peak hour forecasts not available

FEHR PEERS

FIGURE 4.3-A4-f

Peak Hour Traffic Volumes and Lane Configurations
Cumulative No Project Conditions

Table 4.3A-4 Roseville Signalized Intersection Operations – Cumulative No Project Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
1	Blue Oaks Blvd/Grasscreek Dr	13	B	16	B
2	Blue Oaks Blvd/Westbrook Blvd	25	C	29	C
3	Blue Oaks Blvd/Creekview Plz	14	B	14	B
4	Blue Oaks Blvd/Westpark Dr	13	B	13	B
5	Blue Oaks Blvd/Hayden Pkwy	29	C	19	B
6	Blue Oaks Blvd/Fiddyment Rd	***46***	***D***[3]	***46***	***D***[3]
7	Blue Oaks Blvd/Orchard View Rd	8	A	9	A
8	Blue Oaks Blvd/Del Webb Blvd	12	B	11	B
9	Blue Oaks Blvd/Crocker Ranch Rd	12	B	12	B
10	Blue Oaks Blvd/Diamond Creek Blvd/Prairie Woods Wy[4]	25	C	***37***	***D***[3]
11	Blue Oaks Blvd/Woodcreek Oaks Blvd[4]	31	C	***64***	***E***[3]
12	Blue Oaks Blvd/Walgreens Dwy/Woodmeadow Dr[4]	3	A	33	C
13	Blue Oaks Blvd/New Meadow Dr[4]	13	B	15	B
14	Blue Oaks Blvd/Collector C[4]	19	B	***55***	***D***[3]
15	Blue Oaks Blvd/Foothills Blvd[4]	***36***	***D***[3]	***100***	***F***[3]
16	Blue Oaks Blvd/Fidelity Wy/SR 65 Ramps[4,5]	4	A	10	A
17	Blue Oaks Blvd/Washington Blvd/SR 65 Ramps[4]	***42***	***D***[3]	***59***	***E***[3]
18	Pleasant Grove Blvd/Santucci Dr	29	C	23	C
19	Pleasant Grove Blvd/Silver Spruce Dr	6	A	7	A
20	Pleasant Grove Blvd/Westbrook Blvd	26	C	30	C
21	Pleasant Grove Blvd/Sierra Trail Dr	10	B	9	A
24	Pleasant Grove Blvd/Upland Dr	9	A	9	A
25	Pleasant Grove Blvd/Fiddyment Rd	***57***	***E***[3]	***51***	***D***[3]
26	Pleasant Grove Blvd/Sun City Blvd	8	A	9	A
27	Pleasant Grove Blvd/Rose Creek Rd	6	A	8	A
28	Pleasant Grove Blvd/Michener Dr	8	A	9	A
29	Pleasant Grove Blvd/Woodcreek Oaks Blvd	***36***	***D***[3]	***51***	***D***[3]
30	Pleasant Grove Blvd/Country Club Dr	26	C	23	C
31	Pleasant Grove Blvd/Foothills Blvd[4]	***53***	***D***[3]	***65***	***E***[3]
32	Pleasant Grove Blvd/Washington Blvd[4]	***54***	***D***[3]	***62***	***E***[3]
33	Pleasant Grove Blvd/Hallissy Dr/Gold Coast Dr[4]	8	A	***37***	***D***[3]
34	Pleasant Grove Blvd/Roseville Pkwy[4]	***135***	***F***[3]	***126***	***F***[3]
35	Pleasant Grove Blvd/Highland Pointe Dr[4]	34	C	***102***	***F***[3]
36	Pleasant Grove Blvd/SR 65 SB Ramps[4]	8	A	17	B
37	Pleasant Grove Blvd/SR 65 NB Ramps[4]	13	B	20	B
38	Pleasant Grove Blvd/Fairway Dr[4]	***47***	***D***[3]	***82***	***F***[3]
39	Pleasant Grove Blvd/Highland Park Dr	20	C	34	C
40	Vista Grande Blvd/Santucci Blvd	12	B	12	B
41	Vista Grande Blvd/Silver Spruce Dr	14	B	13	B
42	Vista Grande Blvd/Westbrook Blvd	17	B	27	C
43	Vista Grande Blvd/Vista Park Dr	12	B	12	B
44	Vista Grande Blvd/Market St	14	B	15	B
45	Vista Grande Blvd/Monarch Grove St	12	B	12	B
46	Vista Grande Blvd/Upland Dr	14	B	16	B
47	Fiddyment Rd/Westhills Dr	26	C	17	B
48	Baseline Rd/Regional Park Access	13	B	16	B
49	Baseline Rd/Watt Ave	35	C	***38***	***D***[3]
50	Baseline Rd/KT-41 Access	9	A	18	B
51	Baseline Rd/Westbrook Blvd	26	C	31	C
52	Baseline Rd/KT-43 Access	4	A	6	A

Table 4.3A-4 Roseville Signalized Intersection Operations – Cumulative No Project Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
53	Baseline Rd/Market St	15	B	16	B
54	Baseline Rd/DF-40 Access	8	A	13	B
55	Baseline Rd/Upland Dr	7	A	7	A
56	Baseline Rd/Fiddyment Rd/Walerga Rd	***45***	***D***[3]	***48***	***D***[3]
57	Baseline Rd/Junction Blvd	24	C	12	B
58	Baseline Rd/Woodcreek Oaks Blvd/Cook Riolo Rd	23	C	30	C
59	Baseline Rd/Foothills Blvd	***96***	***F***[3]	***43***	***D***[3]
60	Foothills Blvd/HP Central Dwy/Roseville Pkwy	***46***	***D***[3]	***70***	***E***[3]
61	Roseville Pkwy/Washington Blvd	25	C	***42***	***D***[3]
62	Roseville Pkwy/Trestle Dr	13	B	29	C
63	Roseville Pkwy/Gibson Dr (W)[4]	***54***	***D***[3]	33	C
64	Roseville Pkwy/Chase Dr[4]	25	C	24	C
65	Roseville Pkwy/Gibson Dr (E)[4]	27	C	***54***	***D***[3]
66	Roseville Pkwy/West Dr[4]	9	A	19	B
67	Roseville Pkwy/Reserve Dr[4]	35	C	***56***	***E***[3]
68	Roseville Pkwy/Galleria Blvd[4]	***55***	***D***[3]	***67***	***E***[3]
69	Roseville Pkwy/Creekside Ridge Dr[4]	27	C	26	C
70	Roseville Pkwy/Taylor Rd[4]	***45***	***D***[3]	***61***	***E***[3]
71	E Roseville Pkwy/N Sunrise Ave[4]	14	B	***58***	***E***[3]
72	E Roseville Pkwy/Secret Ravine Pkwy[4]	23	C	***62***	***E***[3]
73	E Roseville Pkwy/Alexandra Dr	6	A	5	A
74	E Roseville Pkwy/Rocky Ridge Dr	6	A	8	A
75	E Roseville Pkwy/Orvietto Dr/Lead Hill Blvd	31	C	32	C
76	E Roseville Pkwy/Olympus Dr	19	B	24	C
77	E Roseville Pkwy/Douglas Blvd[4]	***56***	***E***[3]	***58***	***E***[3]
78	E Roseville Pkwy/Village Dr	22	C	22	C
79	E Roseville Pkwy/Eureka Rd	29	C	***54***	***D***[3]
80	E Roseville Pkwy/N Cirby Way	9	A	11	B
81	E Roseville Pkwy/Sierra College Blvd	35	C	***50***	***D***[3]
82	Atlantic St/Yosemite St	17	B	14	B
83	Atlantic St/Tiger Way/Center St	18	B	27	C
84	Atlantic St/Wills Rd	28	C	22	C
85	Atlantic St/I-80 WB Ramps[4,5]	5	A	30	C
86	Eureka Rd/Taylor Rd/I-80 EB Ramps[4,5]	24	C	***55***	***D***[3]
87	Eureka Rd/N Sunrise Ave[4]	22	C	***57***	***E***[3]
88	Eureka Rd/Rocky Ridge Dr	28	C	***37***	***D***[3]
89	Lead Hill Blvd/Eureka Rd	35	C	34	C
90	Douglas Blvd/Eureka Road[4]	***36***	***D***[3]	***65***	***E***[3]
91	Eureka Rd/Deer Valley Apts Dwy	16	B	13	B
92	Eureka Rd/Ashland Dr	19	B	18	B
93	Eureka Rd/Sierra College Blvd	***47***	***D***[3]	***40***	***D***[3]
94	Douglas Blvd/Judah St/Barjo Alley	8	A	16	B
95	Douglas Blvd/Park Dr	10	A	12	B
96	Douglas Blvd/Keehner Ave	11	B	14	B
97	Douglas Blvd/Folsom Rd	20	C	29	C
98	Douglas Blvd/Harding Blvd	29	C	***40***	***D***[3]
99	Douglas Blvd/I-80 WB Ramps	20	C	34	C
100	Douglas Blvd/I-80 EB Ramps[5]	12	B	11	B
101	Douglas Blvd/N Sunrise Ave[4]	34	C	***63***	***E***[3]
102	Douglas Blvd/Santa Clara Dr[4]	26	C	29	C

Table 4.3A-4 Roseville Signalized Intersection Operations – Cumulative No Project Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
103	Douglas Blvd/Sierra Gardens Dr[4]	19	B	29	C
104	Douglas Blvd/Target Dwy[4]	14	B	***38***	***D***[3]
105	Douglas Blvd/Rocky Ridge Dr[4]	34	C	***49***	***D***[3]
106	Douglas Blvd/Sierra College Blvd	***45***	***D***[3]	***56***	***E***[3]
107	Cirby Wy/Foothills Blvd/Roseville Rd[4]	***108***	***F***[3]	***71***	***E***[3]
108	Cirby Wy/Vernon St[4]	***64***	***E***[3]	***68***	***E***[3]
109	Cirby Wy/Northridge Dr/Lindsay Dr[4]	20	B	10	A
110	Cirby Wy/Melody Ln[4,5]	16	B	13	B
111	Cirby Wy/Riverside Ave[4]	***61***	***E***[3]	***140***	***F***[3]
112	Cirby Wy/Orlando Ave/Marlin Dr	***41***	***D***[3]	32	C
113	Cirby Wy/San Simeon Dr	16	B	20	C
114	Cirby Wy/Sunrise Ave	***43***	***D***[3]	***80***	***E***[3]
115	Cirby Wy/Oakridge Dr	31	C	29	C
116	Cirby Wy/Parkview Dr	8	A	6	A
117	Cirby Wy/Rocky Ridge Dr	28	C	***41***	***D***[3]
118	Cirby Wy/Champion Oaks Dr	13	B	14	B
119	Cirby Wy/Old Auburn Rd	27	C	21	C
120	Westbrook Blvd/Holt Pkwy	18	B	15	B
121	Westbrook Blvd/Nobo Dr	12	B	11	B
122	Westbrook Blvd/N Brookstone Dr	7	A	6	A
123	Westbrook Blvd/S Brookstone Dr	4	A	4	A
124	Westbrook Blvd/Octave Ave/Payson Ave	12	B	10	A
125	Lead Hill Blvd/Wal*Mart	6	A	12	B
126	Westbrook Blvd/Solaire Dr	15	B	12	B
127	Westbrook Blvd/Frederico Dr	16	B	15	A
128	Westbrook Blvd/Sierra Glen Dr	5	A	3	A
129	Westbrook Blvd/Sierra Village Dr	14	B	12	B
130	Fiddyment Rd/Angus Rd	31	C	23	C
131	Fiddyment Rd/Hayden Pkwy (N)	23	C	23	C
132	Fiddyment Rd/Crawford Pkwy	12	B	13	B
133	Fiddyment Rd/Hayden Pkwy (South)	11	B	12	B
134	Fiddyment Rd/Village Green Dr	23	C	22	C
135	Fiddyment Rd/Westlake Dr	7	A	5	A
136	Fiddyment Rd/San Fernando Dr	11	B	10	A
137	Woodcreek Oaks Blvd/Northpark Dr	15	B	13	B
138	Woodcreek Oaks Blvd/Parkside Wy	15	B	15	B
139	Woodcreek Oaks Blvd/Painted Desert Dr	13	B	16	B
140	Woodcreek Oaks Blvd/Crimson Ridge Dr	11	B	9	A
141	Woodcreek Oaks Blvd/Horncastle Ave	16	B	14	B
142	Woodcreek Oaks Blvd/Camino Capistrano/Zinnia Way	14	B	14	B
143	Woodcreek Oaks Blvd/Canevari Dr/Arsenault Dr	16	B	22	C
144	Woodcreek Oaks Blvd/McAnally Dr	28	C	23	C
145	Woodcreek Oaks Blvd/Trailee Ln	9	A	8	A
146	Foothills Blvd/Albertsons Dr	27	C	24	C
147	Foothills Blvd/HP South Dwy	9	A	17	B
148	Foothills Blvd/NEC	23	C	16	B
149	Foothills Blvd/Mistywood Dr	17	B	18	B
150	Foothills Blvd/McAnally Dr	22	C	25	C
151	Foothills Blvd/Junction Blvd	***37***	***D***[3]	***52***	***D***[3]
152	Foothills Blvd/Pilgrim Dr/Rand Wy	21	C	8	A

Table 4.3A-4 Roseville Signalized Intersection Operations – Cumulative No Project Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
153	Foothills Blvd/Vineyard Rd	32	C	31	C
154	Foothills Blvd/Denio Loop	13	B	12	B
155	Washington Blvd/Freedom Wy	21	C	29	C
156	Washington Blvd/Hallisy Dr	9	A	9	A
157	Washington Blvd/Industrial Ave	15	B	25	C
158	Washington Blvd/Diamond Oaks Rd/Emerald Oak Rd	14	B	30	C
159	Washington Blvd/Sawtell Rd/Derek Pl	13	B	15	B
160	Washington Blvd/Junction Blvd	22	C	31	C
161	Washington Blvd/All American City Blvd	13	B	14	B
162	Fairway Dr/Cortina Cir	15	B	18	B
163	Westpark Dr/High School Rd	9	A	7	A
164	Fairway Dr/Target Dwy/Rosehall Dr	11	B	14	B
165	Fairway Dr/Central Park Dr/Lowes Dwy	13	B	26	C
166	Fairway Dr/Home Depot Dwy	11	B	28	C
167	Fairway Dr/Five Star Blvd	11	B	***36***	***D***[3]
168	Stanford Ranch Rd/Highland Park Dr	15	B	13	B
169	Stanford Ranch Rd/Fairway Dr[4]	25	C	28	C
170	Stanford Ranch Rd/Five Star Blvd[4]	21	C	***40***	***D***[3]
171	Stanford Ranch Rd/SR 65 NB Ramps[4,5]	8	A	19	B
172	Galleria Blvd/SR 65 SB Ramps[4,5]	79	E	34	C
173	Galleria Cir/JC Penny Dwy	13	B	15	B
174	Galleria Blvd/Antelope Creek Dr[4]	24	C	***67***	***E***[3]
175	Galleria Blvd/Berry St	22	C	30	C
176	Harding Blvd/Wills Rd	29	C	28	C
177	Harding Blvd/Lead Hill Blvd	33	C	32	C
178	Harding Blvd/Estates Dr[4]	17	B	24	C
179	Harding Blvd/Roseville Sq[4]	14	B	31	C
180	N Sunrise Ave/Stone Point Dr	13	B	19	B
181	N Sunrise Ave/Automall Dr	19	B	26	C
182	N Sunrise Ave/Lead Hill Blvd	26	C	***41***	***D***[3]
183	N Sunrise Ave/Sierra Gardens Dr	15	B	32	C
184	Sunrise Ave/Oak Ridge Dr	9	A	9	A
185	Sunrise Ave/Frances Dr	4	A	5	A
186	Sunrise Ave/Coloma Wy	31	C	28	C
187	Sunrise Ave/Sun Tree Dr/Kensington Dr	10	A	28	C
188	Sunrise Ave/Sandringham Dr/Kensington Dr[5]	9	A	28	C
189	Rocky Ridge Dr/Stone Point Dr	6	A	8	A
190	Rocky Ridge Dr/Lead Hill Blvd	20	C	29	C
191	Rocky Ridge Dr/Professional Dr	10	A	17	B
192	Rocky Ridge Dr/Meadowlark Wy/Maidu Dr	7	A	21	C
193	Rocky Ridge Dr/McLaren Dr	8	A	14	B
194	Sierra College Blvd/Secret Ravine Pkwy	21	C	33	C
195	Sierra College Blvd/Miners Ravine Pkwy	15	B	14	B
196	Sierra College Blvd/Olympus Dr	28	C	***37***	***D***[3]
197	Sierra College Blvd/Renaissance Creek SC Dwy/Granite Bay Business Park Dwy	31	C	28	C
198	Sierra College Blvd/Old Auburn Rd	28	C	29	C
199	Olympus Dr/Europa St	10	B	9	A
200	Secret Ravine Pkwy/Scarborough Dr/Poppy Field Dr	16	B	15	B
201	Secret Ravine Pkwy/Alexandra Dr	8	A	8	A

Table 4.3A-4 Roseville Signalized Intersection Operations – Cumulative No Project Conditions

Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
202	Gibson Dr/Convention Center Dr	***55***	***E***[3]	14	B
203	Riverside Ave/I-80 WB Ramps[4]	18	B	***90***	***F***[3]
204	Riverside Ave/I-80 EB Ramps/Orlando Dr[4]	20	C	***70***	***E***[3]
205	Junction Blvd/Stonecrest Dr/Magenta Dr	22	C	21	C
206	Junction Blvd/Park Regency Dr	19	B	14	B
207	Junction Blvd/Woodcreek Oaks Blvd	24	C	***36***	***D***[3]
208	Junction Blvd/Country Club Dr	33	C	24	C
209	Junction Blvd/Revere Dr	7	A	6	A
210	Junction Blvd/Americana Dr	13	B	8	A
211	Junction Blvd/Sawtell Rd/Porter Dr	20	B	19	B
212	PFE Rd/Hilltop Cir/Del Rd	15	B	16	B
213	Santucci Blvd/Solaire Dr	11	B	13	B
214	Santucci Blvd/Federico Dr	17	B	16	B
215	Santucci Blvd/Sierra Village Dr	16	B	14	B
216	Hayden Pkwy/Holt Pkwy	14	B	15	B
217	Industrial Ave/Alantown Dr	15	B	21	C
218	Industrial Ave/Freedom Wy	4	A	4	A
219	Pleasant Grove Blvd/La Sierra Dr	10	A	9	A
220	Westbrook Blvd/Amoruso Road D	13	B	15	B
221	Amoruso Road D/Minor Residential Street 1	13	B	14	B
222	Westbrook Blvd/Amoruso Road B	13	B	17	B
223	Amoruso Road B/Amoruso Road A	19	B	19	B
224	Westbrook Blvd/Amoruso Road D	14	B	15	B
225	Secret Ravine Pkwy/Medical Plz/Falcon Pointe Dr	8	A	9	A
226	Hayden Pkwy/High School Rd/Bellanca Wy	13	B	12	B
227	Junction Blvd / Event Center Dr[6]	-	C	-	C
228	Cirby Way/Kaiser Dwy	***70***	***E***[3]	35	C
P1	Riverside Ave/Darling Way[7]	23	C	21	C
P2	Douglas Blvd/Riverside Ave/Vernon St[7]	17	B	26	C
P3	Vernon St/Grant St[7]	5	A	8	A
P4	Vernon St/Judah St[7]	5	A	10	A
P5	Vernon St/Lincoln St[7]	11	B	***41***	***D***[3]
P6	Washington Blvd/Main St[7]	26	C	***54***	***D***[3]
P7	Oak St/Grant St[7]	6	A	8	A
P8	Oak St/Lincoln St[7]	14	B	14	B
P9	Pleasant Grove Blvd/Market St[7]	31	C	29	C
P10	Pleasant Grove Blvd/Monument Dr/Kirkhill Dr[7]	13	B	13	B

Notes:

1. Delay is reported as seconds per vehicle and represent the average delay for the overall intersection.
2. "LOS" represents level of service, calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).
3. Bold and italicized text signifies that the intersection operates unacceptably according to the City's LOS policy.
4. For the PM peak hour, this intersection was analyzed in a SimTraffic 10 microsimulation model to account for interaction between traffic signals, queue spillback, etc. SimTraffic results represent the average of 10 runs.
5. Because of restrictions in Synchro 10, *Highway Capacity Manual 2000* (Transportation Research Board, 2000) methodologies for calculating delay and level of service are applied at this intersection.
6. Forecasts are not available for this intersection. Results show as LOS C or better.
7. Intersection is located in City's Pedestrian Overlay District (POD), which is exempt from the City's LOS policies.

Source: Fehr & Peers, 2020

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	385	214	19	91	70
Future Volume (veh/h)	21	385	214	19	91	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	405	225	20	96	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	39	1233	623	192	1002	892
Arrive On Green	0.02	0.24	0.12	0.12	0.56	0.56
Sat Flow, veh/h	1781	5274	5274	1572	1781	1585
Grp Volume(v), veh/h	22	405	225	20	96	74
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1572	1781	1585
Q Serve(g_s), s	0.5	2.7	1.7	0.5	1.0	0.9
Cycle Q Clear(g_c), s	0.5	2.7	1.7	0.5	1.0	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	39	1233	623	192	1002	892
V/C Ratio(X)	0.57	0.33	0.36	0.10	0.10	0.08
Avail Cap(c_a), veh/h	218	3623	2499	769	1002	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	12.8	16.5	16.0	4.1	4.1
Incr Delay (d2), s/veh	12.6	0.2	0.4	0.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	0.5	0.1	0.3	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.4	12.9	16.8	16.2	4.3	4.3
LnGrp LOS	C	B	B	B	A	A
Approach Vol, veh/h		427	245		170	
Approach Delay, s/veh		13.9	16.8		4.3	
Approach LOS		B	B		A	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		13.9		27.0	4.9	9.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		29.0		23.0	5.0	20.0
Max Q Clear Time (g_c+I1), s		4.7		3.0	2.5	3.7
Green Ext Time (p_c), s		2.5		0.4	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	345	30	210	125	150	22	758	614	383	836	84
Future Volume (veh/h)	101	345	30	210	125	150	22	758	614	383	836	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	106	363	32	221	132	158	23	798	646	403	880	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	654	203	310	724	225	36	1633	892	436	2778	862
Arrive On Green	0.08	0.13	0.13	0.09	0.14	0.14	0.02	0.32	0.32	0.24	0.54	0.54
Sat Flow, veh/h	1781	5106	1585	3456	5106	1585	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	106	363	32	221	132	158	23	798	646	403	880	88
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1585	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	4.3	4.9	1.3	4.6	1.7	7.0	0.9	9.3	15.1	16.2	7.0	2.0
Cycle Q Clear(g_c), s	4.3	4.9	1.3	4.6	1.7	7.0	0.9	9.3	15.1	16.2	7.0	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	135	654	203	310	724	225	36	1633	892	436	2778	862
V/C Ratio(X)	0.78	0.56	0.16	0.71	0.18	0.70	0.63	0.49	0.72	0.92	0.32	0.10
Avail Cap(c_a), veh/h	170	2014	625	376	2083	647	121	2014	1100	436	2916	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	30.1	28.5	32.5	27.8	30.1	35.7	20.2	22.1	27.1	9.2	8.1
Incr Delay (d2), s/veh	16.9	0.7	0.4	4.9	0.1	4.0	16.8	0.2	1.8	25.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.0	0.5	2.1	0.7	2.8	0.6	3.5	4.9	9.6	2.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	30.8	28.9	37.4	27.9	34.0	52.5	20.4	24.0	52.5	9.3	8.1
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	A	A
Approach Vol, veh/h		501			511			1467			1371	
Approach Delay, s/veh		34.8			33.9			22.5			21.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	27.5	10.6	13.4	5.5	44.0	9.6	14.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	29.0	8.0	29.0	5.0	42.0	7.0	30.0
Max Q Clear Time (g_c+I1), s	18.2	17.1	6.6	6.9	2.9	9.0	6.3	9.0
Green Ext Time (p_c), s	0.0	6.4	0.1	2.5	0.0	7.7	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	1238	506	5	51	13
Future Volume (veh/h)	75	1238	506	5	51	13
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	1303	533	5	54	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	100	2070	1378	426	777	691
Arrive On Green	0.06	0.41	0.27	0.27	0.44	0.44
Sat Flow, veh/h	1781	5274	5274	1579	1781	1585
Grp Volume(v), veh/h	79	1303	533	5	54	14
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1579	1781	1585
Q Serve(g_s), s	2.2	10.3	4.3	0.1	0.9	0.3
Cycle Q Clear(g_c), s	2.2	10.3	4.3	0.1	0.9	0.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	100	2070	1378	426	777	691
V/C Ratio(X)	0.79	0.63	0.39	0.01	0.07	0.02
Avail Cap(c_a), veh/h	212	3036	2024	626	777	691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	12.0	15.0	13.5	8.3	8.1
Incr Delay (d2), s/veh	12.9	0.3	0.2	0.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.8	1.3	0.0	0.3	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.4	12.3	15.2	13.5	8.4	8.1
LnGrp LOS	D	B	B	B	A	A
Approach Vol, veh/h		1382	538		68	
Approach Delay, s/veh		13.7	15.2		8.4	
Approach LOS		B	B		A	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		24.5		26.0	6.8	17.6
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0		22.0	6.0	20.0
Max Q Clear Time (g_c+I1), s		12.3		2.9	4.2	6.3
Green Ext Time (p_c), s		8.2		0.1	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1205	83	1	510	63	8
Future Volume (veh/h)	1205	83	1	510	63	8
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1268	87	1	537	66	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1845	571	3	2245	723	643
Arrive On Green	0.36	0.36	0.00	0.44	0.41	0.41
Sat Flow, veh/h	5274	1581	1781	5274	1781	1585
Grp Volume(v), veh/h	1268	87	1	537	66	8
Grp Sat Flow(s),veh/h/ln	1702	1581	1781	1702	1781	1585
Q Serve(g_s), s	10.9	1.9	0.0	3.4	1.2	0.2
Cycle Q Clear(g_c), s	10.9	1.9	0.0	3.4	1.2	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1845	571	3	2245	723	643
V/C Ratio(X)	0.69	0.15	0.29	0.24	0.09	0.01
Avail Cap(c_a), veh/h	2269	702	138	3059	723	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	11.2	25.8	9.1	9.5	9.2
Incr Delay (d2), s/veh	0.7	0.1	41.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.5	0.0	0.9	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	11.3	66.8	9.1	9.7	9.2
LnGrp LOS	B	B	E	A	A	A
Approach Vol, veh/h	1355			538	74	
Approach Delay, s/veh	14.5			9.2	9.7	
Approach LOS	B			A	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		25.0	4.1	22.7		26.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		21.0	4.0	23.0		31.0
Max Q Clear Time (g_c+I1), s		3.2	2.0	12.9		5.4
Green Ext Time (p_c), s		0.1	0.0	5.8		3.4

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	1141	78	97	366	62	92	88	139	333	85	95
Future Volume (veh/h)	57	1141	78	97	366	62	92	88	139	333	85	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	1201	82	102	385	65	97	93	146	351	89	100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1670	519	130	1823	566	125	235	199	397	521	442
Arrive On Green	0.04	0.33	0.33	0.07	0.36	0.36	0.07	0.13	0.13	0.22	0.28	0.28
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	60	1201	82	102	385	65	97	93	146	351	89	100
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.7	16.5	2.9	4.5	4.2	2.2	4.3	3.6	7.1	15.2	2.9	3.9
Cycle Q Clear(g_c), s	2.7	16.5	2.9	4.5	4.2	2.2	4.3	3.6	7.1	15.2	2.9	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	1670	519	130	1823	566	125	235	199	397	521	442
V/C Ratio(X)	0.78	0.72	0.16	0.78	0.21	0.11	0.78	0.40	0.73	0.88	0.17	0.23
Avail Cap(c_a), veh/h	179	2116	657	157	2052	637	201	752	637	515	1081	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	23.6	19.0	36.3	17.8	17.2	36.4	32.0	33.5	29.9	21.7	22.1
Incr Delay (d2), s/veh	15.5	0.9	0.1	19.1	0.1	0.1	9.9	1.1	5.1	13.7	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	6.4	1.1	2.6	1.6	0.8	2.2	1.7	2.9	7.8	1.2	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.2	24.4	19.1	55.3	17.9	17.3	46.4	33.1	38.7	43.6	21.9	22.4
LnGrp LOS	D	C	B	E	B	B	D	C	D	D	C	C
Approach Vol, veh/h		1343			552			336			540	
Approach Delay, s/veh		25.4			24.7			39.3			36.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.8	15.0	10.8	31.0	10.6	27.2	8.4	33.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	23.0	32.0	7.0	33.0	9.0	46.0	8.0	32.0
Max Q Clear Time (g_c+I1), s	17.2	9.1	6.5	18.5	6.3	5.9	4.7	6.2
Green Ext Time (p_c), s	0.6	0.9	0.0	7.6	0.0	0.8	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	29.0
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	1231	96	283	381	57	42	1049	536	292	880	136
Future Volume (veh/h)	194	1231	96	283	381	57	42	1049	536	292	880	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	204	1296	22	298	401	6	44	1104	380	307	926	50
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	729	1347	416	328	646	198	346	1191	529	328	1098	488
Arrive On Green	0.21	0.26	0.26	0.09	0.13	0.13	0.10	0.34	0.34	0.09	0.31	0.31
Sat Flow, veh/h	3456	5106	1576	3456	5106	1566	3456	3554	1578	3456	3554	1577
Grp Volume(v), veh/h	204	1296	22	298	401	6	44	1104	380	307	926	50
Grp Sat Flow(s),veh/h/ln	1728	1702	1576	1728	1702	1566	1728	1777	1578	1728	1777	1577
Q Serve(g_s), s	4.7	23.7	0.7	8.1	7.1	0.2	1.1	28.4	20.0	8.4	23.1	2.1
Cycle Q Clear(g_c), s	4.7	23.7	0.7	8.1	7.1	0.2	1.1	28.4	20.0	8.4	23.1	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	729	1347	416	328	646	198	346	1191	529	328	1098	488
V/C Ratio(X)	0.28	0.96	0.05	0.91	0.62	0.03	0.13	0.93	0.72	0.94	0.84	0.10
Avail Cap(c_a), veh/h	729	1347	416	328	1293	397	346	1200	533	328	1200	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	34.4	12.5	42.5	39.2	21.5	38.9	30.4	27.6	42.6	30.6	23.4
Incr Delay (d2), s/veh	0.1	16.4	0.1	27.2	1.4	0.1	0.1	12.5	5.6	32.9	6.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.0	0.4	4.5	2.8	0.1	0.4	12.9	7.6	4.8	9.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.4	50.8	12.6	69.7	40.7	21.6	38.9	42.9	33.1	75.5	36.6	23.5
LnGrp LOS	C	D	B	E	D	C	D	D	C	E	D	C
Approach Vol, veh/h		1522			705			1528			1283	
Approach Delay, s/veh		47.7			52.8			40.4			45.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	37.8	13.0	31.0	15.5	35.3	26.0	18.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	6.0	* 6
Max Green Setting (Gmax), s	9.0	32.0	9.0	25.0	9.0	* 32	10.0	* 24
Max Q Clear Time (g_c+I1), s	10.4	30.4	10.1	25.7	3.1	25.1	6.7	9.1
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	4.0	0.1	2.2

Intersection Summary	
HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	2047	0	0	705	96	0	0	0	219	0	8
Future Volume (veh/h)	7	2047	0	0	705	96	0	0	0	219	0	8
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	7	2155	0	0	742	101				231	0	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2				2	0	2
Cap, veh/h	20	3269	1015	125	2859	887				332	0	296
Arrive On Green	0.01	0.64	0.00	0.00	0.56	0.56				0.19	0.00	0.19
Sat Flow, veh/h	1781	5106	1585	185	5106	1585				1781	0	1585
Grp Volume(v), veh/h	7	2155	0	0	742	101				231	0	8
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	185	1702	1585				1781	0	1585
Q Serve(g_s), s	0.2	15.2	0.0	0.0	4.3	1.7				7.0	0.0	0.2
Cycle Q Clear(g_c), s	0.2	15.2	0.0	0.0	4.3	1.7				7.0	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	20	3269	1015	125	2859	887				332	0	296
V/C Ratio(X)	0.36	0.66	0.00	0.00	0.26	0.11				0.70	0.00	0.03
Avail Cap(c_a), veh/h	370	3805	1181	125	2859	887				834	0	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	28.3	6.5	0.0	0.0	6.5	6.0				21.9	0.0	19.2
Incr Delay (d2), s/veh	4.0	0.4	0.0	0.0	0.1	0.1				1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.7	0.0	0.0	1.2	0.5				2.8	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	6.9	0.0	0.0	6.6	6.1				22.9	0.0	19.2
LnGrp LOS	C	A	A	A	A	A				C	A	B
Approach Vol, veh/h		2162			843						239	
Approach Delay, s/veh		7.0			6.5						22.8	
Approach LOS		A			A						C	

Timer - Assigned Phs				4		6	7	8				
Phs Duration (G+Y+Rc), s				42.9		14.8	4.6	38.3				
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0				
Max Green Setting (Gmax), s				43.0		27.0	12.0	27.0				
Max Q Clear Time (g_c+I1), s				17.2		9.0	2.2	6.3				
Green Ext Time (p_c), s				19.8		0.5	0.0	6.2				

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2289	15	67	790	9	127
Future Volume (veh/h)	2289	15	67	790	9	127
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2409	16	71	832	9	134
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3083	957	159	3795	214	190
Arrive On Green	0.60	0.60	0.09	0.74	0.12	0.12
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	2409	16	71	832	9	134
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	28.2	0.3	3.0	4.0	0.4	6.5
Cycle Q Clear(g_c), s	28.2	0.3	3.0	4.0	0.4	6.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	3083	957	159	3795	214	190
V/C Ratio(X)	0.78	0.02	0.45	0.22	0.04	0.70
Avail Cap(c_a), veh/h	3264	1013	201	4096	672	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	6.3	34.4	3.1	31.0	33.7
Incr Delay (d2), s/veh	1.3	0.0	0.7	0.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.1	1.3	0.9	0.2	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	6.3	35.2	3.2	31.1	35.5
LnGrp LOS	B	A	D	A	C	D
Approach Vol, veh/h	2425			903	143	
Approach Delay, s/veh	13.1			5.7	35.2	
Approach LOS	B			A	D	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.5	11.1	54.2		65.3
Change Period (Y+Rc), s		4.9	4.0	6.0		6.0
Max Green Setting (Gmax), s		30.1	9.0	51.0		64.0
Max Q Clear Time (g_c+I1), s		8.5	5.0	30.2		6.0
Green Ext Time (p_c), s		0.3	0.0	17.9		7.7

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	24	2362	771	132	307	47
Future Volume (veh/h)	24	2362	771	132	307	47
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	2486	812	139	323	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	59	3233	2778	858	380	338
Arrive On Green	0.03	0.63	0.54	0.54	0.21	0.21
Sat Flow, veh/h	1781	5274	5274	1578	1781	1585
Grp Volume(v), veh/h	25	2486	812	139	323	49
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1578	1781	1585
Q Serve(g_s), s	1.0	24.7	6.1	3.1	12.4	1.8
Cycle Q Clear(g_c), s	1.0	24.7	6.1	3.1	12.4	1.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	59	3233	2778	858	380	338
V/C Ratio(X)	0.43	0.77	0.29	0.16	0.85	0.14
Avail Cap(c_a), veh/h	150	3455	2778	858	777	691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	9.3	8.8	8.1	26.9	22.7
Incr Delay (d2), s/veh	1.8	1.1	0.1	0.1	2.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.3	1.8	0.9	5.2	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.5	10.5	8.9	8.2	28.9	22.8
LnGrp LOS	D	B	A	A	C	C
Approach Vol, veh/h		2511	951		372	
Approach Delay, s/veh		10.7	8.8		28.1	
Approach LOS		B	A		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		51.0		20.1	6.3	44.7
Change Period (Y+Rc), s		6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s		48.1		31.0	6.0	38.1
Max Q Clear Time (g_c+I1), s		26.7		14.4	3.0	8.1
Green Ext Time (p_c), s		18.3		0.8	0.0	7.5

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	2477	38	27	806	159	38	16	8	235	18	17
Future Volume (veh/h)	152	2477	38	27	806	159	38	16	8	235	18	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	2607	40	28	848	167	28	33	8	277	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	3155	979	62	2797	868	155	163	138	370	195	0
Arrive On Green	0.11	0.62	0.62	0.03	0.55	0.55	0.09	0.09	0.09	0.10	0.00	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	3563	1870	0
Grp Volume(v), veh/h	160	2607	40	28	848	167	28	33	8	277	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	0
Q Serve(g_s), s	11.0	49.8	1.2	1.9	11.3	6.7	1.8	2.0	0.6	9.4	0.0	0.0
Cycle Q Clear(g_c), s	11.0	49.8	1.2	1.9	11.3	6.7	1.8	2.0	0.6	9.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	187	3155	979	62	2797	868	155	163	138	370	195	0
V/C Ratio(X)	0.86	0.83	0.04	0.45	0.30	0.19	0.18	0.20	0.06	0.75	0.00	0.00
Avail Cap(c_a), veh/h	271	3155	979	171	2797	868	171	180	152	715	376	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	55.0	18.6	9.4	59.2	15.3	14.3	52.9	53.0	52.3	54.4	0.0	0.0
Incr Delay (d2), s/veh	11.9	2.6	0.1	1.9	0.3	0.5	0.9	1.0	0.3	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	18.0	0.4	0.9	4.2	2.4	0.9	1.0	0.2	4.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.9	21.3	9.4	61.1	15.6	14.8	53.8	54.0	52.6	57.6	0.0	0.0
LnGrp LOS	E	C	A	E	B	B	D	D	D	E	A	A
Approach Vol, veh/h		2807			1043			69			277	
Approach Delay, s/veh		23.7			16.7			53.8			57.6	
Approach LOS		C			B			D			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.9	8.4	83.2		15.5	17.1	74.5				
Change Period (Y+Rc), s		4.9	4.0	6.0		4.6	4.0	6.0				
Max Green Setting (Gmax), s		25.1	12.0	56.4		12.0	19.0	49.4				
Max Q Clear Time (g_c+I1), s		11.4	3.9	51.8		4.0	13.0	13.3				
Green Ext Time (p_c), s		1.1	0.0	4.5		0.2	0.1	13.9				

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	2414	168	123	833	334	119	471	379	313	192	63
Future Volume (veh/h)	48	2414	168	123	833	334	119	471	379	313	192	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	2541	84	129	877	167	125	496	252	329	202	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	2626	815	219	2459	763	564	600	268	332	312	139
Arrive On Green	0.16	1.00	1.00	0.06	0.48	0.48	0.16	0.17	0.17	0.10	0.09	0.09
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	51	2541	84	129	877	167	125	496	252	329	202	4
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.6	0.0	0.0	4.5	13.4	5.0	3.9	16.9	19.6	11.9	6.9	0.3
Cycle Q Clear(g_c), s	1.6	0.0	0.0	4.5	13.4	5.0	3.9	16.9	19.6	11.9	6.9	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	2626	815	219	2459	763	564	600	268	332	312	139
V/C Ratio(X)	0.18	0.97	0.10	0.59	0.36	0.22	0.22	0.83	0.94	0.99	0.65	0.03
Avail Cap(c_a), veh/h	332	2626	815	332	2459	763	564	600	268	332	600	268
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	0.0	0.0	57.0	20.3	8.2	45.4	50.2	51.3	56.5	55.1	52.1
Incr Delay (d2), s/veh	0.1	11.5	0.3	0.9	0.4	0.7	0.1	9.6	39.7	47.0	3.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.8	0.1	2.0	5.2	2.7	1.7	8.2	10.5	7.3	3.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	11.5	0.3	57.9	20.7	8.8	45.5	59.8	91.0	103.5	58.1	52.2
LnGrp LOS	D	B	A	E	C	A	D	E	F	F	E	D
Approach Vol, veh/h		2676			1173			873			535	
Approach Delay, s/veh		11.8			23.1			66.8			85.9	
Approach LOS		B			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	26.8	11.9	70.3	26.1	16.7	16.0	66.2
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	5.7	* 5.7	6.0	* 6
Max Green Setting (Gmax), s	12.0	21.1	12.0	60.2	12.0	* 21	12.0	* 60
Max Q Clear Time (g_c+I1), s	13.9	21.6	6.5	2.0	5.9	8.9	3.6	15.4
Green Ext Time (p_c), s	0.0	0.0	0.1	53.2	0.1	0.8	0.0	15.6

Intersection Summary	
HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2627	348	0	1312	66	10	3	66	12	2	0
Future Volume (veh/h)	0	2627	348	0	1312	66	10	3	66	12	2	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	2765	366	0	1381	69	7	9	69	13	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1	5065	1248	1	5065	1248	108	114	96	57	60	51
Arrive On Green	0.00	1.00	1.00	0.00	0.79	0.79	0.06	0.06	0.06	0.03	0.03	0.00
Sat Flow, veh/h	1781	6434	1585	1781	6434	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	0	2765	366	0	1381	69	7	9	69	13	2	0
Grp Sat Flow(s),veh/h/ln	1781	1609	1585	1781	1609	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.0	7.3	1.2	0.5	0.6	5.3	0.9	0.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	7.3	1.2	0.5	0.6	5.3	0.9	0.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1	5065	1248	1	5065	1248	108	114	96	57	60	51
V/C Ratio(X)	0.00	0.55	0.29	0.00	0.27	0.06	0.06	0.08	0.72	0.23	0.03	0.00
Avail Cap(c_a), veh/h	57	5065	1248	57	5065	1248	556	584	495	57	60	51
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.96	0.96	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	3.6	3.0	55.3	55.4	57.6	59.0	58.6	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.6	0.0	0.0	0.0	0.2	0.3	9.5	2.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.0	1.7	0.3	0.2	0.3	2.3	0.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.4	0.6	0.0	3.6	3.0	55.6	55.7	67.1	61.0	58.9	0.0
LnGrp LOS	A	A	A	A	A	A	E	E	E	E	E	A
Approach Vol, veh/h		3131			1450			85			15	
Approach Delay, s/veh		0.4			3.6			65.0			60.7	
Approach LOS		A			A			E			E	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.6	0.0	103.4		9.0	0.0	103.4
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		39.0	4.0	58.0		4.0	4.0	58.0
Max Q Clear Time (g_c+I1), s		7.3	0.0	2.0		2.9	0.0	9.3
Green Ext Time (p_c), s		0.3	0.0	44.6		0.0	0.0	13.1

Intersection Summary	
HCM 6th Ctrl Delay	2.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	2689	1350	30	142	28
Future Volume (veh/h)	16	2689	1350	30	142	28
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	2831	1421	32	149	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	723	5255	2336	575	332	152
Arrive On Green	0.81	1.00	0.36	0.36	0.10	0.10
Sat Flow, veh/h	1781	6696	6696	1585	3456	1585
Grp Volume(v), veh/h	17	2831	1421	32	149	29
Grp Sat Flow(s),veh/h/ln	1781	1609	1609	1585	1728	1585
Q Serve(g_s), s	0.2	0.0	22.6	1.6	5.1	2.1
Cycle Q Clear(g_c), s	0.2	0.0	22.6	1.6	5.1	2.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	723	5255	2336	575	332	152
V/C Ratio(X)	0.02	0.54	0.61	0.06	0.45	0.19
Avail Cap(c_a), veh/h	723	5255	3963	976	583	268
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.0	0.0	32.5	25.9	53.4	52.0
Incr Delay (d2), s/veh	0.0	0.3	0.5	0.1	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	8.5	0.6	2.3	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.0	0.3	33.0	26.0	53.7	52.3
LnGrp LOS	A	A	C	C	D	D
Approach Vol, veh/h		2848	1453		178	
Approach Delay, s/veh		0.4	32.9		53.5	
Approach LOS		A	C		D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	108.1	16.9	56.7	51.4
Change Period (Y+Rc), s	6.0	4.9	6.0	* 6
Max Green Setting (Gmax), s	77.0	21.1	12.0	* 77
Max Q Clear Time (g_c+I1), s	2.0	7.1	2.2	24.6
Green Ext Time (p_c), s	65.5	0.4	0.0	20.8

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	2781	20	120	1380	100	10	9	20	10	0	5
Future Volume (veh/h)	30	2781	20	120	1380	100	10	9	20	10	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	2927	21	126	1453	105	11	9	21	11	0	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	3854	950	151	4056	999	143	150	261	94	0	43
Arrive On Green	0.05	0.60	0.60	0.08	0.63	0.63	0.08	0.08	0.08	0.08	0.00	0.08
Sat Flow, veh/h	1781	6434	1585	1781	6434	1585	1781	1870	1585	1179	0	536
Grp Volume(v), veh/h	32	2927	21	126	1453	105	11	9	21	16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1609	1585	1781	1609	1585	1781	1870	1585	1715	0	0
Q Serve(g_s), s	2.2	41.8	0.7	8.7	13.5	3.3	0.7	0.6	1.4	1.1	0.0	0.0
Cycle Q Clear(g_c), s	2.2	41.8	0.7	8.7	13.5	3.3	0.7	0.6	1.4	1.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.69		0.31
Lane Grp Cap(c), veh/h	96	3854	950	151	4056	999	143	150	261	137	0	0
V/C Ratio(X)	0.33	0.76	0.02	0.83	0.36	0.11	0.08	0.06	0.08	0.12	0.00	0.00
Avail Cap(c_a), veh/h	143	3854	950	177	4056	999	228	239	337	220	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.0	18.4	10.2	56.3	11.0	9.1	53.2	53.2	44.2	53.4	0.0	0.0
Incr Delay (d2), s/veh	2.0	1.5	0.0	24.6	0.2	0.2	0.2	0.2	0.1	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	14.3	0.2	4.9	4.4	1.1	0.3	0.3	0.6	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	19.9	10.2	80.9	11.3	9.4	53.5	53.3	44.3	53.8	0.0	0.0
LnGrp LOS	E	B	B	F	B	A	D	D	D	D	A	A
Approach Vol, veh/h		2980			1684			41			16	
Approach Delay, s/veh		20.2			16.4			48.7			53.8	
Approach LOS		C			B			D			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	15.1	80.9		14.5	11.2	84.8				
Change Period (Y+Rc), s		4.5	4.5	6.0		4.5	4.5	6.0				
Max Green Setting (Gmax), s		16.0	12.4	61.1		16.0	10.0	63.5				
Max Q Clear Time (g_c+I1), s		3.1	10.7	43.8		3.4	4.2	15.5				
Green Ext Time (p_c), s		0.0	0.0	17.1		0.1	0.0	28.5				

Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	268	2168	585	302	1274	477	285	483	199	486	611	41
Future Volume (veh/h)	268	2168	585	302	1274	477	285	483	199	486	611	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	282	2282	468	318	1341	185	300	508	0	512	643	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	342	2574	634	370	2522	621	639	540		566	910	282
Arrive On Green	0.20	0.80	0.80	0.11	0.39	0.39	0.13	0.15	0.00	0.16	0.18	0.18
Sat Flow, veh/h	3456	6434	1585	3456	6434	1585	5023	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	282	2282	468	318	1341	185	300	508	0	512	643	7
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1585	1674	1777	1585	1728	1702	1585
Q Serve(g_s), s	9.8	30.5	10.8	11.3	20.0	5.7	6.9	17.7	0.0	18.2	14.8	0.5
Cycle Q Clear(g_c), s	9.8	30.5	10.8	11.3	20.0	5.7	6.9	17.7	0.0	18.2	14.8	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	342	2574	634	370	2522	621	639	540		566	910	282
V/C Ratio(X)	0.82	0.89	0.74	0.86	0.53	0.30	0.47	0.94		0.90	0.71	0.02
Avail Cap(c_a), veh/h	415	2574	634	387	2522	621	639	540		608	1213	377
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	10.6	3.3	54.9	29.2	8.5	50.6	52.4	0.0	51.3	48.3	42.4
Incr Delay (d2), s/veh	9.1	5.0	7.5	16.0	0.8	1.2	0.2	24.2	0.0	15.6	3.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.6	4.2	5.6	7.6	3.7	2.8	9.4	0.0	8.8	6.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	15.5	10.9	70.9	30.0	9.7	50.8	76.6	0.0	66.9	52.0	42.5
LnGrp LOS	E	B	B	E	C	A	D	E		E	D	D
Approach Vol, veh/h		3032			1844			808	A		1162	
Approach Delay, s/veh		18.8			35.0			67.0			58.5	
Approach LOS		B			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	27.6	18.4	55.0	24.5	25.0	17.4	56.0
Change Period (Y+Rc), s	6.0	* 5.3	6.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	12.0	* 30	15.0	* 49	22.0	19.0	14.0	50.0
Max Q Clear Time (g_c+I1), s	8.9	16.8	11.8	22.0	20.2	19.7	13.3	32.5
Green Ext Time (p_c), s	0.2	5.5	0.2	18.5	0.3	0.0	0.1	17.0

Intersection Summary	
HCM 6th Ctrl Delay	35.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1714	64	115	1637	0	25
Future Volume (vph)	1714	64	115	1637	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	4.0		5.0
Lane Util. Factor	0.86	1.00	1.00	0.91		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	6408	1583	1770	5085		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	6408	1583	1770	5085		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1804	67	121	1723	0	26
RTOR Reduction (vph)	0	13	0	0	0	23
Lane Group Flow (vph)	1804	54	121	1723	0	3
Turn Type	NA	Perm	Prot	NA		Over
Protected Phases	4		3	Free		3
Permitted Phases		4				
Actuated Green, G (s)	101.1	101.1	13.9	125.0		13.9
Effective Green, g (s)	101.1	101.1	13.9	125.0		13.9
Actuated g/C Ratio	0.81	0.81	0.11	1.00		0.11
Clearance Time (s)	5.0	5.0	5.0			5.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Lane Grp Cap (vph)	5182	1280	196	5085		179
v/s Ratio Prot	0.28		c0.07	0.34		0.00
v/s Ratio Perm		0.03				
v/c Ratio	0.35	0.04	0.62	0.34		0.02
Uniform Delay, d1	3.2	2.4	53.0	0.0		49.5
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.0	0.0	5.7	0.2		0.0
Delay (s)	3.2	2.4	58.7	0.2		49.5
Level of Service	A	A	E	A		D
Approach Delay (s)	3.2			4.0	49.5	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay	3.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	39.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1262	477	498	930	399	472	0	408	19	523	350
Future Volume (veh/h)	0	1262	477	498	930	399	472	0	408	19	523	350
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1328	233	524	979	0	497	0	152	20	551	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	0	1904	469	581	2533		0	0	0	311	620	
Arrive On Green	0.00	0.30	0.30	0.17	0.50	0.00	0.00	0.00	0.00	0.17	0.17	0.00
Sat Flow, veh/h	0	6696	1585	3456	5106	1585		0		1781	3554	1585
Grp Volume(v), veh/h	0	1328	233	524	979	0		0.0		20	551	0
Grp Sat Flow(s),veh/h/ln	0	1609	1585	1728	1702	1585				1781	1777	1585
Q Serve(g_s), s	0.0	22.9	15.2	18.6	14.9	0.0				1.2	18.9	0.0
Cycle Q Clear(g_c), s	0.0	22.9	15.2	18.6	14.9	0.0				1.2	18.9	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1904	469	581	2533					311	620	
V/C Ratio(X)	0.00	0.70	0.50	0.90	0.39					0.06	0.89	
Avail Cap(c_a), veh/h	0	1904	469	636	2533					328	654	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	39.0	36.3	51.0	19.6	0.0				43.1	50.4	0.0
Incr Delay (d2), s/veh	0.0	1.4	1.6	14.6	0.4	0.0				0.2	14.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.9	5.9	9.0	5.7	0.0				0.5	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	40.4	37.9	65.6	20.1	0.0				43.2	65.1	0.0
LnGrp LOS	A	D	D	E	C					D	E	
Approach Vol, veh/h		1561			1503	A					571	A
Approach Delay, s/veh		40.1			35.9						64.3	
Approach LOS		D			D						E	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		27.8	25.0	43.0				68.0				
Change Period (Y+Rc), s		6.0	4.0	6.0				6.0				
Max Green Setting (Gmax), s		23.0	23.0	35.0				62.0				
Max Q Clear Time (g_c+I1), s		20.9	20.6	24.9				16.9				
Green Ext Time (p_c), s		0.9	0.4	7.6				11.3				

Intersection Summary	
HCM 6th Ctrl Delay	42.2
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	417	570	5	191	27	356	686	2	70	372	0
Future Volume (veh/h)	0	417	570	5	191	27	356	686	2	70	372	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	439	600	5	201	28	375	722	2	74	392	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	1451	647	9	1700	758	487	971	433	96	661	295
Arrive On Green	0.00	0.41	0.41	0.01	0.48	0.48	0.14	0.27	0.27	0.05	0.19	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	439	600	5	201	28	375	722	2	74	392	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	6.4	27.8	0.2	2.4	0.7	8.1	14.3	0.1	3.2	7.8	0.0
Cycle Q Clear(g_c), s	0.0	6.4	27.8	0.2	2.4	0.7	8.1	14.3	0.1	3.2	7.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	2	1451	647	9	1700	758	487	971	433	96	661	295
V/C Ratio(X)	0.00	0.30	0.93	0.53	0.12	0.04	0.77	0.74	0.00	0.77	0.59	0.00
Avail Cap(c_a), veh/h	93	1522	679	93	1700	758	763	1569	700	208	1200	535
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.4	21.7	38.2	11.1	10.7	31.9	25.5	20.4	36.0	28.7	0.0
Incr Delay (d2), s/veh	0.0	0.1	18.5	39.7	0.0	0.0	2.6	1.2	0.0	12.4	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	12.8	0.2	0.9	0.2	3.4	5.9	0.0	1.7	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.5	40.2	78.0	11.1	10.7	34.5	26.7	20.4	48.4	29.5	0.0
LnGrp LOS	A	B	D	E	B	B	C	C	C	D	C	A
Approach Vol, veh/h		1039			234			1099			466	
Approach Delay, s/veh		29.8			12.5			29.3			32.5	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	26.0	5.4	36.4	15.8	19.3	0.0	41.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	9.0	34.0	4.0	33.0	17.0	26.0	4.0	33.0
Max Q Clear Time (g_c+I1), s	5.2	16.3	2.2	29.8	10.1	9.8	0.0	4.4
Green Ext Time (p_c), s	0.0	4.8	0.0	1.7	0.8	2.3	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	28.6
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	468	16	39	204	19	0
Future Volume (veh/h)	468	16	39	204	19	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	493	17	41	215	20	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1225	546	550	1225	333	297
Arrive On Green	0.34	0.34	0.34	0.34	0.19	0.00
Sat Flow, veh/h	3647	1585	890	3647	1781	1585
Grp Volume(v), veh/h	493	17	41	215	20	0
Grp Sat Flow(s),veh/h/ln	1777	1585	890	1777	1781	1585
Q Serve(g_s), s	2.3	0.2	0.8	0.9	0.2	0.0
Cycle Q Clear(g_c), s	2.3	0.2	3.0	0.9	0.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1225	546	550	1225	333	297
V/C Ratio(X)	0.40	0.03	0.07	0.18	0.06	0.00
Avail Cap(c_a), veh/h	4823	2151	2284	8150	1751	1558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.3	4.6	6.5	4.9	7.1	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	0.1	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.5	4.7	6.5	4.9	7.2	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	510			256	20	
Approach Delay, s/veh	5.5			5.2	7.2	
Approach LOS	A			A	A	

Timer - Assigned Phs		2		4			8
Phs Duration (G+Y+Rc), s		9.0		12.4			12.4
Change Period (Y+Rc), s		5.0		5.0			5.0
Max Green Setting (Gmax), s		21.0		29.0			49.0
Max Q Clear Time (g_c+I1), s		2.2		4.3			5.0
Green Ext Time (p_c), s		0.0		3.5			1.8

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	462	7	33	212	213	17	1101	73	304	793	88
Future Volume (veh/h)	144	462	7	33	212	213	17	1101	73	304	793	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	152	486	7	35	223	224	18	1159	77	320	835	93
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	1137	353	91	647	289	56	1423	635	400	2552	792
Arrive On Green	0.07	0.22	0.22	0.03	0.18	0.18	0.02	0.40	0.40	0.12	0.50	0.50
Sat Flow, veh/h	3456	5106	1585	3456	3554	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	152	486	7	35	223	224	18	1159	77	320	835	93
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	3.7	7.0	0.3	0.8	4.7	11.5	0.4	24.7	2.6	7.7	8.3	2.7
Cycle Q Clear(g_c), s	3.7	7.0	0.3	0.8	4.7	11.5	0.4	24.7	2.6	7.7	8.3	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	1137	353	91	647	289	56	1423	635	400	2552	792
V/C Ratio(X)	0.66	0.43	0.02	0.38	0.34	0.78	0.32	0.81	0.12	0.80	0.33	0.12
Avail Cap(c_a), veh/h	446	1919	596	446	1336	596	446	1711	763	446	2552	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	28.4	25.8	40.8	30.4	33.2	41.4	22.7	16.1	36.7	12.7	11.3
Incr Delay (d2), s/veh	3.2	0.3	0.0	2.6	0.3	4.5	3.2	2.7	0.1	9.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.8	0.1	0.4	2.0	4.6	0.2	10.2	0.9	3.7	3.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.0	28.7	25.9	43.4	30.7	37.6	44.6	25.4	16.2	45.8	12.8	11.4
LnGrp LOS	D	C	C	D	C	D	D	C	B	D	B	B
Approach Vol, veh/h		645			482			1254			1248	
Approach Delay, s/veh		31.8			34.8			25.1			21.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	39.1	7.3	24.0	6.4	47.6	10.7	20.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	41.0	11.0	32.0	11.0	41.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	9.7	26.7	2.8	9.0	2.4	10.3	5.7	13.5
Green Ext Time (p_c), s	0.2	7.4	0.0	3.4	0.0	7.1	0.2	2.1

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	835	4	18	444	9	13	0	85	34	6	14
Future Volume (veh/h)	0	835	4	18	444	9	13	0	85	34	6	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	879	4	19	467	9	14	0	89	36	6	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1303	581	34	1749	780	189	0	247	59	39	98
Arrive On Green	0.00	0.37	0.37	0.02	0.49	0.49	0.11	0.00	0.16	0.03	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	0	1585	1781	474	1184
Grp Volume(v), veh/h	0	879	4	19	467	9	14	0	89	36	0	21
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	0	1657
Q Serve(g_s), s	0.0	7.8	0.1	0.4	2.9	0.1	0.3	0.0	1.9	0.8	0.0	0.4
Cycle Q Clear(g_c), s	0.0	7.8	0.1	0.4	2.9	0.1	0.3	0.0	1.9	0.8	0.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.71
Lane Grp Cap(c), veh/h	5	1303	581	34	1749	780	189	0	247	59	0	138
V/C Ratio(X)	0.00	0.67	0.01	0.56	0.27	0.01	0.07	0.00	0.36	0.61	0.00	0.15
Avail Cap(c_a), veh/h	189	1887	842	189	1887	842	189	0	1304	189	0	1364
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.0	7.6	18.3	5.6	4.9	15.2	0.0	14.2	18.0	0.0	16.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	13.4	0.1	0.0	0.8	0.0	0.9	9.6	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.9	0.0	0.3	0.5	0.0	0.1	0.0	0.6	0.4	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.6	7.6	31.8	5.7	4.9	15.9	0.0	15.1	27.5	0.0	16.5
LnGrp LOS	A	B	A	C	A	A	B	A	B	C	A	B
Approach Vol, veh/h		883			495			103			57	
Approach Delay, s/veh		10.6			6.7			15.2			23.5	
Approach LOS		B			A			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	9.9	4.7	17.8	8.0	7.1	0.0	22.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	31.0	4.0	20.0	4.0	31.0	4.0	20.0
Max Q Clear Time (g_c+I1), s	2.8	3.9	2.4	9.8	2.3	2.4	0.0	4.9
Green Ext Time (p_c), s	0.0	0.4	0.0	4.0	0.0	0.1	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	901	12	99	513	150	26	120	198	25	217	121
Future Volume (veh/h)	91	901	12	99	513	150	26	120	198	25	217	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	948	5	104	540	38	27	126	31	26	228	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	1004	448	163	1014	452	292	306	259	301	316	267
Arrive On Green	0.09	0.28	0.28	0.09	0.29	0.29	0.16	0.16	0.16	0.17	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	96	948	5	104	540	38	27	126	31	26	228	21
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.4	16.9	0.1	3.6	8.3	1.1	0.8	3.9	1.1	0.8	7.5	0.7
Cycle Q Clear(g_c), s	3.4	16.9	0.1	3.6	8.3	1.1	0.8	3.9	1.1	0.8	7.5	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	1004	448	163	1014	452	292	306	259	301	316	267
V/C Ratio(X)	0.61	0.94	0.01	0.64	0.53	0.08	0.09	0.41	0.12	0.09	0.72	0.08
Avail Cap(c_a), veh/h	330	1004	448	330	1014	452	570	598	507	550	578	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	22.7	16.7	28.4	19.5	16.9	23.0	24.3	23.1	22.7	25.5	22.7
Incr Delay (d2), s/veh	1.4	16.8	0.0	1.5	0.8	0.1	0.1	0.3	0.1	0.0	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	8.8	0.1	1.6	3.3	0.4	0.3	1.7	0.4	0.3	3.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	39.5	16.7	29.9	20.3	17.1	23.0	24.6	23.2	22.7	26.7	22.7
LnGrp LOS	C	D	B	C	C	B	C	C	C	C	C	C
Approach Vol, veh/h		1049			682			184			275	
Approach Delay, s/veh		38.5			21.6			24.1			26.0	
Approach LOS		D			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.9	9.9	24.0		15.9	9.8	24.2				
Change Period (Y+Rc), s		4.0	4.0	5.7		5.3	4.0	5.7				
Max Green Setting (Gmax), s		20.0	12.0	18.3		20.7	12.0	18.3				
Max Q Clear Time (g_c+I1), s		9.5	5.6	18.9		5.9	5.4	10.3				
Green Ext Time (p_c), s		0.4	0.1	0.0		0.3	0.1	2.7				

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	1240	7	91	684	40	25	28	18	49	6	12
Future Volume (veh/h)	32	1240	7	91	684	40	25	28	18	49	6	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	1305	7	96	720	42	26	29	19	52	6	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	1805	805	124	1949	870	85	89	75	83	87	74
Arrive On Green	0.03	0.51	0.51	0.07	0.55	0.55	0.05	0.05	0.05	0.05	0.05	0.05
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	34	1305	7	96	720	42	26	29	19	52	6	13
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.1	17.0	0.1	3.1	6.8	0.7	0.8	0.9	0.7	1.7	0.2	0.5
Cycle Q Clear(g_c), s	1.1	17.0	0.1	3.1	6.8	0.7	0.8	0.9	0.7	1.7	0.2	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	1805	805	124	1949	870	85	89	75	83	87	74
V/C Ratio(X)	0.66	0.72	0.01	0.77	0.37	0.05	0.31	0.33	0.25	0.63	0.07	0.18
Avail Cap(c_a), veh/h	360	2293	1023	360	2293	1023	606	637	539	600	630	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	11.4	7.2	27.2	7.6	6.2	27.3	27.4	27.3	27.8	27.1	27.2
Incr Delay (d2), s/veh	5.3	1.2	0.0	3.8	0.2	0.0	0.8	0.8	0.6	2.9	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.7	0.0	1.4	2.1	0.2	0.4	0.4	0.3	0.8	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	12.5	7.2	31.0	7.8	6.3	28.1	28.1	27.9	30.7	27.2	27.6
LnGrp LOS	C	B	A	C	A	A	C	C	C	C	C	C
Approach Vol, veh/h		1346			858			74			71	
Approach Delay, s/veh		13.0			10.3			28.1			29.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.7	8.1	35.8		7.7	5.7	38.3				
Change Period (Y+Rc), s		4.9	4.0	5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		20.0	12.0	38.3		20.2	12.0	38.3				
Max Q Clear Time (g_c+I1), s		3.7	5.1	19.0		2.9	3.1	8.8				
Green Ext Time (p_c), s		0.1	0.1	11.2		0.1	0.0	7.2				

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1282	96	30	523	53	116
Future Volume (veh/h)	1282	96	30	523	53	116
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1349	101	32	551	56	122
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1918	856	51	2387	217	193
Arrive On Green	0.54	0.54	0.03	0.67	0.12	0.12
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	1349	101	32	551	56	122
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	13.6	1.5	0.9	2.9	1.4	3.5
Cycle Q Clear(g_c), s	13.6	1.5	0.9	2.9	1.4	3.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1918	856	51	2387	217	193
V/C Ratio(X)	0.70	0.12	0.62	0.23	0.26	0.63
Avail Cap(c_a), veh/h	2566	1145	147	3226	588	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.3	5.5	23.3	3.1	19.3	20.2
Incr Delay (d2), s/veh	0.6	0.1	11.6	0.0	0.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.4	0.5	0.5	0.6	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.8	5.5	34.9	3.1	19.9	23.6
LnGrp LOS	A	A	C	A	B	C
Approach Vol, veh/h	1450			583	178	
Approach Delay, s/veh	8.6			4.9	22.5	
Approach LOS	A			A	C	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		10.9	6.4	31.2			37.6
Change Period (Y+Rc), s		5.0	5.0	5.0			5.0
Max Green Setting (Gmax), s		16.0	4.0	35.0			44.0
Max Q Clear Time (g_c+I1), s		5.5	2.9	15.6			4.9
Green Ext Time (p_c), s		0.4	0.0	10.5			4.2

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	699	617	494	389	35	331	1166	868	39	1067	31
Future Volume (veh/h)	81	699	617	494	389	35	331	1166	868	39	1067	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	736	494	520	409	31	348	1227	678	41	1123	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	979	437	514	957	72	416	1851	574	190	1517	471
Arrive On Green	0.09	0.28	0.28	0.10	0.29	0.29	0.12	0.36	0.36	0.05	0.30	0.30
Sat Flow, veh/h	3456	3554	1585	5023	3349	253	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	85	736	494	520	216	224	348	1227	678	41	1123	9
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1674	1777	1825	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.2	18.5	26.9	10.0	9.7	9.8	9.6	19.7	35.4	1.1	19.4	0.4
Cycle Q Clear(g_c), s	2.2	18.5	26.9	10.0	9.7	9.8	9.6	19.7	35.4	1.1	19.4	0.4
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	979	437	514	508	521	416	1851	574	190	1517	471
V/C Ratio(X)	0.27	0.75	1.13	1.01	0.43	0.43	0.84	0.66	1.18	0.22	0.74	0.02
Avail Cap(c_a), veh/h	354	979	437	514	508	521	460	1851	574	283	1589	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	32.3	35.4	43.8	28.4	28.4	42.0	26.1	31.1	44.1	30.9	24.3
Incr Delay (d2), s/veh	0.2	3.7	84.2	42.5	0.8	0.8	10.7	1.2	98.0	0.2	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.9	19.8	6.0	4.0	4.1	4.5	7.3	27.9	0.5	7.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.4	36.0	119.5	86.3	29.2	29.2	52.7	27.3	129.2	44.3	33.1	24.3
LnGrp LOS	D	D	F	F	C	C	D	C	F	D	C	C
Approach Vol, veh/h		1315			960			2253			1173	
Approach Delay, s/veh		67.8			60.1			61.9			33.5	
Approach LOS		E			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	41.4	14.0	32.9	15.8	35.0	13.0	33.9
Change Period (Y+Rc), s	4.0	6.0	4.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	35.4	10.0	* 27	13.0	30.4	10.0	26.6
Max Q Clear Time (g_c+I1), s	3.1	37.4	12.0	28.9	11.6	21.4	4.2	11.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	5.6	0.1	2.2

Intersection Summary	
HCM 6th Ctrl Delay	57.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	1558	822	69	112	18
Future Volume (veh/h)	7	1558	822	69	112	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	1640	865	0	118	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	27	2229	1864		273	
Arrive On Green	0.01	0.63	0.52	0.00	0.15	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	7	1640	865	0	118	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.2	14.5	7.0	0.0	2.7	0.0
Cycle Q Clear(g_c), s	0.2	14.5	7.0	0.0	2.7	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	27	2229	1864		273	
V/C Ratio(X)	0.26	0.74	0.46		0.43	
Avail Cap(c_a), veh/h	313	2653	1864		1017	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	22.2	5.9	6.8	0.0	17.5	0.0
Incr Delay (d2), s/veh	1.9	1.1	0.3	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.1	1.9	0.0	1.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.1	6.9	7.1	0.0	17.9	0.0
LnGrp LOS	C	A	A		B	
Approach Vol, veh/h		1647	865	A	118	A
Approach Delay, s/veh		7.0	7.1		17.9	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		34.6		11.0	4.7	29.9
Change Period (Y+Rc), s		6.0		4.0	4.0	* 6
Max Green Setting (Gmax), s		34.0		26.0	8.0	* 22
Max Q Clear Time (g_c+I1), s		16.5		4.7	2.2	9.0
Green Ext Time (p_c), s		12.0		0.2	0.0	5.8

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	1621	866	11	40	13
Future Volume (veh/h)	8	1621	866	11	40	13
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	8	1706	912	12	42	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	26	2412	2060	27	131	44
Arrive On Green	0.01	0.68	0.57	0.57	0.10	0.10
Sat Flow, veh/h	1781	3647	3685	47	1275	425
Grp Volume(v), veh/h	8	1706	451	473	57	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1862	1730	0
Q Serve(g_s), s	0.2	13.1	6.4	6.4	1.4	0.0
Cycle Q Clear(g_c), s	0.2	13.1	6.4	6.4	1.4	0.0
Prop In Lane	1.00			0.03	0.74	0.25
Lane Grp Cap(c), veh/h	26	2412	1019	1068	177	0
V/C Ratio(X)	0.30	0.71	0.44	0.44	0.32	0.00
Avail Cap(c_a), veh/h	482	2831	1019	1068	781	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.6	4.4	5.4	5.4	18.5	0.0
Incr Delay (d2), s/veh	2.4	0.9	0.5	0.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.1	1.6	1.6	0.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.0	5.3	5.9	5.9	18.8	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		1714	924		57	
Approach Delay, s/veh		5.4	5.9		18.8	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	35.8	8.5	4.7	31.1
Change Period (Y+Rc), s	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	35.3	20.0	12.0	19.3
Max Q Clear Time (g_c+I1), s	15.1	3.4	2.2	8.4
Green Ext Time (p_c), s	14.9	0.1	0.0	5.1

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	1691	870	13	61	38
Future Volume (veh/h)	34	1691	870	13	61	38
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	1780	916	14	64	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	97	2346	1879	830	239	213
Arrive On Green	0.05	0.66	0.53	0.53	0.13	0.13
Sat Flow, veh/h	1781	3647	3647	1570	1781	1585
Grp Volume(v), veh/h	36	1780	916	14	64	40
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1570	1781	1585
Q Serve(g_s), s	1.0	17.8	8.5	0.2	1.7	1.2
Cycle Q Clear(g_c), s	1.0	17.8	8.5	0.2	1.7	1.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	97	2346	1879	830	239	213
V/C Ratio(X)	0.37	0.76	0.49	0.02	0.27	0.19
Avail Cap(c_a), veh/h	239	2682	1931	853	684	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	6.0	7.8	5.8	20.2	20.0
Incr Delay (d2), s/veh	0.9	1.3	0.3	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.1	2.5	0.1	0.7	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.6	7.4	8.1	5.8	20.5	20.2
LnGrp LOS	C	A	A	A	C	C
Approach Vol, veh/h		1816	930		104	
Approach Delay, s/veh		7.7	8.1		20.3	
Approach LOS		A	A		C	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			41.1		11.0	6.8	34.2
Change Period (Y+Rc), s			6.7		4.0	4.0	6.7
Max Green Setting (Gmax), s			39.3		20.0	7.0	28.3
Max Q Clear Time (g_c+I1), s			19.8		3.7	3.0	10.5
Green Ext Time (p_c), s			14.6		0.2	0.0	6.9

Intersection Summary	
HCM 6th Ctrl Delay	8.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	1403	180	168	736	175	125	480	626	109	359	157
Future Volume (veh/h)	66	1403	180	168	736	175	125	480	626	109	359	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	69	1477	0	177	775	0	132	505	0	115	378	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	2003		438	2554		180	579		163	606	
Arrive On Green	0.03	0.44	0.00	0.14	0.56	0.00	0.06	0.18	0.00	0.05	0.19	0.00
Sat Flow, veh/h	3110	4595	1427	3110	4595	1427	3110	3198	1427	3110	3198	1427
Grp Volume(v), veh/h	69	1477	0	177	775	0	132	505	0	115	378	0
Grp Sat Flow(s),veh/h/ln	1555	1532	1427	1555	1532	1427	1555	1599	1427	1555	1599	1427
Q Serve(g_s), s	2.6	32.1	0.0	6.2	10.8	0.0	5.0	18.4	0.0	4.4	13.0	0.0
Cycle Q Clear(g_c), s	2.6	32.1	0.0	6.2	10.8	0.0	5.0	18.4	0.0	4.4	13.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	2003		438	2554		180	579		163	606	
V/C Ratio(X)	0.63	0.74		0.40	0.30		0.73	0.87		0.70	0.62	
Avail Cap(c_a), veh/h	233	2003		438	2554		207	648		259	701	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.1	28.1	0.0	47.0	14.2	0.0	55.6	47.8	0.0	55.9	44.7	0.0
Incr Delay (d2), s/veh	2.3	2.5	0.0	0.2	0.1	0.0	8.5	12.6	0.0	2.1	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	11.3	0.0	2.3	3.4	0.0	2.1	8.1	0.0	1.7	5.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.4	30.6	0.0	47.2	14.4	0.0	64.1	60.4	0.0	58.0	46.7	0.0
LnGrp LOS	E	C		D	B		E	E		E	D	
Approach Vol, veh/h		1546	A		952	A		637	A		493	A
Approach Delay, s/veh		31.9			20.5			61.2			49.4	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	27.4	22.6	58.0	10.9	28.5	8.2	72.4
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	10.0	* 24	14.0	* 52	8.0	26.3	9.0	57.3
Max Q Clear Time (g_c+I1), s	6.4	20.4	8.2	34.1	7.0	15.0	4.6	12.8
Green Ext Time (p_c), s	0.1	1.3	0.2	11.1	0.0	2.0	0.0	7.3

Intersection Summary	
HCM 6th Ctrl Delay	36.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2246	22	133	885	162	265
Future Volume (veh/h)	2246	22	133	885	162	265
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2364	23	140	932	171	279
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3011	29	163	3587	343	305
Arrive On Green	0.58	0.58	0.09	0.70	0.19	0.19
Sat Flow, veh/h	5382	51	1781	5274	1781	1585
Grp Volume(v), veh/h	1542	845	140	932	171	279
Grp Sat Flow(s),veh/h/ln	1702	1861	1781	1702	1781	1585
Q Serve(g_s), s	42.0	42.2	9.3	8.0	10.3	20.7
Cycle Q Clear(g_c), s	42.0	42.2	9.3	8.0	10.3	20.7
Prop In Lane		0.03	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1966	1075	163	3587	343	305
V/C Ratio(X)	0.78	0.79	0.86	0.26	0.50	0.91
Avail Cap(c_a), veh/h	1966	1075	163	3587	373	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	19.6	53.7	6.5	43.3	47.5
Incr Delay (d2), s/veh	3.2	5.8	32.5	0.2	0.4	26.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.4	17.7	5.5	2.4	4.5	10.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.8	25.4	86.2	6.7	43.7	73.9
LnGrp LOS	C	C	F	A	D	E
Approach Vol, veh/h	2387			1072	450	
Approach Delay, s/veh	23.7			17.1	62.4	
Approach LOS	C			B	E	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		28.0	15.0	75.0			90.0
Change Period (Y+Rc), s		4.9	4.0	5.7			5.7
Max Green Setting (Gmax), s		25.1	11.0	69.3			84.3
Max Q Clear Time (g_c+I1), s		22.7	11.3	44.2			10.0
Green Ext Time (p_c), s		0.4	0.0	24.9			32.4

Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	499	1838	93	501	797	111	67	1268	553	93	549	118
Future Volume (veh/h)	499	1838	93	501	797	111	67	1268	553	93	549	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	525	1935	0	527	839	0	71	1335	0	98	578	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	814	2315		569	1702		110	1420		115	1798	
Arrive On Green	0.24	0.45	0.00	0.11	0.33	0.00	0.03	0.28	0.00	0.03	0.28	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	5106	1585	3456	6434	1585
Grp Volume(v), veh/h	525	1935	0	527	839	0	71	1335	0	98	578	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1702	1585	1728	1609	1585
Q Serve(g_s), s	20.5	50.0	0.0	15.6	19.7	0.0	3.0	38.3	0.0	4.2	10.7	0.0
Cycle Q Clear(g_c), s	20.5	50.0	0.0	15.6	19.7	0.0	3.0	38.3	0.0	4.2	10.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	814	2315		569	1702		110	1420		115	1798	
V/C Ratio(X)	0.65	0.84		0.93	0.49		0.64	0.94		0.85	0.32	
Avail Cap(c_a), veh/h	814	2315		569	1702		138	1430		115	1798	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.7	36.1	0.0	65.9	39.9	0.0	71.8	52.9	0.0	72.1	42.8	0.0
Incr Delay (d2), s/veh	1.4	3.8	0.0	20.9	1.0	0.0	3.0	12.4	0.0	40.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	20.7	0.0	7.6	8.3	0.0	1.4	17.6	0.0	2.5	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.1	39.8	0.0	86.8	40.9	0.0	74.8	65.3	0.0	112.5	42.9	0.0
LnGrp LOS	D	D		F	D		E	E		F	D	
Approach Vol, veh/h		2460	A		1366	A		1406	A		676	A
Approach Delay, s/veh		42.7			58.6			65.8			53.0	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	48.1	23.0	73.8	8.8	48.3	41.1	55.7
Change Period (Y+Rc), s	4.0	* 6.4	6.0	5.7	4.0	6.4	5.7	5.7
Max Green Setting (Gmax), s	5.0	* 42	17.0	64.3	6.0	40.6	31.6	50.0
Max Q Clear Time (g_c+I1), s	6.2	40.3	17.6	52.0	5.0	12.7	22.5	21.7
Green Ext Time (p_c), s	0.0	1.4	0.0	10.9	0.0	4.9	0.7	9.5

Intersection Summary	
HCM 6th Ctrl Delay	53.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	2032	86	159	1039	127	127	960	363	78	471	279
Future Volume (veh/h)	109	2032	86	159	1039	127	127	960	363	78	471	279
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	2139	38	167	1094	0	134	1011	0	82	496	113
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	2145	666	351	3144		608	1009		156	701	218
Arrive On Green	0.06	0.56	0.56	0.10	0.49	0.00	0.18	0.28	0.00	0.05	0.14	0.14
Sat Flow, veh/h	3456	5106	1585	3456	6434	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	115	2139	38	167	1094	0	134	1011	0	82	496	113
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1609	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	4.9	62.6	1.6	6.8	15.7	0.0	5.0	42.6	0.0	3.5	13.9	8.6
Cycle Q Clear(g_c), s	4.9	62.6	1.6	6.8	15.7	0.0	5.0	42.6	0.0	3.5	13.9	8.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	2145	666	351	3144		608	1009		156	701	218
V/C Ratio(X)	0.72	1.00	0.06	0.48	0.35		0.22	1.00		0.53	0.71	0.52
Avail Cap(c_a), veh/h	276	2145	666	351	3144		608	1009		276	1450	450
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.4	33.0	19.6	63.6	23.6	0.0	53.0	53.7	0.0	70.0	61.8	45.1
Incr Delay (d2), s/veh	2.3	18.8	0.2	0.4	0.1	0.0	0.1	28.7	0.0	1.0	2.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	25.7	0.6	3.0	5.9	0.0	2.1	22.5	0.0	1.5	6.1	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.7	51.9	19.7	64.0	23.7	0.0	53.1	82.4	0.0	71.1	63.9	48.1
LnGrp LOS	E	D	B	E	C		D	F		E	E	D
Approach Vol, veh/h		2292			1261	A		1145	A		691	
Approach Delay, s/veh		52.3			29.1			79.0			62.2	
Approach LOS		D			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	49.0	21.2	69.0	32.8	27.0	10.9	79.3
Change Period (Y+Rc), s	4.0	6.4	6.0	6.0	6.4	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	12.0	42.6	10.0	63.0	12.0	* 43	12.0	63.0
Max Q Clear Time (g_c+I1), s	5.5	44.6	8.8	64.6	7.0	15.9	6.9	17.7
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.1	4.7	0.1	10.1

Intersection Summary	
HCM 6th Ctrl Delay	53.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	2364	32	40	1201	77	46	38	34	91	3	26
Future Volume (veh/h)	28	2364	32	40	1201	77	46	38	34	91	3	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	2488	0	42	1264	0	48	40	0	96	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	2938		348	3887		62	53		117	111	
Arrive On Green	0.04	1.00	0.00	0.20	0.76	0.00	0.03	0.03	0.00	0.07	0.06	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	29	2488	0	42	1264	0	48	40	0	96	3	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.4	0.0	0.0	2.9	11.8	0.0	4.0	3.2	0.0	8.0	0.2	0.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.9	11.8	0.0	4.0	3.2	0.0	8.0	0.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	2938		348	3887		62	53		117	111	
V/C Ratio(X)	0.79	0.85		0.12	0.33		0.78	0.75		0.82	0.03	
Avail Cap(c_a), veh/h	143	2938		348	3887		143	237		178	263	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.46	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.6	0.0	0.0	49.7	5.7	0.0	71.8	72.3	0.0	69.2	66.5	0.0
Incr Delay (d2), s/veh	6.2	1.5	0.0	0.1	0.1	0.0	7.5	14.6	0.0	9.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.4	0.0	1.3	3.6	0.0	2.0	1.8	0.0	4.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.8	1.5	0.0	49.8	5.8	0.0	79.3	86.9	0.0	78.8	66.6	0.0
LnGrp LOS	E	A		D	A		E	F		E	E	
Approach Vol, veh/h		2517	A		1306	A		88	A		99	A
Approach Delay, s/veh		2.4			7.2			82.8			78.4	
Approach LOS		A			A			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	9.2	35.0	92.0	9.2	13.8	7.1	119.9
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	15.0	* 19	12.0	* 86	12.0	21.1	12.0	86.3
Max Q Clear Time (g_c+I1), s	10.0	5.2	4.9	2.0	6.0	2.2	4.4	13.8
Green Ext Time (p_c), s	0.0	0.1	0.0	69.0	0.0	0.0	0.0	22.0

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1336	1092	1083	831	165	549	1073	483	164	1025	36
Future Volume (veh/h)	29	1336	1092	1083	831	165	549	1073	483	164	1025	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	1406	0	1140	875	0	578	1129	0	173	1079	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	1113		829	2529		553	1308		228	919	
Arrive On Green	0.05	0.31	0.00	0.24	0.50	0.00	0.05	0.08	0.00	0.07	0.18	0.00
Sat Flow, veh/h	5023	3554	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	31	1406	0	1140	875	0	578	1129	0	173	1079	0
Grp Sat Flow(s),veh/h/ln	1674	1777	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.9	47.0	0.0	36.0	15.7	0.0	24.0	32.8	0.0	7.4	27.0	0.0
Cycle Q Clear(g_c), s	0.9	47.0	0.0	36.0	15.7	0.0	24.0	32.8	0.0	7.4	27.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	1113		829	2529		553	1308		228	919	
V/C Ratio(X)	0.13	1.26		1.37	0.35		1.05	0.86		0.76	1.17	
Avail Cap(c_a), veh/h	301	1113		829	2529		553	1308		422	919	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.78	0.78	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	68.6	51.5	0.0	57.0	23.1	0.0	71.0	66.1	0.0	68.9	61.5	0.0
Incr Delay (d2), s/veh	0.1	125.5	0.0	174.5	0.3	0.0	50.7	6.4	0.0	7.4	89.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	39.7	0.0	35.4	6.2	0.0	15.1	15.8	0.0	3.5	19.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.7	177.0	0.0	231.5	23.3	0.0	121.7	72.5	0.0	76.3	151.3	0.0
LnGrp LOS	E	F		F	C		F	E		E	F	
Approach Vol, veh/h		1437	A		2015	A		1707	A		1252	A
Approach Delay, s/veh		174.7			141.1			89.1			141.0	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	46.4	40.0	53.0	27.0	35.0	13.0	80.0
Change Period (Y+Rc), s	5.7	8.0	4.0	6.0	3.0	* 8	6.0	* 5.7
Max Green Setting (Gmax), s	18.3	25.0	36.0	47.0	24.0	* 27	9.0	* 74
Max Q Clear Time (g_c+I1), s	9.4	34.8	38.0	49.0	26.0	29.0	2.9	17.7
Green Ext Time (p_c), s	0.5	0.0	0.0	0.0	0.0	0.0	0.0	12.1

Intersection Summary	
HCM 6th Ctrl Delay	134.8
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	4	153	55	15	49	211	1608	112	319	1825	186
Future Volume (veh/h)	222	4	153	55	15	49	211	1608	112	319	1825	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	234	4	161	58	16	52	222	1693	118	336	1921	196
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	396	215	182	164	89	75	274	2640	184	914	3193	991
Arrive On Green	0.11	0.11	0.11	0.05	0.05	0.05	0.08	0.43	0.43	0.26	0.63	0.63
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	6187	431	3456	5106	1585
Grp Volume(v), veh/h	234	4	161	58	16	52	222	1320	491	336	1921	196
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1609	1793	1728	1702	1585
Q Serve(g_s), s	9.6	0.3	15.0	2.4	1.2	4.8	9.5	32.4	32.4	11.9	33.9	7.9
Cycle Q Clear(g_c), s	9.6	0.3	15.0	2.4	1.2	4.8	9.5	32.4	32.4	11.9	33.9	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	396	215	182	164	89	75	274	2059	765	914	3193	991
V/C Ratio(X)	0.59	0.02	0.89	0.35	0.18	0.69	0.81	0.64	0.64	0.37	0.60	0.20
Avail Cap(c_a), veh/h	415	224	190	392	212	180	392	2059	765	914	3193	991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.14	0.14	0.14	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.0	58.9	65.4	69.2	68.7	70.4	68.0	33.9	33.9	44.9	16.9	12.0
Incr Delay (d2), s/veh	2.0	0.0	34.7	1.3	1.0	10.8	1.2	0.2	0.6	0.2	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.1	7.8	1.1	0.6	2.2	4.2	12.4	13.8	5.1	12.5	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.1	58.9	100.1	70.5	69.6	81.2	69.2	34.2	34.5	45.2	17.2	12.1
LnGrp LOS	E	E	F	E	E	F	E	C	C	D	B	B
Approach Vol, veh/h		399			126			2033			2453	
Approach Delay, s/veh		79.2			74.8			38.1			20.6	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	46.7	70.0		21.2	15.9	100.8		12.1
Change Period (Y+Rc), s	7.0	6.0		4.0	4.0	* 7		5.0
Max Green Setting (Gmax), s	29.0	64.0		18.0	17.0	* 79		17.0
Max Q Clear Time (g_c+I1), s	13.9	34.4		17.0	11.5	35.9		6.8
Green Ext Time (p_c), s	1.2	27.4		0.2	0.4	40.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	33.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1147	10	0	1825	560	0	0	0	131	0	529
Future Volume (veh/h)	0	1147	10	0	1825	560	0	0	0	131	0	529
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2067	2067	0	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	0	1207	11	0	1921	0				138	0	557
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	3492	1084	0	3161					810	0	654
Arrive On Green	0.00	0.62	0.62	0.00	1.00	0.00				0.23	0.00	0.23
Sat Flow, veh/h	0	5828	1751	0	5274	1585				3456	0	2790
Grp Volume(v), veh/h	0	1207	11	0	1921	0				138	0	557
Grp Sat Flow(s),veh/h/ln	0	1881	1751	0	1702	1585				1728	0	1395
Q Serve(g_s), s	0.0	7.8	0.2	0.0	0.0	0.0				2.4	0.0	14.3
Cycle Q Clear(g_c), s	0.0	7.8	0.2	0.0	0.0	0.0				2.4	0.0	14.3
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3492	1084	0	3161					810	0	654
V/C Ratio(X)	0.00	0.35	0.01	0.00	0.61					0.17	0.00	0.85
Avail Cap(c_a), veh/h	0	3492	1084	0	3161					1000	0	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.77	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.9	5.5	0.0	0.0	0.0				22.9	0.0	27.5
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.3	0.0				0.0	0.0	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.3	0.1	0.0	0.1	0.0				0.9	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.2	5.5	0.0	0.3	0.0				22.9	0.0	33.7
LnGrp LOS	A	A	A	A	A					C	A	C
Approach Vol, veh/h		1218			1921	A					695	
Approach Delay, s/veh		7.2			0.3						31.6	
Approach LOS		A			A						C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.1		22.9		52.1
Change Period (Y+Rc), s		5.7		5.3		5.7
Max Green Setting (Gmax), s		42.3		21.7		42.3
Max Q Clear Time (g_c+I1), s		9.8		16.3		2.0
Green Ext Time (p_c), s		11.6		1.3		20.8

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	911	367	0	1804	581	402
Future Volume (veh/h)	911	367	0	1804	581	402
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	2067	2067	0	1870	1870	1870
Adj Flow Rate, veh/h	959	0	0	1899	612	423
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	3408		0	3084	958	532
Arrive On Green	1.00	0.00	0.00	0.60	0.19	0.19
Sat Flow, veh/h	5828	1751	0	5443	5023	2790
Grp Volume(v), veh/h	959	0	0	1899	612	423
Grp Sat Flow(s),veh/h/ln	1881	1751	0	1702	1674	1395
Q Serve(g_s), s	0.0	0.0	0.0	17.6	8.4	10.8
Cycle Q Clear(g_c), s	0.0	0.0	0.0	17.6	8.4	10.8
Prop In Lane		1.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	3408		0	3084	958	532
V/C Ratio(X)	0.28		0.00	0.62	0.64	0.79
Avail Cap(c_a), veh/h	3408		0	3084	1119	621
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.4	28.0	28.9
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.9	0.6	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	5.0	3.3	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.1	0.0	0.0	10.3	28.5	34.1
LnGrp LOS	A		A	B	C	C
Approach Vol, veh/h	959	A		1899	1035	
Approach Delay, s/veh	0.1			10.3	30.8	
Approach LOS	A			B	C	

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		51.0				51.0	21.6
Change Period (Y+Rc), s		5.7				5.7	7.3
Max Green Setting (Gmax), s		29.3				45.3	16.7
Max Q Clear Time (g_c+I1), s		2.0				19.6	12.8
Green Ext Time (p_c), s		6.8				17.5	1.5

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	132	271	354	214	34	325	624	309	93	1265	97
Future Volume (veh/h)	63	132	271	354	214	34	325	624	309	93	1265	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	2067	2067	2067	1870	1870	1870
Adj Flow Rate, veh/h	66	139	39	373	225	7	342	657	222	98	1332	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	209	93	424	538	240	398	2500	991	142	1882	584
Arrive On Green	0.03	0.06	0.06	0.12	0.15	0.15	0.10	0.44	0.44	0.04	0.37	0.37
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3818	5642	1751	3456	5106	1585
Grp Volume(v), veh/h	66	139	39	373	225	7	342	657	222	98	1332	45
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1909	1881	1751	1728	1702	1585
Q Serve(g_s), s	2.8	5.7	2.1	15.9	8.6	0.6	13.2	11.0	9.4	4.2	33.4	1.5
Cycle Q Clear(g_c), s	2.8	5.7	2.1	15.9	8.6	0.6	13.2	11.0	9.4	4.2	33.4	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	209	93	424	538	240	398	2500	991	142	1882	584
V/C Ratio(X)	0.63	0.66	0.42	0.88	0.42	0.03	0.86	0.26	0.22	0.69	0.71	0.08
Avail Cap(c_a), veh/h	276	623	278	599	964	430	585	2500	991	276	1882	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.9	69.1	23.8	64.7	57.7	54.3	66.1	26.3	16.2	71.0	40.4	8.5
Incr Delay (d2), s/veh	2.3	4.7	3.9	8.2	0.8	0.1	6.0	0.3	0.5	2.2	2.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.8	1.5	7.5	4.0	0.2	6.7	4.9	4.0	1.9	14.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.2	73.9	27.7	72.9	58.5	54.3	72.1	26.6	16.7	73.2	42.7	8.7
LnGrp LOS	E	E	C	E	E	D	E	C	B	E	D	A
Approach Vol, veh/h		244			605			1221			1475	
Approach Delay, s/veh		66.6			67.3			37.5			43.7	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	72.2	22.4	14.5	21.3	61.0	8.6	28.4
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	* 5.7
Max Green Setting (Gmax), s	12.0	66.3	26.0	26.3	23.0	* 55	12.0	* 41
Max Q Clear Time (g_c+I1), s	6.2	13.0	17.9	7.7	15.2	35.4	4.8	10.6
Green Ext Time (p_c), s	0.1	10.4	0.5	1.1	0.4	13.0	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	47.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	18	50	137	12	34	13	477	146	79	1328	3
Future Volume (veh/h)	9	18	50	137	12	34	13	477	146	79	1328	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	9	19	53	144	13	36	14	502	154	83	1398	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	23	65	168	62	173	15	2818	875	102	2135	952
Arrive On Green	0.01	0.06	0.06	0.10	0.16	0.16	0.01	0.61	0.61	0.06	0.67	0.67
Sat Flow, veh/h	1603	392	1094	1603	394	1092	1603	4595	1427	1603	3198	1427
Grp Volume(v), veh/h	9	0	72	144	0	49	14	502	154	83	1398	3
Grp Sat Flow(s),veh/h/ln	1603	0	1486	1603	0	1487	1603	1532	1427	1603	1599	1427
Q Serve(g_s), s	0.7	0.0	5.7	10.6	0.0	3.4	1.0	5.7	5.6	6.1	31.0	0.1
Cycle Q Clear(g_c), s	0.7	0.0	5.7	10.6	0.0	3.4	1.0	5.7	5.6	6.1	31.0	0.1
Prop In Lane	1.00		0.74	1.00		0.73	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	0	89	168	0	235	15	2818	875	102	2135	952
V/C Ratio(X)	0.87	0.00	0.81	0.86	0.00	0.21	0.92	0.18	0.18	0.81	0.65	0.00
Avail Cap(c_a), veh/h	40	0	223	227	0	396	40	2818	875	160	2135	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.6	0.0	55.8	52.8	0.0	44.0	59.4	10.1	10.1	55.5	11.8	6.6
Incr Delay (d2), s/veh	49.5	0.0	14.0	16.5	0.0	0.4	47.7	0.1	0.4	7.8	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	2.5	5.0	0.0	1.3	0.6	1.9	1.8	2.7	10.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.0	0.0	69.8	69.3	0.0	44.4	107.1	10.2	10.5	63.3	12.7	6.6
LnGrp LOS	F	A	E	E	A	D	F	B	B	E	B	A
Approach Vol, veh/h		81			193			670			1484	
Approach Delay, s/veh		74.2			63.0			12.3			15.5	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	79.6	16.6	12.1	5.1	86.1	4.8	24.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	12.0	54.0	17.0	18.0	3.0	63.0	3.0	32.0
Max Q Clear Time (g_c+I1), s	8.1	7.7	12.6	7.7	3.0	33.0	2.7	5.4
Green Ext Time (p_c), s	0.0	6.4	0.1	0.1	0.0	15.8	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	7	23	60	2	73	7	1156	46	41	1324	2
Future Volume (veh/h)	9	7	23	60	2	73	7	1156	46	41	1324	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	7	24	63	2	77	7	1217	48	43	1394	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	104	47	91	252	112	13	1835	570	68	1993	619
Arrive On Green	0.01	0.03	0.03	0.05	0.07	0.07	0.01	0.36	0.36	0.04	0.39	0.39
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	9	7	24	63	2	77	7	1217	48	43	1394	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.2	0.1	0.6	1.3	0.0	1.8	0.2	7.7	0.8	0.9	8.8	0.0
Cycle Q Clear(g_c), s	0.2	0.1	0.6	1.3	0.0	1.8	0.2	7.7	0.8	0.9	8.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	104	47	91	252	112	13	1835	570	68	1993	619
V/C Ratio(X)	0.53	0.07	0.52	0.69	0.01	0.69	0.52	0.66	0.08	0.63	0.70	0.00
Avail Cap(c_a), veh/h	511	2967	1324	511	2967	1324	511	2132	662	511	2132	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	18.1	18.3	17.9	16.6	17.4	18.9	10.3	8.1	18.2	9.8	7.1
Incr Delay (d2), s/veh	23.2	0.3	8.6	9.1	0.0	7.2	28.4	0.6	0.1	9.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.7	0.0	0.8	0.2	2.2	0.2	0.5	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.1	18.4	26.9	27.0	16.6	24.6	47.3	11.0	8.2	27.3	10.8	7.1
LnGrp LOS	D	B	C	C	B	C	D	B	A	C	B	A
Approach Vol, veh/h		40			142			1272			1439	
Approach Delay, s/veh		28.8			25.5			11.0			11.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	18.8	7.0	6.1	5.3	20.0	5.4	7.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	2.9	9.7	3.3	2.6	2.2	10.8	2.2	3.8
Green Ext Time (p_c), s	0.0	4.1	0.1	0.1	0.0	3.8	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	115	3	2	80	8	6	1	0	34	5	1
Future Volume (veh/h)	1	115	3	2	80	8	6	1	0	34	5	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	121	3	2	84	8	6	1	0	36	5	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	417	186	5	421	188	12	5	5	522	538	456
Arrive On Green	0.00	0.12	0.12	0.00	0.12	0.12	0.01	0.00	0.00	0.29	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	1	121	3	2	84	8	6	1	0	36	5	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	1.1	0.1	0.0	0.7	0.2	0.1	0.0	0.0	0.5	0.1	0.0
Cycle Q Clear(g_c), s	0.0	1.1	0.1	0.0	0.7	0.2	0.1	0.0	0.0	0.5	0.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	417	186	5	421	188	12	5	5	522	538	456
V/C Ratio(X)	0.19	0.29	0.02	0.38	0.20	0.04	0.52	0.18	0.00	0.07	0.01	0.00
Avail Cap(c_a), veh/h	261	1771	790	261	1823	813	261	1480	1255	574	1809	1533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	13.8	13.3	17.0	13.6	13.3	16.9	17.0	0.0	8.7	8.7	8.7
Incr Delay (d2), s/veh	16.9	0.4	0.0	40.4	0.2	0.1	31.8	15.2	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.0	0.1	0.2	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	14.1	13.4	57.4	13.8	13.4	48.7	32.2	0.0	8.8	8.7	8.7
LnGrp LOS	C	B	B	E	B	B	D	C	A	A	A	A
Approach Vol, veh/h		125			94			7			42	
Approach Delay, s/veh		14.3			14.7			46.3			8.7	
Approach LOS		B			B			D			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	5.0	5.1	9.0	5.2	14.8	5.0	9.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	* 5
Max Green Setting (Gmax), s	11.0	27.0	5.0	17.0	5.0	33.0	5.0	* 18
Max Q Clear Time (g_c+I1), s	2.5	2.0	2.0	3.1	2.1	2.1	2.0	2.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	120	18	168	53	96	10	951	240	96	1150	9
Future Volume (veh/h)	41	120	18	168	53	96	10	951	240	96	1150	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	126	19	177	56	101	11	1001	253	101	1211	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	248	111	221	568	253	20	1991	618	129	2305	715
Arrive On Green	0.03	0.07	0.07	0.12	0.16	0.16	0.01	0.39	0.39	0.07	0.45	0.45
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	43	126	19	177	56	101	11	1001	253	101	1211	9
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.4	2.0	0.7	5.7	0.8	3.4	0.4	8.8	6.8	3.3	10.1	0.2
Cycle Q Clear(g_c), s	1.4	2.0	0.7	5.7	0.8	3.4	0.4	8.8	6.8	3.3	10.1	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	61	248	111	221	568	253	20	1991	618	129	2305	715
V/C Ratio(X)	0.70	0.51	0.17	0.80	0.10	0.40	0.55	0.50	0.41	0.78	0.53	0.01
Avail Cap(c_a), veh/h	181	1924	858	301	2165	965	121	2393	743	151	2480	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	26.5	25.9	25.2	21.2	22.3	29.1	13.7	13.1	26.9	11.7	8.9
Incr Delay (d2), s/veh	5.4	0.6	0.3	7.2	0.0	0.4	8.6	0.5	1.2	16.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.8	0.2	2.7	0.3	1.2	0.2	3.1	2.3	1.9	3.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	27.1	26.2	32.4	21.2	22.7	37.7	14.2	14.3	43.7	12.2	9.0
LnGrp LOS	C	C	C	C	C	C	D	B	B	D	B	A
Approach Vol, veh/h		188			334			1265			1321	
Approach Delay, s/veh		28.5			27.6			14.4			14.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	28.3	12.3	9.1	5.7	32.0	7.0	14.4
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	5.0	27.7	10.0	32.0	4.0	28.7	6.0	36.0
Max Q Clear Time (g_c+I1), s	5.3	10.8	7.7	4.0	2.4	12.1	3.4	5.4
Green Ext Time (p_c), s	0.0	12.3	0.1	0.5	0.0	12.4	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	484	0	2	280	0	46	0	4	0	0	1
Future Volume (veh/h)	2	484	0	2	280	0	46	0	4	0	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	509	0	2	295	0	48	0	4	0	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	965	430	5	965	430	76	559	474	5	213	181
Arrive On Green	0.00	0.27	0.00	0.00	0.27	0.00	0.04	0.00	0.30	0.00	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	2	509	0	2	295	0	48	0	4	0	0	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	4.3	0.0	0.0	2.3	0.0	0.9	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.3	0.0	0.0	2.3	0.0	0.9	0.0	0.1	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	965	430	5	965	430	76	559	474	5	213	181
V/C Ratio(X)	0.39	0.53	0.00	0.39	0.31	0.00	0.63	0.00	0.01	0.00	0.00	0.01
Avail Cap(c_a), veh/h	203	2632	1174	203	2632	1174	304	1652	1400	203	1545	1310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	17.5	10.9	0.0	17.5	10.2	0.0	16.5	0.0	8.6	0.0	0.0	13.8
Incr Delay (d2), s/veh	43.1	0.4	0.0	43.1	0.2	0.0	8.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.3	0.0	0.1	0.7	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.5	11.3	0.0	60.5	10.3	0.0	24.9	0.0	8.7	0.0	0.0	13.8
LnGrp LOS	E	B	A	E	B	A	C	A	A	A	A	B
Approach Vol, veh/h		511			297			52			1	
Approach Delay, s/veh		11.5			10.7			23.7			13.8	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	15.5	5.1	14.5	6.5	9.0	5.1	14.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	31.0	4.0	26.0	6.0	29.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.0	6.3	2.9	2.0	2.0	4.3
Green Ext Time (p_c), s	0.0	0.0	0.0	3.3	0.0	0.0	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	498	66	8	180	4	79	35	28	5	103	58
Future Volume (veh/h)	35	498	66	8	180	4	79	35	28	5	103	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	524	69	8	189	4	83	37	29	5	108	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	939	419	15	886	395	114	359	304	10	249	211
Arrive On Green	0.02	0.26	0.26	0.01	0.25	0.25	0.06	0.19	0.19	0.01	0.13	0.13
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	37	524	69	8	189	4	83	37	29	5	108	61
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.7	4.3	1.1	0.2	1.4	0.1	1.6	0.6	0.5	0.1	1.8	1.2
Cycle Q Clear(g_c), s	0.7	4.3	1.1	0.2	1.4	0.1	1.6	0.6	0.5	0.1	1.8	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	939	419	15	886	395	114	359	304	10	249	211
V/C Ratio(X)	0.88	0.56	0.16	0.52	0.21	0.01	0.73	0.10	0.10	0.52	0.43	0.29
Avail Cap(c_a), veh/h	236	1726	770	236	1726	770	236	1459	1237	236	1459	1237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	10.8	9.6	16.8	10.1	9.6	15.6	11.3	11.3	16.8	13.5	13.3
Incr Delay (d2), s/veh	40.0	0.5	0.2	25.2	0.1	0.0	8.6	0.1	0.1	36.9	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.3	0.3	0.2	0.4	0.0	0.8	0.2	0.2	0.1	0.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	11.3	9.8	41.9	10.2	9.6	24.2	11.4	11.4	53.7	14.7	14.0
LnGrp LOS	E	B	A	D	B	A	C	B	B	D	B	B
Approach Vol, veh/h		630			201			149			174	
Approach Delay, s/veh		13.8			11.5			18.5			15.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	11.0	4.8	13.5	6.7	9.0	5.3	13.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	4.5	26.5	4.5	16.5	4.5	26.5	4.5	16.5
Max Q Clear Time (g_c+I1), s	2.1	2.6	2.2	6.3	3.6	3.8	2.7	3.4
Green Ext Time (p_c), s	0.0	0.2	0.0	2.7	0.0	0.7	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	634	7	13	191	0	19	3	110	0	2	17
Future Volume (veh/h)	13	634	7	13	191	0	19	3	110	0	2	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	667	7	14	201	0	20	3	116	0	2	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	26	1191	531	26	1191	531	36	480	406	5	196	167
Arrive On Green	0.01	0.34	0.34	0.01	0.34	0.00	0.02	0.26	0.26	0.00	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	14	667	7	14	201	0	20	3	116	0	2	18
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	5.8	0.1	0.3	1.5	0.0	0.4	0.0	2.2	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.3	5.8	0.1	0.3	1.5	0.0	0.4	0.0	2.2	0.0	0.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	26	1191	531	26	1191	531	36	480	406	5	196	167
V/C Ratio(X)	0.54	0.56	0.01	0.54	0.17	0.00	0.56	0.01	0.29	0.00	0.01	0.11
Avail Cap(c_a), veh/h	187	3080	1374	187	3080	1374	234	1425	1207	187	1375	1166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	10.4	8.5	18.6	8.9	0.0	18.5	10.5	11.4	0.0	15.3	15.4
Incr Delay (d2), s/veh	16.6	0.4	0.0	16.6	0.1	0.0	13.0	0.0	0.4	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.8	0.0	0.2	0.5	0.0	0.3	0.0	0.7	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	10.8	8.5	35.3	9.0	0.0	31.5	10.5	11.7	0.0	15.3	15.7
LnGrp LOS	D	B	A	D	A	A	C	B	B	A	B	B
Approach Vol, veh/h		688			215			139			20	
Approach Delay, s/veh		11.2			10.7			14.6			15.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	14.8	5.6	17.8	5.8	9.0	5.6	17.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	29.0	4.0	33.0	5.0	28.0	4.0	33.0
Max Q Clear Time (g_c+I1), s	0.0	4.2	2.3	7.8	2.4	2.4	2.3	3.5
Green Ext Time (p_c), s	0.0	0.3	0.0	4.9	0.0	0.0	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	606	97	93	177	3	19	40	30	18	97	8
Future Volume (veh/h)	41	606	97	93	177	3	19	40	30	18	97	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	638	102	98	186	3	20	42	32	19	102	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	1308	583	127	1428	637	35	200	170	34	199	168
Arrive On Green	0.04	0.37	0.37	0.07	0.40	0.40	0.02	0.11	0.11	0.02	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	43	638	102	98	186	3	20	42	32	19	102	8
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.0	5.9	1.9	2.3	1.4	0.0	0.5	0.9	0.8	0.5	2.2	0.2
Cycle Q Clear(g_c), s	1.0	5.9	1.9	2.3	1.4	0.0	0.5	0.9	0.8	0.5	2.2	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	1308	583	127	1428	637	35	200	170	34	199	168
V/C Ratio(X)	0.65	0.49	0.17	0.77	0.13	0.00	0.57	0.21	0.19	0.56	0.51	0.05
Avail Cap(c_a), veh/h	476	2215	988	476	2215	988	476	718	608	476	718	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	10.5	9.2	19.6	8.1	7.7	20.9	17.5	17.5	20.9	18.2	17.3
Incr Delay (d2), s/veh	10.0	0.6	0.3	9.6	0.1	0.0	13.6	0.5	0.5	14.0	2.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.9	0.6	1.2	0.4	0.0	0.3	0.4	0.3	0.3	1.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	11.1	9.5	29.2	8.2	7.7	34.5	18.0	18.0	34.9	20.2	17.4
LnGrp LOS	C	B	A	C	A	A	C	B	B	C	C	B
Approach Vol, veh/h		783			287			94			129	
Approach Delay, s/veh		11.9			15.4			21.5			22.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	9.1	7.6	21.0	5.3	9.1	6.1	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	5.2	4.5	4.5	4.5	5.2
Max Green Setting (Gmax), s	11.5	16.5	11.5	26.8	11.5	16.5	11.5	26.8
Max Q Clear Time (g_c+I1), s	2.5	2.9	4.3	7.9	2.5	4.2	3.0	3.4
Green Ext Time (p_c), s	0.0	0.2	0.1	7.9	0.0	0.3	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	666	0	43	0	0	130	25	1587	9	347	1544	235
Future Volume (veh/h)	666	0	43	0	0	130	25	1587	9	347	1544	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	701	0	45	0	0	137	26	1671	9	365	1625	247
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	836	0	0	2	0	0	37	1888	586	410	2957	918
Arrive On Green	0.24	0.00	0.00	0.00	0.00	0.00	0.02	0.37	0.37	0.23	0.58	0.58
Sat Flow, veh/h	3456	701		1781	0		1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	701	36.5		0	0.0		26	1671	9	365	1625	247
Grp Sat Flow(s),veh/h/ln	1728	D		1781			1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	18.3			0.0			1.4	29.1	0.3	18.8	18.6	7.4
Cycle Q Clear(g_c), s	18.3			0.0			1.4	29.1	0.3	18.8	18.6	7.4
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	836			2			37	1888	586	410	2957	918
V/C Ratio(X)	0.84			0.00			0.70	0.89	0.02	0.89	0.55	0.27
Avail Cap(c_a), veh/h	1493			75			113	1937	601	713	3659	1136
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			0.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2			0.0			46.2	28.0	19.0	35.3	12.3	10.0
Incr Delay (d2), s/veh	2.3			0.0			20.9	5.2	0.0	7.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8			0.0			0.8	12.3	0.1	8.8	6.6	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5			0.0			67.1	33.3	19.0	42.6	12.5	10.1
LnGrp LOS	D			A			E	C	B	D	B	B
Approach Vol, veh/h								1706			2237	
Approach Delay, s/veh								33.7			17.1	
Approach LOS								C			B	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	26.9	40.1	0.0	7.0	59.9	28.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	38.0	36.0	4.0	6.0	68.0	41.0
Max Q Clear Time (g_c+I1), s	20.8	31.1	0.0	3.4	20.6	20.3
Green Ext Time (p_c), s	1.0	4.0	0.0	0.0	20.9	2.6

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1206	42	29	1228	12	0	9	2	104	21	19
Future Volume (veh/h)	8	1206	42	29	1228	12	0	9	2	104	21	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	1269	44	31	1293	13	0	9	2	109	22	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	1996	620	50	2097	651	4	156	133	141	500	423
Arrive On Green	0.01	0.39	0.39	0.03	0.41	0.41	0.00	0.08	0.08	0.08	0.27	0.27
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	8	1269	44	31	1293	13	0	9	2	109	22	20
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.2	9.6	0.8	0.8	9.6	0.2	0.0	0.2	0.1	2.9	0.4	0.4
Cycle Q Clear(g_c), s	0.2	9.6	0.8	0.8	9.6	0.2	0.0	0.2	0.1	2.9	0.4	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	1996	620	50	2097	651	4	156	133	141	500	423
V/C Ratio(X)	0.53	0.64	0.07	0.62	0.62	0.02	0.00	0.06	0.02	0.78	0.04	0.05
Avail Cap(c_a), veh/h	149	2563	796	149	2563	796	149	1330	1127	298	1486	1260
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	11.8	9.1	23.0	11.1	8.4	0.0	20.2	20.1	21.6	13.0	13.0
Incr Delay (d2), s/veh	26.2	0.3	0.0	11.6	0.3	0.0	0.0	0.2	0.0	8.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.0	0.2	0.5	2.9	0.1	0.0	0.1	0.0	1.4	0.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.8	12.1	9.2	34.6	11.4	8.4	0.0	20.3	20.1	30.4	13.0	13.1
LnGrp LOS	D	B	A	C	B	A	A	C	C	C	B	B
Approach Vol, veh/h		1321			1337			11			151	
Approach Delay, s/veh		12.3			11.9			20.3			25.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	9.0	6.4	23.7	0.0	17.8	5.4	24.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	34.0	4.0	24.0	4.0	38.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	4.9	2.2	2.8	11.6	0.0	2.4	2.2	11.6
Green Ext Time (p_c), s	0.1	0.0	0.0	7.1	0.0	0.1	0.0	7.1

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	972	1	237	1008	33	60	846	385	95	979	516
Future Volume (veh/h)	337	972	1	237	1008	33	60	846	385	95	979	516
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	355	1023	1	249	1061	35	63	891	405	100	1031	543
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	427	1573	488	324	1421	441	115	1813	563	140	1849	574
Arrive On Green	0.12	0.31	0.31	0.09	0.28	0.28	0.03	0.36	0.36	0.04	0.36	0.36
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	355	1023	1	249	1061	35	63	891	405	100	1031	543
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	9.9	17.1	0.0	6.9	18.7	1.6	1.8	13.5	21.9	2.8	15.9	32.8
Cycle Q Clear(g_c), s	9.9	17.1	0.0	6.9	18.7	1.6	1.8	13.5	21.9	2.8	15.9	32.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	427	1573	488	324	1421	441	115	1813	563	140	1849	574
V/C Ratio(X)	0.83	0.65	0.00	0.77	0.75	0.08	0.55	0.49	0.72	0.71	0.56	0.95
Avail Cap(c_a), veh/h	490	1914	594	455	1862	578	140	1862	578	140	1862	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	29.5	23.6	43.7	32.4	26.3	47.0	24.9	27.6	46.8	25.2	30.5
Incr Delay (d2), s/veh	10.4	0.6	0.0	5.1	1.2	0.1	4.0	0.2	4.2	15.8	0.4	24.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	6.9	0.0	3.2	7.7	0.6	0.8	5.4	8.7	1.5	6.4	16.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.6	30.1	23.6	48.8	33.6	26.4	51.0	25.1	31.8	62.6	25.5	55.2
LnGrp LOS	D	C	C	D	C	C	D	C	C	E	C	E
Approach Vol, veh/h		1379			1345			1359			1674	
Approach Delay, s/veh		35.9			36.3			28.3			37.4	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	40.0	14.3	35.4	8.3	40.8	17.2	32.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	36.0	13.0	37.0	4.0	36.0	14.0	36.0
Max Q Clear Time (g_c+I1), s	4.8	23.9	8.9	19.1	3.8	34.8	11.9	20.7
Green Ext Time (p_c), s	0.0	6.1	0.3	7.0	0.0	0.9	0.3	6.8

Intersection Summary	
HCM 6th Ctrl Delay	34.6
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	251	1211	968	98	50	80
Future Volume (veh/h)	251	1211	968	98	50	80
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	1275	1019	103	53	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	344	3401	1830	568	186	166
Arrive On Green	0.19	0.67	0.36	0.36	0.10	0.10
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	264	1275	1019	103	53	84
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	6.1	4.8	7.0	1.9	1.2	2.2
Cycle Q Clear(g_c), s	6.1	4.8	7.0	1.9	1.2	2.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	344	3401	1830	568	186	166
V/C Ratio(X)	0.77	0.37	0.56	0.18	0.28	0.51
Avail Cap(c_a), veh/h	899	5973	2811	872	1185	1054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	3.2	11.2	9.6	18.0	18.5
Incr Delay (d2), s/veh	3.6	0.1	0.3	0.2	0.8	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.7	2.1	0.6	0.5	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.3	3.3	11.5	9.7	18.8	20.8
LnGrp LOS	C	A	B	A	B	C
Approach Vol, veh/h		1539	1122		137	
Approach Delay, s/veh		6.2	11.3		20.1	
Approach LOS		A	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		34.0		9.6	13.4	20.6
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		51.0		29.0	22.0	24.0
Max Q Clear Time (g_c+I1), s		6.8		4.2	8.1	9.0
Green Ext Time (p_c), s		12.7		0.4	0.6	6.7

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	472	779	10	166	613	151	27	656	345	270	692	425
Future Volume (veh/h)	472	779	10	166	613	151	27	656	345	270	692	425
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	497	820	3	175	645	48	28	691	170	284	728	240
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	604	1573	488	268	1075	334	82	1169	363	372	1597	496
Arrive On Green	0.17	0.31	0.31	0.08	0.21	0.21	0.02	0.23	0.23	0.11	0.31	0.31
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	497	820	3	175	645	48	28	691	170	284	728	240
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	10.0	9.5	0.1	3.5	8.2	1.8	0.6	8.7	6.7	5.7	8.2	8.8
Cycle Q Clear(g_c), s	10.0	9.5	0.1	3.5	8.2	1.8	0.6	8.7	6.7	5.7	8.2	8.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	604	1573	488	268	1075	334	82	1169	363	372	1597	496
V/C Ratio(X)	0.82	0.52	0.01	0.65	0.60	0.14	0.34	0.59	0.47	0.76	0.46	0.48
Avail Cap(c_a), veh/h	720	2910	903	480	2555	793	192	2555	793	384	2839	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	20.5	17.3	32.3	25.7	23.1	34.6	24.7	24.0	31.2	19.8	20.0
Incr Delay (d2), s/veh	6.5	0.3	0.0	2.7	0.5	0.2	2.4	0.5	0.9	8.5	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	3.6	0.0	1.5	3.2	0.7	0.3	3.4	2.5	2.8	3.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	20.8	17.3	34.9	26.2	23.3	37.0	25.2	24.9	39.7	20.0	20.8
LnGrp LOS	D	C	B	C	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1320			868			889			1252	
Approach Delay, s/veh		26.2			27.8			25.5			24.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	21.5	10.6	27.2	6.7	27.5	17.6	20.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	36.0	10.0	41.0	4.0	40.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	7.7	10.7	5.5	11.5	2.6	10.8	12.0	10.2
Green Ext Time (p_c), s	0.0	5.8	0.2	6.5	0.0	6.7	0.6	4.9

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1394	897	145	0	33
Future Volume (veh/h)	0	1394	897	145	0	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1467	944	153	0	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	5	3184	3184	988	192	170
Arrive On Green	0.00	0.62	0.62	0.62	0.00	0.11
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	0	1467	944	153	0	35
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.0	5.6	3.2	1.5	0.0	0.7
Cycle Q Clear(g_c), s	0.0	5.6	3.2	1.5	0.0	0.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	5	3184	3184	988	192	170
V/C Ratio(X)	0.00	0.46	0.30	0.15	0.00	0.21
Avail Cap(c_a), veh/h	192	6866	5630	1748	1437	1279
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	3.7	3.2	2.9	0.0	15.1
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.4	0.2	0.0	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	3.8	3.3	3.0	0.0	15.7
LnGrp LOS	A	A	A	A	A	B
Approach Vol, veh/h		1467	1097		35	
Approach Delay, s/veh		3.8	3.2		15.7	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	28.2	9.0	0.0	28.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	50.0	30.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	7.6	2.7	0.0	5.2
Green Ext Time (p_c), s	15.5	0.1	0.0	8.8

Intersection Summary	
HCM 6th Ctrl Delay	3.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1260	128	4	852	63	158	66	13	182	111	32
Future Volume (veh/h)	7	1260	128	4	852	63	158	66	13	182	111	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	1326	135	4	897	66	166	69	14	192	117	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	2103	653	8	2087	648	213	179	152	243	211	178
Arrive On Green	0.01	0.41	0.41	0.00	0.41	0.41	0.12	0.10	0.10	0.14	0.11	0.11
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	7	1326	135	4	897	66	166	69	14	192	117	34
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.2	10.6	2.8	0.1	6.5	1.3	4.6	1.8	0.4	5.3	3.0	1.0
Cycle Q Clear(g_c), s	0.2	10.6	2.8	0.1	6.5	1.3	4.6	1.8	0.4	5.3	3.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	13	2103	653	8	2087	648	213	179	152	243	211	178
V/C Ratio(X)	0.53	0.63	0.21	0.52	0.43	0.10	0.78	0.39	0.09	0.79	0.56	0.19
Avail Cap(c_a), veh/h	174	2294	712	174	2294	712	348	1242	1053	348	1242	1053
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	12.0	9.7	25.4	10.9	9.3	21.9	21.7	21.1	21.4	21.5	20.6
Incr Delay (d2), s/veh	29.3	0.7	0.3	45.2	0.3	0.1	6.1	1.4	0.3	7.7	2.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.4	0.9	0.1	2.1	0.4	2.1	0.8	0.2	2.5	1.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.6	12.7	10.0	70.7	11.1	9.5	27.9	23.1	21.4	29.0	23.8	21.1
LnGrp LOS	D	B	A	E	B	A	C	C	C	C	C	C
Approach Vol, veh/h		1468			967			249			343	
Approach Delay, s/veh		12.7			11.3			26.2			26.5	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	8.9	4.2	27.1	10.1	9.8	4.4	26.9
Change Period (Y+Rc), s	4.0	4.0	4.0	6.0	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	10.0	34.0	5.0	23.0	10.0	34.0	5.0	23.0
Max Q Clear Time (g_c+I1), s	7.3	3.8	2.1	12.6	6.6	5.0	2.2	8.5
Green Ext Time (p_c), s	0.1	0.4	0.0	8.5	0.1	0.7	0.0	8.4

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	170	1284	862	165	55	57
Future Volume (veh/h)	170	1284	862	165	55	57
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	179	1352	907	174	58	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	236	3120	1733	538	198	176
Arrive On Green	0.13	0.61	0.34	0.34	0.11	0.11
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	179	1352	907	174	58	60
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	3.5	5.0	5.1	2.9	1.1	1.3
Cycle Q Clear(g_c), s	3.5	5.0	5.1	2.9	1.1	1.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	236	3120	1733	538	198	176
V/C Ratio(X)	0.76	0.43	0.52	0.32	0.29	0.34
Avail Cap(c_a), veh/h	594	4965	2553	793	1485	1321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	3.7	9.5	8.8	14.7	14.8
Incr Delay (d2), s/veh	4.9	0.1	0.2	0.3	0.8	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.6	1.4	0.8	0.4	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.0	3.8	9.8	9.2	15.5	15.9
LnGrp LOS	B	A	A	A	B	B
Approach Vol, veh/h		1531	1081		118	
Approach Delay, s/veh		5.7	9.7		15.7	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		27.0		9.0	9.8	17.2
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		35.0		30.0	12.0	18.0
Max Q Clear Time (g_c+I1), s		7.0		3.3	5.5	7.1
Green Ext Time (p_c), s		11.9		0.3	0.2	5.1

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	1269	988	38	121	38
Future Volume (veh/h)	70	1269	988	38	121	38
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	1336	1040	40	127	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	104	2957	2005	622	243	216
Arrive On Green	0.06	0.58	0.39	0.39	0.14	0.14
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	74	1336	1040	40	127	40
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	1.4	5.2	5.5	0.6	2.3	0.8
Cycle Q Clear(g_c), s	1.4	5.2	5.5	0.6	2.3	0.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	104	2957	2005	622	243	216
V/C Ratio(X)	0.71	0.45	0.52	0.06	0.52	0.18
Avail Cap(c_a), veh/h	380	4865	3123	969	1596	1420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	4.2	8.1	6.7	14.1	13.4
Incr Delay (d2), s/veh	8.6	0.1	0.2	0.0	1.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.8	1.4	0.1	0.9	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.8	4.3	8.4	6.7	15.9	13.9
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1410	1080		167	
Approach Delay, s/veh		5.4	8.3		15.4	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		25.9		9.3	6.6	19.3
Change Period (Y+Rc), s		5.5		4.5	4.5	5.5
Max Green Setting (Gmax), s		33.5		31.5	7.5	21.5
Max Q Clear Time (g_c+I1), s		7.2		4.3	3.4	7.5
Green Ext Time (p_c), s		11.4		0.5	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	1153	73	242	807	335	184	1060	415	434	859	288
Future Volume (veh/h)	152	1153	73	242	807	335	184	1060	415	434	859	288
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	1214	20	255	849	165	194	1116	295	457	904	147
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	223	1613	509	300	1724	535	257	1430	444	420	1670	518
Arrive On Green	0.06	0.32	0.32	0.09	0.34	0.34	0.07	0.28	0.28	0.12	0.33	0.33
Sat Flow, veh/h	3456	5025	1585	3456	5025	1560	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	160	1214	20	255	849	165	194	1116	295	457	904	147
Grp Sat Flow(s),veh/h/ln	1728	1675	1585	1728	1675	1560	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	5.2	24.9	1.0	8.4	15.4	9.0	6.3	23.2	19.0	14.0	16.7	7.9
Cycle Q Clear(g_c), s	5.2	24.9	1.0	8.4	15.4	9.0	6.3	23.2	19.0	14.0	16.7	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	1613	509	300	1724	535	257	1430	444	420	1670	518
V/C Ratio(X)	0.72	0.75	0.04	0.85	0.49	0.31	0.75	0.78	0.66	1.09	0.54	0.28
Avail Cap(c_a), veh/h	390	1656	522	300	1724	535	360	1594	495	420	1683	522
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	35.1	26.9	51.9	29.9	27.8	52.3	38.2	36.7	50.7	31.7	28.8
Incr Delay (d2), s/veh	4.3	2.3	0.1	20.2	0.2	0.3	5.7	2.8	4.2	70.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	9.8	0.4	4.4	6.0	3.3	3.0	10.0	7.6	9.9	6.5	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.2	37.3	27.0	72.1	30.2	28.1	58.0	41.1	40.9	120.8	32.3	29.3
LnGrp LOS	E	D	C	E	C	C	E	D	D	F	C	C
Approach Vol, veh/h		1394			1269			1605			1508	
Approach Delay, s/veh		39.4			38.3			43.1			58.8	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	38.3	15.0	43.0	13.6	43.7	12.4	45.6
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	* 6
Max Green Setting (Gmax), s	14.0	36.0	10.0	38.0	12.0	38.0	13.0	* 36
Max Q Clear Time (g_c+I1), s	16.0	25.2	10.4	26.9	8.3	18.7	7.2	17.4
Green Ext Time (p_c), s	0.0	7.1	0.0	10.1	0.3	7.9	0.3	11.3

Intersection Summary	
HCM 6th Ctrl Delay	45.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	526	1422	0	0	1094	80	0	0	0	122	0	247
Future Volume (veh/h)	526	1422	0	0	1094	80	0	0	0	122	0	247
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	0	1870	0	1870	0	1870
Adj Flow Rate, veh/h	554	1497	0	0	1152	84	0	0	0	128	0	260
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0	2	0	2
Cap, veh/h	499	2415	0	0	1645	734	0	3	0	249	0	0
Arrive On Green	0.14	0.68	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.14	0.00	0.00
Sat Flow, veh/h	3456	3647	0	0	3647	1585	0	-74814	0	1781	128	
Grp Volume(v), veh/h	554	1497	0	0	1152	84	0	0	0	128	22.7	
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1585	0	1870	0	1781	C	
Q Serve(g_s), s	8.0	12.9	0.0	0.0	14.3	1.7	0.0	0.0	0.0	3.7		
Cycle Q Clear(g_c), s	8.0	12.9	0.0	0.0	14.3	1.7	0.0	0.0	0.0	3.7		
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	499	2415	0	0	1645	734	0	3	0	249		
V/C Ratio(X)	1.11	0.62	0.00	0.00	0.70	0.11	0.00	0.00	0.00	0.51		
Avail Cap(c_a), veh/h	499	2503	0	0	1733	773	0	101	0	289		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	23.7	4.9	0.0	0.0	11.8	8.4	0.0	0.0	0.0	22.1		
Incr Delay (d2), s/veh	73.8	0.5	0.0	0.0	1.4	0.1	0.0	0.0	0.0	0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.9	1.7	0.0	0.0	4.1	0.4	0.0	0.0	0.0	1.4		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	97.5	5.5	0.0	0.0	13.2	8.5	0.0	0.0	0.0	22.7		
LnGrp LOS	F	A	A	A	B	A	A	A	A	C		
Approach Vol, veh/h		2051			1236			0				
Approach Delay, s/veh		30.3			12.9			0.0				
Approach LOS		C			B							

Timer - Assigned Phs	1	2		4			7	8				
Phs Duration (G+Y+Rc), s	11.7	0.0		43.6			12.0	31.6				
Change Period (Y+Rc), s	4.0	4.0		6.0			4.0	6.0				
Max Green Setting (Gmax), s	9.0	3.0		39.0			8.0	27.0				
Max Q Clear Time (g_c+I1), s	5.7	0.0		14.9			10.0	16.3				
Green Ext Time (p_c), s	0.1	0.0		21.8			0.0	9.4				

Intersection Summary	
HCM 6th Ctrl Delay	23.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	356	1132	123	82	875	100	163	0	350	271	0	140
Future Volume (veh/h)	356	1132	123	82	875	100	163	0	350	271	0	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	375	1192	129	86	921	0	172	0	368	285	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	422	1863	827	110	1242		224	0	0	332	0	
Arrive On Green	0.24	0.52	0.52	0.06	0.35	0.00	0.13	0.00	0.00	0.19	0.00	0.00
Sat Flow, veh/h	1781	3554	1577	1781	3554	1585	1781	172		1781	285	
Grp Volume(v), veh/h	375	1192	129	86	921	0	172	31.3		285	38.5	
Grp Sat Flow(s),veh/h/ln	1781	1777	1577	1781	1777	1585	1781	C		1781	D	
Q Serve(g_s), s	14.1	16.6	2.9	3.3	15.7	0.0	6.5			10.7		
Cycle Q Clear(g_c), s	14.1	16.6	2.9	3.3	15.7	0.0	6.5			10.7		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	422	1863	827	110	1242		224			332		
V/C Ratio(X)	0.89	0.64	0.16	0.78	0.74		0.77			0.86		
Avail Cap(c_a), veh/h	490	2264	1005	129	1544		387			420		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	25.5	11.8	8.5	31.9	19.7	0.0	29.2			27.2		
Incr Delay (d2), s/veh	15.0	0.8	0.2	18.9	2.2	0.0	2.1			11.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	7.3	5.8	0.9	1.9	6.3	0.0	2.8			5.4		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.5	12.5	8.7	50.8	21.9	0.0	31.3			38.5		
LnGrp LOS	D	B	A	D	C		C			D		
Approach Vol, veh/h		1696			1007	A						
Approach Delay, s/veh		18.4			24.4							
Approach LOS		B			C							

Timer - Assigned Phs	1		3	4	5		7	8
Phs Duration (G+Y+Rc), s	18.6		8.3	42.2	12.7		20.3	30.1
Change Period (Y+Rc), s	5.7		4.0	6.0	4.0		4.0	6.0
Max Green Setting (Gmax), s	16.3		5.0	44.0	15.0		19.0	30.0
Max Q Clear Time (g_c+I1), s	12.7		5.3	18.6	8.5		16.1	17.7
Green Ext Time (p_c), s	0.2		0.0	12.1	0.2		0.3	6.3

Intersection Summary	
HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	415	959	65	180	48	393	1489	73	54	1266	184
Future Volume (veh/h)	167	415	959	65	180	48	393	1489	73	54	1266	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	176	437	893	68	189	23	414	1567	18	57	1333	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	1777	793	59	2380	739	317	1404	436	45	1340	
Arrive On Green	0.07	0.50	0.50	0.03	0.47	0.47	0.09	0.28	0.28	0.03	0.21	0.00
Sat Flow, veh/h	3456	3554	1585	1781	5106	1585	3456	5106	1585	1781	6434	1585
Grp Volume(v), veh/h	176	437	893	68	189	23	414	1567	18	57	1333	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1702	1585	1728	1702	1585	1781	1609	1585
Q Serve(g_s), s	6.0	8.4	60.0	4.0	2.5	0.9	11.0	33.0	1.0	3.0	24.8	0.0
Cycle Q Clear(g_c), s	6.0	8.4	60.0	4.0	2.5	0.9	11.0	33.0	1.0	3.0	24.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	1777	793	59	2380	739	317	1404	436	45	1340	
V/C Ratio(X)	0.76	0.25	1.13	1.15	0.08	0.03	1.31	1.12	0.04	1.28	0.99	
Avail Cap(c_a), veh/h	288	1777	793	59	2380	739	317	1404	436	45	1340	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.0	17.1	30.0	58.0	17.8	17.3	54.5	43.5	31.9	58.5	47.4	0.0
Incr Delay (d2), s/veh	6.5	0.1	72.9	161.9	0.0	0.0	159.1	62.5	0.2	228.1	23.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.3	36.6	4.4	0.9	0.3	11.6	21.2	0.4	4.1	11.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	17.2	102.9	219.9	17.8	17.4	213.6	106.0	32.1	286.6	70.6	0.0
LnGrp LOS	E	B	F	F	B	B	F	F	C	F	E	
Approach Vol, veh/h		1506			280			1999			1390	A
Approach Delay, s/veh		73.2			66.8			127.6			79.5	
Approach LOS		E			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	39.0	8.0	66.0	15.0	31.0	12.1	61.9
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	3.0	33.0	4.0	60.0	11.0	25.0	10.0	* 55
Max Q Clear Time (g_c+I1), s	5.0	35.0	6.0	62.0	13.0	26.8	8.0	4.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.1

Intersection Summary	
HCM 6th Ctrl Delay	95.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	271	164	356	460	374	244	941	358	572	580	19
Future Volume (veh/h)	21	271	164	356	460	374	244	941	358	572	580	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	285	0	375	484	251	257	991	311	602	611	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	329		451	514	721	293	1024	661	627	1123	
Arrive On Green	0.04	0.18	0.00	0.13	0.27	0.27	0.16	0.29	0.29	0.18	0.32	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1576	1781	3554	1577	3456	3554	1585
Grp Volume(v), veh/h	22	285	0	375	484	251	257	991	311	602	611	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1576	1781	1777	1577	1728	1777	1585
Q Serve(g_s), s	1.1	13.9	0.0	9.9	23.7	9.6	13.2	25.8	13.4	16.2	13.3	0.0
Cycle Q Clear(g_c), s	1.1	13.9	0.0	9.9	23.7	9.6	13.2	25.8	13.4	16.2	13.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	329		451	514	721	293	1024	661	627	1123	
V/C Ratio(X)	0.29	0.87		0.83	0.94	0.35	0.88	0.97	0.47	0.96	0.54	
Avail Cap(c_a), veh/h	209	439		516	514	721	380	1024	661	627	1123	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.5	37.6	0.0	39.7	33.2	16.5	38.2	32.9	19.7	38.0	26.5	0.0
Incr Delay (d2), s/veh	0.8	10.7	0.0	9.9	25.7	0.3	14.2	20.7	0.7	26.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	7.3	0.0	4.8	14.1	3.4	6.5	12.9	4.9	8.6	5.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	48.3	0.0	49.7	59.0	16.7	52.4	53.6	20.4	64.3	27.2	0.0
LnGrp LOS	D	D		D	E	B	D	D	C	E	C	
Approach Vol, veh/h		307	A		1110			1559			1213	A
Approach Delay, s/veh		48.0			46.3			46.8			45.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	33.0	17.2	21.5	19.4	35.6	7.9	30.8
Change Period (Y+Rc), s	5.0	6.0	5.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	17.0	27.0	14.0	* 22	20.0	25.0	11.0	25.0
Max Q Clear Time (g_c+I1), s	18.2	27.8	11.9	15.9	15.2	15.3	3.1	25.7
Green Ext Time (p_c), s	0.0	0.0	0.3	0.6	0.2	2.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	46.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	635	7	24	766	543	29	535	25	307	642	19
Future Volume (veh/h)	43	635	7	24	766	543	29	535	25	307	642	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	668	2	25	806	0	31	563	0	323	676	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	1111	493	169	994		177	864		471	1166	518
Arrive On Green	0.08	0.31	0.31	0.05	0.28	0.00	0.05	0.24	0.00	0.14	0.33	0.33
Sat Flow, veh/h	3456	3554	1577	3456	3554	1585	3456	3554	1585	3456	3554	1578
Grp Volume(v), veh/h	45	668	2	25	806	0	31	563	0	323	676	7
Grp Sat Flow(s),veh/h/ln	1728	1777	1577	1728	1777	1585	1728	1777	1585	1728	1777	1578
Q Serve(g_s), s	0.9	11.7	0.1	0.5	15.5	0.0	0.6	10.4	0.0	6.5	11.6	0.2
Cycle Q Clear(g_c), s	0.9	11.7	0.1	0.5	15.5	0.0	0.6	10.4	0.0	6.5	11.6	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	1111	493	169	994		177	864		471	1166	518
V/C Ratio(X)	0.16	0.60	0.00	0.15	0.81		0.18	0.65		0.69	0.58	0.01
Avail Cap(c_a), veh/h	471	1164	517	707	1358		377	1503		566	1697	753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	21.3	17.3	33.4	24.6	0.0	33.3	25.0	0.0	30.2	20.4	16.6
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.1	2.7	0.0	0.2	1.6	0.0	1.7	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.6	0.0	0.2	6.5	0.0	0.3	4.4	0.0	2.7	4.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.4	21.9	17.3	33.5	27.3	0.0	33.5	26.6	0.0	31.9	21.3	16.6
LnGrp LOS	C	C	B	C	C		C	C		C	C	B
Approach Vol, veh/h		715			831	A		594	A		1006	
Approach Delay, s/veh		22.4			27.5			26.9			24.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	23.8	10.0	25.5	7.7	30.1	7.6	27.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	4.0	* 5
Max Green Setting (Gmax), s	12.0	31.0	10.0	28.0	8.0	35.0	15.0	* 24
Max Q Clear Time (g_c+I1), s	8.5	12.4	2.9	17.5	2.6	13.6	2.5	13.7
Green Ext Time (p_c), s	0.3	4.7	0.0	3.0	0.0	6.2	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	25.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	10	152	20	3	1	53	1117	7	1	1012	10
Future Volume (veh/h)	28	10	152	20	3	1	53	1117	7	1	1012	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	11	160	21	3	1	56	1176	7	1	1065	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	66	210	35	5	2	69	1713	764	4	1579	704
Arrive On Green	0.13	0.13	0.13	0.02	0.02	0.02	0.04	0.48	0.48	0.00	0.44	0.44
Sat Flow, veh/h	1309	496	1585	1497	214	71	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	40	0	160	25	0	0	56	1176	7	1	1065	11
Grp Sat Flow(s),veh/h/ln	1805	0	1585	1783	0	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.0	0.0	4.9	0.7	0.0	0.0	1.6	12.9	0.1	0.0	12.0	0.2
Cycle Q Clear(g_c), s	1.0	0.0	4.9	0.7	0.0	0.0	1.6	12.9	0.1	0.0	12.0	0.2
Prop In Lane	0.72		1.00	0.84		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	0	210	42	0	0	69	1713	764	4	1579	704
V/C Ratio(X)	0.17	0.00	0.76	0.60	0.00	0.00	0.82	0.69	0.01	0.28	0.67	0.02
Avail Cap(c_a), veh/h	566	0	497	142	0	0	106	1713	764	106	1693	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	21.1	24.4	0.0	0.0	24.0	10.1	6.8	25.1	11.1	7.8
Incr Delay (d2), s/veh	0.1	0.0	2.2	5.0	0.0	0.0	13.2	1.3	0.0	15.4	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.7	0.3	0.0	0.0	0.8	3.3	0.0	0.0	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.0	23.3	29.4	0.0	0.0	37.2	11.4	6.8	40.5	12.3	7.8
LnGrp LOS	B	A	C	C	A	A	D	B	A	D	B	A
Approach Vol, veh/h		200			25			1239			1077	
Approach Delay, s/veh		22.5			29.4			12.5			12.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.0	30.3		5.2	5.9	28.4		10.9
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.2
Max Green Setting (Gmax), s	3.0	24.0		4.0	3.0	24.0		15.8
Max Q Clear Time (g_c+I1), s	2.0	14.9		2.7	3.6	14.0		6.9
Green Ext Time (p_c), s	0.0	8.0		0.0	0.0	8.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	844	2322	1685	55	87	211
Future Volume (veh/h)	844	2322	1685	55	87	211
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	888	2444	1774	0	92	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	724	4255	2008		178	
Arrive On Green	0.41	0.83	0.13	0.00	0.10	0.00
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	888	2444	1774	0	92	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	61.0	23.0	51.2	0.0	7.4	0.0
Cycle Q Clear(g_c), s	61.0	23.0	51.2	0.0	7.4	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	724	4255	2008		178	
V/C Ratio(X)	1.23	0.57	0.88		0.52	
Avail Cap(c_a), veh/h	724	4255	2008		178	
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.90	0.00	1.00	0.00
Uniform Delay (d), s/veh	44.5	4.0	61.9	0.0	64.1	0.0
Incr Delay (d2), s/veh	113.7	0.6	5.5	0.0	10.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	48.7	5.5	24.5	0.0	3.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	158.2	4.6	67.4	0.0	74.4	0.0
LnGrp LOS	F	A	E		E	
Approach Vol, veh/h		3332	1774	A	92	A
Approach Delay, s/veh		45.5	67.4		74.4	
Approach LOS		D	E		E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		130.0		20.0	66.0	64.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		116.0		15.0	61.0	59.0
Max Q Clear Time (g_c+I1), s		25.0		9.4	63.0	53.2
Green Ext Time (p_c), s		45.2		0.1	0.0	4.6

Intersection Summary	
HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

User approved ignoring U-Turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2305	109	100	1626	114	158
Future Volume (veh/h)	2305	109	100	1626	114	158
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2426	0	105	1712	120	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3313		127	3813	143	
Arrive On Green	0.43	0.00	0.07	0.75	0.08	0.00
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	2426	0	105	1712	120	0
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	59.1	0.0	8.7	19.2	10.0	0.0
Cycle Q Clear(g_c), s	59.1	0.0	8.7	19.2	10.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	3313		127	3813	143	
V/C Ratio(X)	0.73		0.83	0.45	0.84	
Avail Cap(c_a), veh/h	3313		202	3813	325	
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.00	0.81	0.81	1.00	0.00
Uniform Delay (d), s/veh	31.6	0.0	68.8	7.2	68.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	6.1	0.3	4.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.5	0.0	4.1	6.1	4.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.7	0.0	74.8	7.6	72.8	0.0
LnGrp LOS	C		E	A	E	
Approach Vol, veh/h	2426	A		1817	120	A
Approach Delay, s/veh	32.7			11.4	72.8	
Approach LOS	C			B	E	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		16.7	14.7	103.3		118.0
Change Period (Y+Rc), s		4.6	4.0	6.0		6.0
Max Green Setting (Gmax), s		27.4	17.0	91.0		112.0
Max Q Clear Time (g_c+I1), s		12.0	10.7	61.1		21.2
Green Ext Time (p_c), s		0.2	0.1	23.8		23.7

Intersection Summary	
HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	2189	1	44	1524	944	3	5	32	412	3	185
Future Volume (veh/h)	266	2189	1	44	1524	944	3	5	32	412	3	185
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	280	2304	1	46	1604	0	3	5	34	436	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	3551	1100	60	2840		20	34	45	542	0	
Arrive On Green	0.17	0.70	0.70	0.03	0.56	0.00	0.03	0.03	0.03	0.10	0.00	0.00
Sat Flow, veh/h	1781	5106	1582	1781	5106	1585	688	1147	1505	5344	0	1585
Grp Volume(v), veh/h	280	2304	1	46	1604	0	8	0	34	436	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1582	1781	1702	1585	1836	0	1505	1781	0	1585
Q Serve(g_s), s	23.1	37.6	0.0	3.8	30.5	0.0	0.6	0.0	3.4	12.0	0.0	0.0
Cycle Q Clear(g_c), s	23.1	37.6	0.0	3.8	30.5	0.0	0.6	0.0	3.4	12.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.37		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	3551	1100	60	2840		55	0	45	542	0	
V/C Ratio(X)	0.91	0.65	0.00	0.77	0.56		0.15	0.00	0.76	0.80	0.00	
Avail Cap(c_a), veh/h	428	3551	1100	143	2840		147	0	120	737	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	0.83	0.83	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	60.9	12.7	7.0	71.9	21.5	0.0	70.9	0.0	72.2	65.9	0.0	0.0
Incr Delay (d2), s/veh	14.6	0.7	0.0	15.9	0.2	0.0	1.2	0.0	22.7	4.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	13.0	0.0	2.0	11.7	0.0	0.3	0.0	1.6	5.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.5	13.4	7.0	87.8	21.8	0.0	72.1	0.0	94.9	70.6	0.0	0.0
LnGrp LOS	E	B	A	F	C		E	A	F	E	A	
Approach Vol, veh/h		2585			1650	A		42			436	A
Approach Delay, s/veh		20.1			23.6			90.6			70.6	
Approach LOS		C			C			F			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.5	9.0	110.0		8.5	29.9	89.1				
Change Period (Y+Rc), s		7.3	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		20.7	12.0	84.3		12.0	36.0	60.3				
Max Q Clear Time (g_c+I1), s		14.0	5.8	39.6		5.4	25.1	32.5				
Green Ext Time (p_c), s		1.2	0.0	42.8		0.0	0.8	23.8				

Intersection Summary	
HCM 6th Ctrl Delay	26.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	2	36	14	1	68	15	2446	43	100	2521	3
Future Volume (veh/h)	57	2	36	14	1	68	15	2446	43	100	2521	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	2	38	16	0	0	16	2575	45	105	2654	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	3	73	46	0		23	4976	1223	150	5172	1272
Arrive On Green	0.05	0.05	0.05	0.01	0.00	0.00	0.01	0.77	0.77	0.04	0.80	0.80
Sat Flow, veh/h	1726	58	1535	3563	0	1585	1781	6434	1582	3456	6434	1582
Grp Volume(v), veh/h	62	0	38	16	0	0	16	2575	45	105	2654	3
Grp Sat Flow(s),veh/h/ln	1784	0	1535	1781	0	1585	1781	1609	1582	1728	1609	1582
Q Serve(g_s), s	5.1	0.0	3.6	0.7	0.0	0.0	1.3	22.7	1.0	4.5	20.7	0.1
Cycle Q Clear(g_c), s	5.1	0.0	3.6	0.7	0.0	0.0	1.3	22.7	1.0	4.5	20.7	0.1
Prop In Lane	0.97		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	85	0	73	46	0		23	4976	1223	150	5172	1272
V/C Ratio(X)	0.73	0.00	0.52	0.35	0.00		0.69	0.52	0.04	0.70	0.51	0.00
Avail Cap(c_a), veh/h	167	0	143	380	0		143	4976	1223	323	5172	1272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.79	0.79	0.79	0.67	0.67	0.67
Uniform Delay (d), s/veh	70.5	0.0	69.8	73.4	0.0	0.0	73.7	6.4	4.0	70.8	4.9	2.9
Incr Delay (d2), s/veh	4.5	0.0	2.1	4.0	0.0	0.0	10.3	0.1	0.0	1.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.5	0.3	0.0	0.0	0.7	6.3	0.3	2.0	5.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.0	0.0	71.9	77.4	0.0	0.0	84.1	6.5	4.0	72.3	5.2	2.9
LnGrp LOS	E	A	E	E	A		F	A	A	E	A	A
Approach Vol, veh/h		100			16	A		2636			2762	
Approach Delay, s/veh		73.8			77.4			6.9			7.7	
Approach LOS		E			E			A			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.1	5.9	127.0		5.9	10.5	122.4				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		14.0	12.0	89.6		16.0	14.0	87.6				
Max Q Clear Time (g_c+I1), s		7.1	3.3	22.7		2.7	6.5	24.7				
Green Ext Time (p_c), s		0.1	0.0	43.2		0.0	0.1	40.2				

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	2314	189	365	2317	138	209	77	289	61	15	7
Future Volume (veh/h)	14	2314	189	365	2317	138	209	77	289	61	15	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	2436	199	384	2439	0	150	178	304	40	50	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	775	2943	720	717	2835		285	299	254	93	98	
Arrive On Green	0.22	0.46	0.46	0.42	0.88	0.00	0.16	0.16	0.16	0.05	0.05	0.00
Sat Flow, veh/h	3456	6434	1575	3456	6434	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	15	2436	199	384	2439	0	150	178	304	40	50	0
Grp Sat Flow(s),veh/h/ln	1728	1609	1575	1728	1609	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.5	49.6	11.8	12.5	27.9	0.0	11.6	13.3	24.0	3.3	3.9	0.0
Cycle Q Clear(g_c), s	0.5	49.6	11.8	12.5	27.9	0.0	11.6	13.3	24.0	3.3	3.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	775	2943	720	717	2835		285	299	254	93	98	
V/C Ratio(X)	0.02	0.83	0.28	0.54	0.86		0.53	0.59	1.20	0.43	0.51	
Avail Cap(c_a), veh/h	775	2943	720	717	3243		285	299	254	190	200	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.32	0.32	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.3	35.5	25.3	38.4	6.6	0.0	57.8	58.5	63.0	68.9	69.2	0.0
Incr Delay (d2), s/veh	0.0	2.4	0.8	0.1	0.8	0.0	1.4	2.8	121.0	3.1	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	19.1	4.5	4.6	2.9	0.0	5.4	6.6	18.0	1.6	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.3	38.0	26.1	38.5	7.4	0.0	59.2	61.3	184.0	72.0	73.3	0.0
LnGrp LOS	D	D	C	D	A		E	E	F	E	E	
Approach Vol, veh/h		2650			2823	A		632			90	A
Approach Delay, s/veh		37.1			11.7			119.8			72.7	
Approach LOS		D			B			F			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		28.0	35.1	75.0		11.9	37.7	72.5				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		24.0	23.0	68.6		16.0	16.0	75.6				
Max Q Clear Time (g_c+I1), s		26.0	14.5	51.6		5.9	2.5	29.9				
Green Ext Time (p_c), s		0.0	0.5	15.6		0.2	0.0	36.1				

Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	1468	810	85	1568	389	939	513	44	962	779	276
Future Volume (veh/h)	308	1468	810	85	1568	389	939	513	44	962	779	276
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	324	1545	0	89	1651	0	988	540	0	1013	820	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	2241		130	1737		968	710		1573	947	
Arrive On Green	0.20	0.70	0.00	0.08	0.54	0.00	0.28	0.14	0.00	0.10	0.06	0.00
Sat Flow, veh/h	3456	6434	1585	3456	6434	1585	3456	5106	1585	5023	5106	1585
Grp Volume(v), veh/h	324	1545	0	89	1651	0	988	540	0	1013	820	0
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1585	1728	1702	1585	1674	1702	1585
Q Serve(g_s), s	13.8	21.0	0.0	3.8	36.4	0.0	42.0	15.3	0.0	29.1	23.9	0.0
Cycle Q Clear(g_c), s	13.8	21.0	0.0	3.8	36.4	0.0	42.0	15.3	0.0	29.1	23.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	346	2241		130	1737		968	710		1573	947	
V/C Ratio(X)	0.94	0.69		0.68	0.95		1.02	0.76		0.64	0.87	
Avail Cap(c_a), veh/h	346	2241		184	1737		968	1011		1573	987	
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.68	0.68	0.00	0.77	0.77	0.00	1.00	1.00	0.00	0.85	0.85	0.00
Uniform Delay (d), s/veh	59.5	18.0	0.0	68.5	33.6	0.0	54.0	62.2	0.0	59.2	68.6	0.0
Incr Delay (d2), s/veh	24.9	0.7	0.0	1.8	10.4	0.0	34.4	2.9	0.0	0.8	7.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	4.9	0.0	1.6	11.5	0.0	22.4	6.7	0.0	13.2	11.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.5	18.7	0.0	70.3	44.0	0.0	88.4	65.0	0.0	60.0	75.9	0.0
LnGrp LOS	F	B		E	D		F	E		E	E	
Approach Vol, veh/h		1869	A		1740	A		1528	A		1833	A
Approach Delay, s/veh		30.1			45.3			80.1			67.1	
Approach LOS		C			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	54.7	26.9	9.6	58.7	46.0	35.5	21.4	46.9
Change Period (Y+Rc), s	7.7	6.0	4.0	6.4	4.0	* 7.7	6.4	6.4
Max Green Setting (Gmax), s	38.3	29.7	8.0	49.9	42.0	* 29	15.0	40.5
Max Q Clear Time (g_c+I1), s	31.1	17.3	5.8	23.0	44.0	25.9	15.8	38.4
Green Ext Time (p_c), s	2.5	3.6	0.0	15.2	0.0	2.0	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	54.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	2418	4	13	2085	243	67	0	141	104	1	33
Future Volume (veh/h)	48	2418	4	13	2085	243	67	0	141	104	1	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	2545	4	14	2195	256	71	0	148	110	0	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	3170	980	17	3030	937	381	0	167	163	0	73
Arrive On Green	0.04	0.62	0.62	0.01	0.59	0.59	0.11	0.00	0.11	0.05	0.00	0.05
Sat Flow, veh/h	1781	5106	1579	1781	5106	1578	3563	0	1563	3563	0	1585
Grp Volume(v), veh/h	51	2545	4	14	2195	256	71	0	148	110	0	35
Grp Sat Flow(s),veh/h/ln	1781	1702	1579	1781	1702	1578	1781	0	1563	1781	0	1585
Q Serve(g_s), s	4.3	56.5	0.1	1.2	46.0	11.8	2.7	0.0	14.0	4.6	0.0	3.2
Cycle Q Clear(g_c), s	4.3	56.5	0.1	1.2	46.0	11.8	2.7	0.0	14.0	4.6	0.0	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	66	3170	980	17	3030	937	381	0	167	163	0	73
V/C Ratio(X)	0.78	0.80	0.00	0.84	0.72	0.27	0.19	0.00	0.88	0.67	0.00	0.48
Avail Cap(c_a), veh/h	119	3200	989	59	3030	937	404	0	177	366	0	163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.50	0.50	0.50	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	71.6	21.5	10.8	74.2	21.8	14.8	61.0	0.0	66.1	70.5	0.0	69.8
Incr Delay (d2), s/veh	4.9	1.1	0.0	18.1	0.8	0.4	0.1	0.0	34.6	5.9	0.0	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	21.0	0.0	0.6	17.4	4.2	1.2	0.0	7.1	2.2	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.5	22.6	10.8	92.3	22.5	15.2	61.1	0.0	100.7	76.3	0.0	75.9
LnGrp LOS	E	C	B	F	C	B	E	A	F	E	A	E
Approach Vol, veh/h		2600			2465			219			145	
Approach Delay, s/veh		23.6			22.2			87.8			76.2	
Approach LOS		C			C			F			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		20.1	5.4	99.1		11.5	9.5	95.0				
Change Period (Y+Rc), s		4.0	4.0	6.0		4.6	4.0	6.0				
Max Green Setting (Gmax), s		17.0	5.0	94.0		15.4	10.0	89.0				
Max Q Clear Time (g_c+I1), s		16.0	3.2	58.5		6.6	6.3	48.0				
Green Ext Time (p_c), s		0.0	0.0	31.7		0.3	0.0	33.8				

Intersection Summary	
HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	2407	69	288	1958	210	271	227	320	706	105	121
Future Volume (veh/h)	162	2407	69	288	1958	210	271	227	320	706	105	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1988	1988	1988	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	171	2534	50	303	2061	141	285	239	184	743	111	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	2827	1206	737	2995	927	1052	672	206	760	242	73
Arrive On Green	0.05	0.41	0.41	0.21	0.59	0.59	0.30	0.13	0.13	0.22	0.05	0.05
Sat Flow, veh/h	3673	6839	1679	3456	5106	1581	3456	5106	1567	3456	5106	1535
Grp Volume(v), veh/h	171	2534	50	303	2061	141	285	239	184	743	111	6
Grp Sat Flow(s),veh/h/ln	1837	1710	1679	1728	1702	1581	1728	1702	1567	1728	1702	1535
Q Serve(g_s), s	6.9	51.8	0.0	11.3	42.0	3.7	9.4	6.4	17.3	32.0	3.2	0.6
Cycle Q Clear(g_c), s	6.9	51.8	0.0	11.3	42.0	3.7	9.4	6.4	17.3	32.0	3.2	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	196	2827	1206	737	2995	927	1052	672	206	760	242	73
V/C Ratio(X)	0.87	0.90	0.04	0.41	0.69	0.15	0.27	0.36	0.89	0.98	0.46	0.08
Avail Cap(c_a), veh/h	196	2827	1206	737	2995	927	1052	715	219	760	1191	358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70	0.63	0.63	0.63	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.5	41.0	6.2	50.9	21.5	5.2	39.6	59.3	64.1	58.1	69.6	69.0
Incr Delay (d2), s/veh	24.6	3.6	0.0	0.2	0.5	0.1	0.1	0.4	32.7	26.9	1.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	21.7	0.4	4.9	15.9	2.0	4.0	2.8	8.7	16.6	1.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.1	44.6	6.2	51.1	22.0	5.3	39.7	59.7	96.8	85.1	71.2	69.6
LnGrp LOS	F	D	A	D	C	A	D	E	F	F	E	E
Approach Vol, veh/h		2755			2505			708			860	
Approach Delay, s/veh		47.0			24.6			61.3			83.2	
Approach LOS		D			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	25.7	38.1	68.0	49.6	13.1	12.0	94.1
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	33.0	21.0	14.0	* 62	19.0	35.0	8.0	68.0
Max Q Clear Time (g_c+I1), s	34.0	19.3	13.3	53.8	11.4	5.2	8.9	44.0
Green Ext Time (p_c), s	0.0	0.4	0.1	8.0	0.4	0.7	0.0	21.5

Intersection Summary	
HCM 6th Ctrl Delay	44.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	359	2445	702	216	2138	2	190	176	152	14	46	130
Future Volume (veh/h)	359	2445	702	216	2138	2	190	176	152	14	46	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	378	2574	0	227	2251	2	200	185	0	15	48	137
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	421	3340		270	3117	965	363	224		18	100	150
Arrive On Green	0.24	1.00	0.00	0.16	1.00	1.00	0.07	0.12	0.00	0.01	0.05	0.05
Sat Flow, veh/h	3456	5106	1585	3456	5106	1581	5023	1870	1585	1781	1870	2790
Grp Volume(v), veh/h	378	2574	0	227	2251	2	200	185	0	15	48	137
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1581	1674	1870	1585	1781	1870	1395
Q Serve(g_s), s	15.9	0.0	0.0	9.6	0.0	0.0	5.8	14.5	0.0	1.3	3.7	5.9
Cycle Q Clear(g_c), s	15.9	0.0	0.0	9.6	0.0	0.0	5.8	14.5	0.0	1.3	3.7	5.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	421	3340		270	3117	965	363	224		18	100	150
V/C Ratio(X)	0.90	0.77		0.84	0.72	0.00	0.55	0.83		0.83	0.48	0.91
Avail Cap(c_a), veh/h	530	3340		346	3117	965	536	303		48	133	199
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.22	0.22	0.00	0.75	0.75	0.75	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	0.0	0.0	62.4	0.0	0.0	67.2	64.5	0.0	74.1	68.9	46.4
Incr Delay (d2), s/veh	3.7	0.4	0.0	8.7	0.7	0.0	0.5	15.5	0.0	29.0	1.3	30.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.1	0.0	4.2	0.2	0.0	2.5	7.9	0.0	0.7	1.8	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	0.4	0.0	71.1	0.7	0.0	67.7	80.0	0.0	103.1	70.2	77.1
LnGrp LOS	E	A		E	A	A	E	F		F	E	E
Approach Vol, veh/h		2952	A		2480			385	A		200	
Approach Delay, s/veh		8.0			7.1			73.6			77.4	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	24.7	15.7	104.1	17.5	12.7	22.3	97.6
Change Period (Y+Rc), s	4.0	* 6.7	4.0	6.0	6.7	4.6	4.0	6.0
Max Green Setting (Gmax), s	4.0	* 24	15.0	87.0	16.0	10.7	23.0	79.0
Max Q Clear Time (g_c+I1), s	3.3	16.5	11.6	2.0	7.8	7.9	17.9	2.0
Green Ext Time (p_c), s	0.0	0.8	0.1	67.3	0.2	0.1	0.4	52.5

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	353	2060	4	10	1710	110	0	0	0	109	0	657
Future Volume (veh/h)	353	2060	4	10	1710	110	0	0	0	109	0	657
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	0.97		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	372	2168	4	11	1800	70	0	0	0	115	0	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	3015	6	13	2267	701	1	1	1	163	0	150
Arrive On Green	0.24	1.00	1.00	0.01	0.44	0.44	0.00	0.00	0.00	0.05	0.00	0.05
Sat Flow, veh/h	3456	5263	10	1781	5106	1580	1781	1870	1585	3449	0	3170
Grp Volume(v), veh/h	372	1402	770	11	1800	70	0	0	0	115	0	16
Grp Sat Flow(s),veh/h/ln	1728	1702	1869	1781	1702	1580	1781	1870	1585	1725	0	1585
Q Serve(g_s), s	15.6	0.0	0.0	0.9	45.4	3.9	0.0	0.0	0.0	4.9	0.0	0.7
Cycle Q Clear(g_c), s	15.6	0.0	0.0	0.9	45.4	3.9	0.0	0.0	0.0	4.9	0.0	0.7
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	416	1950	1070	13	2267	701	1	1	1	163	0	150
V/C Ratio(X)	0.90	0.72	0.72	0.84	0.79	0.10	0.00	0.00	0.00	0.71	0.00	0.11
Avail Cap(c_a), veh/h	553	1988	1091	36	2267	701	166	175	148	575	0	528
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.57	0.57	0.57	0.79	0.79	0.79	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.0	0.0	0.0	74.4	35.8	24.3	0.0	0.0	0.0	70.4	0.0	68.4
Incr Delay (d2), s/veh	7.3	0.8	1.4	31.7	2.4	0.2	0.0	0.0	0.0	2.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.2	0.4	0.5	18.6	1.5	0.0	0.0	0.0	2.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	0.8	1.4	106.1	38.2	24.5	0.0	0.0	0.0	72.5	0.0	68.5
LnGrp LOS	E	A	A	F	D	C	A	A	A	E	A	E
Approach Vol, veh/h		2544			1881			0			131	
Approach Delay, s/veh		10.1			38.1			0.0			72.0	
Approach LOS		B			D						E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		0.0	5.1	92.3		13.1	24.4	73.0				
Change Period (Y+Rc), s		4.0	4.0	6.4		6.0	6.4	* 6.4				
Max Green Setting (Gmax), s		14.0	3.0	87.6		25.0	24.0	* 67				
Max Q Clear Time (g_c+I1), s		0.0	2.9	2.0		6.9	17.6	47.4				
Green Ext Time (p_c), s		0.0	0.0	43.5		0.2	0.4	14.2				

Intersection Summary	
HCM 6th Ctrl Delay	23.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	117	110	1659	47	65	1964
Future Volume (veh/h)	117	110	1659	47	65	1964
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	116	1746	49	68	2067
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	184	163	3234	1004	87	3756
Arrive On Green	0.10	0.10	1.00	1.00	0.05	0.74
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	123	116	1746	49	68	2067
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	5.0	5.3	0.0	0.0	2.8	13.5
Cycle Q Clear(g_c), s	5.0	5.3	0.0	0.0	2.8	13.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	184	163	3234	1004	87	3756
V/C Ratio(X)	0.67	0.71	0.54	0.05	0.78	0.55
Avail Cap(c_a), veh/h	577	514	3234	1004	119	3756
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	0.83	0.83
Uniform Delay (d), s/veh	32.4	32.6	0.0	0.0	35.3	4.4
Incr Delay (d2), s/veh	3.1	4.2	0.6	0.1	11.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.8	0.2	0.0	1.4	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.5	36.7	0.6	0.1	47.1	4.9
LnGrp LOS	D	D	A	A	D	A
Approach Vol, veh/h	239		1795			2135
Approach Delay, s/veh	36.1		0.6			6.2
Approach LOS	D		A			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				61.6		13.4	7.7	53.9
Change Period (Y+Rc), s				6.4		5.7	4.0	6.4
Max Green Setting (Gmax), s				38.6		24.3	5.0	29.6
Max Q Clear Time (g_c+I1), s				15.5		7.3	4.8	2.0
Green Ext Time (p_c), s				18.1		0.5	0.0	17.1

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	118	66	148	1600	1922	181
Future Volume (veh/h)	118	66	148	1600	1922	181
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	69	156	1684	2023	191
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	201	92	202	3857	3422	1062
Arrive On Green	0.06	0.06	0.12	1.00	1.00	1.00
Sat Flow, veh/h	3456	1585	3456	5274	5274	1585
Grp Volume(v), veh/h	124	69	156	1684	2023	191
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1702	1585
Q Serve(g_s), s	5.3	6.4	6.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.3	6.4	6.6	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	201	92	202	3857	3422	1062
V/C Ratio(X)	0.62	0.75	0.77	0.44	0.59	0.18
Avail Cap(c_a), veh/h	583	267	599	3857	3422	1062
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.86	0.86	0.78	0.78
Uniform Delay (d), s/veh	69.0	69.6	65.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	4.5	2.0	0.3	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.7	2.8	0.1	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	70.2	74.1	67.3	0.3	0.6	0.3
LnGrp LOS	E	E	E	A	A	A
Approach Vol, veh/h	193			1840	2214	
Approach Delay, s/veh	71.6			6.0	0.6	
Approach LOS	E			A	A	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		14.4	12.8	106.5			119.3
Change Period (Y+Rc), s		5.7	4.0	6.0			* 6
Max Green Setting (Gmax), s		25.3	26.0	83.0			* 1.1E2
Max Q Clear Time (g_c+I1), s		8.4	8.6	2.0			2.0
Green Ext Time (p_c), s		0.3	0.2	49.3			35.2

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	11	184	3	39	15	222	1706	8	9	1868	156
Future Volume (veh/h)	45	11	184	3	39	15	222	1706	8	9	1868	156
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	36	194	3	41	16	234	1796	8	9	1966	164
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	257	218	6	152	59	257	3278	1018	15	2585	802
Arrive On Green	0.02	0.14	0.14	0.00	0.12	0.12	0.14	0.64	0.64	0.01	0.51	0.51
Sat Flow, veh/h	1781	1870	1585	1781	1281	500	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	30	36	194	3	0	57	234	1796	8	9	1966	164
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1780	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	2.5	2.5	18.0	0.3	0.0	4.4	19.4	29.1	0.3	0.8	46.4	8.5
Cycle Q Clear(g_c), s	2.5	2.5	18.0	0.3	0.0	4.4	19.4	29.1	0.3	0.8	46.4	8.5
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	38	257	218	6	0	212	257	3278	1018	15	2585	802
V/C Ratio(X)	0.78	0.14	0.89	0.54	0.00	0.27	0.91	0.55	0.01	0.61	0.76	0.20
Avail Cap(c_a), veh/h	71	324	275	48	0	309	356	3278	1018	48	2585	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.82	0.82	0.82
Uniform Delay (d), s/veh	73.0	56.9	63.6	74.7	0.0	60.1	63.2	14.8	9.7	74.1	29.7	20.4
Incr Delay (d2), s/veh	12.2	0.3	25.9	26.7	0.0	0.5	16.7	0.6	0.0	11.5	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.2	8.7	0.2	0.0	2.0	9.8	10.7	0.1	0.4	18.4	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.2	57.2	89.5	101.3	0.0	60.7	79.9	15.4	9.7	85.6	31.0	20.6
LnGrp LOS	F	E	F	F	A	E	E	B	A	F	C	C
Approach Vol, veh/h		260			60			2038			2139	
Approach Delay, s/veh		84.5			62.7			22.8			30.4	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	26.6	25.6	81.6	7.2	23.8	5.3	102.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	4.0	26.0	30.0	70.3	6.0	* 26	4.0	96.3
Max Q Clear Time (g_c+I1), s	2.3	20.0	21.4	48.4	4.5	6.4	2.8	31.1
Green Ext Time (p_c), s	0.0	0.5	0.2	19.0	0.0	0.2	0.0	37.9

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	8	5	149	258	297	32	1569	117	125	1649	39
Future Volume (veh/h)	2	8	5	149	258	297	32	1569	117	125	1649	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	8	5	157	272	0	34	1652	0	132	1736	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	21	18	180	391		44	3610		178	3766	89
Arrive On Green	0.00	0.01	0.01	0.10	0.11	0.00	0.02	0.71	0.00	0.05	0.73	0.73
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	5106	1585	3456	5131	121
Grp Volume(v), veh/h	2	8	5	157	272	0	34	1652	0	132	1151	626
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1702	1585	1728	1702	1849
Q Serve(g_s), s	0.2	0.6	0.5	13.0	11.1	0.0	2.8	21.0	0.0	5.7	20.4	20.4
Cycle Q Clear(g_c), s	0.2	0.6	0.5	13.0	11.1	0.0	2.8	21.0	0.0	5.7	20.4	20.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	4	21	18	180	391		44	3610		178	2498	1357
V/C Ratio(X)	0.53	0.38	0.28	0.87	0.70		0.78	0.46		0.74	0.46	0.46
Avail Cap(c_a), veh/h	143	251	212	297	765		143	3610		323	2498	1357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	0.60	0.60	0.00	0.68	0.68	0.68
Uniform Delay (d), s/veh	74.8	73.7	73.6	66.5	64.3	0.0	72.8	9.5	0.0	70.2	8.0	8.0
Incr Delay (d2), s/veh	36.2	30.5	23.6	8.0	3.5	0.0	6.5	0.1	0.0	1.6	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.3	6.4	5.2	0.0	1.4	7.1	0.0	2.5	6.7	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	110.9	104.1	97.1	74.5	67.8	0.0	79.3	9.6	0.0	71.7	8.4	8.8
LnGrp LOS	F	F	F	E	E		E	A		E	A	A
Approach Vol, veh/h		15			429	A		1686	A		1909	
Approach Delay, s/veh		102.7			70.3			11.0			12.9	
Approach LOS		F			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	7.4	7.7	115.8	4.3	22.2	11.7	111.8
Change Period (Y+Rc), s	4.0	* 5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	25.0	* 20	12.0	74.3	12.0	32.3	14.0	72.3
Max Q Clear Time (g_c+I1), s	15.0	2.6	4.8	22.4	2.2	13.1	7.7	23.0
Green Ext Time (p_c), s	0.1	0.0	0.0	29.8	0.0	2.4	0.1	27.2

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	1124	97	44	1732	618	277	1038	62	1087	470	172
Future Volume (veh/h)	94	1124	97	44	1732	618	277	1038	62	1087	470	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	1183	36	46	1823	0	292	1093	12	1144	495	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1926	596	78	1872		339	1186	366	2177	2955	
Arrive On Green	0.03	0.38	0.38	0.02	0.37	0.00	0.10	0.23	0.23	0.14	0.19	0.00
Sat Flow, veh/h	3456	5106	1579	3456	5106	1585	3456	5106	1575	5023	5106	1585
Grp Volume(v), veh/h	99	1183	36	46	1823	0	292	1093	12	1144	495	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1579	1728	1702	1585	1728	1702	1575	1674	1702	1585
Q Serve(g_s), s	4.3	28.2	2.2	2.0	52.8	0.0	12.5	31.4	1.0	31.7	12.2	0.0
Cycle Q Clear(g_c), s	4.3	28.2	2.2	2.0	52.8	0.0	12.5	31.4	1.0	31.7	12.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	1926	596	78	1872		339	1186	366	2177	2955	
V/C Ratio(X)	0.86	0.61	0.06	0.59	0.97		0.86	0.92	0.03	0.53	0.17	
Avail Cap(c_a), veh/h	115	1926	596	115	1872		438	1202	371	2177	2955	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.83	0.83	0.00
Uniform Delay (d), s/veh	72.2	37.9	29.8	72.6	46.8	0.0	66.6	56.3	59.7	50.0	30.5	0.0
Incr Delay (d2), s/veh	42.4	1.5	0.2	2.6	15.1	0.0	10.9	11.8	0.1	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	12.1	0.9	0.9	24.9	0.0	5.9	14.5	0.3	14.3	5.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	114.6	39.3	30.0	75.2	61.9	0.0	77.5	68.1	59.7	50.1	30.6	0.0
LnGrp LOS	F	D	C	E	E		E	E	E	D	C	
Approach Vol, veh/h		1318			1869	A		1397			1639	A
Approach Delay, s/veh		44.7			62.2			70.0			44.2	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	62.6	18.7	92.9	9.0	61.0	71.1	40.5
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	5.7	* 5.7
Max Green Setting (Gmax), s	5.0	55.0	19.0	51.3	5.0	55.0	35.0	* 35
Max Q Clear Time (g_c+I1), s	4.0	30.2	14.5	14.2	6.3	54.8	33.7	33.4
Green Ext Time (p_c), s	0.0	12.6	0.2	5.3	0.0	0.2	0.5	1.5

Intersection Summary	
HCM 6th Ctrl Delay	55.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	2	22	32	2	141	35	1104	27	70	520	1
Future Volume (veh/h)	44	2	22	32	2	141	35	1104	27	70	520	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	2	23	34	2	148	37	1162	28	74	547	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	8	169	257	15	241	91	1464	35	136	1593	3
Arrive On Green	0.11	0.11	0.11	0.15	0.15	0.15	0.05	0.41	0.41	0.08	0.44	0.44
Sat Flow, veh/h	1710	74	1585	1687	99	1585	1781	3546	85	1781	3639	7
Grp Volume(v), veh/h	48	0	23	36	0	148	37	582	608	74	267	281
Grp Sat Flow(s),veh/h/ln	1785	0	1585	1786	0	1585	1781	1777	1855	1781	1777	1869
Q Serve(g_s), s	1.7	0.0	0.9	1.2	0.0	6.1	1.4	20.1	20.1	2.8	7.0	7.0
Cycle Q Clear(g_c), s	1.7	0.0	0.9	1.2	0.0	6.1	1.4	20.1	20.1	2.8	7.0	7.0
Prop In Lane	0.96		1.00	0.94		1.00	1.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	190	0	169	272	0	241	91	734	766	136	778	818
V/C Ratio(X)	0.25	0.00	0.14	0.13	0.00	0.61	0.41	0.79	0.79	0.55	0.34	0.34
Avail Cap(c_a), veh/h	254	0	226	1042	0	925	177	868	906	177	868	913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	28.4	25.8	0.0	27.8	32.3	18.0	18.0	31.3	13.1	13.1
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	0.9	1.1	5.2	5.0	1.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.3	0.5	0.0	2.2	0.6	8.1	8.4	1.2	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.1	0.0	28.6	25.8	0.0	28.8	33.4	23.2	23.0	32.6	13.5	13.5
LnGrp LOS	C	A	C	C	A	C	C	C	C	C	B	B
Approach Vol, veh/h		71			184			1227			622	
Approach Delay, s/veh		28.9			28.2			23.4			15.8	
Approach LOS		C			C			C			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.5	7.6	36.5		14.7	9.3	34.7				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		10.0	7.0	34.3		41.0	7.0	34.3				
Max Q Clear Time (g_c+I1), s		3.7	3.4	9.0		8.1	4.8	22.1				
Green Ext Time (p_c), s		0.1	0.0	4.0		0.5	0.0	6.9				

Intersection Summary	
HCM 6th Ctrl Delay	21.8
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	189	389	75	710	450	376	764	181	110	361	21
Future Volume (veh/h)	15	189	389	75	710	450	376	764	181	110	361	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2001	1924	1924	2001	1924	1924	2001	1924	1924	1954	1879	1879
Adj Flow Rate, veh/h	16	199	285	79	747	214	396	804	89	116	380	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	70	946	641	182	1160	515	503	1197	531	377	1517	468
Arrive On Green	0.04	0.26	0.26	0.10	0.32	0.32	0.14	0.33	0.33	0.10	0.30	0.30
Sat Flow, veh/h	1906	3656	1621	1906	3656	1623	3698	3656	1623	3611	5130	1585
Grp Volume(v), veh/h	16	199	285	79	747	214	396	804	89	116	380	6
Grp Sat Flow(s),veh/h/ln	1906	1828	1621	1906	1828	1623	1849	1828	1623	1806	1710	1585
Q Serve(g_s), s	0.7	3.9	11.7	3.5	15.9	9.4	9.4	17.2	3.5	2.7	5.1	0.2
Cycle Q Clear(g_c), s	0.7	3.9	11.7	3.5	15.9	9.4	9.4	17.2	3.5	2.7	5.1	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	946	641	182	1160	515	503	1197	531	377	1517	468
V/C Ratio(X)	0.23	0.21	0.44	0.43	0.64	0.42	0.79	0.67	0.17	0.31	0.25	0.01
Avail Cap(c_a), veh/h	210	1466	872	210	1466	651	735	1385	615	399	1517	468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	26.3	20.1	38.7	26.5	24.3	37.8	26.3	21.7	37.5	24.3	22.5
Incr Delay (d2), s/veh	0.6	0.2	0.8	0.6	1.1	0.9	2.0	1.4	0.3	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.6	4.1	1.6	6.5	3.4	4.1	7.0	1.3	1.1	1.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.0	26.5	20.9	39.3	27.6	25.2	39.8	27.7	21.9	37.7	24.4	22.6
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		500			1040			1289			502	
Approach Delay, s/veh		23.9			28.0			31.0			27.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	29.1	16.3	32.5	7.3	34.4	13.5	35.3
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	10.0	36.3	18.0	26.3	10.0	36.3	10.0	34.3
Max Q Clear Time (g_c+I1), s	5.5	5.9	11.4	7.1	2.7	17.9	4.7	19.2
Green Ext Time (p_c), s	0.1	1.6	0.9	6.2	0.0	10.5	0.2	10.2

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	743	25	14	985	79	130
Future Volume (veh/h)	743	25	14	985	79	130
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	782	26	15	1037	83	137
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1332	594	55	1797	448	399
Arrive On Green	0.37	0.37	0.03	0.51	0.25	0.25
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	782	26	15	1037	83	137
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	7.0	0.4	0.3	8.1	1.5	2.8
Cycle Q Clear(g_c), s	7.0	0.4	0.3	8.1	1.5	2.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1332	594	55	1797	448	399
V/C Ratio(X)	0.59	0.04	0.27	0.58	0.19	0.34
Avail Cap(c_a), veh/h	2429	1083	357	3648	1160	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	7.9	18.9	6.9	11.7	12.3
Incr Delay (d2), s/veh	0.7	0.1	1.0	0.5	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.1	0.1	1.4	0.5	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.7	8.0	19.9	7.4	11.8	12.4
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h	808			1052	220	
Approach Delay, s/veh	10.6			7.6	12.2	
Approach LOS	B			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.0	5.2	20.7		25.9
Change Period (Y+Rc), s		4.0	4.0	5.7		* 5.7
Max Green Setting (Gmax), s		26.0	8.0	27.3		* 41
Max Q Clear Time (g_c+I1), s		4.8	2.3	9.0		10.1
Green Ext Time (p_c), s		0.5	0.0	5.7		10.1

Intersection Summary	
HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	171	583	62	352	257	616	1517	39	84	662	17
Future Volume (veh/h)	108	171	583	62	352	257	616	1517	39	84	662	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	180	0	65	371	0	648	1597	0	88	697	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	478		255	480		726	2510		412	2131	
Arrive On Green	0.07	0.13	0.00	0.07	0.14	0.00	0.21	0.49	0.00	0.12	0.42	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	114	180	0	65	371	0	648	1597	0	88	697	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	3.8	5.5	0.0	2.1	12.1	0.0	21.9	27.8	0.0	2.8	11.1	0.0
Cycle Q Clear(g_c), s	3.8	5.5	0.0	2.1	12.1	0.0	21.9	27.8	0.0	2.8	11.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	478		255	480		726	2510		412	2131	
V/C Ratio(X)	0.45	0.38		0.25	0.77		0.89	0.64		0.21	0.33	
Avail Cap(c_a), veh/h	288	690		288	702		1008	2510		412	2131	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	47.3	0.0	52.5	50.1	0.0	46.1	22.6	0.0	47.8	23.6	0.0
Incr Delay (d2), s/veh	0.5	0.8	0.0	0.2	5.0	0.0	6.2	1.2	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.4	0.0	0.9	5.6	0.0	9.5	10.3	0.0	1.2	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	48.2	0.0	52.7	55.1	0.0	52.3	23.8	0.0	47.9	23.7	0.0
LnGrp LOS	D	D		D	E		D	C		D	C	
Approach Vol, veh/h		294	A		436	A		2245	A		785	A
Approach Delay, s/veh		50.3			54.7			32.0			26.4	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.3	65.0	12.9	21.8	29.2	56.1	12.8	21.9
Change Period (Y+Rc), s	6.0	* 6	4.0	5.7	4.0	6.0	4.0	* 5.7
Max Green Setting (Gmax), s	8.0	* 59	10.0	23.3	35.0	32.0	10.0	* 24
Max Q Clear Time (g_c+I1), s	4.8	29.8	4.1	7.5	23.9	13.1	5.8	14.1
Green Ext Time (p_c), s	0.0	14.3	0.0	1.0	1.3	4.5	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	34.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	815	0	0	607	397	0	0	0	397	0	138
Future Volume (veh/h)	125	815	0	0	607	397	0	0	0	397	0	138
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1841	1841	0	1870	1841	1841				1841	0	1841
Adj Flow Rate, veh/h	132	858	0	0	639	418				418	0	145
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	4	4	0	2	4	4				4	0	4
Cap, veh/h	138	1779	0	4	1228	544				506	0	573
Arrive On Green	0.08	0.51	0.00	0.00	0.35	0.35				0.29	0.00	0.29
Sat Flow, veh/h	1753	3589	0	1781	3497	1549				1753	0	1560
Grp Volume(v), veh/h	132	858	0	0	639	418				418	0	145
Grp Sat Flow(s),veh/h/ln	1753	1749	0	1781	1749	1549				1753	0	1560
Q Serve(g_s), s	3.8	8.1	0.0	0.0	7.4	12.2				11.3	0.0	3.3
Cycle Q Clear(g_c), s	3.8	8.1	0.0	0.0	7.4	12.2				11.3	0.0	3.3
Prop In Lane	1.00		0.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	138	1779	0	4	1228	544				506	0	573
V/C Ratio(X)	0.96	0.48	0.00	0.00	0.52	0.77				0.83	0.00	0.25
Avail Cap(c_a), veh/h	138	1779	0	105	1632	723				966	0	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	23.3	8.1	0.0	0.0	13.1	14.6				16.9	0.0	11.2
Incr Delay (d2), s/veh	62.6	0.2	0.0	0.0	0.3	3.6				1.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.0	0.0	0.0	2.3	3.7				4.2	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.0	8.3	0.0	0.0	13.4	18.2				18.2	0.0	11.3
LnGrp LOS	F	A	A	A	B	B				B	A	B
Approach Vol, veh/h		990			1057						563	
Approach Delay, s/veh		18.7			15.3						16.4	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	31.5		19.3	8.0	23.5
Change Period (Y+Rc), s	4.0	5.7		4.6	4.0	5.7
Max Green Setting (Gmax), s	3.0	24.7		28.0	4.0	23.7
Max Q Clear Time (g_c+I1), s	0.0	10.1		13.3	5.8	14.2
Green Ext Time (p_c), s	0.0	3.5		1.3	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	736	10	64	987	117	31	3	30	121	5	26
Future Volume (veh/h)	184	736	10	64	987	117	31	3	30	121	5	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1885	1826	1826	1885	1885	1885	1791	1791	1732
Adj Flow Rate, veh/h	194	775	11	67	1039	123	33	3	32	127	5	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	1	5	5	1	1	1	1	1	5
Cap, veh/h	239	1717	24	84	1387	611	85	7	70	151	6	130
Arrive On Green	0.14	0.49	0.49	0.05	0.40	0.40	0.05	0.05	0.05	0.09	0.09	0.09
Sat Flow, veh/h	1739	3502	50	1795	3469	1528	1795	139	1480	1644	65	1419
Grp Volume(v), veh/h	194	384	402	67	1039	123	33	0	35	132	0	27
Grp Sat Flow(s),veh/h/ln	1739	1735	1817	1795	1735	1528	1795	0	1619	1709	0	1419
Q Serve(g_s), s	5.9	7.9	7.9	2.0	14.0	2.9	1.0	0.0	1.2	4.2	0.0	1.0
Cycle Q Clear(g_c), s	5.9	7.9	7.9	2.0	14.0	2.9	1.0	0.0	1.2	4.2	0.0	1.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.91	0.96		1.00
Lane Grp Cap(c), veh/h	239	850	891	84	1387	611	85	0	76	156	0	130
V/C Ratio(X)	0.81	0.45	0.45	0.79	0.75	0.20	0.39	0.00	0.46	0.84	0.00	0.21
Avail Cap(c_a), veh/h	255	867	908	164	1544	680	493	0	445	156	0	130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.9	9.1	9.1	25.8	14.0	10.7	25.3	0.0	25.3	24.4	0.0	23.0
Incr Delay (d2), s/veh	15.5	0.4	0.4	6.2	1.9	0.2	1.1	0.0	1.6	32.2	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	2.1	2.2	0.9	4.5	0.8	0.4	0.0	0.5	3.0	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	9.5	9.5	31.9	15.9	10.9	26.3	0.0	26.9	56.6	0.0	23.8
LnGrp LOS	D	A	A	C	B	B	C	A	C	E	A	C
Approach Vol, veh/h		980			1229			68			159	
Approach Delay, s/veh		15.2			16.3			26.6			51.0	
Approach LOS		B			B			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	32.5		6.6	11.5	27.5		9.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	5.0	27.3		15.0	8.0	24.3		5.0
Max Q Clear Time (g_c+I1), s	4.0	9.9		3.2	7.9	16.0		6.2
Green Ext Time (p_c), s	0.0	7.0		0.1	0.0	5.8		0.0

Intersection Summary			
HCM 6th Ctrl Delay			18.4
HCM 6th LOS			B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	920	287	357	857	126	230
Future Volume (veh/h)	920	287	357	857	126	230
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	968	302	376	902	133	242
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1007	629	386	2132	207	528
Arrive On Green	0.28	0.28	0.22	0.60	0.12	0.12
Sat Flow, veh/h	3647	1571	1781	3647	1781	1585
Grp Volume(v), veh/h	968	302	376	902	133	242
Grp Sat Flow(s),veh/h/ln	1777	1571	1781	1777	1781	1585
Q Serve(g_s), s	16.1	8.6	12.6	8.2	4.3	0.0
Cycle Q Clear(g_c), s	16.1	8.6	12.6	8.2	4.3	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1007	629	386	2132	207	528
V/C Ratio(X)	0.96	0.48	0.97	0.42	0.64	0.46
Avail Cap(c_a), veh/h	1007	629	386	2132	475	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	21.2	13.4	23.3	6.4	25.3	15.8
Incr Delay (d2), s/veh	19.6	0.6	38.1	0.6	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	3.2	8.5	2.0	1.8	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.8	14.0	61.4	7.0	26.6	16.0
LnGrp LOS	D	B	E	A	C	B
Approach Vol, veh/h	1270			1278	375	
Approach Delay, s/veh	34.4			23.0	19.7	
Approach LOS	C			C	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.0	23.0		11.0		42.0
Change Period (Y+Rc), s	6.0	* 6		4.0		6.0
Max Green Setting (Gmax), s	13.0	* 17		16.0		34.0
Max Q Clear Time (g_c+I1), s	14.6	18.1		6.3		10.2
Green Ext Time (p_c), s	0.0	0.0		0.7		3.6

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	913	260	597	607	0	0	0	1174	0	0	625
Future Volume (vph)	0	913	260	597	607	0	0	0	1174	0	0	625
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7	5.7	4.0	4.0				4.0			5.0
Lane Util. Factor		0.91	1.00	0.97	0.95				1.00			1.00
Frpb, ped/bikes		1.00	0.98	1.00	1.00				1.00			1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00				1.00			1.00
Frt		1.00	0.85	1.00	1.00				0.86			0.86
Flt Protected		1.00	1.00	0.95	1.00				1.00			1.00
Satd. Flow (prot)		5085	1554	3433	3539				1611			1611
Flt Permitted		1.00	1.00	0.95	1.00				1.00			1.00
Satd. Flow (perm)		5085	1554	3433	3539				1611			1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	961	274	628	639	0	0	0	1236	0	0	658
RTOR Reduction (vph)	0	0	58	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	961	216	628	639	0	0	0	1236	0	0	658
Confl. Peds. (#/hr)			5									
Turn Type		NA	Perm	Prot	NA				Free			Perm
Protected Phases		2		1								
Permitted Phases			2		Free				Free			4
Actuated Green, G (s)		34.8	34.8	15.5	60.0				60.0			60.0
Effective Green, g (s)		34.8	34.8	15.5	60.0				60.0			60.0
Actuated g/C Ratio		0.58	0.58	0.26	1.00				1.00			1.00
Clearance Time (s)		5.7	5.7	4.0								5.0
Vehicle Extension (s)		3.4	3.4	2.0								3.0
Lane Grp Cap (vph)		2949	901	886	3539				1611			1611
v/s Ratio Prot		0.19		0.18								
v/s Ratio Perm			0.14		0.18				c0.77			0.41
v/c Ratio		0.33	0.24	0.71	0.18				0.77			0.41
Uniform Delay, d1		6.5	6.1	20.2	0.0				0.0			0.0
Progression Factor		0.42	0.25	1.09	1.00				1.00			1.00
Incremental Delay, d2		0.2	0.5	1.4	0.1				3.6			0.2
Delay (s)		3.0	2.0	23.4	0.1				3.6			0.2
Level of Service		A	A	C	A				A			A
Approach Delay (s)		2.7			11.6			3.6			0.2	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBT	WBR	WBR2	NBL2	NBT	NBR	SBL	SBR	SBR2
Lane Configurations												
Traffic Volume (vph)	188	1679	220	722	1135	276	162	368	719	97	320	58
Future Volume (vph)	188	1679	220	722	1135	276	162	368	719	97	320	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.7	4.0	5.7	5.7	5.7	4.0	5.3	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.86	0.86	1.00	1.00	0.95	1.00	0.97	0.88	
Frpb, ped/bikes	1.00	1.00	0.98	0.99	1.00	1.00	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	0.93	0.85	0.85	1.00	1.00	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1548	4455	1362	1583	1770	3539	1562	3433	2787	
Flt Permitted	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1548	4455	1362	1583	1770	3539	1562	3433	2787	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	198	1767	232	760	1195	291	171	387	757	102	337	61
RTOR Reduction (vph)	0	0	0	0	0	155	0	0	0	0	97	0
Lane Group Flow (vph)	198	1767	232	1358	597	136	171	387	757	102	301	0
Confl. Peds. (#/hr)			5		5				5		5	
Turn Type	Prot	NA	Free	NA	Prot	Perm	Prot	NA	Free	Prot	pm+ov	
Protected Phases	5	2		6	6		3	8		7	5	
Permitted Phases			Free			6			Free		4	
Actuated Green, G (s)	13.4	73.5	120.0	56.1	56.1	56.1	36.8	21.5	120.0	10.0	13.4	
Effective Green, g (s)	13.4	73.5	120.0	56.1	56.1	56.1	36.8	21.5	120.0	10.0	13.4	
Actuated g/C Ratio	0.11	0.61	1.00	0.47	0.47	0.47	0.31	0.18	1.00	0.08	0.11	
Clearance Time (s)	4.0	5.7		5.7	5.7	5.7	4.0	5.3		4.0	4.0	
Vehicle Extension (s)	2.0	3.4		3.4	3.4	3.4	4.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	383	2167	1548	2082	636	740	542	634	1562	286	311	
v/s Ratio Prot	0.06	0.50		0.30	c0.44		0.10	c0.11		0.03	c0.11	
v/s Ratio Perm			0.15			0.09			c0.48			
v/c Ratio	0.52	0.82	0.15	0.86dr	0.94	0.18	0.32	0.61	0.48	0.36	0.97	
Uniform Delay, d1	50.2	18.0	0.0	24.5	30.3	18.6	31.9	45.4	0.0	52.0	53.1	
Progression Factor	0.99	0.92	1.00	0.48	0.48	0.09	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	2.8	0.2	0.7	19.6	0.1	0.5	2.0	1.1	0.3	41.8	
Delay (s)	50.1	19.4	0.2	12.4	34.3	1.8	32.4	47.4	1.1	52.2	94.9	
Level of Service	D	B	A	B	C	A	C	D	A	D	F	
Approach Delay (s)		20.1		16.8				18.8				
Approach LOS		C		B				B				

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	1990	337	68	1812	32	161	255	144	172	279	160
Future Volume (veh/h)	191	1990	337	68	1812	32	161	255	144	172	279	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	201	2095	0	72	1907	0	169	268	0	181	294	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	2587		236	3126		417	759		287	687	211
Arrive On Green	0.15	1.00	0.00	0.07	0.49	0.00	0.08	0.15	0.00	0.08	0.13	0.13
Sat Flow, veh/h	3456	5106	1585	3456	6434	1585	5023	5106	1585	3456	5106	1567
Grp Volume(v), veh/h	201	2095	0	72	1907	0	169	268	0	181	294	168
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1609	1585	1674	1702	1585	1728	1702	1567
Q Serve(g_s), s	6.7	0.0	0.0	2.4	26.0	0.0	3.8	5.7	0.0	6.1	6.3	12.5
Cycle Q Clear(g_c), s	6.7	0.0	0.0	2.4	26.0	0.0	3.8	5.7	0.0	6.1	6.3	12.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	2587		236	3126		417	759		287	687	211
V/C Ratio(X)	0.78	0.81		0.31	0.61		0.41	0.35		0.63	0.43	0.80
Avail Cap(c_a), veh/h	346	2608		259	3126		419	838		317	864	265
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	0.0	0.0	53.2	22.5	0.0	52.2	45.9	0.0	53.2	47.7	50.3
Incr Delay (d2), s/veh	3.5	1.3	0.0	0.3	0.9	0.0	0.2	0.4	0.0	2.2	0.5	13.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.3	0.0	1.0	9.5	0.0	1.6	2.4	0.0	2.7	2.7	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	1.3	0.0	53.5	23.4	0.0	52.4	46.3	0.0	55.5	48.2	63.7
LnGrp LOS	D	A		D	C		D	D		E	D	E
Approach Vol, veh/h		2296	A		1979	A		437	A		643	
Approach Delay, s/veh		5.9			24.5			48.7			54.3	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	23.1	12.2	66.5	15.3	21.8	14.7	64.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.7	5.3	* 5.7	5.7	* 5.7
Max Green Setting (Gmax), s	11.0	19.7	9.0	61.3	10.0	* 20	12.0	* 58
Max Q Clear Time (g_c+I1), s	8.1	7.7	4.4	2.0	5.8	14.5	8.7	28.0
Green Ext Time (p_c), s	0.1	1.6	0.0	34.7	0.1	1.4	0.1	20.2

Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	203	4	39	138	63	6	1311	82	54	1464	246
Future Volume (veh/h)	390	203	4	39	138	63	6	1311	82	54	1464	246
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	214	0	41	145	0	6	1380	0	57	1541	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	479	603		53	215		288	3041		73	2353	
Arrive On Green	0.14	0.17	0.00	0.03	0.06	0.00	0.16	0.60	0.00	0.04	0.46	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	411	214	0	41	145	0	6	1380	0	57	1541	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	14.0	6.4	0.0	2.7	4.8	0.0	0.3	18.0	0.0	3.8	28.0	0.0
Cycle Q Clear(g_c), s	14.0	6.4	0.0	2.7	4.8	0.0	0.3	18.0	0.0	3.8	28.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	479	603		53	215		288	3041		73	2353	
V/C Ratio(X)	0.86	0.36		0.78	0.67		0.02	0.45		0.78	0.65	
Avail Cap(c_a), veh/h	662	1075		89	563		288	3041		134	2353	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.5	44.0	0.0	57.8	55.2	0.0	42.3	13.5	0.0	57.0	25.0	0.0
Incr Delay (d2), s/veh	6.3	0.6	0.0	9.0	5.0	0.0	0.0	0.2	0.0	6.4	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	2.8	0.0	1.3	2.2	0.0	0.1	6.3	0.0	1.8	10.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	44.6	0.0	66.8	60.2	0.0	42.3	13.6	0.0	63.4	26.4	0.0
LnGrp LOS	E	D		E	E		D	B		E	C	
Approach Vol, veh/h		625	A		186	A		1386	A		1598	A
Approach Delay, s/veh		52.6			61.6			13.7			27.7	
Approach LOS		D			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	26.3	25.1	61.0	20.6	13.3	8.9	77.2
Change Period (Y+Rc), s	4.0	* 6	5.7	* 5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	6.0	* 36	3.0	* 55	23.0	19.0	9.0	49.3
Max Q Clear Time (g_c+I1), s	4.7	8.4	2.3	30.0	16.0	6.8	5.8	20.0
Green Ext Time (p_c), s	0.0	1.4	0.0	13.8	0.7	0.5	0.0	13.2

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	125	128	64	180	94	124	1291	51	172	1162	9
Future Volume (veh/h)	57	125	128	64	180	94	124	1291	51	172	1162	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	132	0	67	189	0	131	1359	0	181	1223	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	248		86	266		158	2098		210	2319	
Arrive On Green	0.04	0.07	0.00	0.05	0.07	0.00	0.09	0.41	0.00	0.12	0.45	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	60	132	0	67	189	0	131	1359	0	181	1223	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	4.0	4.3	0.0	4.5	6.2	0.0	8.7	25.6	0.0	12.0	20.6	0.0
Cycle Q Clear(g_c), s	4.0	4.3	0.0	4.5	6.2	0.0	8.7	25.6	0.0	12.0	20.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	248		86	266		158	2098		210	2319	
V/C Ratio(X)	0.78	0.53		0.78	0.71		0.83	0.65		0.86	0.53	
Avail Cap(c_a), veh/h	119	580		134	610		252	2098		327	2319	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.8	53.9	0.0	56.5	54.2	0.0	53.8	28.4	0.0	52.0	23.5	0.0
Incr Delay (d2), s/veh	6.9	2.1	0.0	5.8	4.8	0.0	5.9	1.6	0.0	8.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.0	0.0	2.1	2.9	0.0	4.1	10.3	0.0	5.7	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.7	56.0	0.0	62.3	59.0	0.0	59.7	29.9	0.0	60.5	23.8	0.0
LnGrp LOS	E	E		E	E		E	C		E	C	
Approach Vol, veh/h		192	A		256	A		1490	A		1404	A
Approach Delay, s/veh		58.4			59.9			32.6			28.6	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	14.8	14.7	60.2	9.2	15.4	19.8	55.0
Change Period (Y+Rc), s	4.0	6.4	4.0	5.7	4.0	6.4	5.7	* 5.7
Max Green Setting (Gmax), s	9.0	19.6	17.0	54.3	8.0	20.6	22.0	* 49
Max Q Clear Time (g_c+I1), s	6.5	6.3	10.7	22.6	6.0	8.2	14.0	27.6
Green Ext Time (p_c), s	0.0	0.4	0.1	11.6	0.0	0.8	0.2	11.1

Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	1254	442	60	1310	609	589	514	19	446	482	25
Future Volume (veh/h)	165	1254	442	60	1310	609	589	514	19	446	482	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	1320	247	63	1379	0	620	541	17	469	507	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	2095	650	105	1830		687	1151	36	562	615	27
Arrive On Green	0.13	0.82	0.82	0.03	0.36	0.00	0.20	0.23	0.23	0.11	0.12	0.12
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5087	159	5023	5019	217
Grp Volume(v), veh/h	174	1320	247	63	1379	0	620	361	197	469	343	186
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1842	1674	1702	1831
Q Serve(g_s), s	5.8	11.5	2.0	2.2	28.5	0.0	21.0	11.0	11.1	11.0	11.8	11.9
Cycle Q Clear(g_c), s	5.8	11.5	2.0	2.2	28.5	0.0	21.0	11.0	11.1	11.0	11.8	11.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		0.12
Lane Grp Cap(c), veh/h	227	2095	650	105	1830		687	770	417	562	417	225
V/C Ratio(X)	0.77	0.63	0.38	0.60	0.75		0.90	0.47	0.47	0.83	0.82	0.83
Avail Cap(c_a), veh/h	317	2095	650	144	1830		864	823	445	712	454	244
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	7.4	1.1	57.4	33.8	0.0	46.9	40.2	40.2	52.2	51.4	51.4
Incr Delay (d2), s/veh	4.2	0.7	0.6	2.0	2.9	0.0	9.6	0.6	1.1	5.6	11.4	20.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.5	1.3	1.0	11.7	0.0	9.7	4.6	5.1	4.8	5.6	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	8.1	1.7	59.5	36.8	0.0	56.5	40.8	41.4	57.8	62.8	71.8
LnGrp LOS	E	A	A	E	D		E	D	D	E	E	E
Approach Vol, veh/h		1741			1442	A		1178			998	
Approach Delay, s/veh		11.9			37.8			49.2			62.1	
Approach LOS		B			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	55.2	29.9	20.7	13.9	49.0	17.4	33.1
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	5.0	49.0	30.0	* 16	11.0	* 43	17.0	29.0
Max Q Clear Time (g_c+I1), s	4.2	13.5	23.0	13.9	7.8	30.5	13.0	13.1
Green Ext Time (p_c), s	0.0	19.5	0.8	0.8	0.1	8.9	0.4	3.9

Intersection Summary	
HCM 6th Ctrl Delay	36.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	0	0	32	6	61	14	1107	13	35	540	4
Future Volume (veh/h)	33	0	0	32	6	61	14	1107	13	35	540	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	0	0	34	6	64	15	1165	14	37	568	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	137	0	208	37	216	46	1600	19	95	1709	12
Arrive On Green	0.07	0.00	0.00	0.14	0.14	0.14	0.03	0.44	0.44	0.05	0.47	0.47
Sat Flow, veh/h	1781	1870	0	1525	269	1585	1781	3596	43	1781	3617	25
Grp Volume(v), veh/h	35	0	0	40	0	64	15	576	603	37	279	293
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1794	0	1585	1781	1777	1863	1781	1777	1866
Q Serve(g_s), s	1.1	0.0	0.0	1.2	0.0	2.2	0.5	16.1	16.1	1.2	6.0	6.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.2	0.0	2.2	0.5	16.1	16.1	1.2	6.0	6.0
Prop In Lane	1.00		0.00	0.85		1.00	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	131	137	0	245	0	216	46	790	829	95	840	882
V/C Ratio(X)	0.27	0.00	0.00	0.16	0.00	0.30	0.33	0.73	0.73	0.39	0.33	0.33
Avail Cap(c_a), veh/h	294	308	0	592	0	523	206	1034	1084	206	1034	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	0.0	0.0	23.1	0.0	23.6	29.0	13.8	13.8	27.7	10.0	10.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.3	1.5	2.6	2.5	1.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.5	0.0	0.8	0.2	6.1	6.3	0.5	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	0.0	0.0	23.2	0.0	23.9	30.5	16.5	16.3	28.7	10.4	10.4
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		35			104			1194			609	
Approach Delay, s/veh		27.0			23.6			16.6			11.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	34.4		8.5	7.2	32.7		12.3
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	7.0	35.3		10.0	7.0	35.3		20.0
Max Q Clear Time (g_c+I1), s	2.5	8.0		3.1	3.2	18.1		4.2
Green Ext Time (p_c), s	0.0	4.5		0.0	0.0	8.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	392	28	33	1155	69	43	5	16	21	17	8
Future Volume (veh/h)	58	392	28	33	1155	69	43	5	16	21	17	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	413	29	35	1216	73	45	5	17	22	18	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1476	103	66	1459	651	202	22	199	93	76	147
Arrive On Green	0.06	0.44	0.44	0.04	0.41	0.41	0.13	0.13	0.13	0.09	0.09	0.09
Sat Flow, veh/h	1781	3369	236	1781	3554	1585	1611	179	1585	1001	819	1585
Grp Volume(v), veh/h	61	217	225	35	1216	73	50	0	17	40	0	8
Grp Sat Flow(s),veh/h/ln	1781	1777	1828	1781	1777	1585	1790	0	1585	1820	0	1585
Q Serve(g_s), s	1.9	4.5	4.6	1.1	17.7	1.6	1.5	0.0	0.5	1.2	0.0	0.3
Cycle Q Clear(g_c), s	1.9	4.5	4.6	1.1	17.7	1.6	1.5	0.0	0.5	1.2	0.0	0.3
Prop In Lane	1.00		0.13	1.00		1.00	0.90		1.00	0.55		1.00
Lane Grp Cap(c), veh/h	115	778	801	66	1459	651	224	0	199	169	0	147
V/C Ratio(X)	0.53	0.28	0.28	0.53	0.83	0.11	0.22	0.00	0.09	0.24	0.00	0.05
Avail Cap(c_a), veh/h	185	778	801	154	1494	667	341	0	302	662	0	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.2	10.4	10.4	27.3	15.3	10.5	22.7	0.0	22.3	24.3	0.0	23.9
Incr Delay (d2), s/veh	1.4	0.9	0.9	2.4	5.7	0.3	0.2	0.0	0.1	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.6	1.6	0.5	6.8	0.5	0.6	0.0	0.2	0.5	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	11.3	11.3	29.7	21.0	10.9	22.9	0.0	22.4	24.6	0.0	23.9
LnGrp LOS	C	B	B	C	C	B	C	A	C	C	A	C
Approach Vol, veh/h		503			1324			67			48	
Approach Delay, s/veh		13.2			20.7			22.8			24.5	
Approach LOS		B			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.2	6.1	31.0		9.4	7.7	29.4				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		11.0	5.0	25.3		21.0	6.0	24.3				
Max Q Clear Time (g_c+I1), s		3.5	3.1	6.6		3.2	3.9	19.7				
Green Ext Time (p_c), s		0.0	0.0	4.8		0.1	0.0	4.0				

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	255	65	28	602	311	482	1279	34	208	719	163
Future Volume (veh/h)	160	255	65	28	602	311	482	1279	34	208	719	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	268	0	29	634	0	507	1346	0	219	757	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	927		178	719		576	1762		276	1247	
Arrive On Green	0.11	0.26	0.00	0.05	0.20	0.00	0.17	0.35	0.00	0.08	0.24	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	168	268	0	29	634	0	507	1346	0	219	757	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	11.1	7.2	0.0	1.0	20.8	0.0	17.2	28.1	0.0	7.5	15.8	0.0
Cycle Q Clear(g_c), s	11.1	7.2	0.0	1.0	20.8	0.0	17.2	28.1	0.0	7.5	15.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	196	927		178	719		576	1762		276	1247	
V/C Ratio(X)	0.86	0.29		0.16	0.88		0.88	0.76		0.79	0.61	
Avail Cap(c_a), veh/h	282	1045		288	779		749	1842		346	1247	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.5	35.5	0.0	54.4	46.5	0.0	48.8	35.0	0.0	54.2	40.2	0.0
Incr Delay (d2), s/veh	11.8	0.3	0.0	0.2	11.7	0.0	8.1	2.1	0.0	7.5	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	3.1	0.0	0.4	10.1	0.0	7.7	11.2	0.0	3.4	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.3	35.7	0.0	54.6	58.2	0.0	57.0	37.1	0.0	61.8	42.4	0.0
LnGrp LOS	E	D		D	E		E	D		E	D	
Approach Vol, veh/h		436	A		663	A		1853	A		976	A
Approach Delay, s/veh		46.7			58.0			42.5			46.8	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	47.1	10.2	37.0	25.7	35.0	17.2	30.0
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	5.7
Max Green Setting (Gmax), s	12.0	43.3	10.0	35.3	26.0	* 29	19.0	26.3
Max Q Clear Time (g_c+I1), s	9.5	30.1	3.0	9.2	19.2	17.8	13.1	22.8
Green Ext Time (p_c), s	0.1	8.1	0.0	2.0	0.8	4.3	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	46.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	446	0	0	192	274	2	2	0	385	0	8
Future Volume (veh/h)	0	446	0	0	192	274	2	2	0	385	0	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	469	0	0	202	288	2	2	0	412	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	7	943	0	0	496	753	4	4	0	748	393	0
Arrive On Green	0.00	0.27	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.21	0.00	0.00
Sat Flow, veh/h	1781	3647	0	0	1870	1585	912	912	0	3563	1870	0
Grp Volume(v), veh/h	0	469	0	0	202	288	4	0	0	412	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1585	1825	0	0	1781	1870	0
Q Serve(g_s), s	0.0	2.8	0.0	0.0	2.2	2.9	0.1	0.0	0.0	2.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.8	0.0	0.0	2.2	2.9	0.1	0.0	0.0	2.6	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	0.50		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	7	943	0	0	496	753	8	0	0	748	393	0
V/C Ratio(X)	0.00	0.50	0.00	0.00	0.41	0.38	0.50	0.00	0.00	0.55	0.00	0.00
Avail Cap(c_a), veh/h	216	2308	0	0	687	914	294	0	0	3162	1660	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.7	0.0	0.0	7.5	4.2	12.3	0.0	0.0	8.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.6	0.3	16.8	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.0	0.0	0.5	0.7	0.1	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.1	0.0	0.0	8.1	4.5	29.1	0.0	0.0	9.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C	A	A	A	A	A
Approach Vol, veh/h		469			490			4			412	
Approach Delay, s/veh		8.1			6.0			29.1			9.0	
Approach LOS		A			A			C			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		11.5		9.2	0.0	11.5		4.1				
Change Period (Y+Rc), s		4.9		4.0	4.0	4.9		4.0				
Max Green Setting (Gmax), s		16.1		22.0	3.0	9.1		4.0				
Max Q Clear Time (g_c+I1), s		4.8		4.6	0.0	4.9		2.1				
Green Ext Time (p_c), s		1.8		1.0	0.0	1.1		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	836	5	3	482	0	11	0	11	116	0	4
Future Volume (veh/h)	0	836	5	3	482	0	11	0	11	116	0	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	880	0	3	507	0	12	0	12	122	0	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1399		12	1763	0	39	0	39	263	0	234
Arrive On Green	0.00	0.39	0.00	0.01	0.50	0.00	0.05	0.00	0.05	0.15	0.00	0.15
Sat Flow, veh/h	0	3741	0	1781	3647	0	839	0	839	1781	0	1585
Grp Volume(v), veh/h	0	880	0	3	507	0	24	0	0	122	0	4
Grp Sat Flow(s),veh/h/ln	0	1777	0	1781	1777	0	1677	0	0	1781	0	1585
Q Serve(g_s), s	0.0	8.3	0.0	0.1	3.5	0.0	0.6	0.0	0.0	2.6	0.0	0.1
Cycle Q Clear(g_c), s	0.0	8.3	0.0	0.1	3.5	0.0	0.6	0.0	0.0	2.6	0.0	0.1
Prop In Lane	0.00		0.00	1.00		0.00	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	0	1399		12	1763	0	78	0	0	263	0	234
V/C Ratio(X)	0.00	0.63		0.26	0.29	0.00	0.31	0.00	0.00	0.46	0.00	0.02
Avail Cap(c_a), veh/h	0	1886		342	2910	0	322	0	0	856	0	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.2	0.0	20.6	6.2	0.0	19.2	0.0	0.0	16.2	0.0	15.2
Incr Delay (d2), s/veh	0.0	0.5	0.0	4.2	0.1	0.0	0.8	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.3	0.0	0.0	0.7	0.0	0.2	0.0	0.0	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.7	0.0	24.8	6.3	0.0	20.0	0.0	0.0	16.7	0.0	15.2
LnGrp LOS	A	B		C	A	A	C	A	A	B	A	B
Approach Vol, veh/h		880	A		510			24			126	
Approach Delay, s/veh		10.7			6.4			20.0			16.7	
Approach LOS		B			A			C			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	4.3	21.3		5.9		25.6		10.1				
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9		4.0				
Max Green Setting (Gmax), s	8.0	22.1		8.0		34.1		20.0				
Max Q Clear Time (g_c+I1), s	2.1	10.3		2.6		5.5		4.6				
Green Ext Time (p_c), s	0.0	6.1		0.0		5.1		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			9.9									
HCM 6th LOS			A									

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	955	16	87	533	49	249
Future Volume (veh/h)	955	16	87	533	49	249
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1005	17	92	561	52	262
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1519	26	116	2075	369	328
Arrive On Green	0.42	0.42	0.06	0.58	0.21	0.21
Sat Flow, veh/h	3669	60	1781	3647	1781	1585
Grp Volume(v), veh/h	499	523	92	561	52	262
Grp Sat Flow(s),veh/h/ln	1777	1859	1781	1777	1781	1585
Q Serve(g_s), s	9.6	9.6	2.2	3.3	1.0	6.7
Cycle Q Clear(g_c), s	9.6	9.6	2.2	3.3	1.0	6.7
Prop In Lane		0.03	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	755	790	116	2075	369	328
V/C Ratio(X)	0.66	0.66	0.80	0.27	0.14	0.80
Avail Cap(c_a), veh/h	965	1010	167	2597	628	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.8	9.8	19.6	4.4	13.8	16.0
Incr Delay (d2), s/veh	1.2	1.1	9.4	0.1	0.1	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.7	1.1	0.6	0.4	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	10.9	29.0	4.4	13.8	17.7
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	1022			653	314	
Approach Delay, s/veh	10.9			7.9	17.1	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.8	23.0		12.8		29.7
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9
Max Green Setting (Gmax), s	4.0	23.1		15.0		31.1
Max Q Clear Time (g_c+I1), s	4.2	11.6		8.7		5.3
Green Ext Time (p_c), s	0.0	6.5		0.3		6.6

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	1109	4	34	738	90	4	6	12	408	4	37
Future Volume (veh/h)	49	1109	4	34	738	90	4	6	12	408	4	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	1167	4	36	777	95	4	6	13	432	0	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	2413	8	46	2079	254	5	8	17	521	0	232
Arrive On Green	0.04	0.66	0.66	0.03	0.65	0.65	0.02	0.02	0.02	0.15	0.00	0.15
Sat Flow, veh/h	1781	3633	12	1781	3187	390	293	439	952	3563	0	1585
Grp Volume(v), veh/h	52	571	600	36	433	439	23	0	0	432	0	39
Grp Sat Flow(s),veh/h/ln	1781	1777	1868	1781	1777	1800	1684	0	0	1781	0	1585
Q Serve(g_s), s	3.5	19.1	19.1	2.4	13.4	13.5	1.6	0.0	0.0	14.1	0.0	2.6
Cycle Q Clear(g_c), s	3.5	19.1	19.1	2.4	13.4	13.5	1.6	0.0	0.0	14.1	0.0	2.6
Prop In Lane	1.00		0.01	1.00		0.22	0.17		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	67	1180	1241	46	1159	1174	30	0	0	521	0	232
V/C Ratio(X)	0.77	0.48	0.48	0.79	0.37	0.37	0.77	0.00	0.00	0.83	0.00	0.17
Avail Cap(c_a), veh/h	148	1180	1241	89	1159	1174	56	0	0	873	0	388
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.89	0.89	0.89	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.2	10.0	10.0	58.1	9.6	9.6	58.7	0.0	0.0	49.8	0.0	44.8
Incr Delay (d2), s/veh	6.8	1.4	1.4	9.4	0.2	0.2	13.8	0.0	0.0	2.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	7.1	7.5	1.2	5.0	5.1	0.8	0.0	0.0	6.5	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.1	11.4	11.3	67.5	9.8	9.8	72.5	0.0	0.0	52.4	0.0	45.1
LnGrp LOS	E	B	B	E	A	A	E	A	A	D	A	D
Approach Vol, veh/h		1223			908			23			471	
Approach Delay, s/veh		13.6			12.1			72.5			51.8	
Approach LOS		B			B			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	84.6		6.1	8.5	83.2		22.2				
Change Period (Y+Rc), s	4.0	4.9		4.0	4.0	4.9		4.6				
Max Green Setting (Gmax), s	6.0	63.1		4.0	10.0	59.1		29.4				
Max Q Clear Time (g_c+I1), s	4.4	21.1		3.6	5.5	15.5		16.1				
Green Ext Time (p_c), s	0.0	28.3		0.0	0.0	21.3		1.4				

Intersection Summary			
HCM 6th Ctrl Delay			20.4
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	1321	15	70	688	906	19	7	29	669	11	185
Future Volume (veh/h)	204	1321	15	70	688	906	19	7	29	669	11	185
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	1391	15	74	724	454	20	7	0	713	0	50
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	1610	17	207	1717	766	35	37	31	797	0	355
Arrive On Green	0.25	0.97	0.97	0.12	0.48	0.48	0.02	0.02	0.00	0.22	0.00	0.22
Sat Flow, veh/h	1781	3324	36	1781	3554	1585	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	215	626	780	74	724	454	20	7	0	713	0	50
Grp Sat Flow(s),veh/h/ln	1781	1496	1864	1781	1777	1585	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	14.3	9.7	9.8	4.6	15.9	24.9	1.3	0.4	0.0	23.3	0.0	3.0
Cycle Q Clear(g_c), s	14.3	9.7	9.8	4.6	15.9	24.9	1.3	0.4	0.0	23.3	0.0	3.0
Prop In Lane	1.00		0.02	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	724	902	207	1717	766	35	37	31	797	0	355
V/C Ratio(X)	0.97	0.86	0.86	0.36	0.42	0.59	0.57	0.19	0.00	0.89	0.00	0.14
Avail Cap(c_a), veh/h	223	724	902	207	1717	766	59	62	53	1042	0	464
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	0.00	0.91	0.00	0.91
Uniform Delay (d), s/veh	44.7	1.1	1.1	48.9	20.1	22.5	58.3	57.9	0.0	45.2	0.0	37.3
Incr Delay (d2), s/veh	44.8	11.0	9.1	0.4	0.2	1.4	5.2	0.9	0.0	6.9	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	2.7	2.9	2.0	6.3	9.0	0.7	0.2	0.0	11.0	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.5	12.1	10.2	49.3	20.3	23.8	63.5	58.8	0.0	52.1	0.0	37.4
LnGrp LOS	F	B	B	D	C	C	E	E	A	D	A	D
Approach Vol, veh/h		1621			1252			27			763	
Approach Delay, s/veh		21.5			23.3			62.3			51.1	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.9	63.0		6.4	19.0	62.9		31.8
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.9
Max Green Setting (Gmax), s	5.0	* 58		4.0	15.0	48.1		35.1
Max Q Clear Time (g_c+I1), s	6.6	11.8		3.3	16.3	26.9		25.3
Green Ext Time (p_c), s	0.0	14.2		0.0	0.0	7.7		1.6

Intersection Summary	
HCM 6th Ctrl Delay	28.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	996	346	0	1504	1061	0	0	0	224	642	152
Future Volume (veh/h)	0	996	346	0	1504	1061	0	0	0	224	642	152
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	1048	364	0	1908	0				236	676	160
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	1907	850	0	2007					674	708	600
Arrive On Green	0.00	0.54	0.54	0.00	1.00	0.00				0.38	0.38	0.38
Sat Flow, veh/h	0	3647	1585	0	3741	1585				1781	1870	1585
Grp Volume(v), veh/h	0	1048	364	0	1908	0				236	676	160
Grp Sat Flow(s),veh/h/ln	0	1777	1585	0	1870	1585				1781	1870	1585
Q Serve(g_s), s	0.0	23.3	16.6	0.0	0.0	0.0				11.4	42.2	8.4
Cycle Q Clear(g_c), s	0.0	23.3	16.6	0.0	0.0	0.0				11.4	42.2	8.4
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1907	850	0	2007					674	708	600
V/C Ratio(X)	0.00	0.55	0.43	0.00	0.95					0.35	0.96	0.27
Avail Cap(c_a), veh/h	0	1907	850	0	2007					708	743	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.43	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	18.3	16.7	0.0	0.0	0.0				26.7	36.3	25.8
Incr Delay (d2), s/veh	0.0	1.1	1.6	0.0	5.9	0.0				0.1	21.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.5	6.2	0.0	1.6	0.0				4.9	23.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.4	18.3	0.0	5.9	0.0				26.8	58.0	25.9
LnGrp LOS	A	B	B	A	A					C	E	C
Approach Vol, veh/h		1412			1908	A					1072	
Approach Delay, s/veh		19.1			5.9						46.4	
Approach LOS		B			A						D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		69.3		50.7		69.3
Change Period (Y+Rc), s		4.9		5.3		4.9
Max Green Setting (Gmax), s		62.1		47.7		62.1
Max Q Clear Time (g_c+I1), s		25.3		44.2		2.0
Green Ext Time (p_c), s		6.1		1.2		26.7

Intersection Summary	
HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	1018	0	0	1549	276	0	0	1396	0	0	1016
Future Volume (vph)	202	1018	0	0	1549	276	0	0	1396	0	0	1016
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.9			4.9	4.0			4.0			4.0
Lane Util. Factor	1.00	0.86			0.86	0.86			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			4793	1362			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			4793	1362			1611			2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	213	1072	0	0	1631	291	0	0	1469	0	0	1069
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	20
Lane Group Flow (vph)	213	1072	0	0	1657	262	0	0	1469	0	0	1049
Turn Type	Prot	NA			NA	Free			Free			Over
Protected Phases	5	2			6							5
Permitted Phases						Free			Free			
Actuated Green, G (s)	25.0	60.0			26.1	60.0			60.0			25.0
Effective Green, g (s)	25.0	60.0			26.1	60.0			60.0			25.0
Actuated g/C Ratio	0.42	1.00			0.44	1.00			1.00			0.42
Clearance Time (s)	4.0	4.9			4.9							4.0
Vehicle Extension (s)	2.0	3.9			3.8							2.0
Lane Grp Cap (vph)	737	6408			2084	1362			1611			1161
v/s Ratio Prot	0.12	0.17			0.35							0.38
v/s Ratio Perm						0.19			c0.91			
v/c Ratio	0.29	0.17			0.80	0.19			0.91			0.90
Uniform Delay, d1	11.6	0.0			14.6	0.0			0.0			16.4
Progression Factor	1.66	1.00			0.88	1.00			1.00			1.00
Incremental Delay, d2	0.1	0.0			2.6	0.2			9.4			9.7
Delay (s)	19.3	0.0			15.5	0.2			9.4			26.1
Level of Service	B	A			B	A			A			C
Approach Delay (s)		3.2			13.4			9.4			26.1	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	12.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.9
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	387	1807	220	108	1332	64	332	557	70	54	165	161
Future Volume (veh/h)	387	1807	220	108	1332	64	332	557	70	54	165	161
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	407	1902	232	114	1402	67	349	586	74	57	174	169
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1031	2835	1063	167	1886	90	403	771	341	97	655	674
Arrive On Green	0.30	0.56	0.56	0.05	0.30	0.30	0.12	0.22	0.22	0.03	0.13	0.13
Sat Flow, veh/h	3456	5106	1581	3456	6337	302	3456	3554	1574	3456	5106	1567
Grp Volume(v), veh/h	407	1902	232	114	1067	402	349	586	74	57	174	169
Grp Sat Flow(s),veh/h/ln	1728	1702	1581	1728	1609	1814	1728	1777	1574	1728	1702	1567
Q Serve(g_s), s	11.2	31.7	6.8	3.9	23.9	24.0	11.9	18.6	4.6	2.0	3.7	2.2
Cycle Q Clear(g_c), s	11.2	31.7	6.8	3.9	23.9	24.0	11.9	18.6	4.6	2.0	3.7	2.2
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1031	2835	1063	167	1436	540	403	771	341	97	655	674
V/C Ratio(X)	0.39	0.67	0.22	0.68	0.74	0.74	0.87	0.76	0.22	0.59	0.27	0.25
Avail Cap(c_a), veh/h	1031	2835	1063	202	1548	582	432	1057	468	144	1077	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.77	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	18.9	7.6	56.2	38.0	38.0	52.1	44.1	38.6	57.6	47.2	9.2
Incr Delay (d2), s/veh	0.1	1.0	0.4	4.1	2.0	5.1	14.9	3.2	0.5	2.1	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	12.1	2.2	1.8	9.6	11.4	5.9	8.4	1.8	0.9	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	19.9	7.9	60.3	40.0	43.1	67.0	47.2	39.2	59.7	47.7	9.6
LnGrp LOS	C	B	A	E	D	D	E	D	D	E	D	A
Approach Vol, veh/h		2541			1583			1009			400	
Approach Delay, s/veh		21.0			42.2			53.5			33.3	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	71.5	18.0	20.7	40.7	40.6	7.4	31.3
Change Period (Y+Rc), s	4.0	4.9	4.0	5.3	4.9	* 4.9	4.0	* 5.3
Max Green Setting (Gmax), s	7.0	54.5	15.0	25.3	23.0	* 39	5.0	* 36
Max Q Clear Time (g_c+I1), s	5.9	33.7	13.9	5.7	13.2	26.0	4.0	20.6
Green Ext Time (p_c), s	0.0	18.3	0.1	3.1	0.6	9.7	0.0	5.5

Intersection Summary	
HCM 6th Ctrl Delay	33.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	1943	48	43	1431	28	36	16	64	32	13	38
Future Volume (veh/h)	88	1943	48	43	1431	28	36	16	64	32	13	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	2045	51	45	1506	29	38	17	67	24	28	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	2523	63	433	3459	1070	102	107	91	105	110	91
Arrive On Green	0.04	0.33	0.33	0.49	1.00	1.00	0.06	0.06	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1781	5123	128	1781	5106	1579	1781	1870	1585	1781	1870	1545
Grp Volume(v), veh/h	93	1358	738	45	1506	29	38	17	67	24	28	40
Grp Sat Flow(s),veh/h/ln	1781	1702	1847	1781	1702	1579	1781	1870	1585	1781	1870	1545
Q Serve(g_s), s	6.2	43.8	43.9	1.6	0.0	0.0	2.5	1.0	5.0	1.5	1.7	3.0
Cycle Q Clear(g_c), s	6.2	43.8	43.9	1.6	0.0	0.0	2.5	1.0	5.0	1.5	1.7	3.0
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	1676	909	433	3459	1070	102	107	91	105	110	91
V/C Ratio(X)	0.80	0.81	0.81	0.10	0.44	0.03	0.37	0.16	0.74	0.23	0.25	0.44
Avail Cap(c_a), veh/h	193	1676	909	433	3459	1070	104	109	92	460	483	399
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	35.1	35.1	23.8	0.0	0.0	54.5	53.8	55.7	53.9	54.0	54.6
Incr Delay (d2), s/veh	3.1	3.0	5.4	0.0	0.2	0.0	1.7	0.5	24.7	0.4	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	19.4	21.8	0.7	0.1	0.0	1.2	0.5	2.6	0.7	0.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.7	38.0	40.5	23.8	0.2	0.0	56.1	54.3	80.4	54.3	54.4	55.8
LnGrp LOS	E	D	D	C	A	A	E	D	F	D	D	E
Approach Vol, veh/h		2189			1580			122			92	
Approach Delay, s/veh		39.8			0.9			69.2			55.0	
Approach LOS		D			A			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	34.1	64.0		10.9	11.9	86.2		11.1
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.0
Max Green Setting (Gmax), s	6.0	* 59		7.0	13.0	52.1		31.0
Max Q Clear Time (g_c+I1), s	3.6	45.9		7.0	8.2	2.0		5.0
Green Ext Time (p_c), s	0.0	12.2		0.0	0.0	34.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1913	37	15	1440	25	119	48	25	56	6	11
Future Volume (veh/h)	11	1913	37	15	1440	25	119	48	25	56	6	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	2014	39	16	1516	26	101	85	26	38	35	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	2305	700	58	2430	738	140	108	33	181	133	46
Arrive On Green	0.02	0.90	0.90	0.03	0.48	0.48	0.08	0.08	0.08	0.10	0.10	0.10
Sat Flow, veh/h	1781	5106	1550	1781	5106	1552	1781	1374	420	1781	1308	448
Grp Volume(v), veh/h	12	2014	39	16	1516	26	101	0	111	38	0	47
Grp Sat Flow(s),veh/h/ln	1781	1702	1550	1781	1702	1552	1781	0	1795	1781	0	1756
Q Serve(g_s), s	0.8	21.8	0.3	1.1	26.6	1.1	6.6	0.0	7.3	2.3	0.0	3.0
Cycle Q Clear(g_c), s	0.8	21.8	0.3	1.1	26.6	1.1	6.6	0.0	7.3	2.3	0.0	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.26
Lane Grp Cap(c), veh/h	15	2305	700	58	2430	738	140	0	141	181	0	179
V/C Ratio(X)	0.82	0.87	0.06	0.27	0.62	0.04	0.72	0.00	0.79	0.21	0.00	0.26
Avail Cap(c_a), veh/h	45	2430	738	58	2430	738	178	0	179	451	0	445
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.91	0.91	0.91	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.9	4.3	3.2	56.6	23.4	16.8	54.0	0.0	54.3	49.5	0.0	49.7
Incr Delay (d2), s/veh	26.6	3.6	0.1	0.8	1.1	0.1	8.4	0.0	14.5	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.7	0.1	0.5	10.6	0.4	3.3	0.0	3.9	1.1	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.5	7.8	3.3	57.5	24.6	16.8	62.4	0.0	68.8	49.7	0.0	50.0
LnGrp LOS	F	A	A	E	C	B	E	A	E	D	A	D
Approach Vol, veh/h		2065			1558			212			85	
Approach Delay, s/veh		8.2			24.8			65.8			49.9	
Approach LOS		A			C			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	59.1		16.8	5.0	62.0		13.5
Change Period (Y+Rc), s	4.0	4.9		4.6	4.0	4.9		4.0
Max Green Setting (Gmax), s	3.0	57.1		30.4	3.0	57.1		12.0
Max Q Clear Time (g_c+I1), s	3.1	23.8		5.0	2.8	28.6		9.3
Green Ext Time (p_c), s	0.0	30.3		0.2	0.0	22.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	1777	66	5	1465	0	14	4	11	27	1	17
Future Volume (veh/h)	59	1777	66	5	1465	0	14	4	11	27	1	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	1871	69	5	1542	0	15	4	12	28	1	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	570	4105	151	7	2495	0	18	9	28	35	3	48
Arrive On Green	0.32	0.81	0.81	0.00	0.49	0.00	0.01	0.02	0.02	0.02	0.03	0.03
Sat Flow, veh/h	1781	5054	186	1781	5274	0	1781	397	1192	1781	80	1449
Grp Volume(v), veh/h	62	1259	681	5	1542	0	15	0	16	28	0	19
Grp Sat Flow(s),veh/h/ln	1781	1702	1836	1781	1702	0	1781	0	1589	1781	0	1529
Q Serve(g_s), s	2.9	13.2	13.3	0.3	26.5	0.0	1.0	0.0	1.2	1.9	0.0	1.5
Cycle Q Clear(g_c), s	2.9	13.2	13.3	0.3	26.5	0.0	1.0	0.0	1.2	1.9	0.0	1.5
Prop In Lane	1.00		0.10	1.00		0.00	1.00		0.75	1.00		0.95
Lane Grp Cap(c), veh/h	570	2765	1491	7	2495	0	18	0	37	35	0	51
V/C Ratio(X)	0.11	0.46	0.46	0.73	0.62	0.00	0.85	0.00	0.43	0.80	0.00	0.37
Avail Cap(c_a), veh/h	570	2765	1491	45	2898	0	104	0	212	119	0	217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	0.82	0.82	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	3.4	3.4	59.7	22.5	0.0	59.3	0.0	57.8	58.6	0.0	56.8
Incr Delay (d2), s/veh	0.0	0.4	0.7	36.3	0.7	0.0	64.7	0.0	7.6	32.6	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.3	3.7	0.2	10.4	0.0	0.8	0.0	0.6	1.2	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	3.8	4.1	96.0	23.2	0.0	124.0	0.0	65.4	91.1	0.0	61.3
LnGrp LOS	C	A	A	F	C	A	F	A	E	F	A	E
Approach Vol, veh/h		2002			1547			31			47	
Approach Delay, s/veh		4.7			23.4			93.8			79.1	
Approach LOS		A			C			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	102.4	5.2	8.0	43.3	63.5	6.4	6.8
Change Period (Y+Rc), s	4.0	4.9	4.0	4.0	4.9	* 4.9	4.0	4.0
Max Green Setting (Gmax), s	3.0	76.1	7.0	17.0	11.0	* 68	8.0	16.0
Max Q Clear Time (g_c+I1), s	2.3	15.3	3.0	3.5	4.9	28.5	3.9	3.2
Green Ext Time (p_c), s	0.0	50.8	0.0	0.0	0.0	30.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	1579	49	44	1269	121	171	723	369	92	324	62
Future Volume (veh/h)	139	1579	49	44	1269	121	171	723	369	92	324	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	1662	0	46	1336	0	180	761	264	97	341	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	2259		374	2551		236	1112	343	144	1047	323
Arrive On Green	0.02	0.15	0.00	0.22	1.00	0.00	0.07	0.22	0.22	0.04	0.21	0.21
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1574	3456	5106	1573
Grp Volume(v), veh/h	146	1662	0	46	1336	0	180	761	264	97	341	10
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1574	1728	1702	1573
Q Serve(g_s), s	5.0	37.4	0.0	1.3	0.1	0.0	6.1	16.4	18.9	3.3	6.8	0.6
Cycle Q Clear(g_c), s	5.0	37.4	0.0	1.3	0.1	0.0	6.1	16.4	18.9	3.3	6.8	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	202	2259		374	2551		236	1112	343	144	1047	323
V/C Ratio(X)	0.72	0.74		0.12	0.52		0.76	0.68	0.77	0.67	0.33	0.03
Avail Cap(c_a), veh/h	259	2259		374	2551		317	1630	502	144	1391	429
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	44.5	0.0	42.4	0.0	0.0	54.9	43.2	44.1	56.7	40.6	38.2
Incr Delay (d2), s/veh	3.9	1.9	0.0	0.1	0.5	0.0	4.8	0.6	3.8	9.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	17.4	0.0	0.5	0.1	0.0	2.8	6.8	7.6	1.6	2.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.8	46.5	0.0	42.5	0.5	0.0	59.7	43.8	48.0	66.4	40.8	38.2
LnGrp LOS	E	D		D	A		E	D	D	E	D	D
Approach Vol, veh/h		1808	A		1382	A		1205			448	
Approach Delay, s/veh		47.7			1.9			47.1			46.3	
Approach LOS		D			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	58.0	13.2	30.9	11.0	64.8	11.3	32.8
Change Period (Y+Rc), s	4.9	* 4.9	5.0	6.3	4.0	4.9	6.3	* 6.7
Max Green Setting (Gmax), s	3.0	* 53	11.0	32.7	9.0	47.1	5.0	* 38
Max Q Clear Time (g_c+I1), s	3.3	39.4	8.1	8.8	7.0	2.1	5.3	20.9
Green Ext Time (p_c), s	0.0	12.3	0.1	2.2	0.0	26.7	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	34.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1474	222	265	1847	191	442	812	235	191	632	141
Future Volume (veh/h)	220	1474	222	265	1847	191	442	812	235	191	632	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	1552	0	279	1944	0	465	855	0	201	665	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	1872		415	2148		515	1273		288	936	286
Arrive On Green	0.08	0.37	0.00	0.12	0.42	0.00	0.15	0.25	0.00	0.08	0.18	0.18
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1559
Grp Volume(v), veh/h	232	1552	0	279	1944	0	465	855	0	201	665	23
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1559
Q Serve(g_s), s	7.9	33.2	0.0	9.3	42.7	0.0	15.9	18.1	0.0	6.8	14.7	1.5
Cycle Q Clear(g_c), s	7.9	33.2	0.0	9.3	42.7	0.0	15.9	18.1	0.0	6.8	14.7	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	1872		415	2148		515	1273		288	936	286
V/C Ratio(X)	0.81	0.83		0.67	0.90		0.90	0.67		0.70	0.71	0.08
Avail Cap(c_a), veh/h	288	1872		415	2148		518	1289		346	1034	316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	34.6	0.0	50.5	32.5	0.0	50.2	40.6	0.0	53.5	46.0	40.6
Incr Delay (d2), s/veh	14.9	4.4	0.0	3.5	6.0	0.0	18.4	1.6	0.0	3.3	2.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	13.8	0.0	4.1	17.7	0.0	7.9	7.4	0.0	3.0	6.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	39.0	0.0	54.0	38.5	0.0	68.6	42.2	0.0	56.8	48.6	40.8
LnGrp LOS	E	D		D	D		E	D		E	D	D
Approach Vol, veh/h		1784	A		2223	A		1320	A		889	
Approach Delay, s/veh		42.9			40.5			51.5			50.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	50.0	21.9	27.7	13.9	56.5	14.0	35.6
Change Period (Y+Rc), s	6.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	12.0	44.0	18.0	24.3	10.0	48.0	12.0	30.3
Max Q Clear Time (g_c+I1), s	11.3	35.2	17.9	16.7	9.9	44.7	8.8	20.1
Green Ext Time (p_c), s	0.1	8.4	0.0	4.9	0.0	3.2	0.1	7.3

Intersection Summary	
HCM 6th Ctrl Delay	44.9
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	551	1674	411	551	2137	519
Future Volume (veh/h)	551	1674	411	551	2137	519
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	580	0	433	377	2249	546
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	523		680	303	1889	1446
Arrive On Green	0.15	0.00	0.19	0.19	0.55	0.77
Sat Flow, veh/h	3456	2790	3647	1585	3456	1870
Grp Volume(v), veh/h	580	0	433	377	2249	546
Grp Sat Flow(s),veh/h/ln	1728	1395	1777	1585	1728	1870
Q Serve(g_s), s	22.7	0.0	16.8	28.7	82.0	14.0
Cycle Q Clear(g_c), s	22.7	0.0	16.8	28.7	82.0	14.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	523		680	303	1889	1446
V/C Ratio(X)	1.11		0.64	1.24	1.19	0.38
Avail Cap(c_a), veh/h	523		680	303	1889	1446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.24	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.6	0.0	55.9	60.6	34.0	5.4
Incr Delay (d2), s/veh	56.4	0.0	2.0	134.1	91.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.0	0.0	7.7	22.7	56.3	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	120.0	0.0	57.8	194.8	125.3	5.6
LnGrp LOS	F		E	F	F	A
Approach Vol, veh/h	580	A	810			2795
Approach Delay, s/veh	120.0		121.6			101.9
Approach LOS	F		F			F

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	88.0	34.0				122.0	28.0
Change Period (Y+Rc), s	6.0	5.3				6.0	5.3
Max Green Setting (Gmax), s	82.0	28.7				116.0	22.7
Max Q Clear Time (g_c+I1), s	84.0	30.7				16.0	24.7
Green Ext Time (p_c), s	0.0	0.0				3.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	108.2
HCM 6th LOS	F

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	424	2172	59	99	1848	92	86	139	130	42	16	307
Future Volume (veh/h)	424	2172	59	99	1848	92	86	139	130	42	16	307
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	446	2286	61	104	1945	57	91	146	16	44	17	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	951	2518	67	149	1675	747	112	180	152	76	104	88
Arrive On Green	0.28	0.71	0.71	0.04	0.47	0.47	0.06	0.10	0.10	0.02	0.06	0.06
Sat Flow, veh/h	3456	3536	94	3456	3554	1585	1781	1870	1585	3456	1870	1585
Grp Volume(v), veh/h	446	1143	1204	104	1945	57	91	146	16	44	17	91
Grp Sat Flow(s),veh/h/ln	1728	1777	1853	1728	1777	1585	1781	1870	1585	1728	1870	1585
Q Serve(g_s), s	16.1	78.0	80.0	4.5	70.7	2.5	7.6	11.5	1.4	1.9	1.3	5.3
Cycle Q Clear(g_c), s	16.1	78.0	80.0	4.5	70.7	2.5	7.6	11.5	1.4	1.9	1.3	5.3
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	951	1265	1320	149	1675	747	112	180	152	76	104	88
V/C Ratio(X)	0.47	0.90	0.91	0.70	1.16	0.08	0.82	0.81	0.10	0.58	0.16	1.03
Avail Cap(c_a), veh/h	951	1265	1320	369	1675	747	190	338	286	369	324	275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	17.4	17.7	70.8	39.7	15.4	69.4	66.5	61.9	72.7	67.5	28.2
Incr Delay (d2), s/veh	0.0	1.2	1.2	2.2	79.6	0.1	5.4	13.3	0.5	2.6	0.9	58.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	28.2	30.1	2.0	48.1	1.1	3.6	6.2	0.6	0.9	0.7	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.3	18.6	19.0	73.0	119.3	15.4	74.8	79.7	62.4	75.2	68.4	87.1
LnGrp LOS	D	B	B	E	F	B	E	E	E	E	E	F
Approach Vol, veh/h		2793			2106			253			152	
Approach Delay, s/veh		23.0			114.2			76.9			81.6	
Approach LOS		C			F			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	20.1	10.5	112.1	13.4	14.0	46.6	76.0
Change Period (Y+Rc), s	4.0	* 5.7	4.0	5.3	4.0	5.7	5.3	* 5.3
Max Green Setting (Gmax), s	16.0	* 27	16.0	73.0	16.0	26.0	18.3	* 71
Max Q Clear Time (g_c+I1), s	3.9	13.5	6.5	82.0	9.6	7.3	18.1	72.7
Green Ext Time (p_c), s	0.0	1.0	0.1	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	63.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	2371	6	13	2033	7	9	0	35	55	3	22
Future Volume (veh/h)	6	2371	6	13	2033	7	9	0	35	55	3	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	2496	6	14	2140	7	9	0	37	58	3	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	2841	7	17	2442	8	43	8	48	139	4	97
Arrive On Green	0.11	0.78	0.78	0.01	0.67	0.67	0.06	0.00	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1781	3637	9	1781	3633	12	68	123	786	1228	64	1585
Grp Volume(v), veh/h	6	1219	1283	14	1046	1101	46	0	0	61	0	23
Grp Sat Flow(s),veh/h/ln	1781	1777	1869	1781	1777	1868	977	0	0	1291	0	1585
Q Serve(g_s), s	0.3	52.6	52.7	0.9	51.6	51.7	0.5	0.0	0.0	0.0	0.0	1.5
Cycle Q Clear(g_c), s	0.3	52.6	52.7	0.9	51.6	51.7	5.7	0.0	0.0	5.2	0.0	1.5
Prop In Lane	1.00		0.00	1.00		0.01	0.20		0.80	0.95		1.00
Lane Grp Cap(c), veh/h	190	1388	1460	17	1194	1256	99	0	0	143	0	97
V/C Ratio(X)	0.03	0.88	0.88	0.83	0.88	0.88	0.47	0.00	0.00	0.43	0.00	0.24
Avail Cap(c_a), veh/h	190	1388	1460	97	1239	1303	187	0	0	222	0	187
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.0	8.4	8.4	54.4	14.4	14.4	50.3	0.0	0.0	50.9	0.0	49.2
Incr Delay (d2), s/veh	0.0	8.1	7.8	29.7	7.3	7.1	1.3	0.0	0.0	0.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	16.2	16.9	0.5	19.4	20.4	1.3	0.0	0.0	1.7	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	16.5	16.2	84.1	21.7	21.5	51.5	0.0	0.0	51.7	0.0	49.7
LnGrp LOS	D	B	B	F	C	C	D	A	A	D	A	D
Approach Vol, veh/h		2508			2161			46			84	
Approach Delay, s/veh		16.4			22.0			51.5			51.1	
Approach LOS		B			C			D			D	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.7	5.0	91.2		13.7	17.0	79.2
Change Period (Y+Rc), s		7.0	4.0	5.3		7.0	5.3	* 5.3
Max Green Setting (Gmax), s		13.0	6.0	74.7		13.0	4.0	* 77
Max Q Clear Time (g_c+I1), s		7.7	2.9	54.7		7.2	2.3	53.7
Green Ext Time (p_c), s		0.0	0.0	17.9		0.1	0.0	20.2

Intersection Summary	
HCM 6th Ctrl Delay	19.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2482	21	368	2069	0	357
Future Volume (vph)	2482	21	368	2069	0	357
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		6.0	5.3		6.0
Lane Util. Factor	0.91		0.97	0.91		1.00
Frt	1.00		1.00	1.00		0.86
Flt Protected	1.00		0.95	1.00		1.00
Satd. Flow (prot)	5079		3433	5085		1611
Flt Permitted	1.00		0.95	1.00		1.00
Satd. Flow (perm)	5079		3433	5085		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	2613	22	387	2178	0	376
RTOR Reduction (vph)	1	0	0	0	0	1
Lane Group Flow (vph)	2634	0	387	2178	0	375
Turn Type	NA		Prot	NA		Over
Protected Phases	4		3	8		3
Permitted Phases						
Actuated Green, G (s)	41.7		20.0	75.0		20.0
Effective Green, g (s)	41.7		20.0	75.0		20.0
Actuated g/C Ratio	0.56		0.27	1.00		0.27
Clearance Time (s)	7.3		6.0	5.3		6.0
Vehicle Extension (s)	3.5		2.0	3.5		2.0
Lane Grp Cap (vph)	2823		915	5085		429
v/s Ratio Prot	c0.52		0.11	0.43		c0.23
v/s Ratio Perm						
v/c Ratio	0.93		0.42	0.43		0.87
Uniform Delay, d1	15.4		22.7	0.0		26.3
Progression Factor	1.00		1.17	1.00		1.00
Incremental Delay, d2	7.2		0.0	0.1		17.2
Delay (s)	22.5		26.6	0.1		43.5
Level of Service	C		C	A		D
Approach Delay (s)	22.5			4.1	43.5	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	303	1199	1337	67	1185	279	1146	682	152	215	179	111
Future Volume (veh/h)	303	1199	1337	67	1185	279	1146	682	152	215	179	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	319	1262	0	71	1247	195	1206	718	74	226	188	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	2117		111	1239	553	1152	1131	504	272	280	87
Arrive On Green	0.14	0.69	0.00	0.03	0.35	0.35	0.33	0.32	0.32	0.08	0.05	0.05
Sat Flow, veh/h	3456	5106	2790	3456	3554	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	319	1262	0	71	1247	195	1206	718	74	226	188	3
Grp Sat Flow(s),veh/h/ln	1728	1702	1395	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	13.0	19.4	0.0	3.0	52.3	10.0	50.0	25.9	5.0	9.7	5.4	0.3
Cycle Q Clear(g_c), s	13.0	19.4	0.0	3.0	52.3	10.0	50.0	25.9	5.0	9.7	5.4	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	2117		111	1239	553	1152	1131	504	272	280	87
V/C Ratio(X)	1.07	0.60		0.64	1.01	0.35	1.05	0.63	0.15	0.83	0.67	0.03
Avail Cap(c_a), veh/h	299	2117		161	1239	553	1152	1201	536	346	534	166
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.26	0.26	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.1	16.5	0.0	71.8	48.8	19.3	50.0	43.7	36.6	68.1	69.5	67.1
Incr Delay (d2), s/veh	45.7	0.1	0.0	2.3	27.1	1.8	39.7	1.2	0.2	10.4	3.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	5.4	0.0	1.4	27.3	3.9	27.5	11.5	2.0	4.7	2.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.8	16.6	0.0	74.1	76.0	21.1	89.7	44.9	36.8	78.5	73.3	67.3
LnGrp LOS	F	B		E	F	C	F	D	D	E	E	E
Approach Vol, veh/h		1581	A		1513			1998			417	
Approach Delay, s/veh		35.4			68.8			71.6			76.1	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	53.0	8.8	67.5	55.3	13.5	18.3	58.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	5.3	* 5.3	5.3	* 5.7
Max Green Setting (Gmax), s	15.0	50.7	7.0	58.7	50.0	* 16	13.0	* 52
Max Q Clear Time (g_c+I1), s	11.7	27.9	5.0	21.4	52.0	7.4	15.0	54.3
Green Ext Time (p_c), s	0.1	6.8	0.0	15.2	0.0	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	60.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1331	81	24	1503	5	23	1	397	5	4	6
Future Volume (veh/h)	4	1331	81	24	1503	5	23	1	397	5	4	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2106	2106	2106	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	1401	82	25	1582	5	24	1	356	5	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	2512	147	32	2428	8	214	9	226	9	7	14
Arrive On Green	0.00	0.65	0.65	0.04	1.00	1.00	0.13	0.13	0.13	0.01	0.01	0.00
Sat Flow, veh/h	2006	3842	224	1781	3634	11	1713	71	1585	1011	809	1585
Grp Volume(v), veh/h	4	728	755	25	773	814	25	0	356	9	0	0
Grp Sat Flow(s),veh/h/ln	2006	2001	2066	1781	1777	1868	1785	0	1585	1820	0	1585
Q Serve(g_s), s	0.2	23.8	24.0	1.7	0.0	0.0	1.5	0.0	15.0	0.6	0.0	0.0
Cycle Q Clear(g_c), s	0.2	23.8	24.0	1.7	0.0	0.0	1.5	0.0	15.0	0.6	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.01	0.96		1.00	0.56		1.00
Lane Grp Cap(c), veh/h	6	1308	1350	32	1188	1249	223	0	226	16	0	14
V/C Ratio(X)	0.64	0.56	0.56	0.79	0.65	0.65	0.11	0.00	1.57	0.57	0.00	0.00
Avail Cap(c_a), veh/h	50	1308	1350	356	1188	1249	223	0	226	62	0	54
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.7	11.3	11.3	57.7	0.0	0.0	46.6	0.0	51.4	59.3	0.0	0.0
Incr Delay (d2), s/veh	33.8	0.6	0.6	12.5	2.3	2.2	0.1	0.0	278.3	11.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	9.6	10.0	0.8	0.8	0.8	0.7	0.0	24.2	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.6	11.9	12.0	70.2	2.3	2.2	46.7	0.0	329.8	70.9	0.0	0.0
LnGrp LOS	F	B	B	E	A	A	D	A	F	E	A	A
Approach Vol, veh/h		1487			1612			381			9	
Approach Delay, s/veh		12.2			3.3			311.2			70.9	
Approach LOS		B			A			F			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	84.1		6.7	4.4	85.9		19.0
Change Period (Y+Rc), s	4.0	5.7		5.7	4.0	* 5.7		4.0
Max Green Setting (Gmax), s	24.0	57.5		4.1	3.0	* 80		15.0
Max Q Clear Time (g_c+I1), s	3.7	26.0		2.6	2.2	2.0		17.0
Green Ext Time (p_c), s	0.1	30.0		0.0	0.0	77.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1706	20	21	1377	0	152	0	206	0	0	0
Future Volume (veh/h)	0	1706	20	21	1377	0	152	0	206	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	0	1870	0
Adj Flow Rate, veh/h	0	1796	21	22	1449	0	160	0	217	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	0	2	0
Cap, veh/h	0	2353	27	27	2496	0	189	0	0	0	2	0
Arrive On Green	0.00	0.65	0.65	0.02	0.70	0.00	0.11	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3691	42	1781	3647	0	1781	160		0	-74814	0
Grp Volume(v), veh/h	0	886	931	22	1449	0	160	64.8		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1863	1781	1777	0	1781	E		0	1870	0
Q Serve(g_s), s	0.0	41.3	41.5	1.5	24.6	0.0	10.6			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	41.3	41.5	1.5	24.6	0.0	10.6			0.0	0.0	0.0
Prop In Lane	0.00		0.02	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1162	1218	27	2496	0	189			0	2	0
V/C Ratio(X)	0.00	0.76	0.76	0.82	0.58	0.00	0.85			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	1162	1218	45	2496	0	282			0	47	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.64	0.64	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	14.3	14.4	58.9	9.0	0.0	52.7			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	2.1	19.7	1.0	0.0	12.2			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.2	16.0	0.8	8.4	0.0	5.4			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.5	16.4	78.7	10.0	0.0	64.8			0.0	0.0	0.0
LnGrp LOS	A	B	B	E	A	A	E			A	A	A
Approach Vol, veh/h		1817			1471						0	
Approach Delay, s/veh		16.4			11.0						0.0	
Approach LOS		B			B							

Timer - Assigned Phs	1	2				6	7	8				
Phs Duration (G+Y+Rc), s	5.8	84.2				90.0	16.7	0.0				
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0	4.0				
Max Green Setting (Gmax), s	3.0	77.3				84.3	19.0	3.0				
Max Q Clear Time (g_c+I1), s	3.5	43.5				26.6	12.6	0.0				
Green Ext Time (p_c), s	0.0	21.0				19.4	0.2	0.0				

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	299	894	689	153	508	28	775	1468	196	105	903	104
Future Volume (veh/h)	299	894	689	153	508	28	775	1468	196	105	903	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	315	941	0	161	535	26	816	1545	118	111	951	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	1032		144	878	43	835	1658	727	115	1391	423
Arrive On Green	0.09	0.29	0.00	0.04	0.25	0.25	0.48	0.93	0.93	0.03	0.27	0.27
Sat Flow, veh/h	3456	3554	1585	3456	3446	167	3456	3554	1559	3456	5106	1553
Grp Volume(v), veh/h	315	941	0	161	275	286	816	1545	118	111	951	25
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1836	1728	1777	1559	1728	1702	1553
Q Serve(g_s), s	10.9	30.7	0.0	5.0	16.4	16.5	27.7	26.7	0.7	3.8	20.0	1.4
Cycle Q Clear(g_c), s	10.9	30.7	0.0	5.0	16.4	16.5	27.7	26.7	0.7	3.8	20.0	1.4
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	1032		144	453	468	835	1658	727	115	1391	423
V/C Ratio(X)	0.99	0.91		1.12	0.61	0.61	0.98	0.93	0.16	0.96	0.68	0.06
Avail Cap(c_a), veh/h	317	1054		144	453	468	835	1658	727	115	1391	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.45	0.45	0.45	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	41.1	0.0	57.5	39.4	39.5	30.7	3.0	2.2	57.9	39.0	32.3
Incr Delay (d2), s/veh	48.9	11.7	0.0	110.2	2.7	2.7	15.7	5.6	0.2	71.7	1.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	14.7	0.0	4.4	7.4	7.6	10.0	2.8	0.3	2.8	8.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	103.4	52.7	0.0	167.7	42.2	42.2	46.4	8.6	2.4	129.7	40.6	32.4
LnGrp LOS	F	D		F	D	D	D	A	A	F	D	C
Approach Vol, veh/h		1256	A		722			2479			1087	
Approach Delay, s/veh		65.4			70.2			20.8			49.5	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	40.6	33.0	38.0	15.0	35.9	9.3	61.7
Change Period (Y+Rc), s	5.3	* 5.7	4.0	5.3	4.0	5.3	5.3	* 5.7
Max Green Setting (Gmax), s	5.0	* 36	29.0	31.4	11.0	30.0	4.0	* 56
Max Q Clear Time (g_c+I1), s	7.0	32.7	29.7	22.0	12.9	18.5	5.8	28.7
Green Ext Time (p_c), s	0.0	2.2	0.0	6.6	0.0	4.7	0.0	21.9

Intersection Summary	
HCM 6th Ctrl Delay	43.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	1172	2	19	674	82	42	67	89	4	8	5
Future Volume (veh/h)	193	1172	2	19	674	82	42	67	89	4	8	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	1234	2	20	709	86	44	71	94	4	8	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	1944	3	24	1294	157	62	100	137	7	13	17
Arrive On Green	0.13	0.53	0.53	0.01	0.41	0.41	0.09	0.09	0.09	0.01	0.01	0.01
Sat Flow, veh/h	1781	3640	6	1781	3188	386	702	1133	1558	613	1226	1585
Grp Volume(v), veh/h	203	602	634	20	395	400	115	0	94	12	0	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1869	1781	1777	1798	1835	0	1558	1840	0	1585
Q Serve(g_s), s	13.4	28.7	28.7	1.3	20.4	20.4	7.3	0.0	7.0	0.8	0.0	0.4
Cycle Q Clear(g_c), s	13.4	28.7	28.7	1.3	20.4	20.4	7.3	0.0	7.0	0.8	0.0	0.4
Prop In Lane	1.00		0.00	1.00		0.21	0.38		1.00	0.33		1.00
Lane Grp Cap(c), veh/h	233	949	998	24	721	730	161	0	137	20	0	17
V/C Ratio(X)	0.87	0.63	0.63	0.83	0.55	0.55	0.71	0.00	0.69	0.60	0.00	0.29
Avail Cap(c_a), veh/h	416	1047	1101	89	721	730	352	0	299	46	0	40
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.1	19.7	19.7	59.0	27.2	27.2	53.3	0.0	53.1	59.1	0.0	58.9
Incr Delay (d2), s/veh	3.9	1.7	1.6	22.3	3.0	3.0	2.2	0.0	2.3	10.4	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	11.6	12.1	0.7	8.9	9.1	3.5	0.0	2.9	0.4	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	21.4	21.3	81.3	30.2	30.2	55.4	0.0	55.4	69.5	0.0	62.3
LnGrp LOS	E	C	C	F	C	C	E	A	E	E	A	E
Approach Vol, veh/h		1439			815			209			17	
Approach Delay, s/veh		26.1			31.5			55.4			67.4	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	69.4		5.3	21.0	54.0		14.5
Change Period (Y+Rc), s	4.0	5.3		4.0	5.3	* 5.3		4.0
Max Green Setting (Gmax), s	6.0	70.7		3.0	28.0	* 49		23.0
Max Q Clear Time (g_c+I1), s	3.3	30.7		2.8	15.4	22.4		9.3
Green Ext Time (p_c), s	0.0	14.9		0.0	0.3	7.4		0.4

Intersection Summary	
HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	1225	0	25	660	14	68	2	26	43	0	64
Future Volume (veh/h)	21	1225	0	25	660	14	68	2	26	43	0	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	1289	0	26	695	15	72	2	27	45	0	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	1903	0	34	1913	41	237	2	29	364	0	160
Arrive On Green	0.02	0.54	0.00	0.02	0.54	0.54	0.10	0.10	0.10	0.10	0.00	0.10
Sat Flow, veh/h	1781	3647	0	1781	3557	77	768	21	288	1758	0	1585
Grp Volume(v), veh/h	22	1289	0	26	347	363	101	0	0	45	0	67
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1857	1078	0	0	1758	0	1585
Q Serve(g_s), s	0.5	10.2	0.0	0.6	4.3	4.3	2.8	0.0	0.0	0.0	0.0	1.5
Cycle Q Clear(g_c), s	0.5	10.2	0.0	0.6	4.3	4.3	3.7	0.0	0.0	0.9	0.0	1.5
Prop In Lane	1.00		0.00	1.00		0.04	0.71		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	29	1903	0	34	956	999	269	0	0	364	0	160
V/C Ratio(X)	0.76	0.68	0.00	0.77	0.36	0.36	0.38	0.00	0.00	0.12	0.00	0.42
Avail Cap(c_a), veh/h	139	2092	0	139	1046	1093	890	0	0	977	0	863
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.9	6.5	0.0	18.8	5.1	5.1	17.7	0.0	0.0	16.0	0.0	16.3
Incr Delay (d2), s/veh	13.7	0.8	0.0	12.9	0.3	0.3	0.6	0.0	0.0	0.1	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.9	0.0	0.3	0.8	0.8	0.8	0.0	0.0	0.3	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	7.4	0.0	31.7	5.4	5.4	18.3	0.0	0.0	16.1	0.0	17.6
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		1311			736			101			112	
Approach Delay, s/veh		7.8			6.3			18.3			17.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	26.0		7.9	4.7	25.9		7.9
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	3.0	22.7		21.0	3.0	22.7		21.0
Max Q Clear Time (g_c+I1), s	2.5	6.3		5.7	2.6	12.2		3.5
Green Ext Time (p_c), s	0.0	6.9		0.2	0.0	8.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	639	546	597	375	152	206
Future Volume (veh/h)	639	546	597	375	152	206
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	695	544	628	395	160	217
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1123	590	710	446	458	710
Arrive On Green	0.32	0.32	0.34	0.34	0.13	0.13
Sat Flow, veh/h	3563	1870	2187	1317	3456	1585
Grp Volume(v), veh/h	695	544	533	490	160	217
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1633	1728	1585
Q Serve(g_s), s	10.4	17.5	17.7	17.7	2.6	5.5
Cycle Q Clear(g_c), s	10.4	17.5	17.7	17.7	2.6	5.5
Prop In Lane	1.00			0.81	1.00	1.00
Lane Grp Cap(c), veh/h	1123	590	602	554	458	710
V/C Ratio(X)	0.62	0.92	0.88	0.89	0.35	0.31
Avail Cap(c_a), veh/h	1125	591	712	655	1219	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	20.6	19.5	19.5	24.6	11.0
Incr Delay (d2), s/veh	1.3	20.5	10.3	11.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	9.9	7.9	7.4	1.0	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.5	41.2	29.8	30.6	24.8	11.1
LnGrp LOS	B	D	C	C	C	B
Approach Vol, veh/h		1239	1023		377	
Approach Delay, s/veh		29.0	30.1		16.9	
Approach LOS		C	C		B	

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		25.1				25.0	12.3
Change Period (Y+Rc), s		4.0				5.3	4.0
Max Green Setting (Gmax), s		25.0				19.7	22.0
Max Q Clear Time (g_c+I1), s		19.7				19.5	7.5
Green Ext Time (p_c), s		1.5				0.1	0.8

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	407	29	19	864	8	94	7	4	3	2	142
Future Volume (veh/h)	192	407	29	19	864	8	94	7	4	3	2	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	202	428	31	20	909	8	99	7	4	3	2	149
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	1594	115	53	1300	11	352	23	8	274	146	260
Arrive On Green	0.14	0.47	0.47	0.03	0.36	0.36	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	3361	243	1781	3610	32	1108	139	47	797	893	1585
Grp Volume(v), veh/h	202	226	233	20	447	470	110	0	0	5	0	149
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1781	1777	1865	1294	0	0	1689	0	1585
Q Serve(g_s), s	4.4	3.1	3.1	0.4	8.6	8.6	2.8	0.0	0.0	0.0	0.0	3.5
Cycle Q Clear(g_c), s	4.4	3.1	3.1	0.4	8.6	8.6	3.1	0.0	0.0	0.1	0.0	3.5
Prop In Lane	1.00		0.13	1.00		0.02	0.90		0.04	0.60		1.00
Lane Grp Cap(c), veh/h	257	843	866	53	640	671	383	0	0	420	0	260
V/C Ratio(X)	0.79	0.27	0.27	0.38	0.70	0.70	0.29	0.00	0.00	0.01	0.00	0.57
Avail Cap(c_a), veh/h	356	919	944	267	830	871	810	0	0	944	0	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	6.3	6.3	19.1	11.0	11.0	15.2	0.0	0.0	14.0	0.0	15.5
Incr Delay (d2), s/veh	5.0	0.3	0.3	1.6	2.5	2.4	0.2	0.0	0.0	0.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.7	0.7	0.2	2.7	2.8	0.8	0.0	0.0	0.0	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	6.6	6.6	20.7	13.5	13.4	15.4	0.0	0.0	14.0	0.0	16.2
LnGrp LOS	C	A	A	C	B	B	B	A	A	B	A	B
Approach Vol, veh/h		661			937			110			154	
Approach Delay, s/veh		11.2			13.6			15.4			16.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	24.3		10.6	9.8	19.7		10.6
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	6.0	20.7		20.0	8.0	18.7		20.0
Max Q Clear Time (g_c+I1), s	2.4	5.1		5.1	6.4	10.6		5.5
Green Ext Time (p_c), s	0.0	2.6		0.2	0.1	3.8		0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	235	301	559	408	333	143
Future Volume (veh/h)	235	301	559	408	333	143
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	247	317	588	429	351	151
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	2	2
Cap, veh/h	413	374	670	936	393	1189
Arrive On Green	0.23	0.23	0.36	0.36	0.22	0.64
Sat Flow, veh/h	1781	1610	1870	1585	1781	1870
Grp Volume(v), veh/h	247	317	588	429	351	151
Grp Sat Flow(s),veh/h/ln	1781	1610	1870	1585	1781	1870
Q Serve(g_s), s	8.7	13.2	20.7	10.7	13.5	2.2
Cycle Q Clear(g_c), s	8.7	13.2	20.7	10.7	13.5	2.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	413	374	670	936	393	1189
V/C Ratio(X)	0.60	0.85	0.88	0.46	0.89	0.13
Avail Cap(c_a), veh/h	608	550	710	970	405	1242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	25.8	21.1	8.1	26.6	5.1
Incr Delay (d2), s/veh	0.5	5.5	12.2	0.6	20.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	5.3	10.5	5.8	7.6	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.6	31.3	33.3	8.6	47.0	5.2
LnGrp LOS	C	C	C	A	D	A
Approach Vol, veh/h	564		1017			502
Approach Delay, s/veh	28.4		22.9			34.4
Approach LOS	C		C			C

Timer - Assigned Phs		2			5	6	8
Phs Duration (G+Y+Rc), s		50.0			19.5	30.5	20.3
Change Period (Y+Rc), s		5.3			4.0	5.3	4.0
Max Green Setting (Gmax), s		46.7			16.0	26.7	24.0
Max Q Clear Time (g_c+I1), s		4.2			15.5	22.7	15.2
Green Ext Time (p_c), s		1.0			0.1	2.5	1.1

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	8	116	209	6	87	35	913	61	47	866	15
Future Volume (veh/h)	71	8	116	209	6	87	35	913	61	47	866	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	8	122	220	6	92	37	961	64	49	912	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	192	163	282	388	329	57	1502	466	71	1539	478
Arrive On Green	0.05	0.10	0.10	0.16	0.21	0.21	0.03	0.29	0.29	0.04	0.30	0.30
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	75	8	122	220	6	92	37	961	64	49	912	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	2.1	0.2	3.7	5.9	0.1	2.4	1.0	8.1	1.5	1.3	7.5	0.4
Cycle Q Clear(g_c), s	2.1	0.2	3.7	5.9	0.1	2.4	1.0	8.1	1.5	1.3	7.5	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	95	192	163	282	388	329	57	1502	466	71	1539	478
V/C Ratio(X)	0.79	0.04	0.75	0.78	0.02	0.28	0.64	0.64	0.14	0.69	0.59	0.03
Avail Cap(c_a), veh/h	289	1213	1028	542	1479	1253	144	1967	610	144	1967	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	19.9	21.5	19.9	15.5	16.4	23.6	15.1	12.8	23.4	14.7	12.2
Incr Delay (d2), s/veh	13.4	0.1	6.7	4.7	0.0	0.5	11.4	0.5	0.1	11.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.1	1.5	2.5	0.0	0.8	0.6	2.7	0.5	0.7	2.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	20.0	28.3	24.6	15.6	16.9	35.0	15.6	12.9	34.9	15.0	12.2
LnGrp LOS	D	C	C	C	B	B	D	B	B	C	B	B
Approach Vol, veh/h		205			318			1062			977	
Approach Delay, s/veh		31.0			22.2			16.1			16.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	19.5	12.8	10.1	6.6	19.9	7.6	15.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	19.0	15.0	32.0	4.0	19.0	8.0	39.0
Max Q Clear Time (g_c+I1), s	3.3	10.1	7.9	5.7	3.0	9.5	4.1	4.4
Green Ext Time (p_c), s	0.0	4.4	0.4	0.4	0.0	4.3	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	2	62	27	0	19	18	949	12	63	1137	10
Future Volume (veh/h)	36	2	62	27	0	19	18	949	12	63	1137	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	2	65	28	0	20	19	999	13	66	1197	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	97	82	47	83	70	34	1974	613	92	2139	664
Arrive On Green	0.03	0.05	0.05	0.03	0.00	0.04	0.02	0.39	0.39	0.05	0.42	0.42
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	38	2	65	28	0	20	19	999	13	66	1197	11
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.9	0.0	1.7	0.6	0.0	0.5	0.4	6.2	0.2	1.5	7.4	0.2
Cycle Q Clear(g_c), s	0.9	0.0	1.7	0.6	0.0	0.5	0.4	6.2	0.2	1.5	7.4	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	61	97	82	47	83	70	34	1974	613	92	2139	664
V/C Ratio(X)	0.62	0.02	0.79	0.59	0.00	0.28	0.56	0.51	0.02	0.72	0.56	0.02
Avail Cap(c_a), veh/h	474	1447	1226	474	1447	1226	474	3210	996	474	3210	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	18.6	19.4	19.9	0.0	19.1	20.1	9.7	7.8	19.3	9.1	7.0
Incr Delay (d2), s/veh	10.0	0.1	15.3	11.2	0.0	2.2	13.8	0.2	0.0	10.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.9	0.4	0.0	0.2	0.3	1.8	0.1	0.8	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	18.7	34.7	31.1	0.0	21.3	33.9	9.9	7.9	29.5	9.3	7.0
LnGrp LOS	C	B	C	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h		105			48			1031			1274	
Approach Delay, s/veh		32.6			27.0			10.3			10.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	21.0	6.1	7.1	5.8	22.3	6.4	6.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	26.0	11.0	32.0	11.0	26.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.5	8.2	2.6	3.7	2.4	9.4	2.9	2.5
Green Ext Time (p_c), s	0.1	6.8	0.0	0.2	0.0	8.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	205	116	52	1250	1002	94
Future Volume (veh/h)	205	116	52	1250	1002	94
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	216	122	55	1316	1055	99
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	338	301	85	2914	2058	637
Arrive On Green	0.19	0.19	0.05	0.57	0.40	0.40
Sat Flow, veh/h	1781	1585	1781	5274	5274	1581
Grp Volume(v), veh/h	216	122	55	1316	1055	99
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1581
Q Serve(g_s), s	3.7	2.3	1.0	5.0	5.2	1.3
Cycle Q Clear(g_c), s	3.7	2.3	1.0	5.0	5.2	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	338	301	85	2914	2058	637
V/C Ratio(X)	0.64	0.41	0.65	0.45	0.51	0.16
Avail Cap(c_a), veh/h	1067	949	320	4892	3363	1041
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	11.9	15.6	4.1	7.5	6.3
Incr Delay (d2), s/veh	2.0	0.9	7.9	0.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.1	0.5	0.3	0.9	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.5	12.8	23.5	4.3	7.7	6.5
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	338			1371	1154	
Approach Delay, s/veh	13.9			5.0	7.6	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		23.1		10.3	5.6	17.5
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	6.0	22.0
Max Q Clear Time (g_c+I1), s		7.0		5.7	3.0	7.2
Green Ext Time (p_c), s		9.8		0.9	0.0	6.2

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	52	49	18	1250	1105	12
Future Volume (veh/h)	52	49	18	1250	1105	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	52	19	1316	1163	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	143	127	35	3264	2447	758
Arrive On Green	0.08	0.08	0.02	0.64	0.48	0.48
Sat Flow, veh/h	1781	1585	1781	5274	5274	1582
Grp Volume(v), veh/h	55	52	19	1316	1163	13
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1582
Q Serve(g_s), s	0.8	0.9	0.3	3.6	4.4	0.1
Cycle Q Clear(g_c), s	0.8	0.9	0.3	3.6	4.4	0.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	143	127	35	3264	2447	758
V/C Ratio(X)	0.39	0.41	0.54	0.40	0.48	0.02
Avail Cap(c_a), veh/h	1250	1112	250	5731	4298	1332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	12.5	13.8	2.5	5.0	3.9
Incr Delay (d2), s/veh	1.7	2.1	12.5	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.2	0.0	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.1	14.6	26.4	2.6	5.1	3.9
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	107			1335	1176	
Approach Delay, s/veh	14.4			2.9	5.1	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		22.2		6.3	4.6	17.7
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	4.0	24.0
Max Q Clear Time (g_c+I1), s		5.6		2.9	2.3	6.4
Green Ext Time (p_c), s		10.0		0.2	0.0	7.2

Intersection Summary	
HCM 6th Ctrl Delay	4.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	0	93	31	0	15	30	1414	11	4	1059	15
Future Volume (veh/h)	88	0	93	31	0	15	30	1414	11	4	1059	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	0	98	33	0	16	32	1488	12	4	1115	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	0	145	57	0	28	51	2294	710	8	2169	672
Arrive On Green	0.17	0.00	0.17	0.05	0.00	0.05	0.03	0.45	0.45	0.00	0.42	0.42
Sat Flow, veh/h	814	0	858	1150	0	558	1781	5106	1582	1781	5106	1581
Grp Volume(v), veh/h	191	0	0	49	0	0	32	1488	12	4	1115	16
Grp Sat Flow(s),veh/h/ln	1672	0	0	1708	0	0	1781	1702	1582	1781	1702	1581
Q Serve(g_s), s	5.2	0.0	0.0	1.4	0.0	0.0	0.9	11.1	0.2	0.1	7.8	0.3
Cycle Q Clear(g_c), s	5.2	0.0	0.0	1.4	0.0	0.0	0.9	11.1	0.2	0.1	7.8	0.3
Prop In Lane	0.49		0.51	0.67		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	282	0	0	85	0	0	51	2294	710	8	2169	672
V/C Ratio(X)	0.68	0.00	0.00	0.57	0.00	0.00	0.62	0.65	0.02	0.52	0.51	0.02
Avail Cap(c_a), veh/h	1302	0	0	1330	0	0	146	3035	940	146	3035	940
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	0.0	22.7	0.0	0.0	23.4	10.4	7.5	24.2	10.3	8.2
Incr Delay (d2), s/veh	2.8	0.0	0.0	6.0	0.0	0.0	11.7	0.3	0.0	45.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	0.6	0.0	0.0	0.5	2.8	0.0	0.1	2.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	0.0	28.6	0.0	0.0	35.1	10.8	7.5	69.3	10.5	8.2
LnGrp LOS	C	A	A	C	A	A	D	B	A	E	B	A
Approach Vol, veh/h		191			49			1532			1135	
Approach Delay, s/veh		21.9			28.6			11.2			10.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.2	25.9		12.2	5.4	24.7		6.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	29.0		38.0	4.0	29.0		38.0				
Max Q Clear Time (g_c+I1), s	2.1	13.1		7.2	2.9	9.8		3.4				
Green Ext Time (p_c), s	0.0	8.9		1.2	0.0	7.2		0.2				

Intersection Summary			
HCM 6th Ctrl Delay			12.0
HCM 6th LOS			B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	696	77	36	460	30	15
Future Volume (veh/h)	696	77	36	460	30	15
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	733	81	38	484	32	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1724	769	76	2226	165	147
Arrive On Green	0.49	0.49	0.04	0.63	0.09	0.09
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	733	81	38	484	32	16
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	5.4	1.1	0.8	2.4	0.7	0.4
Cycle Q Clear(g_c), s	5.4	1.1	0.8	2.4	0.7	0.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1724	769	76	2226	165	147
V/C Ratio(X)	0.43	0.11	0.50	0.22	0.19	0.11
Avail Cap(c_a), veh/h	2154	961	219	3090	878	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.8	5.7	19.0	3.3	17.0	16.9
Incr Delay (d2), s/veh	0.3	0.1	1.9	0.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.3	0.3	0.4	0.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.1	5.8	20.8	3.4	17.2	17.0
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	814			522	48	
Approach Delay, s/veh	6.9			4.6	17.1	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.7	25.4				31.1	9.5
Change Period (Y+Rc), s	4.0	5.7				* 5.7	5.7
Max Green Setting (Gmax), s	5.0	24.6				* 35	20.0
Max Q Clear Time (g_c+I1), s	2.8	7.4				4.4	2.7
Green Ext Time (p_c), s	0.0	12.3				12.5	0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	10	34	53	18	85	35	974	18	24	784	25
Future Volume (veh/h)	132	10	34	53	18	85	35	974	18	24	784	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	11	36	56	19	89	37	1025	19	25	825	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	252	214	81	148	125	59	1655	514	43	1608	499
Arrive On Green	0.10	0.13	0.13	0.05	0.08	0.08	0.03	0.32	0.32	0.02	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	139	11	36	56	19	89	37	1025	19	25	825	26
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	3.2	0.2	0.9	1.3	0.4	2.3	0.9	7.2	0.3	0.6	5.6	0.5
Cycle Q Clear(g_c), s	3.2	0.2	0.9	1.3	0.4	2.3	0.9	7.2	0.3	0.6	5.6	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	252	214	81	148	125	59	1655	514	43	1608	499
V/C Ratio(X)	0.77	0.04	0.17	0.69	0.13	0.71	0.62	0.62	0.04	0.58	0.51	0.05
Avail Cap(c_a), veh/h	378	1411	1195	252	1278	1083	252	2166	672	168	1926	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	16.0	16.2	20.0	18.2	19.1	20.2	12.1	9.8	20.5	11.9	10.1
Incr Delay (d2), s/veh	6.8	0.1	0.4	10.0	0.4	7.2	10.2	0.4	0.0	11.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.1	0.3	0.7	0.2	1.0	0.5	2.2	0.1	0.4	1.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	16.0	16.6	29.9	18.6	26.3	30.5	12.5	9.8	32.4	12.1	10.2
LnGrp LOS	C	B	B	C	B	C	C	B	A	C	B	B
Approach Vol, veh/h		186			164			1081			876	
Approach Delay, s/veh		23.1			26.6			13.1			12.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	18.8	6.9	10.7	6.4	18.4	9.3	8.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	18.0	6.0	32.0	6.0	16.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	2.6	9.2	3.3	2.9	2.9	7.6	5.2	4.3
Green Ext Time (p_c), s	0.0	4.6	0.0	0.1	0.0	3.6	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	82	114	193	30	0	37	942	96	3	856	12
Future Volume (veh/h)	84	82	114	193	30	0	37	942	96	3	856	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	86	120	203	32	0	39	992	101	3	901	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	233	197	267	394	334	61	1778	552	6	1620	503
Arrive On Green	0.06	0.12	0.12	0.15	0.21	0.00	0.03	0.35	0.35	0.00	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	88	86	120	203	32	0	39	992	101	3	901	13
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	2.2	1.9	3.3	5.0	0.6	0.0	1.0	7.1	2.0	0.1	6.6	0.3
Cycle Q Clear(g_c), s	2.2	1.9	3.3	5.0	0.6	0.0	1.0	7.1	2.0	0.1	6.6	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	233	197	267	394	334	61	1778	552	6	1620	503
V/C Ratio(X)	0.78	0.37	0.61	0.76	0.08	0.00	0.64	0.56	0.18	0.51	0.56	0.03
Avail Cap(c_a), veh/h	431	1359	1151	706	1647	1396	196	1911	593	196	1911	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	18.3	18.8	18.5	14.4	0.0	21.7	12.0	10.3	22.6	12.9	10.7
Incr Delay (d2), s/veh	10.9	1.0	3.0	4.4	0.1	0.0	10.6	0.8	0.4	56.3	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.8	1.2	2.1	0.2	0.0	0.6	2.3	0.6	0.1	2.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.8	19.2	21.9	23.0	14.5	0.0	32.3	12.8	10.7	78.9	13.7	10.7
LnGrp LOS	C	B	C	C	B	A	C	B	B	E	B	B
Approach Vol, veh/h		294			235			1132			917	
Approach Delay, s/veh		24.1			21.8			13.2			13.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	20.8	10.8	9.7	5.6	19.4	6.9	13.6
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	17.0	18.0	33.0	5.0	17.0	11.0	40.0
Max Q Clear Time (g_c+I1), s	2.1	9.1	7.0	5.3	3.0	8.6	4.2	2.6
Green Ext Time (p_c), s	0.0	6.0	0.4	0.8	0.0	5.8	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	60	0	1080	31	2	1161
Future Volume (veh/h)	60	0	1080	31	2	1161
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	0	1137	33	2	1222
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	97	86	2275	706	6	3134
Arrive On Green	0.05	0.00	0.45	0.45	0.00	0.61
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	63	0	1137	33	2	1222
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	1.0	0.0	4.8	0.4	0.0	3.7
Cycle Q Clear(g_c), s	1.0	0.0	4.8	0.4	0.0	3.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	97	86	2275	706	6	3134
V/C Ratio(X)	0.65	0.00	0.50	0.05	0.34	0.39
Avail Cap(c_a), veh/h	1714	1525	3389	1052	650	6100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	6.0	4.7	15.0	3.0
Incr Delay (d2), s/veh	7.1	0.0	0.2	0.0	30.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.9	0.1	0.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.1	0.0	6.1	4.8	45.5	3.0
LnGrp LOS	C	A	A	A	D	A
Approach Vol, veh/h	63		1170			1224
Approach Delay, s/veh	21.1		6.1			3.1
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.1	18.4				23.5	6.6
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	2.0	6.8				5.7	3.0
Green Ext Time (p_c), s	0.0	6.6				10.8	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	6	54	141	17	24	15	1125	58	5	1192	141
Future Volume (veh/h)	52	6	54	141	17	24	15	1125	58	5	1192	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	6	57	148	18	25	16	1184	61	5	1255	54
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	93	79	197	215	182	29	1816	564	10	1760	546
Arrive On Green	0.05	0.05	0.05	0.11	0.12	0.12	0.02	0.36	0.36	0.01	0.34	0.34
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	55	6	57	148	18	25	16	1184	61	5	1255	54
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.3	0.1	1.5	3.4	0.4	0.6	0.4	8.1	1.1	0.1	8.9	1.0
Cycle Q Clear(g_c), s	1.3	0.1	1.5	3.4	0.4	0.6	0.4	8.1	1.1	0.1	8.9	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	93	79	197	215	182	29	1816	564	10	1760	546
V/C Ratio(X)	0.68	0.06	0.72	0.75	0.08	0.14	0.55	0.65	0.11	0.52	0.71	0.10
Avail Cap(c_a), veh/h	469	1433	1214	682	1657	1404	469	1956	607	469	1956	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	18.9	19.6	18.0	16.5	16.6	20.4	11.3	9.0	20.7	11.9	9.3
Incr Delay (d2), s/veh	9.8	0.3	11.8	5.7	0.2	0.3	15.5	0.7	0.1	37.4	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	0.7	1.5	0.1	0.2	0.3	2.5	0.3	0.1	2.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.4	19.2	31.4	23.7	16.7	17.0	35.9	12.0	9.1	58.1	13.0	9.4
LnGrp LOS	C	B	C	C	B	B	D	B	A	E	B	A
Approach Vol, veh/h		118			191			1261			1314	
Approach Delay, s/veh		29.9			22.2			12.2			13.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	19.9	9.6	7.1	5.7	19.4	6.9	9.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	16.0	32.0	11.0	16.0	11.0	37.0
Max Q Clear Time (g_c+I1), s	2.1	10.1	5.4	3.5	2.4	10.9	3.3	2.6
Green Ext Time (p_c), s	0.0	3.8	0.3	0.1	0.0	3.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	98	64	77	41	184	44	1549	45	131	638	47
Future Volume (veh/h)	103	98	64	77	41	184	44	1549	45	131	638	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	103	67	81	43	194	46	1631	47	138	672	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	325	274	104	296	250	127	1726	768	153	1778	791
Arrive On Green	0.07	0.17	0.17	0.06	0.16	0.16	0.07	0.49	0.49	0.09	0.50	0.50
Sat Flow, veh/h	1781	1870	1580	1781	1870	1579	1781	3554	1582	1781	3554	1582
Grp Volume(v), veh/h	108	103	67	81	43	194	46	1631	47	138	672	49
Grp Sat Flow(s),veh/h/ln	1781	1870	1580	1781	1870	1579	1781	1777	1582	1781	1777	1582
Q Serve(g_s), s	4.9	3.9	3.0	3.7	1.6	9.6	2.0	35.5	1.3	6.3	9.5	1.3
Cycle Q Clear(g_c), s	4.9	3.9	3.0	3.7	1.6	9.6	2.0	35.5	1.3	6.3	9.5	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	325	274	104	296	250	127	1726	768	153	1778	791
V/C Ratio(X)	0.82	0.32	0.24	0.78	0.15	0.78	0.36	0.94	0.06	0.90	0.38	0.06
Avail Cap(c_a), veh/h	131	597	504	131	597	504	197	1744	776	153	1778	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	29.4	29.1	37.8	29.5	32.9	36.1	19.9	11.1	36.9	12.5	10.5
Incr Delay (d2), s/veh	32.8	0.6	0.5	20.3	0.2	5.1	1.7	11.1	0.0	45.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	1.7	1.1	2.1	0.7	3.8	0.9	14.9	0.4	4.5	3.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	30.0	29.5	58.2	29.8	38.0	37.8	31.0	11.1	82.1	12.7	10.5
LnGrp LOS	E	C	C	E	C	D	D	C	B	F	B	B
Approach Vol, veh/h		278			318			1724			859	
Approach Delay, s/veh		45.4			42.0			30.6			23.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	43.6	8.8	18.1	9.8	44.8	10.0	16.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	40.0	6.0	26.0	9.0	38.0	6.0	26.0
Max Q Clear Time (g_c+I1), s	8.3	37.5	5.7	5.9	4.0	11.5	6.9	11.6
Green Ext Time (p_c), s	0.0	2.0	0.0	0.6	0.0	4.6	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	31.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	12	116	68	3	0	61	1284	63	0	726	15
Future Volume (veh/h)	235	12	116	68	3	0	61	1284	63	0	726	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	247	13	122	72	3	0	64	1352	66	0	764	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	596	505	245	212	180	81	1609	718	103	1264	564
Arrive On Green	0.17	0.35	0.35	0.13	0.13	0.00	0.05	0.50	0.50	0.00	0.40	0.40
Sat Flow, veh/h	1603	1683	1427	1129	1683	1427	1603	3198	1427	341	3198	1427
Grp Volume(v), veh/h	247	13	122	72	3	0	64	1352	66	0	764	16
Grp Sat Flow(s),veh/h/ln	1603	1683	1427	1129	1683	1427	1603	1599	1427	341	1599	1427
Q Serve(g_s), s	10.6	0.4	4.2	4.2	0.1	0.0	2.8	25.5	1.7	0.0	13.3	0.5
Cycle Q Clear(g_c), s	10.6	0.4	4.2	4.2	0.1	0.0	2.8	25.5	1.7	0.0	13.3	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	274	596	505	245	212	180	81	1609	718	103	1264	564
V/C Ratio(X)	0.90	0.02	0.24	0.29	0.01	0.00	0.79	0.84	0.09	0.00	0.60	0.03
Avail Cap(c_a), veh/h	274	648	549	280	264	224	137	1733	773	104	1277	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	14.7	16.0	28.6	26.8	0.0	32.9	15.0	9.1	0.0	16.9	13.0
Incr Delay (d2), s/veh	29.3	0.0	0.1	0.2	0.0	0.0	6.1	4.1	0.1	0.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.1	1.3	1.1	0.0	0.0	1.2	8.9	0.5	0.0	4.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.8	14.7	16.1	28.8	26.8	0.0	39.0	19.1	9.2	0.0	18.0	13.0
LnGrp LOS	E	B	B	C	C	A	D	B	A	A	B	B
Approach Vol, veh/h		382			75			1482			780	
Approach Delay, s/veh		43.0			28.8			19.5			17.9	
Approach LOS		D			C			B			B	

Timer - Assigned Phs		2		4	5	6	7	8
Phs Duration (G+Y+Rc), s		41.3		28.8	7.6	33.7	16.0	12.8
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0	4.0	4.0
Max Green Setting (Gmax), s		38.0		27.0	6.0	28.0	12.0	11.0
Max Q Clear Time (g_c+I1), s		27.5		6.2	4.8	15.3	12.6	6.2
Green Ext Time (p_c), s		7.8		0.3	0.0	5.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	157	279	51	1269	862	20
Future Volume (veh/h)	157	279	51	1269	862	20
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	165	294	54	1336	907	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	419	373	75	1998	1488	664
Arrive On Green	0.24	0.24	0.04	0.56	0.42	0.42
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	165	294	54	1336	907	21
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	3.9	8.6	1.5	13.0	9.8	0.4
Cycle Q Clear(g_c), s	3.9	8.6	1.5	13.0	9.8	0.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	419	373	75	1998	1488	664
V/C Ratio(X)	0.39	0.79	0.72	0.67	0.61	0.03
Avail Cap(c_a), veh/h	685	609	397	3308	2157	962
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	17.7	23.4	7.6	11.2	8.5
Incr Delay (d2), s/veh	0.6	3.7	11.9	0.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.4	0.8	3.5	3.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.5	21.5	35.2	8.0	11.6	8.5
LnGrp LOS	B	C	D	A	B	A
Approach Vol, veh/h	459			1390	928	
Approach Delay, s/veh	19.7			9.0	11.5	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		32.8		16.6	7.1	25.7
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		46.0		19.0	11.0	30.0
Max Q Clear Time (g_c+I1), s		15.0		10.6	3.5	11.8
Green Ext Time (p_c), s		12.8		1.1	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	224	103	96	1345	1138	160
Future Volume (veh/h)	224	103	96	1345	1138	160
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	236	108	101	1416	1198	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	313	279	132	2244	1707	761
Arrive On Green	0.18	0.18	0.07	0.63	0.48	0.48
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	236	108	101	1416	1198	168
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	6.5	3.1	2.9	12.7	13.7	3.2
Cycle Q Clear(g_c), s	6.5	3.1	2.9	12.7	13.7	3.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	313	279	132	2244	1707	761
V/C Ratio(X)	0.75	0.39	0.77	0.63	0.70	0.22
Avail Cap(c_a), veh/h	687	611	412	3084	1988	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	18.9	23.6	5.9	10.6	7.8
Incr Delay (d2), s/veh	1.4	0.3	3.5	0.6	1.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.9	1.2	3.1	4.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.7	19.2	27.1	6.4	11.9	8.1
LnGrp LOS	C	B	C	A	B	A
Approach Vol, veh/h	344			1517	1366	
Approach Delay, s/veh	20.9			7.8	11.4	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		38.7		13.1	7.8	30.9
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		45.0		20.0	12.0	29.0
Max Q Clear Time (g_c+I1), s		14.7		8.5	4.9	15.7
Green Ext Time (p_c), s		17.4		0.6	0.1	9.2

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	54	30	44	24	40	9	1175	50	39	1084	97
Future Volume (veh/h)	215	54	30	44	24	40	9	1175	50	39	1084	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	226	57	32	46	25	42	9	1237	53	41	1141	102
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	300	254	173	182	154	33	1451	647	110	1605	716
Arrive On Green	0.16	0.16	0.16	0.10	0.10	0.10	0.02	0.41	0.41	0.06	0.45	0.45
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	226	57	32	46	25	42	9	1237	53	41	1141	102
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	9.0	2.0	1.3	1.8	0.9	1.8	0.4	23.4	1.5	1.6	19.2	2.8
Cycle Q Clear(g_c), s	9.0	2.0	1.3	1.8	0.9	1.8	0.4	23.4	1.5	1.6	19.2	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	300	254	173	182	154	33	1451	647	110	1605	716
V/C Ratio(X)	0.79	0.19	0.13	0.27	0.14	0.27	0.28	0.85	0.08	0.37	0.71	0.14
Avail Cap(c_a), veh/h	480	504	428	257	270	229	288	1538	686	288	1605	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	27.0	26.7	31.0	30.6	31.0	35.9	19.9	13.4	33.4	16.4	11.9
Incr Delay (d2), s/veh	5.1	0.3	0.2	0.3	0.1	0.3	1.7	5.1	0.1	0.8	1.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.9	0.5	0.7	0.4	0.7	0.2	8.8	0.5	0.7	6.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	27.3	26.9	31.3	30.7	31.4	37.6	25.1	13.5	34.2	18.2	12.1
LnGrp LOS	D	C	C	C	C	C	D	C	B	C	B	B
Approach Vol, veh/h		315			113			1299			1284	
Approach Delay, s/veh		32.8			31.2			24.7			18.3	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.6	36.3		12.5	5.4	39.5		16.8
Change Period (Y+Rc), s	4.0	6.0		5.3	4.0	6.0		4.9
Max Green Setting (Gmax), s	12.0	32.1		10.7	12.0	32.1		20.0
Max Q Clear Time (g_c+I1), s	3.6	25.4		3.8	2.4	21.2		11.0
Green Ext Time (p_c), s	0.0	4.8		0.1	0.0	7.0		0.9

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	72	39	1582	38	67	1520
Future Volume (veh/h)	72	39	1582	38	67	1520
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	41	1665	40	71	1600
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	100	54	2388	741	98	3326
Arrive On Green	0.09	0.09	0.47	0.47	0.06	0.65
Sat Flow, veh/h	1100	594	5274	1585	1781	5274
Grp Volume(v), veh/h	118	0	1665	40	71	1600
Grp Sat Flow(s),veh/h/ln	1708	0	1702	1585	1781	1702
Q Serve(g_s), s	2.6	0.0	10.0	0.5	1.5	6.2
Cycle Q Clear(g_c), s	2.6	0.0	10.0	0.5	1.5	6.2
Prop In Lane	0.64	0.35		1.00	1.00	
Lane Grp Cap(c), veh/h	156	0	2388	741	98	3326
V/C Ratio(X)	0.76	0.00	0.70	0.05	0.72	0.48
Avail Cap(c_a), veh/h	1275	0	2628	816	504	4730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	8.2	5.7	18.1	3.4
Incr Delay (d2), s/veh	7.3	0.0	0.7	0.0	9.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	2.5	0.1	0.8	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.5	0.0	8.9	5.7	27.7	3.5
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	118		1705			1671
Approach Delay, s/veh	24.5		8.8			4.6
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.1	23.2				30.3	8.5
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	3.5	12.0				8.2	4.6
Green Ext Time (p_c), s	0.1	6.2				14.6	0.3

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	0	93	31	0	15	30	1414	11	4	1059	15
Future Volume (veh/h)	88	0	93	31	0	15	30	1414	11	4	1059	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	0	98	33	0	16	32	1488	12	4	1115	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	0	194	53	0	136	51	2633	816	8	2508	777
Arrive On Green	0.07	0.00	0.12	0.03	0.00	0.09	0.03	0.52	0.52	0.00	0.49	0.49
Sat Flow, veh/h	1781	0	1577	1781	0	1574	1781	5106	1582	1781	5106	1582
Grp Volume(v), veh/h	93	0	98	33	0	16	32	1488	12	4	1115	16
Grp Sat Flow(s),veh/h/ln	1781	0	1577	1781	0	1574	1781	1702	1582	1781	1702	1582
Q Serve(g_s), s	2.5	0.0	2.8	0.9	0.0	0.5	0.9	9.7	0.2	0.1	6.9	0.3
Cycle Q Clear(g_c), s	2.5	0.0	2.8	0.9	0.0	0.5	0.9	9.7	0.2	0.1	6.9	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	0	194	53	0	136	51	2633	816	8	2508	777
V/C Ratio(X)	0.79	0.00	0.51	0.63	0.00	0.12	0.62	0.57	0.01	0.52	0.44	0.02
Avail Cap(c_a), veh/h	182	0	1001	182	0	999	146	2633	816	146	2508	777
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	0.0	20.0	23.4	0.0	20.6	23.5	8.1	5.8	24.3	8.1	6.4
Incr Delay (d2), s/veh	11.6	0.0	2.0	11.6	0.0	0.4	11.7	0.9	0.0	45.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.0	0.5	0.0	0.2	0.5	2.3	0.0	0.1	1.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	0.0	22.1	35.0	0.0	21.0	35.2	9.0	5.8	69.4	8.7	6.4
LnGrp LOS	C	A	C	D	A	C	D	A	A	E	A	A
Approach Vol, veh/h		191			49			1532			1135	
Approach Delay, s/veh		27.9			30.5			9.5			8.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.2	29.2	5.4	10.0	5.4	28.0	7.2	8.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	24.0	5.0	31.0	4.0	24.0	5.0	31.0
Max Q Clear Time (g_c+I1), s	2.1	11.7	2.9	4.8	2.9	8.9	4.5	2.5
Green Ext Time (p_c), s	0.0	7.4	0.0	0.5	0.0	6.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	7	157	125	8	0	58	0	39	0	0	0
Future Volume (veh/h)	0	7	157	125	8	0	58	0	39	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	7	165	132	8	0	61	0	41	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	262	222	192	12	181	98	558	249	7	14	6
Arrive On Green	0.00	0.14	0.14	0.11	0.11	0.00	0.06	0.00	0.16	0.00	0.00	0.00
Sat Flow, veh/h	0	1870	1585	1684	102	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	7	165	140	0	0	61	0	41	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1786	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.1	2.5	1.9	0.0	0.0	0.9	0.0	0.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.1	2.5	1.9	0.0	0.0	0.9	0.0	0.6	0.0	0.0	0.0
Prop In Lane	0.00		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	262	222	204	0	181	98	558	249	7	14	6
V/C Ratio(X)	0.00	0.03	0.74	0.69	0.00	0.00	0.62	0.00	0.16	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	1909	1618	1823	0	1618	769	2371	1058	769	2371	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.5	10.5	10.8	0.0	0.0	11.8	0.0	9.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.9	4.1	0.0	0.0	6.3	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.9	0.7	0.0	0.0	0.4	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.5	15.4	14.9	0.0	0.0	18.1	0.0	9.6	0.0	0.0	0.0
LnGrp LOS	A	A	B	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		172			140			102			0	
Approach Delay, s/veh		15.2			14.9			14.7			0.0	
Approach LOS		B			B			B				

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	9.0		8.6	6.4	2.6		7.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.0	17.0		26.0	11.0	17.0		26.0
Max Q Clear Time (g_c+I1), s	0.0	2.6		4.5	2.9	0.0		3.9
Green Ext Time (p_c), s	0.0	0.1		0.5	0.1	0.0		0.7

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	28	80	45	7	48	51	694	13	43	528	38
Future Volume (veh/h)	79	28	80	45	7	48	51	694	13	43	528	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	29	84	47	7	51	54	731	14	45	556	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	53	180	106	16	107	80	1049	468	70	1029	459
Arrive On Green	0.11	0.11	0.11	0.07	0.07	0.07	0.04	0.30	0.30	0.04	0.29	0.29
Sat Flow, veh/h	1337	467	1585	1560	232	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	112	0	84	54	0	51	54	731	14	45	556	40
Grp Sat Flow(s),veh/h/ln	1804	0	1585	1792	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.4	0.0	2.0	1.2	0.0	1.3	1.2	7.5	0.3	1.0	5.4	0.8
Cycle Q Clear(g_c), s	2.4	0.0	2.0	1.2	0.0	1.3	1.2	7.5	0.3	1.0	5.4	0.8
Prop In Lane	0.74		1.00	0.87		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	0	180	122	0	107	80	1049	468	70	1029	459
V/C Ratio(X)	0.55	0.00	0.47	0.44	0.00	0.47	0.68	0.70	0.03	0.65	0.54	0.09
Avail Cap(c_a), veh/h	1135	0	998	1128	0	998	388	1377	614	733	2065	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	17.1	18.5	0.0	18.5	19.4	12.9	10.4	19.6	12.4	10.7
Incr Delay (d2), s/veh	2.3	0.0	1.9	2.5	0.0	3.2	9.6	1.0	0.0	9.7	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.7	0.5	0.0	0.5	0.7	2.5	0.1	0.6	1.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	0.0	19.0	21.0	0.0	21.8	29.1	14.0	10.4	29.2	12.8	10.8
LnGrp LOS	B	A	B	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		196			105			799			641	
Approach Delay, s/veh		19.3			21.4			14.9			13.8	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	17.2		9.7	6.8	17.0		7.8
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	16.0		26.0	9.0	24.0		26.0
Max Q Clear Time (g_c+I1), s	3.0	9.5		4.4	3.2	7.4		3.3
Green Ext Time (p_c), s	0.1	2.6		0.8	0.0	3.6		0.4

Intersection Summary			
HCM 6th Ctrl Delay			15.4
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	2	153	0	3	23	141	887	0	9	483	103
Future Volume (veh/h)	97	2	153	0	3	23	141	887	0	9	483	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	2	161	0	3	24	148	934	0	9	508	108
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	5	436	5	177	150	188	1344	599	17	1003	447
Arrive On Green	0.07	0.28	0.28	0.00	0.09	0.09	0.11	0.38	0.00	0.01	0.28	0.28
Sat Flow, veh/h	1781	19	1569	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	102	0	163	0	3	24	148	934	0	9	508	108
Grp Sat Flow(s),veh/h/ln	1781	0	1588	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.0	0.0	3.0	0.0	0.1	0.5	2.9	8.0	0.0	0.2	4.3	1.9
Cycle Q Clear(g_c), s	2.0	0.0	3.0	0.0	0.1	0.5	2.9	8.0	0.0	0.2	4.3	1.9
Prop In Lane	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	0	441	5	177	150	188	1344	599	17	1003	447
V/C Ratio(X)	0.80	0.00	0.37	0.00	0.02	0.16	0.79	0.69	0.00	0.53	0.51	0.24
Avail Cap(c_a), veh/h	199	0	1018	199	1199	1016	199	1783	795	199	1783	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	10.4	0.0	14.7	14.9	15.7	9.4	0.0	17.7	10.8	9.9
Incr Delay (d2), s/veh	11.9	0.0	0.5	0.0	0.0	0.5	18.0	0.8	0.0	23.1	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.8	0.0	0.0	0.2	1.8	1.8	0.0	0.2	1.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.3	0.0	10.9	0.0	14.8	15.4	33.6	10.2	0.0	40.7	11.2	10.2
LnGrp LOS	C	A	B	A	B	B	C	B	A	D	B	B
Approach Vol, veh/h		265			27			1082			625	
Approach Delay, s/veh		17.6			15.3			13.4			11.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.3	17.6	0.0	14.0	7.8	14.1	6.6	7.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	18.0	4.0	23.0	4.0	18.0	4.0	23.0
Max Q Clear Time (g_c+I1), s	2.2	10.0	0.0	5.0	4.9	6.3	4.0	2.5
Green Ext Time (p_c), s	0.0	3.6	0.0	0.8	0.0	2.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	0	26	43	0	44	12	762	32	20	268	11
Future Volume (veh/h)	62	0	26	43	0	44	12	762	32	20	268	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	0	27	45	0	46	13	802	34	21	282	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	0	119	134	141	118	24	1322	588	38	1349	600
Arrive On Green	0.08	0.00	0.08	0.08	0.00	0.08	0.01	0.37	0.37	0.02	0.38	0.38
Sat Flow, veh/h	1781	0	1577	1781	1870	1577	1781	3554	1581	1781	3554	1581
Grp Volume(v), veh/h	65	0	27	45	0	46	13	802	34	21	282	12
Grp Sat Flow(s),veh/h/ln	1781	0	1577	1781	1870	1577	1781	1777	1581	1781	1777	1581
Q Serve(g_s), s	1.2	0.0	0.6	0.8	0.0	1.0	0.3	6.4	0.5	0.4	1.9	0.2
Cycle Q Clear(g_c), s	1.2	0.0	0.6	0.8	0.0	1.0	0.3	6.4	0.5	0.4	1.9	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	135	0	119	134	141	118	24	1322	588	38	1349	600
V/C Ratio(X)	0.48	0.00	0.23	0.34	0.00	0.39	0.54	0.61	0.06	0.56	0.21	0.02
Avail Cap(c_a), veh/h	1574	0	1394	1574	1653	1394	203	2330	1037	203	2330	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	0.0	15.2	15.4	0.0	15.5	17.2	8.9	7.1	17.0	7.3	6.8
Incr Delay (d2), s/veh	2.7	0.0	1.0	1.5	0.0	2.1	17.3	0.5	0.0	12.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.3	0.0	0.4	0.2	1.4	0.1	0.3	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	0.0	16.2	16.9	0.0	17.5	34.5	9.4	7.1	29.3	7.4	6.8
LnGrp LOS	B	A	B	B	A	B	C	A	A	C	A	A
Approach Vol, veh/h		92			91			849			315	
Approach Delay, s/veh		17.6			17.2			9.7			8.8	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	17.0		6.7	4.5	17.3		6.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	23.0		31.0	4.0	23.0		31.0				
Max Q Clear Time (g_c+I1), s	2.4	8.4		3.2	2.3	3.9		3.0				
Green Ext Time (p_c), s	0.0	4.5		0.4	0.0	1.5		0.2				

Intersection Summary			
HCM 6th Ctrl Delay			10.5
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	3	19	25	9	39	35	691	3	17	305	171
Future Volume (veh/h)	142	3	19	25	9	39	35	691	3	17	305	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	149	3	20	26	9	41	37	727	3	18	321	180
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	6	259	157	54	186	72	1264	5	32	722	396
Arrive On Green	0.16	0.16	0.16	0.12	0.12	0.12	0.04	0.35	0.35	0.02	0.33	0.33
Sat Flow, veh/h	1748	35	1585	1340	464	1585	1781	3630	15	1781	2214	1214
Grp Volume(v), veh/h	152	0	20	35	0	41	37	356	374	18	256	245
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1803	0	1585	1781	1777	1868	1781	1777	1652
Q Serve(g_s), s	3.9	0.0	0.5	0.9	0.0	1.2	1.0	8.2	8.2	0.5	5.7	5.9
Cycle Q Clear(g_c), s	3.9	0.0	0.5	0.9	0.0	1.2	1.0	8.2	8.2	0.5	5.7	5.9
Prop In Lane	0.98		1.00	0.74		1.00	1.00		0.01	1.00		0.74
Lane Grp Cap(c), veh/h	291	0	259	211	0	186	72	619	651	32	579	538
V/C Ratio(X)	0.52	0.00	0.08	0.17	0.00	0.22	0.52	0.58	0.58	0.57	0.44	0.45
Avail Cap(c_a), veh/h	712	0	633	432	0	380	427	827	869	427	827	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	17.8	19.9	0.0	20.0	23.6	13.3	13.3	24.4	13.3	13.4
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	0.0	0.2	2.1	1.1	1.1	5.9	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.2	0.4	0.0	0.4	0.4	2.6	2.8	0.2	1.9	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	0.0	17.8	20.0	0.0	20.2	25.7	14.4	14.4	30.3	14.0	14.2
LnGrp LOS	B	A	B	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		172			76			767			519	
Approach Delay, s/veh		19.5			20.2			14.9			14.6	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	23.1		9.9	6.0	22.0		12.2
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	23.3		12.0	12.0	23.3		20.0
Max Q Clear Time (g_c+I1), s	2.5	10.2		3.2	3.0	7.9		5.9
Green Ext Time (p_c), s	0.0	7.3		0.0	0.0	5.8		0.3

Intersection Summary			
HCM 6th Ctrl Delay			15.6
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	24	30	29	5	21	16	652	17	4	327	36
Future Volume (veh/h)	102	24	30	29	5	21	16	652	17	4	327	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	25	32	31	5	22	17	686	18	4	344	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	54	253	96	15	68	38	1123	29	12	977	107
Arrive On Green	0.16	0.16	0.16	0.10	0.10	0.10	0.02	0.32	0.32	0.01	0.30	0.30
Sat Flow, veh/h	1457	340	1585	913	147	648	1781	3538	93	1781	3229	354
Grp Volume(v), veh/h	132	0	32	58	0	0	17	344	360	4	188	194
Grp Sat Flow(s),veh/h/ln	1798	0	1585	1708	0	0	1781	1777	1854	1781	1777	1807
Q Serve(g_s), s	2.9	0.0	0.7	1.4	0.0	0.0	0.4	7.1	7.1	0.1	3.6	3.6
Cycle Q Clear(g_c), s	2.9	0.0	0.7	1.4	0.0	0.0	0.4	7.1	7.1	0.1	3.6	3.6
Prop In Lane	0.81		1.00	0.53		0.38	1.00		0.05	1.00		0.20
Lane Grp Cap(c), veh/h	287	0	253	179	0	0	38	564	588	12	537	546
V/C Ratio(X)	0.46	0.00	0.13	0.32	0.00	0.00	0.45	0.61	0.61	0.34	0.35	0.35
Avail Cap(c_a), veh/h	585	0	516	477	0	0	497	1004	1048	497	1004	1021
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	15.5	17.8	0.0	0.0	20.8	12.4	12.4	21.3	11.7	11.7
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.4	0.0	0.0	3.0	1.3	1.2	6.4	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.2	0.5	0.0	0.0	0.2	2.5	2.6	0.1	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	0.0	15.6	18.2	0.0	0.0	23.8	13.7	13.7	27.7	12.2	12.2
LnGrp LOS	B	A	B	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		164			58			721			386	
Approach Delay, s/veh		16.6			18.2			13.9			12.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	19.3		8.5	4.9	18.7		10.9
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	24.3		12.0	12.0	24.3		14.0
Max Q Clear Time (g_c+I1), s	2.1	9.1		3.4	2.4	5.6		4.9
Green Ext Time (p_c), s	0.0	4.6		0.1	0.0	2.5		0.3

Intersection Summary			
HCM 6th Ctrl Delay			14.0
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	6	142	13	11	13	97	604	12	2	410	17
Future Volume (veh/h)	66	6	142	13	11	13	97	604	12	2	410	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	6	149	14	12	14	102	636	13	2	432	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	321	28	309	78	67	126	175	1104	23	5	745	31
Arrive On Green	0.20	0.20	0.20	0.08	0.08	0.08	0.10	0.31	0.31	0.00	0.21	0.21
Sat Flow, veh/h	1645	143	1585	981	841	1585	1781	3561	73	1781	3477	145
Grp Volume(v), veh/h	75	0	149	26	0	14	102	317	332	2	220	230
Grp Sat Flow(s),veh/h/ln	1788	0	1585	1821	0	1585	1781	1777	1857	1781	1777	1844
Q Serve(g_s), s	1.5	0.0	3.6	0.6	0.0	0.4	2.4	6.4	6.4	0.0	4.8	4.8
Cycle Q Clear(g_c), s	1.5	0.0	3.6	0.6	0.0	0.4	2.4	6.4	6.4	0.0	4.8	4.8
Prop In Lane	0.92		1.00	0.54		1.00	1.00		0.04	1.00		0.08
Lane Grp Cap(c), veh/h	349	0	309	145	0	126	175	551	576	5	381	395
V/C Ratio(X)	0.21	0.00	0.48	0.18	0.00	0.11	0.58	0.58	0.58	0.41	0.58	0.58
Avail Cap(c_a), veh/h	417	0	369	849	0	739	249	1130	1182	208	1089	1130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	15.3	18.4	0.0	18.3	18.5	12.4	12.4	21.4	15.1	15.1
Incr Delay (d2), s/veh	0.3	0.0	1.2	0.6	0.0	0.4	1.1	1.3	1.2	19.1	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.2	0.2	0.0	0.1	0.9	2.3	2.4	0.0	1.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	16.5	19.0	0.0	18.7	19.6	13.7	13.7	40.4	17.0	16.9
LnGrp LOS	B	A	B	B	A	B	B	B	B	D	B	B
Approach Vol, veh/h		224			40			751			452	
Approach Delay, s/veh		15.9			18.9			14.5			17.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	14.9		12.4	4.1	19.0		7.4				
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	6.0	26.3		10.0	5.0	27.3		20.0				
Max Q Clear Time (g_c+I1), s	4.4	6.8		5.6	2.0	8.4		2.6				
Green Ext Time (p_c), s	0.0	2.4		0.4	0.0	3.6		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		15.6
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	24	35	99	51	97	35	1116	18	227	436	43
Future Volume (veh/h)	58	24	35	99	51	97	35	1116	18	227	436	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	25	37	79	89	102	37	1175	19	239	459	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	70	201	165	173	146	73	1424	23	280	1679	164
Arrive On Green	0.13	0.13	0.13	0.09	0.09	0.09	0.04	0.40	0.40	0.16	0.51	0.51
Sat Flow, veh/h	1281	525	1513	1781	1870	1585	1781	3577	58	1781	3264	319
Grp Volume(v), veh/h	86	0	37	79	89	102	37	584	610	239	249	255
Grp Sat Flow(s),veh/h/ln	1806	0	1513	1781	1870	1585	1781	1777	1858	1781	1777	1806
Q Serve(g_s), s	3.8	0.0	1.9	3.6	3.9	5.4	1.8	25.5	25.5	11.3	6.8	6.9
Cycle Q Clear(g_c), s	3.8	0.0	1.9	3.6	3.9	5.4	1.8	25.5	25.5	11.3	6.8	6.9
Prop In Lane	0.71		1.00	1.00		1.00	1.00		0.03	1.00		0.18
Lane Grp Cap(c), veh/h	239	0	201	165	173	146	73	707	740	280	914	929
V/C Ratio(X)	0.36	0.00	0.18	0.48	0.52	0.70	0.51	0.82	0.83	0.85	0.27	0.27
Avail Cap(c_a), veh/h	460	0	385	171	180	152	124	939	982	515	1329	1351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	33.4	37.3	37.4	38.1	40.6	23.3	23.3	35.5	11.8	11.9
Incr Delay (d2), s/veh	0.7	0.0	0.3	1.6	1.8	11.6	2.0	5.2	5.0	2.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.7	1.7	1.9	2.6	0.8	10.4	10.8	4.8	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.8	0.0	33.7	38.9	39.2	49.7	42.7	28.5	28.3	38.3	12.1	12.1
LnGrp LOS	C	A	C	D	D	D	D	C	C	D	B	B
Approach Vol, veh/h		123			270			1231			743	
Approach Delay, s/veh		34.5			43.1			28.8			20.5	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.6	40.1		13.3	7.5	50.2		15.5
Change Period (Y+Rc), s	4.0	5.7		5.3	4.0	5.7		4.0
Max Green Setting (Gmax), s	25.0	45.7		8.3	6.0	64.7		22.0
Max Q Clear Time (g_c+I1), s	13.3	27.5		7.4	3.8	8.9		5.8
Green Ext Time (p_c), s	0.4	7.0		0.1	0.0	2.9		0.3

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	0	101	42	0	72	73	1058	33	43	448	32
Future Volume (veh/h)	65	0	101	42	0	72	73	1058	33	43	448	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	0	106	44	0	76	77	1114	35	45	472	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	208	0	0	153	0	0	150	1813	57	86	1705	761
Arrive On Green	0.12	0.00	0.00	0.09	0.00	0.00	0.08	0.52	0.52	0.05	0.48	0.48
Sat Flow, veh/h	1781	68		1781	44		1781	3517	110	1781	3554	1585
Grp Volume(v), veh/h	68	17.7		44	18.8		77	563	586	45	472	34
Grp Sat Flow(s),veh/h/ln	1781	B		1781	B		1781	1777	1850	1781	1777	1585
Q Serve(g_s), s	1.5			1.0			1.8	9.6	9.6	1.1	3.4	0.5
Cycle Q Clear(g_c), s	1.5			1.0			1.8	9.6	9.6	1.1	3.4	0.5
Prop In Lane	1.00			1.00			1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	208			153			150	916	954	86	1705	761
V/C Ratio(X)	0.33			0.29			0.51	0.61	0.61	0.52	0.28	0.04
Avail Cap(c_a), veh/h	499			499			499	1505	1567	499	3009	1342
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4			18.4			18.8	7.4	7.4	19.9	6.7	5.9
Incr Delay (d2), s/veh	0.3			0.4			1.0	1.2	1.1	1.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6			0.4			0.7	2.7	2.8	0.4	0.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7			18.8			19.8	8.5	8.5	21.7	6.8	6.0
LnGrp LOS	B			B			B	A	A	C	A	A
Approach Vol, veh/h								1226			551	
Approach Delay, s/veh								9.2			8.0	
Approach LOS								A			A	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	6.1	27.8	9.0	7.6	26.3	7.7
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0	5.7	4.0
Max Green Setting (Gmax), s	12.0	36.3	12.0	12.0	36.3	12.0
Max Q Clear Time (g_c+I1), s	3.1	11.6	3.5	3.8	5.4	3.0
Green Ext Time (p_c), s	0.0	10.5	0.0	0.0	4.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	4	51	63	4	15	289	862	135	99	854	528
Future Volume (veh/h)	85	4	51	63	4	15	289	862	135	99	854	528
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	0	0	66	4	0	304	907	0	104	899	556
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	0		165	174		346	2432		149	1867	580
Arrive On Green	0.10	0.00	0.00	0.09	0.09	0.00	0.19	0.48	0.00	0.08	0.37	0.37
Sat Flow, veh/h	3563	0	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	92	0	0	66	4	0	304	907	0	104	899	556
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.8	0.0	0.0	2.6	0.1	0.0	12.2	8.4	0.0	4.2	10.0	25.3
Cycle Q Clear(g_c), s	1.8	0.0	0.0	2.6	0.1	0.0	12.2	8.4	0.0	4.2	10.0	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	368	0		165	174		346	2432		149	1867	580
V/C Ratio(X)	0.25	0.00		0.40	0.02		0.88	0.37		0.70	0.48	0.96
Avail Cap(c_a), veh/h	965	0		217	228		386	2432		217	1867	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	31.5	30.4	0.0	28.9	12.3	0.0	32.9	18.0	22.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.6	0.1	0.0	17.4	0.2	0.0	5.8	0.3	27.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	1.2	0.1	0.0	6.3	2.5	0.0	1.9	3.3	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	0.0	0.0	33.1	30.5	0.0	46.3	12.5	0.0	38.7	18.4	50.5
LnGrp LOS	C	A		C	C		D	B		D	B	D
Approach Vol, veh/h		92	A		70	A		1211	A		1559	
Approach Delay, s/veh		30.7			32.9			21.0			31.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.2	41.2		11.6	18.3	33.0		10.9
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	9.0	34.0		20.0	16.0	27.0		9.0
Max Q Clear Time (g_c+I1), s	6.2	10.4		3.8	14.2	27.3		4.6
Green Ext Time (p_c), s	0.1	7.7		0.2	0.1	0.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	2	1	17	2	35	51	1429	124	182	799	201
Future Volume (veh/h)	3	2	1	17	2	35	51	1429	124	182	799	201
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	3	0	18	2	0	54	1504	109	192	841	192
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	10	9	7	8	0	89	2389	1066	426	1919	435
Arrive On Green	0.01	0.01	0.00	0.00	0.00	0.00	0.05	0.67	0.67	0.46	0.46	0.46
Sat Flow, veh/h	1781	1870	1585	1781	1870	0	1781	3554	1585	314	4161	944
Grp Volume(v), veh/h	2	3	0	18	2	0	54	1504	109	192	687	346
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	0	1781	1777	1585	314	1702	1700
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.7	6.0	0.6	10.7	3.4	3.4
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.7	6.0	0.6	11.5	3.4	3.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	10	10	9	7	8	0	89	2389	1066	426	1570	784
V/C Ratio(X)	0.21	0.29	0.00	2.51	0.27	0.00	0.61	0.63	0.10	0.45	0.44	0.44
Avail Cap(c_a), veh/h	1148	1205	1021	1148	1205	0	861	15027	6703	1406	12201	6095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	12.3	0.0	12.4	12.4	0.0	11.6	2.3	1.4	8.6	4.5	4.5
Incr Delay (d2), s/veh	10.1	15.1	0.0	759.7	17.7	0.0	6.4	0.3	0.0	0.7	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	1.5	0.0	0.0	0.3	0.1	0.0	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	27.4	0.0	772.1	30.1	0.0	18.0	2.6	1.5	9.4	4.7	4.9
LnGrp LOS	C	C	A	F	C	A	B	A	A	A	A	A
Approach Vol, veh/h		5			20			1667			1225	
Approach Delay, s/veh		25.4			697.9			3.0			5.5	
Approach LOS		C			F			A			A	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		20.7		4.1	5.2	15.5		0.0				
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		5.0				
Max Green Setting (Gmax), s		105.0		16.0	12.0	89.0		16.0				
Max Q Clear Time (g_c+I1), s		8.0		2.0	2.7	5.4		0.0				
Green Ext Time (p_c), s		8.7		0.0	0.1	3.8		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	7	53	0	1	64	17	1795	0	275	556	0
Future Volume (veh/h)	2	7	53	0	1	64	17	1795	0	275	556	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	0	61	0	1	67	18	1889	0	289	585	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	102	0	175	0	1	87	29	2075	0	328	2671	1191
Arrive On Green	0.06	0.00	0.06	0.00	0.06	0.06	0.02	0.58	0.00	0.18	0.75	0.00
Sat Flow, veh/h	1333	0	3170	0	23	1565	1781	3647	0	1781	3554	1585
Grp Volume(v), veh/h	2	0	61	0	0	68	18	1889	0	289	585	0
Grp Sat Flow(s),veh/h/ln	1333	0	1585	0	0	1589	1781	1777	0	1781	1777	1585
Q Serve(g_s), s	0.1	0.0	1.6	0.0	0.0	3.6	0.9	40.1	0.0	13.4	4.2	0.0
Cycle Q Clear(g_c), s	3.7	0.0	1.6	0.0	0.0	3.6	0.9	40.1	0.0	13.4	4.2	0.0
Prop In Lane	1.00		1.00	0.00		0.99	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	102	0	175	0	0	88	29	2075	0	328	2671	1191
V/C Ratio(X)	0.02	0.00	0.35	0.00	0.00	0.77	0.62	0.91	0.00	0.88	0.22	0.00
Avail Cap(c_a), veh/h	437	0	971	0	0	487	840	2136	0	378	2671	1191
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.4	0.0	38.6	0.0	0.0	39.6	41.5	15.7	0.0	33.7	3.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.2	0.0	0.0	13.4	19.6	6.3	0.0	19.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.4	0.0	0.0	1.7	0.5	15.8	0.0	7.4	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.5	0.0	39.8	0.0	0.0	53.0	61.1	21.9	0.0	52.7	3.2	0.0
LnGrp LOS	D	A	D	A	A	D	E	C	A	D	A	A
Approach Vol, veh/h		63			68			1907			874	
Approach Delay, s/veh		39.8			53.0			22.3			19.5	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.6	54.6		9.7	6.4	68.8		9.7
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	18.0	51.0		26.0	40.0	29.0		26.0
Max Q Clear Time (g_c+I1), s	15.4	42.1		5.7	2.9	6.2		5.6
Green Ext Time (p_c), s	0.2	7.5		0.2	0.0	4.1		0.3

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	9	18	42	1	2	8	1463	339	33	643	7
Future Volume (veh/h)	51	9	18	42	1	2	8	1463	339	33	643	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	9	19	45	0	2	8	1540	357	35	677	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	32	200	293	0	130	22	1884	434	53	2457	25
Arrive On Green	0.13	0.13	0.13	0.08	0.00	0.08	0.01	0.45	0.45	0.03	0.47	0.47
Sat Flow, veh/h	1537	256	1585	3563	0	1585	1781	4148	955	1781	5211	54
Grp Volume(v), veh/h	63	0	19	45	0	2	8	1262	635	35	442	242
Grp Sat Flow(s),veh/h/ln	1793	0	1585	1781	0	1585	1781	1702	1698	1781	1702	1861
Q Serve(g_s), s	1.9	0.0	0.6	0.7	0.0	0.1	0.3	18.8	19.0	1.1	4.6	4.6
Cycle Q Clear(g_c), s	1.9	0.0	0.6	0.7	0.0	0.1	0.3	18.8	19.0	1.1	4.6	4.6
Prop In Lane	0.86		1.00	1.00		1.00	1.00		0.56	1.00		0.03
Lane Grp Cap(c), veh/h	226	0	200	293	0	130	22	1547	772	53	1605	877
V/C Ratio(X)	0.28	0.00	0.10	0.15	0.00	0.02	0.36	0.82	0.82	0.66	0.28	0.28
Avail Cap(c_a), veh/h	307	0	271	1219	0	542	183	1630	814	122	1605	877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	0.0	22.6	24.9	0.0	24.7	28.6	13.8	13.9	28.1	9.4	9.4
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.1	0.0	0.0	3.6	3.4	6.9	5.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.2	0.3	0.0	0.0	0.1	5.6	6.4	0.5	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	0.0	22.7	25.0	0.0	24.7	32.2	17.2	20.8	33.3	9.5	9.6
LnGrp LOS	C	A	C	C	A	C	C	B	C	C	A	A
Approach Vol, veh/h		82			47			1905			719	
Approach Delay, s/veh		23.2			25.0			18.5			10.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	32.6		11.4	4.7	33.6		8.8
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	4.0	28.0		10.0	6.0	26.0		20.0
Max Q Clear Time (g_c+I1), s	3.1	21.0		3.9	2.3	6.6		2.7
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	3.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	6	177	73	16	55	123	1620	17	11	1125	21
Future Volume (veh/h)	117	6	177	73	16	55	123	1620	17	11	1125	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	6	186	77	17	58	129	1705	18	12	1184	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	14	269	104	23	112	166	2117	22	16	1664	31
Arrive On Green	0.17	0.17	0.17	0.07	0.07	0.07	0.09	0.41	0.41	0.01	0.32	0.32
Sat Flow, veh/h	1702	83	1558	1472	325	1585	1781	5209	55	1781	5160	96
Grp Volume(v), veh/h	129	0	186	94	0	58	129	1114	609	12	781	425
Grp Sat Flow(s),veh/h/ln	1785	0	1558	1797	0	1585	1781	1702	1860	1781	1702	1851
Q Serve(g_s), s	3.6	0.0	6.4	2.9	0.0	2.0	4.0	16.4	16.4	0.4	11.4	11.4
Cycle Q Clear(g_c), s	3.6	0.0	6.4	2.9	0.0	2.0	4.0	16.4	16.4	0.4	11.4	11.4
Prop In Lane	0.95		1.00	0.82		1.00	1.00		0.03	1.00		0.05
Lane Grp Cap(c), veh/h	309	0	269	127	0	112	166	1384	756	16	1098	597
V/C Ratio(X)	0.42	0.00	0.69	0.74	0.00	0.52	0.78	0.81	0.81	0.74	0.71	0.71
Avail Cap(c_a), veh/h	631	0	550	127	0	112	283	1425	779	94	1098	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	22.0	25.8	0.0	25.4	25.1	14.8	14.8	28.0	16.9	16.9
Incr Delay (d2), s/veh	0.3	0.0	1.2	18.3	0.0	1.9	3.0	4.0	7.1	21.3	2.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	2.3	1.8	0.0	0.8	1.6	5.2	6.3	0.2	3.8	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	0.0	23.2	44.1	0.0	27.3	28.1	18.8	21.9	49.3	19.6	21.9
LnGrp LOS	C	A	C	D	A	C	C	B	C	D	B	C
Approach Vol, veh/h		315			152			1852			1218	
Approach Delay, s/veh		22.4			37.7			20.5			20.7	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	24.3		8.0	4.5	29.0		15.1
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		5.3
Max Green Setting (Gmax), s	9.0	17.7		4.0	3.0	23.7		20.0
Max Q Clear Time (g_c+I1), s	6.0	13.4		4.9	2.4	18.4		8.4
Green Ext Time (p_c), s	0.1	3.1		0.0	0.0	4.7		0.6

Intersection Summary	
HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	654	167	175	201	132	76	1471	201	158	1011	133
Future Volume (veh/h)	242	654	167	175	201	132	76	1471	201	158	1011	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	255	688	55	184	212	32	80	1548	0	166	1064	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	798	351	212	1281	393	188	2188		220	2236	
Arrive On Green	0.09	0.22	0.22	0.12	0.25	0.25	0.05	0.43	0.00	0.06	0.44	0.00
Sat Flow, veh/h	3456	3554	1564	1781	5106	1566	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	255	688	55	184	212	32	80	1548	0	166	1064	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1564	1781	1702	1566	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	8.7	22.3	3.4	12.2	3.9	1.9	2.7	29.8	0.0	5.7	17.8	0.0
Cycle Q Clear(g_c), s	8.7	22.3	3.4	12.2	3.9	1.9	2.7	29.8	0.0	5.7	17.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	320	798	351	212	1281	393	188	2188		220	2236	
V/C Ratio(X)	0.80	0.86	0.16	0.87	0.17	0.08	0.43	0.71		0.75	0.48	
Avail Cap(c_a), veh/h	634	957	421	282	1281	393	202	2188		230	2236	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	44.7	37.4	51.9	35.1	34.4	54.9	28.1	0.0	55.2	23.9	0.0
Incr Delay (d2), s/veh	1.7	7.4	0.3	15.9	0.1	0.1	0.6	1.2	0.0	11.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	10.2	1.3	6.2	1.6	0.7	1.2	11.6	0.0	2.7	6.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	52.2	37.7	67.8	35.2	34.5	55.5	29.4	0.0	66.3	24.7	0.0
LnGrp LOS	E	D	D	E	D	C	E	C		E	C	
Approach Vol, veh/h		998			428			1628	A		1230	A
Approach Delay, s/veh		52.1			49.2			30.7			30.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	58.6	15.1	35.8	11.7	57.4	18.3	32.6
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	7.0	42.0	22.0	29.3	8.0	* 41	19.0	32.3
Max Q Clear Time (g_c+I1), s	4.7	19.8	10.7	5.9	7.7	31.8	14.2	24.3
Green Ext Time (p_c), s	0.0	7.9	0.5	1.2	0.0	7.0	0.1	2.6

Intersection Summary	
HCM 6th Ctrl Delay	37.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	0	39	44	2	21	24	1711	20	10	1382	9
Future Volume (veh/h)	48	0	39	44	2	21	24	1711	20	10	1382	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	0	41	46	2	22	25	1801	21	11	1455	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	4	50	113	10	34	780	2876	1283	14	1911	12
Arrive On Green	0.07	0.00	0.07	0.07	0.07	0.07	0.44	0.81	0.81	0.01	0.37	0.37
Sat Flow, veh/h	849	57	728	919	141	486	1781	3554	1585	1781	5236	32
Grp Volume(v), veh/h	92	0	0	70	0	0	25	1801	21	11	946	518
Grp Sat Flow(s),veh/h/ln	1634	0	0	1546	0	0	1781	1777	1585	1781	1702	1865
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	1.0	23.5	0.3	0.7	29.3	29.3
Cycle Q Clear(g_c), s	6.5	0.0	0.0	5.2	0.0	0.0	1.0	23.5	0.3	0.7	29.3	29.3
Prop In Lane	0.55		0.45	0.66		0.31	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	159	0	0	156	0	0	780	2876	1283	14	1243	681
V/C Ratio(X)	0.58	0.00	0.00	0.45	0.00	0.00	0.03	0.63	0.02	0.80	0.76	0.76
Avail Cap(c_a), veh/h	315	0	0	309	0	0	780	2876	1283	45	2306	1263
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	0.0	0.0	54.4	0.0	0.0	19.2	4.4	2.2	59.4	33.5	33.5
Incr Delay (d2), s/veh	3.3	0.0	0.0	2.0	0.0	0.0	0.0	1.0	0.0	31.9	1.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	0.0	2.1	0.0	0.0	0.4	5.2	0.1	0.4	11.6	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	0.0	0.0	56.4	0.0	0.0	19.3	5.5	2.2	91.4	34.8	35.9
LnGrp LOS	E	A	A	E	A	A	B	A	A	F	C	D
Approach Vol, veh/h		92			70			1847			1475	
Approach Delay, s/veh		58.2			56.4			5.6			35.6	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	102.8		12.3	58.2	49.5		12.3
Change Period (Y+Rc), s	4.0	5.7		4.0	5.7	* 5.7		4.0
Max Green Setting (Gmax), s	3.0	82.3		21.0	4.0	* 81		21.0
Max Q Clear Time (g_c+I1), s	2.7	25.5		8.5	3.0	31.3		7.2
Green Ext Time (p_c), s	0.0	22.5		0.2	0.0	12.5		0.1

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	270	226	109	50	51	125	1760	48	139	2098	31
Future Volume (veh/h)	99	270	226	109	50	51	125	1760	48	139	2098	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	284	238	115	53	0	132	1853	0	146	2208	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	601	266	168	516		186	2702		201	2764	41
Arrive On Green	0.07	0.17	0.17	0.05	0.15	0.00	0.05	0.53	0.00	0.06	0.53	0.53
Sat Flow, veh/h	1781	3554	1571	3456	3554	1585	3456	5106	1585	3456	5183	77
Grp Volume(v), veh/h	104	284	238	115	53	0	132	1853	0	146	1449	792
Grp Sat Flow(s),veh/h/ln	1781	1777	1571	1728	1777	1585	1728	1702	1585	1728	1702	1856
Q Serve(g_s), s	6.9	8.7	17.8	3.9	1.6	0.0	4.5	32.2	0.0	5.0	41.5	41.7
Cycle Q Clear(g_c), s	6.9	8.7	17.8	3.9	1.6	0.0	4.5	32.2	0.0	5.0	41.5	41.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	129	601	266	168	516		186	2702		201	1815	990
V/C Ratio(X)	0.81	0.47	0.90	0.69	0.10		0.71	0.69		0.73	0.80	0.80
Avail Cap(c_a), veh/h	208	631	279	202	516		230	2723		230	1815	990
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	45.0	48.8	56.2	44.5	0.0	55.8	20.9	0.0	55.6	22.8	22.8
Incr Delay (d2), s/veh	4.5	0.8	28.5	4.7	0.1	0.0	4.9	0.8	0.0	7.4	3.8	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	3.9	8.9	1.8	0.7	0.0	2.1	12.1	0.0	2.3	16.3	18.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.3	45.8	77.3	60.9	44.6	0.0	60.7	21.6	0.0	63.0	26.5	29.6
LnGrp LOS	E	D	E	E	D		E	C		E	C	C
Approach Vol, veh/h		626			168	A		1985	A		2387	
Approach Delay, s/veh		60.0			55.8			24.2			29.8	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	23.1	11.0	69.5	9.8	26.0	10.5	70.0
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	14.0	14.3	8.0	64.0	7.0	21.3	8.0	64.0
Max Q Clear Time (g_c+I1), s	8.9	3.6	7.0	34.2	5.9	19.8	6.5	43.7
Green Ext Time (p_c), s	0.1	0.1	0.0	14.5	0.0	0.5	0.0	13.7

Intersection Summary	
HCM 6th Ctrl Delay	32.1
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	169	278	1737	91	210	2271
Future Volume (veh/h)	169	278	1737	91	210	2271
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	0	1828	96	221	2391
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	237		2265	703	269	3383
Arrive On Green	0.13	0.00	0.44	0.44	0.15	0.66
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	178	0	1828	96	221	2391
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	5.7	0.0	18.2	2.1	7.1	17.4
Cycle Q Clear(g_c), s	5.7	0.0	18.2	2.1	7.1	17.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	237		2265	703	269	3383
V/C Ratio(X)	0.75		0.81	0.14	0.82	0.71
Avail Cap(c_a), veh/h	789		2435	756	303	3827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	0.0	14.2	9.7	24.2	6.3
Incr Delay (d2), s/veh	4.7	0.0	2.0	0.1	13.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	5.6	0.6	3.6	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.3	0.0	16.2	9.8	37.5	6.8
LnGrp LOS	C		B	A	D	A
Approach Vol, veh/h	178	A	1924			2612
Approach Delay, s/veh	29.3		15.9			9.4
Approach LOS	C		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.9	32.0				44.9	13.8
Change Period (Y+Rc), s	4.0	6.0				* 6	6.0
Max Green Setting (Gmax), s	10.0	28.0				* 44	26.0
Max Q Clear Time (g_c+I1), s	9.1	20.2				19.4	7.7
Green Ext Time (p_c), s	0.0	5.8				17.4	0.6

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	6	9	95	2	181	40	699	360	461	1037	0
Future Volume (veh/h)	0	6	9	95	2	181	40	699	360	461	1037	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	6	9	100	0	192	42	736	379	485	1092	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	27	23	337	0	300	55	1888	842	507	2298	1025
Arrive On Green	0.00	0.01	0.01	0.09	0.00	0.09	0.03	0.53	0.53	0.15	0.65	0.00
Sat Flow, veh/h	3456	1870	1585	3563	0	3170	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	0	6	9	100	0	192	42	736	379	485	1092	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	0	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.0	0.2	0.4	2.0	0.0	4.4	1.8	9.2	11.0	10.4	11.8	0.0
Cycle Q Clear(g_c), s	0.0	0.2	0.4	2.0	0.0	4.4	1.8	9.2	11.0	10.4	11.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	49	27	23	337	0	300	55	1888	842	507	2298	1025
V/C Ratio(X)	0.00	0.22	0.40	0.30	0.00	0.64	0.76	0.39	0.45	0.96	0.48	0.00
Avail Cap(c_a), veh/h	737	399	338	760	0	676	95	1888	842	507	2298	1025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	36.6	36.6	31.6	0.0	32.7	36.1	10.4	10.8	31.8	6.8	0.0
Incr Delay (d2), s/veh	0.0	4.1	10.8	0.5	0.0	2.3	18.8	0.6	1.7	29.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	0.8	0.0	1.7	1.0	3.0	3.5	6.1	3.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	40.7	47.5	32.1	0.0	35.0	54.8	11.0	12.6	61.1	7.5	0.0
LnGrp LOS	A	D	D	C	A	D	D	B	B	E	A	A
Approach Vol, veh/h		15			292			1157			1577	
Approach Delay, s/veh		44.8			34.0			13.1			23.9	
Approach LOS		D			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	43.8		5.1	6.3	52.5		11.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	16.0		16.0	4.0	23.0		16.0				
Max Q Clear Time (g_c+I1), s	12.4	13.0		2.4	3.8	13.8		6.4				
Green Ext Time (p_c), s	0.0	1.7		0.0	0.0	4.7		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	97	48	539	169	51	552
Future Volume (veh/h)	97	48	539	169	51	552
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	51	567	178	54	581
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	352	313	1199	535	124	1848
Arrive On Green	0.20	0.20	0.34	0.34	0.07	0.52
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	102	51	567	178	54	581
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	1.7	0.9	4.5	3.0	1.0	3.3
Cycle Q Clear(g_c), s	1.7	0.9	4.5	3.0	1.0	3.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	352	313	1199	535	124	1848
V/C Ratio(X)	0.29	0.16	0.47	0.33	0.43	0.31
Avail Cap(c_a), veh/h	1206	1074	2106	939	302	3109
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	11.8	9.3	8.8	15.8	4.9
Incr Delay (d2), s/veh	0.4	0.2	0.6	0.7	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.3	1.3	0.8	0.4	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.5	12.0	9.8	9.5	16.7	5.1
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	153		745			635
Approach Delay, s/veh	12.4		9.7			6.1
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.5	18.0				24.4	11.0
Change Period (Y+Rc), s	4.0	6.0				6.0	4.0
Max Green Setting (Gmax), s	6.0	21.0				31.0	24.0
Max Q Clear Time (g_c+I1), s	3.0	6.5				5.3	3.7
Green Ext Time (p_c), s	0.0	5.5				5.5	0.5

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	164	429	1195	729	17
Future Volume (veh/h)	0	164	429	1195	729	17
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	173	452	1258	767	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	246	219	515	2370	997	445
Arrive On Green	0.00	0.14	0.29	0.67	0.28	0.28
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	0	173	452	1258	767	18
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	0.0	5.4	12.4	9.4	10.2	0.4
Cycle Q Clear(g_c), s	0.0	5.4	12.4	9.4	10.2	0.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	246	219	515	2370	997	445
V/C Ratio(X)	0.00	0.79	0.88	0.53	0.77	0.04
Avail Cap(c_a), veh/h	556	495	591	2704	1178	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.4	17.4	4.4	16.9	13.4
Incr Delay (d2), s/veh	0.0	6.3	12.9	0.2	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.0	6.2	1.9	4.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	27.7	30.3	4.6	19.6	13.5
LnGrp LOS	A	C	C	A	B	B
Approach Vol, veh/h	173			1710	785	
Approach Delay, s/veh	27.7			11.4	19.4	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		39.2		12.1	19.8	19.4
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		39.0		16.0	17.0	17.0
Max Q Clear Time (g_c+I1), s		11.4		7.4	14.4	12.2
Green Ext Time (p_c), s		11.2		0.3	0.4	2.2

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	9	10	53	1	189	6	1254	93	91	608	27
Future Volume (veh/h)	6	9	10	53	1	189	6	1254	93	91	608	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	9	11	56	1	199	6	1320	98	96	640	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	128	116	356	5	262	20	1771	131	123	2032	89
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.01	0.53	0.53	0.07	0.59	0.59
Sat Flow, veh/h	179	766	694	1396	32	1571	1781	3353	248	1781	3468	152
Grp Volume(v), veh/h	26	0	0	57	0	199	6	698	720	96	328	340
Grp Sat Flow(s),veh/h/ln	1639	0	0	1428	0	1571	1781	1777	1824	1781	1777	1842
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	7.0	0.2	17.7	17.8	3.1	5.4	5.4
Cycle Q Clear(g_c), s	0.7	0.0	0.0	1.8	0.0	7.0	0.2	17.7	17.8	3.1	5.4	5.4
Prop In Lane	0.23		0.42	0.98		1.00	1.00		0.14	1.00		0.08
Lane Grp Cap(c), veh/h	349	0	0	361	0	262	20	939	964	123	1041	1079
V/C Ratio(X)	0.07	0.00	0.00	0.16	0.00	0.76	0.30	0.74	0.75	0.78	0.31	0.32
Avail Cap(c_a), veh/h	625	0	0	611	0	542	215	960	985	154	1041	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	0.0	20.8	0.0	23.0	28.4	10.6	10.7	26.6	6.1	6.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	1.7	3.1	3.5	3.5	14.3	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.6	0.0	2.6	0.1	5.3	5.5	1.6	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	0.0	0.0	20.9	0.0	24.8	31.6	14.2	14.2	40.8	6.4	6.4
LnGrp LOS	C	A	A	C	A	C	C	B	B	D	A	A
Approach Vol, veh/h		26			256			1424			764	
Approach Delay, s/veh		20.5			23.9			14.3			10.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	36.3		13.7	4.6	39.7		13.7
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	5.0	31.3		20.0	7.0	29.3		20.0
Max Q Clear Time (g_c+I1), s	5.1	19.8		2.7	2.2	7.4		9.0
Green Ext Time (p_c), s	0.0	10.8		0.0	0.0	11.4		0.4

Intersection Summary		
HCM 6th Ctrl Delay		14.2
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1	47	14	1	15	32	1210	64	26	614	19
Future Volume (veh/h)	80	1	47	14	1	15	32	1210	64	26	614	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	1	49	15	1	16	34	1274	67	27	646	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	1	109	41	3	38	295	2457	1094	33	1849	57
Arrive On Green	0.07	0.07	0.07	0.02	0.02	0.02	0.17	0.69	0.69	0.02	0.53	0.53
Sat Flow, veh/h	1761	21	1585	1675	112	1542	1781	3554	1583	1781	3518	109
Grp Volume(v), veh/h	85	0	49	16	0	16	34	1274	67	27	326	340
Grp Sat Flow(s),veh/h/ln	1782	0	1585	1787	0	1542	1781	1777	1583	1781	1777	1850
Q Serve(g_s), s	4.2	0.0	2.7	0.8	0.0	0.9	1.5	15.5	1.2	1.4	9.6	9.6
Cycle Q Clear(g_c), s	4.2	0.0	2.7	0.8	0.0	0.9	1.5	15.5	1.2	1.4	9.6	9.6
Prop In Lane	0.99		1.00	0.94		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	123	0	109	44	0	38	295	2457	1094	33	934	972
V/C Ratio(X)	0.69	0.00	0.45	0.37	0.00	0.42	0.12	0.52	0.06	0.83	0.35	0.35
Avail Cap(c_a), veh/h	317	0	282	79	0	69	295	2457	1094	79	934	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	0.0	40.2	43.2	0.0	43.3	32.0	6.7	4.5	44.0	12.4	12.4
Incr Delay (d2), s/veh	2.6	0.0	1.1	1.9	0.0	2.8	0.1	0.4	0.1	17.3	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.1	0.4	0.0	0.4	0.6	3.8	0.3	0.7	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	0.0	41.3	45.1	0.0	46.1	32.0	7.1	4.5	61.3	13.4	13.4
LnGrp LOS	D	A	D	D	A	D	C	A	A	E	B	B
Approach Vol, veh/h		134			32			1375			693	
Approach Delay, s/veh		42.7			45.6			7.6			15.3	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.6	53.0		6.2	5.7	67.9		10.2
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	5.0	* 47		4.0	4.0	48.3		16.0
Max Q Clear Time (g_c+I1), s	3.5	11.6		2.9	3.4	17.5		6.2
Green Ext Time (p_c), s	0.0	18.5		0.0	0.0	27.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	497	0	704	11	3	1	291	801	0	1	528	140
Future Volume (veh/h)	497	0	704	11	3	1	291	801	0	1	528	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	523	0	0	12	3	1	306	843	0	1	556	147
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	633	0		59	44	15	380	2100	0	3	1755	783
Arrive On Green	0.18	0.00	0.00	0.03	0.03	0.03	0.11	0.59	0.00	0.00	0.49	0.49
Sat Flow, veh/h	3563	0	1585	1781	1342	447	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	523	0	0	12	0	4	306	843	0	1	556	147
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1790	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	12.7	0.0	0.0	0.6	0.0	0.2	7.8	11.5	0.0	0.1	8.4	4.7
Cycle Q Clear(g_c), s	12.7	0.0	0.0	0.6	0.0	0.2	7.8	11.5	0.0	0.1	8.4	4.7
Prop In Lane	1.00		1.00	1.00		0.25	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	633	0		59	0	59	380	2100	0	3	1755	783
V/C Ratio(X)	0.83	0.00		0.20	0.00	0.07	0.81	0.40	0.00	0.29	0.32	0.19
Avail Cap(c_a), veh/h	1029	0		238	0	239	422	2100	0	139	1755	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	0.0	42.4	0.0	42.2	39.1	9.9	0.0	44.9	13.7	12.7
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.6	0.0	0.2	8.8	0.6	0.0	16.6	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	0.0	0.3	0.0	0.1	3.7	4.2	0.0	0.0	2.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	0.0	0.0	43.0	0.0	42.4	47.9	10.4	0.0	61.4	13.8	12.9
LnGrp LOS	D	A		D	A	D	D	B	A	E	B	B
Approach Vol, veh/h		523	A		16			1149			704	
Approach Delay, s/veh		36.9			42.8			20.4			13.7	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	58.9		7.0	12.9	50.2		20.0
Change Period (Y+Rc), s	4.0	5.7		4.0	3.0	* 5.7		4.0
Max Green Setting (Gmax), s	7.0	27.3		12.0	11.0	* 25		26.0
Max Q Clear Time (g_c+I1), s	2.1	13.5		2.6	9.8	10.4		14.7
Green Ext Time (p_c), s	0.0	4.9		0.0	0.1	4.2		1.2

Intersection Summary	
HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	1	13	0	1	25	30	737	0	22	727	61
Future Volume (veh/h)	85	1	13	0	1	25	30	737	0	22	727	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	1	14	0	1	26	32	776	0	23	765	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	8	108	0	49	41	54	1266	565	40	1158	97
Arrive On Green	0.07	0.07	0.07	0.00	0.03	0.03	0.03	0.36	0.00	0.02	0.35	0.35
Sat Flow, veh/h	1781	107	1495	0	1870	1585	1781	3554	1585	1781	3320	278
Grp Volume(v), veh/h	89	0	15	0	1	26	32	776	0	23	409	420
Grp Sat Flow(s),veh/h/ln	1781	0	1601	0	1870	1585	1781	1777	1585	1781	1777	1820
Q Serve(g_s), s	1.9	0.0	0.3	0.0	0.0	0.6	0.7	6.9	0.0	0.5	7.5	7.5
Cycle Q Clear(g_c), s	1.9	0.0	0.3	0.0	0.0	0.6	0.7	6.9	0.0	0.5	7.5	7.5
Prop In Lane	1.00		0.93	0.00		1.00	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	128	0	115	0	49	41	54	1266	565	40	620	635
V/C Ratio(X)	0.69	0.00	0.13	0.00	0.02	0.63	0.60	0.61	0.00	0.57	0.66	0.66
Avail Cap(c_a), veh/h	1025	0	921	0	1076	912	512	1859	829	512	929	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	16.6	0.0	18.1	18.4	18.3	10.1	0.0	18.5	10.5	10.5
Incr Delay (d2), s/veh	6.6	0.0	0.5	0.0	0.2	14.7	10.1	0.5	0.0	12.0	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.1	0.0	0.0	0.4	0.4	2.0	0.0	0.3	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	0.0	17.1	0.0	18.3	33.1	28.4	10.6	0.0	30.5	11.7	11.7
LnGrp LOS	C	A	B	A	B	C	C	B	A	C	B	B
Approach Vol, veh/h		104			27			808			852	
Approach Delay, s/veh		22.9			32.5			11.3			12.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	18.6		7.8	6.2	18.3		6.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.0	20.0		22.0	11.0	20.0		22.0
Max Q Clear Time (g_c+I1), s	2.5	8.9		3.9	2.7	9.5		2.6
Green Ext Time (p_c), s	0.0	4.0		0.2	0.0	3.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	0	36	40	1	48	64	445	5	25	390	94
Future Volume (veh/h)	68	0	36	40	1	48	64	445	5	25	390	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	0	38	42	1	51	67	468	5	26	411	99
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	531	0	236	246	4	215	157	1040	464	66	858	383
Arrive On Green	0.15	0.00	0.15	0.14	0.14	0.14	0.09	0.29	0.29	0.04	0.24	0.24
Sat Flow, veh/h	3563	0	1585	1781	31	1559	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	72	0	38	42	0	52	67	468	5	26	411	99
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1590	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	0.0	0.9	0.9	0.0	1.3	1.6	4.8	0.1	0.6	4.5	2.3
Cycle Q Clear(g_c), s	0.8	0.0	0.9	0.9	0.0	1.3	1.6	4.8	0.1	0.6	4.5	2.3
Prop In Lane	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	531	0	236	246	0	219	157	1040	464	66	858	383
V/C Ratio(X)	0.14	0.00	0.16	0.17	0.00	0.24	0.43	0.45	0.01	0.39	0.48	0.26
Avail Cap(c_a), veh/h	1578	0	702	474	0	423	474	2653	1183	474	2653	1183
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	16.7	17.2	0.0	17.3	19.5	13.0	11.3	21.2	14.7	13.9
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.1	0.0	0.2	0.7	0.4	0.0	1.4	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.3	0.3	0.0	0.4	0.6	1.7	0.0	0.3	1.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.7	0.0	16.9	17.3	0.0	17.5	20.2	13.4	11.3	22.7	15.3	14.3
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		110			94			540			536	
Approach Delay, s/veh		16.8			17.4			14.2			15.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	18.5		10.2	8.0	16.2		10.7
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	12.0	33.7		12.0	12.0	33.7		20.0
Max Q Clear Time (g_c+I1), s	2.6	6.8		3.3	3.6	6.5		2.9
Green Ext Time (p_c), s	0.0	4.5		0.1	0.0	4.4		0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	44	30	5	60	25
Future Volume (veh/h)	4	44	30	5	60	25
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	46	32	5	63	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	150	134	219	186	156	826
Arrive On Green	0.08	0.08	0.12	0.12	0.09	0.44
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	4	46	32	5	63	26
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	0.0	0.6	0.3	0.1	0.7	0.2
Cycle Q Clear(g_c), s	0.0	0.6	0.3	0.1	0.7	0.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	150	134	219	186	156	826
V/C Ratio(X)	0.03	0.34	0.15	0.03	0.40	0.03
Avail Cap(c_a), veh/h	1773	1577	1950	1653	591	3014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.9	9.1	8.4	8.3	9.1	3.3
Incr Delay (d2), s/veh	0.1	1.5	0.3	0.1	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.9	10.6	8.7	8.3	10.8	3.3
LnGrp LOS	A	B	A	A	B	A
Approach Vol, veh/h	50		37			89
Approach Delay, s/veh	10.5		8.6			8.6
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.9	7.5				14.3	6.8
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	7.0	22.0				34.0	21.0
Max Q Clear Time (g_c+I1), s	2.7	2.3				2.2	2.6
Green Ext Time (p_c), s	0.0	0.1				0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	368	40	42	455	11	39	8	36	6	46	11
Future Volume (veh/h)	3	368	40	42	455	11	39	8	36	6	46	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	387	42	44	479	12	47	0	38	6	48	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	879	392	73	1015	453	241	0	107	9	74	18
Arrive On Green	0.00	0.25	0.25	0.04	0.29	0.29	0.07	0.00	0.07	0.06	0.06	0.06
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	164	1311	328
Grp Volume(v), veh/h	3	387	42	44	479	12	47	0	38	66	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1803	0	0
Q Serve(g_s), s	0.1	2.8	0.6	0.7	3.4	0.2	0.4	0.0	0.7	1.1	0.0	0.0
Cycle Q Clear(g_c), s	0.1	2.8	0.6	0.7	3.4	0.2	0.4	0.0	0.7	1.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.09		0.18
Lane Grp Cap(c), veh/h	6	879	392	73	1015	453	241	0	107	102	0	0
V/C Ratio(X)	0.51	0.44	0.11	0.60	0.47	0.03	0.20	0.00	0.35	0.65	0.00	0.00
Avail Cap(c_a), veh/h	710	3222	1437	710	3222	1437	1893	0	842	719	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.0	9.6	8.8	14.2	8.9	7.7	13.3	0.0	13.4	13.9	0.0	0.0
Incr Delay (d2), s/veh	22.8	0.5	0.2	3.0	0.5	0.0	0.1	0.0	0.7	2.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.7	0.1	0.3	0.7	0.0	0.1	0.0	0.2	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	10.1	8.9	17.2	9.4	7.8	13.4	0.0	14.1	16.5	0.0	0.0
LnGrp LOS	D	B	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		432			535			85			66	
Approach Delay, s/veh		10.1			10.0			13.7			16.5	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.7	5.2	13.1		6.0	4.1	14.3				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		12.0	12.0	27.3		16.0	12.0	27.3				
Max Q Clear Time (g_c+I1), s		3.1	2.7	4.8		2.7	2.1	5.4				
Green Ext Time (p_c), s		0.1	0.0	2.7		0.1	0.0	3.1				

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	350	120	68	366	7	70	9	29	14	37	76
Future Volume (veh/h)	25	350	120	68	366	7	70	9	29	14	37	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	368	126	72	385	7	80	0	31	15	39	80
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	977	436	87	1083	483	266	0	118	159	167	142
Arrive On Green	0.02	0.27	0.27	0.05	0.30	0.30	0.07	0.00	0.07	0.09	0.09	0.09
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	1781	1870	1585
Grp Volume(v), veh/h	26	368	126	72	385	7	80	0	31	15	39	80
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	1585
Q Serve(g_s), s	0.5	3.0	2.2	1.4	3.0	0.1	0.8	0.0	0.7	0.3	0.7	1.7
Cycle Q Clear(g_c), s	0.5	3.0	2.2	1.4	3.0	0.1	0.8	0.0	0.7	0.3	0.7	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	977	436	87	1083	483	266	0	118	159	167	142
V/C Ratio(X)	0.76	0.38	0.29	0.82	0.36	0.01	0.30	0.00	0.26	0.09	0.23	0.56
Avail Cap(c_a), veh/h	149	1889	843	149	1889	843	399	0	177	782	822	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	10.5	10.2	16.8	9.7	8.7	15.7	0.0	15.6	14.9	15.1	15.6
Incr Delay (d2), s/veh	12.3	0.3	0.5	7.1	0.3	0.0	0.2	0.0	0.4	0.4	1.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	0.6	0.6	0.8	0.0	0.2	0.0	0.2	0.1	0.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	10.8	10.7	24.0	10.0	8.7	15.9	0.0	16.0	15.3	16.1	20.6
LnGrp LOS	C	B	B	C	A	A	B	A	B	B	B	C
Approach Vol, veh/h		520			464			111			134	
Approach Delay, s/veh		11.7			12.1			15.9			18.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.7	5.8	15.5		7.8	4.7	16.6				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.6	4.0	5.7				
Max Green Setting (Gmax), s		4.0	3.0	19.0		15.7	3.0	19.0				
Max Q Clear Time (g_c+I1), s		2.8	3.4	5.0		3.7	2.5	5.0				
Green Ext Time (p_c), s		0.0	0.0	4.8		0.6	0.0	4.4				

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	292	58	30	357	3	53	15	4	0	7	27
Future Volume (veh/h)	61	292	58	30	357	3	53	15	4	0	7	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	307	61	32	376	3	56	16	4	0	7	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	1141	509	42	1073	479	87	25	99	0	63	53
Arrive On Green	0.04	0.32	0.32	0.02	0.30	0.30	0.06	0.06	0.06	0.00	0.03	0.03
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1400	400	1585	0	1870	1585
Grp Volume(v), veh/h	64	307	61	32	376	3	72	0	4	0	7	28
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1800	0	1585	0	1870	1585
Q Serve(g_s), s	1.1	2.0	0.8	0.5	2.5	0.0	1.2	0.0	0.1	0.0	0.1	0.5
Cycle Q Clear(g_c), s	1.1	2.0	0.8	0.5	2.5	0.0	1.2	0.0	0.1	0.0	0.1	0.5
Prop In Lane	1.00		1.00	1.00		1.00	0.78		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	76	1141	509	42	1073	479	112	0	99	0	63	53
V/C Ratio(X)	0.84	0.27	0.12	0.77	0.35	0.01	0.64	0.00	0.04	0.00	0.11	0.52
Avail Cap(c_a), veh/h	293	2105	939	235	1988	887	1304	0	1148	0	246	209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	7.7	7.3	14.8	8.3	7.4	13.9	0.0	13.4	0.0	14.2	14.4
Incr Delay (d2), s/veh	9.2	0.2	0.2	10.5	0.3	0.0	7.2	0.0	0.2	0.0	0.3	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.4	0.2	0.3	0.7	0.0	0.6	0.0	0.0	0.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	7.9	7.4	25.2	8.6	7.4	21.1	0.0	13.6	0.0	14.5	17.4
LnGrp LOS	C	A	A	C	A	A	C	A	B	A	B	B
Approach Vol, veh/h		432			411			76			35	
Approach Delay, s/veh		10.1			9.9			20.7			16.8	
Approach LOS		B			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.0	4.7	14.8		5.9	5.3	14.2				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	4.0	5.0				
Max Green Setting (Gmax), s		4.0	4.0	18.0		22.0	5.0	17.0				
Max Q Clear Time (g_c+I1), s		2.5	2.5	4.0		3.2	3.1	4.5				
Green Ext Time (p_c), s		0.0	0.0	4.0		0.2	0.0	4.7				

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	164	136	7	291	109	83	12	4	28	63	8
Future Volume (veh/h)	27	164	136	7	291	109	83	12	4	28	63	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	173	143	7	306	115	96	0	4	29	66	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	954	545	10	780	348	270	0	120	43	99	122
Arrive On Green	0.02	0.27	0.27	0.01	0.22	0.22	0.08	0.00	0.08	0.08	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	562	1280	1585
Grp Volume(v), veh/h	28	173	143	7	306	115	96	0	4	95	0	8
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1842	0	1585
Q Serve(g_s), s	0.5	1.1	1.9	0.1	2.2	1.8	0.8	0.0	0.1	1.5	0.0	0.1
Cycle Q Clear(g_c), s	0.5	1.1	1.9	0.1	2.2	1.8	0.8	0.0	0.1	1.5	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.31		1.00
Lane Grp Cap(c), veh/h	37	954	545	10	780	348	270	0	120	142	0	122
V/C Ratio(X)	0.75	0.18	0.26	0.69	0.39	0.33	0.36	0.00	0.03	0.67	0.00	0.07
Avail Cap(c_a), veh/h	240	2157	1082	180	2037	908	2883	0	1283	497	0	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.4	8.3	7.0	14.7	9.9	9.7	13.0	0.0	12.7	13.3	0.0	12.7
Incr Delay (d2), s/veh	10.9	0.1	0.4	27.0	0.5	0.9	1.0	0.0	0.1	2.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.5	0.1	0.6	0.5	0.3	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	8.5	7.4	41.8	10.4	10.6	14.0	0.0	12.8	15.3	0.0	12.8
LnGrp LOS	C	A	A	D	B	B	B	A	B	B	A	B
Approach Vol, veh/h		344			428			100			103	
Approach Delay, s/veh		9.4			11.0			13.9			15.1	
Approach LOS		A			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.2	4.2	13.0		6.3	5.6	11.5				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	5.0	* 5				
Max Green Setting (Gmax), s		24.0	3.0	18.0		8.0	4.0	* 17				
Max Q Clear Time (g_c+I1), s		2.8	2.1	3.9		3.5	2.5	4.2				
Green Ext Time (p_c), s		0.4	0.0	1.8		0.1	0.0	2.3				

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	35	84	43	12	5	23	703	71	39	1130	91
Future Volume (veh/h)	111	35	84	43	12	5	23	703	71	39	1130	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1870	1870	1870	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	117	37	88	45	13	5	24	740	75	41	1189	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	325	67	160	338	68	26	47	1889	585	80	2234	692
Arrive On Green	0.18	0.14	0.14	0.10	0.05	0.05	0.03	0.39	0.39	0.04	0.40	0.40
Sat Flow, veh/h	1776	488	1162	3456	1285	494	1692	4849	1501	1931	5535	1714
Grp Volume(v), veh/h	117	0	125	45	0	18	24	740	75	41	1189	96
Grp Sat Flow(s),veh/h/ln	1776	0	1650	1728	0	1780	1692	1616	1501	1931	1845	1714
Q Serve(g_s), s	3.3	0.0	4.1	0.7	0.0	0.6	0.8	6.4	1.9	1.2	9.5	0.8
Cycle Q Clear(g_c), s	3.3	0.0	4.1	0.7	0.0	0.6	0.8	6.4	1.9	1.2	9.5	0.8
Prop In Lane	1.00		0.70	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	0	228	338	0	94	47	1889	585	80	2234	692
V/C Ratio(X)	0.36	0.00	0.55	0.13	0.00	0.19	0.51	0.39	0.13	0.51	0.53	0.14
Avail Cap(c_a), veh/h	325	0	569	656	0	685	146	2066	640	167	2358	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	0.0	23.3	23.9	0.0	26.3	27.8	12.7	11.4	27.2	13.1	1.5
Incr Delay (d2), s/veh	0.2	0.0	1.8	0.1	0.0	0.4	3.2	0.3	0.2	1.8	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.6	0.3	0.0	0.2	0.3	1.7	0.6	0.5	2.9	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	25.1	24.0	0.0	26.7	31.0	13.0	11.6	29.0	13.5	1.6
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	A
Approach Vol, veh/h		242			63			839			1326	
Approach Delay, s/veh		23.1			24.7			13.4			13.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	28.6	9.7	13.3	5.6	29.4	15.9	7.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	5.3	* 4
Max Green Setting (Gmax), s	5.0	24.7	11.0	20.0	5.0	24.7	10.0	* 22
Max Q Clear Time (g_c+I1), s	3.2	8.4	2.7	6.1	2.8	11.5	5.3	2.6
Green Ext Time (p_c), s	0.0	11.2	0.0	0.6	0.0	11.9	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	102	96	164	244	10	112	766	86	27	1190	60
Future Volume (veh/h)	29	102	96	164	244	10	112	766	86	27	1190	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	107	101	173	257	11	118	806	91	28	1253	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	443	198	220	296	13	162	3397	1055	51	3234	1004
Arrive On Green	0.02	0.12	0.12	0.06	0.17	0.17	0.09	1.00	1.00	0.01	0.63	0.63
Sat Flow, veh/h	1781	3554	1585	3456	1780	76	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	31	107	101	173	0	268	118	806	91	28	1253	63
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	0	1857	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.6	4.1	8.9	7.4	0.0	21.1	5.0	0.0	0.0	1.2	17.9	2.3
Cycle Q Clear(g_c), s	2.6	4.1	8.9	7.4	0.0	21.1	5.0	0.0	0.0	1.2	17.9	2.3
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	443	198	220	0	309	162	3397	1055	51	3234	1004
V/C Ratio(X)	0.78	0.24	0.51	0.78	0.00	0.87	0.73	0.24	0.09	0.55	0.39	0.06
Avail Cap(c_a), veh/h	166	893	398	392	0	504	323	3397	1055	276	3234	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.0	59.2	61.4	69.2	0.0	60.9	67.1	0.0	0.0	73.4	13.4	10.5
Incr Delay (d2), s/veh	11.6	0.4	2.7	2.3	0.0	10.8	2.3	0.2	0.2	3.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.9	3.8	3.4	0.0	10.9	2.2	0.0	0.0	0.6	6.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.6	59.6	64.1	71.5	0.0	71.8	69.3	0.2	0.2	76.8	13.5	10.5
LnGrp LOS	F	E	E	E	A	E	E	A	A	E	B	B
Approach Vol, veh/h		239			441			1015			1344	
Approach Delay, s/veh		64.7			71.7			8.2			14.7	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	106.2	13.6	24.0	11.0	101.4	7.3	30.2
Change Period (Y+Rc), s	4.0	* 6.4	4.0	5.3	4.0	6.4	4.0	5.3
Max Green Setting (Gmax), s	12.0	* 65	17.0	37.7	14.0	61.6	14.0	40.7
Max Q Clear Time (g_c+I1), s	3.2	2.0	9.4	10.9	7.0	19.9	4.6	23.1
Green Ext Time (p_c), s	0.0	17.5	0.2	1.3	0.1	18.4	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	31	129	177	47	59	107	929	275	108	1362	52
Future Volume (veh/h)	24	31	129	177	47	59	107	929	275	108	1362	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	33	136	186	49	62	113	978	289	114	1434	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	187	159	301	63	80	158	2417	884	731	3263	1013
Arrive On Green	0.10	0.10	0.10	0.08	0.08	0.08	0.09	0.95	0.95	0.21	0.64	0.64
Sat Flow, veh/h	1781	1870	1585	3563	750	949	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	25	33	136	186	0	111	113	978	289	114	1434	55
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1699	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	1.9	2.4	12.7	7.6	0.0	9.6	4.8	2.5	1.9	4.0	21.1	1.9
Cycle Q Clear(g_c), s	1.9	2.4	12.7	7.6	0.0	9.6	4.8	2.5	1.9	4.0	21.1	1.9
Prop In Lane	1.00		1.00	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	187	159	301	0	143	158	2417	884	731	3263	1013
V/C Ratio(X)	0.14	0.18	0.86	0.62	0.00	0.77	0.71	0.40	0.33	0.16	0.44	0.05
Avail Cap(c_a), veh/h	258	271	229	610	0	291	323	2417	884	731	3263	1013
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	0.90	0.90	0.90
Uniform Delay (d), s/veh	61.6	61.8	66.4	66.3	0.0	67.3	67.2	2.2	1.5	48.2	13.6	10.1
Incr Delay (d2), s/veh	0.4	0.4	19.0	2.1	0.0	8.5	5.8	0.5	1.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.2	6.0	3.5	0.0	4.5	2.2	0.8	0.8	1.7	7.8	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.0	62.3	85.5	68.4	0.0	75.8	72.9	2.7	2.5	48.3	13.7	10.2
LnGrp LOS	E	E	F	E	A	E	E	A	A	D	B	B
Approach Vol, veh/h		194			297			1380			1603	
Approach Delay, s/veh		78.5			71.2			8.4			16.1	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	35.7	76.0		20.3	11.9	99.9		18.0
Change Period (Y+Rc), s	4.0	5.0		5.3	5.0	4.0		5.3
Max Green Setting (Gmax), s	12.0	71.0		21.7	14.0	69.0		25.7
Max Q Clear Time (g_c+I1), s	6.0	4.5		14.7	6.8	23.1		11.6
Green Ext Time (p_c), s	0.1	10.8		0.3	0.2	22.8		1.1

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	276	0	0	537	375	774	0	0	1538	176
Future Volume (vph)	0	0	276	0	0	537	375	774	0	0	1538	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			4.0	4.0	5.0			5.0	5.0
Lane Util. Factor			1.00			1.00	0.97	0.91			0.91	1.00
Frt			0.86			0.86	1.00	1.00			1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1611			1611	3433	5085			5085	1583
Flt Permitted			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)			1611			1611	3433	5085			5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	291	0	0	565	395	815	0	0	1619	185
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	47
Lane Group Flow (vph)	0	0	291	0	0	565	395	815	0	0	1619	138
Turn Type			Free			Free	Prot	NA			NA	Perm
Protected Phases							5	2			6	
Permitted Phases			Free			Free						6
Actuated Green, G (s)			75.0			75.0	13.8	75.0			52.2	52.2
Effective Green, g (s)			75.0			75.0	13.8	75.0			52.2	52.2
Actuated g/C Ratio			1.00			1.00	0.18	1.00			0.70	0.70
Clearance Time (s)							4.0	5.0			5.0	5.0
Vehicle Extension (s)							3.0	3.0			3.0	3.0
Lane Grp Cap (vph)			1611			1611	631	5085			3539	1101
v/s Ratio Prot							c0.12	0.16			c0.32	
v/s Ratio Perm			0.18			0.35						0.09
v/c Ratio			0.18			0.35	0.63	0.16			0.46	0.13
Uniform Delay, d1			0.0			0.0	28.2	0.0			5.1	3.8
Progression Factor			1.00			1.00	0.94	1.00			1.69	3.63
Incremental Delay, d2			0.2			0.6	1.9	0.1			0.4	0.2
Delay (s)			0.2			0.6	28.5	0.1			9.0	14.0
Level of Service			A			A	C	A			A	B
Approach Delay (s)		0.2			0.6			9.4			9.5	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1237	0	0	215	0	952	184	535	1304	0
Future Volume (vph)	0	0	1237	0	0	215	0	952	184	535	1304	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.3			4.0		5.7	5.7	5.7	5.7	
Lane Util. Factor			1.00			1.00		0.91	1.00	0.97	0.91	
Frt			0.86			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			1611			1611		5085	1583	3433	5085	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			1611			1611		5085	1583	3433	5085	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	1302	0	0	226	0	1002	194	563	1373	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	12	0	0	0
Lane Group Flow (vph)	0	0	1302	0	0	226	0	1002	182	563	1373	0
Turn Type			Perm			Free		NA	Perm	Prot	NA	
Protected Phases								2		1	6	
Permitted Phases			5			Free			2			
Actuated Green, G (s)			103.7			150.0		104.3	104.3	34.3	35.3	
Effective Green, g (s)			103.7			150.0		104.3	104.3	34.3	35.3	
Actuated g/C Ratio			0.69			1.00		0.70	0.70	0.23	0.24	
Clearance Time (s)			5.3					5.7	5.7	5.7	5.7	
Vehicle Extension (s)			3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)			1113			1611		3535	1100	785	1196	
v/s Ratio Prot								0.20		0.16	c0.27	
v/s Ratio Perm			c0.81			c0.14			0.11			
v/c Ratio			1.17			0.14		0.28	0.17	0.72	1.15	
Uniform Delay, d1			23.1			0.0		8.7	7.9	53.4	57.4	
Progression Factor			1.00			1.00		0.98	0.84	1.02	0.98	
Incremental Delay, d2			86.3			0.2		0.2	0.3	2.9	76.2	
Delay (s)			109.4			0.2		8.7	7.0	57.3	132.4	
Level of Service			F			A		A	A	E	F	
Approach Delay (s)		109.4			0.2			8.4			110.6	
Approach LOS		F			A			A			F	

Intersection Summary			
HCM 2000 Control Delay	78.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	11.4
Intersection Capacity Utilization	111.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1	1	9	8	9	17	43	0	4	13	16
Future Volume (veh/h)	1	1	1	9	8	9	17	43	0	4	13	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1	1	9	8	9	18	45	0	4	14	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	3	3	12	11	12	25	723	0	9	148	180
Arrive On Green	0.00	0.00	0.00	0.02	0.02	0.02	0.01	0.20	0.00	0.00	0.19	0.19
Sat Flow, veh/h	579	579	579	600	533	600	1781	3647	0	1781	769	934
Grp Volume(v), veh/h	3	0	0	26	0	0	18	45	0	4	0	31
Grp Sat Flow(s),veh/h/ln	1737	0	0	1732	0	0	1781	1777	0	1781	0	1702
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.3
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.3
Prop In Lane	0.33		0.33	0.35		0.35	1.00		0.00	1.00		0.55
Lane Grp Cap(c), veh/h	8	0	0	35	0	0	25	723	0	9	0	328
V/C Ratio(X)	0.36	0.00	0.00	0.75	0.00	0.00	0.71	0.06	0.00	0.47	0.00	0.09
Avail Cap(c_a), veh/h	418	0	0	417	0	0	429	1540	0	429	0	738
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.3	0.0	0.0	10.1	0.0	0.0	10.2	6.7	0.0	10.3	0.0	6.9
Incr Delay (d2), s/veh	9.3	0.0	0.0	11.1	0.0	0.0	12.7	0.0	0.0	13.9	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	0.0	0.0	21.2	0.0	0.0	22.8	6.7	0.0	24.2	0.0	7.0
LnGrp LOS	B	A	A	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		3			26			63			35	
Approach Delay, s/veh		19.7			21.2			11.3			9.0	
Approach LOS		B			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	8.2		4.4	4.3	8.0		4.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	9.0		5.0	5.0	9.0		5.0
Max Q Clear Time (g_c+I1), s	2.0	2.2		2.3	2.2	2.3		2.0
Green Ext Time (p_c), s	0.0	0.1		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	9	8	57	10	64	13	984	90	297	1965	53
Future Volume (veh/h)	74	9	8	57	10	64	13	984	90	297	1965	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	78	9	0	60	11	0	14	1036	0	313	2068	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	5	5	5
Cap, veh/h	150	53		135	47		40	2705		375	3200	989
Arrive On Green	0.03	0.03	0.00	0.03	0.03	0.00	0.01	0.54	0.00	0.11	0.64	0.64
Sat Flow, veh/h	5344	1870	1585	5344	1870	1585	3374	4985	1547	3374	4985	1540
Grp Volume(v), veh/h	78	9	0	60	11	0	14	1036	0	313	2068	56
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1687	1662	1547	1687	1662	1540
Q Serve(g_s), s	2.2	0.7	0.0	1.7	0.9	0.0	0.6	18.0	0.0	13.6	38.1	2.0
Cycle Q Clear(g_c), s	2.2	0.7	0.0	1.7	0.9	0.0	0.6	18.0	0.0	13.6	38.1	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	150	53		135	47		40	2705		375	3200	989
V/C Ratio(X)	0.52	0.17		0.44	0.23		0.35	0.38		0.83	0.65	0.06
Avail Cap(c_a), veh/h	428	150		395	138		270	2768		562	3200	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.76	0.76	0.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	71.9	71.2	0.0	72.1	71.7	0.0	73.5	19.8	0.0	65.3	16.4	10.0
Incr Delay (d2), s/veh	2.8	1.5	0.0	3.1	3.4	0.0	1.5	0.1	0.0	0.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.4	0.0	0.8	0.5	0.0	0.3	6.9	0.0	5.8	13.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.6	72.7	0.0	75.2	75.1	0.0	75.0	19.9	0.0	65.7	16.5	10.0
LnGrp LOS	E	E		E	E		E	B		E	B	A
Approach Vol, veh/h		87	A		71	A		1050	A		2437	
Approach Delay, s/veh		74.4			75.2			20.7			22.7	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.7	87.1		8.7	5.8	102.0		8.2				
Change Period (Y+Rc), s	4.0	5.7		4.9	4.0	5.7		4.0				
Max Green Setting (Gmax), s	25.0	83.3		11.1	12.0	96.3		12.0				
Max Q Clear Time (g_c+I1), s	15.6	20.0		3.7	2.6	40.1		4.2				
Green Ext Time (p_c), s	1.0	37.6		0.2	0.0	54.6		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	1	118	5	2	4	42	1470	1	5	1557	156
Future Volume (veh/h)	172	1	118	5	2	4	42	1470	1	5	1557	156
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	181	1	124	5	2	4	44	1547	1	5	1639	164
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1	242	32	13	40	75	1915	1	12	1741	777
Arrive On Green	0.15	0.15	0.15	0.02	0.02	0.02	0.04	0.53	0.53	0.01	0.49	0.49
Sat Flow, veh/h	1772	10	1585	1290	516	1585	1781	3644	2	1781	3554	1585
Grp Volume(v), veh/h	182	0	124	7	0	4	44	754	794	5	1639	164
Grp Sat Flow(s),veh/h/ln	1782	0	1585	1806	0	1585	1781	1777	1870	1781	1777	1585
Q Serve(g_s), s	6.3	0.0	4.7	0.2	0.0	0.2	1.6	22.8	22.8	0.2	28.4	3.8
Cycle Q Clear(g_c), s	6.3	0.0	4.7	0.2	0.0	0.2	1.6	22.8	22.8	0.2	28.4	3.8
Prop In Lane	0.99		1.00	0.71		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	0	242	45	0	40	75	934	983	12	1741	777
V/C Ratio(X)	0.67	0.00	0.51	0.16	0.00	0.10	0.59	0.81	0.81	0.42	0.94	0.21
Avail Cap(c_a), veh/h	547	0	486	249	0	219	137	934	983	137	1751	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	25.4	31.1	0.0	31.1	30.7	12.7	12.7	32.2	15.7	9.5
Incr Delay (d2), s/veh	1.1	0.0	0.6	0.6	0.0	0.4	2.7	5.6	5.3	8.7	10.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	1.7	0.1	0.0	0.1	0.7	8.9	9.3	0.1	12.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.1	0.0	26.0	31.7	0.0	31.5	33.3	18.4	18.1	40.9	26.5	9.6
LnGrp LOS	C	A	C	C	A	C	C	B	B	D	C	A
Approach Vol, veh/h		306			11			1592			1808	
Approach Delay, s/veh		26.7			31.6			18.6			25.0	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	40.2		5.6	6.7	37.9		14.9
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	5.0	32.1		9.0	5.0	32.1		20.0
Max Q Clear Time (g_c+I1), s	2.2	24.8		2.2	3.6	30.4		8.3
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	1.5		0.6

Intersection Summary		
HCM 6th Ctrl Delay		22.4
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	14	372	3	6	18	81	1206	8	7	1387	317
Future Volume (veh/h)	305	14	372	3	6	18	81	1206	8	7	1387	317
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	321	15	392	3	6	19	85	1269	8	7	1460	334
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1018	17	452	31	32	27	126	1705	11	10	1563	697
Arrive On Green	0.29	0.29	0.29	0.02	0.02	0.02	0.04	0.47	0.47	0.01	0.44	0.44
Sat Flow, veh/h	3456	59	1535	1781	1870	1585	3456	3620	23	1781	3554	1585
Grp Volume(v), veh/h	321	0	407	3	6	19	85	623	654	7	1460	334
Grp Sat Flow(s),veh/h/ln	1728	0	1594	1781	1870	1585	1728	1777	1866	1781	1777	1585
Q Serve(g_s), s	6.0	0.0	20.0	0.1	0.3	1.0	2.0	23.6	23.6	0.3	32.3	12.4
Cycle Q Clear(g_c), s	6.0	0.0	20.0	0.1	0.3	1.0	2.0	23.6	23.6	0.3	32.3	12.4
Prop In Lane	1.00		0.96	1.00		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	1018	0	470	31	32	27	126	837	879	10	1563	697
V/C Ratio(X)	0.32	0.00	0.87	0.10	0.19	0.70	0.68	0.74	0.74	0.73	0.93	0.48
Avail Cap(c_a), veh/h	1255	0	579	65	68	58	126	837	879	65	1570	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	0.0	27.6	40.0	40.0	40.4	39.3	17.8	17.8	41.0	22.0	16.4
Incr Delay (d2), s/veh	0.2	0.0	11.2	0.5	1.0	11.2	11.3	4.4	4.2	32.1	11.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	8.8	0.1	0.1	0.5	1.0	9.5	9.9	0.2	14.2	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	0.0	38.8	40.5	41.0	51.6	50.7	22.3	22.1	73.1	33.0	17.6
LnGrp LOS	C	A	D	D	D	D	D	C	C	E	C	B
Approach Vol, veh/h		728			28			1362			1801	
Approach Delay, s/veh		31.7			48.1			23.9			30.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	44.4		5.4	7.0	41.8		28.3
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		4.0
Max Green Setting (Gmax), s	3.0	36.5		3.0	3.0	36.5		30.0
Max Q Clear Time (g_c+I1), s	2.3	25.6		3.0	4.0	34.3		22.0
Green Ext Time (p_c), s	0.0	7.6		0.0	0.0	2.1		2.4

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	141	473	865	408	946	822
Future Volume (veh/h)	141	473	865	408	946	822
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	148	498	911	429	996	865
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	366	577	1369	611	891	2609
Arrive On Green	0.11	0.11	0.39	0.39	0.26	0.73
Sat Flow, veh/h	3456	1585	3647	1585	3456	3647
Grp Volume(v), veh/h	148	498	911	429	996	865
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1728	1777
Q Serve(g_s), s	2.3	2.0	12.3	13.3	15.0	5.0
Cycle Q Clear(g_c), s	2.3	2.0	12.3	13.3	15.0	5.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	366	577	1369	611	891	2609
V/C Ratio(X)	0.40	0.86	0.67	0.70	1.12	0.33
Avail Cap(c_a), veh/h	1426	1063	1692	755	891	2853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	17.2	14.8	15.1	21.6	2.7
Incr Delay (d2), s/veh	0.3	1.5	0.9	2.7	68.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.9	4.5	4.6	13.9	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.6	18.7	15.7	17.8	89.6	2.8
LnGrp LOS	C	B	B	B	F	A
Approach Vol, veh/h	646		1340			1861
Approach Delay, s/veh	20.1		16.4			49.2
Approach LOS	C		B			D

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			48.0		10.2	20.3	27.7
Change Period (Y+Rc), s			5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s			46.7		24.0	15.0	* 28
Max Q Clear Time (g_c+I1), s			7.0		4.3	17.0	15.3
Green Ext Time (p_c), s			6.1		1.8	0.0	7.1

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	9	18	36	20	45	13	1054	0	46	776	90
Future Volume (veh/h)	280	9	18	36	20	45	13	1054	0	46	776	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	319	0	0	38	21	47	14	1109	0	48	817	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	477	251	0	48	26	59	19	1445	0	58	1375	160
Arrive On Green	0.13	0.00	0.00	0.08	0.08	0.08	0.01	0.41	0.00	0.03	0.43	0.43
Sat Flow, veh/h	3563	1870	0	611	338	755	1781	3647	0	1781	3207	373
Grp Volume(v), veh/h	319	0	0	106	0	0	14	1109	0	48	453	459
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1704	0	0	1781	1777	0	1781	1777	1803
Q Serve(g_s), s	4.2	0.0	0.0	3.0	0.0	0.0	0.4	13.3	0.0	1.3	9.7	9.7
Cycle Q Clear(g_c), s	4.2	0.0	0.0	3.0	0.0	0.0	0.4	13.3	0.0	1.3	9.7	9.7
Prop In Lane	1.00		0.00	0.36		0.44	1.00		0.00	1.00		0.21
Lane Grp Cap(c), veh/h	477	251	0	133	0	0	19	1445	0	58	762	773
V/C Ratio(X)	0.67	0.00	0.00	0.80	0.00	0.00	0.74	0.77	0.00	0.83	0.59	0.59
Avail Cap(c_a), veh/h	1365	717	0	137	0	0	108	1584	0	108	778	789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	0.0	22.5	0.0	0.0	24.5	12.7	0.0	23.9	10.9	10.9
Incr Delay (d2), s/veh	0.6	0.0	0.0	24.5	0.0	0.0	18.8	2.4	0.0	10.7	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	2.0	0.0	0.0	0.3	4.7	0.0	0.7	3.3	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	0.0	47.0	0.0	0.0	43.3	15.1	0.0	34.5	12.1	12.1
LnGrp LOS	C	A	A	D	A	A	D	B	A	C	B	B
Approach Vol, veh/h		319			106			1123			960	
Approach Delay, s/veh		21.0			47.0			15.4			13.2	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	25.5		7.9	4.5	26.6		10.6
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	3.0	* 22		4.0	3.0	21.7		19.0
Max Q Clear Time (g_c+I1), s	3.3	15.3		5.0	2.4	11.7		6.2
Green Ext Time (p_c), s	0.0	4.8		0.0	0.0	4.4		0.5

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	10	27	25	1	7	40	1065	23	8	803	27
Future Volume (veh/h)	76	10	27	25	1	7	40	1065	23	8	803	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	11	28	26	1	7	42	1121	24	8	845	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	17	123	53	2	49	277	1766	38	11	1146	38
Arrive On Green	0.08	0.08	0.08	0.03	0.03	0.03	0.16	0.50	0.50	0.01	0.33	0.33
Sat Flow, veh/h	1575	217	1585	1718	66	1585	1781	3557	76	1781	3510	116
Grp Volume(v), veh/h	91	0	28	27	0	7	42	560	585	8	428	445
Grp Sat Flow(s),veh/h/ln	1792	0	1585	1784	0	1585	1781	1777	1857	1781	1777	1849
Q Serve(g_s), s	2.1	0.0	0.7	0.6	0.0	0.2	0.9	10.1	10.1	0.2	9.3	9.3
Cycle Q Clear(g_c), s	2.1	0.0	0.7	0.6	0.0	0.2	0.9	10.1	10.1	0.2	9.3	9.3
Prop In Lane	0.88		1.00	0.96		1.00	1.00		0.04	1.00		0.06
Lane Grp Cap(c), veh/h	139	0	123	55	0	49	277	882	921	11	580	604
V/C Ratio(X)	0.66	0.00	0.23	0.49	0.00	0.14	0.15	0.63	0.63	0.71	0.74	0.74
Avail Cap(c_a), veh/h	824	0	729	657	0	584	656	1149	1200	164	658	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	0.0	18.8	20.7	0.0	20.5	15.9	8.0	8.1	21.6	13.0	13.0
Incr Delay (d2), s/veh	2.0	0.0	0.3	2.5	0.0	0.5	0.1	1.2	1.1	25.7	4.5	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.2	0.3	0.0	0.1	0.3	2.9	3.0	0.2	3.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.4	0.0	19.2	23.2	0.0	21.0	16.0	9.2	9.2	47.3	17.4	17.3
LnGrp LOS	C	A	B	C	A	C	B	A	A	D	B	B
Approach Vol, veh/h		119			34			1187			881	
Approach Delay, s/veh		20.9			22.7			9.4			17.6	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	26.5		7.4	11.7	19.1		5.3
Change Period (Y+Rc), s	4.0	4.9		4.0	4.9	* 4.9		4.0
Max Green Setting (Gmax), s	4.0	28.1		20.0	16.0	* 16		16.0
Max Q Clear Time (g_c+I1), s	2.2	12.1		4.1	2.9	11.3		2.6
Green Ext Time (p_c), s	0.0	9.5		0.3	0.0	2.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	53	147	321	8	372	580
Future Volume (veh/h)	53	147	321	8	372	580
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	155	338	8	392	611
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	701	321	1226	380	462	2993
Arrive On Green	0.20	0.20	0.24	0.24	0.26	0.59
Sat Flow, veh/h	3456	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	56	155	338	8	392	611
Grp Sat Flow(s),veh/h/ln	1728	1585	1702	1585	1781	1702
Q Serve(g_s), s	0.6	4.0	2.5	0.2	9.6	2.6
Cycle Q Clear(g_c), s	0.6	4.0	2.5	0.2	9.6	2.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	701	321	1226	380	462	2993
V/C Ratio(X)	0.08	0.48	0.28	0.02	0.85	0.20
Avail Cap(c_a), veh/h	1503	690	3365	1045	620	5587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	16.2	14.2	13.3	16.2	4.5
Incr Delay (d2), s/veh	0.0	0.4	0.2	0.0	6.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.2	0.7	0.1	3.7	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.9	16.6	14.4	13.4	22.7	4.5
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	211		346			1003
Approach Delay, s/veh	16.1		14.4			11.6
Approach LOS	B		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.9	16.7				32.7	13.3
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0
Max Green Setting (Gmax), s	16.0	30.3				50.3	20.0
Max Q Clear Time (g_c+I1), s	11.6	4.5				4.6	6.0
Green Ext Time (p_c), s	0.4	6.6				15.8	0.3

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	447	54	204	368	93	18	3	161	90	3	15
Future Volume (veh/h)	34	447	54	204	368	93	18	3	161	90	3	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	471	57	215	387	98	19	3	169	97	0	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	978	117	271	1544	479	266	42	273	533	0	237
Arrive On Green	0.06	0.21	0.21	0.15	0.30	0.30	0.17	0.17	0.17	0.15	0.00	0.15
Sat Flow, veh/h	1781	4625	551	1781	5106	1585	1548	244	1585	3563	0	1585
Grp Volume(v), veh/h	36	345	183	215	387	98	22	0	169	97	0	16
Grp Sat Flow(s),veh/h/ln	1781	1702	1771	1781	1702	1585	1793	0	1585	1781	0	1585
Q Serve(g_s), s	1.1	4.9	5.0	6.4	3.1	2.5	0.6	0.0	5.4	1.3	0.0	0.5
Cycle Q Clear(g_c), s	1.1	4.9	5.0	6.4	3.1	2.5	0.6	0.0	5.4	1.3	0.0	0.5
Prop In Lane	1.00		0.31	1.00		1.00	0.86		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	110	720	375	271	1544	479	308	0	273	533	0	237
V/C Ratio(X)	0.33	0.48	0.49	0.79	0.25	0.20	0.07	0.00	0.62	0.18	0.00	0.07
Avail Cap(c_a), veh/h	648	1962	1021	615	2850	885	391	0	346	1296	0	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	19.0	19.1	22.5	14.5	14.3	19.1	0.0	21.1	20.4	0.0	20.1
Incr Delay (d2), s/veh	0.6	1.0	2.0	2.0	0.2	0.4	0.0	0.0	0.9	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.8	2.0	2.5	1.0	0.8	0.2	0.0	1.9	0.5	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.4	20.0	21.1	24.5	14.7	14.7	19.1	0.0	22.0	20.5	0.0	20.1
LnGrp LOS	C	C	C	C	B	B	B	A	C	C	A	C
Approach Vol, veh/h		564			700			191			113	
Approach Delay, s/veh		20.7			17.7			21.6			20.5	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	16.9		12.2	7.4	21.9		13.5
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	19.0	31.7		20.0	20.0	30.7		12.0
Max Q Clear Time (g_c+I1), s	8.4	7.0		3.3	3.1	5.1		7.4
Green Ext Time (p_c), s	0.3	4.6		0.2	0.0	4.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	763	283	65	217	77	371	429	35	80	332	47
Future Volume (veh/h)	218	763	283	65	217	77	371	429	35	80	332	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	2145	2145	2145
Adj Flow Rate, veh/h	229	803	298	68	228	81	391	452	37	84	349	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	1156	516	155	920	411	477	1056	328	380	964	299
Arrive On Green	0.15	0.33	0.33	0.09	0.26	0.26	0.14	0.21	0.21	0.10	0.16	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	5106	1585	3964	5857	1818
Grp Volume(v), veh/h	229	803	298	68	228	81	391	452	37	84	349	49
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1702	1585	1982	1952	1818
Q Serve(g_s), s	8.1	12.8	10.2	2.4	3.3	2.6	7.2	5.0	1.2	1.3	3.5	1.5
Cycle Q Clear(g_c), s	8.1	12.8	10.2	2.4	3.3	2.6	7.2	5.0	1.2	1.3	3.5	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	1156	516	155	920	411	477	1056	328	380	964	299
V/C Ratio(X)	0.84	0.69	0.58	0.44	0.25	0.20	0.82	0.43	0.11	0.22	0.36	0.16
Avail Cap(c_a), veh/h	273	1242	554	218	1112	496	477	2584	802	486	2874	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	19.2	18.3	28.3	19.1	18.9	27.3	22.5	21.0	27.2	24.2	23.4
Incr Delay (d2), s/veh	19.2	2.1	2.3	0.7	0.2	0.4	10.2	0.4	0.2	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	5.2	3.6	1.0	1.3	0.9	3.4	1.9	0.4	0.6	1.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	21.3	20.6	29.0	19.4	19.2	37.5	22.9	21.2	27.3	24.6	23.8
LnGrp LOS	D	C	C	C	B	B	D	C	C	C	C	C
Approach Vol, veh/h		1330			377			880			482	
Approach Delay, s/veh		25.4			21.1			29.4			25.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	26.5	13.0	16.0	14.0	22.2	10.3	18.8
Change Period (Y+Rc), s	4.0	* 5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	8.0	* 23	9.0	32.0	10.0	20.4	8.0	33.0
Max Q Clear Time (g_c+I1), s	4.4	14.8	9.2	5.5	10.1	5.3	3.3	7.0
Green Ext Time (p_c), s	0.0	6.4	0.0	5.3	0.0	3.0	0.1	6.1

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	2	13	25	2	136	49	786	41	134	459	21
Future Volume (veh/h)	12	2	13	25	2	136	49	786	41	134	459	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1988	1988	1988	1870	1945	1870	2145	2231	2145
Adj Flow Rate, veh/h	13	2	14	26	2	143	52	827	43	141	483	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	14	94	255	20	399	109	1305	68	189	2416	721
Arrive On Green	0.06	0.06	0.06	0.14	0.14	0.14	0.06	0.37	0.37	0.09	0.40	0.40
Sat Flow, veh/h	1554	239	1585	1764	136	1681	1781	3572	186	2043	6091	1818
Grp Volume(v), veh/h	15	0	14	28	0	143	52	428	442	141	483	22
Grp Sat Flow(s),veh/h/ln	1793	0	1585	1900	0	1681	1781	1848	1909	2043	2030	1818
Q Serve(g_s), s	0.4	0.0	0.4	0.7	0.0	3.6	1.4	9.8	9.8	3.4	2.7	0.4
Cycle Q Clear(g_c), s	0.4	0.0	0.4	0.7	0.0	3.6	1.4	9.8	9.8	3.4	2.7	0.4
Prop In Lane	0.87		1.00	0.93		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	107	0	94	274	0	399	109	675	697	189	2416	721
V/C Ratio(X)	0.14	0.00	0.15	0.10	0.00	0.36	0.48	0.63	0.63	0.74	0.20	0.03
Avail Cap(c_a), veh/h	315	0	279	769	0	837	209	759	784	280	2620	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	22.8	19.0	0.0	16.3	23.2	13.4	13.4	22.6	10.1	9.4
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.1	0.0	0.2	1.2	2.5	2.4	2.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.3	0.0	1.2	0.6	3.6	3.7	1.6	0.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	0.0	23.1	19.1	0.0	16.5	24.4	15.9	15.8	25.0	10.2	9.5
LnGrp LOS	C	A	C	B	A	B	C	B	B	C	B	A
Approach Vol, veh/h		29			171			922			646	
Approach Delay, s/veh		23.1			16.9			16.4			13.4	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.0	7.1	25.6		11.4	8.7	24.0				
Change Period (Y+Rc), s		4.0	4.0	5.3		4.0	4.0	5.3				
Max Green Setting (Gmax), s		9.0	6.0	22.0		20.7	7.0	21.0				
Max Q Clear Time (g_c+I1), s		2.4	3.4	4.7		5.6	5.4	11.8				
Green Ext Time (p_c), s		0.0	0.0	7.0		0.3	0.0	6.8				

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	183	798	1	18	443
Future Volume (veh/h)	2	183	798	1	18	443
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	193	840	1	19	466
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	361	321	1347	2	60	1868
Arrive On Green	0.20	0.20	0.37	0.37	0.03	0.53
Sat Flow, veh/h	1781	1585	3736	4	1781	3647
Grp Volume(v), veh/h	2	193	410	431	19	466
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1870	1781	1777
Q Serve(g_s), s	0.0	3.6	6.2	6.2	0.3	2.3
Cycle Q Clear(g_c), s	0.0	3.6	6.2	6.2	0.3	2.3
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	361	321	657	691	60	1868
V/C Ratio(X)	0.01	0.60	0.62	0.62	0.31	0.25
Avail Cap(c_a), veh/h	1098	977	1084	1141	380	3350
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.4	11.9	8.5	8.5	15.5	4.2
Incr Delay (d2), s/veh	0.0	0.7	1.3	1.3	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.2	1.5	1.6	0.1	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.4	12.5	9.8	9.7	16.6	4.3
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	195		841			485
Approach Delay, s/veh	12.5		9.8			4.8
Approach LOS	B		A			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				22.1		10.6	5.1	17.0
Change Period (Y+Rc), s				4.9		4.0	4.0	* 4.9
Max Green Setting (Gmax), s				30.9		20.2	7.0	* 20
Max Q Clear Time (g_c+I1), s				4.3		5.6	2.3	8.2
Green Ext Time (p_c), s				2.0		0.4	0.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	5	0	11	0	1472	27	23	1237	0
Future Volume (veh/h)	0	0	0	5	0	11	0	1472	27	23	1237	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	0	0	5	0	12	0	1549	28	24	1302	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	0	4	3	10	0	0	0	2527	46	31	2873	0
Arrive On Green	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.71	0.71	0.02	0.81	0.00
Sat Flow, veh/h	0	-74814	1585	1781	5		0	3665	64	1781	3647	0
Grp Volume(v), veh/h	0	0	0	5	39.1		0	770	807	24	1302	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	D		0	1777	1859	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	0.1			0.0	10.7	10.7	0.6	5.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1			0.0	10.7	10.7	0.6	5.3	0.0
Prop In Lane	0.00		1.00	1.00			0.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h	0	4	3	10			0	1257	1315	31	2873	0
V/C Ratio(X)	0.00	0.00	0.00	0.52			0.00	0.61	0.61	0.79	0.45	0.00
Avail Cap(c_a), veh/h	0	940	796	149			0	1566	1638	112	3652	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	23.7			0.0	3.6	3.6	23.4	1.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	15.4			0.0	1.3	1.3	15.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1			0.0	1.2	1.3	0.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	39.1			0.0	4.9	4.9	38.5	1.6	0.0
LnGrp LOS	A	A	A	D			A	A	A	D	A	A
Approach Vol, veh/h		0						1577			1326	
Approach Delay, s/veh		0.0						4.9			2.3	
Approach LOS								A			A	

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	4.8	38.7	4.3	0.0		43.5
Change Period (Y+Rc), s	4.0	4.9	4.0	4.0		4.9
Max Green Setting (Gmax), s	3.0	42.1	4.0	24.0		49.1
Max Q Clear Time (g_c+I1), s	2.6	12.7	2.1	0.0		7.3
Green Ext Time (p_c), s	0.0	21.1	0.0	0.0		19.9

Intersection Summary	
HCM 6th Ctrl Delay	3.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	24	31	60	27	54	34	1673	40	84	1182	29
Future Volume (veh/h)	48	24	31	60	27	54	34	1673	40	84	1182	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	25	33	63	28	57	36	1761	42	88	1244	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	169	143	190	57	117	86	1826	43	133	1917	48
Arrive On Green	0.09	0.09	0.09	0.11	0.11	0.11	0.05	0.51	0.51	0.07	0.54	0.54
Sat Flow, veh/h	1781	1870	1585	1781	539	1097	1781	3547	84	1781	3542	88
Grp Volume(v), veh/h	51	25	33	63	0	85	36	879	924	88	624	651
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1635	1781	1777	1854	1781	1777	1854
Q Serve(g_s), s	2.2	1.0	1.6	2.6	0.0	4.0	1.6	38.5	38.9	3.9	20.1	20.1
Cycle Q Clear(g_c), s	2.2	1.0	1.6	2.6	0.0	4.0	1.6	38.5	38.9	3.9	20.1	20.1
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.05	1.00		0.05
Lane Grp Cap(c), veh/h	161	169	143	190	0	174	86	915	954	133	962	1003
V/C Ratio(X)	0.32	0.15	0.23	0.33	0.00	0.49	0.42	0.96	0.97	0.66	0.65	0.65
Avail Cap(c_a), veh/h	176	185	157	352	0	324	154	916	956	154	962	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.5	33.9	34.2	33.5	0.0	34.1	37.4	18.9	19.0	36.4	13.1	13.1
Incr Delay (d2), s/veh	1.0	0.3	0.7	0.9	0.0	1.8	1.2	21.0	21.7	5.4	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.5	0.6	1.2	0.0	1.6	0.7	18.2	19.4	1.8	7.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	34.3	34.9	34.3	0.0	35.9	38.6	39.9	40.6	41.8	14.8	14.8
LnGrp LOS	D	C	C	C	A	D	D	D	D	D	B	B
Approach Vol, veh/h		109			148			1839			1363	
Approach Delay, s/veh		35.0			35.2			40.2			16.6	
Approach LOS		C			D			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	49.1		12.6	10.0	46.9		11.3
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	7.0	* 42		16.0	7.0	41.7		8.0
Max Q Clear Time (g_c+I1), s	3.6	22.1		6.0	5.9	40.9		4.2
Green Ext Time (p_c), s	0.0	8.4		0.3	0.0	0.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	23	5	60	18	21	11	2517	16	12	1624	55
Future Volume (veh/h)	49	23	5	60	18	21	11	2517	16	12	1624	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1945	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	52	24	5	63	19	22	12	2649	17	13	1709	58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	68	31	6	83	25	29	16	2903	19	17	2816	96
Arrive On Green	0.06	0.06	0.06	0.08	0.08	0.08	0.02	1.00	1.00	0.01	0.56	0.56
Sat Flow, veh/h	1196	552	115	1101	332	384	1781	5152	33	1781	4991	169
Grp Volume(v), veh/h	81	0	0	104	0	0	12	1721	945	13	1147	620
Grp Sat Flow(s),veh/h/ln	1863	0	0	1817	0	0	1781	1675	1835	1781	1675	1810
Q Serve(g_s), s	2.6	0.0	0.0	3.4	0.0	0.0	0.4	0.0	0.0	0.4	13.6	13.6
Cycle Q Clear(g_c), s	2.6	0.0	0.0	3.4	0.0	0.0	0.4	0.0	0.0	0.4	13.6	13.6
Prop In Lane	0.64		0.06	0.61		0.21	1.00		0.02	1.00		0.09
Lane Grp Cap(c), veh/h	105	0	0	137	0	0	16	1888	1034	17	1890	1021
V/C Ratio(X)	0.77	0.00	0.00	0.76	0.00	0.00	0.74	0.91	0.91	0.75	0.61	0.61
Avail Cap(c_a), veh/h	124	0	0	242	0	0	89	1888	1034	89	1890	1021
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.69	0.69	0.69	0.72	0.72	0.72
Uniform Delay (d), s/veh	27.9	0.0	0.0	27.2	0.0	0.0	29.4	0.0	0.0	29.6	8.7	8.7
Incr Delay (d2), s/veh	17.6	0.0	0.0	3.2	0.0	0.0	15.7	5.9	10.1	15.7	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	1.5	0.0	0.0	0.2	1.6	2.9	0.2	3.5	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	0.0	0.0	30.5	0.0	0.0	45.1	5.9	10.1	45.4	9.1	9.5
LnGrp LOS	D	A	A	C	A	A	D	A	B	D	A	A
Approach Vol, veh/h		81			104			2678			1780	
Approach Delay, s/veh		45.5			30.5			7.6			9.5	
Approach LOS		D			C			A			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.4	4.6	39.5		8.5	4.5	39.6				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		4.0	3.0	27.3		8.0	3.0	27.3				
Max Q Clear Time (g_c+I1), s		4.6	2.4	2.0		5.4	2.4	15.6				
Green Ext Time (p_c), s		0.0	0.0	25.1		0.0	0.0	11.1				

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	0	21	65	0	18	3	2506	92	4	1644	5
Future Volume (vph)	44	0	21	65	0	18	3	2506	92	4	1644	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00		0.96	1.00		0.96	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Frt	1.00		0.85	1.00		0.85	1.00	0.99		1.00	1.00	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1524	1770		1524	1768	5053		1769	5083	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770		1524	1770		1524	1768	5053		1769	5083	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	46	0	22	68	0	19	3	2638	97	4	1731	5
RTOR Reduction (vph)	0	0	21	0	0	18	0	5	0	0	0	0
Lane Group Flow (vph)	46	0	1	68	0	1	3	2730	0	4	1736	0
Confl. Peds. (#/hr)	4		4	4		4	4		4	4		4
Confl. Bikes (#/hr)			2			2			2			2
Turn Type	Prot		Perm	Prot		Perm	Prot	NA		Prot	NA	
Protected Phases	6			5			7	4		3	8	
Permitted Phases			6			5						
Actuated Green, G (s)	3.8		3.8	3.8		3.8	0.6	38.9		0.6	38.9	
Effective Green, g (s)	3.8		3.8	3.8		3.8	0.6	38.9		0.6	38.9	
Actuated g/C Ratio	0.06		0.06	0.06		0.06	0.01	0.65		0.01	0.65	
Clearance Time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Vehicle Extension (s)	2.0		2.0	2.0		2.0	2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	112		96	112		96	17	3276		17	3295	
v/s Ratio Prot	0.03			c0.04			0.00	c0.54		c0.00	0.34	
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.41		0.01	0.61		0.01	0.18	0.83		0.24	0.53	
Uniform Delay, d1	27.0		26.3	27.4		26.3	29.5	8.1		29.5	5.6	
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00		1.36	0.74	
Incremental Delay, d2	0.9		0.0	6.2		0.0	1.8	2.7		2.2	0.2	
Delay (s)	27.9		26.4	33.6		26.4	31.3	10.7		42.3	4.3	
Level of Service	C		C	C		C	C	B		D	A	
Approach Delay (s)		27.4			32.0			10.7			4.4	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	9	163	239	67	27	0
Future Volume (veh/h)	9	163	239	67	27	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	172	252	71	28	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	13	1666	956	427	38	34
Arrive On Green	0.01	0.47	0.27	0.27	0.02	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	9	172	252	71	28	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.1	0.6	1.2	0.7	0.3	0.0
Cycle Q Clear(g_c), s	0.1	0.6	1.2	0.7	0.3	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	13	1666	956	427	38	34
V/C Ratio(X)	0.69	0.10	0.26	0.17	0.73	0.00
Avail Cap(c_a), veh/h	1370	7741	4323	1928	2064	1837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.3	3.1	6.0	5.8	10.1	0.0
Incr Delay (d2), s/veh	21.5	0.0	0.2	0.3	9.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	0.1	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.8	3.1	6.2	6.1	19.5	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		181	323		28	
Approach Delay, s/veh		4.6	6.2		19.5	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	15.4	5.3	4.2	11.3
Change Period (Y+Rc), s	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	45.3	24.1	16.0	25.3
Max Q Clear Time (g_c+I1), s	2.6	2.3	2.1	3.2
Green Ext Time (p_c), s	1.4	0.0	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	355	308	80	185	37	256	549	86	49	215	52
Future Volume (veh/h)	47	355	308	80	185	37	256	549	86	49	215	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	374	0	84	195	0	269	578	0	52	226	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	634		171	765		326	985		128	848	
Arrive On Green	0.06	0.18	0.00	0.10	0.22	0.00	0.18	0.28	0.00	0.07	0.17	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	5274	0
Grp Volume(v), veh/h	49	374	0	84	195	0	269	578	0	52	226	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1702	0
Q Serve(g_s), s	1.3	4.9	0.0	2.3	2.3	0.0	7.3	7.1	0.0	1.4	1.9	0.0
Cycle Q Clear(g_c), s	1.3	4.9	0.0	2.3	2.3	0.0	7.3	7.1	0.0	1.4	1.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	105	634		171	765		326	985		128	848	
V/C Ratio(X)	0.47	0.59		0.49	0.25		0.83	0.59		0.41	0.27	
Avail Cap(c_a), veh/h	212	1408		247	1507		388	1901		247	2327	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.0	19.0	0.0	21.6	16.4	0.0	19.8	15.7	0.0	22.4	18.4	0.0
Incr Delay (d2), s/veh	1.2	1.4	0.0	0.8	0.4	0.0	10.1	1.1	0.0	0.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.9	0.0	0.9	0.9	0.0	3.6	2.7	0.0	0.6	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.2	20.4	0.0	22.5	16.8	0.0	29.9	16.9	0.0	23.2	18.7	0.0
LnGrp LOS	C	C		C	B		C	B		C	B	
Approach Vol, veh/h		423	A		279	A		847	A		278	A
Approach Delay, s/veh		20.9			18.5			21.0			19.5	
Approach LOS		C			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	14.7	13.2	13.7	7.0	16.6	7.6	19.3
Change Period (Y+Rc), s	4.0	5.7	4.0	5.3	4.0	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	7.0	20.0	11.0	23.0	6.0	* 21	7.0	27.0
Max Q Clear Time (g_c+I1), s	4.3	6.9	9.3	3.9	3.3	4.3	3.4	9.1
Green Ext Time (p_c), s	0.0	2.2	0.1	1.8	0.0	1.4	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	41	31	47	11	38	19	1288	62	49	347	8
Future Volume (veh/h)	10	41	31	47	11	38	19	1288	62	49	347	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	43	33	49	12	0	20	1356	65	52	365	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	94	95	144	9		261	2280	109	64	1854	
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.00	0.15	0.66	0.66	0.04	0.52	0.00
Sat Flow, veh/h	296	1560	1585	601	147	1585	1781	3452	165	1781	3647	0
Grp Volume(v), veh/h	54	0	33	61	0	0	20	697	724	52	365	0
Grp Sat Flow(s),veh/h/ln	1856	0	1585	748	0	1585	1781	1777	1841	1781	1777	0
Q Serve(g_s), s	0.0	0.0	1.2	1.9	0.0	0.0	0.6	13.1	13.2	1.7	3.3	0.0
Cycle Q Clear(g_c), s	1.7	0.0	1.2	3.6	0.0	0.0	0.6	13.1	13.2	1.7	3.3	0.0
Prop In Lane	0.20		1.00	0.80		1.00	1.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	184	0	95	153	0		261	1173	1216	64	1854	
V/C Ratio(X)	0.29	0.00	0.35	0.40	0.00		0.08	0.59	0.60	0.81	0.20	
Avail Cap(c_a), veh/h	402	0	293	329	0		261	1173	1216	119	1854	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.3	0.0	27.1	29.3	0.0	0.0	22.1	5.7	5.7	28.7	7.6	0.0
Incr Delay (d2), s/veh	0.7	0.0	1.6	1.2	0.0	0.0	0.0	0.9	0.9	8.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.4	0.9	0.0	0.0	0.2	2.7	2.8	0.8	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	0.0	28.7	30.5	0.0	0.0	22.1	6.6	6.6	37.3	7.9	0.0
LnGrp LOS	C	A	C	C	A		C	A	A	D	A	
Approach Vol, veh/h		87			61	A		1441			417	A
Approach Delay, s/veh		28.2			30.5			6.8			11.6	
Approach LOS		C			C			A			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		8.5	14.5	37.0		8.5	6.2	45.3				
Change Period (Y+Rc), s		4.9	5.7	* 5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		11.1	3.0	* 31		11.1	4.0	30.3				
Max Q Clear Time (g_c+I1), s		3.7	2.6	5.3		5.6	3.7	15.2				
Green Ext Time (p_c), s		0.1	0.0	2.2		0.0	0.0	7.9				

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	4	2	21	1	22	6	1240	31	20	348	5
Future Volume (veh/h)	7	4	2	21	1	22	6	1240	31	20	348	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	4	2	22	1	23	6	1305	33	21	366	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	21	78	78	2	78	374	2780	70	25	2046	28
Arrive On Green	0.05	0.05	0.05	0.05	0.05	0.05	0.21	0.78	0.78	0.01	0.57	0.57
Sat Flow, veh/h	1	433	1585	2	39	1585	1781	3542	90	1781	3589	49
Grp Volume(v), veh/h	11	0	2	23	0	23	6	654	684	21	181	190
Grp Sat Flow(s),veh/h/ln	435	0	1585	40	0	1585	1781	1777	1854	1781	1777	1862
Q Serve(g_s), s	0.0	0.0	0.1	0.0	0.0	1.3	0.2	11.3	11.3	1.1	4.4	4.4
Cycle Q Clear(g_c), s	4.4	0.0	0.1	4.4	0.0	1.3	0.2	11.3	11.3	1.1	4.4	4.4
Prop In Lane	0.64		1.00	0.96		1.00	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	87	0	78	80	0	78	374	1395	1455	25	1013	1061
V/C Ratio(X)	0.13	0.00	0.03	0.29	0.00	0.30	0.02	0.47	0.47	0.85	0.18	0.18
Avail Cap(c_a), veh/h	386	0	387	359	0	387	374	1395	1455	79	1013	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	0.0	40.8	44.6	0.0	41.3	28.2	3.3	3.3	44.3	9.3	9.3
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.7	0.0	0.8	0.0	0.3	0.3	24.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.5	0.0	0.5	0.1	2.3	2.3	0.6	1.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.2	0.0	40.8	45.4	0.0	42.1	28.2	3.6	3.6	68.5	9.7	9.6
LnGrp LOS	D	A	D	D	A	D	C	A	A	E	A	A
Approach Vol, veh/h		13			46			1344			392	
Approach Delay, s/veh		41.2			43.7			3.7			12.8	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	24.6	57.0		8.4	5.2	76.3		8.4
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	3.0	* 51		22.0	4.0	50.3		22.0
Max Q Clear Time (g_c+I1), s	2.2	6.4		6.4	3.1	13.3		6.4
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	13.6		0.1

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	28	104	1161	43	34	335
Future Volume (veh/h)	28	104	1161	43	34	335
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	109	1222	45	36	353
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	159	141	2564	94	45	2853
Arrive On Green	0.09	0.09	0.73	0.73	0.05	1.00
Sat Flow, veh/h	1781	1585	3589	129	1781	3647
Grp Volume(v), veh/h	29	109	621	646	36	353
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1847	1781	1777
Q Serve(g_s), s	1.4	6.1	12.9	12.9	1.8	0.0
Cycle Q Clear(g_c), s	1.4	6.1	12.9	12.9	1.8	0.0
Prop In Lane	1.00	1.00		0.07	1.00	
Lane Grp Cap(c), veh/h	159	141	1303	1355	45	2853
V/C Ratio(X)	0.18	0.77	0.48	0.48	0.81	0.12
Avail Cap(c_a), veh/h	416	370	1303	1355	99	2853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	40.1	4.9	4.9	42.5	0.0
Incr Delay (d2), s/veh	0.2	3.3	0.3	0.3	11.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.3	3.7	3.9	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.1	43.4	5.3	5.2	54.3	0.1
LnGrp LOS	D	D	A	A	D	A
Approach Vol, veh/h	138		1267			389
Approach Delay, s/veh	42.3		5.2			5.1
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		78.0		12.0	6.3	71.7
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		59.3		21.0	5.0	50.3
Max Q Clear Time (g_c+I1), s		2.0		8.1	3.8	14.9
Green Ext Time (p_c), s		2.2		0.2	0.0	9.6

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	0	200	0	1	0	203	692	1	0	512	203
Future Volume (veh/h)	129	0	200	0	1	0	203	692	1	0	512	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1870	1870	1870	1870	1664	1708	1723	2067	2007	2052
Adj Flow Rate, veh/h	136	0	211	0	1	0	214	728	1	0	539	214
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	2	2	2	2	6	3	2	2	6	3
Cap, veh/h	650	0	295	0	5	0	221	1697	763	3	1197	546
Arrive On Green	0.19	0.00	0.19	0.00	0.00	0.00	0.14	0.52	0.52	0.00	0.31	0.31
Sat Flow, veh/h	3428	0	1557	0	1870	0	1585	3246	1460	1968	3813	1739
Grp Volume(v), veh/h	136	0	211	0	1	0	214	728	1	0	539	214
Grp Sat Flow(s),veh/h/ln	1714	0	1557	0	1870	0	1585	1623	1460	1968	1906	1739
Q Serve(g_s), s	1.9	0.0	7.3	0.0	0.0	0.0	7.7	7.9	0.0	0.0	6.5	5.5
Cycle Q Clear(g_c), s	1.9	0.0	7.3	0.0	0.0	0.0	7.7	7.9	0.0	0.0	6.5	5.5
Prop In Lane	1.00		1.00	0.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	650	0	295	0	5	0	221	1697	763	3	1197	546
V/C Ratio(X)	0.21	0.00	0.72	0.00	0.22	0.00	0.97	0.43	0.00	0.00	0.45	0.39
Avail Cap(c_a), veh/h	1193	0	542	0	293	0	221	1697	763	274	1830	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	21.8	0.0	28.6	0.0	24.6	8.4	6.6	0.0	15.8	15.4
Incr Delay (d2), s/veh	0.2	0.0	4.7	0.0	8.4	0.0	51.8	0.3	0.0	0.0	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	2.7	0.0	0.0	0.0	5.6	1.8	0.0	0.0	2.3	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	26.6	0.0	37.0	0.0	76.4	8.7	6.6	0.0	16.2	16.2
LnGrp LOS	B	A	C	A	D	A	E	A	A	A	B	B
Approach Vol, veh/h		347			1			943			753	
Approach Delay, s/veh		23.9			37.0			24.1			16.2	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	36.5		4.1	12.0	24.5		16.9
Change Period (Y+Rc), s	4.0	6.4		4.0	4.0	6.4		6.0
Max Green Setting (Gmax), s	8.0	27.6		9.0	8.0	27.6		20.0
Max Q Clear Time (g_c+I1), s	0.0	9.9		2.0	9.7	8.5		9.3
Green Ext Time (p_c), s	0.0	10.4		0.0	0.0	9.6		1.6

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	0	130	2	0	2	47	845	0	7	683	14
Future Volume (veh/h)	57	0	130	2	0	2	47	845	0	7	683	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	0	137	2	0	2	49	889	0	7	719	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	375	0	333	19	0	17	73	1216	542	17	1103	492
Arrive On Green	0.21	0.00	0.21	0.01	0.00	0.01	0.04	0.34	0.00	0.01	0.31	0.31
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	60	0	137	2	0	2	49	889	0	7	719	15
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.2	0.0	3.2	0.0	0.0	0.1	1.2	9.4	0.0	0.2	7.5	0.3
Cycle Q Clear(g_c), s	1.2	0.0	3.2	0.0	0.0	0.1	1.2	9.4	0.0	0.2	7.5	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	375	0	333	19	0	17	73	1216	542	17	1103	492
V/C Ratio(X)	0.16	0.00	0.41	0.10	0.00	0.12	0.67	0.73	0.00	0.42	0.65	0.03
Avail Cap(c_a), veh/h	497	0	442	828	0	736	497	1453	648	497	1453	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	14.7	21.1	0.0	21.1	20.3	12.4	0.0	21.2	12.8	10.3
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.9	0.0	1.1	3.9	1.9	0.0	6.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.0	0.0	0.0	0.0	0.5	3.3	0.0	0.1	2.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	0.0	15.0	21.9	0.0	22.2	24.2	14.4	0.0	27.4	13.9	10.4
LnGrp LOS	B	A	B	C	A	C	C	B	A	C	B	B
Approach Vol, veh/h		197			4			938			741	
Approach Delay, s/veh		14.7			22.1			14.9			13.9	
Approach LOS		B			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.1	5.8	19.8		4.5	4.4	21.1				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		12.0	12.0	17.6		20.0	12.0	17.6				
Max Q Clear Time (g_c+I1), s		5.2	3.2	9.5		2.1	2.2	11.4				
Green Ext Time (p_c), s		0.3	0.0	3.4		0.0	0.0	3.3				

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	1	276	13	1	7	459	826	32	21	680	97
Future Volume (veh/h)	73	1	276	13	1	7	459	826	32	21	680	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	0	30	14	1	0	483	869	16	22	716	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	385	0	171	115	60	0	480	1907	851	53	1515	470
Arrive On Green	0.11	0.00	0.11	0.03	0.03	0.00	0.27	0.54	0.54	0.03	0.30	0.30
Sat Flow, veh/h	3563	0	1585	3563	1870	0	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	78	0	30	14	1	0	483	869	16	22	716	20
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	1.5	0.0	1.3	0.3	0.0	0.0	20.0	11.1	0.4	0.9	8.5	0.7
Cycle Q Clear(g_c), s	1.5	0.0	1.3	0.3	0.0	0.0	20.0	11.1	0.4	0.9	8.5	0.7
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	385	0	171	115	60	0	480	1907	851	53	1515	470
V/C Ratio(X)	0.20	0.00	0.18	0.12	0.02	0.00	1.01	0.46	0.02	0.42	0.47	0.04
Avail Cap(c_a), veh/h	959	0	427	432	227	0	480	2086	931	144	2008	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	0.0	30.1	34.9	34.8	0.0	27.1	10.6	8.1	35.4	21.4	18.6
Incr Delay (d2), s/veh	0.4	0.0	0.8	0.7	0.2	0.0	42.8	0.3	0.0	2.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.5	0.1	0.0	0.0	13.1	3.4	0.1	0.4	3.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.6	0.0	30.9	35.7	35.0	0.0	69.9	10.9	8.1	37.4	21.7	18.7
LnGrp LOS	C	A	C	D	C	A	F	B	A	D	C	B
Approach Vol, veh/h		108			15			1368			758	
Approach Delay, s/veh		30.7			35.6			31.7			22.1	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	46.2		13.7	24.0	28.4		8.1
Change Period (Y+Rc), s	4.0	* 6.4		5.7	4.0	6.4		5.7
Max Green Setting (Gmax), s	6.0	* 44		20.0	20.0	29.2		9.0
Max Q Clear Time (g_c+I1), s	2.9	13.1		3.5	22.0	10.5		2.3
Green Ext Time (p_c), s	0.0	21.3		0.5	0.0	11.5		0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	2	132	45	3	22	152	1448	90	74	918	96
Future Volume (veh/h)	132	2	132	45	3	22	152	1448	90	74	918	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	140	0	139	47	3	23	160	1524	95	78	966	101
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	380	0	169	140	9	133	188	2059	128	407	2614	273
Arrive On Green	0.11	0.00	0.11	0.08	0.08	0.08	0.11	0.42	0.42	0.23	0.56	0.56
Sat Flow, veh/h	3563	0	1585	1679	107	1585	1781	4913	306	1781	4696	490
Grp Volume(v), veh/h	140	0	139	50	0	23	160	1056	563	78	700	367
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1786	0	1585	1781	1702	1815	1781	1702	1782
Q Serve(g_s), s	4.4	0.0	10.3	3.2	0.0	1.6	10.6	31.3	31.4	4.2	13.8	13.8
Cycle Q Clear(g_c), s	4.4	0.0	10.3	3.2	0.0	1.6	10.6	31.3	31.4	4.2	13.8	13.8
Prop In Lane	1.00		1.00	0.94		1.00	1.00		0.17	1.00		0.27
Lane Grp Cap(c), veh/h	380	0	169	149	0	133	188	1427	761	407	1895	992
V/C Ratio(X)	0.37	0.00	0.82	0.33	0.00	0.17	0.85	0.74	0.74	0.19	0.37	0.37
Avail Cap(c_a), veh/h	623	0	277	313	0	277	267	1427	761	407	1895	992
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	0.0	52.5	51.8	0.0	51.1	52.7	29.3	29.3	37.3	14.8	14.9
Incr Delay (d2), s/veh	0.2	0.0	3.8	0.5	0.0	0.2	12.2	3.5	6.4	0.1	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	4.3	1.5	0.0	0.7	5.2	12.7	14.2	1.8	5.0	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.0	0.0	56.3	52.3	0.0	51.4	64.9	32.8	35.7	37.4	15.1	15.4
LnGrp LOS	D	A	E	D	A	D	E	C	D	D	B	B
Approach Vol, veh/h		279			73			1779			1145	
Approach Delay, s/veh		53.2			52.0			36.6			16.8	
Approach LOS		D			D			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	33.2	56.0		14.0	16.7	72.5		16.8
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	10.0	* 50		21.0	18.0	42.3		21.0
Max Q Clear Time (g_c+I1), s	6.2	33.4		5.2	12.6	15.8		12.3
Green Ext Time (p_c), s	0.0	12.9		0.1	0.1	11.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	31.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	345	66	296	50	128	90	119	1689	19	28	1059	172
Future Volume (veh/h)	345	66	296	50	128	90	119	1689	19	28	1059	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	248	230	312	53	135	95	125	1778	20	29	1115	181
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	521	442	0	183	121	227	2777	862	83	2680	832
Arrive On Green	0.16	0.28	0.28	0.00	0.09	0.09	0.07	0.54	0.54	0.05	0.52	0.52
Sat Flow, veh/h	1781	1870	1585	0	2054	1350	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	248	230	312	0	116	114	125	1778	20	29	1115	181
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	0	1777	1627	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	16.4	12.1	21.2	0.0	7.6	8.3	4.2	29.2	0.7	1.9	15.9	7.4
Cycle Q Clear(g_c), s	16.4	12.1	21.2	0.0	7.6	8.3	4.2	29.2	0.7	1.9	15.9	7.4
Prop In Lane	1.00		1.00	0.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	278	521	442	0	159	145	227	2777	862	83	2680	832
V/C Ratio(X)	0.89	0.44	0.71	0.00	0.73	0.79	0.55	0.64	0.02	0.35	0.42	0.22
Avail Cap(c_a), veh/h	430	521	442	0	212	194	230	2777	862	134	2680	832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	35.6	38.9	0.0	53.2	53.5	54.3	19.1	12.6	55.5	17.3	15.3
Incr Delay (d2), s/veh	9.8	0.9	5.8	0.0	11.2	17.8	1.5	1.1	0.0	0.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	5.5	8.6	0.0	3.8	4.0	1.8	10.6	0.2	0.8	5.8	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	36.5	44.6	0.0	64.4	71.4	55.9	20.3	12.7	56.4	17.5	15.5
LnGrp LOS	E	D	D	A	E	E	E	C	B	E	B	B
Approach Vol, veh/h		790			230			1923			1325	
Approach Delay, s/veh		46.9			67.9			22.5			18.1	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	71.3	0.0	39.1	11.9	69.0	22.7	16.4
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	9.0	48.0	10.0	33.3	8.0	49.0	29.0	14.3
Max Q Clear Time (g_c+I1), s	3.9	31.2	0.0	23.2	6.2	17.9	18.4	10.3
Green Ext Time (p_c), s	0.0	12.6	0.0	2.6	0.0	13.0	0.4	0.5

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	206	15	27	356	8	28	3	28	7	2	8
Future Volume (veh/h)	1	206	15	27	356	8	28	3	28	7	2	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	217	16	28	375	8	29	3	29	7	2	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	879	64	74	1071	23	84	9	84	27	8	31
Arrive On Green	0.00	0.26	0.26	0.04	0.30	0.30	0.10	0.10	0.10	0.04	0.04	0.04
Sat Flow, veh/h	1781	3357	246	1781	3558	76	802	83	802	697	199	796
Grp Volume(v), veh/h	1	114	119	28	187	196	61	0	0	17	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1826	1781	1777	1857	1686	0	0	1692	0	0
Q Serve(g_s), s	0.0	1.6	1.6	0.5	2.6	2.6	1.1	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.6	1.6	0.5	2.6	2.6	1.1	0.0	0.0	0.3	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.04	0.48		0.48	0.41		0.47
Lane Grp Cap(c), veh/h	6	465	478	74	535	559	176	0	0	67	0	0
V/C Ratio(X)	0.18	0.25	0.25	0.38	0.35	0.35	0.35	0.00	0.00	0.25	0.00	0.00
Avail Cap(c_a), veh/h	668	1015	1044	668	1015	1061	1316	0	0	634	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.9	9.3	9.3	15.0	8.7	8.7	13.3	0.0	0.0	14.9	0.0	0.0
Incr Delay (d2), s/veh	5.6	0.5	0.5	1.2	0.7	0.6	0.4	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.2	0.7	0.7	0.3	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	9.8	9.8	16.2	9.4	9.4	13.8	0.0	0.0	15.7	0.0	0.0
LnGrp LOS	C	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		234			411			61			17	
Approach Delay, s/veh		9.8			9.9			13.8			15.7	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		7.4	5.3	14.1		5.3	4.1	15.3
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		25.0	12.0	18.3		12.0	12.0	18.3
Max Q Clear Time (g_c+I1), s		3.1	2.5	3.6		2.3	2.0	4.6
Green Ext Time (p_c), s		0.1	0.0	3.1		0.0	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	228	6	20	488	18	9	2	9	43	0	165
Future Volume (veh/h)	92	228	6	20	488	18	9	2	9	43	0	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	240	6	21	514	19	9	2	9	45	0	174
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	1055	470	46	805	359	34	8	34	308	0	274
Arrive On Green	0.10	0.30	0.30	0.03	0.23	0.23	0.04	0.04	0.04	0.17	0.00	0.17
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	763	170	763	1781	0	1585
Grp Volume(v), veh/h	97	240	6	21	514	19	20	0	0	45	0	174
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1695	0	0	1781	0	1585
Q Serve(g_s), s	2.2	2.2	0.1	0.5	5.6	0.4	0.5	0.0	0.0	0.9	0.0	4.4
Cycle Q Clear(g_c), s	2.2	2.2	0.1	0.5	5.6	0.4	0.5	0.0	0.0	0.9	0.0	4.4
Prop In Lane	1.00		1.00	1.00		1.00	0.45		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	171	1055	470	46	805	359	75	0	0	308	0	274
V/C Ratio(X)	0.57	0.23	0.01	0.46	0.64	0.05	0.27	0.00	0.00	0.15	0.00	0.63
Avail Cap(c_a), veh/h	499	1576	703	499	1576	703	475	0	0	1135	0	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.5	11.4	10.6	20.6	15.0	13.0	19.8	0.0	0.0	15.0	0.0	16.5
Incr Delay (d2), s/veh	1.1	0.1	0.0	2.6	1.0	0.1	0.7	0.0	0.0	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.6	0.0	0.2	1.8	0.1	0.2	0.0	0.0	0.3	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	11.5	10.6	23.2	16.0	13.0	20.5	0.0	0.0	15.1	0.0	17.4
LnGrp LOS	B	B	B	C	B	B	C	A	A	B	A	B
Approach Vol, veh/h		343			554			20			219	
Approach Delay, s/veh		13.8			16.1			20.5			16.9	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		5.9	5.1	18.7		13.1	8.1	15.7
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0
Max Green Setting (Gmax), s		12.0	12.0	19.0		27.3	12.0	19.0
Max Q Clear Time (g_c+I1), s		2.5	2.5	4.2		6.4	4.2	7.6
Green Ext Time (p_c), s		0.0	0.0	1.0		0.5	0.1	2.1

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	186	11	52	315	6	55
Future Volume (veh/h)	186	11	52	315	6	55
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	196	12	55	332	6	58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	463	207	92	1411	307	273
Arrive On Green	0.13	0.13	0.05	0.40	0.17	0.17
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	196	12	55	332	6	58
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	1.2	0.2	0.7	1.4	0.1	0.7
Cycle Q Clear(g_c), s	1.2	0.2	0.7	1.4	0.1	0.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	463	207	92	1411	307	273
V/C Ratio(X)	0.42	0.06	0.60	0.24	0.02	0.21
Avail Cap(c_a), veh/h	2448	1092	844	4897	1381	1229
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	8.8	10.8	4.7	8.0	8.3
Incr Delay (d2), s/veh	0.6	0.1	6.2	0.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.3	0.2	0.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.9	9.0	16.9	4.7	8.0	8.6
LnGrp LOS	A	A	B	A	A	A
Approach Vol, veh/h	208			387	64	
Approach Delay, s/veh	9.9			6.5	8.6	
Approach LOS	A			A	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		9.0	6.2	8.0		14.2
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		18.0	11.0	16.0		32.0
Max Q Clear Time (g_c+I1), s		2.7	2.7	3.2		3.4
Green Ext Time (p_c), s		0.1	0.1	0.9		2.3

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	324	11	277	996	430	257
Future Volume (veh/h)	324	11	277	996	430	257
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	341	12	292	812	453	271
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	403	185	1781	794	454	2837
Arrive On Green	0.12	0.12	0.50	0.50	0.25	0.80
Sat Flow, veh/h	3456	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	341	12	292	812	453	271
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1781	1777
Q Serve(g_s), s	11.4	0.8	5.3	59.0	29.9	2.0
Cycle Q Clear(g_c), s	11.4	0.8	5.3	59.0	29.9	2.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	403	185	1781	794	454	2837
V/C Ratio(X)	0.85	0.06	0.16	1.02	1.00	0.10
Avail Cap(c_a), veh/h	470	215	1781	794	454	2837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	46.3	16.0	29.4	43.8	2.6
Incr Delay (d2), s/veh	11.9	0.1	0.0	37.7	41.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.3	2.1	29.7	18.3	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	62.9	46.4	16.0	67.0	85.5	2.6
LnGrp LOS	E	D	B	F	F	A
Approach Vol, veh/h	353		1104			724
Approach Delay, s/veh	62.3		53.5			54.5
Approach LOS	E		D			D

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	35.0	64.0				99.0	18.7
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	30.0	59.0				94.0	16.0
Max Q Clear Time (g_c+I1), s	31.9	61.0				4.0	13.4
Green Ext Time (p_c), s	0.0	0.0				2.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	55.3
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	432	0	441	0	1657	217	0	829	768
Future Volume (veh/h)	0	0	0	432	0	441	0	1657	217	0	829	768
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				455	0	464	0	1744	0	0	873	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				1589	0	501	0	2820		0	2820	
Arrive On Green				0.32	0.00	0.32	0.00	0.55	0.00	0.00	0.55	0.00
Sat Flow, veh/h				5023	0	1585	0	5274	1585	0	5274	1585
Grp Volume(v), veh/h				455	0	464	0	1744	0	0	873	0
Grp Sat Flow(s),veh/h/ln				1674	0	1585	0	1702	1585	0	1702	1585
Q Serve(g_s), s				5.5	0.0	22.8	0.0	18.7	0.0	0.0	7.4	0.0
Cycle Q Clear(g_c), s				5.5	0.0	22.8	0.0	18.7	0.0	0.0	7.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1589	0	501	0	2820		0	2820	
V/C Ratio(X)				0.29	0.00	0.93	0.00	0.62		0.00	0.31	
Avail Cap(c_a), veh/h				1700	0	536	0	3931		0	3931	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				20.7	0.0	26.7	0.0	12.3	0.0	0.0	9.7	0.0
Incr Delay (d2), s/veh				0.0	0.0	20.7	0.0	0.3	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.1	0.0	11.0	0.0	6.0	0.0	0.0	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				20.8	0.0	47.4	0.0	12.6	0.0	0.0	9.8	0.0
LnGrp LOS				C	A	D	A	B		A	A	
Approach Vol, veh/h					919			1744	A		873	A
Approach Delay, s/veh					34.2			12.6			9.8	
Approach LOS					C			B			A	

Timer - Assigned Phs	2		6		8						
Phs Duration (G+Y+Rc), s	49.9		49.9		30.8						
Change Period (Y+Rc), s	5.3		5.3		5.3						
Max Green Setting (Gmax), s	62.1		62.1		27.3						
Max Q Clear Time (g_c+I1), s	20.7		9.4		24.8						
Green Ext Time (p_c), s	23.8		10.0		0.7						

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	357	113	17	0	162	0	1673	64	56	952	0
Future Volume (veh/h)	0	357	113	17	0	162	0	1673	64	56	952	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	0	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	376	119	18	0	171	0	1761	67	59	1002	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	0	506	226	122	0	0	0	2075	926	100	2418	0
Arrive On Green	0.00	0.14	0.14	0.04	0.00	0.00	0.00	0.58	0.58	0.06	0.68	0.00
Sat Flow, veh/h	0	3647	1585	3456	18		0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	0	376	119	18	47.0		0	1761	67	59	1002	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1728	D		0	1777	1585	1781	1777	0
Q Serve(g_s), s	0.0	10.2	7.0	0.5			0.0	40.9	1.8	3.2	12.6	0.0
Cycle Q Clear(g_c), s	0.0	10.2	7.0	0.5			0.0	40.9	1.8	3.2	12.6	0.0
Prop In Lane	0.00		1.00	1.00			0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	506	226	122			0	2075	926	100	2418	0
V/C Ratio(X)	0.00	0.74	0.53	0.15			0.00	0.85	0.07	0.59	0.41	0.00
Avail Cap(c_a), veh/h	0	853	380	553			0	2267	1011	142	2693	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	41.1	39.8	46.8			0.0	17.2	9.0	46.1	7.1	0.0
Incr Delay (d2), s/veh	0.0	2.0	1.7	0.2			0.0	3.1	0.0	2.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	2.8	0.2			0.0	15.3	0.6	1.5	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	43.1	41.5	47.0			0.0	20.3	9.1	48.1	7.3	0.0
LnGrp LOS	A	D	D	D			A	C	A	D	A	A
Approach Vol, veh/h		495						1828			1061	
Approach Delay, s/veh		42.7						19.9			9.5	
Approach LOS		D						B			A	

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	9.6	63.3	7.5	19.5		73.0
Change Period (Y+Rc), s	4.0	4.9	4.0	5.3		4.9
Max Green Setting (Gmax), s	8.0	63.8	16.0	24.0		75.8
Max Q Clear Time (g_c+I1), s	5.2	42.9	2.5	12.2		14.6
Green Ext Time (p_c), s	0.0	15.5	0.0	2.1		11.2

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	544	4	2	176	185	8	64	2	489	14	105
Future Volume (veh/h)	65	544	4	2	176	185	8	64	2	489	14	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	573	4	2	185	195	8	67	2	515	15	111
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	882	393	4	718	320	24	198	189	585	17	535
Arrive On Green	0.05	0.25	0.25	0.00	0.20	0.20	0.12	0.12	0.12	0.34	0.34	0.34
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	198	1662	1585	1733	50	1585
Grp Volume(v), veh/h	68	573	4	2	185	195	75	0	2	530	0	111
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1860	0	1585	1784	0	1585
Q Serve(g_s), s	2.3	8.9	0.1	0.1	2.7	6.9	2.3	0.0	0.1	17.2	0.0	3.1
Cycle Q Clear(g_c), s	2.3	8.9	0.1	0.1	2.7	6.9	2.3	0.0	0.1	17.2	0.0	3.1
Prop In Lane	1.00		1.00	1.00		1.00	0.11		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	86	882	393	4	718	320	221	0	189	602	0	535
V/C Ratio(X)	0.79	0.65	0.01	0.51	0.26	0.61	0.34	0.00	0.01	0.88	0.00	0.21
Avail Cap(c_a), veh/h	116	1157	516	116	1157	516	303	0	258	1104	0	981
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.9	20.7	17.4	30.6	20.6	22.3	24.8	0.0	23.9	19.2	0.0	14.5
Incr Delay (d2), s/veh	16.1	0.9	0.0	34.0	0.2	2.2	0.3	0.0	0.0	1.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.3	0.0	0.1	1.0	2.4	1.0	0.0	0.0	6.5	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	21.6	17.4	64.6	20.8	24.5	25.2	0.0	23.9	20.9	0.0	14.6
LnGrp LOS	D	C	B	E	C	C	C	A	C	C	A	B
Approach Vol, veh/h		645			382			77			641	
Approach Delay, s/veh		24.1			22.9			25.1			19.8	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	21.2		11.3	7.0	18.4		24.7
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	4.0	20.0		10.0	4.0	20.0		38.0
Max Q Clear Time (g_c+I1), s	2.1	10.9		4.3	4.3	8.9		19.2
Green Ext Time (p_c), s	0.0	4.4		0.0	0.0	2.1		1.5

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	1024	13	74	349	52	12	92	92	113	49	18
Future Volume (veh/h)	45	1024	13	74	349	52	12	92	92	113	49	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	1078	14	78	367	55	13	97	97	119	52	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	1457	650	101	1528	682	23	191	162	155	330	279
Arrive On Green	0.04	0.41	0.41	0.06	0.43	0.43	0.01	0.10	0.10	0.09	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	47	1078	14	78	367	55	13	97	97	119	52	19
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.5	14.9	0.3	2.5	3.8	1.2	0.4	2.9	3.4	3.8	1.4	0.6
Cycle Q Clear(g_c), s	1.5	14.9	0.3	2.5	3.8	1.2	0.4	2.9	3.4	3.8	1.4	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	65	1457	650	101	1528	682	23	191	162	155	330	279
V/C Ratio(X)	0.72	0.74	0.02	0.78	0.24	0.08	0.56	0.51	0.60	0.77	0.16	0.07
Avail Cap(c_a), veh/h	337	1957	873	337	1957	873	337	515	436	337	515	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	14.5	10.2	27.1	10.5	9.8	28.5	24.7	24.9	26.0	20.3	20.0
Incr Delay (d2), s/veh	13.9	1.0	0.0	11.9	0.1	0.1	19.4	2.1	3.5	7.8	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.3	0.1	1.3	1.3	0.4	0.3	1.3	1.4	1.8	0.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.6	15.5	10.2	39.0	10.6	9.8	47.9	26.8	28.4	33.8	20.5	20.1
LnGrp LOS	D	B	B	D	B	A	D	C	C	C	C	C
Approach Vol, veh/h		1139			500			207			190	
Approach Delay, s/veh		16.5			14.9			28.9			28.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	10.9	8.3	28.8	5.8	15.2	7.1	30.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	5.8	5.4	4.5	16.9	2.4	3.4	3.5	5.8
Green Ext Time (p_c), s	0.1	0.5	0.1	6.9	0.0	0.2	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	576	627	72	41	153	147	46	410	127	131	293	164
Future Volume (veh/h)	576	627	72	41	153	147	46	410	127	131	293	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	606	660	0	43	161	0	48	432	0	138	308	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	716	976		237	484		256	604		421	896	
Arrive On Green	0.21	0.27	0.00	0.07	0.14	0.00	0.07	0.17	0.00	0.12	0.25	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	606	660	0	43	161	0	48	432	0	138	308	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.9	9.7	0.0	0.7	2.4	0.0	0.8	6.7	0.0	2.1	4.2	0.0
Cycle Q Clear(g_c), s	9.9	9.7	0.0	0.7	2.4	0.0	0.8	6.7	0.0	2.1	4.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	716	976		237	484		256	604		421	896	
V/C Ratio(X)	0.85	0.68		0.18	0.33		0.19	0.71		0.33	0.34	
Avail Cap(c_a), veh/h	716	1653		471	1471		471	848		942	1350	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.4	19.0	0.0	25.8	22.9	0.0	25.5	23.0	0.0	23.6	18.0	0.0
Incr Delay (d2), s/veh	8.8	1.4	0.0	0.1	0.7	0.0	0.1	2.4	0.0	0.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.4	0.0	0.3	0.9	0.0	0.3	2.6	0.0	0.8	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	20.4	0.0	25.9	23.6	0.0	25.7	25.4	0.0	23.7	18.4	0.0
LnGrp LOS	C	C		C	C		C	C		C	B	
Approach Vol, veh/h		1266	A		204	A		480	A		446	A
Approach Delay, s/veh		25.5			24.1			25.5			20.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	21.8	8.3	20.5	16.2	13.7	12.9	16.0
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	5.7	* 6
Max Green Setting (Gmax), s	8.0	27.3	8.0	22.3	11.0	24.3	16.0	* 14
Max Q Clear Time (g_c+I1), s	2.7	11.7	2.8	6.2	11.9	4.4	4.1	8.7
Green Ext Time (p_c), s	0.0	4.4	0.0	1.9	0.0	1.0	0.2	1.2

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	750	43	145	163	19	69	189	83	182	132	86
Future Volume (veh/h)	116	750	43	145	163	19	69	189	83	182	132	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	789	45	153	172	20	73	199	87	192	139	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	1000	57	162	952	109	159	251	110	234	259	169
Arrive On Green	0.09	0.29	0.29	0.09	0.30	0.30	0.09	0.20	0.20	0.13	0.25	0.25
Sat Flow, veh/h	1781	3417	195	1781	3212	369	1781	1234	539	1781	1055	691
Grp Volume(v), veh/h	122	410	424	153	94	98	73	0	286	192	0	230
Grp Sat Flow(s),veh/h/ln	1781	1777	1835	1781	1777	1804	1781	0	1773	1781	0	1746
Q Serve(g_s), s	4.4	14.0	14.0	5.6	2.6	2.7	2.6	0.0	10.1	6.9	0.0	7.6
Cycle Q Clear(g_c), s	4.4	14.0	14.0	5.6	2.6	2.7	2.6	0.0	10.1	6.9	0.0	7.6
Prop In Lane	1.00		0.11	1.00		0.20	1.00		0.30	1.00		0.40
Lane Grp Cap(c), veh/h	155	520	537	162	527	535	159	0	361	234	0	428
V/C Ratio(X)	0.79	0.79	0.79	0.94	0.18	0.18	0.46	0.00	0.79	0.82	0.00	0.54
Avail Cap(c_a), veh/h	189	681	704	162	654	664	216	0	701	243	0	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.5	21.5	21.5	29.8	17.3	17.3	28.5	0.0	25.0	27.9	0.0	21.6
Incr Delay (d2), s/veh	13.0	5.3	5.2	53.9	0.2	0.2	0.8	0.0	5.4	17.8	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.9	6.1	4.7	1.0	1.0	1.1	0.0	4.5	3.9	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.6	26.8	26.6	83.8	17.5	17.5	29.3	0.0	30.3	45.7	0.0	23.1
LnGrp LOS	D	C	C	F	B	B	C	A	C	D	A	C
Approach Vol, veh/h		956			345			359			422	
Approach Delay, s/veh		28.7			46.9			30.1			33.4	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	18.3	10.0	25.0	9.9	21.1	9.8	25.3
Change Period (Y+Rc), s	4.0	4.9	4.0	5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	9.0	26.1	6.0	25.3	8.0	27.1	7.0	24.3
Max Q Clear Time (g_c+I1), s	8.9	12.1	7.6	16.0	4.6	9.6	6.4	4.7
Green Ext Time (p_c), s	0.0	1.4	0.0	3.3	0.0	1.1	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	1027	331	17	79	13
Future Volume (veh/h)	8	1027	331	17	79	13
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	1081	348	18	83	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	227	1940	755	39	268	238
Arrive On Green	0.13	0.55	0.22	0.22	0.15	0.15
Sat Flow, veh/h	1781	3647	3532	177	1781	1585
Grp Volume(v), veh/h	8	1081	179	187	83	14
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1838	1781	1585
Q Serve(g_s), s	0.1	5.7	2.5	2.5	1.2	0.2
Cycle Q Clear(g_c), s	0.1	5.7	2.5	2.5	1.2	0.2
Prop In Lane	1.00			0.10	1.00	1.00
Lane Grp Cap(c), veh/h	227	1940	390	404	268	238
V/C Ratio(X)	0.04	0.56	0.46	0.46	0.31	0.06
Avail Cap(c_a), veh/h	373	4256	1508	1560	1679	1494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.0	4.2	9.7	9.7	10.8	10.4
Incr Delay (d2), s/veh	0.0	0.3	1.1	1.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.6	0.7	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	4.6	10.8	10.8	11.1	10.5
LnGrp LOS	B	A	B	B	B	B
Approach Vol, veh/h		1089	366		97	
Approach Delay, s/veh		4.6	10.8		11.0	
Approach LOS		A	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		21.3		7.3	9.3	12.0
Change Period (Y+Rc), s		5.7		3.0	5.7	* 5.7
Max Green Setting (Gmax), s		34.3		27.0	6.0	* 24
Max Q Clear Time (g_c+I1), s		7.7		3.2	2.1	4.5
Green Ext Time (p_c), s		8.0		0.2	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1075	51	130	289	0	116	0	116	0	0	0
Future Volume (veh/h)	0	1075	51	130	289	0	116	0	116	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1132	54	137	304	0	122	0	122	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	1554	693	175	2198	0	321	0	285	0	4	0
Arrive On Green	0.00	0.44	0.44	0.10	0.62	0.00	0.18	0.00	0.18	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3647	0	1781	0	1585	0	1870	0
Grp Volume(v), veh/h	0	1132	54	137	304	0	122	0	122	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	0	1781	0	1585	0	1870	0
Q Serve(g_s), s	0.0	12.7	1.0	3.6	1.7	0.0	2.9	0.0	3.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.7	1.0	3.6	1.7	0.0	2.9	0.0	3.3	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	4	1554	693	175	2198	0	321	0	285	0	4	0
V/C Ratio(X)	0.00	0.73	0.08	0.78	0.14	0.00	0.38	0.00	0.43	0.00	0.00	0.00
Avail Cap(c_a), veh/h	185	2165	966	185	2198	0	741	0	659	0	311	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.2	7.9	21.2	3.8	0.0	17.4	0.0	17.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.1	16.7	0.0	0.0	0.3	0.0	0.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	0.2	2.1	0.3	0.0	1.1	0.0	1.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.2	7.9	37.9	3.9	0.0	17.6	0.0	17.9	0.0	0.0	0.0
LnGrp LOS	A	B	A	D	A	A	B	A	B	A	A	A
Approach Vol, veh/h		1186			441			244			0	
Approach Delay, s/veh		12.0			14.4			17.8			0.0	
Approach LOS		B			B			B				

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.7	26.7		12.7	0.0	35.4		0.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	5.0	29.3		20.0	5.0	29.3		8.0
Max Q Clear Time (g_c+I1), s	5.6	14.7		5.3	0.0	3.7		0.0
Green Ext Time (p_c), s	0.0	6.4		0.5	0.0	1.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1027	18	64	390	3	37	9	130	44	14	16
Future Volume (veh/h)	10	1027	18	64	390	3	37	9	130	44	14	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	1081	19	67	411	3	39	9	137	46	15	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	1293	23	165	1584	12	133	19	462	128	26	462
Arrive On Green	0.02	0.36	0.36	0.09	0.44	0.44	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1781	3573	63	1781	3616	26	42	65	1585	36	89	1585
Grp Volume(v), veh/h	11	538	562	67	202	212	48	0	137	61	0	17
Grp Sat Flow(s),veh/h/ln	1781	1777	1859	1781	1777	1866	106	0	1585	126	0	1585
Q Serve(g_s), s	0.3	14.9	14.9	1.9	3.9	3.9	0.6	0.0	3.6	0.6	0.0	0.4
Cycle Q Clear(g_c), s	0.3	14.9	14.9	1.9	3.9	3.9	15.7	0.0	3.6	15.7	0.0	0.4
Prop In Lane	1.00		0.03	1.00		0.01	0.81		1.00	0.75		1.00
Lane Grp Cap(c), veh/h	29	643	673	165	778	817	152	0	462	154	0	462
V/C Ratio(X)	0.37	0.84	0.84	0.41	0.26	0.26	0.32	0.00	0.30	0.40	0.00	0.04
Avail Cap(c_a), veh/h	198	735	768	165	778	817	374	0	705	361	0	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.3	15.8	15.8	23.1	9.6	9.6	21.7	0.0	14.8	21.2	0.0	13.7
Incr Delay (d2), s/veh	2.9	8.0	7.7	0.6	0.2	0.2	0.4	0.0	0.1	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.9	6.1	0.7	1.1	1.2	0.6	0.0	1.2	0.8	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	23.7	23.4	23.7	9.8	9.8	22.2	0.0	14.9	21.8	0.0	13.7
LnGrp LOS	C	C	C	C	A	A	C	A	B	C	A	B
Approach Vol, veh/h		1111			481			185			78	
Approach Delay, s/veh		23.6			11.8			16.8			20.0	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	25.4		20.3	4.9	29.5		20.3
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	5.0	22.3		24.0	6.0	21.3		24.0
Max Q Clear Time (g_c+I1), s	3.9	16.9		17.7	2.3	5.9		17.7
Green Ext Time (p_c), s	0.0	2.9		0.2	0.0	1.8		0.1

Intersection Summary		
HCM 6th Ctrl Delay		19.7
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	764	8	15	296	122	9	0	20	71	0	33
Future Volume (veh/h)	190	764	8	15	296	122	9	0	20	71	0	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	804	8	16	312	128	9	0	21	75	0	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	302	1256	12	50	512	206	28	0	64	273	0	243
Arrive On Green	0.17	0.35	0.35	0.03	0.21	0.21	0.06	0.00	0.06	0.15	0.00	0.15
Sat Flow, veh/h	1781	3605	36	1781	2474	994	492	0	1147	1781	0	1585
Grp Volume(v), veh/h	200	396	416	16	222	218	30	0	0	75	0	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1691	1639	0	0	1781	0	1585
Q Serve(g_s), s	4.5	8.0	8.0	0.4	4.8	5.0	0.8	0.0	0.0	1.6	0.0	0.8
Cycle Q Clear(g_c), s	4.5	8.0	8.0	0.4	4.8	5.0	0.8	0.0	0.0	1.6	0.0	0.8
Prop In Lane	1.00		0.02	1.00		0.59	0.30		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	302	619	649	50	368	350	92	0	0	273	0	243
V/C Ratio(X)	0.66	0.64	0.64	0.32	0.60	0.62	0.33	0.00	0.00	0.27	0.00	0.14
Avail Cap(c_a), veh/h	708	1009	1059	500	802	763	460	0	0	791	0	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.6	11.7	11.7	20.4	15.4	15.4	19.4	0.0	0.0	16.0	0.0	15.7
Incr Delay (d2), s/veh	0.9	1.5	1.4	1.3	2.1	2.4	1.5	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.3	2.4	0.1	1.7	1.7	0.3	0.0	0.0	0.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	13.2	13.1	21.7	17.5	17.8	20.9	0.0	0.0	16.2	0.0	15.8
LnGrp LOS	B	B	B	C	B	B	C	A	A	B	A	B
Approach Vol, veh/h		1012			456			30			110	
Approach Delay, s/veh		14.0			17.8			20.9			16.1	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	20.6		6.4	11.3	14.6		10.6
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	24.3		12.0	17.0	19.3		19.0
Max Q Clear Time (g_c+I1), s	2.4	10.0		2.8	6.5	7.0		3.6
Green Ext Time (p_c), s	0.0	3.9		0.0	0.3	1.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1	9	103	3	44	22	994	118	6	925	16
Future Volume (veh/h)	6	1	9	103	3	44	22	994	118	6	925	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	1	9	108	3	46	23	1046	124	6	974	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	20	17	140	155	131	40	1955	607	12	1872	581
Arrive On Green	0.01	0.01	0.01	0.08	0.08	0.08	0.02	0.38	0.38	0.01	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	6	1	9	108	3	46	23	1046	124	6	974	17
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.0	0.2	2.3	0.1	1.1	0.5	6.1	2.0	0.1	5.7	0.3
Cycle Q Clear(g_c), s	0.1	0.0	0.2	2.3	0.1	1.1	0.5	6.1	2.0	0.1	5.7	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	20	17	140	155	131	40	1955	607	12	1872	581
V/C Ratio(X)	0.52	0.05	0.54	0.77	0.02	0.35	0.57	0.54	0.20	0.52	0.52	0.03
Avail Cap(c_a), veh/h	186	1561	1323	557	1951	1653	232	2929	909	186	2796	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	18.8	18.9	17.3	16.2	16.6	18.6	9.2	7.9	19.0	9.5	7.8
Incr Delay (d2), s/veh	32.1	1.1	24.3	8.6	0.0	1.6	12.0	0.2	0.2	32.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	1.1	0.0	0.4	0.3	1.7	0.5	0.1	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	19.8	43.2	25.9	16.2	18.2	30.6	9.4	8.1	51.1	9.7	7.8
LnGrp LOS	D	B	D	C	B	B	C	A	A	D	A	A
Approach Vol, veh/h		16			157			1193			997	
Approach Delay, s/veh		44.7			23.5			9.7			9.9	
Approach LOS		D			C			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	19.7	8.0	5.4	5.9	19.1	5.2	8.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	22.0	12.0	32.0	5.0	21.0	4.0	40.0
Max Q Clear Time (g_c+I1), s	2.1	8.1	4.3	2.2	2.5	7.7	2.1	3.1
Green Ext Time (p_c), s	0.0	6.6	0.1	0.0	0.0	5.7	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	32	67	261	7	30	22	1082	128	15	1015	7
Future Volume (veh/h)	21	32	67	261	7	30	22	1082	128	15	1015	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	34	71	275	7	32	23	1139	135	16	1068	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	130	110	346	454	385	39	1727	536	28	1697	527
Arrive On Green	0.02	0.07	0.07	0.19	0.24	0.24	0.02	0.34	0.34	0.02	0.33	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	22	34	71	275	7	32	23	1139	135	16	1068	7
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.6	0.9	2.3	7.7	0.1	0.8	0.7	9.9	3.2	0.5	9.2	0.2
Cycle Q Clear(g_c), s	0.6	0.9	2.3	7.7	0.1	0.8	0.7	9.9	3.2	0.5	9.2	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	130	110	346	454	385	39	1727	536	28	1697	527
V/C Ratio(X)	0.59	0.26	0.64	0.80	0.02	0.08	0.59	0.66	0.25	0.57	0.63	0.01
Avail Cap(c_a), veh/h	136	1144	970	749	1788	1515	136	2148	667	136	2148	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	23.1	23.7	20.1	15.1	15.3	25.4	14.7	12.5	25.6	14.7	11.7
Incr Delay (d2), s/veh	14.0	1.1	6.2	4.2	0.0	0.1	13.7	0.5	0.2	16.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	1.0	3.3	0.1	0.3	0.4	3.4	1.0	0.3	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	24.1	29.9	24.3	15.1	15.4	39.1	15.3	12.8	42.1	15.1	11.7
LnGrp LOS	D	C	C	C	B	B	D	B	B	D	B	B
Approach Vol, veh/h		127			314			1297			1091	
Approach Delay, s/veh		30.0			23.2			15.4			15.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	22.7	15.1	8.6	6.1	22.4	6.1	17.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	22.0	22.0	32.0	4.0	22.0	4.0	50.0
Max Q Clear Time (g_c+I1), s	2.5	11.9	9.7	4.3	2.7	11.2	2.6	2.8
Green Ext Time (p_c), s	0.0	5.7	0.6	0.4	0.0	5.4	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	9	101	114	4	15	29	1138	39	52	1340	15
Future Volume (veh/h)	55	9	101	114	4	15	29	1138	39	52	1340	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	9	106	120	4	16	31	1198	41	55	1411	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	167	142	155	249	211	50	1981	615	75	2055	638
Arrive On Green	0.04	0.09	0.09	0.09	0.13	0.13	0.03	0.39	0.39	0.04	0.40	0.40
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	58	9	106	120	4	16	31	1198	41	55	1411	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.7	0.2	3.4	3.4	0.1	0.5	0.9	9.7	0.8	1.6	11.8	0.3
Cycle Q Clear(g_c), s	1.7	0.2	3.4	3.4	0.1	0.5	0.9	9.7	0.8	1.6	11.8	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	167	142	155	249	211	50	1981	615	75	2055	638
V/C Ratio(X)	0.74	0.05	0.75	0.77	0.02	0.08	0.63	0.60	0.07	0.73	0.69	0.03
Avail Cap(c_a), veh/h	241	1159	982	310	1231	1043	138	2145	666	241	2441	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	21.5	22.9	23.1	19.5	19.6	24.8	12.6	9.9	24.4	12.7	9.3
Incr Delay (d2), s/veh	13.1	0.1	7.6	7.9	0.0	0.2	12.2	0.4	0.0	12.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.1	1.5	1.7	0.0	0.2	0.5	3.2	0.3	0.9	3.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.5	21.6	30.5	30.9	19.5	19.8	37.1	13.1	10.0	37.1	13.4	9.3
LnGrp LOS	D	C	C	C	B	B	D	B	A	D	B	A
Approach Vol, veh/h		173			140			1270			1482	
Approach Delay, s/veh		32.4			29.3			13.6			14.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	25.3	9.5	9.6	6.4	26.1	7.3	11.9
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	7.0	21.7	9.0	32.0	4.0	24.7	7.0	34.0
Max Q Clear Time (g_c+I1), s	3.6	11.7	5.4	5.4	2.9	13.8	3.7	2.5
Green Ext Time (p_c), s	0.0	5.8	0.1	0.4	0.0	7.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	47	76	19	67	5	28	52	19	7	99	75
Future Volume (veh/h)	65	47	76	19	67	5	28	52	19	7	99	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	49	80	20	71	5	29	55	20	7	104	79
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	300	253	36	212	15	51	268	97	13	181	137
Arrive On Green	0.06	0.16	0.16	0.02	0.12	0.12	0.03	0.20	0.20	0.01	0.18	0.18
Sat Flow, veh/h	1781	1870	1575	1781	1726	122	1781	1307	475	1781	984	747
Grp Volume(v), veh/h	68	49	80	20	0	76	29	0	75	7	0	183
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	0	1847	1781	0	1782	1781	0	1731
Q Serve(g_s), s	1.1	0.7	1.3	0.3	0.0	1.1	0.5	0.0	1.0	0.1	0.0	2.9
Cycle Q Clear(g_c), s	1.1	0.7	1.3	0.3	0.0	1.1	0.5	0.0	1.0	0.1	0.0	2.9
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.27	1.00		0.43
Lane Grp Cap(c), veh/h	103	300	253	36	0	227	51	0	365	13	0	318
V/C Ratio(X)	0.66	0.16	0.32	0.55	0.00	0.33	0.57	0.00	0.21	0.52	0.00	0.58
Avail Cap(c_a), veh/h	750	1671	1407	450	0	1339	510	0	1952	330	0	1721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	10.7	11.0	14.4	0.0	11.9	14.2	0.0	9.8	14.7	0.0	11.1
Incr Delay (d2), s/veh	7.0	0.3	0.7	12.2	0.0	0.9	9.5	0.0	0.3	27.7	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.2	0.4	0.2	0.0	0.4	0.3	0.0	0.3	0.1	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	11.0	11.7	26.6	0.0	12.8	23.8	0.0	10.1	42.4	0.0	12.7
LnGrp LOS	C	B	B	C	A	B	C	A	B	D	A	B
Approach Vol, veh/h		197			96			104			190	
Approach Delay, s/veh		14.6			15.6			13.9			13.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	10.6	5.1	9.3	5.4	10.0	6.2	8.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	32.5	7.5	26.5	8.5	29.5	12.5	21.5
Max Q Clear Time (g_c+I1), s	2.1	3.0	2.3	3.3	2.5	4.9	3.1	3.1
Green Ext Time (p_c), s	0.0	0.3	0.0	0.4	0.0	1.0	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	27	461	657	22	72	332
Future Volume (veh/h)	27	461	657	22	72	332
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	240	692	9	76	349
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	339	302	852	722	96	1140
Arrive On Green	0.19	0.19	0.46	0.46	0.05	0.61
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	28	240	692	9	76	349
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	0.6	7.2	16.0	0.2	2.1	4.5
Cycle Q Clear(g_c), s	0.6	7.2	16.0	0.2	2.1	4.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	339	302	852	722	96	1140
V/C Ratio(X)	0.08	0.80	0.81	0.01	0.79	0.31
Avail Cap(c_a), veh/h	606	539	1384	1173	214	1796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	19.3	11.8	7.4	23.4	4.7
Incr Delay (d2), s/veh	0.1	4.8	1.9	0.0	13.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.8	5.6	0.0	1.2	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.7	24.1	13.7	7.5	36.9	4.8
LnGrp LOS	B	C	B	A	D	A
Approach Vol, veh/h	268		701			425
Approach Delay, s/veh	23.3		13.6			10.6
Approach LOS	C		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.7	27.8				35.5	14.5
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	6.0	37.0				48.0	17.0
Max Q Clear Time (g_c+I1), s	4.1	18.0				6.5	9.2
Green Ext Time (p_c), s	0.0	4.8				2.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	6	2	615	17	5	527
Future Volume (veh/h)	6	2	615	17	5	527
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	2	647	18	5	555
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	15	14	1005	851	589	1005
Arrive On Green	0.01	0.01	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1781	1585	1870	1585	771	1870
Grp Volume(v), veh/h	6	2	647	18	5	555
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	771	1870
Q Serve(g_s), s	0.1	0.0	4.9	0.1	0.1	3.9
Cycle Q Clear(g_c), s	0.1	0.0	4.9	0.1	4.9	3.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	15	14	1005	851	589	1005
V/C Ratio(X)	0.39	0.15	0.64	0.02	0.01	0.55
Avail Cap(c_a), veh/h	1438	1280	2360	2000	1147	2360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.8	9.7	3.2	2.1	5.0	3.0
Incr Delay (d2), s/veh	15.1	4.7	0.7	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	0.0	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.8	14.5	3.9	2.2	5.0	3.5
LnGrp LOS	C	B	A	A	A	A
Approach Vol, veh/h	8		665			560
Approach Delay, s/veh	22.2		3.9			3.5
Approach LOS	C		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		15.6				15.6	4.2
Change Period (Y+Rc), s		5.0				5.0	4.0
Max Green Setting (Gmax), s		25.0				25.0	16.0
Max Q Clear Time (g_c+I1), s		6.9				6.9	2.1
Green Ext Time (p_c), s		3.8				3.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	467	16	39	203	7	19	3	14	11	8	7
Future Volume (veh/h)	5	467	16	39	203	7	19	3	14	11	8	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	492	17	41	214	7	20	3	15	12	8	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	1060	471	70	1179	524	37	18	90	23	54	47
Arrive On Green	0.01	0.30	0.30	0.04	0.33	0.33	0.02	0.07	0.07	0.01	0.06	0.06
Sat Flow, veh/h	1781	3554	1580	1781	3554	1580	1781	270	1351	1781	918	804
Grp Volume(v), veh/h	5	492	17	41	214	7	20	0	18	12	0	15
Grp Sat Flow(s),veh/h/ln	1781	1777	1580	1781	1777	1580	1781	0	1621	1781	0	1722
Q Serve(g_s), s	0.1	3.1	0.2	0.6	1.2	0.1	0.3	0.0	0.3	0.2	0.0	0.2
Cycle Q Clear(g_c), s	0.1	3.1	0.2	0.6	1.2	0.1	0.3	0.0	0.3	0.2	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.83	1.00		0.47
Lane Grp Cap(c), veh/h	10	1060	471	70	1179	524	37	0	109	23	0	102
V/C Ratio(X)	0.51	0.46	0.04	0.59	0.18	0.01	0.54	0.00	0.17	0.53	0.00	0.15
Avail Cap(c_a), veh/h	260	3367	1497	519	3885	1727	454	0	2126	260	0	2070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	7.8	6.8	13.0	6.5	6.2	13.3	0.0	12.1	13.5	0.0	12.3
Incr Delay (d2), s/veh	36.4	0.3	0.0	7.7	0.1	0.0	12.0	0.0	0.7	17.7	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.0	0.3	0.2	0.0	0.2	0.0	0.1	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.0	8.2	6.9	20.6	6.6	6.2	25.3	0.0	12.8	31.2	0.0	12.9
LnGrp LOS	D	A	A	C	A	A	C	A	B	C	A	B
Approach Vol, veh/h		514			262			38			27	
Approach Delay, s/veh		8.5			8.8			19.4			21.0	
Approach LOS		A			A			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.3	5.8	5.1	12.2	4.6	5.6	4.1	13.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	36.0	8.0	26.0	7.0	33.0	4.0	30.0
Max Q Clear Time (g_c+I1), s	2.2	2.3	2.6	5.1	2.3	2.2	2.1	3.2
Green Ext Time (p_c), s	0.0	0.1	0.0	2.9	0.0	0.0	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	9	6	116	10	39	3	511	274	104	341	12
Future Volume (veh/h)	6	9	6	116	10	39	3	511	274	104	341	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	9	6	122	11	41	3	538	288	109	359	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	105	89	259	233	197	11	1474	458	245	1819	565
Arrive On Green	0.01	0.06	0.06	0.07	0.12	0.12	0.00	0.29	0.29	0.07	0.36	0.36
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	6	9	6	122	11	41	3	538	288	109	359	13
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.1	0.2	0.1	1.3	0.2	0.9	0.0	3.3	6.2	1.2	1.9	0.2
Cycle Q Clear(g_c), s	0.1	0.2	0.1	1.3	0.2	0.9	0.0	3.3	6.2	1.2	1.9	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	22	105	89	259	233	197	11	1474	458	245	1819	565
V/C Ratio(X)	0.27	0.09	0.07	0.47	0.05	0.21	0.26	0.36	0.63	0.45	0.20	0.02
Avail Cap(c_a), veh/h	968	762	646	968	762	646	968	2212	687	968	2212	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	17.6	17.6	17.4	15.1	15.4	19.5	11.1	12.1	17.5	8.7	8.2
Incr Delay (d2), s/veh	6.3	0.3	0.3	1.3	0.1	0.5	11.9	0.2	1.4	1.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.5	0.1	0.3	0.0	1.0	1.9	0.5	0.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	17.9	17.9	18.7	15.2	16.0	31.4	11.3	13.6	18.8	8.8	8.2
LnGrp LOS	C	B	B	B	B	B	C	B	B	B	A	A
Approach Vol, veh/h		21			174			829			481	
Approach Delay, s/veh		20.1			17.9			12.1			11.0	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	16.3	7.9	7.2	5.1	19.0	5.3	9.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	3.2	8.2	3.3	2.2	2.0	3.9	2.1	2.9
Green Ext Time (p_c), s	0.2	3.1	0.2	0.0	0.0	1.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	347	10	12	136	14	15	14	21	5	8	4
Future Volume (veh/h)	9	347	10	12	136	14	15	14	21	5	8	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	365	11	13	143	15	16	15	22	5	8	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	771	344	24	785	350	83	87	74	215	225	191
Arrive On Green	0.01	0.22	0.22	0.01	0.22	0.22	0.05	0.05	0.05	0.12	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	9	365	11	13	143	15	16	15	22	5	8	4
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.2	3.0	0.2	0.2	1.1	0.2	0.3	0.3	0.4	0.1	0.1	0.1
Cycle Q Clear(g_c), s	0.2	3.0	0.2	0.2	1.1	0.2	0.3	0.3	0.4	0.1	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	771	344	24	785	350	83	87	74	215	225	191
V/C Ratio(X)	0.53	0.47	0.03	0.54	0.18	0.04	0.19	0.17	0.30	0.02	0.04	0.02
Avail Cap(c_a), veh/h	590	2569	1146	590	2569	1146	1288	1352	1146	858	901	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	11.3	10.2	16.3	10.5	10.2	15.2	15.2	15.3	12.9	12.9	12.9
Incr Delay (d2), s/veh	22.8	0.5	0.0	17.1	0.1	0.0	1.1	0.9	2.2	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.9	0.1	0.2	0.3	0.1	0.1	0.1	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	11.8	10.3	33.4	10.6	10.2	16.3	16.1	17.5	12.9	13.0	12.9
LnGrp LOS	D	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		385			171			53			17	
Approach Delay, s/veh		12.4			12.3			16.8			12.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		6.5	5.5	12.2		9.0	5.3	12.3
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		24.0	11.0	24.0		16.0	11.0	24.0
Max Q Clear Time (g_c+I1), s		2.4	2.2	5.0		2.1	2.2	3.1
Green Ext Time (p_c), s		0.1	0.0	2.3		0.0	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	10	20	16	10	44	30	644	10	79	530	30
Future Volume (veh/h)	30	10	20	16	10	44	30	644	10	79	530	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	11	21	17	11	46	32	678	11	83	558	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	161	137	31	137	116	54	1369	425	112	1535	476
Arrive On Green	0.03	0.09	0.09	0.02	0.07	0.07	0.03	0.27	0.27	0.06	0.30	0.30
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	32	11	21	17	11	46	32	678	11	83	558	32
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.6	0.2	0.4	0.3	0.2	1.0	0.6	4.0	0.2	1.6	3.0	0.5
Cycle Q Clear(g_c), s	0.6	0.2	0.4	0.3	0.2	1.0	0.6	4.0	0.2	1.6	3.0	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	54	161	137	31	137	116	54	1369	425	112	1535	476
V/C Ratio(X)	0.59	0.07	0.15	0.55	0.08	0.40	0.59	0.50	0.03	0.74	0.36	0.07
Avail Cap(c_a), veh/h	554	846	717	554	846	717	554	2453	761	554	2453	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	14.9	15.0	17.2	15.3	15.7	16.9	10.9	9.5	16.3	9.7	8.8
Incr Delay (d2), s/veh	9.7	0.2	0.5	14.3	0.2	2.2	9.7	0.3	0.0	9.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.1	0.2	0.1	0.4	0.4	1.2	0.1	0.8	0.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	15.0	15.5	31.5	15.5	17.8	26.7	11.2	9.6	25.4	9.9	8.9
LnGrp LOS	C	B	B	C	B	B	C	B	A	C	A	A
Approach Vol, veh/h		64			74			721			673	
Approach Delay, s/veh		21.0			20.6			11.9			11.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	14.5	5.6	8.1	6.1	15.6	6.1	7.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	6.0	2.3	2.4	2.6	5.0	2.6	3.0
Green Ext Time (p_c), s	0.1	3.5	0.0	0.0	0.0	3.1	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	121	22	173	34	7	15	6	314	15	7	25
Future Volume (veh/h)	19	121	22	173	34	7	15	6	314	15	7	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	127	23	182	36	7	16	6	331	16	7	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	324	145	241	735	328	29	493	418	29	493	418
Arrive On Green	0.02	0.09	0.09	0.14	0.21	0.21	0.02	0.26	0.26	0.02	0.26	0.26
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	20	127	23	182	36	7	16	6	331	16	7	26
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.5	1.4	0.5	4.0	0.3	0.1	0.4	0.1	7.9	0.4	0.1	0.5
Cycle Q Clear(g_c), s	0.5	1.4	0.5	4.0	0.3	0.1	0.4	0.1	7.9	0.4	0.1	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	35	324	145	241	735	328	29	493	418	29	493	418
V/C Ratio(X)	0.56	0.39	0.16	0.75	0.05	0.02	0.55	0.01	0.79	0.55	0.01	0.06
Avail Cap(c_a), veh/h	483	1928	860	659	2279	1017	483	1015	860	483	1015	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	17.4	17.0	16.9	12.9	12.8	19.8	11.0	13.9	19.8	11.0	11.2
Incr Delay (d2), s/veh	13.3	0.8	0.5	4.7	0.0	0.0	15.4	0.0	3.4	15.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.5	0.2	1.7	0.1	0.0	0.3	0.0	2.6	0.3	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	18.1	17.5	21.6	12.9	12.8	35.2	11.0	17.3	35.2	11.0	11.2
LnGrp LOS	C	B	B	C	B	B	D	B	B	D	B	B
Approach Vol, veh/h		170			225			353			49	
Approach Delay, s/veh		19.8			20.0			18.0			19.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	15.7	10.5	8.7	5.7	15.7	5.8	13.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	22.0	15.0	22.0	11.0	22.0	11.0	26.0
Max Q Clear Time (g_c+I1), s	2.4	9.9	6.0	3.4	2.4	2.5	2.5	2.3
Green Ext Time (p_c), s	0.0	0.9	0.3	0.7	0.0	0.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	25	200	200	6	0	66	736	268	0	528	0
Future Volume (veh/h)	0	25	200	200	6	0	66	736	268	0	528	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	26	211	211	6	0	69	775	282	0	556	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	327	277	359	737	625	180	1915	594	8	1060	329
Arrive On Green	0.00	0.17	0.17	0.10	0.39	0.00	0.05	0.38	0.38	0.00	0.21	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	0	26	211	211	6	0	69	775	282	0	556	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.0	0.5	5.5	2.5	0.1	0.0	0.8	4.8	5.9	0.0	4.2	0.0
Cycle Q Clear(g_c), s	0.0	0.5	5.5	2.5	0.1	0.0	0.8	4.8	5.9	0.0	4.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	8	327	277	359	737	625	180	1915	594	8	1060	329
V/C Ratio(X)	0.00	0.08	0.76	0.59	0.01	0.00	0.38	0.40	0.47	0.00	0.52	0.00
Avail Cap(c_a), veh/h	878	691	585	878	737	625	878	2004	622	878	2004	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.0	17.0	18.5	8.0	0.0	19.9	10.0	10.3	0.0	15.3	0.0
Incr Delay (d2), s/veh	0.0	0.1	4.3	1.5	0.0	0.0	1.3	0.1	0.6	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	2.0	1.0	0.0	0.0	0.3	1.4	1.7	0.0	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.1	21.3	20.1	8.0	0.0	21.2	10.1	10.9	0.0	15.7	0.0
LnGrp LOS	A	B	C	C	A	A	C	B	B	A	B	A
Approach Vol, veh/h		237			217			1126			556	
Approach Delay, s/veh		20.6			19.7			11.0			15.7	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	21.2	9.5	12.6	7.3	14.0	0.0	22.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	0.0	7.9	4.5	7.5	2.8	6.2	0.0	2.1
Green Ext Time (p_c), s	0.0	4.2	0.4	0.5	0.1	2.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	212	0	11	803	9	0	0	3	2	0	10
Future Volume (veh/h)	19	212	0	11	803	9	0	0	3	2	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	223	0	12	845	9	0	0	3	2	0	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	1407	0	23	1398	15	0	0	15	35	0	31
Arrive On Green	0.02	0.40	0.00	0.01	0.39	0.39	0.00	0.00	0.01	0.02	0.00	0.02
Sat Flow, veh/h	1781	3647	0	1781	3602	38	0	0	1578	1781	0	1578
Grp Volume(v), veh/h	20	223	0	12	417	437	0	0	3	2	0	11
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1863	0	0	1578	1781	0	1578
Q Serve(g_s), s	0.3	1.2	0.0	0.2	5.3	5.3	0.0	0.0	0.1	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.3	1.2	0.0	0.2	5.3	5.3	0.0	0.0	0.1	0.0	0.0	0.2
Prop In Lane	1.00		0.00	1.00		0.02	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	1407	0	23	690	723	0	0	15	35	0	31
V/C Ratio(X)	0.55	0.16	0.00	0.53	0.60	0.60	0.00	0.00	0.21	0.06	0.00	0.36
Avail Cap(c_a), veh/h	250	2249	0	250	1124	1179	0	0	1165	1315	0	1165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.8	5.5	0.0	14.0	7.0	7.0	0.0	0.0	14.0	13.7	0.0	13.8
Incr Delay (d2), s/veh	12.1	0.1	0.0	17.8	0.9	0.8	0.0	0.0	6.9	0.7	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.2	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	5.6	0.0	31.8	7.8	7.8	0.0	0.0	20.8	14.4	0.0	20.6
LnGrp LOS	C	A	A	C	A	A	A	A	C	B	A	C
Approach Vol, veh/h		243			866			3			13	
Approach Delay, s/veh		7.3			8.1			20.8			19.6	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.3	4.4	15.3		4.6	4.6	15.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	4.0	18.0		21.0	4.0	18.0
Max Q Clear Time (g_c+I1), s		2.1	2.2	3.2		2.2	2.3	7.3
Green Ext Time (p_c), s		0.0	0.0	1.0		0.0	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	5	40	45	7	69	60	120	16	16	72	98
Future Volume (veh/h)	72	5	40	45	7	69	60	120	16	16	72	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	5	42	47	7	73	63	126	17	17	76	103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	262	221	79	224	189	100	362	305	32	291	245
Arrive On Green	0.06	0.14	0.14	0.04	0.12	0.12	0.06	0.19	0.19	0.02	0.16	0.16
Sat Flow, veh/h	1781	1870	1575	1781	1870	1575	1781	1870	1577	1781	1870	1575
Grp Volume(v), veh/h	76	5	42	47	7	73	63	126	17	17	76	103
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1575	1781	1870	1577	1781	1870	1575
Q Serve(g_s), s	1.1	0.1	0.6	0.7	0.1	1.1	0.9	1.5	0.2	0.3	0.9	1.6
Cycle Q Clear(g_c), s	1.1	0.1	0.6	0.7	0.1	1.1	0.9	1.5	0.2	0.3	0.9	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	262	221	79	224	189	100	362	305	32	291	245
V/C Ratio(X)	0.66	0.02	0.19	0.60	0.03	0.39	0.63	0.35	0.06	0.54	0.26	0.42
Avail Cap(c_a), veh/h	336	1554	1308	336	1554	1308	269	1624	1369	269	1624	1368
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	9.8	10.1	12.4	10.3	10.8	12.2	9.2	8.7	12.9	9.8	10.1
Incr Delay (d2), s/veh	6.3	0.0	0.4	7.1	0.1	1.3	6.4	0.6	0.1	13.4	0.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.4	0.0	0.3	0.4	0.4	0.1	0.2	0.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	9.8	10.5	19.5	10.4	12.1	18.7	9.8	8.8	26.3	10.3	11.3
LnGrp LOS	B	A	B	B	B	B	B	A	A	C	B	B
Approach Vol, veh/h		123			127			206			196	
Approach Delay, s/veh		15.3			14.7			12.4			12.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	9.1	5.2	7.7	5.5	8.1	5.7	7.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	23.0	5.0	22.0	4.0	23.0	5.0	22.0
Max Q Clear Time (g_c+I1), s	2.3	3.5	2.7	2.6	2.9	3.6	3.1	3.1
Green Ext Time (p_c), s	0.0	0.6	0.0	0.1	0.0	0.6	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

SimTraffic Post-Processor | **Kaiser Roseville Campus Expansion TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions**
Volume and Delay by Movement | **AM Peak Hour**

Intersection 5 **Cirby Way/Cirby Hills Dr-Kaiser North Driveway** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	84	105.5%	40.0	8.5	D
	Through						
	Right Turn	50	61	121.6%	12.6	2.8	B
	Subtotal	130	145	111.7%	28.6	5.3	C
SB	Left Turn	30	30	100.1%	64.5	17.0	E
	Through						
	Right Turn	70	78	111.3%	30.2	8.4	C
	Subtotal	100	108	107.9%	39.9	9.5	D
EB	Left Turn	90	76	84.9%	46.7	6.8	D
	Through	1,230	1,073	87.2%	11.8	1.7	B
	Right Turn	180	146	81.3%	11.2	2.2	B
	Subtotal	1,500	1,296	86.4%	13.8	2.0	B
WB	Left Turn	120	82	68.4%	146.0	47.1	F
	Through	1,800	1,177	65.4%	134.9	33.9	F
	Right Turn	30	19	62.1%	108.3	59.9	F
	Subtotal	1,950	1,278	65.5%	135.4	34.2	F
Total		3,680	2,827	76.8%	70.2	14.2	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	60	29	145	24	17	54	718	273	28	220	4
Future Volume (veh/h)	4	60	29	145	24	17	54	718	273	28	220	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	63	31	153	25	18	57	756	287	29	232	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	183	166	194	32	23	89	826	700	68	1534	26
Arrive On Green	0.10	0.10	0.10	0.14	0.14	0.14	0.05	0.44	0.44	0.04	0.43	0.43
Sat Flow, veh/h	111	1753	1585	1383	226	163	1781	1870	1585	1781	3575	62
Grp Volume(v), veh/h	67	0	31	196	0	0	57	756	287	29	115	121
Grp Sat Flow(s),veh/h/ln	1865	0	1585	1772	0	0	1781	1870	1585	1781	1777	1859
Q Serve(g_s), s	2.1	0.0	1.1	6.7	0.0	0.0	2.0	23.7	7.7	1.0	2.5	2.5
Cycle Q Clear(g_c), s	2.1	0.0	1.1	6.7	0.0	0.0	2.0	23.7	7.7	1.0	2.5	2.5
Prop In Lane	0.06		1.00	0.78		0.09	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	195	0	166	248	0	0	89	826	700	68	763	798
V/C Ratio(X)	0.34	0.00	0.19	0.79	0.00	0.00	0.64	0.92	0.41	0.43	0.15	0.15
Avail Cap(c_a), veh/h	238	0	202	735	0	0	171	976	827	171	958	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	25.6	26.1	0.0	0.0	29.2	16.4	11.9	29.5	10.9	10.9
Incr Delay (d2), s/veh	0.4	0.0	0.2	2.1	0.0	0.0	2.8	10.8	0.1	1.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.4	2.8	0.0	0.0	0.9	11.2	2.4	0.4	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	0.0	25.8	28.2	0.0	0.0	32.0	27.2	12.1	31.1	11.0	11.0
LnGrp LOS	C	A	C	C	A	A	C	C	B	C	B	B
Approach Vol, veh/h		98			196			1100			265	
Approach Delay, s/veh		26.3			28.2			23.5			13.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	33.0		10.5	7.1	32.2		12.8
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	6.0	32.7		8.0	6.0	* 34		26.0
Max Q Clear Time (g_c+I1), s	3.0	25.7		4.1	4.0	4.5		8.7
Green Ext Time (p_c), s	0.0	1.9		0.1	0.0	0.8		0.4

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	296	302	1	50	72	3	0	354	318	0	196	246
Future Volume (veh/h)	296	302	1	50	72	3	0	354	318	0	196	246
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	312	318	1	53	76	3	0	373	335	0	206	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	426	445	1	251	492	19	0	579	490	0	579	
Arrive On Green	0.24	0.24	0.24	0.14	0.14	0.14	0.00	0.31	0.31	0.00	0.31	0.00
Sat Flow, veh/h	1781	1863	6	1781	3486	137	0	1870	1585	0	1870	1585
Grp Volume(v), veh/h	312	0	319	53	39	40	0	373	335	0	206	0
Grp Sat Flow(s),veh/h/ln	1781	0	1869	1781	1777	1846	0	1870	1585	0	1870	1585
Q Serve(g_s), s	7.5	0.0	7.3	1.2	0.9	0.9	0.0	8.0	8.6	0.0	4.0	0.0
Cycle Q Clear(g_c), s	7.5	0.0	7.3	1.2	0.9	0.9	0.0	8.0	8.6	0.0	4.0	0.0
Prop In Lane	1.00		0.00	1.00		0.07	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	426	0	447	251	251	260	0	579	490	0	579	
V/C Ratio(X)	0.73	0.00	0.71	0.21	0.15	0.16	0.00	0.64	0.68	0.00	0.36	
Avail Cap(c_a), veh/h	768	0	806	307	307	318	0	766	649	0	579	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	16.3	0.0	16.2	17.6	17.5	17.5	0.0	13.8	14.0	0.0	12.4	0.0
Incr Delay (d2), s/veh	1.8	0.0	1.6	0.3	0.2	0.2	0.0	2.6	3.7	0.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	2.9	0.5	0.3	0.3	0.0	3.2	3.1	0.0	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	0.0	17.8	17.9	17.7	17.7	0.0	16.4	17.7	0.0	13.2	0.0
LnGrp LOS	B	A	B	B	B	B	A	B	B	A	B	
Approach Vol, veh/h		631			132			708			206	A
Approach Delay, s/veh		17.9			17.8			17.0			13.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		11.4		18.5		16.4		18.5				
Change Period (Y+Rc), s		4.9		* 4.2		5.3		* 4.2				
Max Green Setting (Gmax), s		8.0		* 9.4		20.0		* 19				
Max Q Clear Time (g_c+I1), s		3.2		6.0		9.5		10.6				
Green Ext Time (p_c), s		0.1		0.4		1.6		3.8				

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	441	187	38	300	33	148	12	38	3	15	7
Future Volume (veh/h)	12	441	187	38	300	33	148	12	38	3	15	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	464	197	40	316	35	156	13	40	3	16	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	782	675	245	630	66	582	18	227	222	95	39
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	18	1837	1585	86	1480	154	1523	127	1585	74	665	272
Grp Volume(v), veh/h	477	0	197	391	0	0	169	0	40	26	0	0
Grp Sat Flow(s),veh/h/ln	1855	0	1585	1720	0	0	1650	0	1585	1012	0	0
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	1.6	2.9	0.0	0.0	1.7	0.0	0.4	1.7	0.0	0.0
Prop In Lane	0.03		1.00	0.10		0.09	0.92		1.00	0.12		0.27
Lane Grp Cap(c), veh/h	984	0	675	941	0	0	600	0	227	356	0	0
V/C Ratio(X)	0.48	0.00	0.29	0.42	0.00	0.00	0.28	0.00	0.18	0.07	0.00	0.00
Avail Cap(c_a), veh/h	2684	0	2148	2438	0	0	1959	0	1748	1998	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.2	0.0	3.6	4.0	0.0	0.0	7.7	0.0	7.2	7.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.2	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.5	0.0	3.8	4.2	0.0	0.0	7.8	0.0	7.3	7.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		674			391			209			26	
Approach Delay, s/veh		4.3			4.2			7.7			7.2	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.3		6.7		12.3		6.7				
Change Period (Y+Rc), s		* 4.2		4.0		* 4.2		4.0				
Max Green Setting (Gmax), s		* 26		21.0		* 26		21.0				
Max Q Clear Time (g_c+I1), s		5.7		3.7		4.9		3.7				
Green Ext Time (p_c), s		2.4		0.4		1.4		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	4.9
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	545	11	34	419	117	14	40	45	39	27	27
Future Volume (veh/h)	95	545	11	34	419	117	14	40	45	39	27	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	574	12	36	441	123	15	42	47	41	28	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	601	952	20	594	734	205	344	70	78	307	22	137
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	847	1825	38	829	1407	392	1348	806	902	373	255	1585
Grp Volume(v), veh/h	100	0	586	36	0	564	15	0	89	69	0	28
Grp Sat Flow(s),veh/h/ln	847	0	1863	829	0	1800	1348	0	1708	627	0	1585
Q Serve(g_s), s	2.0	0.0	4.6	0.7	0.0	4.6	0.0	0.0	1.1	0.8	0.0	0.3
Cycle Q Clear(g_c), s	6.5	0.0	4.6	5.3	0.0	4.6	1.8	0.0	1.1	1.8	0.0	0.3
Prop In Lane	1.00		0.02	1.00		0.22	1.00		0.53	0.59		1.00
Lane Grp Cap(c), veh/h	601	0	972	594	0	938	344	0	148	329	0	137
V/C Ratio(X)	0.17	0.00	0.60	0.06	0.00	0.60	0.04	0.00	0.60	0.21	0.00	0.20
Avail Cap(c_a), veh/h	1122	0	2119	1105	0	2047	1386	0	1469	1481	0	1363
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	0.0	3.5	5.3	0.0	3.5	10.5	0.0	9.2	10.2	0.0	8.9
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.0	0.0	0.5	0.0	0.0	1.5	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	3.9	5.4	0.0	4.0	10.5	0.0	10.7	10.3	0.0	9.2
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	A
Approach Vol, veh/h		686			600			104			97	
Approach Delay, s/veh		4.2			4.0			10.6			10.0	
Approach LOS		A			A			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.1		5.8		15.1		5.8				
Change Period (Y+Rc), s		* 4.2		4.0		* 4.2		4.0				
Max Green Setting (Gmax), s		* 24		18.0		* 24		18.0				
Max Q Clear Time (g_c+I1), s		8.5		3.8		7.3		3.8				
Green Ext Time (p_c), s		2.4		0.2		2.0		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	343	27	180	338	8	44	57	460	13	22	26
Future Volume (veh/h)	74	343	27	180	338	8	44	57	460	13	22	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	361	23	189	356	6	46	60	99	14	23	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	516	33	244	700	12	275	116	184	211	88	13
Arrive On Green	0.05	0.30	0.30	0.14	0.38	0.38	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1781	1740	111	1781	1834	31	726	996	1585	284	758	113
Grp Volume(v), veh/h	78	0	384	189	0	362	106	0	99	41	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1850	1781	0	1865	1723	0	1585	1155	0	0
Q Serve(g_s), s	1.2	0.0	5.0	2.8	0.0	4.0	0.0	0.0	1.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	5.0	2.8	0.0	4.0	1.5	0.0	1.6	1.5	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.02	0.43		1.00	0.34		0.10
Lane Grp Cap(c), veh/h	93	0	549	244	0	712	390	0	184	312	0	0
V/C Ratio(X)	0.84	0.00	0.70	0.77	0.00	0.51	0.27	0.00	0.54	0.13	0.00	0.00
Avail Cap(c_a), veh/h	329	0	1351	526	0	1568	1100	0	877	996	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.7	0.0	8.5	11.3	0.0	6.4	11.2	0.0	11.3	10.8	0.0	0.0
Incr Delay (d2), s/veh	7.2	0.0	1.3	2.0	0.0	0.5	0.1	0.0	0.9	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.4	0.9	0.0	0.9	0.4	0.0	0.4	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	9.8	13.3	0.0	6.9	11.4	0.0	12.2	10.9	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		462			551			205			41	
Approach Delay, s/veh		11.5			9.1			11.8			10.9	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	12.2		7.1	5.4	14.5		7.1
Change Period (Y+Rc), s	4.0	* 4.2		4.0	4.0	* 4.2		4.0
Max Green Setting (Gmax), s	8.0	* 20		15.0	5.0	* 23		15.0
Max Q Clear Time (g_c+I1), s	4.8	7.0		3.5	3.2	6.0		3.5
Green Ext Time (p_c), s	0.1	1.1		0.1	0.0	1.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	90	399	91	63	4	247	736	20	29	883	29
Future Volume (veh/h)	90	90	399	91	63	4	247	736	20	29	883	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	95	63	96	66	1	260	775	8	31	929	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	323	339	287	314	330	280	366	1041	464	231	1212	
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.11	0.29	0.29	0.13	0.34	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	95	95	63	96	66	1	260	775	8	31	929	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.5	3.4	2.6	3.6	2.3	0.0	5.6	15.2	0.3	1.2	17.9	0.0
Cycle Q Clear(g_c), s	3.5	3.4	2.6	3.6	2.3	0.0	5.6	15.2	0.3	1.2	17.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	323	339	287	314	330	280	366	1041	464	231	1212	
V/C Ratio(X)	0.29	0.28	0.22	0.31	0.20	0.00	0.71	0.74	0.02	0.13	0.77	
Avail Cap(c_a), veh/h	463	487	412	463	487	412	1124	1849	825	463	1849	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.2	27.1	26.8	27.6	27.0	26.1	33.2	24.6	19.3	29.7	22.6	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.1	0.2	0.1	0.0	1.0	1.5	0.0	0.1	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.5	1.0	1.5	1.0	0.0	2.3	6.0	0.1	0.5	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	27.3	27.0	27.8	27.1	26.1	34.2	26.1	19.3	29.7	24.0	0.0
LnGrp LOS	C	C	C	C	C	C	C	C	B	C	C	
Approach Vol, veh/h		253			163			1043			960	A
Approach Delay, s/veh		27.3			27.5			28.0			24.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.9	27.4		17.9	11.1	30.2		17.6
Change Period (Y+Rc), s	4.0	4.9		4.0	3.0	* 4		4.0
Max Green Setting (Gmax), s	20.0	40.0		20.0	25.0	* 40		20.0
Max Q Clear Time (g_c+I1), s	3.2	17.2		5.5	7.6	19.9		5.6
Green Ext Time (p_c), s	0.0	5.4		0.5	0.6	6.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	354	402	310	203	2
Future Volume (veh/h)	1	354	402	310	203	2
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	1	373	423	326	216	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	7	1983	746	629	449	203
Arrive On Green	0.00	0.56	0.40	0.40	0.13	0.00
Sat Flow, veh/h	1781	3647	1870	1577	3563	1610
Grp Volume(v), veh/h	1	373	423	326	216	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1870	1577	1781	1610
Q Serve(g_s), s	0.0	1.3	4.4	4.0	1.4	0.0
Cycle Q Clear(g_c), s	0.0	1.3	4.4	4.0	1.4	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	7	1983	746	629	449	203
V/C Ratio(X)	0.14	0.19	0.57	0.52	0.48	0.00
Avail Cap(c_a), veh/h	281	4209	1625	1370	3095	1399
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.6	2.8	5.9	5.8	10.3	0.0
Incr Delay (d2), s/veh	9.0	0.0	0.7	0.7	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.9	0.7	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.6	2.8	6.6	6.4	11.1	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		374	749		216	
Approach Delay, s/veh		2.9	6.5		11.1	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		18.1		7.2	4.0	14.1
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0		22.0	4.0	22.0
Max Q Clear Time (g_c+I1), s		3.3		3.4	2.0	6.4
Green Ext Time (p_c), s		2.5		0.7	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	443	648	323	22	1	22
Future Volume (veh/h)	443	648	323	22	1	22
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	466	682	356	0	1	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	878	781	562	548	52	44
Arrive On Green	0.49	0.49	0.16	0.00	0.03	0.03
Sat Flow, veh/h	1781	1585	3563	1870	1870	1570
Grp Volume(v), veh/h	466	682	356	0	1	23
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1570
Q Serve(g_s), s	6.7	14.3	3.5	0.0	0.0	0.5
Cycle Q Clear(g_c), s	6.7	14.3	3.5	0.0	0.0	0.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	878	781	562	548	52	44
V/C Ratio(X)	0.53	0.87	0.63	0.00	0.02	0.53
Avail Cap(c_a), veh/h	1003	892	955	1554	852	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	6.5	8.4	14.7	0.0	17.6	17.9
Incr Delay (d2), s/veh	0.5	8.7	1.2	0.0	0.1	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.9	1.2	0.0	0.0	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.0	17.1	15.9	0.0	17.8	27.3
LnGrp LOS	A	B	B	A	B	C
Approach Vol, veh/h	1148			356	24	
Approach Delay, s/veh	13.0			15.9	26.9	
Approach LOS	B			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		14.9		22.4	9.9	5.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0		21.0	10.0	17.0
Max Q Clear Time (g_c+I1), s		0.0		16.3	5.5	2.5
Green Ext Time (p_c), s		0.0		2.1	0.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	66	202	421	99	37	24
Future Volume (veh/h)	66	202	421	99	37	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	213	443	104	39	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	92	1664	941	291	881	784
Arrive On Green	0.05	0.33	0.18	0.18	0.49	0.49
Sat Flow, veh/h	1781	5274	5274	1576	1781	1585
Grp Volume(v), veh/h	69	213	443	104	39	25
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1576	1781	1585
Q Serve(g_s), s	1.7	1.3	3.4	2.6	0.5	0.4
Cycle Q Clear(g_c), s	1.7	1.3	3.4	2.6	0.5	0.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	92	1664	941	291	881	784
V/C Ratio(X)	0.75	0.13	0.47	0.36	0.04	0.03
Avail Cap(c_a), veh/h	240	3443	2295	709	881	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	10.6	16.2	15.8	5.8	5.8
Incr Delay (d2), s/veh	11.6	0.0	0.4	0.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.4	1.1	0.8	0.2	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.4	10.6	16.6	16.6	5.9	5.9
LnGrp LOS	C	B	B	B	A	A
Approach Vol, veh/h		282	547		64	
Approach Delay, s/veh		15.9	16.6		5.9	
Approach LOS		B	B		A	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		18.5		26.0	6.3	12.2
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0		22.0	6.0	20.0
Max Q Clear Time (g_c+I1), s		3.3		2.5	3.7	5.4
Green Ext Time (p_c), s		1.2		0.1	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	156	15	773	406	408	39	971	287	220	840	96
Future Volume (veh/h)	73	156	15	773	406	408	39	971	287	220	840	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	164	16	814	427	429	41	1022	302	232	884	101
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	355	110	929	1443	448	54	1524	833	272	2147	666
Arrive On Green	0.06	0.07	0.07	0.27	0.28	0.28	0.03	0.30	0.30	0.15	0.42	0.42
Sat Flow, veh/h	1781	5106	1585	3456	5106	1585	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	77	164	16	814	427	429	41	1022	302	232	884	101
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1585	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	3.2	2.3	0.7	17.1	5.0	20.2	1.7	13.3	6.5	9.6	9.2	3.0
Cycle Q Clear(g_c), s	3.2	2.3	0.7	17.1	5.0	20.2	1.7	13.3	6.5	9.6	9.2	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	355	110	929	1443	448	54	1524	833	272	2147	666
V/C Ratio(X)	0.77	0.46	0.14	0.88	0.30	0.96	0.76	0.67	0.36	0.85	0.41	0.15
Avail Cap(c_a), veh/h	234	1948	605	1046	1443	448	211	2016	1101	281	2217	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	34.0	33.2	26.6	21.3	26.8	36.6	23.4	21.0	31.4	15.4	13.6
Incr Delay (d2), s/veh	11.9	0.9	0.6	7.8	0.1	31.8	18.9	0.5	0.3	21.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.0	0.3	7.7	1.9	11.2	1.0	5.2	0.0	5.6	3.4	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.3	34.9	33.8	34.4	21.5	58.6	55.4	23.9	21.2	52.7	15.6	13.7
LnGrp LOS	D	C	C	C	C	E	E	C	C	D	B	B
Approach Vol, veh/h		257			1670			1365			1217	
Approach Delay, s/veh		38.5			37.3			24.3			22.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	26.7	24.4	9.3	6.3	36.0	8.3	25.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	30.0	23.0	29.0	9.0	33.0	10.0	12.0
Max Q Clear Time (g_c+I1), s	11.6	15.3	19.1	4.3	3.7	11.2	5.2	22.2
Green Ext Time (p_c), s	0.0	7.3	1.3	1.1	0.0	6.8	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	26	637	1396	24	118	76
Future Volume (veh/h)	26	637	1396	24	118	76
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	671	1469	25	124	80
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	44	2418	1922	595	679	604
Arrive On Green	0.02	0.47	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1781	5274	5274	1581	1781	1585
Grp Volume(v), veh/h	27	671	1469	25	124	80
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1581	1781	1585
Q Serve(g_s), s	0.8	4.4	13.9	0.6	2.6	1.8
Cycle Q Clear(g_c), s	0.8	4.4	13.9	0.6	2.6	1.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	44	2418	1922	595	679	604
V/C Ratio(X)	0.62	0.28	0.76	0.04	0.18	0.13
Avail Cap(c_a), veh/h	129	2873	2132	660	679	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	8.8	15.0	10.9	11.3	11.1
Incr Delay (d2), s/veh	13.3	0.1	1.5	0.0	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.2	4.4	0.2	1.0	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.9	8.8	16.6	10.9	11.9	11.6
LnGrp LOS	D	A	B	B	B	B
Approach Vol, veh/h		698	1494		204	
Approach Delay, s/veh		10.1	16.5		11.8	
Approach LOS		B	B		B	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			30.1		25.0	5.4	24.7
Change Period (Y+Rc), s			4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s			31.0		21.0	4.0	23.0
Max Q Clear Time (g_c+I1), s			6.4		4.6	2.8	15.9
Green Ext Time (p_c), s			4.3		0.5	0.0	4.9

Intersection Summary		
HCM 6th Ctrl Delay		14.2
HCM 6th LOS		B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	744	11	19	1428	13	1
Future Volume (veh/h)	744	11	19	1428	13	1
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	783	12	20	1503	14	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1749	541	34	2231	736	655
Arrive On Green	0.34	0.34	0.02	0.44	0.41	0.41
Sat Flow, veh/h	5274	1580	1781	5274	1781	1585
Grp Volume(v), veh/h	783	12	20	1503	14	1
Grp Sat Flow(s),veh/h/ln	1702	1580	1781	1702	1781	1585
Q Serve(g_s), s	6.3	0.3	0.6	12.5	0.2	0.0
Cycle Q Clear(g_c), s	6.3	0.3	0.6	12.5	0.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1749	541	34	2231	736	655
V/C Ratio(X)	0.45	0.02	0.58	0.67	0.02	0.00
Avail Cap(c_a), veh/h	2109	653	134	2876	736	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	11.6	25.9	12.0	9.3	9.2
Incr Delay (d2), s/veh	0.2	0.0	14.8	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.1	0.4	3.5	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.8	11.6	40.7	12.4	9.3	9.2
LnGrp LOS	B	B	D	B	A	A
Approach Vol, veh/h	795			1523	15	
Approach Delay, s/veh	13.7			12.8	9.3	
Approach LOS	B			B	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		26.0	5.0	22.2		27.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		22.0	4.0	22.0		30.0
Max Q Clear Time (g_c+I1), s		2.2	2.6	8.3		14.5
Green Ext Time (p_c), s		0.0	0.0	4.2		8.8

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	580	63	129	1323	260	69	79	72	120	72	72
Future Volume (veh/h)	119	580	63	129	1323	260	69	79	72	120	72	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	611	66	136	1393	274	73	83	76	126	76	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	2058	639	176	2101	652	93	166	140	161	236	200
Arrive On Green	0.09	0.40	0.40	0.10	0.41	0.41	0.05	0.09	0.09	0.09	0.13	0.13
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	125	611	66	136	1393	274	73	83	76	126	76	76
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.3	5.1	1.6	4.7	13.8	7.7	2.5	2.6	2.9	4.3	2.3	2.8
Cycle Q Clear(g_c), s	4.3	5.1	1.6	4.7	13.8	7.7	2.5	2.6	2.9	4.3	2.3	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	2058	639	176	2101	652	93	166	140	161	236	200
V/C Ratio(X)	0.78	0.30	0.10	0.77	0.66	0.42	0.78	0.50	0.54	0.78	0.32	0.38
Avail Cap(c_a), veh/h	256	2368	735	342	2613	811	199	957	811	199	957	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	12.7	11.6	27.5	14.9	13.1	29.3	27.2	27.3	27.9	24.9	25.1
Incr Delay (d2), s/veh	7.9	0.1	0.1	7.1	0.5	0.4	13.2	2.3	3.2	15.0	0.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.7	0.5	2.2	4.8	2.5	1.4	1.2	1.2	2.4	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	12.7	11.7	34.6	15.3	13.5	42.5	29.5	30.5	42.8	25.7	26.3
LnGrp LOS	D	B	B	C	B	B	D	C	C	D	C	C
Approach Vol, veh/h		802			1803			232			278	
Approach Delay, s/veh		16.2			16.5			33.9			33.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	10.5	11.2	30.2	8.3	12.9	10.6	30.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	32.0	12.0	29.0	7.0	32.0	9.0	32.0
Max Q Clear Time (g_c+I1), s	6.3	4.9	6.7	7.1	4.5	4.8	6.3	15.8
Green Ext Time (p_c), s	0.0	0.7	0.1	4.5	0.0	0.6	0.1	9.9

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	570	34	501	1433	247	63	974	352	114	1079	154
Future Volume (veh/h)	141	570	34	501	1433	247	63	974	352	114	1079	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	148	600	4	527	1508	94	66	1025	122	120	1136	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	788	242	842	1646	509	254	1159	514	289	1126	500
Arrive On Green	0.08	0.15	0.15	0.24	0.32	0.32	0.07	0.33	0.33	0.08	0.32	0.32
Sat Flow, veh/h	3456	5106	1570	3456	5106	1578	3456	3554	1578	3456	3554	1578
Grp Volume(v), veh/h	148	600	4	527	1508	94	66	1025	122	120	1136	48
Grp Sat Flow(s),veh/h/ln	1728	1702	1570	1728	1702	1578	1728	1777	1578	1728	1777	1578
Q Serve(g_s), s	4.3	11.7	0.2	14.2	29.6	3.3	1.9	28.4	2.9	3.4	33.0	2.2
Cycle Q Clear(g_c), s	4.3	11.7	0.2	14.2	29.6	3.3	1.9	28.4	2.9	3.4	33.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	788	242	842	1646	509	254	1159	514	289	1126	500
V/C Ratio(X)	0.57	0.76	0.02	0.63	0.92	0.18	0.26	0.88	0.24	0.41	1.01	0.10
Avail Cap(c_a), veh/h	465	981	302	929	1668	515	299	1159	514	299	1126	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	42.2	37.3	35.1	33.9	13.7	45.5	33.2	6.3	45.3	35.6	25.0
Incr Delay (d2), s/veh	0.7	3.3	0.0	0.7	8.5	0.3	0.2	8.8	0.5	0.4	28.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.9	0.1	5.7	12.5	1.6	0.8	12.6	2.0	1.4	17.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.2	45.5	37.4	35.9	42.4	14.0	45.7	42.0	6.8	45.6	64.5	25.2
LnGrp LOS	D	D	D	D	D	B	D	D	A	D	F	C
Approach Vol, veh/h		752			2129			1213			1304	
Approach Delay, s/veh		45.8			39.5			38.7			61.3	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	39.9	29.4	22.1	13.7	39.0	11.9	39.6
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	9.0	33.0	28.0	20.0	9.0	* 33	14.0	34.0
Max Q Clear Time (g_c+I1), s	5.4	30.4	16.2	13.7	3.9	35.0	6.3	31.6
Green Ext Time (p_c), s	0.1	1.9	1.1	2.1	0.0	0.0	0.2	2.0

Intersection Summary	
HCM 6th Ctrl Delay	45.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	1026	2147	261	141	4
Future Volume (veh/h)	5	1026	2147	261	141	4
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	1080	2260	275	148	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	14	3393	3012	935	301	268
Arrive On Green	0.01	0.66	0.59	0.59	0.17	0.17
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	5	1080	2260	275	148	4
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.2	5.4	19.5	5.2	4.5	0.1
Cycle Q Clear(g_c), s	0.2	5.4	19.5	5.2	4.5	0.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	14	3393	3012	935	301	268
V/C Ratio(X)	0.35	0.32	0.75	0.29	0.49	0.01
Avail Cap(c_a), veh/h	356	4511	3149	978	802	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	4.3	9.1	6.1	22.6	20.8
Incr Delay (d2), s/veh	5.4	0.1	1.1	0.3	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.3	5.7	1.4	1.8	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.0	4.4	10.1	6.4	23.1	20.8
LnGrp LOS	C	A	B	A	C	C
Approach Vol, veh/h		1085	2535		152	
Approach Delay, s/veh		4.5	9.7		23.0	
Approach LOS		A	A		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		45.9		14.1	4.5	41.4
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		53.0		27.0	12.0	37.0
Max Q Clear Time (g_c+I1), s		7.4		6.5	2.2	21.5
Green Ext Time (p_c), s		10.7		0.3	0.0	13.8

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1182	20	217	2402	21	130
Future Volume (veh/h)	1182	20	217	2402	21	130
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1244	21	228	2528	22	137
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2303	715	277	3428	270	240
Arrive On Green	0.45	0.45	0.16	0.67	0.15	0.15
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	1244	21	228	2528	22	137
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	10.9	0.5	7.6	19.8	0.7	4.9
Cycle Q Clear(g_c), s	10.9	0.5	7.6	19.8	0.7	4.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2303	715	277	3428	270	240
V/C Ratio(X)	0.54	0.03	0.82	0.74	0.08	0.57
Avail Cap(c_a), veh/h	2322	721	347	3649	871	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	9.4	25.2	6.6	22.4	24.3
Incr Delay (d2), s/veh	0.3	0.0	10.0	0.9	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.1	3.8	4.9	0.3	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.6	9.4	35.2	7.4	22.5	25.0
LnGrp LOS	B	A	D	A	C	C
Approach Vol, veh/h	1265			2756	159	
Approach Delay, s/veh	12.5			9.7	24.7	
Approach LOS	B			A	C	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		14.2	13.6	33.8			47.3
Change Period (Y+Rc), s		4.9	4.0	6.0			6.0
Max Green Setting (Gmax), s		30.1	12.0	28.0			44.0
Max Q Clear Time (g_c+I1), s		6.9	9.6	12.9			21.8
Green Ext Time (p_c), s		0.4	0.1	8.2			19.5

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	38	1255	2590	342	203	28
Future Volume (veh/h)	38	1255	2590	342	203	28
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	1321	2726	360	214	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	76	3737	3288	1017	258	229
Arrive On Green	0.04	0.73	0.64	0.64	0.14	0.14
Sat Flow, veh/h	1781	5274	5274	1579	1781	1585
Grp Volume(v), veh/h	40	1321	2726	360	214	29
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1579	1781	1585
Q Serve(g_s), s	1.9	8.3	36.0	9.3	10.3	1.4
Cycle Q Clear(g_c), s	1.9	8.3	36.0	9.3	10.3	1.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	76	3737	3288	1017	258	229
V/C Ratio(X)	0.53	0.35	0.83	0.35	0.83	0.13
Avail Cap(c_a), veh/h	121	3939	3361	1039	626	557
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	4.3	12.0	7.2	36.7	32.9
Incr Delay (d2), s/veh	2.1	0.1	1.9	0.3	2.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.8	10.7	2.5	4.6	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.5	4.4	13.9	7.6	39.3	33.0
LnGrp LOS	D	A	B	A	D	C
Approach Vol, veh/h		1361	3086		243	
Approach Delay, s/veh		5.5	13.2		38.6	
Approach LOS		A	B		D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	70.6	17.7	7.7	62.8
Change Period (Y+Rc), s	6.0	4.9	4.0	6.0
Max Green Setting (Gmax), s	68.1	31.0	6.0	58.1
Max Q Clear Time (g_c+I1), s	10.3	12.3	3.9	38.0
Green Ext Time (p_c), s	13.8	0.5	0.0	18.9

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	270	440	5	428	26	691	547	8	74	817	0
Future Volume (veh/h)	0	270	440	5	428	26	691	547	8	74	817	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	284	63	5	451	6	727	576	4	78	860	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	452	201	9	746	333	864	1778	793	101	1091	487
Arrive On Green	0.00	0.13	0.13	0.01	0.21	0.21	0.25	0.50	0.50	0.06	0.31	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	284	63	5	451	6	727	576	4	78	860	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	4.9	2.3	0.2	7.4	0.2	12.9	6.2	0.1	2.8	14.2	0.0
Cycle Q Clear(g_c), s	0.0	4.9	2.3	0.2	7.4	0.2	12.9	6.2	0.1	2.8	14.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	3	452	201	9	746	333	864	1778	793	101	1091	487
V/C Ratio(X)	0.00	0.63	0.31	0.53	0.60	0.02	0.84	0.32	0.01	0.77	0.79	0.00
Avail Cap(c_a), veh/h	304	883	394	304	883	394	1020	1778	793	304	1325	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	26.7	25.5	31.9	23.0	20.2	22.9	9.6	8.1	30.0	20.4	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.9	38.9	0.9	0.0	5.7	0.1	0.0	11.8	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.1	0.9	0.2	3.0	0.1	5.5	2.1	0.0	1.5	5.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	28.1	26.4	70.8	23.9	20.2	28.6	9.7	8.1	41.7	23.1	0.0
LnGrp LOS	A	C	C	E	C	C	C	A	A	D	C	A
Approach Vol, veh/h		347			462			1307			938	
Approach Delay, s/veh		27.8			24.3			20.2			24.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	37.2	5.3	13.2	21.1	24.8	0.0	18.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	32.0	11.0	16.0	19.0	24.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	4.8	8.2	2.2	6.9	14.9	16.2	0.0	9.4
Green Ext Time (p_c), s	0.1	4.1	0.0	1.3	1.2	3.5	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	363	11	53	452	8	0
Future Volume (veh/h)	363	11	53	452	8	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	382	12	56	476	8	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	827	369	91	1678	269	239
Arrive On Green	0.23	0.23	0.05	0.47	0.15	0.00
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	382	12	56	476	8	0
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	2.5	0.2	0.8	2.2	0.1	0.0
Cycle Q Clear(g_c), s	2.5	0.2	0.8	2.2	0.1	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	827	369	91	1678	269	239
V/C Ratio(X)	0.46	0.03	0.62	0.28	0.03	0.00
Avail Cap(c_a), veh/h	2412	1076	470	4020	1343	1195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.7	7.9	12.3	4.3	9.6	0.0
Incr Delay (d2), s/veh	0.4	0.0	6.6	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	0.3	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.2	7.9	19.0	4.4	9.6	0.0
LnGrp LOS	A	A	B	A	A	A
Approach Vol, veh/h	394			532	8	
Approach Delay, s/veh	9.1			5.9	9.6	
Approach LOS	A			A	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		9.0	6.4	11.2		17.5
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		20.0	7.0	18.0		30.0
Max Q Clear Time (g_c+I1), s		2.1	2.8	4.5		4.2
Green Ext Time (p_c), s		0.0	0.0	2.1		3.3

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	317	10	65	492	373	8	935	47	303	1294	141
Future Volume (veh/h)	123	317	10	65	492	373	8	935	47	303	1294	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	129	334	11	68	518	393	8	984	49	319	1362	148
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	1586	492	125	1037	462	28	1139	508	391	2174	675
Arrive On Green	0.05	0.31	0.31	0.04	0.29	0.29	0.01	0.32	0.32	0.11	0.43	0.43
Sat Flow, veh/h	3456	5106	1585	3456	3554	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	129	334	11	68	518	393	8	984	49	319	1362	148
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	3.3	4.4	0.4	1.8	11.0	21.3	0.2	23.7	2.0	8.2	19.0	5.4
Cycle Q Clear(g_c), s	3.3	4.4	0.4	1.8	11.0	21.3	0.2	23.7	2.0	8.2	19.0	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	1586	492	125	1037	462	28	1139	508	391	2174	675
V/C Ratio(X)	0.68	0.21	0.02	0.55	0.50	0.85	0.29	0.86	0.10	0.82	0.63	0.22
Avail Cap(c_a), veh/h	190	1850	574	152	1249	557	152	1249	557	417	2187	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.2	23.2	21.8	43.2	26.7	30.4	44.9	29.1	21.7	39.4	20.5	16.6
Incr Delay (d2), s/veh	9.4	0.1	0.0	3.7	0.4	10.3	5.6	6.1	0.1	11.3	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.7	0.2	0.8	4.6	9.2	0.1	10.7	0.7	4.0	7.3	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.7	23.2	21.8	46.8	27.1	40.7	50.5	35.2	21.8	50.7	21.0	16.7
LnGrp LOS	D	C	C	D	C	D	D	D	C	D	C	B
Approach Vol, veh/h		474			979			1041			1829	
Approach Delay, s/veh		30.9			33.9			34.6			25.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	34.2	8.3	33.3	5.7	43.8	10.0	31.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	32.0	4.0	33.0	4.0	39.0	5.0	32.0
Max Q Clear Time (g_c+I1), s	10.2	25.7	3.8	6.4	2.2	21.0	5.3	23.3
Green Ext Time (p_c), s	0.1	3.5	0.0	2.3	0.0	10.0	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	659	13	86	921	34	5	0	32	16	5	8
Future Volume (veh/h)	0	659	13	86	921	34	5	0	32	16	5	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	694	14	91	969	36	5	0	34	17	5	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1131	504	119	1768	788	200	0	234	31	34	55
Arrive On Green	0.00	0.32	0.32	0.07	0.50	0.50	0.11	0.00	0.15	0.02	0.05	0.05
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	0	1585	1781	648	1036
Grp Volume(v), veh/h	0	694	14	91	969	36	5	0	34	17	0	13
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	0	1684
Q Serve(g_s), s	0.0	5.9	0.2	1.8	6.7	0.4	0.1	0.0	0.7	0.3	0.0	0.3
Cycle Q Clear(g_c), s	0.0	5.9	0.2	1.8	6.7	0.4	0.1	0.0	0.7	0.3	0.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.62
Lane Grp Cap(c), veh/h	5	1131	504	119	1768	788	200	0	234	31	0	89
V/C Ratio(X)	0.00	0.61	0.03	0.77	0.55	0.05	0.02	0.00	0.15	0.55	0.00	0.15
Avail Cap(c_a), veh/h	200	1998	891	200	1998	891	200	0	1382	200	0	1468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.3	8.3	16.3	6.2	4.6	14.0	0.0	13.2	17.3	0.0	16.1
Incr Delay (d2), s/veh	0.0	0.5	0.0	9.8	0.3	0.0	0.2	0.0	0.3	14.3	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.4	0.0	0.9	1.0	0.1	0.0	0.0	0.2	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.8	8.4	26.1	6.4	4.6	14.3	0.0	13.5	31.6	0.0	16.8
LnGrp LOS	A	B	A	C	A	A	B	A	B	C	A	B
Approach Vol, veh/h		708			1096			39			30	
Approach Delay, s/veh		10.8			8.0			13.6			25.2	
Approach LOS		B			A			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	9.3	6.4	15.3	8.0	5.9	0.0	21.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	31.0	4.0	20.0	4.0	31.0	4.0	20.0
Max Q Clear Time (g_c+I1), s	2.3	2.7	3.8	7.9	2.1	2.3	0.0	8.7
Green Ext Time (p_c), s	0.0	0.1	0.0	3.4	0.0	0.0	0.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	635	15	231	1133	81	13	130	179	10	181	109
Future Volume (veh/h)	49	635	15	231	1133	81	13	130	179	10	181	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	668	4	243	1193	33	14	137	24	11	191	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	994	443	286	1343	599	262	276	234	267	280	238
Arrive On Green	0.06	0.28	0.28	0.16	0.38	0.38	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	52	668	4	243	1193	33	14	137	24	11	191	16
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.0	12.1	0.1	9.6	22.8	1.0	0.5	4.9	0.9	0.4	7.0	0.6
Cycle Q Clear(g_c), s	2.0	12.1	0.1	9.6	22.8	1.0	0.5	4.9	0.9	0.4	7.0	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	112	994	443	286	1343	599	262	276	234	267	280	238
V/C Ratio(X)	0.47	0.67	0.01	0.85	0.89	0.06	0.05	0.50	0.10	0.04	0.68	0.07
Avail Cap(c_a), veh/h	172	1045	466	344	1388	619	509	534	453	492	516	437
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	23.1	18.8	29.5	21.1	14.3	26.6	28.4	26.7	26.3	29.2	26.5
Incr Delay (d2), s/veh	1.1	2.0	0.0	13.5	7.6	0.1	0.0	0.5	0.1	0.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.0	0.0	5.0	10.1	0.3	0.2	2.1	0.4	0.2	3.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	25.1	18.9	43.0	28.7	14.4	26.6	28.9	26.8	26.4	30.3	26.5
LnGrp LOS	C	C	B	D	C	B	C	C	C	C	C	C
Approach Vol, veh/h		724			1469			175			218	
Approach Delay, s/veh		25.7			30.8			28.5			29.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		14.9	15.7	26.0		16.0	8.5	33.1
Change Period (Y+Rc), s		4.0	4.0	5.7		5.3	4.0	5.7
Max Green Setting (Gmax), s		20.0	14.0	21.3		20.7	7.0	28.3
Max Q Clear Time (g_c+I1), s		9.0	11.6	14.1		6.9	4.0	24.8
Green Ext Time (p_c), s		0.3	0.1	3.0		0.3	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	906	12	93	1302	53	15	17	14	34	37	38
Future Volume (veh/h)	17	906	12	93	1302	53	15	17	14	34	37	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	954	13	98	1371	56	16	18	15	36	39	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	1713	764	126	1902	848	68	71	60	106	112	95
Arrive On Green	0.02	0.48	0.48	0.07	0.54	0.54	0.04	0.04	0.04	0.06	0.06	0.06
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	18	954	13	98	1371	56	16	18	15	36	39	40
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.6	10.6	0.2	3.0	16.3	0.9	0.5	0.5	0.5	1.1	1.1	1.4
Cycle Q Clear(g_c), s	0.6	10.6	0.2	3.0	16.3	0.9	0.5	0.5	0.5	1.1	1.1	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	1713	764	126	1902	848	68	71	60	106	112	95
V/C Ratio(X)	0.58	0.56	0.02	0.78	0.72	0.07	0.24	0.25	0.25	0.34	0.35	0.42
Avail Cap(c_a), veh/h	128	2058	918	256	2313	1032	645	677	574	639	671	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	10.2	7.5	25.5	9.8	6.2	26.0	26.0	26.0	25.2	25.2	25.3
Incr Delay (d2), s/veh	6.2	0.5	0.0	3.9	1.2	0.1	0.7	0.7	0.8	0.7	0.7	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.5	0.1	1.3	5.1	0.3	0.2	0.2	0.2	0.4	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	10.7	7.6	29.4	11.0	6.3	26.7	26.7	26.8	25.9	25.9	26.4
LnGrp LOS	C	B	A	C	B	A	C	C	C	C	C	C
Approach Vol, veh/h		985			1525			49			115	
Approach Delay, s/veh		11.1			12.0			26.7			26.1	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		8.2	7.9	32.6		7.0	5.0	35.5
Change Period (Y+Rc), s		4.9	4.0	5.7		4.9	4.0	5.7
Max Green Setting (Gmax), s		20.0	8.0	32.3		20.2	4.0	36.3
Max Q Clear Time (g_c+I1), s		3.4	5.0	12.6		2.5	2.6	18.3
Green Ext Time (p_c), s		0.2	0.0	8.0		0.0	0.0	11.6

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	821	87	176	1324	113	86
Future Volume (veh/h)	821	87	176	1324	113	86
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	864	92	185	1394	119	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1344	600	245	2262	217	193
Arrive On Green	0.38	0.38	0.14	0.64	0.12	0.12
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	864	92	185	1394	119	91
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	8.3	1.6	4.1	9.7	2.6	2.2
Cycle Q Clear(g_c), s	8.3	1.6	4.1	9.7	2.6	2.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1344	600	245	2262	217	193
V/C Ratio(X)	0.64	0.15	0.76	0.62	0.55	0.47
Avail Cap(c_a), veh/h	2060	919	645	3776	688	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.6	8.5	17.2	4.5	17.1	16.9
Incr Delay (d2), s/veh	0.5	0.1	4.7	0.3	2.1	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.4	1.8	1.6	1.0	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.1	8.6	21.9	4.8	19.2	18.7
LnGrp LOS	B	A	C	A	B	B
Approach Vol, veh/h	956			1579	210	
Approach Delay, s/veh	10.9			6.8	19.0	
Approach LOS	B			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		10.1	10.7	20.7		31.4
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		16.0	15.0	24.0		44.0
Max Q Clear Time (g_c+I1), s		4.6	6.1	10.3		11.7
Green Ext Time (p_c), s		0.5	0.3	5.4		13.8

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	557	400	955	870	52	576	1090	536	67	1073	76
Future Volume (veh/h)	99	557	400	955	870	52	576	1090	536	67	1073	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	586	167	1005	916	52	606	1147	232	71	1129	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	282	627	279	1083	1061	60	657	1932	600	211	1272	395
Arrive On Green	0.08	0.18	0.18	0.22	0.31	0.31	0.19	0.38	0.38	0.06	0.25	0.25
Sat Flow, veh/h	3456	3554	1585	5023	3418	194	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	104	586	167	1005	476	492	606	1147	232	71	1129	18
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1674	1777	1835	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	3.4	19.3	11.5	23.3	29.9	29.9	20.4	21.3	12.6	2.3	25.3	1.0
Cycle Q Clear(g_c), s	3.4	19.3	11.5	23.3	29.9	29.9	20.4	21.3	12.6	2.3	25.3	1.0
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	282	627	279	1083	551	570	657	1932	600	211	1272	395
V/C Ratio(X)	0.37	0.94	0.60	0.93	0.86	0.86	0.92	0.59	0.39	0.34	0.89	0.05
Avail Cap(c_a), veh/h	292	627	279	1102	551	570	671	1956	607	233	1310	407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	48.2	44.9	45.6	38.5	38.5	47.1	29.5	26.8	53.4	42.9	33.8
Incr Delay (d2), s/veh	0.3	21.8	4.6	12.8	13.7	13.4	17.7	0.7	0.8	0.3	8.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	10.1	4.7	10.5	14.4	14.9	9.9	8.2	4.7	1.0	11.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.8	69.9	49.5	58.4	52.2	51.9	64.8	30.3	27.6	53.7	51.0	33.9
LnGrp LOS	D	E	D	E	D	D	E	C	C	D	D	C
Approach Vol, veh/h		857			1973			1985			1218	
Approach Delay, s/veh		63.8			55.3			40.5			50.9	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	50.8	29.6	26.9	26.5	35.5	13.7	42.8
Change Period (Y+Rc), s	4.0	6.0	4.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	45.4	26.0	* 21	23.0	30.4	10.0	36.6
Max Q Clear Time (g_c+I1), s	4.3	23.3	25.3	21.3	22.4	27.3	5.4	31.9
Green Ext Time (p_c), s	0.0	12.2	0.3	0.0	0.1	2.3	0.1	2.4

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	1134	1616	168	107	8
Future Volume (veh/h)	13	1134	1616	168	107	8
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1194	1701	0	113	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	49	2523	2191		224	
Arrive On Green	0.03	0.71	0.62	0.00	0.13	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	14	1194	1701	0	113	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.5	8.9	21.4	0.0	3.6	0.0
Cycle Q Clear(g_c), s	0.5	8.9	21.4	0.0	3.6	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	49	2523	2191		224	
V/C Ratio(X)	0.28	0.47	0.78		0.50	
Avail Cap(c_a), veh/h	234	3149	2467		760	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	29.0	3.9	8.6	0.0	24.9	0.0
Incr Delay (d2), s/veh	1.2	0.2	1.7	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.9	6.4	0.0	1.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.2	4.1	10.3	0.0	25.5	0.0
LnGrp LOS	C	A	B		C	
Approach Vol, veh/h		1208	1701	A	113	A
Approach Delay, s/veh		4.4	10.3		25.5	
Approach LOS		A	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		49.3		11.7	5.7	43.6
Change Period (Y+Rc), s		6.0		4.0	4.0	* 6
Max Green Setting (Gmax), s		54.0		26.0	8.0	* 42
Max Q Clear Time (g_c+I1), s		10.9		5.6	2.5	23.4
Green Ext Time (p_c), s		12.7		0.2	0.0	14.1

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	15	1183	1808	16	48	7
Future Volume (veh/h)	15	1183	1808	16	48	7
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	16	1245	1903	17	51	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	48	2709	2435	22	137	19
Arrive On Green	0.03	0.76	0.67	0.67	0.09	0.09
Sat Flow, veh/h	1781	3647	3703	32	1519	208
Grp Volume(v), veh/h	16	1245	935	985	59	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1865	1757	0
Q Serve(g_s), s	0.6	8.4	23.8	24.0	2.1	0.0
Cycle Q Clear(g_c), s	0.6	8.4	23.8	24.0	2.1	0.0
Prop In Lane	1.00			0.02	0.86	0.12
Lane Grp Cap(c), veh/h	48	2709	1199	1258	159	0
V/C Ratio(X)	0.33	0.46	0.78	0.78	0.37	0.00
Avail Cap(c_a), veh/h	189	3256	1331	1397	534	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.4	2.9	7.4	7.4	28.2	0.0
Incr Delay (d2), s/veh	1.5	0.2	3.2	3.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.5	7.2	7.5	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.9	3.1	10.6	10.5	28.7	0.0
LnGrp LOS	C	A	B	B	C	A
Approach Vol, veh/h		1261	1920		59	
Approach Delay, s/veh		3.4	10.6		28.7	
Approach LOS		A	B		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	55.9	9.9	5.8	50.1
Change Period (Y+Rc), s	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	60.3	20.0	7.0	49.3
Max Q Clear Time (g_c+I1), s	10.4	4.1	2.6	26.0
Green Ext Time (p_c), s	16.5	0.1	0.0	18.4

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	45	1279	1837	27	31	33
Future Volume (veh/h)	45	1279	1837	27	31	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	1346	1934	28	33	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	102	2754	2369	1049	158	141
Arrive On Green	0.06	0.77	0.67	0.67	0.09	0.09
Sat Flow, veh/h	1781	3647	3647	1573	1781	1585
Grp Volume(v), veh/h	47	1346	1934	28	33	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1573	1781	1585
Q Serve(g_s), s	2.0	10.8	31.2	0.5	1.3	1.6
Cycle Q Clear(g_c), s	2.0	10.8	31.2	0.5	1.3	1.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	102	2754	2369	1049	158	141
V/C Ratio(X)	0.46	0.49	0.82	0.03	0.21	0.25
Avail Cap(c_a), veh/h	159	3141	2643	1170	454	404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	3.2	9.6	4.4	33.2	33.3
Incr Delay (d2), s/veh	1.2	0.2	2.1	0.0	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.3	10.0	0.1	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.0	3.4	11.7	4.5	33.4	33.6
LnGrp LOS	D	A	B	A	C	C
Approach Vol, veh/h		1393	1962		68	
Approach Delay, s/veh		4.5	11.6		33.5	
Approach LOS		A	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		67.4		11.0	8.5	59.0
Change Period (Y+Rc), s		6.7		4.0	4.0	6.7
Max Green Setting (Gmax), s		69.3		20.0	7.0	58.3
Max Q Clear Time (g_c+I1), s		12.8		3.6	4.0	33.2
Green Ext Time (p_c), s		17.9		0.1	0.0	19.1

Intersection Summary	
HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	996	148	612	1554	215	259	444	528	358	689	190
Future Volume (veh/h)	69	996	148	612	1554	215	259	444	528	358	689	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	73	1048	0	644	1636	0	273	467	0	377	725	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	1122		759	2142		311	577		439	754	
Arrive On Green	0.04	0.24	0.00	0.24	0.47	0.00	0.10	0.18	0.00	0.14	0.24	0.00
Sat Flow, veh/h	3110	4595	1427	3110	4595	1427	3110	3198	1427	3110	3198	1427
Grp Volume(v), veh/h	73	1048	0	644	1636	0	273	467	0	377	725	0
Grp Sat Flow(s),veh/h/ln	1555	1532	1427	1555	1532	1427	1555	1599	1427	1555	1599	1427
Q Serve(g_s), s	2.8	26.8	0.0	23.7	35.4	0.0	10.4	16.8	0.0	14.2	26.9	0.0
Cycle Q Clear(g_c), s	2.8	26.8	0.0	23.7	35.4	0.0	10.4	16.8	0.0	14.2	26.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	1122		759	2142		311	577		439	754	
V/C Ratio(X)	0.64	0.93		0.85	0.76		0.88	0.81		0.86	0.96	
Avail Cap(c_a), veh/h	156	1122		803	2142		311	674		439	754	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.0	44.4	0.0	43.2	26.6	0.0	53.3	47.2	0.0	50.4	45.3	0.0
Incr Delay (d2), s/veh	2.3	15.1	0.0	7.6	1.9	0.0	22.8	7.5	0.0	14.9	23.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	11.2	0.0	9.4	12.1	0.0	4.9	7.1	0.0	6.3	12.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.3	59.5	0.0	50.8	28.4	0.0	76.1	54.6	0.0	65.3	69.1	0.0
LnGrp LOS	E	E		D	C		E	D		E	E	
Approach Vol, veh/h		1121	A		2280	A		740	A		1102	A
Approach Delay, s/veh		59.5			34.8			62.5			67.8	
Approach LOS		E			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.6	27.4	35.0	35.0	16.0	34.0	8.4	61.6
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	15.0	* 25	31.0	* 29	12.0	28.3	6.0	54.3
Max Q Clear Time (g_c+I1), s	16.2	18.8	25.7	28.8	12.4	28.9	4.8	37.4
Green Ext Time (p_c), s	0.0	1.8	0.9	0.4	0.0	0.0	0.0	11.5

Intersection Summary	
HCM 6th Ctrl Delay	50.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1657	213	211	2538	11	235
Future Volume (veh/h)	1657	213	211	2538	11	235
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1744	224	222	2672	12	247
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2422	309	250	3587	305	272
Arrive On Green	0.53	0.53	0.14	0.70	0.17	0.17
Sat Flow, veh/h	4746	585	1781	5274	1781	1585
Grp Volume(v), veh/h	1294	674	222	2672	12	247
Grp Sat Flow(s),veh/h/ln	1702	1759	1781	1702	1781	1585
Q Serve(g_s), s	34.7	35.1	14.7	39.2	0.7	18.4
Cycle Q Clear(g_c), s	34.7	35.1	14.7	39.2	0.7	18.4
Prop In Lane		0.33	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1801	930	250	3587	305	272
V/C Ratio(X)	0.72	0.72	0.89	0.74	0.04	0.91
Avail Cap(c_a), veh/h	1801	930	297	3587	386	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	21.6	50.7	11.1	41.5	48.8
Incr Delay (d2), s/veh	2.5	4.9	21.6	1.4	0.0	21.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	14.3	7.8	11.9	0.3	8.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.0	26.5	72.3	12.6	41.5	70.0
LnGrp LOS	C	C	E	B	D	E
Approach Vol, veh/h	1968			2894	259	
Approach Delay, s/veh	24.8			17.2	68.7	
Approach LOS	C			B	E	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		24.6	20.8	69.2		90.0
Change Period (Y+Rc), s		4.0	4.0	5.7		5.7
Max Green Setting (Gmax), s		26.0	20.0	60.3		84.3
Max Q Clear Time (g_c+I1), s		20.4	16.7	37.1		41.2
Green Ext Time (p_c), s		0.2	0.1	22.6		42.9

Intersection Summary	
HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	367	1402	77	746	1879	116	312	851	528	151	1435	417
Future Volume (veh/h)	367	1402	77	746	1879	116	312	851	528	151	1435	417
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	386	1476	0	785	1978	0	328	896	0	159	1511	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	383	1800		795	2055		259	1241		214	1373	
Arrive On Green	0.11	0.35	0.00	0.21	0.54	0.00	0.08	0.24	0.00	0.06	0.21	0.00
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	5106	1585	3456	6434	1585
Grp Volume(v), veh/h	386	1476	0	785	1978	0	328	896	0	159	1511	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1702	1585	1728	1609	1585
Q Serve(g_s), s	13.3	31.6	0.0	18.7	44.6	0.0	9.0	19.3	0.0	5.4	25.6	0.0
Cycle Q Clear(g_c), s	13.3	31.6	0.0	18.7	44.6	0.0	9.0	19.3	0.0	5.4	25.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	383	1800		795	2055		259	1241		214	1373	
V/C Ratio(X)	1.01	0.82		0.99	0.96		1.27	0.72		0.74	1.10	
Avail Cap(c_a), veh/h	383	1800		795	2055		259	1241		259	1373	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.48	0.48	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	35.4	0.0	47.2	27.0	0.0	55.5	41.7	0.0	55.3	47.2	0.0
Incr Delay (d2), s/veh	48.0	3.4	0.0	19.0	7.5	0.0	146.5	2.3	0.0	6.6	56.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	13.0	0.0	8.5	16.0	0.0	9.1	8.1	0.0	2.5	15.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	101.3	38.8	0.0	66.2	34.5	0.0	202.0	44.0	0.0	62.0	104.0	0.0
LnGrp LOS	F	D		E	C		F	D		E	F	
Approach Vol, veh/h		1862	A		2763	A		1224	A		1670	A
Approach Delay, s/veh		51.7			43.5			86.3			100.0	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	35.6	25.0	48.0	15.0	32.0	19.0	54.0
Change Period (Y+Rc), s	4.0	* 6.4	6.0	5.7	6.0	6.4	5.7	5.7
Max Green Setting (Gmax), s	9.0	* 28	19.0	42.3	9.0	25.6	13.3	48.3
Max Q Clear Time (g_c+I1), s	7.4	21.3	20.7	33.6	11.0	27.6	15.3	46.6
Green Ext Time (p_c), s	0.0	3.8	0.0	7.0	0.0	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	65.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	1699	112	460	2107	77	311	723	306	220	1267	148
Future Volume (veh/h)	177	1699	112	460	2107	77	311	723	306	220	1267	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	186	1788	38	484	2218	0	327	761	0	232	1334	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	1830	568	461	2822		288	948		259	1217	378
Arrive On Green	0.07	0.36	0.36	0.13	0.44	0.00	0.08	0.27	0.00	0.08	0.24	0.24
Sat Flow, veh/h	3456	5106	1585	3456	6434	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	186	1788	38	484	2218	0	327	761	0	232	1334	31
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1609	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	6.4	41.5	1.9	16.0	35.4	0.0	10.0	24.0	0.0	8.0	28.6	1.5
Cycle Q Clear(g_c), s	6.4	41.5	1.9	16.0	35.4	0.0	10.0	24.0	0.0	8.0	28.6	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	1830	568	461	2822		288	948		259	1217	378
V/C Ratio(X)	0.77	0.98	0.07	1.05	0.79		1.14	0.80		0.90	1.10	0.08
Avail Cap(c_a), veh/h	259	1830	568	461	2822		288	948		259	1217	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.55	0.55	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	38.0	25.3	52.0	28.9	0.0	55.0	41.1	0.0	55.0	45.7	23.9
Incr Delay (d2), s/veh	7.5	12.5	0.1	45.2	1.3	0.0	94.7	5.4	0.0	29.5	56.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	18.5	0.7	9.6	13.1	0.0	8.0	10.8	0.0	4.5	17.9	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.4	50.5	25.5	97.2	30.1	0.0	149.7	46.5	0.0	84.5	102.0	24.1
LnGrp LOS	E	D	C	F	C		F	D		F	F	C
Approach Vol, veh/h		2012			2702	A		1088	A		1597	
Approach Delay, s/veh		51.2			42.1			77.5			97.9	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	38.4	22.0	49.0	16.4	35.0	12.4	58.6
Change Period (Y+Rc), s	4.0	6.4	6.0	6.0	6.4	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	9.0	29.6	16.0	43.0	10.0	* 29	9.0	52.0
Max Q Clear Time (g_c+I1), s	10.0	26.0	18.0	43.5	12.0	30.6	8.4	37.4
Green Ext Time (p_c), s	0.0	1.8	0.0	0.0	0.0	0.0	0.0	12.2

Intersection Summary	
HCM 6th Ctrl Delay	61.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	2132	32	93	2246	83	382	55	25	107	10	14
Future Volume (veh/h)	12	2132	32	93	2246	83	382	55	25	107	10	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	2244	0	98	2364	0	402	58	0	113	11	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	2495		260	3255		392	288		135	18	
Arrive On Green	0.01	0.49	0.00	0.15	0.64	0.00	0.22	0.15	0.00	0.08	0.01	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	13	2244	0	98	2364	0	402	58	0	113	11	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.1	60.1	0.0	7.5	46.9	0.0	33.0	4.1	0.0	9.4	0.9	0.0
Cycle Q Clear(g_c), s	1.1	60.1	0.0	7.5	46.9	0.0	33.0	4.1	0.0	9.4	0.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	2495		260	3255		392	288		135	18	
V/C Ratio(X)	0.85	0.90		0.38	0.73		1.03	0.20		0.84	0.60	
Avail Cap(c_a), veh/h	36	2495		260	3255		392	399		202	188	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	74.3	35.0	0.0	57.9	18.3	0.0	58.5	55.4	0.0	68.4	74.0	0.0
Incr Delay (d2), s/veh	16.0	2.3	0.0	0.3	1.0	0.0	52.2	0.3	0.0	11.4	28.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	24.2	0.0	3.3	17.2	0.0	20.6	2.0	0.0	4.7	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.2	37.3	0.0	58.2	19.3	0.0	110.7	55.6	0.0	79.8	102.6	0.0
LnGrp LOS	F	D		E	B		F	E		E	F	
Approach Vol, veh/h		2257	A		2462	A		460	A		124	A
Approach Delay, s/veh		37.6			20.8			103.8			81.8	
Approach LOS		D			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	28.0	27.6	79.0	37.0	6.4	5.3	101.3
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	17.0	* 32	10.0	* 73	33.0	15.1	3.0	80.3
Max Q Clear Time (g_c+I1), s	11.4	6.1	9.5	62.1	35.0	2.9	3.1	48.9
Green Ext Time (p_c), s	0.1	0.2	0.0	10.5	0.0	0.0	0.0	28.3

Intersection Summary	
HCM 6th Ctrl Delay	36.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	12	35	281	26	77	88	1351	173	94	930	1
Future Volume (veh/h)	6	12	35	281	26	77	88	1351	173	94	930	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	6	13	37	296	27	81	93	1422	182	99	979	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	7	16	45	305	84	252	96	2432	755	80	1661	741
Arrive On Green	0.00	0.04	0.04	0.19	0.23	0.23	0.06	0.53	0.53	0.05	0.52	0.52
Sat Flow, veh/h	1603	386	1099	1603	371	1112	1603	4595	1427	1603	3198	1427
Grp Volume(v), veh/h	6	0	50	296	0	108	93	1422	182	99	979	1
Grp Sat Flow(s),veh/h/ln	1603	0	1485	1603	0	1483	1603	1532	1427	1603	1599	1427
Q Serve(g_s), s	0.4	0.0	3.3	18.3	0.0	6.1	5.8	21.1	6.9	5.0	21.2	0.0
Cycle Q Clear(g_c), s	0.4	0.0	3.3	18.3	0.0	6.1	5.8	21.1	6.9	5.0	21.2	0.0
Prop In Lane	1.00		0.74	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	7	0	61	305	0	335	96	2432	755	80	1661	741
V/C Ratio(X)	0.81	0.00	0.83	0.97	0.00	0.32	0.97	0.58	0.24	1.24	0.59	0.00
Avail Cap(c_a), veh/h	48	0	327	305	0	564	96	2432	755	80	1661	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	0.0	47.6	40.2	0.0	32.3	46.9	16.0	12.7	47.5	16.7	11.6
Incr Delay (d2), s/veh	52.3	0.0	20.5	43.5	0.0	0.5	80.3	1.0	0.8	176.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.6	10.8	0.0	2.2	4.4	7.2	2.3	5.9	7.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.1	0.0	68.1	83.8	0.0	32.8	127.2	17.1	13.5	224.0	17.4	11.6
LnGrp LOS	F	A	E	F	A	C	F	B	B	F	B	B
Approach Vol, veh/h		56			404			1697			1079	
Approach Delay, s/veh		71.8			70.1			22.7			36.4	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	58.9	23.0	9.1	10.0	57.9	4.5	27.6
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	5.0	35.0	19.0	22.0	6.0	34.0	3.0	38.0
Max Q Clear Time (g_c+I1), s	7.0	23.1	20.3	5.3	7.8	23.2	2.4	8.1
Green Ext Time (p_c), s	0.0	8.9	0.0	0.1	0.0	5.7	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	3	8	45	11	84	18	1566	56	59	1506	9
Future Volume (veh/h)	4	3	8	45	11	84	18	1566	56	59	1506	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	3	8	47	12	88	19	1648	59	62	1585	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	147	66	69	269	120	33	2376	738	83	2519	782
Arrive On Green	0.00	0.04	0.04	0.04	0.08	0.08	0.02	0.47	0.47	0.05	0.49	0.49
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	4	3	8	47	12	88	19	1648	59	62	1585	9
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.0	0.2	1.3	0.2	2.7	0.5	12.5	1.0	1.7	11.2	0.1
Cycle Q Clear(g_c), s	0.1	0.0	0.2	1.3	0.2	2.7	0.5	12.5	1.0	1.7	11.2	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	8	147	66	69	269	120	33	2376	738	83	2519	782
V/C Ratio(X)	0.52	0.02	0.12	0.68	0.04	0.73	0.57	0.69	0.08	0.75	0.63	0.01
Avail Cap(c_a), veh/h	145	2320	1035	291	2610	1164	182	2709	841	145	2605	809
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	22.5	22.6	23.3	21.0	22.2	23.9	10.3	7.3	23.1	9.1	6.3
Incr Delay (d2), s/veh	45.1	0.1	0.8	11.3	0.1	8.3	14.7	0.7	0.0	12.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.7	0.1	1.2	0.3	3.7	0.3	0.9	3.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.4	22.6	23.4	34.6	21.1	30.5	38.5	11.0	7.3	35.6	9.6	6.3
LnGrp LOS	E	C	C	C	C	C	D	B	A	D	A	A
Approach Vol, veh/h		15			147			1726			1656	
Approach Delay, s/veh		35.5			31.0			11.2			10.5	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	27.8	6.9	7.0	5.9	29.2	5.2	8.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	26.0	8.0	32.0	5.0	25.0	4.0	36.0
Max Q Clear Time (g_c+I1), s	3.7	14.5	3.3	2.2	2.5	13.2	2.1	4.7
Green Ext Time (p_c), s	0.0	8.3	0.0	0.0	0.0	8.2	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	73	6	1	151	33	4	1	2	13	4	2
Future Volume (veh/h)	1	73	6	1	151	33	4	1	2	13	4	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	77	6	1	159	35	4	1	2	14	4	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	396	177	6	396	177	8	265	225	66	326	276
Arrive On Green	0.00	0.11	0.11	0.00	0.11	0.11	0.00	0.14	0.14	0.04	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	1	77	6	1	159	35	4	1	2	14	4	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.6	0.1	0.0	1.2	0.6	0.1	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.6	0.1	0.0	1.2	0.6	0.1	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	6	396	177	6	396	177	8	265	225	66	326	276
V/C Ratio(X)	0.16	0.19	0.03	0.16	0.40	0.20	0.51	0.00	0.01	0.21	0.01	0.01
Avail Cap(c_a), veh/h	253	2267	1011	253	2267	1011	253	1856	1573	631	2254	1910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.1	11.4	11.2	14.1	11.7	11.4	14.0	10.4	10.4	13.2	9.6	9.6
Incr Delay (d2), s/veh	11.3	0.2	0.1	11.3	0.7	0.5	43.8	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	0.0	0.4	0.2	0.1	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	11.6	11.3	25.3	12.3	11.9	57.9	10.4	10.4	14.8	9.7	9.6
LnGrp LOS	C	B	B	C	B	B	E	B	B	B	A	A
Approach Vol, veh/h		84			195			7			20	
Approach Delay, s/veh		11.8			12.3			37.5			13.3	
Approach LOS		B			B			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	9.0	5.0	8.1	5.1	9.9	5.0	8.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	10.0	28.0	4.0	18.0	4.0	34.0	4.0	18.0
Max Q Clear Time (g_c+I1), s	2.2	2.0	2.0	2.6	2.1	2.0	2.0	3.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	60	9	463	102	34	70	1336	245	67	1168	50
Future Volume (veh/h)	16	60	9	463	102	34	70	1336	245	67	1168	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	63	9	487	107	36	74	1406	258	71	1229	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	141	63	535	1153	514	95	1819	565	91	1808	561
Arrive On Green	0.02	0.04	0.04	0.30	0.32	0.32	0.05	0.36	0.36	0.05	0.35	0.35
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	17	63	9	487	107	36	74	1406	258	71	1229	53
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.8	1.4	0.4	21.2	1.7	1.3	3.3	19.7	10.1	3.2	16.5	1.8
Cycle Q Clear(g_c), s	0.8	1.4	0.4	21.2	1.7	1.3	3.3	19.7	10.1	3.2	16.5	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	28	141	63	535	1153	514	95	1819	565	91	1808	561
V/C Ratio(X)	0.61	0.45	0.14	0.91	0.09	0.07	0.78	0.77	0.46	0.78	0.68	0.09
Avail Cap(c_a), veh/h	111	1414	631	664	2519	1123	133	2013	625	133	2013	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	37.7	37.3	27.1	18.9	18.8	37.6	23.0	19.9	37.7	22.1	17.4
Incr Delay (d2), s/veh	19.4	2.2	1.0	14.6	0.0	0.1	17.3	1.7	0.6	16.1	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.6	0.2	10.7	0.7	0.5	1.9	7.7	3.6	1.8	6.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	39.9	38.3	41.7	19.0	18.8	54.9	24.7	20.5	53.8	22.9	17.4
LnGrp LOS	E	D	D	D	B	B	D	C	C	D	C	B
Approach Vol, veh/h		89			630			1738			1353	
Approach Delay, s/veh		43.4			36.5			25.4			24.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	34.0	29.2	8.2	9.3	33.8	6.3	31.1
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	6.0	31.7	30.0	32.0	6.0	31.7	5.0	57.0
Max Q Clear Time (g_c+I1), s	5.2	21.7	23.2	3.4	5.3	18.5	2.8	3.7
Green Ext Time (p_c), s	0.0	7.0	1.0	0.3	0.0	7.2	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	370	0	22	591	0	26	0	1	0	2	0
Future Volume (veh/h)	2	370	0	22	591	0	26	0	1	0	2	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	389	0	23	622	0	27	0	1	0	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1053	469	41	1126	502	47	508	431	5	204	173
Arrive On Green	0.00	0.30	0.00	0.02	0.32	0.00	0.03	0.00	0.27	0.00	0.11	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	2	389	0	23	622	0	27	0	1	0	2	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	3.2	0.0	0.5	5.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.2	0.0	0.5	5.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	1053	469	41	1126	502	47	508	431	5	204	173
V/C Ratio(X)	0.41	0.37	0.00	0.57	0.55	0.00	0.58	0.00	0.00	0.00	0.01	0.00
Avail Cap(c_a), veh/h	194	2715	1211	243	2812	1254	194	1429	1211	194	1429	1211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	18.3	10.2	0.0	17.7	10.4	0.0	17.6	0.0	9.7	0.0	14.6	0.0
Incr Delay (d2), s/veh	47.5	0.2	0.0	11.8	0.4	0.0	10.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.0	0.0	0.3	1.6	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.7	10.4	0.0	29.5	10.8	0.0	28.4	0.0	9.7	0.0	14.6	0.0
LnGrp LOS	E	B	A	C	B	A	C	A	A	A	B	A
Approach Vol, veh/h		391			645			28			2	
Approach Delay, s/veh		10.7			11.5			27.8			14.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	15.0	5.8	15.9	6.0	9.0	5.1	16.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	28.0	5.0	28.0	4.0	28.0	4.0	29.0
Max Q Clear Time (g_c+I1), s	0.0	2.0	2.5	5.2	2.5	2.0	2.0	7.3
Green Ext Time (p_c), s	0.0	0.0	0.0	2.6	0.0	0.0	0.0	4.3

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	265	48	38	676	6	70	81	12	3	52	37
Future Volume (veh/h)	68	265	48	38	676	6	70	81	12	3	52	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	279	51	40	712	6	74	85	13	3	55	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	1110	495	64	1042	465	100	284	241	6	186	157
Arrive On Green	0.05	0.31	0.31	0.04	0.29	0.29	0.06	0.15	0.15	0.00	0.10	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	72	279	51	40	712	6	74	85	13	3	55	39
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.6	2.4	0.9	0.9	7.1	0.1	1.6	1.6	0.3	0.1	1.1	0.9
Cycle Q Clear(g_c), s	1.6	2.4	0.9	0.9	7.1	0.1	1.6	1.6	0.3	0.1	1.1	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	98	1110	495	64	1042	465	100	284	241	6	186	157
V/C Ratio(X)	0.74	0.25	0.10	0.63	0.68	0.01	0.74	0.30	0.05	0.51	0.30	0.25
Avail Cap(c_a), veh/h	177	1412	630	177	1412	630	177	1207	1023	177	1207	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	10.3	9.8	19.2	12.6	10.1	18.7	15.2	14.6	20.0	16.8	16.7
Incr Delay (d2), s/veh	10.2	0.1	0.1	9.7	0.8	0.0	10.4	0.6	0.1	56.0	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.7	0.3	0.5	2.4	0.0	0.9	0.6	0.1	0.1	0.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	10.5	9.9	28.8	13.4	10.1	29.1	15.8	14.7	76.1	17.7	17.6
LnGrp LOS	C	B	A	C	B	B	C	B	B	E	B	B
Approach Vol, veh/h		402			758			172			97	
Approach Delay, s/veh		13.7			14.2			21.4			19.5	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	11.1	6.4	17.6	7.3	9.0	7.2	16.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	26.0	4.0	16.0	4.0	26.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	2.1	3.6	2.9	4.4	3.6	3.1	3.6	9.1
Green Ext Time (p_c), s	0.0	0.4	0.0	1.5	0.0	0.3	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	292	17	76	760	0	12	0	38	0	0	5
Future Volume (veh/h)	2	292	17	76	760	0	12	0	38	0	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	307	18	80	800	0	13	0	40	0	0	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	1160	517	105	1362	607	24	447	379	4	187	159
Arrive On Green	0.00	0.33	0.33	0.06	0.38	0.00	0.01	0.00	0.24	0.00	0.00	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	2	307	18	80	800	0	13	0	40	0	0	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	2.5	0.3	1.8	7.2	0.0	0.3	0.0	0.8	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	2.5	0.3	1.8	7.2	0.0	0.3	0.0	0.8	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	4	1160	517	105	1362	607	24	447	379	4	187	159
V/C Ratio(X)	0.45	0.26	0.03	0.76	0.59	0.00	0.54	0.00	0.11	0.00	0.00	0.03
Avail Cap(c_a), veh/h	178	2849	1271	312	3116	1390	178	1265	1072	178	1265	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	19.9	9.9	9.2	18.5	9.8	0.0	19.6	0.0	11.9	0.0	0.0	16.2
Incr Delay (d2), s/veh	57.5	0.1	0.0	10.8	0.4	0.0	17.7	0.0	0.1	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.8	0.1	0.9	2.1	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.4	10.0	9.2	29.3	10.2	0.0	37.3	0.0	12.0	0.0	0.0	16.3
LnGrp LOS	E	B	A	C	B	A	D	A	B	A	A	B
Approach Vol, veh/h		327			880			53			5	
Approach Delay, s/veh		10.4			11.9			18.2			16.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	14.5	7.4	18.0	5.5	9.0	5.1	20.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	27.0	7.0	32.0	4.0	27.0	4.0	35.0
Max Q Clear Time (g_c+I1), s	0.0	2.8	3.8	4.5	2.3	2.1	2.0	9.2
Green Ext Time (p_c), s	0.0	0.1	0.0	2.1	0.0	0.0	0.0	6.1

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	234	47	71	714	1	74	136	99	5	97	49
Future Volume (veh/h)	49	234	47	71	714	1	74	136	99	5	97	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	246	49	75	752	1	78	143	104	5	102	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	1146	511	97	1188	530	100	298	252	10	203	172
Arrive On Green	0.04	0.32	0.32	0.05	0.33	0.33	0.06	0.16	0.16	0.01	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	52	246	49	75	752	1	78	143	104	5	102	52
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.3	2.2	0.9	1.8	7.8	0.0	1.9	3.0	2.6	0.1	2.2	1.3
Cycle Q Clear(g_c), s	1.3	2.2	0.9	1.8	7.8	0.0	1.9	3.0	2.6	0.1	2.2	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	76	1146	511	97	1188	530	100	298	252	10	203	172
V/C Ratio(X)	0.68	0.21	0.10	0.77	0.63	0.00	0.78	0.48	0.41	0.52	0.50	0.30
Avail Cap(c_a), veh/h	245	2117	944	245	2117	944	245	814	690	163	729	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	10.8	10.3	20.4	12.3	9.7	20.3	16.7	16.5	21.6	18.3	17.9
Incr Delay (d2), s/veh	10.2	0.1	0.1	11.9	0.6	0.0	12.4	1.2	1.1	37.5	1.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	0.3	1.0	2.6	0.0	1.0	1.2	0.9	0.1	1.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	10.9	10.4	32.3	12.8	9.7	32.7	17.9	17.6	59.1	20.3	18.9
LnGrp LOS	C	B	B	C	B	A	C	B	B	E	C	B
Approach Vol, veh/h		347			828			325			159	
Approach Delay, s/veh		13.8			14.6			21.3			21.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	11.9	7.4	19.1	7.4	9.7	6.9	19.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	19.0	6.0	26.0	6.0	17.0	6.0	26.0
Max Q Clear Time (g_c+I1), s	2.1	5.0	3.8	4.2	3.9	4.2	3.3	9.8
Green Ext Time (p_c), s	0.0	0.9	0.0	1.7	0.0	0.5	0.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	0	11	13	0	528	42	1624	24	223	1467	834
Future Volume (veh/h)	341	0	11	13	0	528	42	1624	24	223	1467	834
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	359	0	12	14	0	556	44	1709	25	235	1544	878
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	453	0	0	23	0	0	56	2906	902	275	3534	1097
Arrive On Green	0.13	0.00	0.00	0.01	0.00	0.00	0.03	0.57	0.57	0.15	0.69	0.69
Sat Flow, veh/h	3456	359		1781	14		1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	359	46.7		14	74.5		44	1709	25	235	1544	878
Grp Sat Flow(s),veh/h/ln	1728	D		1781	E		1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	10.4			0.8			2.5	22.4	0.7	13.3	13.8	39.5
Cycle Q Clear(g_c), s	10.4			0.8			2.5	22.4	0.7	13.3	13.8	39.5
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	453			23			56	2906	902	275	3534	1097
V/C Ratio(X)	0.79			0.61			0.78	0.59	0.03	0.85	0.44	0.80
Avail Cap(c_a), veh/h	937			69			121	2906	902	1001	4947	1536
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5			50.7			49.6	14.4	9.7	42.5	7.0	11.0
Incr Delay (d2), s/veh	3.2			23.8			20.6	0.3	0.0	7.4	0.1	2.1
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6			0.5			1.4	8.2	0.2	6.3	4.4	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.7			74.5			70.2	14.7	9.8	49.9	7.1	13.1
LnGrp LOS	D			E			E	B	A	D	A	B
Approach Vol, veh/h								1778			2657	
Approach Delay, s/veh								16.0			12.9	
Approach LOS								B			B	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	21.0	63.7	6.3	8.3	76.4	18.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	58.0	49.0	4.0	7.0	100.0	28.0
Max Q Clear Time (g_c+I1), s	15.3	24.4	2.8	4.5	41.5	12.4
Green Ext Time (p_c), s	0.7	14.8	0.0	0.0	30.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	1456	30	68	1368	46	0	24	19	143	10	7
Future Volume (veh/h)	14	1456	30	68	1368	46	0	24	19	143	10	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	1533	32	72	1440	48	0	25	20	151	11	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	2104	653	91	2038	633	3	134	113	192	503	426
Arrive On Green	0.06	0.41	0.41	0.05	0.40	0.40	0.00	0.07	0.07	0.11	0.27	0.27
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	15	1533	32	72	1440	48	0	25	20	151	11	7
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.4	14.1	0.7	2.2	13.2	0.5	0.0	0.7	0.7	4.6	0.2	0.1
Cycle Q Clear(g_c), s	0.4	14.1	0.7	2.2	13.2	0.5	0.0	0.7	0.7	4.6	0.2	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	2104	653	91	2038	633	3	134	113	192	503	426
V/C Ratio(X)	0.13	0.73	0.05	0.79	0.71	0.08	0.00	0.19	0.18	0.79	0.02	0.02
Avail Cap(c_a), veh/h	127	2373	737	127	2373	737	127	1070	907	255	1204	1020
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	13.8	9.9	26.3	14.1	2.8	0.0	24.4	24.4	24.3	15.0	6.7
Incr Delay (d2), s/veh	0.5	1.0	0.0	19.9	0.8	0.1	0.0	0.7	0.7	11.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.8	0.2	1.4	4.5	0.3	0.0	0.3	0.3	2.4	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	14.8	9.9	46.1	14.9	2.9	0.0	25.1	25.2	35.5	15.1	6.7
LnGrp LOS	C	B	A	D	B	A	A	C	C	D	B	A
Approach Vol, veh/h		1580			1560			45			169	
Approach Delay, s/veh		14.8			16.0			25.1			32.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	9.0	7.9	28.1	0.0	20.0	8.6	27.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	32.0	4.0	26.0	4.0	36.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	6.6	2.7	4.2	16.1	0.0	2.2	2.4	15.2
Green Ext Time (p_c), s	0.1	0.1	0.0	6.9	0.0	0.0	0.0	7.1

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	551	1146	6	469	1089	38	19	1166	478	57	1106	399
Future Volume (veh/h)	551	1146	6	469	1089	38	19	1166	478	57	1106	399
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	580	1206	2	494	1146	9	20	1227	215	60	1164	152
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	658	1570	488	579	1454	451	58	1556	483	108	1630	506
Arrive On Green	0.19	0.31	0.31	0.17	0.28	0.28	0.02	0.30	0.30	0.03	0.32	0.32
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	580	1206	2	494	1146	9	20	1227	215	60	1164	152
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	17.3	22.7	0.1	14.7	21.9	0.4	0.6	23.3	11.6	1.8	21.3	7.7
Cycle Q Clear(g_c), s	17.3	22.7	0.1	14.7	21.9	0.4	0.6	23.3	11.6	1.8	21.3	7.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	658	1570	488	579	1454	451	58	1556	483	108	1630	506
V/C Ratio(X)	0.88	0.77	0.00	0.85	0.79	0.02	0.34	0.79	0.45	0.55	0.71	0.30
Avail Cap(c_a), veh/h	750	1735	539	750	1735	539	130	1783	553	130	1783	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	33.3	25.4	42.8	34.9	27.3	51.5	33.7	29.6	50.6	31.8	27.2
Incr Delay (d2), s/veh	10.9	1.9	0.0	7.5	2.1	0.0	3.5	2.2	0.6	4.4	1.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	9.5	0.0	6.8	9.2	0.2	0.3	9.8	4.5	0.8	8.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.7	35.2	25.4	50.4	37.0	27.3	55.0	35.9	30.3	55.0	33.0	27.5
LnGrp LOS	D	D	C	D	D	C	D	D	C	D	C	C
Approach Vol, veh/h		1788			1649			1462			1376	
Approach Delay, s/veh		40.9			41.0			35.3			33.4	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	37.3	22.8	37.6	6.8	38.8	25.2	35.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	37.0	23.0	36.0	4.0	37.0	23.0	36.0
Max Q Clear Time (g_c+I1), s	3.8	25.3	16.7	24.7	2.6	23.3	19.3	23.9
Green Ext Time (p_c), s	0.0	7.0	1.0	6.3	0.0	7.3	0.9	6.2

Intersection Summary	
HCM 6th Ctrl Delay	38.0
HCM 6th LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	204	1291	1284	91	122	374
Future Volume (veh/h)	204	1291	1284	91	122	374
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	1359	1352	96	128	394
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	264	2917	1797	558	509	453
Arrive On Green	0.15	0.57	0.35	0.35	0.29	0.29
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	215	1359	1352	96	128	394
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	8.2	10.9	16.3	2.9	3.9	16.5
Cycle Q Clear(g_c), s	8.2	10.9	16.3	2.9	3.9	16.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	264	2917	1797	558	509	453
V/C Ratio(X)	0.82	0.47	0.75	0.17	0.25	0.87
Avail Cap(c_a), veh/h	433	3646	2042	634	763	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	8.8	20.0	15.6	19.2	23.8
Incr Delay (d2), s/veh	6.1	0.1	1.4	0.1	0.3	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.4	6.2	1.0	1.6	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.0	8.9	21.4	15.8	19.5	31.7
LnGrp LOS	C	A	C	B	B	C
Approach Vol, veh/h		1574	1448		522	
Approach Delay, s/veh		12.4	21.0		28.7	
Approach LOS		B	C		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		45.0		25.0	15.4	29.6
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		50.0		30.0	17.0	28.0
Max Q Clear Time (g_c+I1), s		12.9		18.5	10.2	18.3
Green Ext Time (p_c), s		13.3		1.5	0.3	6.3

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	525	859	30	467	791	296	13	776	241	164	835	571
Future Volume (veh/h)	525	859	30	467	791	296	13	776	241	164	835	571
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	553	904	8	492	833	236	14	817	68	173	879	306
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	656	1368	425	598	1283	398	46	1233	383	244	1526	474
Arrive On Green	0.19	0.27	0.27	0.17	0.25	0.25	0.01	0.24	0.24	0.07	0.30	0.30
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	553	904	8	492	833	236	14	817	68	173	879	306
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	13.1	13.4	0.3	11.7	12.4	11.1	0.3	12.3	2.9	4.2	12.4	14.3
Cycle Q Clear(g_c), s	13.1	13.4	0.3	11.7	12.4	11.1	0.3	12.3	2.9	4.2	12.4	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	656	1368	425	598	1283	398	46	1233	383	244	1526	474
V/C Ratio(X)	0.84	0.66	0.02	0.82	0.65	0.59	0.31	0.66	0.18	0.71	0.58	0.65
Avail Cap(c_a), veh/h	813	2161	671	813	2161	671	163	2221	690	244	2342	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	27.7	22.9	33.9	28.5	28.0	41.6	29.1	25.6	38.7	25.2	25.9
Incr Delay (d2), s/veh	6.7	0.6	0.0	5.0	0.6	1.4	3.7	0.6	0.2	9.2	0.3	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	5.3	0.1	5.2	5.0	4.3	0.2	4.9	1.1	2.0	4.9	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	28.2	22.9	38.9	29.0	29.4	45.3	29.7	25.8	47.9	25.6	27.4
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1465			1561			899			1358	
Approach Delay, s/veh		32.6			32.2			29.7			28.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	25.5	19.7	28.8	6.1	30.4	21.1	27.4
Change Period (Y+Rc), s	5.0	5.0	5.0	6.0	5.0	5.0	5.0	6.0
Max Green Setting (Gmax), s	6.0	37.0	20.0	36.0	4.0	39.0	20.0	36.0
Max Q Clear Time (g_c+I1), s	6.2	14.3	13.7	15.4	2.3	16.3	15.1	14.4
Green Ext Time (p_c), s	0.0	6.3	1.0	6.5	0.0	7.8	1.0	7.0

Intersection Summary	
HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1264	1397	89	0	157
Future Volume (veh/h)	0	1264	1397	89	0	157
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1331	1471	94	0	165
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	5	2740	2740	851	303	269
Arrive On Green	0.00	0.54	0.54	0.54	0.00	0.17
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	0	1331	1471	94	0	165
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.0	5.6	6.4	1.0	0.0	3.3
Cycle Q Clear(g_c), s	0.0	5.6	6.4	1.0	0.0	3.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	5	2740	2740	851	303	269
V/C Ratio(X)	0.00	0.49	0.54	0.11	0.00	0.61
Avail Cap(c_a), veh/h	209	4645	3297	1023	1516	1349
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	4.9	5.1	3.9	0.0	13.1
Incr Delay (d2), s/veh	0.0	0.1	0.2	0.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	1.1	0.2	0.0	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.1	5.3	3.9	0.0	15.4
LnGrp LOS	A	A	A	A	A	B
Approach Vol, veh/h		1331	1565		165	
Approach Delay, s/veh		5.1	5.2		15.4	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	23.3	10.8	0.0	23.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	29.0	4.0	22.0
Max Q Clear Time (g_c+I1), s	7.6	5.3	0.0	8.4
Green Ext Time (p_c), s	10.7	0.5	0.0	8.7

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1127	114	22	1326	198	135	112	10	105	68	25
Future Volume (veh/h)	23	1127	114	22	1326	198	135	112	10	105	68	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	1186	120	23	1396	208	142	118	11	111	72	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	2123	659	39	2119	658	180	205	173	142	165	139
Arrive On Green	0.02	0.42	0.42	0.02	0.42	0.42	0.10	0.11	0.11	0.08	0.09	0.09
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	24	1186	120	23	1396	208	142	118	11	111	72	26
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.7	9.5	2.6	0.7	11.8	4.7	4.2	3.2	0.3	3.3	2.0	0.8
Cycle Q Clear(g_c), s	0.7	9.5	2.6	0.7	11.8	4.7	4.2	3.2	0.3	3.3	2.0	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	2123	659	39	2119	658	180	205	173	142	165	139
V/C Ratio(X)	0.60	0.56	0.18	0.60	0.66	0.32	0.79	0.58	0.06	0.78	0.44	0.19
Avail Cap(c_a), veh/h	133	2573	799	133	2573	799	200	1152	976	200	1152	976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	11.9	9.9	26.0	12.6	10.6	23.5	22.7	21.4	24.2	23.2	22.7
Incr Delay (d2), s/veh	13.6	0.2	0.1	13.9	0.5	0.3	17.2	2.6	0.2	12.2	1.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.0	0.8	0.4	3.8	1.4	2.5	1.5	0.1	1.8	0.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	12.1	10.0	39.8	13.1	10.8	40.7	25.2	21.5	36.4	25.0	23.3
LnGrp LOS	D	B	B	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h		1330			1627			271			209	
Approach Delay, s/veh		12.4			13.2			33.2			30.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	10.9	6.2	27.3	10.4	9.7	6.2	27.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	6.0	33.0	4.0	27.0	6.0	33.0	4.0	27.0
Max Q Clear Time (g_c+I1), s	5.3	5.2	2.7	11.5	6.2	4.0	2.7	13.8
Green Ext Time (p_c), s	0.0	0.6	0.0	7.9	0.0	0.4	0.0	8.4

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	151	1092	1283	122	207	263
Future Volume (veh/h)	151	1092	1283	122	207	263
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	1149	1351	128	218	277
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	206	2918	1827	567	414	368
Arrive On Green	0.12	0.57	0.36	0.36	0.23	0.23
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	159	1149	1351	128	218	277
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	4.4	6.3	11.8	2.9	5.5	8.3
Cycle Q Clear(g_c), s	4.4	6.3	11.8	2.9	5.5	8.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	206	2918	1827	567	414	368
V/C Ratio(X)	0.77	0.39	0.74	0.23	0.53	0.75
Avail Cap(c_a), veh/h	385	3610	2006	623	1015	903
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	6.0	14.3	11.4	17.1	18.2
Incr Delay (d2), s/veh	6.1	0.1	1.4	0.2	1.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.6	4.0	0.9	2.1	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.0	6.1	15.6	11.6	18.1	21.3
LnGrp LOS	C	A	B	B	B	C
Approach Vol, veh/h		1308	1479		495	
Approach Delay, s/veh		8.8	15.3		19.9	
Approach LOS		A	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		34.1		16.8	10.9	23.2
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		36.0		29.0	11.0	20.0
Max Q Clear Time (g_c+I1), s		8.3		10.3	6.4	13.8
Green Ext Time (p_c), s		9.6		1.5	0.2	4.4

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	82	1217	1397	74	70	9
Future Volume (veh/h)	82	1217	1397	74	70	9
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	1281	1471	78	74	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	108	3371	2441	758	173	154
Arrive On Green	0.06	0.66	0.48	0.48	0.10	0.10
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	86	1281	1471	78	74	9
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	2.0	4.7	8.7	1.1	1.6	0.2
Cycle Q Clear(g_c), s	2.0	4.7	8.7	1.1	1.6	0.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	108	3371	2441	758	173	154
V/C Ratio(X)	0.79	0.38	0.60	0.10	0.43	0.06
Avail Cap(c_a), veh/h	216	4337	3098	962	1297	1154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	3.2	7.9	5.9	17.5	16.9
Incr Delay (d2), s/veh	12.2	0.1	0.2	0.1	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.6	2.2	0.3	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.3	3.2	8.1	6.0	19.2	17.0
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1367	1549		83	
Approach Delay, s/veh		5.0	8.0		19.0	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		32.2		9.0	7.5	24.7
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		35.0		30.0	5.0	25.0
Max Q Clear Time (g_c+I1), s		6.7		3.6	4.0	10.7
Green Ext Time (p_c), s		11.2		0.2	0.0	9.0

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	1022	123	539	1305	269	162	841	434	403	1000	40
Future Volume (veh/h)	222	1022	123	539	1305	269	162	841	434	403	1000	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	234	1076	28	567	1374	135	171	885	161	424	1053	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	290	1488	469	647	2007	623	225	1112	345	419	1398	434
Arrive On Green	0.08	0.30	0.30	0.19	0.40	0.40	0.07	0.22	0.22	0.12	0.27	0.27
Sat Flow, veh/h	3456	5025	1585	3456	5025	1560	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	234	1076	28	567	1374	135	171	885	161	424	1053	10
Grp Sat Flow(s),veh/h/ln	1728	1675	1585	1728	1675	1560	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	8.2	23.7	1.6	19.7	28.0	7.0	6.0	20.3	10.9	15.0	23.3	0.6
Cycle Q Clear(g_c), s	8.2	23.7	1.6	19.7	28.0	7.0	6.0	20.3	10.9	15.0	23.3	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	1488	469	647	2007	623	225	1112	345	419	1398	434
V/C Ratio(X)	0.81	0.72	0.06	0.88	0.68	0.22	0.76	0.80	0.47	1.01	0.75	0.02
Avail Cap(c_a), veh/h	335	1488	469	782	2071	643	251	1238	384	419	1485	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.7	39.0	31.2	48.9	30.7	24.4	56.9	45.8	42.1	54.4	41.1	32.8
Incr Delay (d2), s/veh	12.0	2.1	0.1	9.6	1.2	0.3	11.4	4.1	1.9	47.1	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	9.5	0.6	9.1	11.0	2.6	3.0	9.0	4.4	9.0	9.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.7	41.1	31.3	58.5	31.9	24.8	68.3	49.9	44.0	101.5	43.6	32.9
LnGrp LOS	E	D	C	E	C	C	E	D	D	F	D	C
Approach Vol, veh/h		1338			2076			1217			1487	
Approach Delay, s/veh		45.5			38.7			51.7			60.0	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	32.9	28.2	42.6	13.1	39.9	15.4	55.4
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	30.0	28.0	35.0	9.0	36.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	17.0	22.3	21.7	25.7	8.0	25.3	10.2	30.0
Green Ext Time (p_c), s	0.0	4.7	1.4	8.2	0.1	6.6	0.2	19.4

Intersection Summary	
HCM 6th Ctrl Delay	48.0
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	365	1408	0	0	1396	74	0	0	0	55	0	613
Future Volume (veh/h)	365	1408	0	0	1396	74	0	0	0	55	0	613
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	0	1870	0	1870	0	1870
Adj Flow Rate, veh/h	384	1482	0	0	1469	78	0	0	0	58	0	645
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0	2	0	2
Cap, veh/h	511	2551	0	0	1762	786	0	3	0	173	0	0
Arrive On Green	0.15	0.72	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.10	0.00	0.00
Sat Flow, veh/h	3456	3647	0	0	3647	1585	0	-74814	0	1781	58	
Grp Volume(v), veh/h	384	1482	0	0	1469	78	0	0	0	58	23.2	
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1585	0	1870	0	1781	C	
Q Serve(g_s), s	5.7	10.9	0.0	0.0	19.2	1.4	0.0	0.0	0.0	1.6		
Cycle Q Clear(g_c), s	5.7	10.9	0.0	0.0	19.2	1.4	0.0	0.0	0.0	1.6		
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		
Lane Grp Cap(c), veh/h	511	2551	0	0	1762	786	0	3	0	173		
V/C Ratio(X)	0.75	0.58	0.00	0.00	0.83	0.10	0.00	0.00	0.00	0.34		
Avail Cap(c_a), veh/h	512	2568	0	0	1778	793	0	104	0	297		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00		
Uniform Delay (d), s/veh	22.0	3.7	0.0	0.0	11.7	7.2	0.0	0.0	0.0	22.7		
Incr Delay (d2), s/veh	5.5	0.4	0.0	0.0	3.7	0.1	0.0	0.0	0.0	0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.3	0.7	0.0	0.0	5.6	0.3	0.0	0.0	0.0	0.6		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	4.1	0.0	0.0	15.4	7.3	0.0	0.0	0.0	23.2		
LnGrp LOS	C	A	A	A	B	A	A	A	A	C		
Approach Vol, veh/h		1866			1547			0				
Approach Delay, s/veh		8.9			15.0			0.0				
Approach LOS		A			B							

Timer - Assigned Phs	1	2		4			7	8				
Phs Duration (G+Y+Rc), s	9.2	0.0		44.7			12.0	32.8				
Change Period (Y+Rc), s	4.0	4.0		6.0			4.0	6.0				
Max Green Setting (Gmax), s	9.0	3.0		39.0			8.0	27.0				
Max Q Clear Time (g_c+I1), s	3.6	0.0		12.9			7.7	21.2				
Green Ext Time (p_c), s	0.0	0.0		23.4			0.0	5.6				

Intersection Summary												
HCM 6th Ctrl Delay			11.9									
HCM 6th LOS			B									

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	461	897	92	484	960	226	141	0	184	163	0	487
Future Volume (veh/h)	461	897	92	484	960	226	141	0	184	163	0	487
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	485	944	97	509	1011	0	148	0	194	172	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	533	1326	587	558	1286		193	0	0	209	0	
Arrive On Green	0.30	0.37	0.37	0.31	0.36	0.00	0.11	0.00	0.00	0.12	0.00	0.00
Sat Flow, veh/h	1781	3554	1574	1781	3554	1585	1781	148		1781	172	
Grp Volume(v), veh/h	485	944	97	509	1011	0	148	37.0		172	52.2	
Grp Sat Flow(s),veh/h/ln	1781	1777	1574	1781	1777	1585	1781	D		1781	D	
Q Serve(g_s), s	20.9	18.1	3.3	21.9	20.2	0.0	6.4			7.5		
Cycle Q Clear(g_c), s	20.9	18.1	3.3	21.9	20.2	0.0	6.4			7.5		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	533	1326	587	558	1286		193			209		
V/C Ratio(X)	0.91	0.71	0.17	0.91	0.79		0.77			0.82		
Avail Cap(c_a), veh/h	737	1425	631	781	1514		513			230		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	26.9	21.4	16.7	26.4	22.7	0.0	34.6			34.4		
Incr Delay (d2), s/veh	10.2	2.0	0.3	9.7	3.1	0.0	2.4			17.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	9.9	7.5	1.2	10.3	8.5	0.0	2.9			4.2		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.1	23.4	17.0	36.1	25.8	0.0	37.0			52.2		
LnGrp LOS	D	C	B	D	C		D			D		
Approach Vol, veh/h		1526			1520	A						
Approach Delay, s/veh		27.3			29.2							
Approach LOS		C			C							

Timer - Assigned Phs	1		3	4	5		7	8
Phs Duration (G+Y+Rc), s	15.0		29.0	35.8	12.7		29.9	34.9
Change Period (Y+Rc), s	5.7		4.0	6.0	4.0		6.0	* 6
Max Green Setting (Gmax), s	10.3		35.0	32.0	23.0		33.0	* 34
Max Q Clear Time (g_c+I1), s	9.5		23.9	20.1	8.4		22.9	22.2
Green Ext Time (p_c), s	0.0		1.0	6.0	0.2		0.9	6.6

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	330	518	91	542	131	805	1630	93	149	1736	266
Future Volume (veh/h)	245	330	518	91	542	131	805	1630	93	149	1736	266
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	258	347	151	96	571	16	847	1716	45	157	1827	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	568	253	119	696	216	920	2570	798	185	2191	
Arrive On Green	0.09	0.16	0.16	0.07	0.14	0.14	0.27	0.50	0.50	0.10	0.34	0.00
Sat Flow, veh/h	3456	3554	1585	1781	5106	1585	3456	5106	1585	1781	6434	1585
Grp Volume(v), veh/h	258	347	151	96	571	16	847	1716	45	157	1827	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1702	1585	1728	1702	1585	1781	1609	1585
Q Serve(g_s), s	8.8	10.9	10.6	6.4	13.1	1.1	28.6	30.2	1.7	10.4	31.4	0.0
Cycle Q Clear(g_c), s	8.8	10.9	10.6	6.4	13.1	1.1	28.6	30.2	1.7	10.4	31.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	312	568	253	119	696	216	920	2570	798	185	2191	
V/C Ratio(X)	0.83	0.61	0.60	0.81	0.82	0.07	0.92	0.67	0.06	0.85	0.83	
Avail Cap(c_a), veh/h	317	592	264	119	766	238	979	2570	798	252	2191	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.7	46.9	46.8	55.2	50.4	45.2	42.8	22.3	15.2	52.9	36.4	0.0
Incr Delay (d2), s/veh	15.3	2.4	4.7	30.6	7.8	0.3	13.1	1.4	0.1	14.0	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	4.9	4.4	3.8	5.9	0.4	13.2	11.3	0.6	5.2	12.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	49.3	51.5	85.8	58.2	45.5	55.8	23.7	15.4	66.9	39.5	0.0
LnGrp LOS	E	D	D	F	E	D	E	C	B	E	D	
Approach Vol, veh/h		756			683			2608			1984	A
Approach Delay, s/veh		56.5			61.8			34.0			41.7	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	66.4	12.0	25.2	36.0	46.9	14.8	22.4
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	17.0	55.0	8.0	20.0	34.0	38.0	11.0	* 18
Max Q Clear Time (g_c+I1), s	12.4	32.2	8.4	12.9	30.6	33.4	10.8	15.1
Green Ext Time (p_c), s	0.1	11.2	0.0	2.0	1.4	3.9	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	482	260	357	570	588	211	808	341	420	1233	6
Future Volume (veh/h)	25	482	260	357	570	588	211	808	341	420	1233	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	507	0	376	600	524	222	851	287	442	1298	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	506		405	658	789	193	980	620	510	1153	
Arrive On Green	0.04	0.27	0.00	0.12	0.35	0.35	0.11	0.28	0.28	0.15	0.32	0.00
Sat Flow, veh/h	1781	1870	1585	3456	1870	1578	1781	3554	1576	3456	3554	1585
Grp Volume(v), veh/h	26	507	0	376	600	524	222	851	287	442	1298	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1578	1781	1777	1576	1728	1777	1585
Q Serve(g_s), s	1.6	30.0	0.0	12.0	34.0	27.6	12.0	25.3	15.0	13.9	36.0	0.0
Cycle Q Clear(g_c), s	1.6	30.0	0.0	12.0	34.0	27.6	12.0	25.3	15.0	13.9	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	506		405	658	789	193	980	620	510	1153	
V/C Ratio(X)	0.33	1.00		0.93	0.91	0.66	1.15	0.87	0.46	0.87	1.13	
Avail Cap(c_a), veh/h	144	506		405	658	789	193	980	620	592	1153	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.4	40.5	0.0	48.5	34.3	20.8	49.5	38.3	25.0	46.2	37.5	0.0
Incr Delay (d2), s/veh	0.9	40.8	0.0	27.7	17.1	2.1	112.0	8.6	0.7	11.6	68.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	19.5	0.0	6.7	18.2	10.3	11.1	11.4	5.7	6.5	25.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	81.3	0.0	76.2	51.4	22.9	161.5	46.9	25.7	57.8	105.9	0.0
LnGrp LOS	D	F		E	D	C	F	D	C	E	F	
Approach Vol, veh/h		533	A		1500			1360			1740	A
Approach Delay, s/veh		79.8			47.7			61.1			93.7	
Approach LOS		E			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.4	36.6	18.0	35.0	16.0	42.0	9.0	44.0
Change Period (Y+Rc), s	5.0	6.0	5.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	19.0	28.0	13.0	* 30	12.0	36.0	9.0	34.0
Max Q Clear Time (g_c+I1), s	15.9	27.3	14.0	32.0	14.0	38.0	3.6	36.0
Green Ext Time (p_c), s	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	70.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	753	16	45	943	590	1	635	36	589	1017	55
Future Volume (veh/h)	55	753	16	45	943	590	1	635	36	589	1017	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	793	3	47	993	0	1	668	0	620	1071	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	871	386	501	1114		8	831		687	1530	680
Arrive On Green	0.08	0.25	0.25	0.15	0.31	0.00	0.00	0.23	0.00	0.20	0.43	0.43
Sat Flow, veh/h	3456	3554	1575	3456	3554	1585	3456	3554	1585	3456	3554	1580
Grp Volume(v), veh/h	58	793	3	47	993	0	1	668	0	620	1071	24
Grp Sat Flow(s),veh/h/ln	1728	1777	1575	1728	1777	1585	1728	1777	1585	1728	1777	1580
Q Serve(g_s), s	1.7	23.3	0.1	1.3	28.5	0.0	0.0	19.0	0.0	18.8	26.3	0.5
Cycle Q Clear(g_c), s	1.7	23.3	0.1	1.3	28.5	0.0	0.0	19.0	0.0	18.8	26.3	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	871	386	501	1114		8	831		687	1530	680
V/C Ratio(X)	0.22	0.91	0.01	0.09	0.89		0.13	0.80		0.90	0.70	0.04
Avail Cap(c_a), veh/h	322	961	426	645	1259		258	994		741	1530	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	39.3	12.5	39.7	35.1	0.0	53.4	38.7	0.0	41.9	24.9	5.6
Incr Delay (d2), s/veh	0.2	11.2	0.0	0.0	7.7	0.0	2.9	5.2	0.0	13.1	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	11.4	0.1	0.5	13.3	0.0	0.0	8.8	0.0	9.2	11.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.6	50.5	12.5	39.8	42.7	0.0	56.3	43.9	0.0	55.1	26.7	5.7
LnGrp LOS	D	D	B	D	D		E	D		E	C	A
Approach Vol, veh/h		854			1040	A		669	A		1715	
Approach Delay, s/veh		50.1			42.6			43.9			36.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.3	31.1	12.2	38.6	4.2	52.2	20.6	30.3
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	5.0	* 4
Max Green Setting (Gmax), s	23.0	30.0	10.0	38.0	8.0	45.0	20.0	* 29
Max Q Clear Time (g_c+I1), s	20.8	21.0	3.7	30.5	2.0	28.3	3.3	25.3
Green Ext Time (p_c), s	0.5	3.7	0.0	3.1	0.0	9.0	0.1	1.0

Intersection Summary	
HCM 6th Ctrl Delay	41.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	4	98	33	7	2	177	1474	22	0	1335	0
Future Volume (veh/h)	9	4	98	33	7	2	177	1474	22	0	1335	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	4	6	35	7	0	186	1552	14	0	1405	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	10	30	54	11	0	113	2296	1024	4	1771	790
Arrive On Green	0.02	0.02	0.02	0.04	0.04	0.00	0.06	0.65	0.65	0.00	0.50	0.00
Sat Flow, veh/h	1252	556	1585	1496	299	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	13	0	6	42	0	0	186	1552	14	0	1405	0
Grp Sat Flow(s),veh/h/ln	1808	0	1585	1796	0	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.3	0.0	0.2	1.1	0.0	0.0	3.0	13.0	0.1	0.0	15.6	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.2	1.1	0.0	0.0	3.0	13.0	0.1	0.0	15.6	0.0
Prop In Lane	0.69		1.00	0.83		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	0	30	64	0	0	113	2296	1024	4	1771	790
V/C Ratio(X)	0.39	0.00	0.20	0.65	0.00	0.00	1.65	0.68	0.01	0.00	0.79	0.00
Avail Cap(c_a), veh/h	602	0	528	151	0	0	113	2296	1024	113	1798	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	23.0	0.0	22.9	22.6	0.0	0.0	22.2	5.3	3.0	0.0	9.9	0.0
Incr Delay (d2), s/veh	2.7	0.0	1.2	4.1	0.0	0.0	328.9	0.9	0.0	0.0	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.5	0.0	0.0	11.3	1.5	0.0	0.0	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	24.2	26.7	0.0	0.0	351.1	6.2	3.0	0.0	12.5	0.0
LnGrp LOS	C	A	C	C	A	A	F	A	A	A	B	A
Approach Vol, veh/h		19			42			1752			1405	
Approach Delay, s/veh		25.2			26.7			42.8			12.5	
Approach LOS		C			C			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	36.6		5.7	7.0	29.6		5.1
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.2
Max Green Setting (Gmax), s	3.0	24.0		4.0	3.0	24.0		15.8
Max Q Clear Time (g_c+I1), s	0.0	15.0		3.1	5.0	17.6		2.3
Green Ext Time (p_c), s	0.0	8.6		0.0	0.0	6.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.3
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	65	78	2119	163	81	1944
Future Volume (veh/h)	65	78	2119	163	81	1944
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	82	2231	172	85	2046
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	123	110	3760	1167	107	4238
Arrive On Green	0.07	0.07	1.00	1.00	0.06	0.83
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	68	82	2231	172	85	2046
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	4.4	6.1	0.0	0.0	5.7	13.6
Cycle Q Clear(g_c), s	4.4	6.1	0.0	0.0	5.7	13.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	123	110	3760	1167	107	4238
V/C Ratio(X)	0.55	0.75	0.59	0.15	0.79	0.48
Avail Cap(c_a), veh/h	361	321	3760	1167	178	4238
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.81	0.81	0.82	0.82
Uniform Delay (d), s/veh	54.0	54.8	0.0	0.0	55.6	2.9
Incr Delay (d2), s/veh	2.8	7.3	0.2	0.1	4.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	5.5	0.1	0.0	2.6	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.9	62.1	0.2	0.1	59.7	3.2
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	150		2403			2131
Approach Delay, s/veh	59.8		0.2			5.5
Approach LOS	E		A			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				106.0		14.0	11.2	94.8
Change Period (Y+Rc), s				6.4		5.7	4.0	6.4
Max Green Setting (Gmax), s				83.6		24.3	12.0	67.6
Max Q Clear Time (g_c+I1), s				15.6		8.1	7.7	2.0
Green Ext Time (p_c), s				37.1		0.3	0.0	41.5

Intersection Summary	
HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	312	233	107	2010	1812	237
Future Volume (veh/h)	312	233	107	2010	1812	237
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	328	245	113	2116	1907	249
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	603	277	167	3387	2969	922
Arrive On Green	0.17	0.17	0.10	1.00	1.00	1.00
Sat Flow, veh/h	3456	1585	3456	5274	5274	1585
Grp Volume(v), veh/h	328	245	113	2116	1907	249
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1702	1585
Q Serve(g_s), s	10.4	18.1	3.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.4	18.1	3.8	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	603	277	167	3387	2969	922
V/C Ratio(X)	0.54	0.89	0.67	0.62	0.64	0.27
Avail Cap(c_a), veh/h	835	383	835	3387	2969	922
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.79	0.79	0.86	0.86
Uniform Delay (d), s/veh	45.2	48.4	53.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	13.4	1.4	0.7	0.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	8.0	1.6	0.2	0.3	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.4	61.8	54.7	0.7	0.9	0.6
LnGrp LOS	D	E	D	A	A	A
Approach Vol, veh/h	573			2229	2156	
Approach Delay, s/veh	52.4			3.4	0.9	
Approach LOS	D			A	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		26.7	9.8	75.8		85.6
Change Period (Y+Rc), s		5.7	4.0	6.0		* 6
Max Green Setting (Gmax), s		29.0	29.0	46.3		* 80
Max Q Clear Time (g_c+I1), s		20.1	5.8	2.0		2.0
Green Ext Time (p_c), s		0.8	0.2	31.6		48.0

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	31	227	7	20	14	186	1873	8	15	1983	68
Future Volume (veh/h)	252	31	227	7	20	14	186	1873	8	15	1983	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	0	14	7	21	0	196	1972	5	16	2087	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	0	156	36	38	0	223	2899	900	25	2331	724
Arrive On Green	0.10	0.00	0.10	0.02	0.02	0.00	0.12	0.57	0.57	0.01	0.46	0.46
Sat Flow, veh/h	3563	0	1585	1781	1870	0	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	289	0	14	7	21	0	196	1972	5	16	2087	38
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	9.6	0.0	1.0	0.5	1.3	0.0	13.0	32.6	0.2	1.1	45.1	1.6
Cycle Q Clear(g_c), s	9.6	0.0	1.0	0.5	1.3	0.0	13.0	32.6	0.2	1.1	45.1	1.6
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	0	156	36	38	0	223	2899	900	25	2331	724
V/C Ratio(X)	0.83	0.00	0.09	0.19	0.56	0.00	0.88	0.68	0.01	0.65	0.90	0.05
Avail Cap(c_a), veh/h	386	0	172	238	249	0	238	2899	900	74	2353	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	0.75	0.75	0.75	0.77	0.77	0.77
Uniform Delay (d), s/veh	53.1	0.0	49.2	57.8	58.3	0.0	51.6	18.3	11.3	58.9	30.0	18.2
Incr Delay (d2), s/veh	13.5	0.0	0.3	1.9	9.1	0.0	21.7	1.0	0.0	8.1	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	0.4	0.2	0.7	0.0	7.0	11.9	0.1	0.5	18.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.6	0.0	49.6	59.7	67.4	0.0	73.3	19.3	11.3	67.0	34.0	18.2
LnGrp LOS	E	A	D	E	E	A	E	B	B	E	C	B
Approach Vol, veh/h		303			28			2173			2141	
Approach Delay, s/veh		65.8			65.5			24.1			34.0	
Approach LOS		E			E			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.8	19.0	60.5		6.4	5.7	73.8				
Change Period (Y+Rc), s		6.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		13.0	16.0	55.3		16.0	5.0	66.3				
Max Q Clear Time (g_c+I1), s		11.6	15.0	47.1		3.3	3.1	34.6				
Green Ext Time (p_c), s		0.2	0.0	7.7		0.0	0.0	25.3				

Intersection Summary	
HCM 6th Ctrl Delay	31.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	202	93	36	97	200	19	1701	139	343	1828	37
Future Volume (veh/h)	67	202	93	36	97	200	19	1701	139	343	1828	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	213	98	38	102	0	20	1791	0	361	1924	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	263	223	48	416		29	2801		421	3369	68
Arrive On Green	0.05	0.14	0.14	0.03	0.12	0.00	0.02	0.55	0.00	0.12	0.65	0.65
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	5106	1585	3456	5151	104
Grp Volume(v), veh/h	71	213	98	38	102	0	20	1791	0	361	1271	692
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1702	1585	1728	1702	1852
Q Serve(g_s), s	4.7	13.3	6.8	2.5	3.1	0.0	1.3	29.3	0.0	12.3	24.7	24.8
Cycle Q Clear(g_c), s	4.7	13.3	6.8	2.5	3.1	0.0	1.3	29.3	0.0	12.3	24.7	24.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	91	263	223	48	416		29	2801		421	2226	1211
V/C Ratio(X)	0.78	0.81	0.44	0.78	0.25		0.69	0.64		0.86	0.57	0.57
Avail Cap(c_a), veh/h	148	344	292	89	512		74	2801		547	2226	1211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	0.68	0.68	0.00	0.63	0.63	0.63
Uniform Delay (d), s/veh	56.3	50.0	47.2	58.0	48.2	0.0	58.7	18.8	0.0	51.7	11.5	11.5
Incr Delay (d2), s/veh	5.4	17.3	3.9	9.8	0.5	0.0	7.3	0.4	0.0	5.6	0.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.5	2.9	1.3	1.4	0.0	0.6	10.7	0.0	5.5	8.3	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	67.2	51.1	67.8	48.6	0.0	66.0	19.2	0.0	57.3	12.1	12.7
LnGrp LOS	E	E	D	E	D		E	B		E	B	B
Approach Vol, veh/h		382			140	A		1811	A		2324	
Approach Delay, s/veh		62.1			53.8			19.8			19.3	
Approach LOS		E			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	22.6	5.9	84.2	10.1	19.8	18.6	71.5
Change Period (Y+Rc), s	4.0	* 5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	6.0	* 22	5.0	68.3	10.0	17.3	19.0	54.3
Max Q Clear Time (g_c+I1), s	4.5	15.3	3.3	26.8	6.7	5.1	14.3	31.3
Green Ext Time (p_c), s	0.0	1.7	0.0	29.3	0.0	0.5	0.3	17.7

Intersection Summary	
HCM 6th Ctrl Delay	24.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	3	8	22	3	171	97	922	11	92	1147	7
Future Volume (veh/h)	23	3	8	22	3	171	97	922	11	92	1147	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	3	8	23	3	180	102	971	12	97	1207	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	14	113	250	33	251	156	1527	19	154	1534	9
Arrive On Green	0.07	0.07	0.07	0.16	0.16	0.16	0.09	0.42	0.42	0.09	0.42	0.42
Sat Flow, veh/h	1592	199	1585	1584	207	1585	1781	3595	44	1781	3622	21
Grp Volume(v), veh/h	27	0	8	26	0	180	102	480	503	97	592	622
Grp Sat Flow(s),veh/h/ln	1791	0	1585	1791	0	1585	1781	1777	1862	1781	1777	1867
Q Serve(g_s), s	1.0	0.0	0.3	0.8	0.0	7.4	3.8	14.5	14.5	3.6	19.6	19.6
Cycle Q Clear(g_c), s	1.0	0.0	0.3	0.8	0.0	7.4	3.8	14.5	14.5	3.6	19.6	19.6
Prop In Lane	0.89		1.00	0.88		1.00	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	127	0	113	283	0	251	156	755	791	154	752	790
V/C Ratio(X)	0.21	0.00	0.07	0.09	0.00	0.72	0.65	0.64	0.64	0.63	0.79	0.79
Avail Cap(c_a), veh/h	263	0	233	1077	0	953	183	868	910	209	894	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	0.0	29.6	24.5	0.0	27.3	30.1	15.4	15.4	30.1	17.0	17.0
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	1.5	3.9	1.8	1.7	1.6	4.8	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	0.4	0.0	2.7	1.7	5.4	5.6	1.5	7.7	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	0.0	29.7	24.6	0.0	28.7	34.0	17.2	17.2	31.7	21.8	21.6
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		35			206			1085			1311	
Approach Delay, s/veh		30.1			28.2			18.8			22.5	
Approach LOS		C			C			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		8.8	10.0	34.6		14.8	9.9	34.7				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		10.0	7.0	34.3		41.0	8.0	33.3				
Max Q Clear Time (g_c+I1), s		3.0	5.8	21.6		9.4	5.6	16.5				
Green Ext Time (p_c), s		0.0	0.0	7.2		0.5	0.0	6.8				

Intersection Summary	
HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	521	626	178	505	110	326	587	93	650	720	28
Future Volume (veh/h)	32	521	626	178	505	110	326	587	93	650	720	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2001	1924	1924	2001	1924	1924	2001	1924	1924	1954	1879	1879
Adj Flow Rate, veh/h	34	548	620	187	532	33	343	618	23	684	758	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	119	697	508	200	853	378	452	1072	476	750	1942	601
Arrive On Green	0.06	0.19	0.19	0.10	0.23	0.23	0.12	0.29	0.29	0.21	0.38	0.38
Sat Flow, veh/h	1906	3656	1618	1906	3656	1620	3698	3656	1622	3611	5130	1586
Grp Volume(v), veh/h	34	548	620	187	532	33	343	618	23	684	758	6
Grp Sat Flow(s),veh/h/ln	1906	1828	1618	1906	1828	1620	1849	1828	1622	1806	1710	1586
Q Serve(g_s), s	1.6	13.6	18.2	9.3	12.4	1.5	8.6	13.7	1.0	17.7	10.3	0.2
Cycle Q Clear(g_c), s	1.6	13.6	18.2	9.3	12.4	1.5	8.6	13.7	1.0	17.7	10.3	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	697	508	200	853	378	452	1072	476	750	1942	601
V/C Ratio(X)	0.29	0.79	1.22	0.94	0.62	0.09	0.76	0.58	0.05	0.91	0.39	0.01
Avail Cap(c_a), veh/h	200	790	549	200	853	378	853	1534	681	758	2045	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	36.7	32.8	42.3	32.8	28.6	40.5	28.6	24.1	36.9	21.6	18.5
Incr Delay (d2), s/veh	0.5	5.5	116.0	45.0	1.8	0.2	1.0	0.8	0.1	14.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	6.2	27.0	6.6	5.4	0.6	3.7	5.7	0.4	8.8	3.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	42.2	148.8	87.4	34.6	28.8	41.5	29.5	24.2	51.9	21.8	18.5
LnGrp LOS	D	D	F	F	C	C	D	C	C	D	C	B
Approach Vol, veh/h		1202			752			984			1448	
Approach Delay, s/veh		97.2			47.5			33.5			36.0	
Approach LOS		F			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	23.9	15.7	41.8	9.9	27.9	23.8	33.7
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	10.0	20.6	22.0	38.0	10.0	20.6	20.0	40.0
Max Q Clear Time (g_c+I1), s	11.3	15.6	10.6	12.3	3.6	14.4	19.7	15.7
Green Ext Time (p_c), s	0.0	2.5	1.1	14.5	0.0	3.5	0.1	11.6

Intersection Summary	
HCM 6th Ctrl Delay	54.2
HCM 6th LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1256	87	109	897	62	26
Future Volume (veh/h)	1256	87	109	897	62	26
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1322	92	115	944	65	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1667	743	218	2367	273	243
Arrive On Green	0.47	0.47	0.12	0.67	0.15	0.15
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	1322	92	115	944	65	27
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	16.9	1.8	3.2	6.5	1.7	0.8
Cycle Q Clear(g_c), s	16.9	1.8	3.2	6.5	1.7	0.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1667	743	218	2367	273	243
V/C Ratio(X)	0.79	0.12	0.53	0.40	0.24	0.11
Avail Cap(c_a), veh/h	1876	837	266	2785	665	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.0	8.0	22.1	4.1	20.0	19.6
Incr Delay (d2), s/veh	2.5	0.1	0.7	0.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.4	1.2	0.9	0.7	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.6	8.1	22.8	4.3	20.1	19.6
LnGrp LOS	B	A	C	A	C	B
Approach Vol, veh/h	1414			1059	92	
Approach Delay, s/veh	14.1			6.3	20.0	
Approach LOS	B			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		12.2	10.6	30.8		41.4
Change Period (Y+Rc), s		4.0	4.0	5.7		* 5.7
Max Green Setting (Gmax), s		20.0	8.0	28.3		* 42
Max Q Clear Time (g_c+I1), s		3.7	5.2	18.9		8.5
Green Ext Time (p_c), s		0.1	0.0	6.3		9.1

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	428	713	58	208	86	665	1093	59	238	1761	89
Future Volume (veh/h)	127	428	713	58	208	86	665	1093	59	238	1761	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	451	0	61	219	0	700	1151	0	251	1854	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	562		236	561		638	2247		575	2232	
Arrive On Green	0.07	0.16	0.00	0.07	0.16	0.00	0.18	0.44	0.00	0.17	0.44	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	134	451	0	61	219	0	700	1151	0	251	1854	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	4.9	15.9	0.0	2.2	7.2	0.0	24.0	21.2	0.0	8.5	41.7	0.0
Cycle Q Clear(g_c), s	4.9	15.9	0.0	2.2	7.2	0.0	24.0	21.2	0.0	8.5	41.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	562		236	561		638	2247		575	2232	
V/C Ratio(X)	0.56	0.80		0.26	0.39		1.10	0.51		0.44	0.83	
Avail Cap(c_a), veh/h	239	850		266	888		638	2247		575	2232	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.7	52.7	0.0	57.4	49.1	0.0	53.0	26.3	0.0	48.7	32.3	0.0
Incr Delay (d2), s/veh	1.9	5.0	0.0	0.2	0.8	0.0	65.1	0.8	0.0	0.2	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	7.3	0.0	0.9	3.2	0.0	15.7	8.2	0.0	3.5	16.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.5	57.8	0.0	57.6	49.9	0.0	118.1	27.2	0.0	48.9	35.3	0.0
LnGrp LOS	E	E		E	D		F	C		D	D	
Approach Vol, veh/h		585	A		280	A		1851	A		2105	A
Approach Delay, s/veh		58.4			51.6			61.6			36.9	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.6	63.2	12.9	26.3	28.0	62.8	12.9	26.2
Change Period (Y+Rc), s	6.0	* 6	4.0	5.7	4.0	6.0	4.0	* 5.7
Max Green Setting (Gmax), s	12.0	* 57	10.0	31.1	24.0	45.2	9.0	* 33
Max Q Clear Time (g_c+I1), s	10.5	23.2	4.2	17.9	26.0	43.7	6.9	9.2
Green Ext Time (p_c), s	0.1	9.8	0.0	2.7	0.0	1.3	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	685	0	0	990	489	0	0	0	314	0	131
Future Volume (veh/h)	75	685	0	0	990	489	0	0	0	314	0	131
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1841	1841	0	1870	1841	1841				1841	0	1841
Adj Flow Rate, veh/h	79	721	0	0	1042	515				331	0	138
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	4	4	0	2	4	4				4	0	4
Cap, veh/h	99	1947	0	4	1472	653				419	0	461
Arrive On Green	0.06	0.56	0.00	0.00	0.42	0.42				0.24	0.00	0.24
Sat Flow, veh/h	1753	3589	0	1781	3497	1551				1753	0	1560
Grp Volume(v), veh/h	79	721	0	0	1042	515				331	0	138
Grp Sat Flow(s),veh/h/ln	1753	1749	0	1781	1749	1551				1753	0	1560
Q Serve(g_s), s	2.2	5.8	0.0	0.0	12.4	14.5				8.9	0.0	3.4
Cycle Q Clear(g_c), s	2.2	5.8	0.0	0.0	12.4	14.5				8.9	0.0	3.4
Prop In Lane	1.00		0.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	99	1947	0	4	1472	653				419	0	461
V/C Ratio(X)	0.80	0.37	0.00	0.00	0.71	0.79				0.79	0.00	0.30
Avail Cap(c_a), veh/h	104	1947	0	106	1715	760				974	0	955
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	6.2	0.0	0.0	12.0	12.6				18.0	0.0	13.7
Incr Delay (d2), s/veh	30.1	0.1	0.0	0.0	1.1	4.9				1.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.2	0.0	0.0	3.6	4.4				3.4	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.6	6.4	0.0	0.0	13.2	17.5				19.3	0.0	13.9
LnGrp LOS	D	A	A	A	B	B				B	A	B
Approach Vol, veh/h		800			1557						469	
Approach Delay, s/veh		11.0			14.6						17.7	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	33.7		16.6	6.8	26.9
Change Period (Y+Rc), s	4.0	5.7		4.6	4.0	5.7
Max Green Setting (Gmax), s	3.0	24.7		28.0	3.0	24.7
Max Q Clear Time (g_c+I1), s	0.0	7.8		10.9	4.2	16.5
Green Ext Time (p_c), s	0.0	3.0		1.1	0.0	4.6

Intersection Summary			
HCM 6th Ctrl Delay			14.1
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	623	16	9	1194	344	24	1	11	86	4	293
Future Volume (veh/h)	122	623	16	9	1194	344	24	1	11	86	4	293
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1885	1826	1826	1885	1885	1885	1791	1791	1732
Adj Flow Rate, veh/h	128	656	17	9	1257	362	25	1	12	91	4	308
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	1	5	5	1	1	1	1	1	5
Cap, veh/h	137	1717	44	12	1474	650	52	4	43	384	17	339
Arrive On Green	0.08	0.50	0.50	0.01	0.42	0.42	0.03	0.03	0.03	0.23	0.23	0.23
Sat Flow, veh/h	1739	3455	89	1795	3469	1529	1795	124	1492	1637	72	1449
Grp Volume(v), veh/h	128	329	344	9	1257	362	25	0	13	95	0	308
Grp Sat Flow(s),veh/h/ln	1739	1735	1809	1795	1735	1529	1795	0	1617	1709	0	1449
Q Serve(g_s), s	5.6	9.0	9.0	0.4	24.8	13.6	1.0	0.0	0.6	3.4	0.0	15.7
Cycle Q Clear(g_c), s	5.6	9.0	9.0	0.4	24.8	13.6	1.0	0.0	0.6	3.4	0.0	15.7
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.92	0.96		1.00
Lane Grp Cap(c), veh/h	137	862	899	12	1474	650	52	0	47	400	0	339
V/C Ratio(X)	0.93	0.38	0.38	0.73	0.85	0.56	0.48	0.00	0.28	0.24	0.00	0.91
Avail Cap(c_a), veh/h	137	862	899	71	1520	670	354	0	319	405	0	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.8	11.9	11.9	37.7	19.7	16.5	36.3	0.0	36.1	23.6	0.0	28.3
Incr Delay (d2), s/veh	55.8	0.3	0.3	26.6	4.8	1.0	2.5	0.0	1.2	0.3	0.0	26.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	2.9	3.1	0.2	9.5	4.2	0.5	0.0	0.2	1.4	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.6	12.1	12.1	64.2	24.5	17.4	38.9	0.0	37.3	23.9	0.0	54.9
LnGrp LOS	F	B	B	E	C	B	D	A	D	C	A	D
Approach Vol, veh/h		801			1628			38			403	
Approach Delay, s/veh		24.7			23.2			38.3			47.6	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	43.5		6.2	10.0	38.0		21.8
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	3.0	36.3		15.0	6.0	33.3		18.0
Max Q Clear Time (g_c+I1), s	2.4	11.0		3.0	7.6	26.8		17.7
Green Ext Time (p_c), s	0.0	7.0		0.0	0.0	5.4		0.1

Intersection Summary			
HCM 6th Ctrl Delay			27.2
HCM 6th LOS			C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	720	270	265	1479	108	667
Future Volume (veh/h)	720	270	265	1479	108	667
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	758	284	279	1557	114	702
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	864	603	588	2322	250	746
Arrive On Green	0.24	0.24	0.33	0.65	0.14	0.14
Sat Flow, veh/h	3647	1569	1781	3647	1781	1585
Grp Volume(v), veh/h	758	284	279	1557	114	702
Grp Sat Flow(s),veh/h/ln	1777	1569	1781	1777	1781	1585
Q Serve(g_s), s	15.4	10.2	9.3	20.3	4.4	6.8
Cycle Q Clear(g_c), s	15.4	10.2	9.3	20.3	4.4	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	864	603	588	2322	250	746
V/C Ratio(X)	0.88	0.47	0.47	0.67	0.46	0.94
Avail Cap(c_a), veh/h	900	620	618	2322	380	862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	27.3	17.4	19.9	8.0	29.6	18.9
Incr Delay (d2), s/veh	9.6	0.6	0.2	1.5	0.5	15.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	4.3	3.4	5.4	1.9	19.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.9	18.0	20.2	9.5	30.1	34.8
LnGrp LOS	D	B	C	A	C	C
Approach Vol, veh/h	1042			1836	816	
Approach Delay, s/veh	31.7			11.1	34.2	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	30.8	24.2		14.5		55.0
Change Period (Y+Rc), s	6.0	* 6		4.0		6.0
Max Green Setting (Gmax), s	26.0	* 19		16.0		49.0
Max Q Clear Time (g_c+I1), s	11.3	17.4		8.8		22.3
Green Ext Time (p_c), s	0.5	0.8		1.7		7.9

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	487	307	18	124	310	94	1	1513	11	102	1438	305
Future Volume (veh/h)	487	307	18	124	310	94	1	1513	11	102	1438	305
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	513	323	0	131	326	0	1	1593	0	107	1514	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	578	671		158	391		1	2179		132	2481	
Arrive On Green	0.17	0.19	0.00	0.09	0.11	0.00	0.00	0.43	0.00	0.07	0.49	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	513	323	0	131	326	0	1	1593	0	107	1514	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	17.4	9.7	0.0	8.7	10.8	0.0	0.1	31.2	0.0	7.1	26.0	0.0
Cycle Q Clear(g_c), s	17.4	9.7	0.0	8.7	10.8	0.0	0.1	31.2	0.0	7.1	26.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	578	671		158	391		1	2179		132	2481	
V/C Ratio(X)	0.89	0.48		0.83	0.83		0.67	0.73		0.81	0.61	
Avail Cap(c_a), veh/h	691	720		223	444		45	2179		193	2481	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.9	43.4	0.0	53.8	52.3	0.0	59.9	28.7	0.0	54.7	22.5	0.0
Incr Delay (d2), s/veh	10.6	0.9	0.0	11.8	12.5	0.0	113.3	2.2	0.0	9.5	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	4.2	0.0	4.3	5.4	0.0	0.1	12.5	0.0	3.5	10.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	44.3	0.0	65.6	64.8	0.0	173.3	30.9	0.0	64.2	23.7	0.0
LnGrp LOS	E	D		E	E		F	C		E	C	
Approach Vol, veh/h		836	A		457	A		1594	A		1621	A
Approach Delay, s/veh		53.6			65.0			31.0			26.4	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	28.6	5.8	64.0	24.1	19.2	12.9	56.9
Change Period (Y+Rc), s	4.0	* 6	5.7	* 5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	15.0	* 24	3.0	* 58	24.0	15.0	13.0	48.3
Max Q Clear Time (g_c+I1), s	10.7	11.7	2.1	28.0	19.4	12.8	9.1	33.2
Green Ext Time (p_c), s	0.1	1.7	0.0	14.9	0.7	0.4	0.1	10.2

Intersection Summary	
HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	259	266	50	190	126	235	1417	90	108	1521	72
Future Volume (veh/h)	58	259	266	50	190	126	235	1417	90	108	1521	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	273	0	53	200	0	247	1492	0	114	1601	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	347		68	327		276	2566		140	2247	
Arrive On Green	0.04	0.10	0.00	0.04	0.09	0.00	0.15	0.50	0.00	0.08	0.44	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	61	273	0	53	200	0	247	1492	0	114	1601	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	4.1	9.0	0.0	3.5	6.5	0.0	16.3	24.6	0.0	7.6	30.7	0.0
Cycle Q Clear(g_c), s	4.1	9.0	0.0	3.5	6.5	0.0	16.3	24.6	0.0	7.6	30.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	347		68	327		276	2566		140	2247	
V/C Ratio(X)	0.78	0.79		0.78	0.61		0.89	0.58		0.82	0.71	
Avail Cap(c_a), veh/h	119	521		119	521		371	2566		208	2247	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.8	52.9	0.0	57.2	52.4	0.0	49.7	21.0	0.0	54.4	27.4	0.0
Incr Delay (d2), s/veh	7.9	5.4	0.0	6.9	2.6	0.0	16.0	1.0	0.0	8.8	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	4.2	0.0	1.7	2.9	0.0	8.3	9.4	0.0	3.7	12.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.6	58.3	0.0	64.0	55.0	0.0	65.7	22.0	0.0	63.2	28.6	0.0
LnGrp LOS	E	E		E	D		E	C		E	C	
Approach Vol, veh/h		334	A		253	A		1739	A		1715	A
Approach Delay, s/veh		59.5			56.9			28.2			30.9	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	18.1	22.6	58.5	9.3	17.4	15.1	66.0
Change Period (Y+Rc), s	4.0	6.4	4.0	5.7	4.0	6.4	5.7	* 5.7
Max Green Setting (Gmax), s	8.0	17.6	25.0	49.3	8.0	17.6	14.0	* 60
Max Q Clear Time (g_c+I1), s	5.5	11.0	18.3	32.7	6.1	8.5	9.6	26.6
Green Ext Time (p_c), s	0.0	0.7	0.3	11.0	0.0	0.7	0.1	15.5

Intersection Summary	
HCM 6th Ctrl Delay	33.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	0	14	2	45	7	847	11	51	1199	11
Future Volume (veh/h)	17	0	0	14	2	45	7	847	11	51	1199	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	0	0	15	2	47	7	892	12	54	1262	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	82	0	181	24	182	23	1576	21	129	1797	17
Arrive On Green	0.04	0.00	0.00	0.11	0.11	0.11	0.01	0.44	0.44	0.07	0.50	0.50
Sat Flow, veh/h	1781	1870	0	1581	211	1585	1781	3590	48	1781	3607	34
Grp Volume(v), veh/h	18	0	0	17	0	47	7	441	463	54	622	652
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1791	0	1585	1781	1777	1862	1781	1777	1864
Q Serve(g_s), s	0.5	0.0	0.0	0.5	0.0	1.4	0.2	9.9	9.9	1.6	14.5	14.5
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.5	0.0	1.4	0.2	9.9	9.9	1.6	14.5	14.5
Prop In Lane	1.00		0.00	0.88		1.00	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	78	82	0	205	0	182	23	780	817	129	885	929
V/C Ratio(X)	0.23	0.00	0.00	0.08	0.00	0.26	0.30	0.57	0.57	0.42	0.70	0.70
Avail Cap(c_a), veh/h	333	349	0	669	0	592	233	1171	1227	233	1171	1229
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	0.0	21.2	0.0	21.6	26.2	11.2	11.2	23.8	10.4	10.4
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.1	0.0	0.3	2.7	1.1	1.1	0.8	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.5	0.1	3.5	3.6	0.6	4.8	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	0.0	21.3	0.0	21.9	28.9	12.3	12.3	24.6	12.3	12.2
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		18			64			911			1328	
Approach Delay, s/veh		25.3			21.7			12.4			12.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	32.4		6.3	7.9	29.2		10.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	7.0	35.3		10.0	7.0	35.3		20.0
Max Q Clear Time (g_c+I1), s	2.2	16.5		2.5	3.6	11.9		3.4
Green Ext Time (p_c), s	0.0	10.2		0.0	0.0	7.5		0.1

Intersection Summary		
HCM 6th Ctrl Delay		13.0
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1166	52	50	740	8	40	2	27	13	8	3
Future Volume (veh/h)	43	1166	52	50	740	8	40	2	27	13	8	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	1227	55	53	779	8	42	2	28	14	8	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	1548	69	89	1574	702	225	11	209	66	38	91
Arrive On Green	0.05	0.45	0.45	0.05	0.44	0.44	0.13	0.13	0.13	0.06	0.06	0.06
Sat Flow, veh/h	1781	3464	155	1781	3554	1585	1704	81	1585	1154	659	1585
Grp Volume(v), veh/h	45	629	653	53	779	8	44	0	28	22	0	3
Grp Sat Flow(s),veh/h/ln	1781	1777	1842	1781	1777	1585	1785	0	1585	1813	0	1585
Q Serve(g_s), s	1.4	17.1	17.1	1.6	8.8	0.2	1.2	0.0	0.9	0.7	0.0	0.1
Cycle Q Clear(g_c), s	1.4	17.1	17.1	1.6	8.8	0.2	1.2	0.0	0.9	0.7	0.0	0.1
Prop In Lane	1.00		0.08	1.00		1.00	0.95		1.00	0.64		1.00
Lane Grp Cap(c), veh/h	96	794	823	89	1574	702	235	0	209	104	0	91
V/C Ratio(X)	0.47	0.79	0.79	0.59	0.49	0.01	0.19	0.00	0.13	0.21	0.00	0.03
Avail Cap(c_a), veh/h	190	829	859	158	1594	711	348	0	309	643	0	562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.9	13.4	13.4	26.2	11.2	8.8	21.8	0.0	21.6	25.4	0.0	25.1
Incr Delay (d2), s/veh	1.3	7.9	7.7	2.4	1.1	0.0	0.1	0.0	0.1	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	6.9	7.1	0.7	2.9	0.0	0.5	0.0	0.3	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	21.3	21.1	28.6	12.3	8.8	21.9	0.0	21.7	25.7	0.0	25.2
LnGrp LOS	C	C	C	C	B	A	C	A	C	C	A	C
Approach Vol, veh/h		1327			840			72			25	
Approach Delay, s/veh		21.4			13.3			21.9			25.7	
Approach LOS		C			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.4	6.8	30.9		7.2	7.0	30.7				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		11.0	5.0	26.3		20.0	6.0	25.3				
Max Q Clear Time (g_c+I1), s		3.2	3.6	19.1		2.7	3.4	10.8				
Green Ext Time (p_c), s		0.0	0.0	6.1		0.0	0.0	7.8				

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	647	486	79	469	241	136	1169	37	304	1456	194
Future Volume (veh/h)	131	647	486	79	469	241	136	1169	37	304	1456	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	681	0	83	494	0	143	1231	0	320	1533	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	773		270	718		257	2014		392	2140	
Arrive On Green	0.09	0.22	0.00	0.08	0.20	0.00	0.07	0.39	0.00	0.11	0.42	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	138	681	0	83	494	0	143	1231	0	320	1533	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	9.1	22.3	0.0	2.7	15.5	0.0	4.8	23.1	0.0	10.9	29.9	0.0
Cycle Q Clear(g_c), s	9.1	22.3	0.0	2.7	15.5	0.0	4.8	23.1	0.0	10.9	29.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	167	773		270	718		257	2014		392	2140	
V/C Ratio(X)	0.83	0.88		0.31	0.69		0.56	0.61		0.82	0.72	
Avail Cap(c_a), veh/h	267	927		288	718		259	2014		576	2140	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.4	45.5	0.0	52.2	44.4	0.0	53.6	29.0	0.0	52.0	28.9	0.0
Incr Delay (d2), s/veh	11.0	8.7	0.0	0.6	2.8	0.0	2.6	0.5	0.0	5.8	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	10.4	0.0	1.2	6.9	0.0	2.1	8.9	0.0	4.8	11.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.4	54.1	0.0	52.9	47.2	0.0	56.2	29.5	0.0	57.8	31.0	0.0
LnGrp LOS	E	D		D	D		E	C		E	C	
Approach Vol, veh/h		819	A		577	A		1374	A		1853	A
Approach Delay, s/veh		55.9			48.0			32.3			35.6	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	53.0	13.4	31.8	14.6	56.0	15.2	29.9
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	5.7
Max Green Setting (Gmax), s	20.0	39.3	10.0	31.3	9.0	* 50	18.0	23.3
Max Q Clear Time (g_c+I1), s	12.9	25.1	4.7	24.3	6.8	31.9	11.1	17.5
Green Ext Time (p_c), s	0.7	5.0	0.1	1.8	0.1	7.3	0.2	1.1

Intersection Summary	
HCM 6th Ctrl Delay	39.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	483	0	0	608	398	2	2	0	511	0	23
Future Volume (veh/h)	1	483	0	0	608	398	2	2	0	511	0	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	508	0	0	640	419	2	2	0	560	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	2552	0	0	1343	1421	4	4	0	636	334	0
Arrive On Green	0.00	0.72	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.18	0.00	0.00
Sat Flow, veh/h	0	3647	0	0	1870	1585	912	912	0	3563	1870	0
Grp Volume(v), veh/h	0	508	0	0	640	419	4	0	0	560	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	0	0	1870	1585	1825	0	0	1781	1870	0
Q Serve(g_s), s	0.0	6.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	19.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	19.9	0.0	0.0
Prop In Lane	0.00		0.00	0.00		1.00	0.50		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	2552	0	0	1343	1421	8	0	0	636	334	0
V/C Ratio(X)	0.00	0.20	0.00	0.00	0.48	0.29	0.53	0.00	0.00	0.88	0.00	0.00
Avail Cap(c_a), veh/h	0	2552	0	0	1343	1421	56	0	0	987	518	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.89	0.89	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.0	0.0	0.0	0.0	0.0	64.6	0.0	0.0	52.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.2	0.1	19.7	0.0	0.0	4.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.1	0.0	0.0	0.1	0.0	0.2	0.0	0.0	9.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.2	0.0	0.0	0.2	0.1	84.3	0.0	0.0	56.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	F	A	A	E	A	A
Approach Vol, veh/h		508			1059			4			560	
Approach Delay, s/veh		6.2			0.2			84.3			56.0	
Approach LOS		A			A			F			E	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		98.2		27.2	0.0	98.2		4.5				
Change Period (Y+Rc), s		4.9		4.0	4.0	4.9		4.0				
Max Green Setting (Gmax), s		77.1		36.0	3.0	70.1		4.0				
Max Q Clear Time (g_c+I1), s		8.1		21.9	0.0	2.0		2.3				
Green Ext Time (p_c), s		2.8		1.3	0.0	11.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	990	24	18	966	0	45	0	45	76	11	29
Future Volume (veh/h)	0	990	24	18	966	0	45	0	45	76	11	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1042	0	19	1017	0	47	0	47	80	12	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1409		64	1755	0	84	0	84	195	51	131
Arrive On Green	0.00	0.40	0.00	0.07	0.99	0.00	0.10	0.00	0.10	0.11	0.11	0.11
Sat Flow, veh/h	0	3741	0	1781	3647	0	839	0	839	1781	462	1194
Grp Volume(v), veh/h	0	1042	0	19	1017	0	94	0	0	80	0	43
Grp Sat Flow(s),veh/h/ln	0	1777	0	1781	1777	0	1677	0	0	1781	0	1656
Q Serve(g_s), s	0.0	16.3	0.0	0.7	0.5	0.0	3.5	0.0	0.0	2.7	0.0	1.5
Cycle Q Clear(g_c), s	0.0	16.3	0.0	0.7	0.5	0.0	3.5	0.0	0.0	2.7	0.0	1.5
Prop In Lane	0.00		0.00	1.00		0.00	0.50		0.50	1.00		0.72
Lane Grp Cap(c), veh/h	0	1409		64	1755	0	169	0	0	195	0	182
V/C Ratio(X)	0.00	0.74		0.30	0.58	0.00	0.56	0.00	0.00	0.41	0.00	0.24
Avail Cap(c_a), veh/h	0	1409		219	1755	0	206	0	0	329	0	306
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.79	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.7	0.0	29.4	0.2	0.0	27.9	0.0	0.0	27.0	0.0	26.4
Incr Delay (d2), s/veh	0.0	1.7	0.0	1.0	1.4	0.0	1.1	0.0	0.0	0.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.0	0.0	0.3	0.4	0.0	1.4	0.0	0.0	1.1	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.4	0.0	30.4	1.6	0.0	28.9	0.0	0.0	27.5	0.0	26.7
LnGrp LOS	A	B		C	A	A	C	A	A	C	A	C
Approach Vol, veh/h		1042	A		1036			94			123	
Approach Delay, s/veh		18.4			2.1			28.9			27.2	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	6.3	30.7		10.5		37.0		11.1
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s	8.0	20.1		8.0		32.1		12.0
Max Q Clear Time (g_c+I1), s	2.7	18.3		5.5		2.5		4.7
Green Ext Time (p_c), s	0.0	1.4		0.0		11.8		0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1075	46	159	547	33	171
Future Volume (veh/h)	1075	46	159	547	33	171
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1132	48	167	576	35	180
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1897	80	208	2575	246	219
Arrive On Green	0.55	0.55	0.12	0.72	0.14	0.14
Sat Flow, veh/h	3567	147	1781	3647	1781	1585
Grp Volume(v), veh/h	579	601	167	576	35	180
Grp Sat Flow(s),veh/h/ln	1777	1844	1781	1777	1781	1585
Q Serve(g_s), s	14.3	14.3	5.9	3.5	1.1	7.2
Cycle Q Clear(g_c), s	14.3	14.3	5.9	3.5	1.1	7.2
Prop In Lane		0.08	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	970	1007	208	2575	246	219
V/C Ratio(X)	0.60	0.60	0.80	0.22	0.14	0.82
Avail Cap(c_a), veh/h	970	1007	274	2575	247	219
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	9.9	28.0	2.9	24.6	27.2
Incr Delay (d2), s/veh	1.0	1.0	8.9	0.2	0.1	20.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	4.6	2.9	0.7	0.5	3.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	10.9	36.9	3.1	24.7	47.4
LnGrp LOS	B	B	D	A	C	D
Approach Vol, veh/h	1180			743	215	
Approach Delay, s/veh	10.9			10.7	43.7	
Approach LOS	B			B	D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	11.6	40.4		13.0		52.0
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9
Max Green Setting (Gmax), s	10.0	33.1		9.0		47.1
Max Q Clear Time (g_c+I1), s	7.9	16.3		9.2		5.5
Green Ext Time (p_c), s	0.1	9.8		0.0		7.8

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	1155	4	13	1322	101	5	2	12	509	4	90
Future Volume (veh/h)	98	1155	4	13	1322	101	5	2	12	509	4	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	1216	4	14	1392	106	5	2	13	539	0	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	2099	7	161	2021	153	7	3	17	623	0	277
Arrive On Green	0.07	0.58	0.58	0.09	0.60	0.60	0.02	0.02	0.02	0.17	0.00	0.17
Sat Flow, veh/h	1781	3633	12	1781	3348	254	414	166	1076	3563	0	1585
Grp Volume(v), veh/h	103	595	625	14	736	762	20	0	0	539	0	95
Grp Sat Flow(s),veh/h/ln	1781	1777	1868	1781	1777	1825	1656	0	0	1781	0	1585
Q Serve(g_s), s	7.4	27.6	27.6	0.9	36.5	36.9	1.6	0.0	0.0	19.1	0.0	6.8
Cycle Q Clear(g_c), s	7.4	27.6	27.6	0.9	36.5	36.9	1.6	0.0	0.0	19.1	0.0	6.8
Prop In Lane	1.00		0.01	1.00		0.14	0.25		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	127	1026	1079	161	1073	1102	26	0	0	623	0	277
V/C Ratio(X)	0.81	0.58	0.58	0.09	0.69	0.69	0.76	0.00	0.00	0.87	0.00	0.34
Avail Cap(c_a), veh/h	164	1026	1079	161	1073	1102	51	0	0	806	0	358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.5	17.4	17.4	54.2	17.4	17.5	63.7	0.0	0.0	52.2	0.0	47.1
Incr Delay (d2), s/veh	16.2	2.4	2.3	0.1	1.9	1.9	15.5	0.0	0.0	7.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	11.4	12.0	0.4	14.8	15.4	0.8	0.0	0.0	9.2	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.7	19.8	19.7	54.3	19.3	19.4	79.2	0.0	0.0	59.5	0.0	47.6
LnGrp LOS	E	B	B	D	B	B	E	A	A	E	A	D
Approach Vol, veh/h		1323			1512			20			634	
Approach Delay, s/veh		24.1			19.7			79.2			57.8	
Approach LOS		C			B			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.6	80.0		6.1	13.2	83.4		27.3
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.6
Max Green Setting (Gmax), s	4.0	* 75		4.0	12.0	67.1		29.4
Max Q Clear Time (g_c+I1), s	2.9	29.6		3.6	9.4	38.9		21.1
Green Ext Time (p_c), s	0.0	31.3		0.0	0.1	25.2		1.6

Intersection Summary	
HCM 6th Ctrl Delay	28.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	1313	18	109	1081	590	50	59	114	1001	12	324
Future Volume (veh/h)	374	1313	18	109	1081	590	50	59	114	1001	12	324
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	394	1382	18	115	1138	409	53	62	0	1063	0	134
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	370	1661	22	475	1877	837	69	72	61	1044	0	465
Arrive On Green	0.42	0.92	0.92	0.27	0.53	0.53	0.04	0.04	0.00	0.29	0.00	0.29
Sat Flow, veh/h	1781	3592	47	1781	3554	1585	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	394	683	717	115	1138	409	53	62	0	1063	0	134
Grp Sat Flow(s),veh/h/ln	1781	1777	1862	1781	1777	1585	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	27.0	16.3	16.4	6.6	28.9	21.3	3.8	4.3	0.0	38.1	0.0	8.5
Cycle Q Clear(g_c), s	27.0	16.3	16.4	6.6	28.9	21.3	3.8	4.3	0.0	38.1	0.0	8.5
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	370	821	861	475	1877	837	69	72	61	1044	0	465
V/C Ratio(X)	1.06	0.83	0.83	0.24	0.61	0.49	0.77	0.86	0.00	1.02	0.00	0.29
Avail Cap(c_a), veh/h	370	821	861	475	1877	837	69	72	61	1044	0	465
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.71	0.00	0.71
Uniform Delay (d), s/veh	38.0	3.3	3.3	37.4	21.3	19.5	61.9	62.2	0.0	46.0	0.0	35.5
Incr Delay (d2), s/veh	65.1	9.6	9.3	0.1	0.6	0.5	38.1	59.5	0.0	28.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.5	3.8	3.9	2.8	11.4	7.6	2.5	3.2	0.0	20.8	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	103.1	12.9	12.5	37.5	21.9	20.0	100.1	121.7	0.0	74.0	0.0	35.6
LnGrp LOS	F	B	B	D	C	C	F	F	A	F	A	D
Approach Vol, veh/h		1794			1662			115			1197	
Approach Delay, s/veh		32.5			22.5			111.7			69.7	
Approach LOS		C			C			F			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	39.9	65.0		9.0	31.0	73.9		43.0
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.9
Max Green Setting (Gmax), s	9.0	* 60		5.0	27.0	42.1		38.1
Max Q Clear Time (g_c+I1), s	8.6	18.4		6.3	29.0	30.9		40.1
Green Ext Time (p_c), s	0.0	13.7		0.0	0.0	7.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1102	765	0	1619	1411	0	0	0	231	804	161
Future Volume (veh/h)	0	1102	765	0	1619	1411	0	0	0	231	804	161
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	1160	805	0	1883	0				243	846	158
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	1862	830	0	1960					708	744	630
Arrive On Green	0.00	0.70	0.70	0.00	1.00	0.00				0.40	0.40	0.40
Sat Flow, veh/h	0	3647	1585	0	3741	1585				1781	1870	1585
Grp Volume(v), veh/h	0	1160	805	0	1883	0				243	846	158
Grp Sat Flow(s),veh/h/ln	0	1777	1585	0	1870	1585				1781	1870	1585
Q Serve(g_s), s	0.0	22.7	61.7	0.0	0.0	0.0				12.4	51.7	8.7
Cycle Q Clear(g_c), s	0.0	22.7	61.7	0.0	0.0	0.0				12.4	51.7	8.7
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1862	830	0	1960					708	744	630
V/C Ratio(X)	0.00	0.62	0.97	0.00	0.96					0.34	1.14	0.25
Avail Cap(c_a), veh/h	0	1862	830	0	1960					708	744	630
HCM Platoon Ratio	1.00	1.33	1.33	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.38	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	12.8	18.7	0.0	0.0	0.0				27.3	39.2	26.2
Incr Delay (d2), s/veh	0.0	1.6	24.6	0.0	6.0	0.0				0.1	77.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.4	22.6	0.0	1.6	0.0				5.3	39.3	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.4	43.4	0.0	6.0	0.0				27.4	116.9	26.3
LnGrp LOS	A	B	D	A	A					C	F	C
Approach Vol, veh/h		1965			1883	A					1247	
Approach Delay, s/veh		26.3			6.0						88.0	
Approach LOS		C			A						F	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		73.0		57.0		73.0
Change Period (Y+Rc), s		4.9		5.3		4.9
Max Green Setting (Gmax), s		68.1		51.7		68.1
Max Q Clear Time (g_c+I1), s		24.7		53.7		2.0
Green Ext Time (p_c), s		4.7		0.0		26.9

Intersection Summary	
HCM 6th Ctrl Delay	33.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	283	1050	0	0	2548	543	0	0	1185	0	0	482
Future Volume (vph)	283	1050	0	0	2548	543	0	0	1185	0	0	482
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.9			4.9	4.9			4.0			4.0
Lane Util. Factor	1.00	0.86			0.86	0.86			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			4791	1362			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			4791	1362			1611			2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	298	1105	0	0	2682	572	0	0	1247	0	0	507
RTOR Reduction (vph)	0	0	0	0	3	61	0	0	0	0	0	25
Lane Group Flow (vph)	298	1105	0	0	2736	454	0	0	1247	0	0	482
Turn Type	Prot	NA			NA	Perm			Free			Over
Protected Phases	5	2			6							5
Permitted Phases						6			Free			
Actuated Green, G (s)	13.4	65.0			42.7	42.7			65.0			13.4
Effective Green, g (s)	13.4	65.0			42.7	42.7			65.0			13.4
Actuated g/C Ratio	0.21	1.00			0.66	0.66			1.00			0.21
Clearance Time (s)	4.0	4.9			4.9	4.9						4.0
Vehicle Extension (s)	2.0	3.9			3.8	3.8						2.0
Lane Grp Cap (vph)	364	6408			3147	894			1611			574
v/s Ratio Prot	0.17	0.17			c0.57							0.17
v/s Ratio Perm						0.33			c0.77			
v/c Ratio	0.82	0.17			0.87	0.51			0.77			0.84
Uniform Delay, d1	24.6	0.0			8.9	5.7			0.0			24.8
Progression Factor	1.77	1.00			0.91	0.97			1.00			1.00
Incremental Delay, d2	10.5	0.0			1.3	0.7			3.7			10.0
Delay (s)	54.1	0.0			9.5	6.3			3.7			34.7
Level of Service	D	A			A	A			A			C
Approach Delay (s)		11.5			9.0			3.7			34.7	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.9
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	342	1741	455	411	1781	209	337	941	252	232	925	64
Future Volume (veh/h)	342	1741	455	411	1781	209	337	941	252	232	925	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	360	1833	0	433	1875	0	355	991	0	244	974	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	414	1957		490	2154		374	1077		288	949	290
Arrive On Green	0.12	0.38	0.00	0.14	0.42	0.00	0.11	0.21	0.00	0.08	0.19	0.19
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1559
Grp Volume(v), veh/h	360	1833	0	433	1875	0	355	991	0	244	974	9
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1559
Q Serve(g_s), s	12.3	41.4	0.0	14.8	40.3	0.0	12.3	22.8	0.0	8.4	22.3	0.6
Cycle Q Clear(g_c), s	12.3	41.4	0.0	14.8	40.3	0.0	12.3	22.8	0.0	8.4	22.3	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	414	1957		490	2154		374	1077		288	949	290
V/C Ratio(X)	0.87	0.94		0.88	0.87		0.95	0.92		0.85	1.03	0.03
Avail Cap(c_a), veh/h	432	1957		490	2154		374	1077		288	949	290
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	35.6	0.0	50.5	31.7	0.0	53.2	46.4	0.0	54.2	48.8	40.0
Incr Delay (d2), s/veh	15.9	10.0	0.0	16.8	4.2	0.0	33.0	12.8	0.0	19.4	36.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	18.0	0.0	7.3	16.3	0.0	6.8	10.4	0.0	4.3	12.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.8	45.6	0.0	67.3	35.9	0.0	86.2	59.1	0.0	73.7	85.0	40.1
LnGrp LOS	E	D		E	D		F	E		E	F	D
Approach Vol, veh/h		2193	A		2308	A		1346	A		1227	
Approach Delay, s/veh		49.3			41.8			66.3			82.4	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	52.0	17.0	28.0	18.4	56.6	14.0	31.0
Change Period (Y+Rc), s	6.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	17.0	46.0	13.0	22.3	15.0	50.0	10.0	25.3
Max Q Clear Time (g_c+I1), s	16.8	43.4	14.3	24.3	14.3	42.3	10.4	24.8
Green Ext Time (p_c), s	0.0	2.5	0.0	0.0	0.1	7.5	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	55.8
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1618	136	272	1519	4	23	2	440	7	4	8
Future Volume (veh/h)	51	1618	136	272	1519	4	23	2	440	7	4	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2106	2106	2106	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	1703	143	286	1599	4	24	2	463	7	4	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	1885	156	307	2327	6	206	17	471	18	10	25
Arrive On Green	0.04	0.50	0.50	0.34	1.00	1.00	0.13	0.13	0.13	0.02	0.02	0.02
Sat Flow, veh/h	2006	3740	310	1781	3636	9	1650	138	1585	1154	659	1585
Grp Volume(v), veh/h	54	902	944	286	781	822	26	0	463	11	0	8
Grp Sat Flow(s),veh/h/ln	2006	2001	2050	1781	1777	1869	1788	0	1585	1813	0	1585
Q Serve(g_s), s	3.2	48.9	50.8	18.6	0.0	0.0	1.5	0.0	15.0	0.7	0.0	0.6
Cycle Q Clear(g_c), s	3.2	48.9	50.8	18.6	0.0	0.0	1.5	0.0	15.0	0.7	0.0	0.6
Prop In Lane	1.00		0.15	1.00		0.00	0.92		1.00	0.64		1.00
Lane Grp Cap(c), veh/h	73	1008	1033	307	1137	1196	223	0	471	28	0	25
V/C Ratio(X)	0.74	0.89	0.91	0.93	0.69	0.69	0.12	0.00	0.98	0.39	0.00	0.32
Avail Cap(c_a), veh/h	134	1009	1034	312	1137	1196	223	0	471	62	0	54
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.2	26.9	27.4	38.6	0.0	0.0	46.6	0.0	41.8	58.5	0.0	58.4
Incr Delay (d2), s/veh	5.3	10.5	12.3	26.7	2.5	2.4	0.1	0.0	36.6	3.2	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	24.6	26.6	8.7	0.8	0.8	0.7	0.0	17.9	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	37.4	39.7	65.4	2.5	2.4	46.7	0.0	78.4	61.7	0.0	61.2
LnGrp LOS	E	D	D	E	A	A	D	A	E	E	A	E
Approach Vol, veh/h		1900			1889			489			19	
Approach Delay, s/veh		39.2			12.0			76.7			61.5	
Approach LOS		D			B			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	24.7	66.2		7.6	8.4	82.5		19.0
Change Period (Y+Rc), s	4.0	5.7		5.7	4.0	* 5.7		4.0
Max Green Setting (Gmax), s	21.0	60.5		4.1	8.0	* 75		15.0
Max Q Clear Time (g_c+I1), s	20.6	52.8		2.7	5.2	2.0		17.0
Green Ext Time (p_c), s	0.1	7.6		0.0	0.1	72.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1573	435	80	1633	0	154	0	25	0	0	0
Future Volume (veh/h)	0	1573	435	80	1633	0	154	0	25	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	0	1870	0
Adj Flow Rate, veh/h	0	1656	458	84	1719	0	162	0	26	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	0	2	0
Cap, veh/h	0	1884	498	104	2733	0	163	0	0	0	2	0
Arrive On Green	0.00	0.68	0.68	0.06	0.77	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	2874	734	1781	3647	0	1781	162		0	-74814	0
Grp Volume(v), veh/h	0	1030	1084	84	1719	0	162	122.4		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1777	1738	1781	1777	0	1781	F		0	1870	0
Q Serve(g_s), s	0.0	53.4	64.1	5.6	26.0	0.0	10.9			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	53.4	64.1	5.6	26.0	0.0	10.9			0.0	0.0	0.0
Prop In Lane	0.00		0.42	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1204	1178	104	2733	0	163			0	2	0
V/C Ratio(X)	0.00	0.86	0.92	0.81	0.63	0.00	0.99			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	1204	1178	104	2733	0	163			0	47	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.38	0.38	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	14.8	16.6	55.8	6.2	0.0	54.5			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	5.3	34.0	1.1	0.0	67.9			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	19.0	23.0	3.5	7.7	0.0	8.0			0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.5	21.8	89.8	7.3	0.0	122.4			0.0	0.0	0.0
LnGrp LOS	A	B	C	F	A	A	F			A	A	A
Approach Vol, veh/h		2114			1803						0	
Approach Delay, s/veh		19.7			11.1						0.0	
Approach LOS		B			B							

Timer - Assigned Phs	1	2				6	7	8				
Phs Duration (G+Y+Rc), s	11.0	87.0				98.0	15.0	0.0				
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0	4.0				
Max Green Setting (Gmax), s	7.0	81.3				92.3	11.0	3.0				
Max Q Clear Time (g_c+I1), s	7.6	66.1				28.0	12.9	0.0				
Green Ext Time (p_c), s	0.0	13.2				27.5	0.0	0.0				

Intersection Summary	
HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	716	546	545	738	61	728	1214	155	208	1502	203
Future Volume (veh/h)	377	716	546	545	738	61	728	1214	155	208	1502	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	397	754	0	574	777	60	766	1278	89	219	1581	130
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	720		530	848	65	714	1568	688	253	1631	497
Arrive On Green	0.11	0.20	0.00	0.15	0.25	0.25	0.21	0.44	0.44	0.07	0.32	0.32
Sat Flow, veh/h	3456	3554	1585	3456	3337	258	3456	3554	1558	3456	5106	1555
Grp Volume(v), veh/h	397	754	0	574	414	423	766	1278	89	219	1581	130
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1818	1728	1777	1558	1728	1702	1555
Q Serve(g_s), s	17.0	30.4	0.0	23.0	34.0	34.0	31.0	47.1	5.1	9.4	45.8	9.3
Cycle Q Clear(g_c), s	17.0	30.4	0.0	23.0	34.0	34.0	31.0	47.1	5.1	9.4	45.8	9.3
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	720		530	451	462	714	1568	688	253	1631	497
V/C Ratio(X)	1.01	1.05		1.08	0.92	0.92	1.07	0.81	0.13	0.86	0.97	0.26
Avail Cap(c_a), veh/h	392	720		530	451	462	714	1568	688	253	1631	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.63	0.63	0.63	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.5	59.8	0.0	63.5	54.4	54.4	59.5	36.6	24.8	68.8	50.3	37.9
Incr Delay (d2), s/veh	49.0	46.5	0.0	63.5	23.7	23.4	48.5	3.1	0.2	24.3	15.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	18.2	0.0	14.7	17.9	18.3	18.2	20.5	1.9	5.0	21.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.5	106.3	0.0	127.0	78.1	77.8	108.0	39.6	25.1	93.0	66.0	38.3
LnGrp LOS	F	F		F	E	E	F	D	C	F	E	D
Approach Vol, veh/h		1151	A		1411			2133			1930	
Approach Delay, s/veh		109.4			97.9			63.6			67.2	
Approach LOS		F			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.3	36.1	35.0	53.2	21.0	43.4	16.3	71.9
Change Period (Y+Rc), s	5.3	* 5.7	4.0	5.3	4.0	5.3	5.3	* 5.7
Max Green Setting (Gmax), s	23.0	* 30	31.0	46.6	17.0	36.8	11.0	* 66
Max Q Clear Time (g_c+I1), s	25.0	32.4	33.0	47.8	19.0	36.0	11.4	49.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.6	0.0	13.0

Intersection Summary	
HCM 6th Ctrl Delay	79.9
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	1074	10	128	1180	10	11	11	42	15	244	213
Future Volume (veh/h)	58	1074	10	128	1180	10	11	11	42	15	244	213
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	1131	11	135	1242	11	12	12	44	16	257	224
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	1808	18	158	2010	18	46	46	77	18	294	265
Arrive On Green	0.03	0.50	0.50	0.09	0.56	0.56	0.05	0.05	0.05	0.17	0.17	0.17
Sat Flow, veh/h	1781	3606	35	1781	3609	32	912	912	1538	109	1756	1585
Grp Volume(v), veh/h	61	557	585	135	611	642	24	0	44	273	0	224
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1864	1825	0	1538	1865	0	1585
Q Serve(g_s), s	3.0	20.5	20.5	6.7	20.9	20.9	1.1	0.0	2.5	12.9	0.0	12.3
Cycle Q Clear(g_c), s	3.0	20.5	20.5	6.7	20.9	20.9	1.1	0.0	2.5	12.9	0.0	12.3
Prop In Lane	1.00		0.02	1.00		0.02	0.50		1.00	0.06		1.00
Lane Grp Cap(c), veh/h	59	891	935	158	990	1039	92	0	77	312	0	265
V/C Ratio(X)	1.03	0.63	0.63	0.85	0.62	0.62	0.26	0.00	0.57	0.88	0.00	0.84
Avail Cap(c_a), veh/h	59	891	935	158	990	1039	324	0	273	332	0	282
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.5	16.3	16.3	40.4	13.5	13.5	41.1	0.0	41.8	36.6	0.0	36.3
Incr Delay (d2), s/veh	124.7	3.3	3.2	32.3	1.7	1.6	0.6	0.0	2.5	20.1	0.0	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	8.2	8.6	4.3	7.7	8.0	0.5	0.0	1.0	7.6	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	168.2	19.6	19.5	72.7	15.1	15.1	41.7	0.0	44.2	56.7	0.0	54.6
LnGrp LOS	F	B	B	E	B	B	D	A	D	E	A	D
Approach Vol, veh/h		1203			1388			68			497	
Approach Delay, s/veh		27.1			20.7			43.3			55.7	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	50.4		19.1	7.0	55.4		8.5
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	32.7		16.0	3.0	37.7		16.0
Max Q Clear Time (g_c+I1), s	8.7	22.5		14.9	5.0	22.9		4.5
Green Ext Time (p_c), s	0.0	6.2		0.2	0.0	9.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1074	0	15	1347	13	12	0	5	31	0	25
Future Volume (veh/h)	33	1074	0	15	1347	13	12	0	5	31	0	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	1131	0	16	1418	14	13	0	5	33	0	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	2868	0	20	2861	28	86	0	6	140	0	54
Arrive On Green	0.02	0.81	0.00	0.01	0.79	0.79	0.03	0.00	0.03	0.03	0.00	0.03
Sat Flow, veh/h	1781	3647	0	1781	3605	36	485	8	190	1740	0	1585
Grp Volume(v), veh/h	35	1131	0	16	699	733	18	0	0	33	0	26
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1864	683	0	0	1740	0	1585
Q Serve(g_s), s	1.8	8.1	0.0	0.8	12.0	12.1	1.1	0.0	0.0	0.0	0.0	1.4
Cycle Q Clear(g_c), s	1.8	8.1	0.0	0.8	12.0	12.1	2.7	0.0	0.0	1.6	0.0	1.4
Prop In Lane	1.00		0.00	1.00		0.02	0.72		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	43	2868	0	20	1410	1479	92	0	0	140	0	54
V/C Ratio(X)	0.81	0.39	0.00	0.82	0.50	0.50	0.20	0.00	0.00	0.24	0.00	0.48
Avail Cap(c_a), veh/h	59	2868	0	59	1410	1479	378	0	0	421	0	370
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.7	2.5	0.0	44.4	3.2	3.2	44.1	0.0	0.0	42.8	0.0	42.7
Incr Delay (d2), s/veh	31.2	0.4	0.0	25.3	1.2	1.2	0.8	0.0	0.0	0.6	0.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.4	0.0	0.5	2.6	2.7	0.4	0.0	0.0	0.7	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.9	2.9	0.0	69.7	4.4	4.4	44.8	0.0	0.0	43.4	0.0	47.4
LnGrp LOS	E	A	A	E	A	A	D	A	A	D	A	D
Approach Vol, veh/h		1166			1448			18			59	
Approach Delay, s/veh		5.0			5.1			44.8			45.2	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	76.7		7.1	5.0	77.9		7.1
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	3.0	52.7		21.0	3.0	52.7		21.0
Max Q Clear Time (g_c+I1), s	3.8	14.1		4.7	2.8	10.1		3.6
Green Ext Time (p_c), s	0.0	25.5		0.0	0.0	20.8		0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	588	393	708	225	799	613
Future Volume (veh/h)	588	393	708	225	799	613
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	619	414	745	202	841	630
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1006	528	780	212	949	883
Arrive On Green	0.28	0.28	0.28	0.28	0.27	0.27
Sat Flow, veh/h	3563	1870	2857	749	3456	1585
Grp Volume(v), veh/h	619	414	479	468	841	630
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1736	1728	1585
Q Serve(g_s), s	13.7	18.6	24.1	24.1	21.2	25.0
Cycle Q Clear(g_c), s	13.7	18.6	24.1	24.1	21.2	25.0
Prop In Lane	1.00			0.43	1.00	1.00
Lane Grp Cap(c), veh/h	1006	528	502	490	949	883
V/C Ratio(X)	0.62	0.78	0.95	0.95	0.89	0.71
Avail Cap(c_a), veh/h	1006	528	502	490	949	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	30.1	32.1	32.1	31.6	14.5
Incr Delay (d2), s/veh	2.8	11.1	30.4	30.8	9.8	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	9.5	13.9	13.7	9.6	14.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.2	41.2	62.4	62.9	41.4	16.8
LnGrp LOS	C	D	E	E	D	B
Approach Vol, veh/h		1033	947		1471	
Approach Delay, s/veh		35.2	62.7		30.9	
Approach LOS		D	E		C	

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		31.0				31.0	29.0
Change Period (Y+Rc), s		5.3				5.3	4.0
Max Green Setting (Gmax), s		25.7				25.7	25.0
Max Q Clear Time (g_c+I1), s		26.1				20.6	27.0
Green Ext Time (p_c), s		0.0				3.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	787	196	40	626	8	53	3	2	12	6	320
Future Volume (veh/h)	17	787	196	40	626	8	53	3	2	12	6	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	828	206	42	659	8	56	3	2	13	6	337
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	1098	273	97	1499	18	402	20	9	389	156	409
Arrive On Green	0.03	0.39	0.39	0.05	0.42	0.42	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1781	2820	701	1781	3596	44	956	79	35	981	603	1585
Grp Volume(v), veh/h	18	522	512	42	326	341	61	0	0	19	0	337
Grp Sat Flow(s),veh/h/ln	1781	1777	1744	1781	1777	1863	1070	0	0	1584	0	1585
Q Serve(g_s), s	0.4	11.3	11.3	1.0	5.8	5.8	1.7	0.0	0.0	0.0	0.0	8.9
Cycle Q Clear(g_c), s	0.4	11.3	11.3	1.0	5.8	5.8	2.0	0.0	0.0	0.3	0.0	8.9
Prop In Lane	1.00		0.40	1.00		0.02	0.92		0.03	0.68		1.00
Lane Grp Cap(c), veh/h	48	692	679	97	741	777	431	0	0	545	0	409
V/C Ratio(X)	0.38	0.75	0.75	0.43	0.44	0.44	0.14	0.00	0.00	0.03	0.00	0.82
Avail Cap(c_a), veh/h	240	824	809	240	824	864	635	0	0	836	0	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.3	11.8	11.8	20.4	9.3	9.3	13.0	0.0	0.0	12.4	0.0	15.6
Incr Delay (d2), s/veh	1.8	4.0	4.1	1.1	0.7	0.6	0.1	0.0	0.0	0.0	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.9	3.8	0.4	1.7	1.8	0.4	0.0	0.0	0.1	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	15.8	15.8	21.5	9.9	9.9	13.1	0.0	0.0	12.4	0.0	17.2
LnGrp LOS	C	B	B	C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		1052			709			61			356	
Approach Delay, s/veh		15.9			10.6			13.1			17.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	22.7		15.5	5.2	23.9		15.5
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	6.0	20.7		20.0	6.0	20.7		20.0
Max Q Clear Time (g_c+I1), s	3.0	13.3		4.0	2.4	7.8		10.9
Green Ext Time (p_c), s	0.0	4.0		0.1	0.0	3.6		0.7

Intersection Summary		
HCM 6th Ctrl Delay		14.3
HCM 6th LOS		B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	467	359	283	307	259	554
Future Volume (veh/h)	467	359	283	307	259	554
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	435	439	298	323	273	583
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	2	2
Cap, veh/h	582	527	483	927	278	920
Arrive On Green	0.33	0.33	0.26	0.26	0.16	0.49
Sat Flow, veh/h	1781	1610	1870	1585	1781	1870
Grp Volume(v), veh/h	435	439	298	323	273	583
Grp Sat Flow(s),veh/h/ln	1781	1610	1870	1585	1781	1870
Q Serve(g_s), s	11.2	12.9	7.2	5.5	7.8	11.8
Cycle Q Clear(g_c), s	11.2	12.9	7.2	5.5	7.8	11.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	582	527	483	927	278	920
V/C Ratio(X)	0.75	0.83	0.62	0.35	0.98	0.63
Avail Cap(c_a), veh/h	833	753	900	1281	278	1337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.4	16.0	16.8	5.6	21.6	9.6
Incr Delay (d2), s/veh	1.1	3.8	2.0	0.4	49.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.6	3.0	3.2	6.7	4.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.5	19.8	18.8	5.9	70.7	10.8
LnGrp LOS	B	B	B	A	E	B
Approach Vol, veh/h	874		621			856
Approach Delay, s/veh	18.1		12.1			29.9
Approach LOS	B		B			C

Timer - Assigned Phs		2			5	6	8
Phs Duration (G+Y+Rc), s		30.5			12.0	18.5	20.8
Change Period (Y+Rc), s		5.3			4.0	5.3	4.0
Max Green Setting (Gmax), s		36.7			8.0	24.7	24.0
Max Q Clear Time (g_c+I1), s		13.8			9.8	9.2	14.9
Green Ext Time (p_c), s		4.6			0.0	4.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	6	39	102	8	61	105	994	130	95	1134	76
Future Volume (veh/h)	29	6	39	102	8	61	105	994	130	95	1134	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	6	41	107	8	64	111	1046	137	100	1194	80
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	74	63	139	166	141	144	1857	577	127	1809	562
Arrive On Green	0.03	0.04	0.04	0.08	0.09	0.09	0.08	0.36	0.36	0.07	0.35	0.35
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	31	6	41	107	8	64	111	1046	137	100	1194	80
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.8	0.1	1.1	2.6	0.2	1.7	2.7	7.3	2.7	2.5	8.8	1.5
Cycle Q Clear(g_c), s	0.8	0.1	1.1	2.6	0.2	1.7	2.7	7.3	2.7	2.5	8.8	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	74	63	139	166	141	144	1857	577	127	1809	562
V/C Ratio(X)	0.61	0.08	0.65	0.77	0.05	0.45	0.77	0.56	0.24	0.79	0.66	0.14
Avail Cap(c_a), veh/h	159	1340	1135	399	1591	1348	359	2743	852	159	2172	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	20.7	21.2	20.2	18.6	19.3	20.1	11.4	9.9	20.4	12.2	9.8
Incr Delay (d2), s/veh	11.2	0.5	10.9	8.7	0.1	2.3	8.5	0.3	0.2	18.5	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.6	1.3	0.1	0.6	1.3	2.2	0.8	1.6	2.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	21.1	32.1	28.9	18.7	21.6	28.6	11.6	10.1	38.9	12.7	9.9
LnGrp LOS	C	C	C	C	B	C	C	B	B	D	B	A
Approach Vol, veh/h		78			179			1294			1374	
Approach Delay, s/veh		31.5			25.9			12.9			14.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	21.3	8.5	6.8	8.6	20.8	6.3	9.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	24.0	10.0	32.0	9.0	19.0	4.0	38.0
Max Q Clear Time (g_c+I1), s	4.5	9.3	4.6	3.1	4.7	10.8	2.8	3.7
Green Ext Time (p_c), s	0.0	6.8	0.1	0.1	0.1	5.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	2	22	10	1	42	63	1321	27	64	1132	37
Future Volume (veh/h)	15	2	22	10	1	42	63	1321	27	64	1132	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	2	23	11	1	44	66	1391	28	67	1192	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	80	68	20	71	60	89	2321	721	90	2324	721
Arrive On Green	0.02	0.04	0.04	0.01	0.04	0.04	0.05	0.45	0.45	0.05	0.46	0.46
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	16	2	23	11	1	44	66	1391	28	67	1192	39
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.4	0.0	0.6	0.3	0.0	1.2	1.7	9.3	0.4	1.7	7.5	0.6
Cycle Q Clear(g_c), s	0.4	0.0	0.6	0.3	0.0	1.2	1.7	9.3	0.4	1.7	7.5	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	29	80	68	20	71	60	89	2321	721	90	2324	721
V/C Ratio(X)	0.56	0.02	0.34	0.54	0.01	0.73	0.74	0.60	0.04	0.75	0.51	0.05
Avail Cap(c_a), veh/h	157	1319	1118	196	1360	1153	432	3151	978	196	2476	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	20.8	21.1	22.3	21.0	21.6	21.3	9.3	6.9	21.3	8.8	6.9
Incr Delay (d2), s/veh	15.8	0.1	2.9	20.5	0.1	15.3	11.6	0.3	0.0	11.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.3	0.2	0.0	0.7	0.9	2.6	0.1	0.9	2.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.0	20.9	24.0	42.8	21.1	36.8	32.9	9.5	6.9	33.0	9.0	6.9
LnGrp LOS	D	C	C	D	C	D	C	A	A	C	A	A
Approach Vol, veh/h		41			56			1485			1298	
Approach Delay, s/veh		29.3			37.7			10.5			10.1	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	25.6	5.5	6.9	7.3	25.6	5.7	6.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	28.0	5.0	32.0	11.0	22.0	4.0	33.0
Max Q Clear Time (g_c+I1), s	3.7	11.3	2.3	2.6	3.7	9.5	2.4	3.2
Green Ext Time (p_c), s	0.0	9.4	0.0	0.0	0.1	6.7	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	76	48	103	1265	1539	178
Future Volume (veh/h)	76	48	103	1265	1539	178
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	51	108	1332	1620	187
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	144	129	137	3558	2600	805
Arrive On Green	0.08	0.08	0.08	0.70	0.51	0.51
Sat Flow, veh/h	1781	1585	1781	5274	5274	1582
Grp Volume(v), veh/h	80	51	108	1332	1620	187
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1582
Q Serve(g_s), s	1.6	1.1	2.1	3.9	8.2	2.4
Cycle Q Clear(g_c), s	1.6	1.1	2.1	3.9	8.2	2.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	144	129	137	3558	2600	805
V/C Ratio(X)	0.55	0.40	0.79	0.37	0.62	0.23
Avail Cap(c_a), veh/h	989	880	297	4535	3118	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	15.7	16.3	2.2	6.4	4.9
Incr Delay (d2), s/veh	3.3	2.0	9.7	0.1	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	1.0	0.0	1.1	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.2	17.7	26.1	2.3	6.6	5.1
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	131			1440	1807	
Approach Delay, s/veh	18.6			4.1	6.5	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		29.1		6.9	6.8	22.3
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	6.0	22.0
Max Q Clear Time (g_c+I1), s		5.9		3.6	4.1	10.2
Green Ext Time (p_c), s		10.1		0.3	0.0	8.1

Intersection Summary	
HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	21	45	1349	1535	53
Future Volume (veh/h)	19	21	45	1349	1535	53
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	22	47	1420	1616	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	69	61	76	3667	2829	877
Arrive On Green	0.04	0.04	0.04	0.72	0.55	0.55
Sat Flow, veh/h	1781	1585	1781	5274	5274	1582
Grp Volume(v), veh/h	20	22	47	1420	1616	56
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1582
Q Serve(g_s), s	0.4	0.4	0.9	3.6	6.8	0.5
Cycle Q Clear(g_c), s	0.4	0.4	0.9	3.6	6.8	0.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	69	61	76	3667	2829	877
V/C Ratio(X)	0.29	0.36	0.62	0.39	0.57	0.06
Avail Cap(c_a), veh/h	1083	963	217	4965	3724	1154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.4	15.4	15.5	1.8	4.8	3.4
Incr Delay (d2), s/veh	2.3	3.5	8.1	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.4	0.0	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.7	18.9	23.6	1.9	5.0	3.4
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	42			1467	1672	
Approach Delay, s/veh	18.3			2.6	4.9	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		27.6		5.3	5.4	22.2
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	4.0	24.0
Max Q Clear Time (g_c+I1), s		5.6		2.4	2.9	8.8
Green Ext Time (p_c), s		11.0		0.1	0.0	9.4

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	43	13	0	6	94	1300	29	17	1683	94
Future Volume (veh/h)	30	0	43	13	0	6	94	1300	29	17	1683	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	0	45	14	0	6	99	1368	31	18	1772	99
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	0	69	35	0	15	127	3090	958	31	2814	872
Arrive On Green	0.07	0.00	0.07	0.03	0.00	0.03	0.07	0.61	0.61	0.02	0.55	0.55
Sat Flow, veh/h	687	0	966	1199	0	514	1781	5106	1582	1781	5106	1582
Grp Volume(v), veh/h	77	0	0	20	0	0	99	1368	31	18	1772	99
Grp Sat Flow(s),veh/h/ln	1653	0	0	1713	0	0	1781	1702	1582	1781	1702	1582
Q Serve(g_s), s	2.6	0.0	0.0	0.7	0.0	0.0	3.2	8.4	0.5	0.6	13.8	1.7
Cycle Q Clear(g_c), s	2.6	0.0	0.0	0.7	0.0	0.0	3.2	8.4	0.5	0.6	13.8	1.7
Prop In Lane	0.42		0.58	0.70		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	0	0	50	0	0	127	3090	958	31	2814	872
V/C Ratio(X)	0.65	0.00	0.00	0.40	0.00	0.00	0.78	0.44	0.03	0.58	0.63	0.11
Avail Cap(c_a), veh/h	1085	0	0	1125	0	0	215	4324	1340	123	4059	1258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	0.0	27.6	0.0	0.0	26.4	6.2	4.6	28.2	8.9	6.2
Incr Delay (d2), s/veh	5.9	0.0	0.0	5.0	0.0	0.0	9.7	0.1	0.0	16.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	0.3	0.0	0.0	1.5	1.8	0.1	0.4	3.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.1	0.0	0.0	32.6	0.0	0.0	36.1	6.3	4.6	44.3	9.2	6.3
LnGrp LOS	C	A	A	C	A	A	D	A	A	D	A	A
Approach Vol, veh/h		77			20			1498			1889	
Approach Delay, s/veh		32.1			32.6			8.2			9.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	39.0		8.1	8.1	35.9		5.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	49.0		38.0	7.0	46.0		38.0
Max Q Clear Time (g_c+I1), s	2.6	10.4		4.6	5.2	15.8		2.7
Green Ext Time (p_c), s	0.0	12.0		0.4	0.0	16.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	845	131	133	641	149	64
Future Volume (veh/h)	845	131	133	641	149	64
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	889	138	140	675	157	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1519	678	178	2154	302	269
Arrive On Green	0.43	0.43	0.10	0.61	0.17	0.17
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	889	138	140	675	157	67
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	9.7	2.8	3.9	4.7	4.1	1.9
Cycle Q Clear(g_c), s	9.7	2.8	3.9	4.7	4.1	1.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1519	678	178	2154	302	269
V/C Ratio(X)	0.59	0.20	0.79	0.31	0.52	0.25
Avail Cap(c_a), veh/h	1649	736	210	2467	701	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	9.1	22.3	4.9	19.2	18.3
Incr Delay (d2), s/veh	0.7	0.3	12.6	0.1	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.8	2.1	1.2	1.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.8	9.4	34.9	5.0	19.7	18.5
LnGrp LOS	B	A	C	A	B	B
Approach Vol, veh/h	1027			815	224	
Approach Delay, s/veh	11.5			10.2	19.4	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.1	27.4				36.5	14.3
Change Period (Y+Rc), s	4.0	5.7				* 5.7	5.7
Max Green Setting (Gmax), s	6.0	23.6				* 35	20.0
Max Q Clear Time (g_c+I1), s	5.9	11.7				6.7	6.1
Green Ext Time (p_c), s	0.0	10.0				16.5	0.4

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	19	25	20	12	38	53	903	47	88	1144	137
Future Volume (veh/h)	49	19	25	20	12	38	53	903	47	88	1144	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	20	26	21	13	40	56	951	49	93	1204	144
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	123	104	37	81	69	80	1987	617	118	2094	650
Arrive On Green	0.04	0.07	0.07	0.02	0.04	0.04	0.05	0.39	0.39	0.07	0.41	0.41
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	52	20	26	21	13	40	56	951	49	93	1204	144
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.3	0.4	0.7	0.5	0.3	1.1	1.4	6.1	0.8	2.2	7.9	2.6
Cycle Q Clear(g_c), s	1.3	0.4	0.7	0.5	0.3	1.1	1.4	6.1	0.8	2.2	7.9	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	76	123	104	37	81	69	80	1987	617	118	2094	650
V/C Ratio(X)	0.68	0.16	0.25	0.57	0.16	0.58	0.70	0.48	0.08	0.79	0.58	0.22
Avail Cap(c_a), veh/h	204	1286	1090	163	1243	1054	245	3043	945	204	2926	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	19.2	19.4	21.2	20.1	20.5	20.5	10.0	8.4	20.1	9.9	8.4
Incr Delay (d2), s/veh	10.2	0.6	1.2	13.3	0.9	7.5	10.3	0.2	0.1	11.2	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.2	0.3	0.3	0.1	0.5	0.7	1.8	0.2	1.2	2.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	19.9	20.6	34.4	21.0	28.0	30.8	10.2	8.5	31.3	10.2	8.5
LnGrp LOS	C	B	C	C	C	C	C	B	A	C	B	A
Approach Vol, veh/h		98			74			1056			1441	
Approach Delay, s/veh		25.8			28.6			11.2			11.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	22.0	5.9	7.9	7.0	22.9	6.9	6.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	26.0	4.0	30.0	6.0	25.0	5.0	29.0
Max Q Clear Time (g_c+I1), s	4.2	8.1	2.5	2.7	3.4	9.9	3.3	3.1
Green Ext Time (p_c), s	0.0	6.6	0.0	0.1	0.0	7.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	46	41	143	92	0	92	968	243	2	1078	110
Future Volume (veh/h)	35	46	41	143	92	0	92	968	243	2	1078	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	48	43	151	97	0	97	1019	256	2	1135	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	111	94	198	258	219	124	2024	628	4	1679	521
Arrive On Green	0.03	0.06	0.06	0.11	0.14	0.00	0.07	0.40	0.40	0.00	0.33	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	37	48	43	151	97	0	97	1019	256	2	1135	116
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.0	1.2	1.2	3.8	2.2	0.0	2.5	7.0	5.4	0.1	8.9	2.5
Cycle Q Clear(g_c), s	1.0	1.2	1.2	3.8	2.2	0.0	2.5	7.0	5.4	0.1	8.9	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	58	111	94	198	258	219	124	2024	628	4	1679	521
V/C Ratio(X)	0.64	0.43	0.46	0.76	0.38	0.00	0.78	0.50	0.41	0.51	0.68	0.22
Avail Cap(c_a), veh/h	268	1289	1092	499	1530	1297	268	2309	717	153	1979	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	21.1	21.1	20.0	18.2	0.0	21.3	10.6	10.1	23.1	13.4	11.3
Incr Delay (d2), s/veh	10.9	2.6	3.4	5.9	0.9	0.0	10.2	0.2	0.4	77.2	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.5	1.7	0.9	0.0	1.3	2.1	1.6	0.1	2.9	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	23.7	24.5	26.0	19.1	0.0	31.4	10.8	10.5	100.3	14.2	11.5
LnGrp LOS	C	C	C	C	B	A	C	B	B	F	B	B
Approach Vol, veh/h		128			248			1372			1253	
Approach Delay, s/veh		26.7			23.3			12.2			14.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	23.4	10.2	7.8	8.2	20.3	6.5	11.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	21.0	13.0	32.0	7.0	18.0	7.0	38.0
Max Q Clear Time (g_c+I1), s	2.1	9.0	5.8	3.2	4.5	10.9	3.0	4.2
Green Ext Time (p_c), s	0.0	6.2	0.2	0.3	0.0	4.4	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	37	15	1283	76	0	1263
Future Volume (veh/h)	37	15	1283	76	0	1263
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	16	1351	80	0	1329
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	88	78	3120	969	6	3120
Arrive On Green	0.05	0.05	0.61	0.61	0.00	0.61
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	39	16	1351	80	0	1329
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	0.6	0.3	4.1	0.6	0.0	4.0
Cycle Q Clear(g_c), s	0.6	0.3	4.1	0.6	0.0	4.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	88	78	3120	969	6	3120
V/C Ratio(X)	0.44	0.21	0.43	0.08	0.00	0.43
Avail Cap(c_a), veh/h	1755	1561	4683	1454	242	6244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	13.4	3.0	2.3	0.0	3.0
Incr Delay (d2), s/veh	3.5	1.3	0.1	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.2	0.0	0.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.1	14.7	3.1	2.4	0.0	3.1
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	55		1431			1329
Approach Delay, s/veh	16.4		3.1			3.1
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	0.0	23.0				23.0	6.4
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	4.0	27.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	0.0	6.1				6.0	2.6
Green Ext Time (p_c), s	0.0	10.6				12.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	3.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	29	17	52	14	6	70	1441	193	15	1500	125
Future Volume (veh/h)	204	29	17	52	14	6	70	1441	193	15	1500	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	31	18	55	15	6	74	1517	203	16	1579	132
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	242	205	72	37	31	232	2443	758	28	2952	916
Arrive On Green	0.15	0.13	0.13	0.04	0.02	0.02	0.48	0.48	0.48	0.02	0.58	0.58
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	285	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	215	31	18	55	15	6	74	1517	203	16	1579	132
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	285	1702	1585	1781	1702	1585
Q Serve(g_s), s	6.9	0.9	0.6	1.8	0.5	0.2	12.7	13.1	4.6	0.5	11.2	2.3
Cycle Q Clear(g_c), s	6.9	0.9	0.6	1.8	0.5	0.2	18.0	13.1	4.6	0.5	11.2	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	242	205	72	37	31	232	2443	758	28	2952	916
V/C Ratio(X)	0.81	0.13	0.09	0.77	0.41	0.19	0.32	0.62	0.27	0.57	0.53	0.14
Avail Cap(c_a), veh/h	390	1165	987	240	1007	854	245	2664	827	120	3437	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	22.9	22.8	28.2	28.8	28.7	15.0	11.5	9.3	29.1	7.7	5.8
Incr Delay (d2), s/veh	7.7	0.2	0.2	15.7	7.0	2.9	0.8	0.4	0.2	17.3	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.4	0.2	1.0	0.3	0.1	0.8	4.2	1.4	0.3	3.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.1	23.1	23.0	44.0	35.8	31.6	15.7	11.9	9.5	46.4	7.8	5.8
LnGrp LOS	C	C	C	D	D	C	B	B	A	D	A	A
Approach Vol, veh/h		264			76			1794			1727	
Approach Delay, s/veh		30.4			41.4			11.8			8.0	
Approach LOS		C			D			B			A	

Timer - Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	5.9	33.4	7.4	12.7		39.4	13.9	6.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	31.0	8.0	37.0		40.0	13.0	32.0
Max Q Clear Time (g_c+I1), s	2.5	20.0	3.8	2.9		13.2	8.9	2.5
Green Ext Time (p_c), s	0.0	8.4	0.0	0.2		14.7	0.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	46	64	163	77	175	44	886	33	190	1450	96
Future Volume (veh/h)	44	46	64	163	77	175	44	886	33	190	1450	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	48	67	172	81	184	46	933	35	200	1526	101
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	156	131	210	300	253	131	1599	711	243	1821	811
Arrive On Green	0.04	0.08	0.08	0.12	0.16	0.16	0.07	0.45	0.45	0.14	0.51	0.51
Sat Flow, veh/h	1781	1870	1574	1781	1870	1579	1781	3554	1582	1781	3554	1582
Grp Volume(v), veh/h	46	48	67	172	81	184	46	933	35	200	1526	101
Grp Sat Flow(s),veh/h/ln	1781	1870	1574	1781	1870	1579	1781	1777	1582	1781	1777	1582
Q Serve(g_s), s	1.9	1.8	3.1	7.1	2.9	8.4	1.9	14.8	0.9	8.2	27.7	2.5
Cycle Q Clear(g_c), s	1.9	1.8	3.1	7.1	2.9	8.4	1.9	14.8	0.9	8.2	27.7	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	156	131	210	300	253	131	1599	711	243	1821	811
V/C Ratio(X)	0.63	0.31	0.51	0.82	0.27	0.73	0.35	0.58	0.05	0.82	0.84	0.12
Avail Cap(c_a), veh/h	165	645	543	236	719	607	213	1791	797	354	2073	923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	32.5	33.1	32.5	27.8	30.1	33.2	15.5	11.7	31.7	15.7	9.6
Incr Delay (d2), s/veh	8.6	1.1	3.0	18.1	0.5	3.9	1.6	0.4	0.0	9.7	2.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.8	1.2	3.9	1.2	3.2	0.8	5.1	0.3	3.9	9.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	33.6	36.1	50.6	28.3	34.0	34.8	15.9	11.7	41.4	18.6	9.6
LnGrp LOS	D	C	D	D	C	C	C	B	B	D	B	A
Approach Vol, veh/h		161			437			1014			1827	
Approach Delay, s/veh		37.7			39.5			16.6			20.6	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	37.9	12.9	10.3	9.6	42.7	7.1	16.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	38.0	10.0	26.0	9.0	44.0	7.0	29.0
Max Q Clear Time (g_c+I1), s	10.2	16.8	9.1	5.1	3.9	29.7	3.9	10.4
Green Ext Time (p_c), s	0.2	6.3	0.0	0.4	0.0	9.0	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	13	32	97	7	0	113	886	83	0	1449	142
Future Volume (veh/h)	96	13	32	97	7	0	113	886	83	0	1449	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	101	14	34	102	7	0	119	933	87	0	1525	149
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	386	327	199	173	146	144	2139	954	73	1721	767
Arrive On Green	0.09	0.23	0.23	0.10	0.10	0.00	0.09	0.67	0.67	0.00	0.54	0.54
Sat Flow, veh/h	1603	1683	1427	1222	1683	1427	1603	3198	1427	498	3198	1427
Grp Volume(v), veh/h	101	14	34	102	7	0	119	933	87	0	1525	149
Grp Sat Flow(s),veh/h/ln	1603	1683	1427	1222	1683	1427	1603	1599	1427	498	1599	1427
Q Serve(g_s), s	6.0	0.6	1.8	8.0	0.4	0.0	7.2	13.4	2.1	0.0	41.3	5.3
Cycle Q Clear(g_c), s	6.0	0.6	1.8	8.0	0.4	0.0	7.2	13.4	2.1	0.0	41.3	5.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	386	327	199	173	146	144	2139	954	73	1721	767
V/C Ratio(X)	0.73	0.04	0.10	0.51	0.04	0.00	0.83	0.44	0.09	0.00	0.89	0.19
Avail Cap(c_a), veh/h	147	875	742	547	652	553	163	2250	1004	85	1794	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	29.4	29.8	43.1	39.6	0.0	43.9	7.6	5.7	0.0	20.0	11.7
Incr Delay (d2), s/veh	13.7	0.0	0.1	0.8	0.0	0.0	22.9	0.3	0.1	0.0	6.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.3	0.6	2.4	0.2	0.0	3.7	4.1	0.6	0.0	15.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.4	29.4	29.9	43.8	39.7	0.0	66.8	7.9	5.8	0.0	26.0	11.9
LnGrp LOS	E	C	C	D	D	A	E	A	A	A	C	B
Approach Vol, veh/h		149			109			1139			1674	
Approach Delay, s/veh		48.5			43.6			13.9			24.7	
Approach LOS		D			D			B			C	

Timer - Assigned Phs		2		4	5	6	7	8
Phs Duration (G+Y+Rc), s		71.6		26.5	12.8	58.8	12.4	14.1
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0	4.0	4.0
Max Green Setting (Gmax), s		69.0		51.0	10.0	55.0	9.0	38.0
Max Q Clear Time (g_c+I1), s		15.4		3.8	9.2	43.3	8.0	10.0
Green Ext Time (p_c), s		12.7		0.1	0.0	9.5	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	58	81	269	937	1287	113
Future Volume (veh/h)	58	81	269	937	1287	113
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	85	283	986	1355	119
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	146	130	340	2700	1740	776
Arrive On Green	0.08	0.08	0.19	0.76	0.49	0.49
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	61	85	283	986	1355	119
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	2.1	3.3	9.7	5.8	19.9	2.6
Cycle Q Clear(g_c), s	2.1	3.3	9.7	5.8	19.9	2.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	146	130	340	2700	1740	776
V/C Ratio(X)	0.42	0.66	0.83	0.37	0.78	0.15
Avail Cap(c_a), veh/h	536	477	536	3432	2081	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	28.1	24.6	2.5	13.3	8.9
Incr Delay (d2), s/veh	1.9	5.5	6.3	0.1	1.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.1	4.4	0.9	7.0	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.5	33.6	30.8	2.6	14.9	9.0
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	146			1269	1474	
Approach Delay, s/veh	31.9			8.9	14.4	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		53.0		10.2	17.1	35.9
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		61.0		19.0	19.0	37.0
Max Q Clear Time (g_c+I1), s		7.8		5.3	11.7	21.9
Green Ext Time (p_c), s		9.3		0.3	0.5	9.1

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	105	130	1267	1374	179
Future Volume (veh/h)	120	105	130	1267	1374	179
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	111	137	1334	1446	188
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	278	248	177	2366	1759	785
Arrive On Green	0.16	0.16	0.10	0.67	0.50	0.50
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	126	111	137	1334	1446	188
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	3.6	3.6	4.2	11.3	19.5	3.8
Cycle Q Clear(g_c), s	3.6	3.6	4.2	11.3	19.5	3.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	278	248	177	2366	1759	785
V/C Ratio(X)	0.45	0.45	0.77	0.56	0.82	0.24
Avail Cap(c_a), veh/h	634	564	380	2846	1834	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	21.5	24.7	5.0	12.1	8.1
Incr Delay (d2), s/veh	0.4	0.5	2.7	0.4	3.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.2	1.8	2.6	6.9	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.0	22.0	27.4	5.4	15.5	8.4
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	237			1471	1634	
Approach Delay, s/veh	22.0			7.5	14.7	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		43.4		12.8	9.6	33.8
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		45.0		20.0	12.0	29.0
Max Q Clear Time (g_c+I1), s		13.3		5.6	6.2	21.5
Green Ext Time (p_c), s		16.6		0.5	0.1	6.4

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	32	10	43	115	76	25	1205	33	35	1141	278
Future Volume (veh/h)	125	32	10	43	115	76	25	1205	33	35	1141	278
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	34	11	45	121	80	26	1268	35	37	1201	293
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	216	227	192	196	206	174	80	1531	683	103	1577	704
Arrive On Green	0.12	0.12	0.12	0.11	0.11	0.11	0.05	0.43	0.43	0.06	0.44	0.44
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	132	34	11	45	121	80	26	1268	35	37	1201	293
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	5.1	1.2	0.4	1.7	4.4	3.4	1.0	22.8	0.9	1.4	20.5	9.1
Cycle Q Clear(g_c), s	5.1	1.2	0.4	1.7	4.4	3.4	1.0	22.8	0.9	1.4	20.5	9.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	216	227	192	196	206	174	80	1531	683	103	1577	704
V/C Ratio(X)	0.61	0.15	0.06	0.23	0.59	0.46	0.32	0.83	0.05	0.36	0.76	0.42
Avail Cap(c_a), veh/h	494	518	439	197	207	176	197	1664	742	197	1664	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	28.4	28.1	29.3	30.6	30.1	33.4	18.2	12.0	32.7	16.9	13.7
Incr Delay (d2), s/veh	2.9	0.3	0.1	0.2	2.9	0.7	0.9	3.9	0.1	0.8	2.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.5	0.2	0.7	2.1	1.3	0.4	8.1	0.3	0.6	7.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	28.7	28.2	29.5	33.4	30.8	34.3	22.1	12.0	33.5	19.3	14.5
LnGrp LOS	C	C	C	C	C	C	C	C	B	C	B	B
Approach Vol, veh/h		177			246			1329			1531	
Approach Delay, s/veh		31.9			31.9			22.1			18.7	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	37.1		13.2	7.2	38.0		13.6
Change Period (Y+Rc), s	4.0	6.0		5.3	4.0	6.0		4.9
Max Green Setting (Gmax), s	8.0	33.8		8.0	8.0	33.8		20.0
Max Q Clear Time (g_c+I1), s	3.4	24.8		6.4	3.0	22.5		7.1
Green Ext Time (p_c), s	0.0	6.3		0.1	0.0	8.2		0.5

Intersection Summary	
HCM 6th Ctrl Delay	21.8
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	31	28	1663	60	43	1448
Future Volume (veh/h)	31	28	1663	60	43	1448
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	29	1751	63	45	1524
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	43	38	2943	914	68	3712
Arrive On Green	0.05	0.05	0.58	0.58	0.04	0.73
Sat Flow, veh/h	883	776	5274	1585	1781	5274
Grp Volume(v), veh/h	63	0	1751	63	45	1524
Grp Sat Flow(s),veh/h/ln	1686	0	1702	1585	1781	1702
Q Serve(g_s), s	1.6	0.0	9.9	0.8	1.1	5.2
Cycle Q Clear(g_c), s	1.6	0.0	9.9	0.8	1.1	5.2
Prop In Lane	0.52	0.46		1.00	1.00	
Lane Grp Cap(c), veh/h	82	0	2943	914	68	3712
V/C Ratio(X)	0.77	0.00	0.59	0.07	0.66	0.41
Avail Cap(c_a), veh/h	606	0	3782	1174	440	5616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	6.1	4.2	21.1	2.4
Incr Delay (d2), s/veh	13.9	0.0	0.2	0.0	10.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.1	0.2	0.6	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.8	0.0	6.3	4.2	31.4	2.4
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	63		1814			1569
Approach Delay, s/veh	34.8		6.2			3.3
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.7	30.7				37.4	7.2
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	33.0				49.0	16.0
Max Q Clear Time (g_c+I1), s	3.1	11.9				7.2	3.6
Green Ext Time (p_c), s	0.0	13.8				16.4	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	43	13	0	6	94	1300	29	17	1683	94
Future Volume (veh/h)	30	0	43	13	0	6	94	1300	29	17	1683	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	0	45	14	0	6	99	1368	31	18	1772	99
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	0	117	25	0	95	127	3166	981	31	2890	896
Arrive On Green	0.03	0.00	0.07	0.01	0.00	0.06	0.07	0.62	0.62	0.02	0.57	0.57
Sat Flow, veh/h	1781	0	1572	1781	0	1571	1781	5106	1582	1781	5106	1582
Grp Volume(v), veh/h	32	0	45	14	0	6	99	1368	31	18	1772	99
Grp Sat Flow(s),veh/h/ln	1781	0	1572	1781	0	1571	1781	1702	1582	1781	1702	1582
Q Serve(g_s), s	1.0	0.0	1.6	0.5	0.0	0.2	3.2	8.1	0.4	0.6	13.4	1.7
Cycle Q Clear(g_c), s	1.0	0.0	1.6	0.5	0.0	0.2	3.2	8.1	0.4	0.6	13.4	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	49	0	117	25	0	95	127	3166	981	31	2890	896
V/C Ratio(X)	0.65	0.00	0.39	0.56	0.00	0.06	0.78	0.43	0.03	0.58	0.61	0.11
Avail Cap(c_a), veh/h	122	0	836	122	0	835	183	3166	981	122	2890	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	0.0	25.7	28.6	0.0	25.8	26.6	5.8	4.3	28.4	8.4	5.9
Incr Delay (d2), s/veh	13.3	0.0	2.1	18.6	0.0	0.3	12.4	0.4	0.1	16.2	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.6	0.3	0.0	0.1	1.6	1.7	0.1	0.4	3.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.4	0.0	27.8	47.2	0.0	26.1	39.1	6.2	4.4	44.6	9.4	6.1
LnGrp LOS	D	A	C	D	A	C	D	A	A	D	A	A
Approach Vol, veh/h		77			20			1498			1889	
Approach Delay, s/veh		33.4			40.8			8.3			9.6	
Approach LOS		C			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	40.1	4.8	8.3	8.2	37.0	5.6	7.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	35.0	4.0	31.0	6.0	33.0	4.0	31.0
Max Q Clear Time (g_c+I1), s	2.6	10.1	2.5	3.6	5.2	15.4	3.0	2.2
Green Ext Time (p_c), s	0.0	10.3	0.0	0.2	0.0	11.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	4	61	51	4	0	135	0	116	0	0	0
Future Volume (veh/h)	0	4	61	51	4	0	135	0	116	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	4	64	54	4	0	142	0	122	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	116	98	91	7	86	189	661	295	8	17	7
Arrive On Green	0.00	0.06	0.06	0.05	0.05	0.00	0.11	0.00	0.19	0.00	0.00	0.00
Sat Flow, veh/h	0	1870	1585	1664	123	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	4	64	58	0	0	142	0	122	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1787	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.8	0.7	0.0	0.0	1.7	0.0	1.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.8	0.7	0.0	0.0	1.7	0.0	1.5	0.0	0.0	0.0
Prop In Lane	0.00		1.00	0.93		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	116	98	97	0	86	189	661	295	8	17	7
V/C Ratio(X)	0.00	0.03	0.65	0.60	0.00	0.00	0.75	0.00	0.41	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2261	1916	2161	0	1916	911	4461	1990	911	4461	1990
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.5	9.9	9.9	0.0	0.0	9.3	0.0	7.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	7.0	5.7	0.0	0.0	5.8	0.0	0.9	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.4	0.3	0.0	0.0	0.7	0.0	0.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.6	16.9	15.6	0.0	0.0	15.2	0.0	8.6	0.0	0.0	0.0
LnGrp LOS	A	A	B	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		68			58			264			0	
Approach Delay, s/veh		16.5			15.6			12.2			0.0	
Approach LOS		B			B			B				

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	9.0		6.3	7.3	1.7		6.2
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.0	27.0		26.0	11.0	27.0		26.0
Max Q Clear Time (g_c+I1), s	0.0	3.5		2.8	3.7	0.0		2.7
Green Ext Time (p_c), s	0.0	0.3		0.2	0.2	0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	9	67	8	98	267	78	588	31	56	963	102
Future Volume (veh/h)	58	9	67	8	98	267	78	588	31	56	963	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	9	71	8	103	281	82	619	33	59	1014	107
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	439	372	0	439	372	104	1293	577	84	1253	559
Arrive On Green	0.00	0.23	0.23	0.00	0.23	0.23	0.06	0.36	0.36	0.05	0.35	0.35
Sat Flow, veh/h	0	1870	1585	0	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	0	9	71	0	103	281	82	619	33	59	1014	107
Grp Sat Flow(s),veh/h/ln	0	1870	1585	0	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.2	1.5	0.0	1.9	7.0	1.9	5.7	0.6	1.4	10.9	2.0
Cycle Q Clear(g_c), s	0.0	0.2	1.5	0.0	1.9	7.0	1.9	5.7	0.6	1.4	10.9	2.0
Prop In Lane	0.00		1.00	0.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	439	372	0	439	372	104	1293	577	84	1253	559
V/C Ratio(X)	0.00	0.02	0.19	0.00	0.23	0.76	0.79	0.48	0.06	0.70	0.81	0.19
Avail Cap(c_a), veh/h	0	751	636	0	751	636	463	1343	599	463	1343	599
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	12.5	13.0	0.0	13.1	15.1	19.7	10.4	8.8	19.9	12.4	9.5
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.3	3.1	12.2	0.3	0.0	10.1	3.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.5	0.0	0.7	2.4	1.1	1.8	0.2	0.7	4.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.5	13.2	0.0	13.4	18.2	31.8	10.7	8.8	29.9	16.0	9.7
LnGrp LOS	A	B	B	A	B	B	C	B	A	C	B	A
Approach Vol, veh/h		80			384			734			1180	
Approach Delay, s/veh		13.1			16.9			12.9			16.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	20.4	0.0	14.9	7.5	19.9	0.0	14.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	17.0	11.0	16.0	11.0	17.0
Max Q Clear Time (g_c+I1), s	3.4	7.7	0.0	3.5	3.9	12.9	0.0	9.0
Green Ext Time (p_c), s	0.1	2.7	0.0	0.2	0.1	2.0	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	1	182	0	5	9	194	592	0	26	1101	122
Future Volume (veh/h)	88	1	182	0	5	9	194	592	0	26	1101	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	1	192	0	5	9	204	623	0	27	1159	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	2	324	3	127	108	255	1984	885	44	1562	697
Arrive On Green	0.07	0.21	0.21	0.00	0.07	0.07	0.14	0.56	0.00	0.02	0.44	0.44
Sat Flow, veh/h	1781	8	1578	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	93	0	193	0	5	9	204	623	0	27	1159	128
Grp Sat Flow(s),veh/h/ln	1781	0	1586	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.9	0.0	6.2	0.0	0.1	0.3	6.3	5.3	0.0	0.9	15.4	2.8
Cycle Q Clear(g_c), s	2.9	0.0	6.2	0.0	0.1	0.3	6.3	5.3	0.0	0.9	15.4	2.8
Prop In Lane	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	0	326	3	127	108	255	1984	885	44	1562	697
V/C Ratio(X)	0.78	0.00	0.59	0.00	0.04	0.08	0.80	0.31	0.00	0.62	0.74	0.18
Avail Cap(c_a), veh/h	157	0	672	126	760	644	378	2574	1148	157	2134	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	20.4	0.0	24.7	24.7	23.5	6.7	0.0	27.4	13.2	9.7
Incr Delay (d2), s/veh	16.8	0.0	1.7	0.0	0.1	0.3	7.3	0.1	0.0	13.5	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.2	0.0	0.1	0.1	2.8	1.3	0.0	0.5	4.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.8	0.0	22.1	0.0	24.8	25.1	30.7	6.8	0.0	40.9	14.1	9.8
LnGrp LOS	D	A	C	A	C	C	C	A	A	D	B	A
Approach Vol, veh/h		286			14			827			1314	
Approach Delay, s/veh		28.8			25.0			12.7			14.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	35.6	0.0	15.6	12.1	28.9	7.8	7.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	41.0	4.0	24.0	12.0	34.0	5.0	23.0
Max Q Clear Time (g_c+I1), s	2.9	7.3	0.0	8.2	8.3	17.4	4.9	2.3
Green Ext Time (p_c), s	0.0	4.2	0.0	0.9	0.2	7.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	0	9	19	0	24	20	357	28	45	1006	65
Future Volume (veh/h)	24	0	9	19	0	24	20	357	28	45	1006	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	0	9	20	0	25	21	376	29	47	1059	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	0	63	86	90	76	37	1613	718	73	1684	750
Arrive On Green	0.04	0.00	0.04	0.05	0.00	0.05	0.02	0.45	0.45	0.04	0.47	0.47
Sat Flow, veh/h	1781	0	1576	1781	1870	1576	1781	3554	1582	1781	3554	1582
Grp Volume(v), veh/h	25	0	9	20	0	25	21	376	29	47	1059	68
Grp Sat Flow(s),veh/h/ln	1781	0	1576	1781	1870	1576	1781	1777	1582	1781	1777	1582
Q Serve(g_s), s	0.5	0.0	0.2	0.4	0.0	0.6	0.4	2.5	0.4	1.0	8.6	0.9
Cycle Q Clear(g_c), s	0.5	0.0	0.2	0.4	0.0	0.6	0.4	2.5	0.4	1.0	8.6	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	71	0	63	86	90	76	37	1613	718	73	1684	750
V/C Ratio(X)	0.35	0.00	0.14	0.23	0.00	0.33	0.56	0.23	0.04	0.64	0.63	0.09
Avail Cap(c_a), veh/h	1439	0	1273	1439	1511	1273	186	2686	1196	371	3057	1361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	17.8	17.6	0.0	17.7	18.6	6.4	5.8	18.1	7.6	5.5
Incr Delay (d2), s/veh	2.9	0.0	1.0	1.4	0.0	2.5	12.7	0.1	0.0	9.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.2	0.0	0.2	0.3	0.5	0.1	0.5	1.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.8	0.0	18.8	19.0	0.0	20.2	31.3	6.5	5.9	27.2	8.0	5.6
LnGrp LOS	C	A	B	B	A	C	C	A	A	C	A	A
Approach Vol, veh/h		34			45			426			1174	
Approach Delay, s/veh		20.3			19.6			7.7			8.6	
Approach LOS		C			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	21.4		5.5	4.8	22.2		5.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	29.0		31.0	4.0	33.0		31.0
Max Q Clear Time (g_c+I1), s	3.0	4.5		2.5	2.4	10.6		2.6
Green Ext Time (p_c), s	0.0	2.3		0.1	0.0	7.6		0.1

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	0	34	9	3	23	10	481	15	45	1126	115
Future Volume (veh/h)	66	0	34	9	3	23	10	481	15	45	1126	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	0	36	9	3	24	11	506	16	47	1185	121
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	216	0	192	91	30	106	25	1728	55	64	1671	170
Arrive On Green	0.12	0.00	0.12	0.07	0.07	0.07	0.01	0.49	0.49	0.04	0.51	0.51
Sat Flow, veh/h	1781	0	1585	1352	451	1585	1781	3516	111	1781	3256	332
Grp Volume(v), veh/h	69	0	36	12	0	24	11	255	267	47	646	660
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1803	0	1585	1781	1777	1850	1781	1777	1811
Q Serve(g_s), s	2.2	0.0	1.3	0.4	0.0	0.9	0.4	5.3	5.3	1.6	17.3	17.4
Cycle Q Clear(g_c), s	2.2	0.0	1.3	0.4	0.0	0.9	0.4	5.3	5.3	1.6	17.3	17.4
Prop In Lane	1.00		1.00	0.75		1.00	1.00		0.06	1.00		0.18
Lane Grp Cap(c), veh/h	216	0	192	121	0	106	25	873	909	64	912	929
V/C Ratio(X)	0.32	0.00	0.19	0.10	0.00	0.23	0.44	0.29	0.29	0.74	0.71	0.71
Avail Cap(c_a), veh/h	974	0	867	348	0	306	344	980	1021	344	980	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	0.0	24.6	27.2	0.0	27.5	30.4	9.4	9.4	29.7	11.6	11.6
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.1	0.0	0.4	4.6	0.2	0.2	6.1	2.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.5	0.2	0.0	0.3	0.2	1.6	1.7	0.7	5.5	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	24.7	27.4	0.0	27.9	35.0	9.6	9.6	35.7	14.0	14.0
LnGrp LOS	C	A	C	C	A	C	C	A	A	D	B	B
Approach Vol, veh/h		105			36			533			1353	
Approach Delay, s/veh		25.1			27.7			10.2			14.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	36.2		8.2	4.9	37.6		11.5
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	34.3		12.0	12.0	34.3		34.0
Max Q Clear Time (g_c+I1), s	3.6	7.3		2.9	2.4	19.4		4.2
Green Ext Time (p_c), s	0.0	8.0		0.0	0.0	12.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	16	30	23	4	18	21	480	25	15	1071	78
Future Volume (veh/h)	65	16	30	23	4	18	21	480	25	15	1071	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	17	32	24	4	19	22	505	26	16	1127	82
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	42	186	72	12	57	46	1618	83	42	1573	114
Arrive On Green	0.12	0.12	0.12	0.08	0.08	0.08	0.03	0.47	0.47	0.02	0.47	0.47
Sat Flow, veh/h	1439	360	1585	870	145	688	1781	3439	177	1781	3359	244
Grp Volume(v), veh/h	85	0	32	47	0	0	22	261	270	16	596	613
Grp Sat Flow(s),veh/h/ln	1798	0	1585	1703	0	0	1781	1777	1839	1781	1777	1826
Q Serve(g_s), s	2.5	0.0	1.1	1.5	0.0	0.0	0.7	5.3	5.3	0.5	15.5	15.5
Cycle Q Clear(g_c), s	2.5	0.0	1.1	1.5	0.0	0.0	0.7	5.3	5.3	0.5	15.5	15.5
Prop In Lane	0.80		1.00	0.51		0.40	1.00		0.10	1.00		0.13
Lane Grp Cap(c), veh/h	211	0	186	140	0	0	46	836	865	42	832	855
V/C Ratio(X)	0.40	0.00	0.17	0.33	0.00	0.00	0.48	0.31	0.31	0.38	0.72	0.72
Avail Cap(c_a), veh/h	996	0	878	354	0	0	370	1116	1155	370	1116	1147
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	23.0	25.0	0.0	0.0	27.8	9.5	9.5	27.8	12.3	12.3
Incr Delay (d2), s/veh	0.5	0.0	0.2	0.5	0.0	0.0	2.9	0.3	0.2	2.1	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.4	0.6	0.0	0.0	0.3	1.8	1.8	0.2	5.5	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	0.0	23.1	25.5	0.0	0.0	30.6	9.7	9.7	29.9	14.0	13.9
LnGrp LOS	C	A	C	C	A	A	C	A	A	C	B	B
Approach Vol, veh/h		117			47			553			1225	
Approach Delay, s/veh		23.8			25.5			10.6			14.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	32.9		8.8	5.5	32.8		10.8
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	36.3		12.0	12.0	36.3		32.0
Max Q Clear Time (g_c+I1), s	2.5	7.3		3.5	2.7	17.5		4.5
Green Ext Time (p_c), s	0.0	4.2		0.1	0.0	9.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	5	111	13	11	7	196	543	22	13	1047	60
Future Volume (veh/h)	32	5	111	13	11	7	196	543	22	13	1047	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	5	117	14	12	7	206	572	23	14	1102	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	31	211	61	53	99	256	1763	71	31	1298	74
Arrive On Green	0.13	0.13	0.13	0.06	0.06	0.06	0.14	0.51	0.51	0.02	0.38	0.38
Sat Flow, veh/h	1562	230	1585	981	841	1585	1781	3482	140	1781	3417	195
Grp Volume(v), veh/h	39	0	117	26	0	7	206	292	303	14	573	592
Grp Sat Flow(s),veh/h/ln	1792	0	1585	1821	0	1585	1781	1777	1845	1781	1777	1835
Q Serve(g_s), s	1.2	0.0	4.4	0.9	0.0	0.3	7.1	6.1	6.1	0.5	18.6	18.6
Cycle Q Clear(g_c), s	1.2	0.0	4.4	0.9	0.0	0.3	7.1	6.1	6.1	0.5	18.6	18.6
Prop In Lane	0.87		1.00	0.54		1.00	1.00		0.08	1.00		0.11
Lane Grp Cap(c), veh/h	239	0	211	114	0	99	256	900	934	31	675	697
V/C Ratio(X)	0.16	0.00	0.55	0.23	0.00	0.07	0.81	0.32	0.32	0.46	0.85	0.85
Avail Cap(c_a), veh/h	256	0	226	317	0	276	452	1050	1090	141	740	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	25.6	28.1	0.0	27.9	26.2	9.2	9.2	30.7	17.9	17.9
Incr Delay (d2), s/veh	0.3	0.0	2.5	1.0	0.0	0.3	2.3	0.3	0.3	3.9	8.9	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.7	0.4	0.0	0.1	3.0	2.1	2.2	0.2	8.4	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	0.0	28.1	29.1	0.0	28.1	28.4	9.5	9.5	34.6	26.8	26.6
LnGrp LOS	C	A	C	C	A	C	C	A	A	C	C	C
Approach Vol, veh/h		156			33			801			1179	
Approach Delay, s/veh		27.2			28.9			14.4			26.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.1	29.7		12.4	5.1	37.7		8.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	16.0	26.3		9.0	5.0	37.3		11.0
Max Q Clear Time (g_c+I1), s	9.1	20.6		6.4	2.5	8.1		2.9
Green Ext Time (p_c), s	0.2	3.3		0.1	0.0	3.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	13	28	52	16	252	47	1045	17	134	1403	92
Future Volume (veh/h)	31	13	28	52	16	252	47	1045	17	134	1403	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	14	2	36	44	13	49	1100	17	141	1477	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	66	184	148	156	132	86	1699	26	175	1776	113
Arrive On Green	0.12	0.12	0.12	0.08	0.08	0.08	0.05	0.47	0.47	0.10	0.52	0.52
Sat Flow, veh/h	1269	538	1507	1781	1870	1585	1781	3581	55	1781	3389	215
Grp Volume(v), veh/h	47	0	2	36	44	13	49	546	571	141	771	800
Grp Sat Flow(s),veh/h/ln	1807	0	1507	1781	1870	1585	1781	1777	1859	1781	1777	1827
Q Serve(g_s), s	2.0	0.0	0.1	1.6	1.9	0.6	2.3	19.9	19.9	6.6	31.2	31.7
Cycle Q Clear(g_c), s	2.0	0.0	0.1	1.6	1.9	0.6	2.3	19.9	19.9	6.6	31.2	31.7
Prop In Lane	0.70		1.00	1.00		1.00	1.00		0.03	1.00		0.12
Lane Grp Cap(c), veh/h	221	0	184	148	156	132	86	843	882	175	931	957
V/C Ratio(X)	0.21	0.00	0.01	0.24	0.28	0.10	0.57	0.65	0.65	0.81	0.83	0.84
Avail Cap(c_a), veh/h	549	0	458	377	396	335	125	1057	1106	229	1161	1194
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	33.0	36.7	36.8	36.2	39.8	17.1	17.1	37.8	17.1	17.2
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.6	0.7	0.2	2.2	1.2	1.2	11.2	4.6	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.7	0.9	0.3	1.0	7.2	7.6	3.3	11.6	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	0.0	33.0	37.3	37.5	36.5	42.0	18.3	18.2	49.0	21.7	22.0
LnGrp LOS	C	A	C	D	D	D	D	B	B	D	C	C
Approach Vol, veh/h		49			93			1166			1712	
Approach Delay, s/veh		34.1			37.3			19.2			24.1	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	46.3		12.4	8.1	50.5		14.5
Change Period (Y+Rc), s	4.0	5.7		5.3	4.0	5.7		4.0
Max Green Setting (Gmax), s	11.0	50.9		18.1	6.0	55.9		26.0
Max Q Clear Time (g_c+I1), s	8.6	21.9		3.9	4.3	33.7		4.0
Green Ext Time (p_c), s	0.1	7.5		0.2	0.0	11.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	0	42	12	0	23	49	1017	32	38	1374	6
Future Volume (veh/h)	35	0	42	12	0	23	49	1017	32	38	1374	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	0	44	13	0	24	52	1071	34	40	1446	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	126	0	0	53	0	0	107	2231	71	74	2190	977
Arrive On Green	0.07	0.00	0.00	0.03	0.00	0.00	0.06	0.63	0.63	0.04	0.62	0.62
Sat Flow, veh/h	1781	37		1781	13		1781	3516	112	1781	3554	1585
Grp Volume(v), veh/h	37	24.4		13	26.6		52	541	564	40	1446	6
Grp Sat Flow(s),veh/h/ln	1781	C		1781	C		1781	1777	1850	1781	1777	1585
Q Serve(g_s), s	1.1			0.4			1.5	8.7	8.7	1.2	14.3	0.1
Cycle Q Clear(g_c), s	1.1			0.4			1.5	8.7	8.7	1.2	14.3	0.1
Prop In Lane	1.00			1.00			1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	126			53			107	1128	1174	74	2190	977
V/C Ratio(X)	0.29			0.25			0.49	0.48	0.48	0.54	0.66	0.01
Avail Cap(c_a), veh/h	657			394			394	1583	1648	394	3165	1412
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9			25.7			24.7	5.2	5.2	25.5	6.7	4.0
Incr Delay (d2), s/veh	0.5			0.9			1.3	0.5	0.5	2.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4			0.2			0.6	2.2	2.3	0.5	3.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4			26.6			25.9	5.7	5.7	27.7	7.3	4.0
LnGrp LOS	C			C			C	A	A	C	A	A
Approach Vol, veh/h								1157			1492	
Approach Delay, s/veh								6.6			7.9	
Approach LOS								A			A	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	6.3	40.1	7.8	7.3	39.1	5.6
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0	5.7	4.0
Max Green Setting (Gmax), s	12.0	48.3	20.0	12.0	48.3	12.0
Max Q Clear Time (g_c+I1), s	3.2	10.7	3.1	3.5	16.3	2.4
Green Ext Time (p_c), s	0.0	11.6	0.0	0.0	17.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	546	6	305	175	6	104	99	1030	55	38	1141	174
Future Volume (veh/h)	546	6	305	175	6	104	99	1030	55	38	1141	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	579	0	0	184	6	0	104	1084	0	40	1201	183
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	729	0		226	238		129	1810		97	1718	533
Arrive On Green	0.20	0.00	0.00	0.13	0.13	0.00	0.07	0.35	0.00	0.05	0.34	0.34
Sat Flow, veh/h	3563	0	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	579	0	0	184	6	0	104	1084	0	40	1201	183
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	10.7	0.0	0.0	7.0	0.2	0.0	4.0	12.1	0.0	1.5	14.1	6.0
Cycle Q Clear(g_c), s	10.7	0.0	0.0	7.0	0.2	0.0	4.0	12.1	0.0	1.5	14.1	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	729	0		226	238		129	1810		97	1718	533
V/C Ratio(X)	0.79	0.00		0.81	0.03		0.81	0.60		0.41	0.70	0.34
Avail Cap(c_a), veh/h	1028	0		257	270		129	1842		180	1989	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	0.0	29.4	26.5	0.0	31.7	18.3	0.0	31.7	19.9	17.2
Incr Delay (d2), s/veh	2.5	0.0	0.0	16.1	0.0	0.0	28.9	0.7	0.0	2.8	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	0.0	3.9	0.1	0.0	2.6	4.0	0.0	0.7	4.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.7	0.0	0.0	45.5	26.5	0.0	60.6	19.1	0.0	34.5	21.2	17.9
LnGrp LOS	C	A		D	C		E	B		C	C	B
Approach Vol, veh/h		579	A		190	A		1188	A		1424	
Approach Delay, s/veh		28.7			44.9			22.7			21.1	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	30.6		18.2	9.0	29.3		12.8
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	7.0	25.0		20.0	5.0	27.0		10.0
Max Q Clear Time (g_c+I1), s	3.5	14.1		12.7	6.0	16.1		9.0
Green Ext Time (p_c), s	0.0	6.0		1.5	0.0	7.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	2	39	132	2	195	5	1032	36	67	1803	1
Future Volume (veh/h)	164	2	39	132	2	195	5	1032	36	67	1803	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	0	41	139	2	205	5	1086	38	71	1898	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	0	142	308	3	272	10	1836	819	274	2338	1
Arrive On Green	0.09	0.00	0.09	0.17	0.17	0.17	0.01	0.52	0.52	0.44	0.44	0.44
Sat Flow, veh/h	3563	0	1585	1781	15	1572	1781	3554	1585	501	5271	3
Grp Volume(v), veh/h	174	0	41	139	0	207	5	1086	38	71	1226	673
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1587	1781	1777	1585	501	1702	1870
Q Serve(g_s), s	2.8	0.0	1.4	4.1	0.0	7.3	0.2	12.5	0.7	6.8	18.5	18.5
Cycle Q Clear(g_c), s	2.8	0.0	1.4	4.1	0.0	7.3	0.2	12.5	0.7	15.0	18.5	18.5
Prop In Lane	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	319	0	142	308	0	275	10	1836	819	274	1510	829
V/C Ratio(X)	0.55	0.00	0.29	0.45	0.00	0.75	0.53	0.59	0.05	0.26	0.81	0.81
Avail Cap(c_a), veh/h	967	0	430	484	0	431	363	2714	1210	299	1675	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	0.0	25.1	21.8	0.0	23.2	29.2	9.9	7.1	16.6	14.3	14.3
Incr Delay (d2), s/veh	1.5	0.0	1.1	1.0	0.0	4.2	38.5	0.3	0.0	0.5	2.9	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.5	1.7	0.0	2.9	0.2	3.1	0.2	0.6	5.5	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.1	0.0	26.2	22.9	0.0	27.3	67.7	10.2	7.1	17.1	17.1	19.4
LnGrp LOS	C	A	C	C	A	C	E	B	A	B	B	B
Approach Vol, veh/h		215			346			1129			1970	
Approach Delay, s/veh		26.9			25.5			10.4			17.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		34.4		9.3	4.3	30.1		15.2				
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		5.0				
Max Green Setting (Gmax), s		45.0		16.0	12.0	29.0		16.0				
Max Q Clear Time (g_c+I1), s		14.5		4.8	2.2	20.5		9.3				
Green Ext Time (p_c), s		5.6		0.7	0.0	5.7		0.9				

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	9	152	0	2	116	46	934	0	299	1804	0
Future Volume (veh/h)	0	9	152	0	2	116	46	934	0	299	1804	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	166	0	2	122	48	983	0	315	1899	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	99	0	326	0	3	161	61	1718	0	370	2335	1042
Arrive On Green	0.00	0.00	0.10	0.00	0.10	0.10	0.03	0.48	0.00	0.21	0.66	0.00
Sat Flow, veh/h	1267	0	3170	0	26	1563	1781	3647	0	1781	3554	1585
Grp Volume(v), veh/h	0	0	166	0	0	124	48	983	0	315	1899	0
Grp Sat Flow(s),veh/h/ln	1267	0	1585	0	0	1589	1781	1777	0	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	3.6	0.0	0.0	5.5	1.9	14.4	0.0	12.4	28.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.6	0.0	0.0	5.5	1.9	14.4	0.0	12.4	28.6	0.0
Prop In Lane	1.00		1.00	0.00		0.98	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	99	0	326	0	0	163	61	1718	0	370	2335	1042
V/C Ratio(X)	0.00	0.00	0.51	0.00	0.00	0.76	0.79	0.57	0.00	0.85	0.81	0.00
Avail Cap(c_a), veh/h	421	0	1132	0	0	567	98	1718	0	661	2684	1197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	30.9	0.0	0.0	31.8	34.9	13.4	0.0	27.7	9.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.2	0.0	0.0	7.1	19.8	0.5	0.0	5.5	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.0	0.0	2.4	1.2	5.3	0.0	5.6	8.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	32.2	0.0	0.0	38.9	54.7	13.9	0.0	33.3	11.0	0.0
LnGrp LOS	A	A	C	A	A	D	D	B	A	C	B	A
Approach Vol, veh/h		166			124			1031			2214	
Approach Delay, s/veh		32.2			38.9			15.8			14.1	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.1	40.2		12.5	7.5	52.8		12.5				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	27.0	32.0		26.0	4.0	55.0		26.0				
Max Q Clear Time (g_c+I1), s	14.4	16.4		5.6	3.9	30.6		7.5				
Green Ext Time (p_c), s	0.8	6.3		0.6	0.0	17.2		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	8	105	114	3	18	17	945	329	14	1695	41
Future Volume (veh/h)	33	8	105	114	3	18	17	945	329	14	1695	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	8	111	122	0	19	18	995	346	15	1784	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	46	218	433	0	193	45	1743	606	26	2334	56
Arrive On Green	0.14	0.14	0.14	0.12	0.00	0.12	0.03	0.47	0.47	0.01	0.46	0.46
Sat Flow, veh/h	1463	334	1585	3563	0	1585	1781	3741	1300	1781	5129	124
Grp Volume(v), veh/h	43	0	111	122	0	19	18	905	436	15	1184	643
Grp Sat Flow(s),veh/h/ln	1797	0	1585	1781	0	1585	1781	1702	1636	1781	1702	1848
Q Serve(g_s), s	1.5	0.0	4.5	2.2	0.0	0.7	0.7	13.4	13.4	0.6	20.1	20.1
Cycle Q Clear(g_c), s	1.5	0.0	4.5	2.2	0.0	0.7	0.7	13.4	13.4	0.6	20.1	20.1
Prop In Lane	0.81		1.00	1.00		1.00	1.00		0.79	1.00		0.07
Lane Grp Cap(c), veh/h	247	0	218	433	0	193	45	1586	763	26	1549	841
V/C Ratio(X)	0.17	0.00	0.51	0.28	0.00	0.10	0.40	0.57	0.57	0.58	0.76	0.76
Avail Cap(c_a), veh/h	260	0	230	1032	0	459	155	1873	900	103	1774	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	27.6	27.6	0.0	27.0	33.1	13.4	13.4	33.8	15.7	15.7
Incr Delay (d2), s/veh	0.1	0.0	0.7	0.1	0.0	0.1	2.1	0.4	0.9	7.5	2.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.7	0.9	0.0	0.3	0.3	3.9	3.9	0.3	6.3	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	0.0	28.3	27.7	0.0	27.0	35.2	13.9	14.3	41.3	17.7	19.3
LnGrp LOS	C	A	C	C	A	C	D	B	B	D	B	B
Approach Vol, veh/h		154			141			1359			1842	
Approach Delay, s/veh		27.8			27.6			14.3			18.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	38.2		13.5	5.8	37.4		12.4
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	4.0	38.0		10.0	6.0	36.0		20.0
Max Q Clear Time (g_c+I1), s	2.6	15.4		6.5	2.7	22.1		4.2
Green Ext Time (p_c), s	0.0	9.2		0.0	0.0	9.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	20	232	70	10	38	158	1561	11	14	2055	64
Future Volume (veh/h)	142	20	232	70	10	38	158	1561	11	14	2055	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	149	21	17	74	11	0	166	1643	11	15	2163	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	25	173	65	10	66	195	3535	24	18	2934	88
Arrive On Green	0.11	0.11	0.11	0.04	0.04	0.00	0.11	0.68	0.68	0.01	0.58	0.58
Sat Flow, veh/h	1570	221	1543	1560	232	1585	1781	5233	35	1781	5093	153
Grp Volume(v), veh/h	170	0	17	85	0	0	166	1069	585	15	1444	784
Grp Sat Flow(s),veh/h/ln	1792	0	1543	1792	0	1585	1781	1702	1864	1781	1702	1841
Q Serve(g_s), s	11.2	0.0	1.2	5.0	0.0	0.0	11.0	17.8	17.8	1.0	37.5	37.7
Cycle Q Clear(g_c), s	11.2	0.0	1.2	5.0	0.0	0.0	11.0	17.8	17.8	1.0	37.5	37.7
Prop In Lane	0.88		1.00	0.87		1.00	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	201	0	173	75	0	66	195	2300	1259	18	1961	1061
V/C Ratio(X)	0.85	0.00	0.10	1.14	0.00	0.00	0.85	0.46	0.46	0.85	0.74	0.74
Avail Cap(c_a), veh/h	219	0	189	75	0	66	356	2300	1259	45	1961	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	0.0	47.8	57.5	0.0	0.0	52.5	9.2	9.2	59.3	18.7	18.8
Incr Delay (d2), s/veh	22.0	0.0	0.1	146.5	0.0	0.0	4.0	0.3	0.6	32.2	2.5	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.5	5.3	0.0	0.0	4.9	5.4	6.0	0.6	13.4	15.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.3	0.0	47.9	204.0	0.0	0.0	56.5	9.5	9.8	91.5	21.2	23.4
LnGrp LOS	E	A	D	F	A	A	E	A	A	F	C	C
Approach Vol, veh/h		187			85			1820			2243	
Approach Delay, s/veh		71.9			204.0			13.9			22.5	
Approach LOS		E			F			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.1	75.1		9.0	5.2	87.1		18.7
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		5.3
Max Green Setting (Gmax), s	24.0	57.0		5.0	3.0	78.0		14.7
Max Q Clear Time (g_c+I1), s	13.0	39.7		7.0	3.0	19.8		13.2
Green Ext Time (p_c), s	0.2	15.3		0.0	0.0	27.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	348	76	367	942	183	282	1583	148	278	1725	233
Future Volume (veh/h)	113	348	76	367	942	183	282	1583	148	278	1725	233
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	366	7	386	992	64	297	1666	0	293	1816	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	446	194	414	1495	459	230	1971		317	2099	
Arrive On Green	0.07	0.13	0.13	0.23	0.29	0.29	0.07	0.39	0.00	0.09	0.41	0.00
Sat Flow, veh/h	3456	3554	1547	1781	5106	1569	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	119	366	7	386	992	64	297	1666	0	293	1816	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1547	1781	1702	1569	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	4.0	12.0	0.5	25.5	20.5	3.6	8.0	35.7	0.0	10.1	39.0	0.0
Cycle Q Clear(g_c), s	4.0	12.0	0.5	25.5	20.5	3.6	8.0	35.7	0.0	10.1	39.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	446	194	414	1495	459	230	1971		317	2099	
V/C Ratio(X)	0.53	0.82	0.04	0.93	0.66	0.14	1.29	0.85		0.92	0.87	
Avail Cap(c_a), veh/h	259	512	223	490	1757	540	230	1971		317	2099	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.3	51.1	46.1	45.1	37.3	31.3	56.0	33.6	0.0	54.1	32.3	0.0
Incr Delay (d2), s/veh	0.7	9.6	0.1	21.3	0.9	0.2	158.7	4.7	0.0	31.3	5.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	5.8	0.2	13.2	8.2	1.3	8.5	14.7	0.0	5.6	15.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	60.7	46.2	66.5	38.1	31.5	214.7	38.2	0.0	85.4	37.4	0.0
LnGrp LOS	D	E	D	E	D	C	F	D		F	D	
Approach Vol, veh/h		492			1442			1963	A		2109	A
Approach Delay, s/veh		59.1			45.4			64.9			44.1	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	55.3	11.8	40.8	15.0	52.3	31.9	20.8
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	8.0	42.0	9.0	41.3	11.0	* 39	33.0	17.3
Max Q Clear Time (g_c+I1), s	10.0	41.0	6.0	22.5	12.1	37.7	27.5	14.0
Green Ext Time (p_c), s	0.0	0.9	0.1	6.0	0.0	1.4	0.4	0.6

Intersection Summary	
HCM 6th Ctrl Delay	52.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1	25	28	1	19	29	2018	41	33	2127	11
Future Volume (veh/h)	25	1	25	28	1	19	29	2018	41	33	2127	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	1	26	29	1	20	31	2124	43	35	2239	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	1	33	138	1	27	36	2485	1108	41	3680	20
Arrive On Green	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.70	0.70	0.02	0.70	0.70
Sat Flow, veh/h	843	32	843	1000	34	689	1781	3554	1585	1781	5241	28
Grp Volume(v), veh/h	53	0	0	50	0	0	31	2124	43	35	1454	797
Grp Sat Flow(s),veh/h/ln	1719	0	0	1723	0	0	1781	1777	1585	1781	1702	1865
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.0	1.0	25.7	0.5	1.1	12.8	12.8
Cycle Q Clear(g_c), s	1.7	0.0	0.0	1.6	0.0	0.0	1.0	25.7	0.5	1.1	12.8	12.8
Prop In Lane	0.49		0.49	0.58		0.40	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	161	0	0	167	0	0	36	2485	1108	41	2390	1310
V/C Ratio(X)	0.33	0.00	0.00	0.30	0.00	0.00	0.85	0.85	0.04	0.84	0.61	0.61
Avail Cap(c_a), veh/h	490	0	0	491	0	0	124	2671	1191	93	2500	1370
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	0.0	0.0	27.3	0.0	0.0	28.1	6.5	2.7	28.0	4.5	4.5
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.0	0.0	0.0	18.2	2.9	0.0	15.4	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.7	0.0	0.0	0.6	3.9	0.1	0.6	1.5	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	0.0	0.0	28.3	0.0	0.0	46.4	9.4	2.7	43.5	4.9	5.3
LnGrp LOS	C	A	A	C	A	A	D	A	A	D	A	A
Approach Vol, veh/h		53			50			2198			2286	
Approach Delay, s/veh		28.5			28.3			9.8			5.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	46.0		6.3	5.2	46.1		6.3
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	3.0	43.3		15.0	4.0	42.3		15.0
Max Q Clear Time (g_c+I1), s	3.1	27.7		3.7	3.0	14.8		3.6
Green Ext Time (p_c), s	0.0	12.5		0.1	0.0	18.5		0.1

Intersection Summary		
HCM 6th Ctrl Delay		8.1
HCM 6th LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	71	153	137	331	115	305	2298	85	96	2096	40
Future Volume (veh/h)	88	71	153	137	331	115	305	2298	85	96	2096	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	75	161	144	348	0	321	2419	0	101	2206	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	435	191	199	407		384	3125		152	2812	53
Arrive On Green	0.07	0.12	0.12	0.06	0.11	0.00	0.11	0.61	0.00	0.04	0.55	0.55
Sat Flow, veh/h	1781	3554	1566	3456	3554	1585	3456	5106	1585	3456	5158	98
Grp Volume(v), veh/h	93	75	161	144	348	0	321	2419	0	101	1454	794
Grp Sat Flow(s),veh/h/ln	1781	1777	1566	1728	1777	1585	1728	1702	1585	1728	1702	1852
Q Serve(g_s), s	6.2	2.3	12.1	4.9	11.5	0.0	10.9	41.9	0.0	3.5	40.7	40.9
Cycle Q Clear(g_c), s	6.2	2.3	12.1	4.9	11.5	0.0	10.9	41.9	0.0	3.5	40.7	40.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	116	435	191	199	407		384	3125		152	1855	1010
V/C Ratio(X)	0.80	0.17	0.84	0.73	0.85		0.84	0.77		0.66	0.78	0.79
Avail Cap(c_a), veh/h	134	453	200	230	423		518	3125		173	1855	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	47.2	51.5	55.6	52.1	0.0	52.3	17.2	0.0	56.5	21.7	21.7
Incr Delay (d2), s/veh	22.1	0.2	26.3	7.0	15.6	0.0	6.6	1.9	0.0	5.4	2.3	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	1.0	6.0	2.3	6.0	0.0	5.0	15.3	0.0	1.6	15.6	17.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.4	47.5	77.8	62.6	67.8	0.0	58.9	19.1	0.0	61.8	24.0	26.0
LnGrp LOS	E	D	E	E	E		E	B		E	C	C
Approach Vol, veh/h		329			492	A		2740	A		2349	
Approach Delay, s/veh		70.8			66.3			23.8			26.3	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	19.4	9.3	79.5	10.9	20.4	17.3	71.4
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	9.0	14.3	6.0	71.0	8.0	15.3	18.0	59.0
Max Q Clear Time (g_c+I1), s	8.2	13.5	5.5	43.9	6.9	14.1	12.9	42.9
Green Ext Time (p_c), s	0.0	0.2	0.0	19.2	0.0	0.2	0.4	11.6

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	33	247	2475	203	254	2073
Future Volume (veh/h)	33	247	2475	203	254	2073
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	0	2605	214	267	2182
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	48		3096	961	306	4221
Arrive On Green	0.03	0.00	0.61	0.61	0.17	0.83
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	35	0	2605	214	267	2182
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	1.6	0.0	33.6	5.0	12.0	10.6
Cycle Q Clear(g_c), s	1.6	0.0	33.6	5.0	12.0	10.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	48		3096	961	306	4221
V/C Ratio(X)	0.73		0.84	0.22	0.87	0.52
Avail Cap(c_a), veh/h	565		3241	1006	348	4612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	0.0	13.0	7.3	33.1	2.1
Incr Delay (d2), s/veh	19.3	0.0	2.1	0.1	17.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	10.2	1.4	6.3	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.8	0.0	15.1	7.5	50.8	2.3
LnGrp LOS	E		B	A	D	A
Approach Vol, veh/h	35	A	2819			2449
Approach Delay, s/veh	58.8		14.5			7.6
Approach LOS	E		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	18.1	55.7				73.7	8.2
Change Period (Y+Rc), s	4.0	6.0				* 6	6.0
Max Green Setting (Gmax), s	16.0	52.0				* 74	26.0
Max Q Clear Time (g_c+I1), s	14.0	35.6				12.6	3.6
Green Ext Time (p_c), s	0.1	14.1				24.8	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	23	53	437	138	512	110	1040	231	282	1129	0
Future Volume (veh/h)	0	23	53	437	138	512	110	1040	231	282	1129	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	24	0	460	211	189	116	1095	85	297	1188	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	38	32	577	303	257	139	1959	874	307	1999	892
Arrive On Green	0.00	0.02	0.00	0.16	0.16	0.16	0.08	0.55	0.55	0.09	0.56	0.00
Sat Flow, veh/h	3456	1870	1585	3563	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	0	24	0	460	211	189	116	1095	85	297	1188	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.0	1.1	0.0	11.2	9.6	10.2	5.8	18.0	2.3	7.7	19.8	0.0
Cycle Q Clear(g_c), s	0.0	1.1	0.0	11.2	9.6	10.2	5.8	18.0	2.3	7.7	19.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	38	32	577	303	257	139	1959	874	307	1999	892
V/C Ratio(X)	0.00	0.64	0.00	0.80	0.70	0.74	0.84	0.56	0.10	0.97	0.59	0.00
Avail Cap(c_a), veh/h	614	333	282	673	353	299	139	1959	874	307	1999	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	43.8	0.0	36.3	35.6	35.9	40.9	13.1	9.6	40.9	12.9	0.0
Incr Delay (d2), s/veh	0.0	16.7	0.0	5.8	4.9	7.8	34.0	1.2	0.2	42.3	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.0	5.1	4.6	4.3	3.7	6.4	0.7	4.9	6.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	60.5	0.0	42.1	40.5	43.7	74.9	14.2	9.8	83.1	14.2	0.0
LnGrp LOS	A	E	A	D	D	D	E	B	A	F	B	A
Approach Vol, veh/h		24			860			1296			1485	
Approach Delay, s/veh		60.5			42.1			19.4			28.0	
Approach LOS		E			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	53.6		5.8	11.0	54.6		18.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	8.0	33.0		16.0	7.0	34.0		17.0				
Max Q Clear Time (g_c+I1), s	9.7	20.0		3.1	7.8	21.8		13.2				
Green Ext Time (p_c), s	0.0	6.0		0.0	0.0	6.1		1.4				

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	121	31	586	130	84	1014
Future Volume (veh/h)	121	31	586	130	84	1014
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	33	617	137	88	1067
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	346	308	1196	534	171	1916
Arrive On Green	0.19	0.19	0.34	0.34	0.10	0.54
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	127	33	617	137	88	1067
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	2.3	0.6	5.2	2.4	1.8	7.4
Cycle Q Clear(g_c), s	2.3	0.6	5.2	2.4	1.8	7.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	346	308	1196	534	171	1916
V/C Ratio(X)	0.37	0.11	0.52	0.26	0.51	0.56
Avail Cap(c_a), veh/h	1139	1013	1987	886	285	2934
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	12.4	10.0	9.0	16.1	5.7
Incr Delay (d2), s/veh	0.6	0.2	0.7	0.5	0.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.2	1.6	0.7	0.6	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.8	12.6	10.7	9.5	17.0	6.2
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	160		754			1155
Approach Delay, s/veh	13.5		10.5			7.0
Approach LOS	B		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.6	18.6				26.2	11.3
Change Period (Y+Rc), s	4.0	6.0				6.0	4.0
Max Green Setting (Gmax), s	6.0	21.0				31.0	24.0
Max Q Clear Time (g_c+I1), s	3.8	7.2				9.4	4.3
Green Ext Time (p_c), s	0.0	5.4				10.4	0.5

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	18	498	272	759	1336	11
Future Volume (veh/h)	18	498	272	759	1336	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	252	286	799	1406	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	324	288	323	2481	1622	723
Arrive On Green	0.18	0.18	0.18	0.70	0.46	0.46
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	19	252	286	799	1406	6
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	0.7	12.9	13.0	7.3	29.6	0.2
Cycle Q Clear(g_c), s	0.7	12.9	13.0	7.3	29.6	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	324	288	323	2481	1622	723
V/C Ratio(X)	0.06	0.87	0.88	0.32	0.87	0.01
Avail Cap(c_a), veh/h	385	343	343	2649	1752	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	33.1	33.2	4.9	20.3	12.3
Incr Delay (d2), s/veh	0.1	19.1	22.2	0.1	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	12.1	7.4	2.1	12.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.2	52.2	55.4	5.0	25.0	12.3
LnGrp LOS	C	D	E	A	C	B
Approach Vol, veh/h	271			1085	1412	
Approach Delay, s/veh	50.5			18.2	24.9	
Approach LOS	D			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		63.1		20.1	20.1	43.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		62.0		18.0	16.0	41.0
Max Q Clear Time (g_c+I1), s		9.3		14.9	15.0	31.6
Green Ext Time (p_c), s		6.9		0.3	0.1	6.4

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	8	237	7	336	8	994	69	231	1593	34
Future Volume (veh/h)	5	1	8	237	7	336	8	994	69	231	1593	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	1	8	249	7	354	8	1046	73	243	1677	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	33	44	277	5	404	25	1378	96	282	1968	42
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.01	0.41	0.41	0.16	0.55	0.55
Sat Flow, veh/h	0	129	172	723	20	1576	1781	3368	235	1781	3557	76
Grp Volume(v), veh/h	14	0	0	256	0	354	8	552	567	243	836	877
Grp Sat Flow(s),veh/h/ln	302	0	0	743	0	1576	1781	1777	1826	1781	1777	1856
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	16.8	0.3	20.7	20.7	10.4	30.9	31.2
Cycle Q Clear(g_c), s	20.0	0.0	0.0	20.0	0.0	16.8	0.3	20.7	20.7	10.4	30.9	31.2
Prop In Lane	0.36		0.57	0.97		1.00	1.00		0.13	1.00		0.04
Lane Grp Cap(c), veh/h	140	0	0	282	0	404	25	727	747	282	983	1027
V/C Ratio(X)	0.10	0.00	0.00	0.91	0.00	0.88	0.31	0.76	0.76	0.86	0.85	0.85
Avail Cap(c_a), veh/h	140	0	0	282	0	404	160	759	780	297	983	1027
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	0.0	31.5	0.0	27.8	38.0	19.7	19.7	32.0	14.7	14.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	30.3	0.0	18.2	2.6	4.9	4.8	20.0	7.6	7.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	7.2	0.0	8.2	0.2	8.2	8.4	5.6	11.4	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	0.0	0.0	61.8	0.0	45.9	40.6	24.6	24.5	52.0	22.3	22.3
LnGrp LOS	C	A	A	E	A	D	D	C	C	D	C	C
Approach Vol, veh/h		14			610			1127			1956	
Approach Delay, s/veh		23.6			52.6			24.7			26.0	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.3	37.6		24.0	5.1	48.8		24.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	13.0	33.3		20.0	7.0	39.3		20.0
Max Q Clear Time (g_c+I1), s	12.4	22.7		22.0	2.3	33.2		22.0
Green Ext Time (p_c), s	0.0	9.1		0.0	0.0	6.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	0	31	58	4	25	41	1018	8	20	1697	36
Future Volume (veh/h)	54	0	31	58	4	25	41	1018	8	20	1697	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	0	33	61	4	26	43	1072	8	21	1786	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	0	78	75	5	69	54	2472	1101	25	2416	51
Arrive On Green	0.05	0.00	0.05	0.04	0.04	0.04	0.03	0.70	0.70	0.01	0.68	0.68
Sat Flow, veh/h	1781	0	1585	1677	110	1542	1781	3554	1583	1781	3558	75
Grp Volume(v), veh/h	57	0	33	65	0	26	43	1072	8	21	889	935
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1787	0	1542	1781	1777	1583	1781	1777	1857
Q Serve(g_s), s	2.8	0.0	1.8	3.2	0.0	1.5	2.2	11.8	0.1	1.1	29.0	29.3
Cycle Q Clear(g_c), s	2.8	0.0	1.8	3.2	0.0	1.5	2.2	11.8	0.1	1.1	29.0	29.3
Prop In Lane	1.00		1.00	0.94		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	88	0	78	79	0	69	54	2472	1101	25	1206	1261
V/C Ratio(X)	0.65	0.00	0.42	0.82	0.00	0.38	0.79	0.43	0.01	0.85	0.74	0.74
Avail Cap(c_a), veh/h	317	0	282	79	0	69	59	2472	1101	79	1206	1261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	0.0	41.5	42.6	0.0	41.8	43.3	6.0	4.2	44.3	9.3	9.3
Incr Delay (d2), s/veh	2.9	0.0	1.3	44.2	0.0	1.3	42.9	0.3	0.0	24.2	4.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.7	2.4	0.0	0.6	1.5	2.9	0.0	0.6	8.5	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.9	0.0	42.8	86.9	0.0	43.1	86.3	6.3	4.2	68.5	13.3	13.3
LnGrp LOS	D	A	D	F	A	D	F	A	A	E	B	B
Approach Vol, veh/h		90			91			1123			1845	
Approach Delay, s/veh		44.2			74.4			9.3			13.9	
Approach LOS		D			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	66.8		8.0	5.3	68.3		8.5
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	3.0	49.3		4.0	4.0	48.3		16.0
Max Q Clear Time (g_c+I1), s	4.2	31.3		5.2	3.1	13.8		4.8
Green Ext Time (p_c), s	0.0	17.8		0.0	0.0	27.8		0.2

Intersection Summary			
HCM 6th Ctrl Delay			14.9
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	0	407	12	4	2	827	777	0	4	1085	676
Future Volume (veh/h)	256	0	407	12	4	2	827	777	0	4	1085	676
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	269	0	0	13	4	0	871	818	0	4	1142	319
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	395	0		62	65	0	883	2311	0	13	1469	655
Arrive On Green	0.11	0.00	0.00	0.03	0.03	0.00	0.26	0.65	0.00	0.01	0.41	0.41
Sat Flow, veh/h	3563	0	1585	1781	1870	0	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	269	0	0	13	4	0	871	818	0	4	1142	319
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	6.5	0.0	0.0	0.6	0.2	0.0	22.6	9.4	0.0	0.2	25.0	13.3
Cycle Q Clear(g_c), s	6.5	0.0	0.0	0.6	0.2	0.0	22.6	9.4	0.0	0.2	25.0	13.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	395	0		62	65	0	883	2311	0	13	1469	655
V/C Ratio(X)	0.68	0.00		0.21	0.06	0.00	0.99	0.35	0.00	0.30	0.78	0.49
Avail Cap(c_a), veh/h	396	0		238	249	0	883	2311	0	139	1469	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	0.0	0.0	42.2	42.0	0.0	33.3	7.1	0.0	44.4	22.8	19.4
Incr Delay (d2), s/veh	4.7	0.0	0.0	1.7	0.4	0.0	26.8	0.4	0.0	12.4	2.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.0	0.3	0.1	0.0	12.4	3.2	0.0	0.1	9.5	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	0.0	0.0	43.9	42.4	0.0	60.2	7.6	0.0	56.8	25.5	20.0
LnGrp LOS	D	A		D	D	A	E	A	A	E	C	B
Approach Vol, veh/h		269	A		17			1689			1465	
Approach Delay, s/veh		43.1			43.6			34.7			24.4	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	64.2		7.1	26.0	42.9		14.0
Change Period (Y+Rc), s	4.0	5.7		4.0	3.0	* 5.7		4.0
Max Green Setting (Gmax), s	7.0	43.3		12.0	23.0	* 29		10.0
Max Q Clear Time (g_c+I1), s	2.2	11.4		2.6	24.6	27.0		8.5
Green Ext Time (p_c), s	0.0	4.4		0.0	0.0	1.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1	31	0	2	31	37	1228	0	34	965	98
Future Volume (veh/h)	61	1	31	0	2	31	37	1228	0	34	965	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	1	33	0	2	33	39	1293	0	36	1016	103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	3	93	0	58	49	60	1673	746	56	1527	155
Arrive On Green	0.06	0.06	0.06	0.00	0.03	0.03	0.03	0.47	0.00	0.03	0.47	0.47
Sat Flow, veh/h	1781	47	1545	0	1870	1585	1781	3554	1585	1781	3258	330
Grp Volume(v), veh/h	64	0	34	0	2	33	39	1293	0	36	554	565
Grp Sat Flow(s),veh/h/ln	1781	0	1592	0	1870	1585	1781	1777	1585	1781	1777	1811
Q Serve(g_s), s	1.7	0.0	1.0	0.0	0.1	1.0	1.1	14.9	0.0	1.0	11.8	11.8
Cycle Q Clear(g_c), s	1.7	0.0	1.0	0.0	0.1	1.0	1.1	14.9	0.0	1.0	11.8	11.8
Prop In Lane	1.00		0.97	0.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	107	0	96	0	58	49	60	1673	746	56	833	849
V/C Ratio(X)	0.60	0.00	0.36	0.00	0.03	0.67	0.65	0.77	0.00	0.64	0.67	0.67
Avail Cap(c_a), veh/h	797	0	712	0	837	709	145	1951	870	145	975	994
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	0.0	22.2	0.0	23.1	23.6	23.5	10.8	0.0	23.5	10.1	10.1
Incr Delay (d2), s/veh	5.3	0.0	2.2	0.0	0.2	14.9	11.3	1.7	0.0	11.5	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.4	0.0	0.0	0.5	0.6	4.8	0.0	0.6	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	0.0	24.4	0.0	23.4	38.5	34.8	12.5	0.0	35.0	11.5	11.4
LnGrp LOS	C	A	C	A	C	D	C	B	A	C	B	B
Approach Vol, veh/h		98			35			1332			1155	
Approach Delay, s/veh		26.6			37.6			13.2			12.2	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	28.2		8.0	6.7	28.1		6.5
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	4.0	27.0		22.0	4.0	27.0		22.0
Max Q Clear Time (g_c+I1), s	3.0	16.9		3.7	3.1	13.8		3.0
Green Ext Time (p_c), s	0.0	6.3		0.3	0.0	6.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	2	103	22	1	26	83	898	24	73	979	110
Future Volume (veh/h)	181	2	103	22	1	26	83	898	24	73	979	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	192	0	108	23	1	27	87	945	25	77	1031	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	504	0	224	150	5	129	154	1532	683	125	1474	657
Arrive On Green	0.14	0.00	0.14	0.08	0.08	0.08	0.09	0.43	0.43	0.07	0.41	0.41
Sat Flow, veh/h	3563	0	1585	1781	57	1537	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	192	0	108	23	0	28	87	945	25	77	1031	116
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1594	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.1	0.0	4.0	0.8	0.0	1.0	3.0	13.1	0.6	2.7	15.2	2.9
Cycle Q Clear(g_c), s	3.1	0.0	4.0	0.8	0.0	1.0	3.0	13.1	0.6	2.7	15.2	2.9
Prop In Lane	1.00		1.00	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	504	0	224	150	0	134	154	1532	683	125	1474	657
V/C Ratio(X)	0.38	0.00	0.48	0.15	0.00	0.21	0.56	0.62	0.04	0.61	0.70	0.18
Avail Cap(c_a), veh/h	1125	0	501	338	0	302	338	1891	843	338	1891	843
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	25.1	26.9	0.0	27.0	27.8	14.0	10.4	28.6	15.3	11.7
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.2	0.0	0.3	1.2	0.6	0.0	1.8	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.5	0.3	0.0	0.4	1.3	4.7	0.2	1.1	5.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	0.0	25.7	27.1	0.0	27.3	29.0	14.5	10.4	30.4	16.3	11.9
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		300			51			1057			1224	
Approach Delay, s/veh		25.1			27.2			15.6			16.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	32.6		9.3	9.5	31.6		13.0
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	12.0	33.7		12.0	12.0	33.7		20.0
Max Q Clear Time (g_c+I1), s	4.7	15.1		3.0	5.0	17.2		6.0
Green Ext Time (p_c), s	0.0	8.6		0.0	0.0	9.1		0.5

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	8	9	1	5	29
Future Volume (veh/h)	1	8	9	1	5	29
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	8	9	1	5	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	31	27	155	131	15	726
Arrive On Green	0.02	0.02	0.08	0.08	0.01	0.39
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	1	8	9	1	5	31
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	0.0	0.1	0.1	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.0	0.1	0.1	0.0	0.0	0.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	31	27	155	131	15	726
V/C Ratio(X)	0.03	0.29	0.06	0.01	0.34	0.04
Avail Cap(c_a), veh/h	2224	1979	2557	2167	635	3780
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.1	8.2	7.1	7.1	8.3	3.2
Incr Delay (d2), s/veh	0.4	5.9	0.2	0.0	13.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.6	14.0	7.3	7.1	21.4	3.2
LnGrp LOS	A	B	A	A	C	A
Approach Vol, veh/h	9		10			36
Approach Delay, s/veh	13.4		7.2			5.8
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.1	6.4				11.5	5.3
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	6.0	23.0				34.0	21.0
Max Q Clear Time (g_c+I1), s	2.0	2.1				2.2	2.1
Green Ext Time (p_c), s	0.0	0.0				0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	1057	63	97	937	29	138	32	15	3	34	13
Future Volume (veh/h)	54	1057	63	97	937	29	138	32	15	3	34	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	1113	66	102	986	31	90	112	16	3	36	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	1510	674	130	1631	727	178	187	158	4	51	20
Arrive On Green	0.04	0.42	0.42	0.07	0.46	0.46	0.10	0.10	0.10	0.04	0.04	0.04
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	101	1210	470
Grp Volume(v), veh/h	57	1113	66	102	986	31	90	112	16	53	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	0	0
Q Serve(g_s), s	1.6	12.9	1.2	2.8	10.2	0.5	2.4	2.8	0.5	1.4	0.0	0.0
Cycle Q Clear(g_c), s	1.6	12.9	1.2	2.8	10.2	0.5	2.4	2.8	0.5	1.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.06		0.26
Lane Grp Cap(c), veh/h	70	1510	674	130	1631	727	178	187	158	75	0	0
V/C Ratio(X)	0.82	0.74	0.10	0.78	0.60	0.04	0.51	0.60	0.10	0.71	0.00	0.00
Avail Cap(c_a), veh/h	145	1901	848	217	2046	913	580	609	516	145	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.4	11.8	8.5	22.4	10.0	7.3	21.0	21.2	20.1	23.3	0.0	0.0
Incr Delay (d2), s/veh	8.3	1.4	0.1	3.8	0.5	0.0	0.8	1.2	0.1	4.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.8	0.3	1.1	2.7	0.1	1.0	1.2	0.1	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.8	13.2	8.6	26.2	10.5	7.4	21.8	22.3	20.2	27.8	0.0	0.0
LnGrp LOS	C	B	A	C	B	A	C	C	C	C	A	A
Approach Vol, veh/h		1236			1119			218			53	
Approach Delay, s/veh		13.8			11.8			22.0			27.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.1	7.6	26.6		8.9	5.9	28.3				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		4.0	6.0	26.3		16.0	4.0	28.3				
Max Q Clear Time (g_c+I1), s		3.4	4.8	14.9		4.8	3.6	12.2				
Green Ext Time (p_c), s		0.0	0.0	6.0		0.4	0.0	6.4				

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	855	221	177	942	38	228	44	112	20	36	67
Future Volume (veh/h)	81	855	221	177	942	38	228	44	112	20	36	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	900	233	186	992	40	273	0	118	21	38	71
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	1292	576	211	1379	615	282	0	125	137	144	122
Arrive On Green	0.06	0.36	0.36	0.12	0.39	0.39	0.08	0.00	0.08	0.08	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	1781	1870	1585
Grp Volume(v), veh/h	85	900	233	186	992	40	273	0	118	21	38	71
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	1585
Q Serve(g_s), s	2.4	10.9	5.5	5.2	12.0	0.8	3.9	0.0	3.7	0.6	1.0	2.2
Cycle Q Clear(g_c), s	2.4	10.9	5.5	5.2	12.0	0.8	3.9	0.0	3.7	0.6	1.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	1292	576	211	1379	615	282	0	125	137	144	122
V/C Ratio(X)	0.79	0.70	0.40	0.88	0.72	0.07	0.97	0.00	0.94	0.15	0.26	0.58
Avail Cap(c_a), veh/h	141	1335	595	211	1475	658	282	0	125	447	470	398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	13.7	12.0	21.9	13.1	9.7	23.2	0.0	23.2	21.8	22.0	22.6
Incr Delay (d2), s/veh	14.8	1.7	0.7	31.0	1.8	0.1	44.8	0.0	61.7	0.7	1.4	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.6	1.6	3.7	3.8	0.2	3.2	0.0	3.3	0.2	0.4	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.2	15.5	12.7	53.0	14.9	9.8	68.0	0.0	84.9	22.5	23.4	28.6
LnGrp LOS	D	B	B	D	B	A	E	A	F	C	C	C
Approach Vol, veh/h		1218			1218			391			130	
Approach Delay, s/veh		16.5			20.6			73.1			26.1	
Approach LOS		B			C			E			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		8.5	10.0	24.1		8.0	8.8	25.3				
Change Period (Y+Rc), s		4.6	4.0	5.7		4.0	5.7	* 5.7				
Max Green Setting (Gmax), s		12.7	6.0	19.0		4.0	4.0	* 21				
Max Q Clear Time (g_c+I1), s		4.2	7.2	12.9		5.9	4.4	14.0				
Green Ext Time (p_c), s		0.5	0.0	4.9		0.0	0.0	5.6				

Intersection Summary	
HCM 6th Ctrl Delay	26.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	911	85	65	857	2	144	40	10	3	17	94
Future Volume (veh/h)	84	911	85	65	857	2	144	40	10	3	17	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	959	89	68	902	2	152	42	11	3	18	99
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	1324	591	88	1313	586	329	91	370	38	231	230
Arrive On Green	0.06	0.37	0.37	0.05	0.37	0.37	0.23	0.23	0.23	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1410	390	1585	265	1592	1585
Grp Volume(v), veh/h	88	959	89	68	902	2	194	0	11	21	0	99
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1800	0	1585	1857	0	1585
Q Serve(g_s), s	4.4	20.9	3.4	3.4	19.3	0.1	8.3	0.0	0.5	0.9	0.0	5.1
Cycle Q Clear(g_c), s	4.4	20.9	3.4	3.4	19.3	0.1	8.3	0.0	0.5	0.9	0.0	5.1
Prop In Lane	1.00		1.00	1.00		1.00	0.78		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	113	1324	591	88	1313	586	420	0	370	269	0	230
V/C Ratio(X)	0.78	0.72	0.15	0.78	0.69	0.00	0.46	0.00	0.03	0.08	0.00	0.43
Avail Cap(c_a), veh/h	198	1461	652	178	1421	634	420	0	370	269	0	230
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.5	24.3	18.8	42.3	24.0	17.9	29.6	0.0	26.6	33.3	0.0	35.1
Incr Delay (d2), s/veh	4.3	1.9	0.2	5.4	1.5	0.0	3.6	0.0	0.1	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	8.3	1.2	1.6	8.1	0.0	4.0	0.0	0.2	0.4	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.9	26.2	19.0	47.7	25.5	17.9	33.3	0.0	26.8	33.3	0.0	35.6
LnGrp LOS	D	C	B	D	C	B	C	A	C	C	A	D
Approach Vol, veh/h		1136			972			205			120	
Approach Delay, s/veh		27.1			27.0			32.9			35.2	
Approach LOS		C			C			C			D	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		17.0	9.4	38.5		25.0	9.7	38.3
Change Period (Y+Rc), s		4.0	5.0	* 5		4.0	4.0	5.0
Max Green Setting (Gmax), s		6.0	9.0	* 37		21.0	10.0	36.0
Max Q Clear Time (g_c+I1), s		7.1	5.4	22.9		10.3	6.4	21.3
Green Ext Time (p_c), s		0.0	0.0	10.7		0.6	0.0	11.1

Intersection Summary	
HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	538	381	57	483	64	428	70	51	59	44	18
Future Volume (veh/h)	40	538	381	57	483	64	428	70	51	59	44	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	566	255	60	508	29	504	0	10	62	46	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	1011	730	77	1025	457	628	0	279	81	60	123
Arrive On Green	0.03	0.28	0.28	0.04	0.29	0.29	0.18	0.00	0.18	0.08	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	1044	774	1585
Grp Volume(v), veh/h	42	566	255	60	508	29	504	0	10	108	0	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1818	0	1585
Q Serve(g_s), s	2.4	14.1	10.8	3.5	12.3	1.4	14.1	0.0	0.5	6.1	0.0	0.1
Cycle Q Clear(g_c), s	2.4	14.1	10.8	3.5	12.3	1.4	14.1	0.0	0.5	6.1	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.57		1.00
Lane Grp Cap(c), veh/h	53	1011	730	77	1025	457	628	0	279	141	0	123
V/C Ratio(X)	0.79	0.56	0.35	0.78	0.50	0.06	0.80	0.00	0.04	0.76	0.00	0.01
Avail Cap(c_a), veh/h	86	1011	730	154	1025	457	891	0	396	455	0	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	50.1	31.7	18.0	49.2	30.7	26.8	41.1	0.0	35.5	47.0	0.0	44.3
Incr Delay (d2), s/veh	9.1	0.9	0.5	6.1	1.7	0.3	4.0	0.0	0.1	9.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	6.0	5.4	1.6	5.3	0.5	6.6	0.0	0.2	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2	32.6	18.5	55.3	32.4	27.1	45.1	0.0	35.6	56.8	0.0	44.3
LnGrp LOS	E	C	B	E	C	C	D	A	D	E	A	D
Approach Vol, veh/h		863			597			514			109	
Approach Delay, s/veh		29.7			34.5			44.9			56.7	
Approach LOS		C			C			D			E	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.1	8.5	34.6		22.3	8.1	35.0
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	5.0	* 5
Max Green Setting (Gmax), s		26.0	9.0	26.0		26.0	5.0	* 30
Max Q Clear Time (g_c+I1), s		8.1	5.5	16.1		16.1	4.4	14.3
Green Ext Time (p_c), s		0.4	0.0	4.1		2.2	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	36.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	14	34	24	12	4	37	1334	6	7	858	191
Future Volume (veh/h)	164	14	34	24	12	4	37	1334	6	7	858	191
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1870	1870	1870	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	173	15	36	25	13	4	39	1404	6	7	903	201
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	68	162	220	68	21	69	2099	650	18	2220	687
Arrive On Green	0.15	0.14	0.14	0.06	0.05	0.05	0.04	0.43	0.43	0.01	0.40	0.40
Sat Flow, veh/h	1776	485	1165	3456	1371	422	1692	4849	1502	1931	5535	1714
Grp Volume(v), veh/h	173	0	51	25	0	17	39	1404	6	7	903	201
Grp Sat Flow(s),veh/h/ln	1776	0	1650	1728	0	1793	1692	1616	1502	1931	1845	1714
Q Serve(g_s), s	5.0	0.0	1.5	0.4	0.0	0.5	1.2	12.6	0.1	0.2	6.3	1.7
Cycle Q Clear(g_c), s	5.0	0.0	1.5	0.4	0.0	0.5	1.2	12.6	0.1	0.2	6.3	1.7
Prop In Lane	1.00		0.71	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	0	230	220	0	89	69	2099	650	18	2220	687
V/C Ratio(X)	0.64	0.00	0.22	0.11	0.00	0.19	0.56	0.67	0.01	0.39	0.41	0.29
Avail Cap(c_a), veh/h	392	0	476	699	0	528	156	2140	663	178	2443	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	0.0	20.8	24.0	0.0	24.8	25.6	12.3	8.8	26.8	11.7	1.7
Incr Delay (d2), s/veh	0.9	0.0	0.4	0.1	0.0	0.4	2.7	1.0	0.0	5.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.5	0.1	0.0	0.2	0.5	3.2	0.0	0.1	1.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	0.0	21.2	24.1	0.0	25.2	28.2	13.3	8.8	31.9	11.9	2.2
LnGrp LOS	C	A	C	C	A	C	C	B	A	C	B	A
Approach Vol, veh/h		224			42			1449			1111	
Approach Delay, s/veh		22.2			24.5			13.7			10.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	29.5	7.5	12.9	6.2	27.8	13.6	6.7
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	5.3	* 4
Max Green Setting (Gmax), s	5.0	24.0	11.0	15.7	5.0	24.0	12.0	* 16
Max Q Clear Time (g_c+I1), s	2.2	14.6	2.4	3.5	3.2	8.3	7.0	2.5
Green Ext Time (p_c), s	0.0	9.0	0.0	0.2	0.0	12.6	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	28	31	15	19	15	138	185	0	37	211	213
Future Volume (veh/h)	31	28	31	15	19	15	138	185	0	37	211	213
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	29	33	16	20	16	145	195	0	39	222	224
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	36	41	19	23	19	185	1486	0	48	291	294
Arrive On Green	0.07	0.07	0.07	0.03	0.03	0.03	0.10	0.42	0.00	0.03	0.34	0.34
Sat Flow, veh/h	602	529	602	537	672	537	1781	3647	0	1781	854	861
Grp Volume(v), veh/h	95	0	0	52	0	0	145	195	0	39	0	446
Grp Sat Flow(s),veh/h/ln	1732	0	0	1747	0	0	1781	1777	0	1781	0	1715
Q Serve(g_s), s	1.9	0.0	0.0	1.0	0.0	0.0	2.8	1.2	0.0	0.8	0.0	8.2
Cycle Q Clear(g_c), s	1.9	0.0	0.0	1.0	0.0	0.0	2.8	1.2	0.0	0.8	0.0	8.2
Prop In Lane	0.35		0.35	0.31		0.31	1.00		0.00	1.00		0.50
Lane Grp Cap(c), veh/h	117	0	0	60	0	0	185	1486	0	48	0	585
V/C Ratio(X)	0.81	0.00	0.00	0.86	0.00	0.00	0.78	0.13	0.00	0.81	0.00	0.76
Avail Cap(c_a), veh/h	245	0	0	148	0	0	353	2112	0	252	0	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	0.0	17.0	0.0	0.0	15.4	6.3	0.0	17.1	0.0	10.4
Incr Delay (d2), s/veh	5.0	0.0	0.0	12.6	0.0	0.0	2.7	0.0	0.0	11.4	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.6	0.0	0.0	1.1	0.3	0.0	0.4	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	0.0	0.0	29.6	0.0	0.0	18.2	6.4	0.0	28.5	0.0	12.4
LnGrp LOS	C	A	A	C	A	A	B	A	A	C	A	B
Approach Vol, veh/h		95			52			340			485	
Approach Delay, s/veh		21.3			29.6			11.4			13.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	18.8		5.2	7.7	16.1		6.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	21.0		3.0	7.0	19.0		5.0
Max Q Clear Time (g_c+I1), s	2.8	3.2		3.0	4.8	10.2		3.9
Green Ext Time (p_c), s	0.0	1.0		0.0	0.0	1.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	0	93	5	1	6	185	1600	5	54	2082	243
Future Volume (veh/h)	101	0	93	5	1	6	185	1600	5	54	2082	243
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	106	0	98	5	1	6	195	1684	5	57	2192	256
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	0	125	37	7	39	153	2572	8	73	2356	1051
Arrive On Green	0.08	0.00	0.08	0.02	0.02	0.02	0.09	0.71	0.71	0.04	0.66	0.66
Sat Flow, veh/h	1781	0	1585	1496	299	1585	1781	3634	11	1781	3554	1585
Grp Volume(v), veh/h	106	0	98	6	0	6	195	823	866	57	2192	256
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1796	0	1585	1781	1777	1868	1781	1777	1585
Q Serve(g_s), s	7.5	0.0	7.8	0.4	0.0	0.5	11.0	32.2	32.3	4.1	69.4	8.3
Cycle Q Clear(g_c), s	7.5	0.0	7.8	0.4	0.0	0.5	11.0	32.2	32.3	4.1	69.4	8.3
Prop In Lane	1.00		1.00	0.83		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	140	0	125	44	0	39	153	1257	1322	73	2356	1051
V/C Ratio(X)	0.75	0.00	0.78	0.14	0.00	0.15	1.27	0.65	0.65	0.78	0.93	0.24
Avail Cap(c_a), veh/h	279	0	248	126	0	112	153	1257	1322	125	2393	1068
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	0.0	57.8	61.0	0.0	61.1	58.4	10.2	10.2	60.7	19.0	8.7
Incr Delay (d2), s/veh	3.1	0.0	4.0	0.5	0.0	0.7	163.6	1.4	1.4	6.4	7.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	3.3	0.2	0.0	0.2	11.9	12.0	12.6	2.0	28.5	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	0.0	61.8	61.6	0.0	61.8	222.0	11.6	11.5	67.1	26.3	8.8
LnGrp LOS	E	A	E	E	A	E	F	B	B	E	C	A
Approach Vol, veh/h		204			12			1884			2505	
Approach Delay, s/veh		61.3			61.7			33.4			25.4	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	96.5		7.1	15.0	90.7		15.0
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.9
Max Green Setting (Gmax), s	9.0	88.1		9.0	11.0	86.1		20.0
Max Q Clear Time (g_c+I1), s	6.1	34.3		2.5	13.0	71.4		9.8
Green Ext Time (p_c), s	0.0	22.9		0.0	0.0	13.4		0.3

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	7	213	13	15	42	220	1468	5	5	1537	621
Future Volume (veh/h)	306	7	213	13	15	42	220	1468	5	5	1537	621
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	322	7	224	14	16	44	232	1545	5	5	1618	654
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	654	9	292	62	65	55	241	2066	7	7	1787	797
Arrive On Green	0.19	0.19	0.19	0.03	0.03	0.03	0.07	0.57	0.57	0.00	0.50	0.50
Sat Flow, veh/h	3456	48	1544	1781	1870	1585	3456	3633	12	1781	3554	1585
Grp Volume(v), veh/h	322	0	231	14	16	44	232	755	795	5	1618	654
Grp Sat Flow(s),veh/h/ln	1728	0	1592	1781	1870	1585	1728	1777	1868	1781	1777	1585
Q Serve(g_s), s	7.2	0.0	11.8	0.7	0.7	2.4	5.8	27.4	27.5	0.2	35.8	30.0
Cycle Q Clear(g_c), s	7.2	0.0	11.8	0.7	0.7	2.4	5.8	27.4	27.5	0.2	35.8	30.0
Prop In Lane	1.00		0.97	1.00		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	654	0	301	62	65	55	241	1010	1062	7	1787	797
V/C Ratio(X)	0.49	0.00	0.77	0.23	0.25	0.80	0.96	0.75	0.75	0.71	0.91	0.82
Avail Cap(c_a), veh/h	1205	0	555	62	65	55	241	1010	1062	62	1797	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.2	0.0	33.1	40.4	40.4	41.2	39.9	13.9	13.9	42.8	19.5	18.1
Incr Delay (d2), s/veh	0.6	0.0	4.1	0.7	0.7	51.0	47.1	3.8	3.6	39.5	7.4	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	4.9	0.3	0.3	1.7	3.9	10.2	10.7	0.2	14.5	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.8	0.0	37.2	41.1	41.1	92.2	87.0	17.7	17.5	82.3	26.9	25.8
LnGrp LOS	C	A	D	D	D	F	F	B	B	F	C	C
Approach Vol, veh/h		553			74			1782			2277	
Approach Delay, s/veh		34.0			71.5			26.7			26.7	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	54.4		7.0	10.0	48.8		20.3
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		4.0
Max Green Setting (Gmax), s	3.0	46.5		3.0	6.0	43.5		30.0
Max Q Clear Time (g_c+I1), s	2.2	29.5		4.4	7.8	37.8		13.8
Green Ext Time (p_c), s	0.0	12.7		0.0	0.0	5.5		2.4

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	764	776	834	453	1028	812
Future Volume (veh/h)	764	776	834	453	1028	812
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	804	817	878	477	1082	855
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	922	881	2800	1249	998	3984
Arrive On Green	0.27	0.27	0.79	0.79	0.29	1.00
Sat Flow, veh/h	3456	1585	3647	1585	3456	3647
Grp Volume(v), veh/h	804	817	878	477	1082	855
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1728	1777
Q Serve(g_s), s	20.0	24.0	6.3	8.2	26.0	0.0
Cycle Q Clear(g_c), s	20.0	24.0	6.3	8.2	26.0	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	922	881	2800	1249	998	3984
V/C Ratio(X)	0.87	0.93	0.31	0.38	1.08	0.21
Avail Cap(c_a), veh/h	922	881	2800	1249	998	3984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.5	18.3	2.7	2.9	32.0	0.0
Incr Delay (d2), s/veh	8.9	15.4	0.1	0.3	54.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	33.3	1.4	1.7	17.9	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.4	33.8	2.8	3.2	86.0	0.1
LnGrp LOS	D	C	A	A	F	A
Approach Vol, veh/h	1621		1355			1937
Approach Delay, s/veh	37.1		2.9			48.1
Approach LOS	D		A			D

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				107.5		28.0	30.0	77.5
Change Period (Y+Rc), s				* 5.3		4.0	4.0	5.3
Max Green Setting (Gmax), s				* 58		24.0	26.0	26.7
Max Q Clear Time (g_c+I1), s				2.0		26.0	28.0	10.2
Green Ext Time (p_c), s				6.1		0.0	0.0	8.7

Intersection Summary	
HCM 6th Ctrl Delay	32.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	295	15	27	25	11	51	43	926	0	70	1328	166
Future Volume (veh/h)	295	15	27	25	11	51	43	926	0	70	1328	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	349	0	0	26	12	54	45	975	0	74	1398	175
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	409	214	0	32	15	66	58	2246	0	94	2075	258
Arrive On Green	0.11	0.00	0.00	0.07	0.07	0.07	0.03	0.63	0.00	0.05	0.65	0.65
Sat Flow, veh/h	3563	1870	0	472	218	980	1781	3647	0	1781	3181	395
Grp Volume(v), veh/h	349	0	0	92	0	0	45	975	0	74	776	797
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1670	0	0	1781	1777	0	1781	1777	1799
Q Serve(g_s), s	12.5	0.0	0.0	7.1	0.0	0.0	3.3	18.1	0.0	5.3	35.0	36.0
Cycle Q Clear(g_c), s	12.5	0.0	0.0	7.1	0.0	0.0	3.3	18.1	0.0	5.3	35.0	36.0
Prop In Lane	1.00		0.00	0.28		0.59	1.00		0.00	1.00		0.22
Lane Grp Cap(c), veh/h	409	214	0	113	0	0	58	2246	0	94	1159	1174
V/C Ratio(X)	0.85	0.00	0.00	0.82	0.00	0.00	0.78	0.43	0.00	0.79	0.67	0.68
Avail Cap(c_a), veh/h	575	302	0	128	0	0	82	2246	0	164	1159	1174
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.96	0.96	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	0.0	0.0	59.8	0.0	0.0	62.4	12.1	0.0	60.9	13.9	14.1
Incr Delay (d2), s/veh	6.5	0.0	0.0	26.0	0.0	0.0	15.1	0.6	0.0	5.4	1.5	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	0.0	3.8	0.0	0.0	1.7	7.2	0.0	2.6	13.8	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	0.0	0.0	85.8	0.0	0.0	77.6	12.7	0.0	66.3	15.5	15.7
LnGrp LOS	E	A	A	F	A	A	E	B	A	E	B	B
Approach Vol, veh/h		349			92			1020			1647	
Approach Delay, s/veh		63.0			85.8			15.6			17.9	
Approach LOS		E			F			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	87.5		12.8	8.2	90.1		18.9
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	12.0	* 70		10.0	6.0	75.7		21.0
Max Q Clear Time (g_c+I1), s	7.3	20.1		9.1	5.3	38.0		14.5
Green Ext Time (p_c), s	0.0	14.3		0.0	0.0	18.0		0.4

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	20	127	135	7	48	130	793	20	25	1154	37
Future Volume (veh/h)	158	20	127	135	7	48	130	793	20	25	1154	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	166	21	134	142	7	51	137	835	21	26	1215	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	24	193	168	8	157	162	1910	48	184	1963	63
Arrive On Green	0.12	0.12	0.12	0.10	0.10	0.10	0.09	0.54	0.54	0.10	0.56	0.56
Sat Flow, veh/h	1590	201	1585	1701	84	1585	1781	3542	89	1781	3514	113
Grp Volume(v), veh/h	187	0	134	149	0	51	137	419	437	26	614	640
Grp Sat Flow(s),veh/h/ln	1791	0	1585	1785	0	1585	1781	1777	1854	1781	1777	1850
Q Serve(g_s), s	13.3	0.0	10.5	10.7	0.0	3.9	9.8	18.5	18.5	1.7	30.3	30.3
Cycle Q Clear(g_c), s	13.3	0.0	10.5	10.7	0.0	3.9	9.8	18.5	18.5	1.7	30.3	30.3
Prop In Lane	0.89		1.00	0.95		1.00	1.00		0.05	1.00		0.06
Lane Grp Cap(c), veh/h	218	0	193	176	0	157	162	958	1000	184	993	1034
V/C Ratio(X)	0.86	0.00	0.70	0.84	0.00	0.33	0.85	0.44	0.44	0.14	0.62	0.62
Avail Cap(c_a), veh/h	289	0	256	220	0	195	219	958	1000	184	993	1034
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.22	0.22	0.22	0.91	0.91	0.91
Uniform Delay (d), s/veh	56.0	0.0	54.8	57.6	0.0	54.5	58.2	18.1	18.1	53.0	19.3	19.3
Incr Delay (d2), s/veh	14.4	0.0	2.6	18.0	0.0	0.4	3.9	0.3	0.3	0.1	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	0.0	4.4	5.7	0.0	1.6	4.6	7.6	7.9	0.8	12.6	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.4	0.0	57.4	75.6	0.0	55.0	62.1	18.4	18.4	53.1	20.6	20.6
LnGrp LOS	E	A	E	E	A	D	E	B	B	D	C	C
Approach Vol, veh/h		321			200			993			1280	
Approach Delay, s/veh		65.0			70.4			24.4			21.3	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.4	75.0		19.8	15.8	77.5		16.8
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.0
Max Green Setting (Gmax), s	6.0	* 70		21.0	16.0	60.1		16.0
Max Q Clear Time (g_c+I1), s	3.7	20.5		15.3	11.8	32.3		12.7
Green Ext Time (p_c), s	0.0	10.8		0.5	0.1	14.9		0.2

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	72	287	669	48	352	733
Future Volume (veh/h)	72	287	669	48	352	733
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	302	704	51	371	772
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	765	351	1687	524	417	3202
Arrive On Green	0.22	0.22	0.33	0.33	0.23	0.63
Sat Flow, veh/h	3456	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	76	302	704	51	371	772
Grp Sat Flow(s),veh/h/ln	1728	1585	1702	1585	1781	1702
Q Serve(g_s), s	1.1	11.7	6.9	1.4	12.9	4.2
Cycle Q Clear(g_c), s	1.1	11.7	6.9	1.4	12.9	4.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	765	351	1687	524	417	3202
V/C Ratio(X)	0.10	0.86	0.42	0.10	0.89	0.24
Avail Cap(c_a), veh/h	1080	496	2418	751	445	4015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	24.0	16.6	14.8	23.7	5.2
Incr Delay (d2), s/veh	0.0	7.9	0.3	0.1	17.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.7	2.2	0.4	6.6	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.9	31.9	16.9	15.0	41.4	5.3
LnGrp LOS	B	C	B	B	D	A
Approach Vol, veh/h	378		755			1143
Approach Delay, s/veh	29.5		16.8			17.0
Approach LOS	C		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	19.0	26.8				45.8	18.2
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0
Max Green Setting (Gmax), s	16.0	30.3				50.3	20.0
Max Q Clear Time (g_c+I1), s	14.9	8.9				6.2	13.7
Green Ext Time (p_c), s	0.1	12.3				20.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	724	30	139	758	122	113	17	477	256	6	82
Future Volume (veh/h)	70	724	30	139	758	122	113	17	477	256	6	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	762	27	146	798	36	119	18	318	273	0	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	1320	47	183	1403	435	365	55	371	523	0	233
Arrive On Green	0.09	0.26	0.26	0.10	0.27	0.27	0.23	0.23	0.23	0.15	0.00	0.15
Sat Flow, veh/h	1781	5063	179	1781	5106	1585	1557	236	1585	3563	0	1585
Grp Volume(v), veh/h	74	512	277	146	798	36	137	0	318	273	0	9
Grp Sat Flow(s),veh/h/ln	1781	1702	1838	1781	1702	1585	1793	0	1585	1781	0	1585
Q Serve(g_s), s	2.7	8.9	8.9	5.4	9.1	1.1	4.3	0.0	13.0	4.8	0.0	0.3
Cycle Q Clear(g_c), s	2.7	8.9	8.9	5.4	9.1	1.1	4.3	0.0	13.0	4.8	0.0	0.3
Prop In Lane	1.00		0.10	1.00		1.00	0.87		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	887	479	183	1403	435	420	0	371	523	0	233
V/C Ratio(X)	0.47	0.58	0.58	0.80	0.57	0.08	0.33	0.00	0.86	0.52	0.00	0.04
Avail Cap(c_a), veh/h	210	1593	860	210	2389	742	609	0	538	1052	0	468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.3	21.8	21.8	29.7	21.1	18.2	21.5	0.0	24.8	26.7	0.0	24.8
Incr Delay (d2), s/veh	0.8	1.2	2.3	14.6	0.7	0.2	0.2	0.0	6.5	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.3	3.7	2.9	3.3	0.4	1.8	0.0	5.3	2.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	23.0	24.1	44.3	21.9	18.4	21.7	0.0	31.3	27.0	0.0	24.8
LnGrp LOS	C	C	C	D	C	B	C	A	C	C	A	C
Approach Vol, veh/h		863			980			455			282	
Approach Delay, s/veh		24.0			25.1			28.4			26.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	23.0		14.0	10.0	23.9		19.9
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	31.7		20.0	8.0	31.7		23.0
Max Q Clear Time (g_c+I1), s	7.4	10.9		6.8	4.7	11.1		15.0
Green Ext Time (p_c), s	0.0	6.8		0.7	0.0	7.5		0.9

Intersection Summary	
HCM 6th Ctrl Delay	25.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	664	526	80	599	183	483	683	57	160	639	326
Future Volume (veh/h)	195	664	526	80	599	183	483	683	57	160	639	326
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	2145	2145	2145
Adj Flow Rate, veh/h	205	699	337	84	631	45	508	719	14	168	673	143
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	978	436	156	913	407	458	1470	456	408	1512	469
Arrive On Green	0.11	0.28	0.28	0.09	0.26	0.26	0.13	0.29	0.29	0.10	0.26	0.26
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	5106	1585	3964	5857	1818
Grp Volume(v), veh/h	205	699	337	84	631	45	508	719	14	168	673	143
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1702	1585	1982	1952	1818
Q Serve(g_s), s	8.0	13.4	14.8	3.4	12.1	1.6	10.0	8.8	0.5	3.0	7.3	4.8
Cycle Q Clear(g_c), s	8.0	13.4	14.8	3.4	12.1	1.6	10.0	8.8	0.5	3.0	7.3	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	189	978	436	156	913	407	458	1470	456	408	1512	469
V/C Ratio(X)	1.09	0.71	0.77	0.54	0.69	0.11	1.11	0.49	0.03	0.41	0.44	0.30
Avail Cap(c_a), veh/h	189	1026	458	189	1007	449	458	2299	714	420	2482	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	24.7	25.2	33.0	25.3	21.4	32.8	22.3	19.3	31.7	23.5	22.5
Incr Delay (d2), s/veh	90.4	2.9	9.1	1.1	2.2	0.2	75.5	0.4	0.0	0.2	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	5.8	6.2	1.5	5.1	0.6	8.7	3.3	0.2	1.4	3.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.1	27.6	34.3	34.0	27.5	21.6	108.3	22.7	19.4	32.0	23.8	23.1
LnGrp LOS	F	C	C	C	C	C	F	C	B	C	C	C
Approach Vol, veh/h		1241			760			1241			984	
Approach Delay, s/veh		45.3			27.9			57.7			25.1	
Approach LOS		D			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	26.1	14.0	24.8	12.0	24.7	11.8	27.0
Change Period (Y+Rc), s	4.0	* 5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	8.0	* 22	10.0	32.0	8.0	21.4	8.0	34.0
Max Q Clear Time (g_c+I1), s	5.4	16.8	12.0	9.3	10.0	14.1	5.0	10.8
Green Ext Time (p_c), s	0.0	4.0	0.0	10.2	0.0	4.3	0.1	9.9

Intersection Summary	
HCM 6th Ctrl Delay	41.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	22	105	155	13	392	94	769	47	288	894	72
Future Volume (veh/h)	80	22	105	155	13	392	94	769	47	288	894	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1988	1988	1988	1870	1945	1870	2145	2231	2145
Adj Flow Rate, veh/h	84	23	111	163	14	413	99	809	49	303	941	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	45	184	408	35	656	127	949	57	320	2155	643
Arrive On Green	0.12	0.12	0.12	0.23	0.23	0.23	0.07	0.27	0.27	0.16	0.35	0.35
Sat Flow, veh/h	1413	387	1585	1750	150	1683	1781	3537	214	2043	6091	1818
Grp Volume(v), veh/h	107	0	111	177	0	413	99	423	435	303	941	76
Grp Sat Flow(s),veh/h/ln	1800	0	1585	1900	0	1683	1781	1848	1903	2043	2030	1818
Q Serve(g_s), s	4.3	0.0	5.1	6.0	0.0	15.2	4.2	16.6	16.6	11.3	9.0	2.2
Cycle Q Clear(g_c), s	4.3	0.0	5.1	6.0	0.0	15.2	4.2	16.6	16.6	11.3	9.0	2.2
Prop In Lane	0.79		1.00	0.92		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	209	0	184	443	0	656	127	496	511	320	2155	643
V/C Ratio(X)	0.51	0.00	0.60	0.40	0.00	0.63	0.78	0.85	0.85	0.95	0.44	0.12
Avail Cap(c_a), veh/h	211	0	186	513	0	718	232	506	521	320	2155	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	0.0	32.2	24.9	0.0	18.9	35.0	26.6	26.6	32.0	18.9	16.7
Incr Delay (d2), s/veh	0.8	0.0	3.7	0.2	0.0	1.0	3.9	14.3	13.9	36.1	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.0	2.6	0.0	5.5	1.9	8.7	8.9	8.4	3.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	0.0	35.9	25.1	0.0	19.9	38.9	40.9	40.5	68.1	19.2	16.9
LnGrp LOS	C	A	D	C	A	B	D	D	D	E	B	B
Approach Vol, veh/h		218			590			957			1320	
Approach Delay, s/veh		34.3			21.5			40.5			30.3	
Approach LOS		C			C			D			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.9	9.5	32.4		21.8	16.0	25.9				
Change Period (Y+Rc), s		4.0	4.0	5.3		4.0	4.0	5.3				
Max Green Setting (Gmax), s		9.0	10.0	23.0		20.7	12.0	21.0				
Max Q Clear Time (g_c+I1), s		7.1	6.2	11.0		17.2	13.3	18.6				
Green Ext Time (p_c), s		0.1	0.0	9.1		0.6	0.0	1.9				

Intersection Summary	
HCM 6th Ctrl Delay	32.1
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	68	844	7	206	915
Future Volume (veh/h)	3	68	844	7	206	915
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	72	888	7	217	963
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	210	187	1257	10	310	2255
Arrive On Green	0.12	0.12	0.35	0.35	0.17	0.63
Sat Flow, veh/h	1781	1585	3707	28	1781	3647
Grp Volume(v), veh/h	3	72	437	458	217	963
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1865	1781	1777
Q Serve(g_s), s	0.1	1.5	7.5	7.5	4.1	4.8
Cycle Q Clear(g_c), s	0.1	1.5	7.5	7.5	4.1	4.8
Prop In Lane	1.00	1.00		0.02	1.00	
Lane Grp Cap(c), veh/h	210	187	618	649	310	2255
V/C Ratio(X)	0.01	0.39	0.71	0.71	0.70	0.43
Avail Cap(c_a), veh/h	1013	902	1001	1050	351	3182
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	14.5	10.0	10.0	13.8	3.3
Incr Delay (d2), s/veh	0.0	1.3	1.5	1.4	5.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	2.0	2.1	1.6	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.9	15.8	11.5	11.4	19.0	3.4
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	75		895			1180
Approach Delay, s/veh	15.7		11.5			6.3
Approach LOS	B		B			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				27.3		8.2	10.2	17.2
Change Period (Y+Rc), s				* 4.8		4.0	4.0	* 4.8
Max Green Setting (Gmax), s				* 32		20.2	7.0	* 20
Max Q Clear Time (g_c+I1), s				6.8		3.5	6.1	9.5
Green Ext Time (p_c), s				4.8		0.2	0.1	2.8

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	24	0	21	0	1383	28	32	1633	0
Future Volume (veh/h)	0	0	0	24	0	21	0	1383	28	32	1633	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	0	0	25	0	22	0	1456	29	34	1719	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	0	4	4	43	0	0	0	2309	46	42	2721	0
Arrive On Green	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.65	0.65	0.02	0.77	0.00
Sat Flow, veh/h	0	-74814	1585	1781	25		0	3657	71	1781	3647	0
Grp Volume(v), veh/h	0	0	0	25	25.1		0	725	760	34	1719	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	C		0	1777	1858	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	0.6			0.0	10.3	10.3	0.8	9.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.6			0.0	10.3	10.3	0.8	9.3	0.0
Prop In Lane	0.00		1.00	1.00			0.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	0	4	4	43			0	1151	1204	42	2721	0
V/C Ratio(X)	0.00	0.00	0.00	0.58			0.00	0.63	0.63	0.82	0.63	0.00
Avail Cap(c_a), veh/h	0	1060	898	168			0	1347	1408	126	3281	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	20.5			0.0	4.4	4.4	20.6	2.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.6			0.0	1.7	1.6	13.4	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3			0.0	1.5	1.6	0.4	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	25.1			0.0	6.1	6.0	34.0	2.9	0.0
LnGrp LOS	A	A	A	C			A	A	A	C	A	A
Approach Vol, veh/h		0						1485			1753	
Approach Delay, s/veh		0.0						6.1			3.5	
Approach LOS								A			A	

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	5.0	32.3	5.0	0.0		37.3
Change Period (Y+Rc), s	4.0	4.9	4.0	4.0		4.9
Max Green Setting (Gmax), s	3.0	32.1	4.0	24.0		39.1
Max Q Clear Time (g_c+I1), s	2.8	12.3	2.6	0.0		11.3
Green Ext Time (p_c), s	0.0	14.7	0.0	0.0		21.1

Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	11	53	62	17	65	34	1641	43	30	1799	36
Future Volume (veh/h)	62	11	53	62	17	65	34	1641	43	30	1799	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	12	56	65	18	68	36	1727	45	32	1894	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	162	137	176	33	125	83	2042	53	77	2044	41
Arrive On Green	0.09	0.09	0.09	0.10	0.10	0.10	0.05	0.58	0.58	0.04	0.57	0.57
Sat Flow, veh/h	1781	1870	1585	1781	334	1262	1781	3538	92	1781	3562	71
Grp Volume(v), veh/h	65	12	56	65	0	86	36	865	907	32	941	991
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1596	1781	1777	1853	1781	1777	1857
Q Serve(g_s), s	3.1	0.5	3.0	3.0	0.0	4.6	1.7	35.6	36.1	1.6	42.7	43.4
Cycle Q Clear(g_c), s	3.1	0.5	3.0	3.0	0.0	4.6	1.7	35.6	36.1	1.6	42.7	43.4
Prop In Lane	1.00		1.00	1.00		0.79	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	154	162	137	176	0	158	83	1026	1069	77	1020	1065
V/C Ratio(X)	0.42	0.07	0.41	0.37	0.00	0.55	0.44	0.84	0.85	0.42	0.92	0.93
Avail Cap(c_a), veh/h	160	168	143	320	0	287	140	1033	1077	140	1041	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	37.3	38.5	37.5	0.0	38.2	41.3	15.5	15.6	41.5	17.2	17.3
Incr Delay (d2), s/veh	1.6	0.2	1.7	1.1	0.0	2.5	1.3	6.8	6.8	1.3	13.3	13.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.2	1.2	1.4	0.0	1.9	0.8	13.6	14.4	0.7	17.9	19.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.1	37.5	40.1	38.6	0.0	40.7	42.6	22.3	22.4	42.8	30.5	31.0
LnGrp LOS	D	D	D	D	A	D	D	C	C	D	C	C
Approach Vol, veh/h		133			151			1808			1964	
Approach Delay, s/veh		39.9			39.8			22.7			30.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	56.3		12.8	7.8	56.6		11.7
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	7.0	* 52		16.0	7.0	51.7		8.0
Max Q Clear Time (g_c+I1), s	3.7	45.4		6.6	3.6	38.1		5.1
Green Ext Time (p_c), s	0.0	5.7		0.3	0.0	10.4		0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	26	10	105	31	58	5	2163	9	39	2494	73
Future Volume (veh/h)	55	26	10	105	31	58	5	2163	9	39	2494	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1945	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	58	27	11	111	33	61	5	2277	9	41	2625	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	71	33	13	126	38	69	7	2725	11	53	2720	79
Arrive On Green	0.06	0.06	0.06	0.13	0.13	0.13	0.01	1.00	1.00	0.03	0.54	0.54
Sat Flow, veh/h	1117	520	212	973	289	535	1781	5167	20	1781	5018	146
Grp Volume(v), veh/h	96	0	0	205	0	0	5	1476	810	41	1746	956
Grp Sat Flow(s),veh/h/ln	1849	0	0	1797	0	0	1781	1675	1837	1781	1675	1814
Q Serve(g_s), s	7.7	0.0	0.0	16.8	0.0	0.0	0.4	0.0	0.0	3.4	74.8	76.5
Cycle Q Clear(g_c), s	7.7	0.0	0.0	16.8	0.0	0.0	0.4	0.0	0.0	3.4	74.8	76.5
Prop In Lane	0.60		0.11	0.54		0.30	1.00		0.01	1.00		0.08
Lane Grp Cap(c), veh/h	118	0	0	233	0	0	7	1767	969	53	1816	983
V/C Ratio(X)	0.82	0.00	0.00	0.88	0.00	0.00	0.75	0.84	0.84	0.77	0.96	0.97
Avail Cap(c_a), veh/h	148	0	0	324	0	0	143	1816	996	143	1816	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.68	0.68	0.68	0.34	0.34	0.34
Uniform Delay (d), s/veh	69.4	0.0	0.0	64.1	0.0	0.0	74.4	0.0	0.0	72.3	32.9	33.2
Incr Delay (d2), s/veh	19.4	0.0	0.0	14.5	0.0	0.0	33.4	2.5	4.5	3.1	6.2	11.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	8.7	0.0	0.0	0.3	0.6	1.2	1.6	30.3	34.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.8	0.0	0.0	78.6	0.0	0.0	107.7	2.5	4.5	75.3	39.1	44.6
LnGrp LOS	F	A	A	E	A	A	F	A	A	E	D	D
Approach Vol, veh/h		96			205			2291			2743	
Approach Delay, s/veh		88.8			78.6			3.4			41.6	
Approach LOS		F			E			A			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.5	8.5	84.8		23.5	6.3	87.0				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	5.7	* 5.7				
Max Green Setting (Gmax), s		12.0	12.0	81.3		27.0	12.0	* 81				
Max Q Clear Time (g_c+I1), s		9.7	5.4	2.0		18.8	2.4	78.5				
Green Ext Time (p_c), s		0.0	0.0	74.0		0.3	0.0	2.8				

Intersection Summary	
HCM 6th Ctrl Delay	27.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	0	211	370	0	7	60	2189	43	4	2443	180
Future Volume (vph)	25	0	211	370	0	7	60	2189	43	4	2443	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00		0.97	1.00		0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Frt	1.00		0.85	1.00		0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1540	1770		1554	1770	5067		1768	5019	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770		1540	1770		1554	1770	5067		1768	5019	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	0	222	389	0	7	63	2304	45	4	2572	189
RTOR Reduction (vph)	0	0	74	0	0	5	0	1	0	0	5	0
Lane Group Flow (vph)	26	0	148	389	0	2	63	2348	0	4	2756	0
Confl. Peds. (#/hr)	4		4	4		4	4		4	4		4
Confl. Bikes (#/hr)			2			2			2			2
Turn Type	Prot		Perm	Prot		Perm	Prot	NA		Prot	NA	
Protected Phases	6			5			7	4		3	8	
Permitted Phases			6			5						
Actuated Green, G (s)	36.2		36.2	36.2		36.2	8.8	96.5		0.6	88.3	
Effective Green, g (s)	36.2		36.2	36.2		36.2	8.8	96.5		0.6	88.3	
Actuated g/C Ratio	0.24		0.24	0.24		0.24	0.06	0.64		0.00	0.59	
Clearance Time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Vehicle Extension (s)	2.0		2.0	2.0		2.0	2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	427		371	427		375	103	3259		7	2954	
v/s Ratio Prot	0.01			c0.22			c0.04	c0.46		0.00	c0.55	
v/s Ratio Perm			0.10			0.00						
v/c Ratio	0.06		0.40	0.91		0.00	0.61	0.72		0.57	0.93	
Uniform Delay, d1	43.8		47.8	55.3		43.2	68.9	17.8		74.6	28.2	
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00		0.80	0.73	
Incremental Delay, d2	0.0		0.3	23.0		0.0	7.3	1.4		36.4	4.1	
Delay (s)	43.8		48.0	78.3		43.2	76.3	19.2		95.9	24.5	
Level of Service	D		D	E		D	E	B		F	C	
Approach Delay (s)		47.6			77.7			20.7			24.6	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	27.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	313	340	52	187	30
Future Volume (veh/h)	2	313	340	52	187	30
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	329	358	55	197	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	7	1536	985	440	287	256
Arrive On Green	0.00	0.43	0.28	0.28	0.16	0.16
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	2	329	358	55	197	32
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.0	1.5	2.1	0.7	2.7	0.5
Cycle Q Clear(g_c), s	0.0	1.5	2.1	0.7	2.7	0.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	7	1536	985	440	287	256
V/C Ratio(X)	0.29	0.21	0.36	0.13	0.69	0.13
Avail Cap(c_a), veh/h	1093	6036	3311	1477	1714	1525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	4.6	7.6	7.1	10.3	9.4
Incr Delay (d2), s/veh	8.5	0.1	0.4	0.2	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.5	0.2	0.8	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.5	4.8	8.0	7.3	11.4	9.4
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		331	413		229	
Approach Delay, s/veh		4.9	7.9		11.1	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	17.0	9.1	4.0	12.9
Change Period (Y+Rc), s	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	44.3	25.1	16.0	24.3
Max Q Clear Time (g_c+I1), s	3.5	4.7	2.0	4.1
Green Ext Time (p_c), s	2.9	0.5	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	396	502	162	306	151	399	534	166	33	478	74
Future Volume (veh/h)	38	396	502	162	306	151	399	534	166	33	478	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	417	0	171	322	0	420	562	0	35	503	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	607		207	855		465	1375		88	895	
Arrive On Green	0.05	0.17	0.00	0.12	0.24	0.00	0.26	0.39	0.00	0.05	0.18	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	5274	0
Grp Volume(v), veh/h	40	417	0	171	322	0	420	562	0	35	503	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1702	0
Q Serve(g_s), s	1.5	7.6	0.0	6.4	5.2	0.0	15.7	7.9	0.0	1.3	6.2	0.0
Cycle Q Clear(g_c), s	1.5	7.6	0.0	6.4	5.2	0.0	15.7	7.9	0.0	1.3	6.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	83	607		207	855		465	1375		88	895	
V/C Ratio(X)	0.48	0.69		0.82	0.38		0.90	0.41		0.40	0.56	
Avail Cap(c_a), veh/h	156	1034		207	1158		518	1861		181	1709	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.0	26.8	0.0	29.7	21.8	0.0	24.5	15.3	0.0	31.7	25.9	0.0
Incr Delay (d2), s/veh	1.6	2.2	0.0	21.7	0.6	0.0	16.9	0.4	0.0	1.1	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.2	0.0	3.9	2.1	0.0	8.3	3.0	0.0	0.6	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	29.0	0.0	51.4	22.4	0.0	41.4	15.7	0.0	32.7	27.1	0.0
LnGrp LOS	C	C		D	C		D	B		C	C	
Approach Vol, veh/h		457	A		493	A		982	A		538	A
Approach Delay, s/veh		29.4			32.4			26.7			27.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	17.4	22.0	17.3	7.2	22.2	7.4	31.9
Change Period (Y+Rc), s	4.0	5.7	4.0	5.3	4.0	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	8.0	20.0	20.0	23.0	6.0	* 22	7.0	36.0
Max Q Clear Time (g_c+I1), s	8.4	9.6	17.7	8.2	3.5	7.2	3.3	9.9
Green Ext Time (p_c), s	0.0	2.2	0.3	3.8	0.0	2.3	0.0	5.5

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	26	109	162	33	127	45	841	28	64	1370	34
Future Volume (veh/h)	7	26	109	162	33	127	45	841	28	64	1370	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	27	115	171	35	0	47	885	29	67	1442	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	321	308	307	40		81	1807	59	85	1735	
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.00	0.05	0.51	0.51	0.05	0.49	0.00
Sat Flow, veh/h	191	1652	1585	1013	207	1585	1781	3511	115	1781	3647	0
Grp Volume(v), veh/h	34	0	115	206	0	0	47	448	466	67	1442	0
Grp Sat Flow(s),veh/h/ln	1843	0	1585	1220	0	1585	1781	1777	1850	1781	1777	0
Q Serve(g_s), s	0.0	0.0	3.8	9.1	0.0	0.0	1.6	9.8	9.8	2.2	21.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	3.8	10.0	0.0	0.0	1.6	9.8	9.8	2.2	21.0	0.0
Prop In Lane	0.21		1.00	0.83		1.00	1.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	431	0	308	347	0		81	914	952	85	1735	
V/C Ratio(X)	0.08	0.00	0.37	0.59	0.00		0.58	0.49	0.49	0.79	0.83	
Avail Cap(c_a), veh/h	472	0	346	379	0		89	914	952	148	1735	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.8	0.0	21.0	23.9	0.0	0.0	28.1	9.4	9.4	28.3	13.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.6	1.8	0.0	0.0	3.9	0.5	0.5	6.1	4.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.3	2.8	0.0	0.0	0.7	2.8	3.0	1.0	7.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	21.5	25.7	0.0	0.0	32.0	10.0	10.0	34.4	18.0	0.0
LnGrp LOS	B	A	C	C	A		C	A	A	C	B	
Approach Vol, veh/h		149			206	A		961			1509	A
Approach Delay, s/veh		21.2			25.7			11.1			18.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.6	8.4	35.0		16.6	6.9	36.6				
Change Period (Y+Rc), s		4.9	5.7	* 5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		13.1	3.0	* 29		13.1	5.0	27.3				
Max Q Clear Time (g_c+I1), s		5.8	3.6	23.0		12.0	4.2	11.8				
Green Ext Time (p_c), s		0.2	0.0	4.4		0.1	0.0	4.7				

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	2	1	53	5	55	1	911	27	95	1556	6
Future Volume (veh/h)	7	2	1	53	5	55	1	911	27	95	1556	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	2	1	56	5	58	1	959	28	100	1638	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	12	386	81	4	386	27	1876	55	128	2070	8
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.53	0.53	0.07	0.57	0.57
Sat Flow, veh/h	7	51	1585	18	17	1585	1781	3526	103	1781	3632	13
Grp Volume(v), veh/h	9	0	1	61	0	58	1	483	504	100	801	843
Grp Sat Flow(s),veh/h/ln	57	0	1585	35	0	1585	1781	1777	1852	1781	1777	1868
Q Serve(g_s), s	0.1	0.0	0.0	0.3	0.0	2.6	0.0	15.7	15.7	5.0	31.8	31.8
Cycle Q Clear(g_c), s	21.9	0.0	0.0	21.9	0.0	2.6	0.0	15.7	15.7	5.0	31.8	31.8
Prop In Lane	0.78		1.00	0.92		1.00	1.00		0.06	1.00		0.01
Lane Grp Cap(c), veh/h	85	0	386	85	0	386	27	946	986	128	1013	1065
V/C Ratio(X)	0.11	0.00	0.00	0.72	0.00	0.15	0.04	0.51	0.51	0.78	0.79	0.79
Avail Cap(c_a), veh/h	86	0	387	86	0	387	59	946	986	198	1013	1065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	25.7	43.7	0.0	26.7	43.7	13.5	13.5	41.1	15.2	15.2
Incr Delay (d2), s/veh	0.5	0.0	0.0	24.3	0.0	0.2	0.2	0.6	0.6	10.3	6.3	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	1.9	0.0	1.0	0.0	5.7	5.9	2.5	12.6	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	25.7	67.9	0.0	26.9	43.9	14.1	14.1	51.3	21.5	21.2
LnGrp LOS	C	A	C	E	A	C	D	B	B	D	C	C
Approach Vol, veh/h		10			119			988			1744	
Approach Delay, s/veh		28.6			47.9			14.2			23.0	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.0	57.0		26.0	10.5	53.6		26.0
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	3.0	* 51		22.0	10.0	44.3		22.0
Max Q Clear Time (g_c+I1), s	2.0	33.8		23.9	7.0	17.7		23.9
Green Ext Time (p_c), s	0.0	11.8		0.0	0.1	7.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	8	101	875	57	128	1484
Future Volume (veh/h)	8	101	875	57	128	1484
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	106	921	60	135	1562
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	151	134	1121	73	736	2869
Arrive On Green	0.08	0.08	0.33	0.33	0.83	1.00
Sat Flow, veh/h	1781	1585	3480	221	1781	3647
Grp Volume(v), veh/h	8	106	483	498	135	1562
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1831	1781	1777
Q Serve(g_s), s	0.4	5.9	22.5	22.5	1.4	0.0
Cycle Q Clear(g_c), s	0.4	5.9	22.5	22.5	1.4	0.0
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	151	134	588	606	736	2869
V/C Ratio(X)	0.05	0.79	0.82	0.82	0.18	0.54
Avail Cap(c_a), veh/h	416	370	815	840	736	2869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.76	0.76
Uniform Delay (d), s/veh	37.9	40.4	27.7	27.7	4.7	0.0
Incr Delay (d2), s/veh	0.1	3.9	5.3	5.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.2	10.1	10.3	0.5	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.9	44.3	33.0	32.8	4.8	0.6
LnGrp LOS	D	D	C	C	A	A
Approach Vol, veh/h	114		981			1697
Approach Delay, s/veh	43.8		32.9			0.9
Approach LOS	D		C			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		78.4		11.6	42.9	35.5
Change Period (Y+Rc), s		5.7		4.0	5.7	* 5.7
Max Green Setting (Gmax), s		59.3		21.0	14.0	* 41
Max Q Clear Time (g_c+I1), s		2.0		7.9	3.4	24.5
Green Ext Time (p_c), s		17.1		0.2	0.2	5.3

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	274	0	234	2	0	2	248	752	4	0	909	140
Future Volume (veh/h)	274	0	234	2	0	2	248	752	4	0	909	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1870	1870	1870	1870	1664	1708	1723	2067	2007	2052
Adj Flow Rate, veh/h	288	0	38	2	0	0	261	792	2	0	957	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	2	2	2	2	6	3	2	2	6	3
Cap, veh/h	477	0	216	9	0	0	205	1920	864	3	1516	692
Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.13	0.59	0.59	0.00	0.40	0.40
Sat Flow, veh/h	3428	0	1553	1781	0	0	1585	3246	1460	1968	3813	1739
Grp Volume(v), veh/h	288	0	38	2	0	0	261	792	2	0	957	47
Grp Sat Flow(s),veh/h/ln	1714	0	1553	1781	0	0	1585	1623	1460	1968	1906	1739
Q Serve(g_s), s	4.9	0.0	1.3	0.1	0.0	0.0	8.0	8.2	0.0	0.0	12.5	1.0
Cycle Q Clear(g_c), s	4.9	0.0	1.3	0.1	0.0	0.0	8.0	8.2	0.0	0.0	12.5	1.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	477	0	216	9	0	0	205	1920	864	3	1516	692
V/C Ratio(X)	0.60	0.00	0.18	0.23	0.00	0.00	1.28	0.41	0.00	0.00	0.63	0.07
Avail Cap(c_a), veh/h	1107	0	501	259	0	0	205	1920	864	254	1698	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	0.0	23.5	30.7	0.0	0.0	27.0	6.8	5.2	0.0	15.0	11.5
Incr Delay (d2), s/veh	1.8	0.0	0.6	4.8	0.0	0.0	156.4	0.2	0.0	0.0	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.5	0.0	0.0	0.0	11.5	1.6	0.0	0.0	4.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	0.0	24.1	35.5	0.0	0.0	183.4	7.1	5.2	0.0	15.9	11.6
LnGrp LOS	C	A	C	D	A	A	F	A	A	A	B	B
Approach Vol, veh/h		326			2			1055			1004	
Approach Delay, s/veh		26.6			35.5			50.7			15.7	
Approach LOS		C			D			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	43.0		4.3	12.0	31.0		14.6
Change Period (Y+Rc), s	4.0	6.4		4.0	4.0	6.4		6.0
Max Green Setting (Gmax), s	8.0	27.6		9.0	8.0	27.6		20.0
Max Q Clear Time (g_c+I1), s	0.0	10.2		2.1	10.0	14.5		6.9
Green Ext Time (p_c), s	0.0	11.1		0.0	0.0	10.1		1.8

Intersection Summary			
HCM 6th Ctrl Delay			32.6
HCM 6th LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	0	53	1	0	6	118	992	1	1	1085	60
Future Volume (veh/h)	26	0	53	1	0	6	118	992	1	1	1085	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	0	56	1	0	6	124	1044	1	1	1142	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	0	207	33	0	29	161	1831	816	3	1514	675
Arrive On Green	0.13	0.00	0.13	0.02	0.00	0.02	0.09	0.52	0.52	0.00	0.43	0.43
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	27	0	56	1	0	6	124	1044	1	1	1142	63
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	0.0	1.8	0.0	0.0	0.2	3.7	11.1	0.0	0.0	15.0	1.3
Cycle Q Clear(g_c), s	0.7	0.0	1.8	0.0	0.0	0.2	3.7	11.1	0.0	0.0	15.0	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	0	207	33	0	29	161	1831	816	3	1514	675
V/C Ratio(X)	0.12	0.00	0.27	0.03	0.00	0.21	0.77	0.57	0.00	0.31	0.75	0.09
Avail Cap(c_a), veh/h	389	0	346	971	0	864	389	1831	816	389	1783	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	21.6	26.5	0.0	26.6	24.5	9.2	6.5	27.4	13.4	9.4
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.1	0.0	1.3	2.9	0.6	0.0	18.8	1.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.6	0.0	0.0	0.1	1.6	3.5	0.0	0.0	5.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	0.0	21.8	26.7	0.0	27.9	27.4	9.7	6.5	46.2	15.2	9.5
LnGrp LOS	C	A	C	C	A	C	C	A	A	D	B	A
Approach Vol, veh/h		83			7			1169			1206	
Approach Delay, s/veh		21.6			27.7			11.6			15.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		11.2	9.0	29.8		5.0	4.1	34.7
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4
Max Green Setting (Gmax), s		12.0	12.0	27.6		30.0	12.0	27.6
Max Q Clear Time (g_c+I1), s		3.8	5.7	17.0		2.2	2.0	13.1
Green Ext Time (p_c), s		0.1	0.1	6.5		0.0	0.0	7.1

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	1	501	7	1	5	295	1005	10	4	1053	73
Future Volume (veh/h)	108	1	501	7	1	5	295	1005	10	4	1053	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	0	227	7	1	0	311	1058	5	4	1108	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	642	0	286	66	35	0	243	1770	789	11	1880	584
Arrive On Green	0.18	0.00	0.18	0.02	0.02	0.00	0.14	0.50	0.50	0.01	0.37	0.37
Sat Flow, veh/h	3563	0	1585	3563	1870	0	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	115	0	227	7	1	0	311	1058	5	4	1108	22
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	2.0	0.0	10.1	0.1	0.0	0.0	10.0	15.6	0.1	0.2	12.9	0.7
Cycle Q Clear(g_c), s	2.0	0.0	10.1	0.1	0.0	0.0	10.0	15.6	0.1	0.2	12.9	0.7
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	642	0	286	66	35	0	243	1770	789	11	1880	584
V/C Ratio(X)	0.18	0.00	0.79	0.11	0.03	0.00	1.28	0.60	0.01	0.35	0.59	0.04
Avail Cap(c_a), veh/h	971	0	432	437	229	0	243	1770	789	146	2031	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	28.8	35.4	35.4	0.0	31.7	13.2	9.3	36.3	18.7	14.9
Incr Delay (d2), s/veh	0.2	0.0	8.4	1.1	0.5	0.0	154.5	0.8	0.0	6.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	4.4	0.1	0.0	0.0	14.3	5.0	0.0	0.1	4.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	37.2	36.6	35.9	0.0	186.2	14.0	9.3	43.0	19.3	14.9
LnGrp LOS	C	A	D	D	D	A	F	B	A	D	B	B
Approach Vol, veh/h		342			8			1374			1134	
Approach Delay, s/veh		33.3			36.5			52.9			19.3	
Approach LOS		C			D			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	43.0		18.9	14.0	33.4		7.1
Change Period (Y+Rc), s	4.0	* 6.4		5.7	4.0	6.4		5.7
Max Green Setting (Gmax), s	6.0	* 34		20.0	10.0	29.2		9.0
Max Q Clear Time (g_c+I1), s	2.2	17.6		12.1	12.0	14.9		2.1
Green Ext Time (p_c), s	0.0	13.8		1.2	0.0	12.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	37.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	4	288	120	5	65	147	1372	45	94	1554	183
Future Volume (veh/h)	256	4	288	120	5	65	147	1372	45	94	1554	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	272	0	23	126	5	4	155	1444	45	99	1636	182
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	0	153	156	6	144	183	2302	72	364	2652	294
Arrive On Green	0.10	0.00	0.10	0.09	0.09	0.09	0.10	0.45	0.45	0.20	0.57	0.57
Sat Flow, veh/h	3563	0	1585	1716	68	1585	1781	5087	159	1781	4664	518
Grp Volume(v), veh/h	272	0	23	131	0	4	155	966	523	99	1193	625
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1785	0	1585	1781	1702	1842	1781	1702	1777
Q Serve(g_s), s	9.0	0.0	1.6	8.6	0.0	0.3	10.3	26.0	26.0	5.6	27.9	28.1
Cycle Q Clear(g_c), s	9.0	0.0	1.6	8.6	0.0	0.3	10.3	26.0	26.0	5.6	27.9	28.1
Prop In Lane	1.00		1.00	0.96		1.00	1.00		0.09	1.00		0.29
Lane Grp Cap(c), veh/h	344	0	153	162	0	144	183	1540	833	364	1936	1011
V/C Ratio(X)	0.79	0.00	0.15	0.81	0.00	0.03	0.85	0.63	0.63	0.27	0.62	0.62
Avail Cap(c_a), veh/h	623	0	277	223	0	198	252	1540	833	364	1936	1011
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	0.0	49.7	53.5	0.0	49.7	52.9	25.1	25.1	40.2	17.2	17.2
Incr Delay (d2), s/veh	1.6	0.0	0.2	10.2	0.0	0.0	13.4	1.9	3.6	0.1	1.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.6	4.4	0.0	0.1	5.1	10.3	11.5	2.4	10.1	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.6	0.0	49.9	63.7	0.0	49.8	66.4	27.1	28.7	40.3	18.1	19.1
LnGrp LOS	D	A	D	E	A	D	E	C	C	D	B	B
Approach Vol, veh/h		295			135			1644			1917	
Approach Delay, s/veh		54.2			63.3			31.3			19.6	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	29.6	60.0		14.9	16.3	73.2		15.6
Change Period (Y+Rc), s	5.0	* 5.7		4.0	4.0	5.0		4.0
Max Green Setting (Gmax), s	12.0	* 54		15.0	17.0	50.0		21.0
Max Q Clear Time (g_c+I1), s	7.6	28.0		10.6	12.3	30.1		11.0
Green Ext Time (p_c), s	0.1	16.6		0.1	0.1	16.0		0.6

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	333	108	74	22	87	37	256	1436	23	54	2080	390
Future Volume (veh/h)	333	108	74	22	87	37	256	1436	23	54	2080	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	351	114	78	23	92	39	269	1512	24	57	2189	411
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	415	255	174	0	204	82	324	2510	779	204	2702	839
Arrive On Green	0.12	0.25	0.25	0.00	0.08	0.08	0.09	0.49	0.49	0.11	0.53	0.53
Sat Flow, veh/h	3563	1035	708	0	2474	995	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	351	0	192	0	65	66	269	1512	24	57	2189	411
Grp Sat Flow(s),veh/h/ln	1781	0	1743	0	1777	1691	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	11.6	0.0	11.2	0.0	4.2	4.5	9.2	25.7	0.8	3.5	42.4	10.8
Cycle Q Clear(g_c), s	11.6	0.0	11.2	0.0	4.2	4.5	9.2	25.7	0.8	3.5	42.4	10.8
Prop In Lane	1.00		0.41	0.00		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	415	0	429	0	146	139	324	2510	779	204	2702	839
V/C Ratio(X)	0.85	0.00	0.45	0.00	0.44	0.48	0.83	0.60	0.03	0.28	0.81	0.49
Avail Cap(c_a), veh/h	534	0	429	0	212	202	346	2510	779	204	2702	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	0.0	38.3	0.0	52.4	52.6	53.4	22.0	12.8	48.6	23.3	5.3
Incr Delay (d2), s/veh	7.9	0.0	1.2	0.0	3.3	4.0	13.7	1.1	0.1	0.3	2.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	4.8	0.0	1.9	2.0	4.5	9.6	0.3	1.5	15.7	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.8	0.0	39.5	0.0	55.7	56.6	67.2	23.1	12.9	48.9	25.4	6.1
LnGrp LOS	E	A	D	A	E	E	E	C	B	D	C	A
Approach Vol, veh/h		543			131			1805			2657	
Approach Delay, s/veh		52.6			56.2			29.5			22.9	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	65.0	0.0	35.3	15.2	69.5	19.7	15.6
Change Period (Y+Rc), s	6.0	* 6	4.0	5.7	4.0	6.0	5.7	* 5.7
Max Green Setting (Gmax), s	9.0	* 59	10.0	22.3	12.0	56.0	18.0	* 14
Max Q Clear Time (g_c+I1), s	5.5	27.7	0.0	13.2	11.2	44.4	13.6	6.5
Green Ext Time (p_c), s	0.0	16.5	0.0	0.7	0.1	10.8	0.4	0.4

Intersection Summary	
HCM 6th Ctrl Delay	29.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	557	17	14	258	8	14	2	15	7	0	5
Future Volume (veh/h)	6	557	17	14	258	8	14	2	15	7	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	586	18	15	272	8	15	2	16	7	0	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	1409	43	41	1448	42	48	6	51	28	0	20
Arrive On Green	0.01	0.40	0.40	0.02	0.41	0.41	0.06	0.06	0.06	0.03	0.00	0.03
Sat Flow, veh/h	1781	3520	108	1781	3525	103	766	102	817	988	0	706
Grp Volume(v), veh/h	6	296	308	15	137	143	33	0	0	12	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1851	1781	1777	1852	1685	0	0	1694	0	0
Q Serve(g_s), s	0.1	4.4	4.4	0.3	1.8	1.8	0.7	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.1	4.4	4.4	0.3	1.8	1.8	0.7	0.0	0.0	0.3	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.06	0.45		0.48	0.58		0.42
Lane Grp Cap(c), veh/h	23	711	741	41	730	760	105	0	0	48	0	0
V/C Ratio(X)	0.26	0.42	0.42	0.36	0.19	0.19	0.31	0.00	0.00	0.25	0.00	0.00
Avail Cap(c_a), veh/h	391	1039	1082	293	941	981	1202	0	0	418	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	7.9	7.9	17.5	6.9	6.9	16.3	0.0	0.0	17.3	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.7	0.6	2.0	0.2	0.2	0.6	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.0	1.1	0.1	0.4	0.4	0.2	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.0	8.5	8.5	19.5	7.1	7.1	17.0	0.0	0.0	18.3	0.0	0.0
LnGrp LOS	C	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		610			295			33			12	
Approach Delay, s/veh		8.6			7.7			17.0			18.3	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		6.3	4.8	20.3		5.0	4.5	20.7
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		26.0	6.0	21.3		9.0	8.0	19.3
Max Q Clear Time (g_c+I1), s		2.7	2.3	6.4		2.3	2.1	3.8
Green Ext Time (p_c), s		0.0	0.0	8.2		0.0	0.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	539	12	39	323	34	4	0	13	12	0	123
Future Volume (veh/h)	158	539	12	39	323	34	4	0	13	12	0	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	166	567	13	41	340	36	4	0	14	13	0	129
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	906	404	82	617	275	15	0	52	285	0	253
Arrive On Green	0.13	0.26	0.26	0.05	0.17	0.17	0.04	0.00	0.04	0.16	0.00	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	361	0	1264	1781	0	1585
Grp Volume(v), veh/h	166	567	13	41	340	36	18	0	0	13	0	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1625	0	0	1781	0	1585
Q Serve(g_s), s	3.5	5.6	0.2	0.9	3.5	0.8	0.4	0.0	0.0	0.2	0.0	2.9
Cycle Q Clear(g_c), s	3.5	5.6	0.2	0.9	3.5	0.8	0.4	0.0	0.0	0.2	0.0	2.9
Prop In Lane	1.00		1.00	1.00		1.00	0.22		0.78	1.00		1.00
Lane Grp Cap(c), veh/h	227	906	404	82	617	275	66	0	0	285	0	253
V/C Ratio(X)	0.73	0.63	0.03	0.50	0.55	0.13	0.27	0.00	0.00	0.05	0.00	0.51
Avail Cap(c_a), veh/h	631	1708	762	541	1529	682	493	0	0	1230	0	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.6	13.0	11.1	18.4	14.9	13.8	18.4	0.0	0.0	14.1	0.0	15.2
Incr Delay (d2), s/veh	1.7	0.8	0.0	1.8	0.9	0.2	0.8	0.0	0.0	0.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.7	0.1	0.3	1.1	0.2	0.2	0.0	0.0	0.1	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.3	13.9	11.1	20.2	15.8	14.1	19.2	0.0	0.0	14.1	0.0	15.8
LnGrp LOS	B	B	B	C	B	B	B	A	A	B	A	B
Approach Vol, veh/h		746			417			18			142	
Approach Delay, s/veh		14.8			16.1			19.2			15.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.6	5.8	16.1		12.0	9.0	12.9				
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0				
Max Green Setting (Gmax), s		12.0	12.0	19.0		27.3	14.0	17.0				
Max Q Clear Time (g_c+I1), s		2.4	2.9	7.6		4.9	5.5	5.5				
Green Ext Time (p_c), s		0.0	0.0	2.3		0.3	0.2	1.4				

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	348	2	50	239	6	54
Future Volume (veh/h)	348	2	50	239	6	54
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	366	2	53	252	6	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	779	348	87	1637	274	244
Arrive On Green	0.22	0.22	0.05	0.46	0.15	0.15
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	366	2	53	252	6	57
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	2.3	0.0	0.8	1.1	0.1	0.8
Cycle Q Clear(g_c), s	2.3	0.0	0.8	1.1	0.1	0.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	779	348	87	1637	274	244
V/C Ratio(X)	0.47	0.01	0.61	0.15	0.02	0.23
Avail Cap(c_a), veh/h	2190	977	755	4380	1235	1099
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.8	7.9	12.1	4.1	9.3	9.6
Incr Delay (d2), s/veh	0.4	0.0	6.7	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	0.1	0.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.3	7.9	18.8	4.1	9.4	10.1
LnGrp LOS	A	A	B	A	A	B
Approach Vol, veh/h	368			305	63	
Approach Delay, s/veh	9.3			6.7	10.0	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		9.0	6.3	10.7		17.0
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		18.0	11.0	16.0		32.0
Max Q Clear Time (g_c+I1), s		2.8	2.8	4.3		3.1
Green Ext Time (p_c), s		0.1	0.0	1.8		1.7

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1183	492	243	609	102	326
Future Volume (veh/h)	1183	492	243	609	102	326
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1245	225	256	113	107	343
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1630	747	517	231	139	1156
Arrive On Green	0.47	0.47	0.15	0.15	0.08	0.33
Sat Flow, veh/h	3456	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	1245	225	256	113	107	343
Grp Sat Flow(s),veh/h/ln	1728	1585	1777	1585	1781	1777
Q Serve(g_s), s	14.7	4.3	3.3	3.2	2.9	3.5
Cycle Q Clear(g_c), s	14.7	4.3	3.3	3.2	2.9	3.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1630	747	517	231	139	1156
V/C Ratio(X)	0.76	0.30	0.49	0.49	0.77	0.30
Avail Cap(c_a), veh/h	2737	1255	1804	805	398	2959
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	8.0	19.4	19.4	22.3	12.4
Incr Delay (d2), s/veh	0.8	0.2	0.7	1.6	8.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	1.2	1.3	1.2	1.4	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.5	8.2	20.1	21.0	30.8	12.5
LnGrp LOS	B	A	C	C	C	B
Approach Vol, veh/h	1470		369			450
Approach Delay, s/veh	11.0		20.4			16.9
Approach LOS	B		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.9	12.2				21.0	28.2
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	25.0				41.0	39.0
Max Q Clear Time (g_c+I1), s	4.9	5.3				5.5	16.7
Green Ext Time (p_c), s	0.1	1.9				2.4	6.6

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	352	6	1	648	566	2	13	5	198	10	58
Future Volume (veh/h)	49	352	6	1	648	566	2	13	5	198	10	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	371	6	1	682	596	2	14	5	208	11	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	1564	697	3	1426	636	12	81	79	305	16	285
Arrive On Green	0.04	0.44	0.44	0.00	0.40	0.40	0.05	0.05	0.05	0.18	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	232	1626	1585	1696	90	1585
Grp Volume(v), veh/h	52	371	6	1	682	596	16	0	5	219	0	61
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1859	0	1585	1786	0	1585
Q Serve(g_s), s	1.6	3.6	0.1	0.0	7.8	19.8	0.5	0.0	0.2	6.3	0.0	1.8
Cycle Q Clear(g_c), s	1.6	3.6	0.1	0.0	7.8	19.8	0.5	0.0	0.2	6.3	0.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	0.12		1.00	0.95		1.00
Lane Grp Cap(c), veh/h	71	1564	697	3	1426	636	93	0	79	322	0	285
V/C Ratio(X)	0.73	0.24	0.01	0.31	0.48	0.94	0.17	0.00	0.06	0.68	0.00	0.21
Avail Cap(c_a), veh/h	163	1564	697	130	1428	637	340	0	290	652	0	579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.0	9.6	8.6	27.3	12.1	15.7	24.9	0.0	24.8	21.0	0.0	19.1
Incr Delay (d2), s/veh	5.3	0.1	0.0	18.6	0.3	21.6	0.3	0.0	0.1	1.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.0	0.0	0.0	2.4	9.1	0.2	0.0	0.1	2.4	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.3	9.7	8.6	45.9	12.4	37.4	25.2	0.0	24.9	21.9	0.0	19.3
LnGrp LOS	C	A	A	D	B	D	C	A	C	C	A	B
Approach Vol, veh/h		429			1279			21			280	
Approach Delay, s/veh		12.3			24.1			25.2			21.3	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	30.1		6.7	6.2	28.0		13.9
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	4.0	23.0		10.0	5.0	22.0		20.0
Max Q Clear Time (g_c+I1), s	2.0	5.6		2.5	3.6	21.8		8.3
Green Ext Time (p_c), s	0.0	4.3		0.0	0.0	0.2		0.5

Intersection Summary		
HCM 6th Ctrl Delay		21.2
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	524	10	86	1204	61	7	5	43	43	4	21
Future Volume (veh/h)	31	524	10	86	1204	61	7	5	43	43	4	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	552	11	91	1267	64	7	5	45	45	4	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	1576	703	118	1708	762	13	141	120	65	196	166
Arrive On Green	0.03	0.44	0.44	0.07	0.48	0.48	0.01	0.08	0.08	0.04	0.10	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	33	552	11	91	1267	64	7	5	45	45	4	22
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.0	5.4	0.2	2.7	15.2	1.2	0.2	0.1	1.4	1.3	0.1	0.7
Cycle Q Clear(g_c), s	1.0	5.4	0.2	2.7	15.2	1.2	0.2	0.1	1.4	1.3	0.1	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	1576	703	118	1708	762	13	141	120	65	196	166
V/C Ratio(X)	0.64	0.35	0.02	0.77	0.74	0.08	0.53	0.04	0.38	0.69	0.02	0.13
Avail Cap(c_a), veh/h	370	2149	959	370	2149	959	370	601	509	370	566	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	9.7	8.2	24.3	11.1	7.4	26.2	22.7	23.3	25.2	21.2	21.5
Incr Delay (d2), s/veh	12.3	0.1	0.0	10.1	1.1	0.0	29.4	0.1	1.9	12.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.8	0.1	1.4	4.9	0.3	0.2	0.1	0.6	0.7	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	9.8	8.3	34.5	12.2	7.5	55.6	22.8	25.2	37.4	21.3	21.9
LnGrp LOS	D	A	A	C	B	A	E	C	C	D	C	C
Approach Vol, veh/h		596			1422			57			71	
Approach Delay, s/veh		11.3			13.4			28.7			31.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	9.0	8.5	28.5	5.4	10.5	6.5	30.4
Change Period (Y+Rc), s	5.0	* 5	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	* 17	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.3	3.4	4.7	7.4	2.2	2.7	3.0	17.2
Green Ext Time (p_c), s	0.0	0.1	0.1	3.9	0.0	0.0	0.0	8.2

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	372	297	25	144	925	152	35	578	134	270	606	548
Future Volume (veh/h)	372	297	25	144	925	152	35	578	134	270	606	548
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	392	313	0	152	974	0	37	608	0	284	638	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	1231		334	1130		194	746		346	903	
Arrive On Green	0.13	0.35	0.00	0.10	0.32	0.00	0.06	0.21	0.00	0.10	0.25	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	392	313	0	152	974	0	37	608	0	284	638	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	8.9	5.0	0.0	3.3	20.6	0.0	0.8	13.0	0.0	6.4	13.0	0.0
Cycle Q Clear(g_c), s	8.9	5.0	0.0	3.3	20.6	0.0	0.8	13.0	0.0	6.4	13.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	433	1231		334	1130		194	746		346	903	
V/C Ratio(X)	0.91	0.25		0.45	0.86		0.19	0.81		0.82	0.71	
Avail Cap(c_a), veh/h	433	1304		346	1215		346	890		346	903	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.5	18.7	0.0	34.1	25.6	0.0	36.0	30.1	0.0	35.2	27.1	0.0
Incr Delay (d2), s/veh	21.8	0.2	0.0	0.4	6.7	0.0	0.2	5.6	0.0	13.6	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	1.8	0.0	1.3	8.6	0.0	0.3	5.7	0.0	3.2	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.3	18.9	0.0	34.4	32.3	0.0	36.1	35.7	0.0	48.8	30.0	0.0
LnGrp LOS	E	B		C	C		D	D		D	C	
Approach Vol, veh/h		705	A		1126	A		645	A		922	A
Approach Delay, s/veh		39.7			32.6			35.7			35.8	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	33.4	8.5	26.3	14.0	31.1	12.0	22.8
Change Period (Y+Rc), s	4.0	5.7	4.0	* 6	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	8.0	29.3	8.0	* 20	10.0	27.3	8.0	20.0
Max Q Clear Time (g_c+I1), s	5.3	7.0	2.8	15.0	10.9	22.6	8.4	15.0
Green Ext Time (p_c), s	0.1	2.2	0.0	2.1	0.0	2.8	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	486	180	145	1041	50	164	243	13	60	138	48
Future Volume (veh/h)	40	486	180	145	1041	50	164	243	13	60	138	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	512	189	153	1096	53	173	256	14	63	145	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	858	315	195	1371	66	216	328	18	148	196	69
Arrive On Green	0.05	0.34	0.34	0.11	0.40	0.40	0.12	0.19	0.19	0.08	0.15	0.15
Sat Flow, veh/h	1781	2544	935	1781	3450	167	1781	1757	96	1781	1322	465
Grp Volume(v), veh/h	42	357	344	153	564	585	173	0	270	63	0	196
Grp Sat Flow(s),veh/h/ln	1781	1777	1702	1781	1777	1840	1781	0	1853	1781	0	1787
Q Serve(g_s), s	1.5	10.9	11.0	5.5	18.4	18.4	6.2	0.0	9.1	2.2	0.0	6.9
Cycle Q Clear(g_c), s	1.5	10.9	11.0	5.5	18.4	18.4	6.2	0.0	9.1	2.2	0.0	6.9
Prop In Lane	1.00		0.55	1.00		0.09	1.00		0.05	1.00		0.26
Lane Grp Cap(c), veh/h	87	599	574	195	706	731	216	0	346	148	0	265
V/C Ratio(X)	0.48	0.60	0.60	0.79	0.80	0.80	0.80	0.00	0.78	0.42	0.00	0.74
Avail Cap(c_a), veh/h	163	678	650	381	895	927	326	0	690	218	0	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.3	18.0	18.0	28.4	17.4	17.4	28.0	0.0	25.4	28.5	0.0	26.7
Incr Delay (d2), s/veh	1.5	1.4	1.5	2.7	4.6	4.4	4.3	0.0	5.3	0.7	0.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.1	4.0	2.3	7.2	7.4	2.8	0.0	4.3	0.9	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	19.4	19.6	31.1	22.0	21.9	32.3	0.0	30.6	29.2	0.0	32.2
LnGrp LOS	C	B	B	C	C	C	C	A	C	C	A	C
Approach Vol, veh/h		743			1302			443			259	
Approach Delay, s/veh		20.2			23.0			31.3			31.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	17.1	11.2	27.8	12.0	14.6	7.2	31.7
Change Period (Y+Rc), s	4.0	4.9	4.0	5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	8.0	24.4	14.0	25.0	12.0	20.4	6.0	33.0
Max Q Clear Time (g_c+I1), s	4.2	11.1	7.5	13.0	8.2	8.9	3.5	20.4
Green Ext Time (p_c), s	0.0	1.2	0.1	3.2	0.1	0.7	0.0	5.6

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	515	1351	27	30	6
Future Volume (veh/h)	11	515	1351	27	30	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	542	1422	28	32	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	33	2461	2050	40	122	109
Arrive On Green	0.02	0.69	0.58	0.58	0.07	0.07
Sat Flow, veh/h	1781	3647	3658	70	1781	1585
Grp Volume(v), veh/h	12	542	708	742	32	6
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1858	1781	1585
Q Serve(g_s), s	0.3	2.2	11.4	11.5	0.7	0.1
Cycle Q Clear(g_c), s	0.3	2.2	11.4	11.5	0.7	0.1
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	33	2461	1022	1069	122	109
V/C Ratio(X)	0.36	0.22	0.69	0.69	0.26	0.06
Avail Cap(c_a), veh/h	263	3965	1545	1615	877	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	2.3	6.1	6.1	17.9	17.7
Incr Delay (d2), s/veh	2.4	0.1	1.1	1.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.8	1.8	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.1	2.3	7.2	7.2	18.3	17.8
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		554	1450		38	
Approach Delay, s/veh		2.8	7.2		18.3	
Approach LOS		A	A		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		33.8		6.8	4.8	29.1
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		45.3		20.0	6.0	35.3
Max Q Clear Time (g_c+I1), s		4.2		2.7	2.3	13.5
Green Ext Time (p_c), s		3.6		0.0	0.0	9.9

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	472	58	115	1379	0	68	0	59	0	0	0
Future Volume (veh/h)	0	472	58	115	1379	0	68	0	59	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	497	61	121	1452	0	72	0	62	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1325	591	168	2028	0	317	0	282	0	5	0
Arrive On Green	0.00	0.37	0.37	0.09	0.57	0.00	0.18	0.00	0.18	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3647	0	1781	0	1585	0	1870	0
Grp Volume(v), veh/h	0	497	61	121	1452	0	72	0	62	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	0	1781	0	1585	0	1870	0
Q Serve(g_s), s	0.0	3.9	1.0	2.5	11.4	0.0	1.3	0.0	1.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.9	1.0	2.5	11.4	0.0	1.3	0.0	1.3	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	5	1325	591	168	2028	0	317	0	282	0	5	0
V/C Ratio(X)	0.00	0.38	0.10	0.72	0.72	0.00	0.23	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	231	2884	1286	600	3621	0	924	0	822	0	388	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.8	7.9	17.0	6.0	0.0	13.6	0.0	13.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.1	5.7	0.5	0.0	0.4	0.0	0.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.2	1.1	1.7	0.0	0.5	0.0	0.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.0	8.0	22.7	6.5	0.0	13.9	0.0	14.0	0.0	0.0	0.0
LnGrp LOS	A	A	A	C	A	A	B	A	B	A	A	A
Approach Vol, veh/h		558			1573			134			0	
Approach Delay, s/veh		8.9			7.7			14.0			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	20.1		10.9	0.0	27.7		0.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	13.0	31.3		20.0	5.0	39.3		8.0
Max Q Clear Time (g_c+I1), s	4.5	5.9		3.3	0.0	13.4		0.0
Green Ext Time (p_c), s	0.2	1.9		0.4	0.0	8.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	604	38	104	1423	5	46	17	115	24	15	25
Future Volume (veh/h)	37	604	38	104	1423	5	46	17	115	24	15	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	636	40	109	1498	5	48	18	121	25	16	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1556	98	136	1775	6	119	30	396	102	45	396
Arrive On Green	0.05	0.46	0.46	0.08	0.49	0.49	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	3395	213	1781	3633	12	85	120	1585	44	179	1585
Grp Volume(v), veh/h	39	333	343	109	733	770	66	0	121	41	0	26
Grp Sat Flow(s),veh/h/ln	1781	1777	1832	1781	1777	1868	205	0	1585	222	0	1585
Q Serve(g_s), s	1.4	7.9	7.9	3.8	22.8	22.8	1.3	0.0	3.9	0.4	0.0	0.8
Cycle Q Clear(g_c), s	1.4	7.9	7.9	3.8	22.8	22.8	15.9	0.0	3.9	15.5	0.0	0.8
Prop In Lane	1.00		0.12	1.00		0.01	0.73		1.00	0.61		1.00
Lane Grp Cap(c), veh/h	82	814	839	136	868	913	149	0	396	147	0	396
V/C Ratio(X)	0.48	0.41	0.41	0.80	0.84	0.84	0.44	0.00	0.31	0.28	0.00	0.07
Avail Cap(c_a), veh/h	168	933	961	253	1017	1069	338	0	600	331	0	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.5	11.5	11.5	28.8	14.1	14.1	26.3	0.0	19.3	19.8	0.0	18.2
Incr Delay (d2), s/veh	1.6	0.4	0.4	4.2	6.2	5.9	0.8	0.0	0.2	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.5	2.6	1.6	8.1	8.4	1.0	0.0	1.4	0.5	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	11.9	11.9	33.0	20.3	20.1	27.0	0.0	19.5	20.2	0.0	18.2
LnGrp LOS	C	B	B	C	C	C	C	A	B	C	A	B
Approach Vol, veh/h		715			1612			187			67	
Approach Delay, s/veh		12.9			21.1			22.2			19.4	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	35.1		20.6	6.9	37.0		20.6
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	9.0	33.3		24.0	6.0	36.3		24.0
Max Q Clear Time (g_c+I1), s	5.8	9.9		17.9	3.4	24.8		17.5
Green Ext Time (p_c), s	0.0	3.7		0.2	0.0	6.9		0.1

Intersection Summary		
HCM 6th Ctrl Delay		18.8
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	404	6	2	645	78	2	0	2	138	0	212
Future Volume (veh/h)	100	404	6	2	645	78	2	0	2	138	0	212
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	105	425	6	2	679	82	2	0	2	145	0	223
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	1531	22	7	972	117	7	0	7	337	0	300
Arrive On Green	0.13	0.43	0.43	0.00	0.30	0.30	0.01	0.00	0.01	0.19	0.00	0.19
Sat Flow, veh/h	1781	3587	51	1781	3193	385	839	0	839	1781	0	1585
Grp Volume(v), veh/h	105	210	221	2	378	383	4	0	0	145	0	223
Grp Sat Flow(s),veh/h/ln	1781	1777	1861	1781	1777	1801	1677	0	0	1781	0	1585
Q Serve(g_s), s	2.6	3.7	3.7	0.1	8.9	9.0	0.1	0.0	0.0	3.4	0.0	6.3
Cycle Q Clear(g_c), s	2.6	3.7	3.7	0.1	8.9	9.0	0.1	0.0	0.0	3.4	0.0	6.3
Prop In Lane	1.00		0.03	1.00		0.21	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	225	758	794	7	541	548	15	0	0	337	0	300
V/C Ratio(X)	0.47	0.28	0.28	0.29	0.70	0.70	0.28	0.00	0.00	0.43	0.00	0.74
Avail Cap(c_a), veh/h	449	907	950	449	907	919	423	0	0	711	0	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.3	8.9	8.9	23.6	14.6	14.6	23.4	0.0	0.0	17.0	0.0	18.2
Incr Delay (d2), s/veh	0.6	0.3	0.3	8.5	2.2	2.2	7.4	0.0	0.0	0.3	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.0	1.0	0.0	3.0	3.0	0.1	0.0	0.0	1.3	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	9.1	9.1	32.2	16.8	16.8	30.8	0.0	0.0	17.4	0.0	19.6
LnGrp LOS	B	A	A	C	B	B	C	A	A	B	A	B
Approach Vol, veh/h		536			763			4			368	
Approach Delay, s/veh		11.2			16.8			30.8			18.7	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	26.0		4.4	10.0	20.2		13.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	24.3		12.0	12.0	24.3		19.0
Max Q Clear Time (g_c+I1), s	2.1	5.7		2.1	4.6	11.0		8.3
Green Ext Time (p_c), s	0.0	2.1		0.0	0.1	3.5		0.7

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	6	33	150	4	72	21	1149	142	15	1230	17
Future Volume (veh/h)	26	6	33	150	4	72	21	1149	142	15	1230	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	6	35	158	4	76	22	1209	149	16	1295	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	67	57	209	238	202	38	1923	597	29	1896	588
Arrive On Green	0.03	0.04	0.04	0.12	0.13	0.13	0.02	0.38	0.38	0.02	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	27	6	35	158	4	76	22	1209	149	16	1295	18
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.7	0.1	1.0	3.8	0.1	1.9	0.5	8.5	2.8	0.4	9.4	0.3
Cycle Q Clear(g_c), s	0.7	0.1	1.0	3.8	0.1	1.9	0.5	8.5	2.8	0.4	9.4	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	46	67	57	209	238	202	38	1923	597	29	1896	588
V/C Ratio(X)	0.59	0.09	0.62	0.76	0.02	0.38	0.58	0.63	0.25	0.56	0.68	0.03
Avail Cap(c_a), veh/h	202	1360	1152	567	1742	1477	202	2320	720	162	2204	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	20.5	20.9	18.8	16.8	17.6	21.3	11.2	9.4	21.5	11.7	8.8
Incr Delay (d2), s/veh	11.7	0.6	10.4	5.5	0.0	1.2	13.0	0.4	0.2	15.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.5	1.7	0.0	0.7	0.3	2.6	0.8	0.3	2.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	21.1	31.3	24.4	16.8	18.8	34.3	11.6	9.7	37.2	12.4	8.8
LnGrp LOS	C	C	C	C	B	B	C	B	A	D	B	A
Approach Vol, veh/h		68			238			1380			1329	
Approach Delay, s/veh		31.0			22.5			11.8			12.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	21.6	10.2	6.6	5.9	21.3	6.1	10.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	20.0	14.0	32.0	5.0	19.0	5.0	41.0
Max Q Clear Time (g_c+I1), s	2.4	10.5	5.8	3.0	2.5	11.4	2.7	3.9
Green Ext Time (p_c), s	0.0	5.8	0.2	0.1	0.0	4.9	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	14	25	184	36	18	60	1285	287	35	1357	20
Future Volume (veh/h)	9	14	25	184	36	18	60	1285	287	35	1357	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	15	26	194	38	19	63	1353	302	37	1428	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	66	56	254	316	267	85	1852	575	58	1775	551
Arrive On Green	0.01	0.04	0.04	0.14	0.17	0.17	0.05	0.36	0.36	0.03	0.35	0.35
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	9	15	26	194	38	19	63	1353	302	37	1428	21
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.2	0.4	0.8	4.9	0.8	0.5	1.6	10.8	7.0	1.0	11.9	0.4
Cycle Q Clear(g_c), s	0.2	0.4	0.8	4.9	0.8	0.5	1.6	10.8	7.0	1.0	11.9	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	66	56	254	316	267	85	1852	575	58	1775	551
V/C Ratio(X)	0.54	0.23	0.46	0.76	0.12	0.07	0.74	0.73	0.53	0.64	0.80	0.04
Avail Cap(c_a), veh/h	152	1276	1082	646	1795	1521	152	1852	575	152	1851	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	22.0	22.2	19.3	16.5	16.4	22.0	13.0	11.8	22.4	13.9	10.1
Incr Delay (d2), s/veh	23.9	1.7	5.9	4.7	0.2	0.1	11.8	1.5	0.9	11.0	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.3	2.1	0.3	0.2	0.9	3.6	2.1	0.5	4.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	23.7	28.1	24.0	16.7	16.5	33.9	14.5	12.6	33.4	16.5	10.1
LnGrp LOS	D	C	C	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		50			251			1718			1486	
Approach Delay, s/veh		30.2			22.4			14.9			16.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	22.0	11.7	6.7	7.2	21.3	5.4	12.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	17.0	17.0	32.0	4.0	17.0	4.0	45.0
Max Q Clear Time (g_c+I1), s	3.0	12.8	6.9	2.8	3.6	13.9	2.2	2.8
Green Ext Time (p_c), s	0.0	3.3	0.4	0.1	0.0	2.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	7	39	44	15	91	96	1526	101	42	1461	56
Future Volume (veh/h)	24	7	39	44	15	91	96	1526	101	42	1461	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	7	41	46	16	96	101	1606	106	44	1538	59
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	130	110	66	156	133	131	2427	753	64	2237	694
Arrive On Green	0.02	0.07	0.07	0.04	0.08	0.08	0.07	0.48	0.48	0.04	0.44	0.44
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	25	7	41	46	16	96	101	1606	106	44	1538	59
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.7	0.2	1.3	1.3	0.4	3.1	2.9	12.6	2.0	1.3	12.7	1.1
Cycle Q Clear(g_c), s	0.7	0.2	1.3	1.3	0.4	3.1	2.9	12.6	2.0	1.3	12.7	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	41	130	110	66	156	133	131	2427	753	64	2237	694
V/C Ratio(X)	0.60	0.05	0.37	0.69	0.10	0.72	0.77	0.66	0.14	0.68	0.69	0.08
Avail Cap(c_a), veh/h	136	1142	968	136	1142	968	306	2923	907	136	2436	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	22.8	23.3	24.9	22.2	23.4	23.9	10.5	7.7	25.0	11.8	8.6
Incr Delay (d2), s/veh	13.2	0.2	2.1	12.2	0.3	7.3	9.3	0.4	0.1	12.1	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.5	0.7	0.2	1.3	1.5	3.8	0.6	0.7	4.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.6	22.9	25.3	37.1	22.5	30.7	33.1	10.9	7.8	37.0	12.6	8.6
LnGrp LOS	D	C	C	D	C	C	C	B	A	D	B	A
Approach Vol, veh/h		73			158			1813			1641	
Approach Delay, s/veh		29.7			31.7			12.0			13.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	29.9	7.0	8.6	8.8	28.0	6.2	9.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	4.0	30.0	4.0	32.0	9.0	25.0	4.0	32.0
Max Q Clear Time (g_c+I1), s	3.3	14.6	3.3	3.3	4.9	14.7	2.7	5.1
Green Ext Time (p_c), s	0.0	10.3	0.0	0.1	0.1	7.2	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	61	50	43	53	2	50	101	13	2	39	43
Future Volume (veh/h)	85	61	50	43	53	2	50	101	13	2	39	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	64	53	45	56	2	53	106	14	2	41	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	288	243	75	225	8	86	273	36	6	100	109
Arrive On Green	0.07	0.15	0.15	0.04	0.13	0.13	0.05	0.17	0.17	0.00	0.12	0.12
Sat Flow, veh/h	1781	1870	1575	1781	1794	64	1781	1617	214	1781	812	891
Grp Volume(v), veh/h	89	64	53	45	0	58	53	0	120	2	0	86
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	0	1858	1781	0	1830	1781	0	1702
Q Serve(g_s), s	1.4	0.9	0.8	0.7	0.0	0.8	0.8	0.0	1.7	0.0	0.0	1.3
Cycle Q Clear(g_c), s	1.4	0.9	0.8	0.7	0.0	0.8	0.8	0.0	1.7	0.0	0.0	1.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.12	1.00		0.52
Lane Grp Cap(c), veh/h	126	288	243	75	0	233	86	0	309	6	0	209
V/C Ratio(X)	0.70	0.22	0.22	0.60	0.00	0.25	0.62	0.00	0.39	0.32	0.00	0.41
Avail Cap(c_a), veh/h	908	1742	1467	595	0	1404	657	0	1962	344	0	1526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.9	10.5	10.5	13.4	0.0	11.2	13.3	0.0	10.5	14.2	0.0	11.5
Incr Delay (d2), s/veh	6.9	0.4	0.4	7.5	0.0	0.6	7.1	0.0	0.8	26.8	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.3	0.2	0.4	0.0	0.3	0.4	0.0	0.5	0.1	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	10.9	11.0	20.9	0.0	11.8	20.3	0.0	11.3	41.0	0.0	12.8
LnGrp LOS	B	B	B	C	A	B	C	A	B	D	A	B
Approach Vol, veh/h		206			103			173			88	
Approach Delay, s/veh		14.8			15.8			14.1			13.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	9.3	5.7	8.9	5.9	8.0	6.5	8.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	30.5	9.5	26.5	10.5	25.5	14.5	21.5
Max Q Clear Time (g_c+I1), s	2.0	3.7	2.7	2.9	2.8	3.3	3.4	2.8
Green Ext Time (p_c), s	0.0	0.6	0.0	0.4	0.0	0.4	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	141	293	418	66	337	848
Future Volume (veh/h)	141	293	418	66	337	848
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	148	308	440	69	355	893
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	406	361	539	457	415	1131
Arrive On Green	0.23	0.23	0.29	0.29	0.23	0.60
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	148	308	440	69	355	893
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	4.2	11.1	13.1	1.9	11.4	21.6
Cycle Q Clear(g_c), s	4.2	11.1	13.1	1.9	11.4	21.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	406	361	539	457	415	1131
V/C Ratio(X)	0.36	0.85	0.82	0.15	0.85	0.79
Avail Cap(c_a), veh/h	477	424	782	663	566	1533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	22.1	19.8	15.8	21.9	8.9
Incr Delay (d2), s/veh	0.5	13.7	4.4	0.2	9.3	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	5.2	5.8	0.7	5.4	6.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.0	35.8	24.2	16.0	31.2	10.9
LnGrp LOS	B	D	C	B	C	B
Approach Vol, veh/h	456		509			1248
Approach Delay, s/veh	30.7		23.1			16.7
Approach LOS	C		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	18.9	22.2				41.2	18.6
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	19.0	25.0				49.0	16.0
Max Q Clear Time (g_c+I1), s	13.4	15.1				23.6	13.1
Green Ext Time (p_c), s	0.6	2.1				7.8	0.5

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	18	29	552	13	27	701
Future Volume (veh/h)	18	29	552	13	27	701
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	31	581	14	28	738
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	84	75	1071	907	617	1071
Arrive On Green	0.05	0.05	0.57	0.57	0.57	0.57
Sat Flow, veh/h	1781	1585	1870	1585	823	1870
Grp Volume(v), veh/h	19	31	581	14	28	738
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	823	1870
Q Serve(g_s), s	0.2	0.4	4.6	0.1	0.5	6.6
Cycle Q Clear(g_c), s	0.2	0.4	4.6	0.1	5.1	6.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	84	75	1071	907	617	1071
V/C Ratio(X)	0.23	0.41	0.54	0.02	0.05	0.69
Avail Cap(c_a), veh/h	1204	1071	2370	2008	1188	2370
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	11.0	3.1	2.2	4.7	3.6
Incr Delay (d2), s/veh	1.3	3.6	0.4	0.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.2	0.1	0.0	0.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.2	14.6	3.6	2.2	4.7	4.4
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	50		595			766
Approach Delay, s/veh	13.7		3.5			4.4
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		18.6				18.6	5.1
Change Period (Y+Rc), s		5.0				5.0	4.0
Max Green Setting (Gmax), s		30.0				30.0	16.0
Max Q Clear Time (g_c+I1), s		6.6				8.6	2.4
Green Ext Time (p_c), s		3.6				5.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	368	11	53	449	0	8	4	8	15	2	11
Future Volume (veh/h)	5	368	11	53	449	0	8	4	8	15	2	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	387	12	56	473	0	8	4	8	16	2	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	930	413	91	1093	488	15	28	56	30	14	81
Arrive On Green	0.01	0.26	0.26	0.05	0.31	0.00	0.01	0.05	0.05	0.02	0.06	0.06
Sat Flow, veh/h	1781	3554	1579	1781	3554	1585	1781	555	1110	1781	231	1384
Grp Volume(v), veh/h	5	387	12	56	473	0	8	0	12	16	0	14
Grp Sat Flow(s),veh/h/ln	1781	1777	1579	1781	1777	1585	1781	0	1665	1781	0	1615
Q Serve(g_s), s	0.1	2.3	0.1	0.8	2.7	0.0	0.1	0.0	0.2	0.2	0.0	0.2
Cycle Q Clear(g_c), s	0.1	2.3	0.1	0.8	2.7	0.0	0.1	0.0	0.2	0.2	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.67	1.00		0.86
Lane Grp Cap(c), veh/h	10	930	413	91	1093	488	15	0	84	30	0	95
V/C Ratio(X)	0.51	0.42	0.03	0.61	0.43	0.00	0.52	0.00	0.14	0.53	0.00	0.15
Avail Cap(c_a), veh/h	414	3578	1590	690	4129	1842	414	0	2064	414	0	2001
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.8	7.9	7.1	12.0	7.1	0.0	12.7	0.0	11.7	12.6	0.0	11.5
Incr Delay (d2), s/veh	36.3	0.3	0.0	6.5	0.3	0.0	24.6	0.0	0.8	14.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.4	0.0	0.4	0.4	0.0	0.1	0.0	0.1	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	8.2	7.1	18.5	7.4	0.0	37.3	0.0	12.5	26.6	0.0	12.3
LnGrp LOS	D	A	A	B	A	A	D	A	B	C	A	B
Approach Vol, veh/h		404			529			20			30	
Approach Delay, s/veh		8.7			8.6			22.4			19.9	
Approach LOS		A			A			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	5.3	5.3	10.8	4.2	5.5	4.1	11.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	32.0	10.0	26.0	6.0	32.0	6.0	30.0
Max Q Clear Time (g_c+I1), s	2.2	2.2	2.8	4.3	2.1	2.2	2.1	4.7
Green Ext Time (p_c), s	0.0	0.0	0.0	2.2	0.0	0.0	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	2	3	396	7	129	9	522	193	52	530	1
Future Volume (veh/h)	4	2	3	396	7	129	9	522	193	52	530	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	2	3	417	7	136	9	549	203	55	558	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	147	124	609	468	397	33	1180	366	155	1361	422
Arrive On Green	0.00	0.08	0.08	0.18	0.25	0.25	0.01	0.23	0.23	0.04	0.27	0.27
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	4	2	3	417	7	136	9	549	203	55	558	1
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.0	0.0	0.1	4.8	0.1	3.0	0.1	3.9	4.8	0.7	3.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	4.8	0.1	3.0	0.1	3.9	4.8	0.7	3.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	147	124	609	468	397	33	1180	366	155	1361	422
V/C Ratio(X)	0.27	0.01	0.02	0.68	0.01	0.34	0.27	0.47	0.55	0.35	0.41	0.00
Avail Cap(c_a), veh/h	892	702	595	973	746	633	892	1918	595	892	1918	595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	18.1	18.1	16.4	12.0	13.1	21.0	14.1	14.4	19.7	12.9	11.5
Incr Delay (d2), s/veh	9.2	0.0	0.1	1.4	0.0	0.5	4.4	0.3	1.3	1.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.7	0.0	0.9	0.1	1.3	1.6	0.3	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	18.1	18.2	17.8	12.0	13.6	25.4	14.4	15.8	21.1	13.1	11.5
LnGrp LOS	C	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		9			560			761			614	
Approach Delay, s/veh		23.6			16.7			14.9			13.8	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	14.8	12.5	8.3	5.4	16.4	5.2	15.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	12.0	16.0	11.0	16.0	11.0	17.0
Max Q Clear Time (g_c+I1), s	2.7	6.8	6.8	2.1	2.1	5.8	2.0	5.0
Green Ext Time (p_c), s	0.1	3.0	0.7	0.0	0.0	2.7	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	183	21	32	507	69	10	22	8	31	24	73
Future Volume (veh/h)	52	183	21	32	507	69	10	22	8	31	24	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	193	22	34	534	73	11	23	8	33	25	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	1034	461	57	982	438	67	71	60	191	200	170
Arrive On Green	0.05	0.29	0.29	0.03	0.28	0.28	0.04	0.04	0.04	0.11	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	55	193	22	34	534	73	11	23	8	33	25	77
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.1	1.5	0.4	0.7	4.8	1.3	0.2	0.4	0.2	0.6	0.5	1.7
Cycle Q Clear(g_c), s	1.1	1.5	0.4	0.7	4.8	1.3	0.2	0.4	0.2	0.6	0.5	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	83	1034	461	57	982	438	67	71	60	191	200	170
V/C Ratio(X)	0.66	0.19	0.05	0.60	0.54	0.17	0.16	0.33	0.13	0.17	0.12	0.45
Avail Cap(c_a), veh/h	522	2271	1013	522	2271	1013	1138	1195	1013	759	797	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	10.0	9.6	17.9	11.6	10.3	17.5	17.6	17.5	15.3	15.2	15.7
Incr Delay (d2), s/veh	8.8	0.1	0.0	9.8	0.5	0.2	1.1	2.6	1.0	0.4	0.3	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.5	0.1	0.4	1.5	0.4	0.1	0.2	0.1	0.2	0.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.4	10.1	9.6	27.7	12.0	10.5	18.6	20.2	18.5	15.7	15.5	17.6
LnGrp LOS	C	B	A	C	B	B	B	C	B	B	B	B
Approach Vol, veh/h		270			641			42			135	
Approach Delay, s/veh		13.4			12.7			19.5			16.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.4	6.2	15.9		9.0	6.7	15.4				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		24.0	11.0	24.0		16.0	11.0	24.0				
Max Q Clear Time (g_c+I1), s		2.4	2.7	3.5		3.7	3.1	6.8				
Green Ext Time (p_c), s		0.1	0.0	1.2		0.3	0.0	3.6				

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	20	110	29	30	109	120	695	25	71	753	90
Future Volume (veh/h)	100	20	110	29	30	109	120	695	25	71	753	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	105	21	116	31	32	115	126	732	26	75	793	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	312	264	51	222	188	165	1548	481	97	1353	420
Arrive On Green	0.08	0.17	0.17	0.03	0.12	0.12	0.09	0.30	0.30	0.05	0.26	0.26
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	105	21	116	31	32	115	126	732	26	75	793	95
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	2.6	0.4	2.9	0.8	0.7	3.1	3.1	5.2	0.5	1.9	6.0	2.1
Cycle Q Clear(g_c), s	2.6	0.4	2.9	0.8	0.7	3.1	3.1	5.2	0.5	1.9	6.0	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	312	264	51	222	188	165	1548	481	97	1353	420
V/C Ratio(X)	0.77	0.07	0.44	0.61	0.14	0.61	0.77	0.47	0.05	0.78	0.59	0.23
Avail Cap(c_a), veh/h	438	669	567	438	669	567	438	1941	603	438	1941	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	15.7	16.7	21.5	17.7	18.7	19.8	12.7	11.0	20.9	14.3	12.8
Incr Delay (d2), s/veh	8.8	0.1	1.1	11.2	0.3	3.2	7.2	0.2	0.0	12.5	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.2	1.0	0.4	0.3	1.2	1.5	1.7	0.2	1.0	2.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.1	15.8	17.9	32.6	18.0	21.9	27.0	12.9	11.1	33.3	14.7	13.1
LnGrp LOS	C	B	B	C	B	C	C	B	B	C	B	B
Approach Vol, veh/h		242			178			884			963	
Approach Delay, s/veh		22.6			23.1			14.9			16.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	18.6	6.3	12.5	9.1	16.8	8.4	10.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	3.9	7.2	2.8	4.9	5.1	8.0	4.6	5.1
Green Ext Time (p_c), s	0.1	3.6	0.0	0.3	0.1	3.8	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	66	11	438	160	8	17	5	180	21	9	14
Future Volume (veh/h)	10	66	11	438	160	8	17	5	180	21	9	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	69	12	461	168	8	18	5	189	22	9	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	294	131	551	1352	603	32	299	253	38	305	259
Arrive On Green	0.01	0.08	0.08	0.31	0.38	0.38	0.02	0.16	0.16	0.02	0.16	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	11	69	12	461	168	8	18	5	189	22	9	15
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	0.9	0.3	11.3	1.4	0.1	0.5	0.1	5.3	0.6	0.2	0.4
Cycle Q Clear(g_c), s	0.3	0.9	0.3	11.3	1.4	0.1	0.5	0.1	5.3	0.6	0.2	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	20	294	131	551	1352	603	32	299	253	38	305	259
V/C Ratio(X)	0.54	0.23	0.09	0.84	0.12	0.01	0.57	0.02	0.75	0.58	0.03	0.06
Avail Cap(c_a), veh/h	418	1670	745	951	2732	1219	418	879	745	418	879	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	20.1	19.8	15.1	9.4	9.0	22.8	16.6	18.8	22.7	16.5	16.6
Incr Delay (d2), s/veh	20.6	0.4	0.3	3.5	0.0	0.0	14.9	0.0	4.4	13.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.1	4.3	0.5	0.0	0.3	0.0	2.0	0.4	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	20.5	20.1	18.5	9.5	9.0	37.7	16.6	23.1	36.0	16.5	16.6
LnGrp LOS	D	C	C	B	A	A	D	B	C	D	B	B
Approach Vol, veh/h		92			637			212			46	
Approach Delay, s/veh		23.2			16.0			24.2			25.9	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	12.5	19.5	8.9	5.8	12.6	5.5	22.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	22.0	25.0	22.0	11.0	22.0	11.0	36.0
Max Q Clear Time (g_c+I1), s	2.6	7.3	13.3	2.9	2.5	2.4	2.3	3.4
Green Ext Time (p_c), s	0.0	0.5	1.2	0.3	0.0	0.0	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	9	72	364	46	0	169	715	200	0	869	0
Future Volume (veh/h)	0	9	72	364	46	0	169	715	200	0	869	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	9	76	383	48	0	178	753	211	0	915	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	7	142	120	539	625	529	303	2357	732	7	1388	431
Arrive On Green	0.00	0.08	0.08	0.16	0.33	0.00	0.09	0.46	0.46	0.00	0.27	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	0	9	76	383	48	0	178	753	211	0	915	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.0	0.2	2.3	5.1	0.9	0.0	2.4	4.6	4.0	0.0	7.8	0.0
Cycle Q Clear(g_c), s	0.0	0.2	2.3	5.1	0.9	0.0	2.4	4.6	4.0	0.0	7.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	7	142	120	539	625	529	303	2357	732	7	1388	431
V/C Ratio(X)	0.00	0.06	0.63	0.71	0.08	0.00	0.59	0.32	0.29	0.00	0.66	0.00
Avail Cap(c_a), veh/h	777	611	518	777	625	529	777	2357	732	777	1774	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	21.0	22.0	19.6	11.1	0.0	21.5	8.3	8.2	0.0	15.8	0.0
Incr Delay (d2), s/veh	0.0	0.2	5.4	1.7	0.1	0.0	1.8	0.1	0.2	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.9	2.0	0.3	0.0	1.0	1.3	1.1	0.0	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.2	27.4	21.3	11.2	0.0	23.3	8.4	8.4	0.0	16.4	0.0
LnGrp LOS	A	C	C	C	B	A	C	A	A	A	B	A
Approach Vol, veh/h		85			431			1142			915	
Approach Delay, s/veh		26.7			20.2			10.7			16.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	27.6	12.6	8.7	9.3	18.3	0.0	21.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	0.0	6.6	7.1	4.3	4.4	9.8	0.0	2.9
Green Ext Time (p_c), s	0.0	4.3	0.5	0.2	0.3	3.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	848	0	9	344	7	0	1	17	21	1	24
Future Volume (veh/h)	23	848	0	9	344	7	0	1	17	21	1	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	893	0	9	362	7	0	1	18	22	1	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	1413	0	17	1366	26	0	2	38	88	3	75
Arrive On Green	0.02	0.40	0.00	0.01	0.38	0.38	0.00	0.03	0.03	0.05	0.05	0.05
Sat Flow, veh/h	1781	3647	0	1781	3566	69	0	84	1507	1781	61	1526
Grp Volume(v), veh/h	24	893	0	9	180	189	0	0	19	22	0	26
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1858	0	0	1591	1781	0	1587
Q Serve(g_s), s	0.4	6.2	0.0	0.2	2.1	2.2	0.0	0.0	0.4	0.4	0.0	0.5
Cycle Q Clear(g_c), s	0.4	6.2	0.0	0.2	2.1	2.2	0.0	0.0	0.4	0.4	0.0	0.5
Prop In Lane	1.00		0.00	1.00		0.04	0.00		0.95	1.00		0.96
Lane Grp Cap(c), veh/h	43	1413	0	17	681	712	0	0	40	88	0	78
V/C Ratio(X)	0.56	0.63	0.00	0.52	0.26	0.27	0.00	0.00	0.47	0.25	0.00	0.33
Avail Cap(c_a), veh/h	231	2072	0	231	1036	1083	0	0	1082	1212	0	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	7.5	0.0	15.2	6.5	6.5	0.0	0.0	14.8	14.1	0.0	14.2
Incr Delay (d2), s/veh	10.9	0.5	0.0	22.7	0.2	0.2	0.0	0.0	8.4	1.5	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.0	0.0	0.2	0.4	0.4	0.0	0.0	0.2	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	8.0	0.0	37.9	6.7	6.7	0.0	0.0	23.3	15.6	0.0	16.6
LnGrp LOS	C	A	A	D	A	A	A	A	C	B	A	B
Approach Vol, veh/h		917			378			19			48	
Approach Delay, s/veh		8.4			7.5			23.3			16.2	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.8	4.3	16.3		5.5	4.7	15.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	4.0	18.0		21.0	4.0	18.0
Max Q Clear Time (g_c+I1), s		2.4	2.2	8.2		2.5	2.4	4.2
Green Ext Time (p_c), s		0.0	0.0	3.9		0.1	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	1	17	19	0	29	8	131	42	74	135	11
Future Volume (veh/h)	17	1	17	19	0	29	8	131	42	74	135	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	1	18	20	0	31	8	138	44	78	142	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	135	114	37	139	117	15	322	271	120	432	365
Arrive On Green	0.02	0.07	0.07	0.02	0.00	0.07	0.01	0.17	0.17	0.07	0.23	0.23
Sat Flow, veh/h	1781	1870	1576	1781	1870	1576	1781	1870	1576	1781	1870	1578
Grp Volume(v), veh/h	18	1	18	20	0	31	8	138	44	78	142	12
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1870	1576	1781	1870	1576	1781	1870	1578
Q Serve(g_s), s	0.2	0.0	0.3	0.3	0.0	0.4	0.1	1.6	0.6	1.0	1.5	0.1
Cycle Q Clear(g_c), s	0.2	0.0	0.3	0.3	0.0	0.4	0.1	1.6	0.6	1.0	1.5	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	135	114	37	139	117	15	322	271	120	432	365
V/C Ratio(X)	0.54	0.01	0.16	0.54	0.00	0.26	0.52	0.43	0.16	0.65	0.33	0.03
Avail Cap(c_a), veh/h	297	1716	1445	297	1716	1445	297	1716	1445	446	1872	1579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	10.3	10.4	11.6	0.0	10.5	11.8	8.9	8.5	10.9	7.7	7.1
Incr Delay (d2), s/veh	12.6	0.0	0.6	11.6	0.0	1.2	24.4	0.9	0.3	5.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.2	0.0	0.1	0.1	0.4	0.1	0.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	10.3	11.1	23.3	0.0	11.7	36.3	9.8	8.7	16.6	8.1	7.2
LnGrp LOS	C	B	B	C	A	B	D	A	A	B	A	A
Approach Vol, veh/h		37			51			190			232	
Approach Delay, s/veh		17.5			16.2			10.6			10.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	8.1	4.5	5.7	4.2	9.5	4.5	5.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	22.0	4.0	22.0	4.0	24.0	4.0	22.0
Max Q Clear Time (g_c+I1), s	3.0	3.6	2.3	2.3	2.1	3.5	2.2	2.4
Green Ext Time (p_c), s	0.0	0.7	0.0	0.0	0.0	0.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

SimTraffic Post-Processor | **Kaiser Roseville Campus Expansion TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 5 **Cirby Way/Cirby Hills Dr-Kaiser North Driveway** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	180	155	85.9%	121.3	48.0	F
	Through						
	Right Turn	330	334	101.3%	16.0	1.6	B
	Subtotal	510	489	95.9%	49.7	17.0	D
SB	Left Turn	30	28	93.7%	68.1	20.5	E
	Through						
	Right Turn	70	68	97.7%	33.3	11.9	C
	Subtotal	100	97	96.5%	41.9	10.6	D
EB	Left Turn	60	51	85.5%	66.7	20.5	E
	Through	1,440	1,162	80.7%	16.4	1.1	B
	Right Turn	80	66	82.2%	13.1	2.2	B
	Subtotal	1,580	1,279	81.0%	18.2	1.1	B
WB	Left Turn	50	31	62.3%	90.8	13.6	F
	Through	1,700	1,194	70.3%	44.2	20.0	D
	Right Turn	20	14	68.4%	40.2	32.6	D
	Subtotal	1,770	1,239	70.0%	45.3	19.6	D
Total		3,960	3,104	78.4%	34.6	9.2	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	36	71	185	46	18	57	637	226	7	768	8
Future Volume (veh/h)	26	36	71	185	46	18	57	637	226	7	768	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	38	75	195	48	19	60	671	238	7	808	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	129	190	240	59	23	94	750	636	20	1296	13
Arrive On Green	0.12	0.12	0.12	0.18	0.18	0.18	0.05	0.40	0.40	0.01	0.36	0.36
Sat Flow, veh/h	761	1071	1585	1325	326	129	1781	1870	1585	1781	3605	36
Grp Volume(v), veh/h	65	0	75	262	0	0	60	671	238	7	398	418
Grp Sat Flow(s),veh/h/ln	1832	0	1585	1781	0	0	1781	1870	1585	1781	1777	1864
Q Serve(g_s), s	1.9	0.0	2.6	8.5	0.0	0.0	2.0	20.2	6.4	0.2	11.1	11.1
Cycle Q Clear(g_c), s	1.9	0.0	2.6	8.5	0.0	0.0	2.0	20.2	6.4	0.2	11.1	11.1
Prop In Lane	0.42		1.00	0.74		0.07	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	220	0	190	322	0	0	94	750	636	20	639	670
V/C Ratio(X)	0.30	0.00	0.39	0.81	0.00	0.00	0.64	0.89	0.37	0.36	0.62	0.62
Avail Cap(c_a), veh/h	243	0	210	769	0	0	207	1015	860	177	967	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	24.5	23.7	0.0	0.0	28.0	16.9	12.7	29.6	15.9	15.9
Incr Delay (d2), s/veh	0.3	0.0	0.5	1.9	0.0	0.0	2.7	6.7	0.1	4.0	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.0	3.5	0.0	0.0	0.9	8.9	2.0	0.1	4.2	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	0.0	25.0	25.6	0.0	0.0	30.7	23.6	12.9	33.6	16.9	16.8
LnGrp LOS	C	A	C	C	A	A	C	C	B	C	B	B
Approach Vol, veh/h		140			262			969			823	
Approach Delay, s/veh		24.7			25.6			21.4			17.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	29.5		11.2	7.2	27.0		14.9
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	6.0	32.7		8.0	7.0	* 33		26.0
Max Q Clear Time (g_c+I1), s	2.2	22.2		4.6	4.0	13.1		10.5
Green Ext Time (p_c), s	0.0	2.0		0.1	0.0	3.2		0.5

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	179	0	402	392	5	0	395	372	0	359	383
Future Volume (veh/h)	231	179	0	402	392	5	0	395	372	0	359	383
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	216	226	0	423	413	5	0	416	392	0	378	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	288	302	0	555	1120	14	0	545	462	0	545	
Arrive On Green	0.16	0.16	0.00	0.31	0.31	0.31	0.00	0.29	0.29	0.00	0.29	0.00
Sat Flow, veh/h	1781	1870	0	1781	3596	44	0	1870	1585	0	1870	1585
Grp Volume(v), veh/h	216	226	0	423	204	214	0	416	392	0	378	0
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	1777	1863	0	1870	1585	0	1870	1585
Q Serve(g_s), s	7.6	7.6	0.0	14.1	5.9	5.9	0.0	13.4	15.3	0.0	11.8	0.0
Cycle Q Clear(g_c), s	7.6	7.6	0.0	14.1	5.9	5.9	0.0	13.4	15.3	0.0	11.8	0.0
Prop In Lane	1.00		0.00	1.00		0.02	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	288	302	0	555	553	580	0	545	462	0	545	
V/C Ratio(X)	0.75	0.75	0.00	0.76	0.37	0.37	0.00	0.76	0.85	0.00	0.69	
Avail Cap(c_a), veh/h	541	568	0	679	677	710	0	647	548	0	568	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	26.3	26.3	0.0	20.5	17.6	17.7	0.0	21.3	22.0	0.0	20.7	0.0
Incr Delay (d2), s/veh	2.9	2.8	0.0	5.9	0.9	0.8	0.0	4.5	10.4	0.0	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	3.4	0.0	6.1	2.3	2.4	0.0	6.1	6.6	0.0	5.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.3	29.1	0.0	26.4	18.5	18.5	0.0	25.7	32.4	0.0	23.9	0.0
LnGrp LOS	C	C	A	C	B	B	A	C	C	A	C	
Approach Vol, veh/h		442			841			808			378	A
Approach Delay, s/veh		29.2			22.5			29.0			23.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.4		24.5		16.0		24.5				
Change Period (Y+Rc), s		4.9		5.3		5.3		* 5.3				
Max Green Setting (Gmax), s		25.1		20.0		20.0		* 23				
Max Q Clear Time (g_c+I1), s		16.1		13.8		9.6		17.3				
Green Ext Time (p_c), s		4.4		0.7		1.0		1.9				

Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	555	217	37	483	21	130	54	64	8	40	17
Future Volume (veh/h)	21	555	217	37	483	21	130	54	64	8	40	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	584	228	39	508	22	137	57	67	8	42	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	1151	1003	113	1032	43	282	85	322	89	205	77
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	25	1818	1585	57	1630	68	786	420	1585	40	1008	377
Grp Volume(v), veh/h	606	0	228	569	0	0	194	0	67	68	0	0
Grp Sat Flow(s),veh/h/ln	1842	0	1585	1756	0	0	1206	0	1585	1424	0	0
Q Serve(g_s), s	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	1.8	0.1	0.0	0.0
Cycle Q Clear(g_c), s	8.8	0.0	3.1	8.1	0.0	0.0	8.1	0.0	1.8	8.2	0.0	0.0
Prop In Lane	0.04		1.00	0.07		0.04	0.71		1.00	0.12		0.26
Lane Grp Cap(c), veh/h	1241	0	1003	1188	0	0	368	0	322	370	0	0
V/C Ratio(X)	0.49	0.00	0.23	0.48	0.00	0.00	0.53	0.00	0.21	0.18	0.00	0.00
Avail Cap(c_a), veh/h	1241	0	1003	1188	0	0	539	0	507	568	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.91	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.0	0.0	3.9	4.9	0.0	0.0	19.0	0.0	16.6	16.6	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.5	1.3	0.0	0.0	0.4	0.0	0.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.7	2.2	0.0	0.0	1.9	0.0	0.6	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.4	0.0	4.5	6.1	0.0	0.0	19.4	0.0	16.7	16.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	A
Approach Vol, veh/h		834			569			261			68	
Approach Delay, s/veh		5.8			6.1			18.7			16.6	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.9	14.1	35.9	14.1
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 26	16.0	* 26	16.0
Max Q Clear Time (g_c+I1), s	10.8	10.1	10.1	10.2
Green Ext Time (p_c), s	2.9	0.3	2.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.3
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	613	20	42	642	61	12	43	17	118	72	95
Future Volume (veh/h)	46	613	20	42	642	61	12	43	17	118	72	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	645	21	44	676	64	13	45	18	124	76	100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	443	1172	38	495	1095	104	193	235	94	261	108	294
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	719	1801	59	770	1682	159	1209	1271	508	780	583	1585
Grp Volume(v), veh/h	48	0	666	44	0	740	13	0	63	200	0	100
Grp Sat Flow(s),veh/h/ln	719	0	1860	770	0	1842	1209	0	1779	1363	0	1585
Q Serve(g_s), s	2.1	0.0	9.7	1.6	0.0	11.7	0.5	0.0	1.5	5.7	0.0	2.7
Cycle Q Clear(g_c), s	13.8	0.0	9.7	11.4	0.0	11.7	7.8	0.0	1.5	7.2	0.0	2.7
Prop In Lane	1.00		0.03	1.00		0.09	1.00		0.29	0.62		1.00
Lane Grp Cap(c), veh/h	443	0	1210	495	0	1199	193	0	329	369	0	294
V/C Ratio(X)	0.11	0.00	0.55	0.09	0.00	0.62	0.07	0.00	0.19	0.54	0.00	0.34
Avail Cap(c_a), veh/h	443	0	1210	495	0	1199	356	0	569	571	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.1	0.0	4.7	7.8	0.0	5.1	23.3	0.0	17.2	19.9	0.0	17.7
Incr Delay (d2), s/veh	0.5	0.0	1.8	0.4	0.0	2.4	0.1	0.0	0.1	0.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.6	0.3	0.0	3.2	0.1	0.0	0.6	2.0	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.6	0.0	6.6	8.2	0.0	7.5	23.3	0.0	17.3	20.3	0.0	18.0
LnGrp LOS	A	A	A	A	A	A	C	A	B	C	A	B
Approach Vol, veh/h		714			784			76			300	
Approach Delay, s/veh		6.8			7.5			18.3			19.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		36.7		13.3		36.7		13.3				
Change Period (Y+Rc), s		* 4.2		4.0		* 4.2		4.0				
Max Green Setting (Gmax), s		* 26		16.0		* 26		16.0				
Max Q Clear Time (g_c+I1), s		15.8		9.8		13.7		9.2				
Green Ext Time (p_c), s		2.1		0.1		2.6		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	541	33	427	495	16	42	40	328	73	104	46
Future Volume (veh/h)	42	541	33	427	495	16	42	40	328	73	104	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	569	33	449	521	16	44	42	43	77	109	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	606	35	484	1059	33	138	116	269	110	121	38
Arrive On Green	0.03	0.35	0.35	0.27	0.59	0.59	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1781	1751	102	1781	1805	55	493	680	1585	363	712	225
Grp Volume(v), veh/h	44	0	602	449	0	537	86	0	43	225	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1852	1781	0	1860	1172	0	1585	1301	0	0
Q Serve(g_s), s	2.5	0.0	31.5	24.5	0.0	16.8	0.0	0.0	2.3	11.3	0.0	0.0
Cycle Q Clear(g_c), s	2.5	0.0	31.5	24.5	0.0	16.8	5.7	0.0	2.3	17.0	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03	0.51		1.00	0.34		0.17
Lane Grp Cap(c), veh/h	56	0	641	484	0	1091	254	0	269	269	0	0
V/C Ratio(X)	0.79	0.00	0.94	0.93	0.00	0.49	0.34	0.00	0.16	0.84	0.00	0.00
Avail Cap(c_a), veh/h	89	0	719	570	0	1224	254	0	269	269	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	48.1	0.0	31.6	35.5	0.0	12.0	36.5	0.0	35.4	42.6	0.0	0.0
Incr Delay (d2), s/veh	7.7	0.0	17.0	18.6	0.0	1.6	0.3	0.0	0.1	18.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	16.6	12.9	0.0	7.0	1.8	0.0	0.9	6.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	0.0	48.7	54.1	0.0	13.6	36.8	0.0	35.5	61.4	0.0	0.0
LnGrp LOS	E	A	D	D	A	B	D	A	D	E	A	A
Approach Vol, veh/h		646			986			129			225	
Approach Delay, s/veh		49.2			32.0			36.3			61.4	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	31.2	38.8		21.0	7.1	62.9		21.0
Change Period (Y+Rc), s	4.0	* 4.2		4.0	4.0	* 4.2		4.0
Max Green Setting (Gmax), s	32.0	* 39		17.0	5.0	* 66		17.0
Max Q Clear Time (g_c+I1), s	26.5	33.5		7.7	4.5	18.8		19.0
Green Ext Time (p_c), s	0.6	1.2		0.1	0.0	2.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	41.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	127	249	144	75	13	599	1059	43	30	1206	3
Future Volume (veh/h)	71	127	249	144	75	13	599	1059	43	30	1206	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	134	28	152	79	1	631	1115	19	32	1269	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	290	246	276	290	246	653	1275	569	255	1188	
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.19	0.36	0.36	0.14	0.33	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	75	134	28	152	79	1	631	1115	19	32	1269	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.3	5.9	1.4	7.1	3.4	0.0	16.3	26.4	0.7	1.4	30.1	0.0
Cycle Q Clear(g_c), s	3.3	5.9	1.4	7.1	3.4	0.0	16.3	26.4	0.7	1.4	30.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	290	246	276	290	246	653	1275	569	255	1188	
V/C Ratio(X)	0.27	0.46	0.11	0.55	0.27	0.00	0.97	0.87	0.03	0.13	1.07	
Avail Cap(c_a), veh/h	277	291	247	277	291	247	653	1386	618	255	1188	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.5	34.6	32.7	35.1	33.6	32.2	36.2	27.0	18.7	33.6	30.0	0.0
Incr Delay (d2), s/veh	0.2	0.4	0.1	1.3	0.2	0.0	26.9	6.4	0.0	0.1	46.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.7	0.5	3.2	1.5	0.0	9.0	11.4	0.2	0.6	19.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	35.0	32.8	36.5	33.7	32.2	63.2	33.4	18.8	33.7	76.3	0.0
LnGrp LOS	C	D	C	D	C	C	E	C	B	C	F	
Approach Vol, veh/h		237			232			1765			1301	A
Approach Delay, s/veh		34.4			35.5			43.9			75.2	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.9	37.2		18.0	20.0	34.1		18.0
Change Period (Y+Rc), s	4.0	4.9		4.0	3.0	* 4		4.0
Max Green Setting (Gmax), s	10.0	35.1		14.0	17.0	* 30		14.0
Max Q Clear Time (g_c+I1), s	3.4	28.4		7.9	18.3	32.1		9.1
Green Ext Time (p_c), s	0.0	3.9		0.3	0.0	0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	54.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	504	504	209	328	10
Future Volume (veh/h)	40	504	504	209	328	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	42	531	531	220	355	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	69	2032	765	645	643	291
Arrive On Green	0.04	0.57	0.41	0.41	0.18	0.00
Sat Flow, veh/h	1781	3647	1870	1577	3563	1610
Grp Volume(v), veh/h	42	531	531	220	355	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1870	1577	1781	1610
Q Serve(g_s), s	0.7	2.4	7.6	3.1	2.9	0.0
Cycle Q Clear(g_c), s	0.7	2.4	7.6	3.1	2.9	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	69	2032	765	645	643	291
V/C Ratio(X)	0.61	0.26	0.69	0.34	0.55	0.00
Avail Cap(c_a), veh/h	221	3304	1275	1075	2429	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.3	3.5	7.9	6.6	12.0	0.0
Incr Delay (d2), s/veh	8.3	0.1	1.1	0.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.3	2.0	0.7	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.5	3.5	9.0	6.9	12.8	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		573	751		355	
Approach Delay, s/veh		5.0	8.4		12.8	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		22.4		9.8	5.3	17.2
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0		22.0	4.0	22.0
Max Q Clear Time (g_c+I1), s		4.4		4.9	2.7	9.6
Green Ext Time (p_c), s		3.8		1.1	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	298	592	785	12	7	489
Future Volume (veh/h)	298	592	785	12	7	489
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	314	127	835	0	7	123
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	430	383	1137	1001	196	164
Arrive On Green	0.24	0.24	0.32	0.00	0.10	0.10
Sat Flow, veh/h	1781	1585	3563	1870	1870	1571
Grp Volume(v), veh/h	314	127	835	0	7	123
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1571
Q Serve(g_s), s	5.8	2.4	7.5	0.0	0.1	2.7
Cycle Q Clear(g_c), s	5.8	2.4	7.5	0.0	0.1	2.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	430	383	1137	1001	196	164
V/C Ratio(X)	0.73	0.33	0.73	0.00	0.04	0.75
Avail Cap(c_a), veh/h	795	707	1590	1878	835	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	11.2	10.9	0.0	14.4	15.6
Incr Delay (d2), s/veh	2.4	0.5	1.1	0.0	0.1	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.3	2.3	0.0	0.0	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.9	11.7	12.0	0.0	14.5	22.2
LnGrp LOS	B	B	B	A	B	C
Approach Vol, veh/h	441			835	130	
Approach Delay, s/veh	14.0			12.0	21.8	
Approach LOS	B			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		23.2		12.7	15.4	7.8
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		36.0		16.0	16.0	16.0
Max Q Clear Time (g_c+I1), s		0.0		7.8	9.5	4.7
Green Ext Time (p_c), s		0.0		0.9	2.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor | **Amoruso EIR - Blue Oaks**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 13 **New Meadow Dr/Blue Oaks Blvd** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	24	25	102.9%	59.1	7.0	E
	Through						
	Right Turn	6	6	101.7%	18.5	12.3	B
	Subtotal	**30**	**31**	**102.7%**	**50.9**	**5.4**	**D**
EB	Left Turn	9	9	100.0%	47.9	7.1	D
	Through	651	612	94.0%	10.6	1.4	B
	Right Turn						
	Subtotal	**660**	**621**	**94.1%**	**11.1**	**1.3**	**B**
WB	Left Turn						
	Through	804	664	82.6%	15.2	1.3	B
	Right Turn	138	109	78.7%	18.8	1.4	B
	Subtotal	**942**	**773**	**82.0%**	**15.7**	**1.3**	**B**
Total		**1,632**	**1,424**	**87.3%**	**14.5**	**0.8**	**B**

Intersection 10 **Diamond Creek Blvd/Blue Oaks Blvd-Wal-Mart** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	21	19	92.4%	54.0	8.9	D
	Through	7	6	91.4%	60.2	24.0	E
	Right Turn	8	10	120.0%	15.5	4.5	B
	Subtotal	**36**	**35**	**98.3%**	**44.8**	**9.9**	**D**
SB	Left Turn	75	73	96.9%	50.4	4.5	D
	Through	8	9	108.8%	56.6	14.6	E
	Right Turn	47	46	97.2%	49.6	7.3	D
	Subtotal	**130**	**127**	**97.8%**	**50.5**	**4.6**	**D**
EB	Left Turn	19	19	101.1%	75.3	19.2	E
	Through	353	344	97.4%	23.9	2.3	C
	Right Turn	9	10	107.8%	5.8	0.9	A
	Subtotal	**381**	**373**	**97.8%**	**26.2**	**2.7**	**C**
WB	Left Turn	7	6	85.7%	73.8	16.3	E
	Through	697	557	79.9%	41.1	10.6	D
	Right Turn	57	48	83.5%	20.8	9.9	C
	Subtotal	**761**	**611**	**80.2%**	**39.8**	**10.5**	**D**
Total		**1,308**	**1,146**	**87.6%**	**36.6**	**6.2**	**D**

SimTraffic Post-Processor | **Amoruso EIR - Blue Oaks**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 15 **Foothills Blvd/Blue Oaks Blvd-Hwy 65 NB Ramp** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	151	119	78.6%	203.4	39.0	F
	Through	239	186	77.9%	205.9	37.9	F
	Right Turn	63	59	93.5%	4.2	2.7	A
	Subtotal	**453**	**364**	**80.3%**	**172.2**	**31.1**	**F**
SB	Left Turn	206	126	61.1%	354.1	34.6	F
	Through	198	193	97.5%	54.9	4.0	D
	Right Turn	75	67	88.8%	35.6	8.3	D
	Subtotal	**479**	**386**	**80.5%**	**149.6**	**14.1**	**F**
EB	Left Turn	33	34	104.2%	81.9	10.9	F
	Through	551	474	86.0%	83.0	8.2	F
	Right Turn	91	76	83.1%	102.3	17.0	F
	Subtotal	**675**	**584**	**86.5%**	**85.4**	**8.2**	**F**
WB	Left Turn	78	68	87.7%	64.8	8.9	E
	Through	716	589	82.2%	53.1	1.5	D
	Right Turn	110	82	74.7%	29.0	3.5	C
	Subtotal	**904**	**740**	**81.8%**	**51.5**	**1.4**	**D**
Total		**2,511**	**2,072**	**82.5%**	**100.3**	**4.9**	**F**

Intersection 11 **Woodcreek Oaks Blvd-Pleasant Grove Blvd/Blue Oaks Blvd** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	30	29	98.0%	66.1	12.5	E
	Through	85	75	88.0%	144.0	46.4	F
	Right Turn	57	56	98.8%	45.1	27.5	D
	Subtotal	**172**	**161**	**93.3%**	**96.4**	**36.2**	**F**
SB	Left Turn	152	131	86.4%	141.7	34.5	F
	Through	156	145	92.7%	139.3	25.5	F
	Right Turn	13	10	77.7%	83.6	26.5	F
	Subtotal	**321**	**286**	**89.1%**	**138.7**	**24.7**	**F**
EB	Left Turn	34	30	89.1%	56.4	5.5	E
	Through	389	384	98.8%	57.7	4.3	E
	Right Turn	40	36	89.5%	31.5	5.4	C
	Subtotal	**463**	**450**	**97.3%**	**55.5**	**3.5**	**E**
WB	Left Turn	176	143	81.5%	48.6	9.3	D
	Through	780	657	84.2%	33.0	6.8	C
	Right Turn						
	Subtotal	**956**	**800**	**83.7%**	**35.9**	**7.1**	**D**
Total		**1,912**	**1,697**	**88.8%**	**64.0**	**5.0**	**E**

SimTraffic Post-Processor | **Amoruso EIR - Blue Oaks**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 17 **Washington Blvd/Blue Oaks Blvd** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	178	154	86.2%	164.5	33.8	F
	Through						
	Right Turn	292	291	99.8%	55.7	12.2	E
	Subtotal	**470**	**445**	**94.7%**	**93.4**	**15.9**	**F**
SB	Left Turn	18	17	96.7%	79.9	32.1	E
	Through	128	127	99.1%	80.7	30.0	F
	Right Turn	50	48	95.2%	33.8	29.7	C
	Subtotal	**196**	**192**	**97.9%**	**69.0**	**30.5**	**E**
EB	Left Turn						
	Through	382	312	81.8%	74.0	10.8	E
	Right Turn	151	123	81.2%	14.1	2.4	B
	Subtotal	**533**	**435**	**81.6%**	**57.2**	**8.2**	**E**
WB	Left Turn	92	91	98.4%	58.8	4.7	E
	Through	303	307	101.5%	25.1	2.0	C
	Right Turn	99	105	105.6%	5.1	0.7	A
	Subtotal	**494**	**502**	**101.7%**	**27.1**	**1.7**	**C**
Total		**1,693**	**1,574**	**93.0%**	**59.3**	**8.3**	**E**

Intersection 12 **Wood Meadow Dwy/Blue Oaks Blvd** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	172	163	94.7%	95.4	34.1	F
	Through	1	2	160.0%	88.4	56.2	F
	Right Turn	30	32	105.7%	69.6	34.8	E
	Subtotal	**203**	**196**	**96.7%**	**91.3**	**34.4**	**F**
SB	Left Turn	46	30	64.3%	288.7	60.0	F
	Through	1	1	60.0%	63.8	82.1	E
	Right Turn	8	6	70.0%	189.9	94.1	F
	Subtotal	**55**	**36**	**65.1%**	**274.1**	**67.9**	**F**
EB	Left Turn						
	Through	584	561	96.1%	12.4	2.2	B
	Right Turn	14	11	75.7%	7.7	1.8	A
	Subtotal	**598**	**572**	**95.6%**	**12.3**	**2.1**	**B**
WB	Left Turn	26	21	79.6%	76.8	5.7	E
	Through	776	643	82.9%	17.9	3.6	B
	Right Turn	7	6	78.6%	2.1	1.9	A
	Subtotal	**809**	**669**	**82.7%**	**19.6**	**3.5**	**B**
Total		**1,665**	**1,473**	**88.5%**	**32.5**	**5.5**	**C**

Intersection 14 **Collector C/Blue Oaks Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	32	33	103.8%	74.8	21.0	E
	Through						
	Right Turn	72	72	99.4%	49.6	11.0	D
	Subtotal	**104**	**105**	**100.8%**	**58.2**	**12.3**	**E**
SB	Left Turn	44	40	90.9%	106.9	36.7	F
	Through						
	Right Turn	20	23	116.0%	56.4	31.5	E
	Subtotal	**64**	**63**	**98.8%**	**88.6**	**35.2**	**F**
EB	Left Turn	52	45	86.9%	80.8	14.5	F
	Through	2,584	1,831	70.9%	112.9	20.5	F
	Right Turn	64	35	54.4%	171.1	38.6	F
	Subtotal	**2,700**	**1,911**	**70.8%**	**113.1**	**20.0**	**F**
WB	Left Turn	32	26	82.5%	66.7	13.0	E
	Through	3,712	2,784	75.0%	14.6	1.1	B
	Right Turn	20	16	82.0%	12.1	3.4	B
	Subtotal	**3,764**	**2,827**	**75.1%**	**15.0**	**1.0**	**B**
Total		**6,632**	**4,906**	**74.0%**	**54.9**	**6.8**	**D**

Intersection 16 **Fidelity Way/Blue Oaks Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn	408	382	93.5%	11.8	2.6	B
	Subtotal	**408**	**382**	**93.5%**	**11.8**	**2.6**	**B**
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,720	1,276	74.2%	6.2	0.9	A
	Right Turn	16	11	67.5%	1.5	0.8	A
	Subtotal	**1,736**	**1,287**	**74.1%**	**6.1**	**0.9**	**A**
WB	Left Turn	36	29	81.1%	14.1	4.6	B
	Through	2,088	1,883	90.2%	13.7	28.4	B
	Right Turn						
	Subtotal	**2,124**	**1,912**	**90.0%**	**13.6**	**27.8**	**B**
Total		**4,268**	**3,580**	**83.9%**	**9.6**	**11.3**	**A**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR - Eureka Douglas**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 90 **Eureka Rd/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	576	580	100.6%	72.5	14.1	E
	Through	660	663	100.5%	51.1	4.0	D
	Right Turn	20	20	102.0%	37.4	14.0	D
	Subtotal	**1,256**	**1,263**	**100.6%**	**60.8**	**7.1**	**E**
SB	Left Turn	980	824	84.1%	180.1	24.7	F
	Through	844	797	94.4%	52.9	4.4	D
	Right Turn						
	Subtotal	**1,824**	**1,621**	**88.9%**	**117.7**	**11.9**	**F**
EB	Left Turn	168	154	91.4%	79.3	20.1	E
	Through	1,360	1,340	98.5%	43.6	2.7	D
	Right Turn	452	407	90.0%	42.2	2.5	D
	Subtotal	**1,980**	**1,900**	**96.0%**	**46.4**	**3.3**	**D**
WB	Left Turn	68	61	90.0%	87.0	13.8	F
	Through	1,704	1,639	96.2%	48.4	7.8	D
	Right Turn	572	497	86.9%	29.5	6.1	C
	Subtotal	**2,344**	**2,197**	**93.7%**	**45.2**	**7.5**	**D**
Total		**7,404**	**6,981**	**94.3%**	**65.1**	**5.1**	**E**

Intersection 105 **Rocky Ridge Dr/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	308	302	98.1%	99.7	24.3	F
	Through	524	502	95.9%	41.6	4.8	D
	Right Turn	268	270	100.6%	29.4	3.9	C
	Subtotal	**1,100**	**1,074**	**97.6%**	**55.1**	**9.3**	**E**
SB	Left Turn	264	263	99.5%	93.6	9.0	F
	Through	1,196	1,204	100.7%	47.8	3.3	D
	Right Turn	512	478	93.3%	59.6	19.3	E
	Subtotal	**1,972**	**1,944**	**98.6%**	**57.1**	**5.5**	**E**
EB	Left Turn	132	128	97.0%	129.8	44.7	F
	Through	1,504	1,450	96.4%	31.2	2.9	C
	Right Turn	160	141	88.0%	15.1	2.6	B
	Subtotal	**1,796**	**1,719**	**95.7%**	**37.4**	**4.3**	**D**
WB	Left Turn	172	152	88.4%	65.6	11.6	E
	Through	1,904	1,766	92.8%	48.7	8.2	D
	Right Turn	184	165	89.6%	25.5	7.4	C
	Subtotal	**2,260**	**2,083**	**92.2%**	**48.1**	**7.7**	**D**
Total		**7,128**	**6,820**	**95.7%**	**49.1**	**4.0**	**D**

Intersection 102 **Santa Clara Dr/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	88	90	102.7%	70.4	15.0	E
	Through	36	36	100.0%	60.9	11.6	E
	Right Turn	120	122	101.7%	21.5	6.9	C
	Subtotal	**244**	**248**	**101.8%**	**45.8**	**5.8**	**D**
SB	Left Turn	176	164	93.2%	61.0	6.4	E
	Through	92	84	90.9%	55.2	10.5	E
	Right Turn	136	148	109.1%	36.4	8.4	D
	Subtotal	**404**	**396**	**98.0%**	**50.7**	**6.3**	**D**
EB	Left Turn	148	130	87.8%	63.9	19.8	E
	Through	1,744	1,683	96.5%	25.8	3.4	C
	Right Turn	44	46	104.5%	30.9	6.8	C
	Subtotal	**1,936**	**1,859**	**96.0%**	**28.7**	**4.0**	**C**
WB	Left Turn	176	150	85.2%	44.4	7.4	D
	Through	2,472	2,236	90.5%	21.7	2.1	C
	Right Turn	44	40	91.8%	11.9	3.6	B
	Subtotal	**2,692**	**2,427**	**90.1%**	**23.0**	**2.5**	**C**
Total		**5,276**	**4,930**	**93.4%**	**28.6**	**1.8**	**C**

Intersection 103 **Sierra Gardens Dr/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	176	164	93.4%	88.7	27.8	F
	Through	40	45	112.0%	90.7	29.3	F
	Right Turn	32	32	98.8%	79.4	21.8	E
	Subtotal	**248**	**241**	**97.1%**	**87.7**	**25.0**	**F**
SB	Left Turn	244	236	96.7%	61.3	14.0	E
	Through	52	51	97.7%	69.3	27.0	E
	Right Turn	40	51	128.0%	56.5	18.1	E
	Subtotal	**336**	**338**	**100.6%**	**61.7**	**14.7**	**E**
EB	Left Turn	48	41	85.0%	79.5	24.8	E
	Through	1,792	1,728	96.4%	14.7	1.2	B
	Right Turn	40	44	111.0%	8.8	1.3	A
	Subtotal	**1,880**	**1,813**	**96.4%**	**16.0**	**1.3**	**B**
WB	Left Turn	28	24	85.7%	101.6	14.0	F
	Through	2,660	2,415	90.8%	26.7	4.4	C
	Right Turn						
	Subtotal	**2,688**	**2,439**	**90.7%**	**27.5**	**4.5**	**C**
Total		**5,152**	**4,830**	**93.8%**	**28.7**	**3.2**	**C**

Intersection 101 **N. Sunrise Ave/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	420	393	93.5%	131.9	48.6	F
	Through	508	498	98.1%	47.0	6.0	D
	Right Turn	172	190	110.5%	25.0	3.1	C
	Subtotal	**1,100**	**1,081**	**98.3%**	**74.5**	**21.1**	**E**
SB	Left Turn	184	183	99.6%	66.9	8.0	E
	Through	812	831	102.4%	49.4	3.9	D
	Right Turn	492	482	98.0%	23.7	6.9	C
	Subtotal	**1,488**	**1,496**	**100.6%**	**43.3**	**3.7**	**D**
EB	Left Turn	448	332	74.0%	252.3	29.5	F
	Through	1,692	1,599	94.5%	65.1	6.8	E
	Right Turn	208	220	105.8%	12.9	2.2	B
	Subtotal	**2,348**	**2,151**	**91.6%**	**88.7**	**9.6**	**F**
WB	Left Turn	216	205	94.8%	59.8	5.4	E
	Through	2,332	2,057	88.2%	45.0	2.8	D
	Right Turn	152	130	85.8%	52.3	8.6	D
	Subtotal	**2,700**	**2,392**	**88.6%**	**46.7**	**2.6**	**D**
Total		**7,636**	**7,121**	**93.3%**	**62.9**	**4.0**	**E**

Intersection 104 **Target Dwy/Douglas Blvd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	144	150	104.2%	88.0	26.9	F
	Through	24	24	101.7%	78.3	31.6	E
	Right Turn	56	54	95.7%	58.1	25.5	E
	Subtotal	**224**	**228**	**101.8%**	**79.9**	**23.6**	**E**
SB	Left Turn	116	106	91.0%	57.5	19.1	E
	Through	12	16	130.0%	65.3	32.7	E
	Right Turn	132	127	96.1%	47.3	20.6	D
	Subtotal	**260**	**248**	**95.4%**	**53.4**	**18.8**	**D**
EB	Left Turn	168	141	84.0%	72.0	14.8	E
	Through	1,668	1,589	95.3%	18.1	2.5	B
	Right Turn	64	66	102.5%	18.0	4.9	B
	Subtotal	**1,900**	**1,796**	**94.5%**	**22.4**	**3.5**	**C**
WB	Left Turn	72	70	96.7%	111.5	15.7	F
	Through	2,488	2,243	90.1%	41.3	1.9	D
	Right Turn	16	15	92.5%	41.2	8.2	D
	Subtotal	**2,576**	**2,327**	**90.3%**	**43.4**	**2.0**	**D**
Total		**4,960**	**4,599**	**92.7%**	**37.6**	**3.1**	**D**

Intersection 77 **Douglas Blvd/E. Roseville Pkwy** **Signal**

SimTraffic Post-Processor | **Amoruso Ranch Specific Plan EIR - Eureka Douglas**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	264	258	97.6%	65.7	3.6	E
	Through	736	734	99.7%	52.0	4.2	D
	Right Turn	56	57	101.4%	21.5	4.6	C
	Subtotal	**1,056**	**1,048**	**99.2%**	**53.8**	**3.4**	**D**
SB	Left Turn	820	746	91.0%	135.4	32.6	F
	Through	1,144	1,133	99.1%	51.8	4.2	D
	Right Turn	148	142	95.7%	6.6	1.3	A
	Subtotal	**2,112**	**2,021**	**95.7%**	**79.5**	**12.3**	**E**
EB	Left Turn	224	203	90.7%	56.8	4.7	E
	Through	1,872	1,724	92.1%	31.7	1.9	C
	Right Turn	412	381	92.5%	24.4	1.9	C
	Subtotal	**2,508**	**2,308**	**92.0%**	**32.7**	**1.8**	**C**
WB	Left Turn	124	113	91.3%	74.2	9.8	E
	Through	1,664	1,602	96.3%	64.8	7.6	E
	Right Turn	1,000	951	95.1%	60.1	19.6	E
	Subtotal	**2,788**	**2,666**	**95.6%**	**63.5**	**11.7**	**E**
Total		**8,464**	**8,043**	**95.0%**	**57.5**	**4.8**	**E**

Intersection 87 **N. Sunrise Ave/Eureka Rd** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	556	561	100.9%	70.5	11.6	E
	Through	548	558	101.9%	43.8	4.1	D
	Right Turn	216	211	97.6%	4.0	0.5	A
	Subtotal	**1,320**	**1,330**	**100.8%**	**48.7**	**5.1**	**D**
SB	Left Turn	172	178	103.5%	69.3	11.5	E
	Through	496	496	99.9%	50.6	6.2	D
	Right Turn	256	258	100.8%	28.0	4.4	C
	Subtotal	**924**	**932**	**100.8%**	**47.8**	**3.3**	**D**
EB	Left Turn	236	226	95.9%	124.7	51.3	F
	Through	1,688	1,645	97.5%	30.6	3.6	C
	Right Turn	392	370	94.4%	14.3	1.5	B
	Subtotal	**2,316**	**2,242**	**96.8%**	**37.6**	**7.1**	**D**
WB	Left Turn	192	181	94.4%	114.4	22.2	F
	Through	2,612	2,416	92.5%	79.1	21.9	E
	Right Turn	64	57	89.4%	34.3	20.6	C
	Subtotal	**2,868**	**2,655**	**92.6%**	**80.6**	**21.6**	**F**
Total		**7,428**	**7,158**	**96.4%**	**56.9**	**7.5**	**E**

Intersection 85 **I-80 WB Ramps/Atlantic** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**

NB	Left Turn						
	Through						
	Right Turn	1,160	1,184	102.1%	1.8	0.4	A
	Subtotal	**1,160**	**1,184**	**102.1%**	**1.8**	**0.4**	**A**
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	860	797	92.7%	18.2	0.9	B
	Right Turn	736	675	91.7%	30.5	3.0	C
	Subtotal	**1,596**	**1,472**	**92.2%**	**23.9**	**1.9**	**C**
WB	Left Turn	1,000	817	81.7%	111.5	27.0	F
	Through	1,284	1,141	88.9%	7.7	1.4	A
	Right Turn						
	Subtotal	**2,284**	**1,958**	**85.7%**	**51.0**	**11.6**	**D**
Total		**5,040**	**4,614**	**91.5%**	**29.7**	**4.9**	**C**

Intersection 86 **I-80 EB Ramps/Eureka Rd-Atlantic St** **Signal**

		Volume (veh/hr)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	164	144	87.8%	46.5	13.5	D
	Through	456	460	100.8%	51.6	6.0	D
	Right Turn	588	607	103.3%	7.4	1.1	A
	Subtotal	**1,208**	**1,211**	**100.2%**	**28.8**	**4.2**	**C**
SB	Left Turn	392	332	84.8%	173.0	53.3	F
	Through						
	Right Turn	356	316	88.7%	177.9	86.8	F
	Subtotal	**748**	**648**	**86.6%**	**174.2**	**61.4**	**F**
EB	Left Turn	224	161	71.8%	246.1	41.7	F
	Through	1,480	1,481	100.1%	34.6	2.3	C
	Right Turn	316	282	89.1%	14.1	1.0	B
	Subtotal	**2,020**	**1,924**	**95.2%**	**49.3**	**4.2**	**D**
WB	Left Turn						
	Through	1,812	1,654	91.3%	41.9	13.5	D
	Right Turn	1,632	1,497	91.7%	46.1	13.6	D
	Subtotal	**3,444**	**3,150**	**91.5%**	**43.9**	**13.4**	**D**
Total		**7,420**	**6,933**	**93.4%**	**54.5**	**5.8**	**D**

SimTraffic Post-Processor | **Amoruso EIR - Pleasant Grove**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 38 **Pleasant Grove Blvd/Fairway Dr** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	156	135	86.7%	98.5	19.4	F
	Through	341	306	89.6%	44.7	5.5	D
	Right Turn	162	141	86.9%	22.9	2.2	C
	Subtotal	**659**	**582**	**88.2%**	**52.0**	**7.6**	**D**
SB	Left Turn	32	25	77.8%	118.6	24.3	F
	Through	244	212	87.0%	145.4	31.4	F
	Right Turn	44	35	78.4%	133.8	42.0	F
	Subtotal	**320**	**272**	**84.9%**	**141.4**	**31.5**	**F**
EB	Left Turn	69	68	98.3%	57.5	4.3	E
	Through	129	129	99.6%	51.4	4.4	D
	Right Turn	143	119	83.1%	124.4	35.5	F
	Subtotal	**341**	**315**	**92.4%**	**80.6**	**14.9**	**F**
WB	Left Turn	173	141	81.3%	159.1	44.6	F
	Through	146	144	98.3%	37.6	3.0	D
	Right Turn	47	45	94.7%	17.3	2.1	B
	Subtotal	**366**	**329**	**89.8%**	**87.0**	**18.5**	**F**
Total		**1,686**	**1,497**	**88.8%**	**81.8**	**6.3**	**F**

Intersection 35 **Pleasant Grove Blvd/Highland Pointe Dr-Wal-Mart** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	104	91	87.0%	143.2	26.4	F
	Through	697	588	84.3%	129.0	24.3	F
	Right Turn	11	8	71.8%	124.5	24.7	F
	Subtotal	**812**	**686**	**84.5%**	**131.0**	**22.7**	**F**
SB	Left Turn	46	42	90.7%	91.4	23.6	F
	Through	531	481	90.5%	52.2	15.3	D
	Right Turn	78	66	84.4%	7.0	1.4	A
	Subtotal	**655**	**588**	**89.8%**	**50.1**	**12.9**	**D**
EB	Left Turn	167	108	64.7%	281.2	40.4	F
	Through	2	2	85.0%	67.2	53.9	E
	Right Turn	119	104	87.3%	88.6	21.4	F
	Subtotal	**288**	**214**	**74.2%**	**187.0**	**30.1**	**F**
WB	Left Turn	65	68	104.0%	52.2	3.1	D
	Through	6	7	113.3%	52.3	11.9	D
	Right Turn	77	77	100.3%	51.1	19.3	D
	Subtotal	**148**	**152**	**102.4%**	**51.7**	**11.0**	**D**
Total		**1,903**	**1,640**	**86.2%**	**101.9**	**8.6**	**F**

SimTraffic Post-Processor | **Amoruso EIR - Pleasant Grove**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 37 **Pleasant Grove Blvd/Hwy 65 NB Ramp** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	201	199	99.0%	57.2	6.0	E
	Through						
	Right Turn	166	163	98.4%	39.5	8.0	D
	Subtotal	**367**	**362**	**98.7%**	**49.3**	**5.6**	**D**
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	567	493	86.9%	14.2	1.5	B
	Right Turn	170	133	78.0%	11.8	0.6	B
	Subtotal	**737**	**625**	**84.8%**	**13.7**	**1.3**	**B**
WB	Left Turn						
	Through	535	457	85.5%	8.3	2.0	A
	Right Turn	57	47	82.6%	1.6	0.3	A
	Subtotal	**592**	**504**	**85.2%**	**7.7**	**1.9**	**A**
Total		**1,696**	**1,492**	**88.0%**	**20.3**	**2.1**	**C**

Intersection 36 **Pleasant Grove Blvd/Hwy 65 SB Ramp** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	41	43	103.9%	25.2	7.3	C
	Through						
	Right Turn	116	121	104.5%	26.0	13.8	C
	Subtotal	**157**	**164**	**104.3%**	**25.7**	**11.7**	**C**
EB	Left Turn						
	Through	696	587	84.3%	15.5	2.2	B
	Right Turn	3	2	50.0%	6.1	6.8	A
	Subtotal	**699**	**588**	**84.2%**	**15.4**	**2.2**	**B**
WB	Left Turn						
	Through	737	667	90.5%	15.7	7.1	B
	Right Turn						
	Subtotal	**737**	**667**	**90.5%**	**15.7**	**7.2**	**B**
Total		**1,593**	**1,419**	**89.1%**	**16.7**	**5.3**	**B**

SimTraffic Post-Processor | **Amoruso Ranch EIR**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 64 **Chase Dr/Roseville Pkwy** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	20	18	92.0%	59.0	6.8	E
	Through						
	Right Turn	19	20	106.8%	1.2	0.2	A
	Subtotal	**39**	**39**	**99.2%**	**28.7**	**4.7**	**C**
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	616	430	69.7%	26.9	5.3	C
	Right Turn	34	25	74.7%	15.1	5.7	B
	Subtotal	**650**	**455**	**70.0%**	**26.3**	**5.2**	**C**
WB	Left Turn	122	88	71.8%	76.0	17.2	E
	Through	605	470	77.7%	11.0	2.0	B
	Right Turn						
	Subtotal	**727**	**558**	**76.7%**	**21.3**	**4.5**	**C**
Total		**1,416**	**1,052**	**74.3%**	**23.7**	**2.2**	**C**

Intersection 69 **Creekside Ridge Dr/Roseville Pkwy-North Drwy** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	15	14	95.3%	82.0	10.0	F
	Through						
	Right Turn	18	17	92.8%	21.5	8.4	C
	Subtotal	**33**	**31**	**93.9%**	**50.1**	**11.2**	**D**
SB	Left Turn	72	74	103.2%	57.9	6.3	E
	Through	1	0	40.0%	11.1	18.1	B
	Right Turn	76	72	95.3%	53.3	10.5	D
	Subtotal	**149**	**147**	**98.7%**	**55.9**	**5.8**	**E**
EB	Left Turn	26	19	74.2%	56.8	15.9	E
	Through	686	480	69.9%	16.1	1.4	B
	Right Turn	3	2	70.0%	0.3	0.5	A
	Subtotal	**715**	**501**	**70.1%**	**17.6**	**1.5**	**B**
WB	Left Turn	10	7	70.0%	69.0	21.9	E
	Through	703	571	81.3%	24.4	2.7	C
	Right Turn	57	47	81.8%	20.3	3.3	C
	Subtotal	**770**	**625**	**81.2%**	**24.6**	**2.4**	**C**
Total		**1,667**	**1,304**	**78.2%**	**26.1**	**2.1**	**C**

SimTraffic Post-Processor | **Amoruso Ranch EIR**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 65 **Gibson Dr-Castaic Ct/Roseville Pkwy** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	1	0	40.0%	7.3	14.0	A
	Through	1	2	160.0%	51.7	44.4	D
	Right Turn	11	14	123.6%	24.8	12.8	C
	Subtotal	**13**	**16**	**120.0%**	**30.3**	**9.9**	**C**
SB	Left Turn	299	242	80.8%	156.7	22.5	F
	Through	2	1	40.0%	105.4	88.2	F
	Right Turn	92	65	70.5%	177.6	32.2	F
	Subtotal	**393**	**307**	**78.2%**	**161.1**	**22.7**	**F**
EB	Left Turn	54	39	71.5%	80.0	7.9	E
	Through	580	408	70.3%	11.8	1.4	B
	Right Turn						
	Subtotal	**634**	**447**	**70.4%**	**17.8**	**1.7**	**B**
WB	Left Turn	16	11	67.5%	64.4	12.3	E
	Through	635	499	78.6%	33.7	4.0	C
	Right Turn	165	129	78.4%	5.5	1.0	A
	Subtotal	**816**	**640**	**78.4%**	**28.5**	**3.1**	**C**
Total		**1,856**	**1,409**	**75.9%**	**53.9**	**4.4**	**D**

Intersection 71 **N. Sunrise/Roseville Pkwy** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	168	159	94.6%	109.2	13.3	F
	Through	17	17	100.0%	43.6	16.4	D
	Right Turn	72	71	98.5%	10.3	2.3	B
	Subtotal	**257**	**247**	**96.0%**	**76.4**	**10.0**	**E**
SB	Left Turn	4	4	87.5%	99.4	63.0	F
	Through	49	47	95.9%	91.8	26.8	F
	Right Turn	94	86	91.8%	45.7	8.0	D
	Subtotal	**147**	**137**	**93.1%**	**64.5**	**10.2**	**E**
EB	Left Turn	24	15	64.2%	58.7	10.4	E
	Through	646	448	69.4%	32.3	2.5	C
	Right Turn	174	122	69.8%	14.9	1.9	B
	Subtotal	**844**	**585**	**69.3%**	**29.4**	**2.3**	**C**
WB	Left Turn	69	40	58.4%	270.0	25.0	F
	Through	694	486	70.0%	63.7	12.6	E
	Right Turn						
	Subtotal	**763**	**526**	**69.0%**	**79.6**	**12.6**	**E**
Total		**2,011**	**1,495**	**74.3%**	**57.9**	**5.2**	**E**

Intersection 67 **Reserve Dr/Roseville Pkwy-Burger King Drwy** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	96	73	75.6%	236.1	26.8	F
	Through	24	20	81.3%	251.8	31.0	F
	Right Turn	118	86	72.6%	186.4	40.7	F
	Subtotal	**238**	**178**	**74.7%**	**213.8**	**28.4**	**F**
SB	Left Turn	75	77	103.1%	48.2	4.2	D
	Through	49	46	94.1%	50.0	6.1	D
	Right Turn	21	21	98.1%	7.7	4.4	A
	Subtotal	**145**	**144**	**99.3%**	**43.0**	**5.2**	**D**
EB	Left Turn	8	6	75.0%	73.7	17.2	E
	Through	781	571	73.1%	48.3	6.2	D
	Right Turn	59	40	67.8%	44.9	14.6	D
	Subtotal	**848**	**617**	**72.7%**	**48.3**	**6.4**	**D**
WB	Left Turn	89	62	69.2%	83.4	22.6	F
	Through	668	516	77.2%	16.3	3.3	B
	Right Turn	65	52	79.2%	3.2	0.5	A
	Subtotal	**822**	**629**	**76.5%**	**21.9**	**4.3**	**C**
Total		**2,053**	**1,567**	**76.3%**	**56.0**	**4.0**	**E**

Intersection 72 **Secret Ravine Pkwy/Roseville Pkwy-Douglas Blvd** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	41	37	89.8%	129.6	41.7	F
	Through						
	Right Turn	132	118	89.7%	97.1	33.9	F
	Subtotal	**173**	**155**	**89.7%**	**105.3**	**29.2**	**F**
EB	Left Turn	167	121	72.2%	50.0	9.7	D
	Through	512	364	71.0%	4.2	1.8	A
	Right Turn	1	1	80.0%	2.9	7.0	A
	Subtotal	**680**	**485**	**71.3%**	**15.6**	**3.3**	**B**
WB	Left Turn	4	3	67.5%	147.7	49.0	F
	Through	592	457	77.1%	97.0	28.4	F
	Right Turn	38	32	84.2%	68.1	27.6	E
	Subtotal	**634**	**491**	**77.5%**	**95.3**	**28.0**	**F**
Total		**1,487**	**1,131**	**76.1%**	**61.9**	**11.6**	**E**

Intersection 70 **Taylor Rd/Roseville Pkwy** **Signal**

SimTraffic Post-Processor | **Amoruso Ranch EIR**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	83	88	106.5%	61.7	7.1	E
	Through	110	105	95.0%	46.6	3.7	D
	Right Turn	57	60	104.7%	29.8	4.0	C
	Subtotal	**250**	**253**	**101.0%**	**48.0**	**2.9**	**D**
SB	Left Turn	111	49	44.5%	425.6	28.1	F
	Through	71	58	82.3%	52.8	6.1	D
	Right Turn	51	43	83.9%	30.9	5.0	C
	Subtotal	**233**	**151**	**64.6%**	**169.9**	**16.3**	**F**
EB	Left Turn	73	47	64.4%	137.6	49.7	F
	Through	661	476	72.1%	25.2	2.2	C
	Right Turn	26	19	73.5%	5.8	2.8	A
	Subtotal	**760**	**542**	**71.4%**	**34.4**	**5.1**	**C**
WB	Left Turn	52	33	63.3%	71.8	16.7	E
	Through	649	503	77.5%	68.4	10.2	E
	Right Turn	253	178	70.4%	49.5	4.5	D
	Subtotal	**954**	**714**	**74.8%**	**64.0**	**8.6**	**E**
Total		**2,197**	**1,659**	**75.5%**	**61.4**	**4.2**	**E**

Intersection 66 **Roseville Pkwy/West Mall Dwy** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	8	6	78.8%	70.4	28.7	E
	Through	721	549	76.2%	18.7	3.5	B
	Right Turn	26	20	76.9%	3.2	1.4	A
	Subtotal	**755**	**576**	**76.3%**	**18.7**	**3.4**	**B**
SB	Left Turn	81	60	73.6%	75.0	12.6	E
	Through	800	593	74.1%	13.9	5.6	B
	Right Turn	9	6	67.8%	8.7	5.5	A
	Subtotal	**890**	**659**	**74.0%**	**19.4**	**4.6**	**B**
EB	Left Turn	6	6	106.7%	55.9	15.1	E
	Through	1	1	110.0%	56.5	30.6	E
	Right Turn	6	7	118.3%	24.8	9.5	C
	Subtotal	**13**	**15**	**112.3%**	**39.7**	**8.2**	**D**
WB	Left Turn	34	36	104.7%	45.6	7.4	D
	Through	1	1	80.0%	15.6	17.5	B
	Right Turn	90	89	99.3%	2.8	0.4	A
	Subtotal	**125**	**126**	**100.6%**	**15.1**	**3.0**	**B**
Total		**1,783**	**1,375**	**77.1%**	**19.0**	**3.1**	**B**

Intersection 63 **Gibson Dr/Roseville Pkwy** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**

NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	19	19	98.9%	70.0	21.2	E
	Through						
	Right Turn	254	235	92.6%	31.3	19.0	C
	Subtotal	**273**	**254**	**93.1%**	**33.9**	**17.5**	**C**
EB	Left Turn	117	83	70.5%	74.5	14.7	E
	Through	631	437	69.3%	6.5	1.8	A
	Right Turn						
	Subtotal	**748**	**520**	**69.5%**	**17.2**	**2.2**	**B**
WB	Left Turn						
	Through	599	420	70.2%	51.6	21.3	D
	Right Turn	26	19	73.8%	44.8	32.5	D
	Subtotal	**625**	**439**	**70.3%**	**51.3**	**21.8**	**D**
Total		**1,646**	**1,213**	**73.7%**	**32.9**	**9.9**	**C**

Intersection 174 **Galleria/Antelope Creek** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	28	21	75.7%	49.0	8.5	D
	Through	497	423	85.1%	17.3	2.5	B
	Right Turn	50	40	80.2%	1.8	0.1	A
	Subtotal	**575**	**484**	**84.2%**	**17.4**	**2.2**	**B**
SB	Left Turn	71	54	76.1%	180.3	38.3	F
	Through	455	348	76.4%	118.7	30.5	F
	Right Turn	43	42	96.7%	5.9	1.8	A
	Subtotal	**569**	**443**	**77.9%**	**115.6**	**27.5**	**F**
EB	Left Turn	135	128	94.9%	70.0	30.8	E
	Through	18	18	98.9%	49.2	14.9	D
	Right Turn	28	26	94.3%	1.4	1.6	A
	Subtotal	**181**	**172**	**95.2%**	**57.5**	**25.3**	**E**
WB	Left Turn	123	81	66.0%	196.8	73.1	F
	Through	24	23	95.8%	59.1	12.6	E
	Right Turn	84	84	99.6%	6.2	5.3	A
	Subtotal	**231**	**188**	**81.3%**	**92.3**	**27.8**	**F**
Total		**1,556**	**1,288**	**82.7%**	**67.0**	**13.5**	**E**

Intersection 68 **Galleria/Roseville Pkwy** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	173	101	58.2%	314.0	26.1	F
	Through	225	204	90.8%	51.4	3.5	D

NB	Right Turn	21	20	94.3%	4.6	0.5	A
	Subtotal	**419**	**325**	**77.5%**	**130.1**	**9.4**	**F**
SB	Left Turn	210	118	56.0%	248.4	21.8	F
	Through	248	208	84.0%	36.2	3.9	D
	Right Turn	123	105	85.7%	4.3	0.5	A
	Subtotal	**581**	**431**	**74.3%**	**86.2**	**4.3**	**F**
EB	Left Turn	183	122	66.6%	110.1	20.2	F
	Through	486	365	75.0%	52.6	11.0	D
	Right Turn	281	201	71.4%	7.4	1.3	A
	Subtotal	**950**	**687**	**72.3%**	**49.7**	**7.7**	**D**
WB	Left Turn	86	72	83.8%	75.0	21.5	E
	Through	504	411	81.6%	45.6	9.0	D
	Right Turn	173	140	80.6%	3.3	0.3	A
	Subtotal	**763**	**623**	**81.6%**	**39.7**	**7.5**	**D**
Total		**2,713**	**2,066**	**76.2%**	**66.9**	**4.3**	**E**

Intersection 34 **Pleasant Grove Blvd/Roseville Pkwy** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	241	148	61.4%	113.3	14.6	F
	Through	391	292	74.7%	56.2	7.2	E
	Right Turn	292	223	76.5%	7.3	1.3	A
	Subtotal	**924**	**663**	**71.8%**	**52.6**	**3.3**	**D**
SB	Left Turn	81	63	77.4%	179.1	39.8	F
	Through	323	239	73.9%	203.4	42.6	F
	Right Turn	6	5	83.3%	98.9	50.6	F
	Subtotal	**410**	**306**	**74.7%**	**197.0**	**41.6**	**F**
EB	Left Turn	17	14	82.9%	115.8	24.7	F
	Through	345	242	70.3%	248.8	33.1	F
	Right Turn	203	139	68.4%	236.6	34.0	F
	Subtotal	**565**	**395**	**70.0%**	**239.7**	**32.9**	**F**
WB	Left Turn	236	152	64.4%	276.8	34.9	F
	Through	435	432	99.3%	48.6	6.2	D
	Right Turn	63	64	102.2%	14.6	3.5	B
	Subtotal	**734**	**648**	**88.3%**	**98.7**	**11.4**	**F**
Total		**2,633**	**2,013**	**76.5%**	**125.9**	**8.9**	**F**

SimTraffic Post-Processor | **Amoruso EIR**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 107 **Foothills Blvd/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through	165	112	67.9%	128.2	5.3	F
	Right Turn	139	80	57.7%	119.8	12.7	F
	Subtotal	**304**	**192**	**63.3%**	**124.6**	**7.5**	**F**
SB	Left Turn	494	377	76.3%	39.1	1.4	D
	Through	123	107	86.7%	13.6	7.8	B
	Right Turn						
	Subtotal	**617**	**483**	**78.3%**	**33.5**	**1.9**	**C**
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	214	120	55.9%	123.7	12.6	F
	Through						
	Right Turn	592	323	54.5%	77.3	10.9	E
	Subtotal	**806**	**442**	**54.9%**	**89.9**	**11.7**	**F**
Total		**1,727**	**1,118**	**64.7%**	**71.4**	**4.8**	**E**

Intersection 110 **Melody Ln/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through						
	Right Turn	63	51	80.3%	84.9	142.1	F
	Subtotal	**63**	**51**	**80.3%**	**84.9**	**142.1**	**F**
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	588	416	70.8%	13.8	7.6	B
	Right Turn	4	2	60.0%	9.6	9.1	A
	Subtotal	**592**	**419**	**70.7%**	**13.7**	**7.5**	**B**
WB	Left Turn	86	60	69.4%	25.3	5.2	C
	Through	704	457	64.9%	5.0	0.6	A
	Right Turn						
	Subtotal	**790**	**517**	**65.4%**	**7.4**	**1.0**	**A**
Total		**1,445**	**986**	**68.2%**	**12.8**	**6.9**	**B**

SimTraffic Post-Processor | **Amoruso EIR**
Average Results from 10 Runs | **2035 Cumulative Plus Project**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 109 **Northridge Dr/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	1	1	80.0%	24.5	32.3	C
	Through						
	Right Turn	6	7	108.3%	20.4	8.6	C
	Subtotal	**7**	**7**	**104.3%**	**24.3**	**13.0**	**C**
SB	Left Turn	9	9	94.4%	62.2	8.6	E
	Through						
	Right Turn	6	6	101.7%	22.1	10.9	C
	Subtotal	**15**	**15**	**97.3%**	**45.3**	**6.0**	**D**
EB	Left Turn	4	3	85.0%	71.4	35.5	E
	Through	581	424	72.9%	6.8	2.0	A
	Right Turn	7	5	68.6%	4.2	3.7	A
	Subtotal	**592**	**432**	**72.9%**	**7.2**	**2.0**	**A**
WB	Left Turn	3	2	53.3%	64.4	32.2	E
	Through	684	439	64.1%	10.3	3.6	B
	Right Turn						
	Subtotal	**687**	**440**	**64.1%**	**10.5**	**3.6**	**B**
Total		**1,301**	**894**	**68.7%**	**9.6**	**2.3**	**A**

Intersection 111 **Riverside Ave/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	361	209	57.8%	136.9	6.0	F
	Through	169	110	65.3%	46.3	4.2	D
	Right Turn	71	46	64.6%	11.9	2.9	B
	Subtotal	**601**	**365**	**60.7%**	**93.9**	**4.9**	**F**
SB	Left Turn	76	55	72.8%	232.2	70.1	F
	Through	183	113	61.5%	359.6	82.8	F
	Right Turn	60	40	66.3%	291.5	91.6	F
	Subtotal	**319**	**208**	**65.1%**	**313.1**	**79.6**	**F**
EB	Left Turn	62	26	41.9%	421.7	120.3	F
	Through	281	206	73.5%	28.2	4.0	C
	Right Turn	307	225	73.2%	3.2	0.2	A
	Subtotal	**650**	**457**	**70.3%**	**38.0**	**7.3**	**D**
WB	Left Turn	10	7	71.0%	252.0	63.1	F
	Through	406	299	73.6%	235.5	42.5	F
	Right Turn						
	Subtotal	**416**	**306**	**73.6%**	**235.7**	**42.2**	**F**
Total		**1,986**	**1,336**	**67.3%**	**140.2**	**18.0**	**F**

Intersection 108 **Vernon St/Cirby Way** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn	4	3	65.0%	83.9	46.4	F
	Through	14	13	90.7%	60.2	11.3	E
	Right Turn	28	28	100.0%	36.4	6.9	D
	Subtotal	**46**	**43**	**94.1%**	**46.2**	**6.8**	**D**
SB	Left Turn	16	14	87.5%	116.1	32.6	F
	Through	16	12	74.4%	118.0	39.9	F
	Right Turn	176	109	61.6%	264.0	52.2	F
	Subtotal	**208**	**134**	**64.6%**	**235.2**	**47.1**	**F**
EB	Left Turn	92	62	67.5%	56.1	8.2	E
	Through	535	392	73.2%	23.0	2.6	C
	Right Turn	5	4	86.0%	19.5	6.3	B
	Subtotal	**632**	**458**	**72.5%**	**27.4**	**3.1**	**C**
WB	Left Turn	23	13	56.1%	95.7	18.2	F
	Through	626	368	58.7%	60.4	13.3	E
	Right Turn	11	9	79.1%	41.0	16.5	D
	Subtotal	**660**	**389**	**59.0%**	**61.1**	**13.2**	**E**
Total		**1,546**	**1,025**	**66.3%**	**67.9**	**5.7**	**E**

Intersection 203 **Riverside Ave/I-80 WB Ramps** **Signal**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through	466	271	58.1%	195.1	19.9	F
	Right Turn	47	36	76.4%	29.5	11.9	C
	Subtotal	**513**	**307**	**59.8%**	**175.8**	**19.3**	**F**
SB	Left Turn						
	Through	256	174	68.0%	11.1	2.0	B
	Right Turn	244	170	69.8%	0.6	0.1	A
	Subtotal	**500**	**344**	**68.9%**	**5.9**	**0.9**	**A**
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	215	181	84.0%	58.9	29.5	E
	Through						
	Right Turn	114	79	68.9%	197.8	80.4	F
	Subtotal	**329**	**259**	**78.8%**	**100.1**	**38.2**	**F**
Total		**1,342**	**910**	**67.8%**	**89.6**	**15.1**	**F**

Intersection 204 **Riverside Ave/I-80 EB Ramps** **Signal**

SimTraffic Post-Processor **Amoruso EIR**
Average Results from 10 Runs **2035 Cumulative Plus Project**
Volume and Delay by Movement **PM Peak Hour**

		Volume (vehicles)			Total Delay (sec/veh)		
Direction	**Movement**	**Demand**	**Served**	**% Served**	**Average**	**Std. Dev.**	**LOS**
NB	Left Turn						
	Through	384	301	78.3%	122.9	39.5	F
	Right Turn	18	12	65.6%	128.0	39.1	F
	Subtotal	**402**	**312**	**77.7%**	**123.1**	**39.2**	**F**
SB	Left Turn	27	20	75.2%	92.1	18.6	F
	Through	395	296	74.8%	23.2	2.9	C
	Right Turn						
	Subtotal	**422**	**316**	**74.9%**	**27.6**	**3.2**	**C**
EB	Left Turn						
	Through	108	110	102.2%	61.7	7.1	E
	Right Turn	33	35	104.8%	23.8	7.0	C
	Subtotal	**141**	**145**	**102.8%**	**52.6**	**5.7**	**D**
WB	Left Turn	32	29	89.4%	51.1	9.0	D
	Through						
	Right Turn	120	96	79.8%	71.6	20.2	E
	Subtotal	**152**	**124**	**81.8%**	**66.8**	**14.9**	**E**
Total		**1,117**	**898**	**80.4%**	**70.2**	**13.3**	**E**

Cumulative Plus General Plan Constrained Conditions

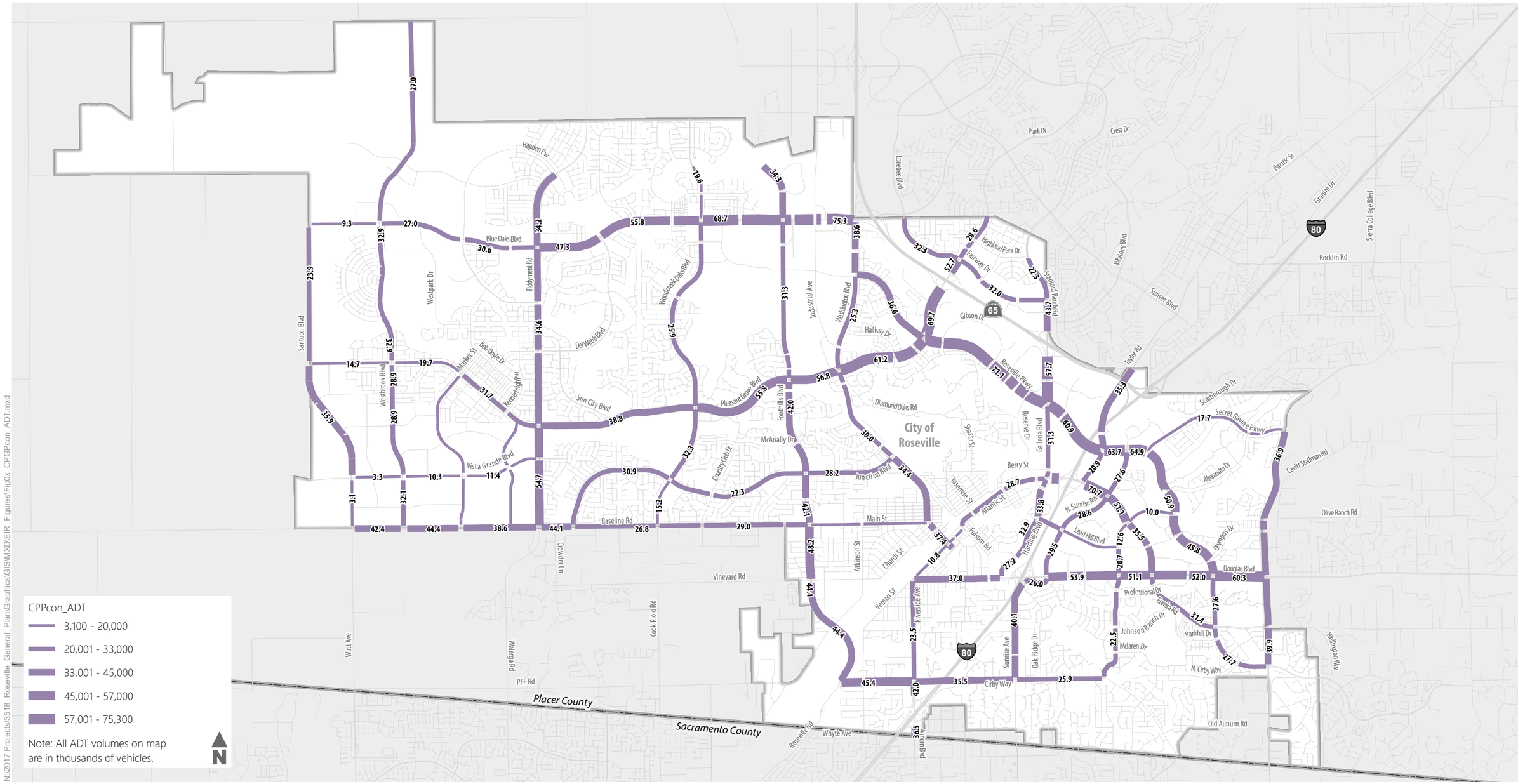


Figure 4.3-A5

Cumulative Plus General Plan Constrained Network Average Daily Traffic Volumes

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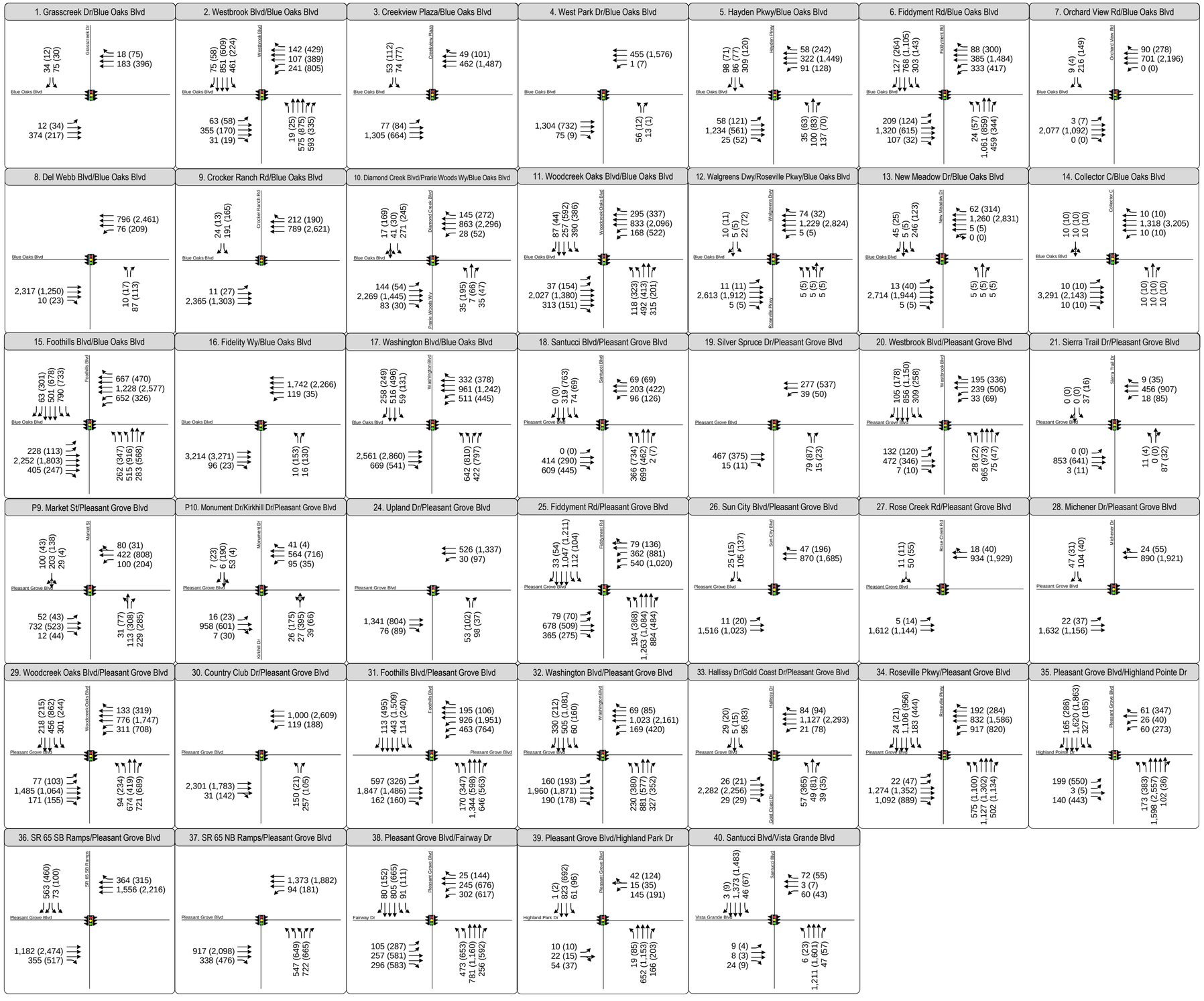


FIGURE 4.3-A9-a

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Constrained Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

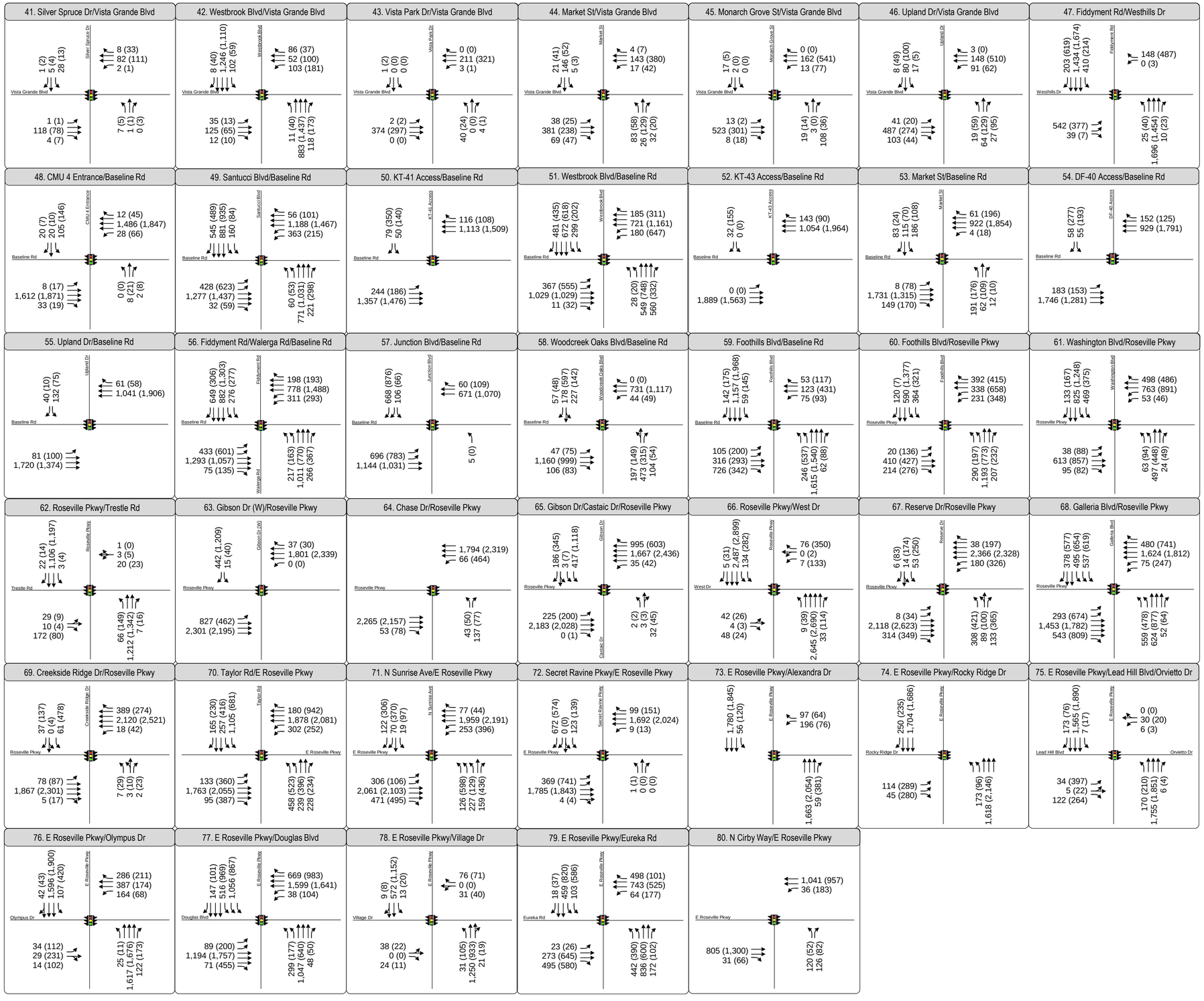


FIGURE 4.3-A9-b

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Constrained Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

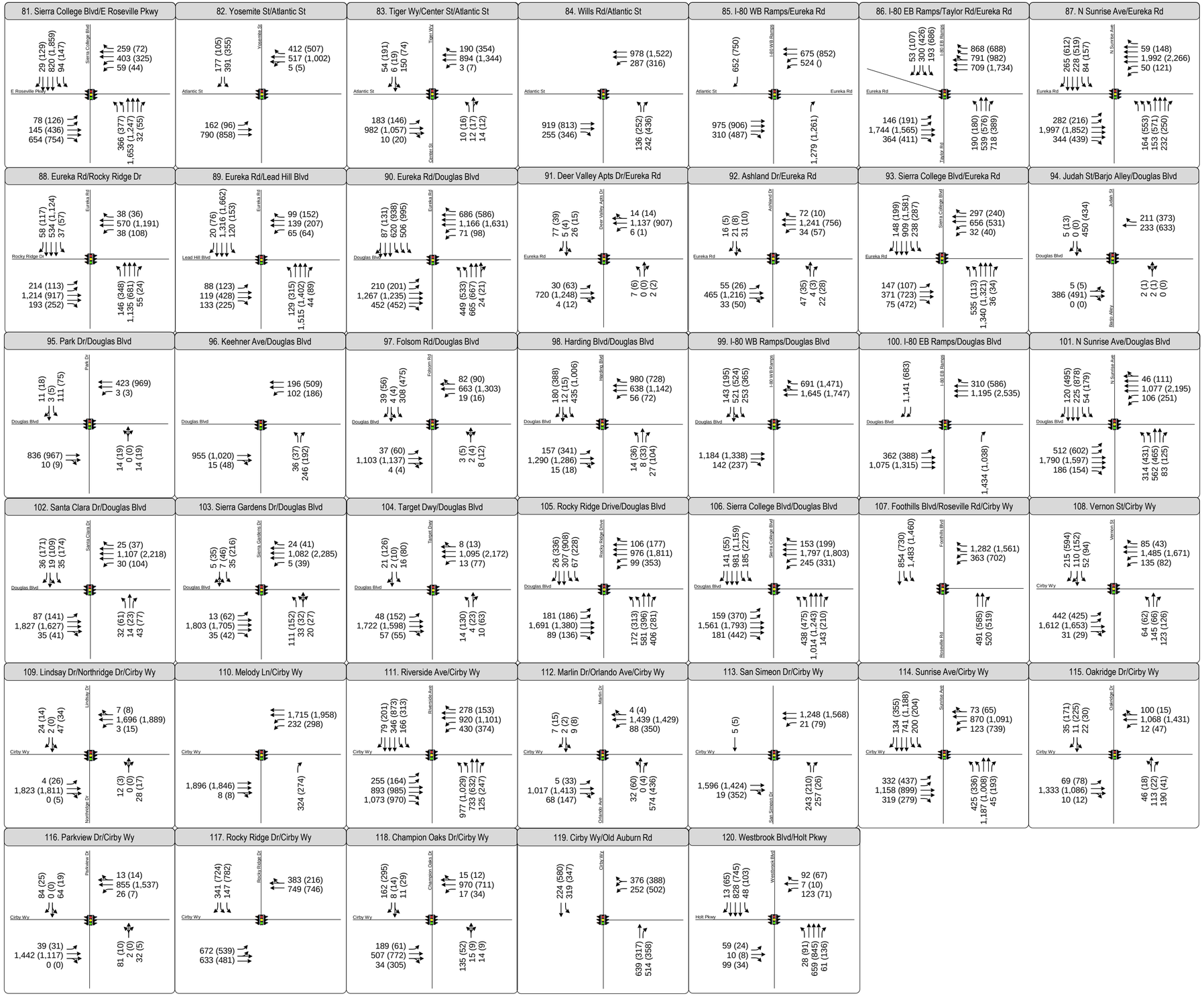


FIGURE 4.3-A9-c

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Constrained Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

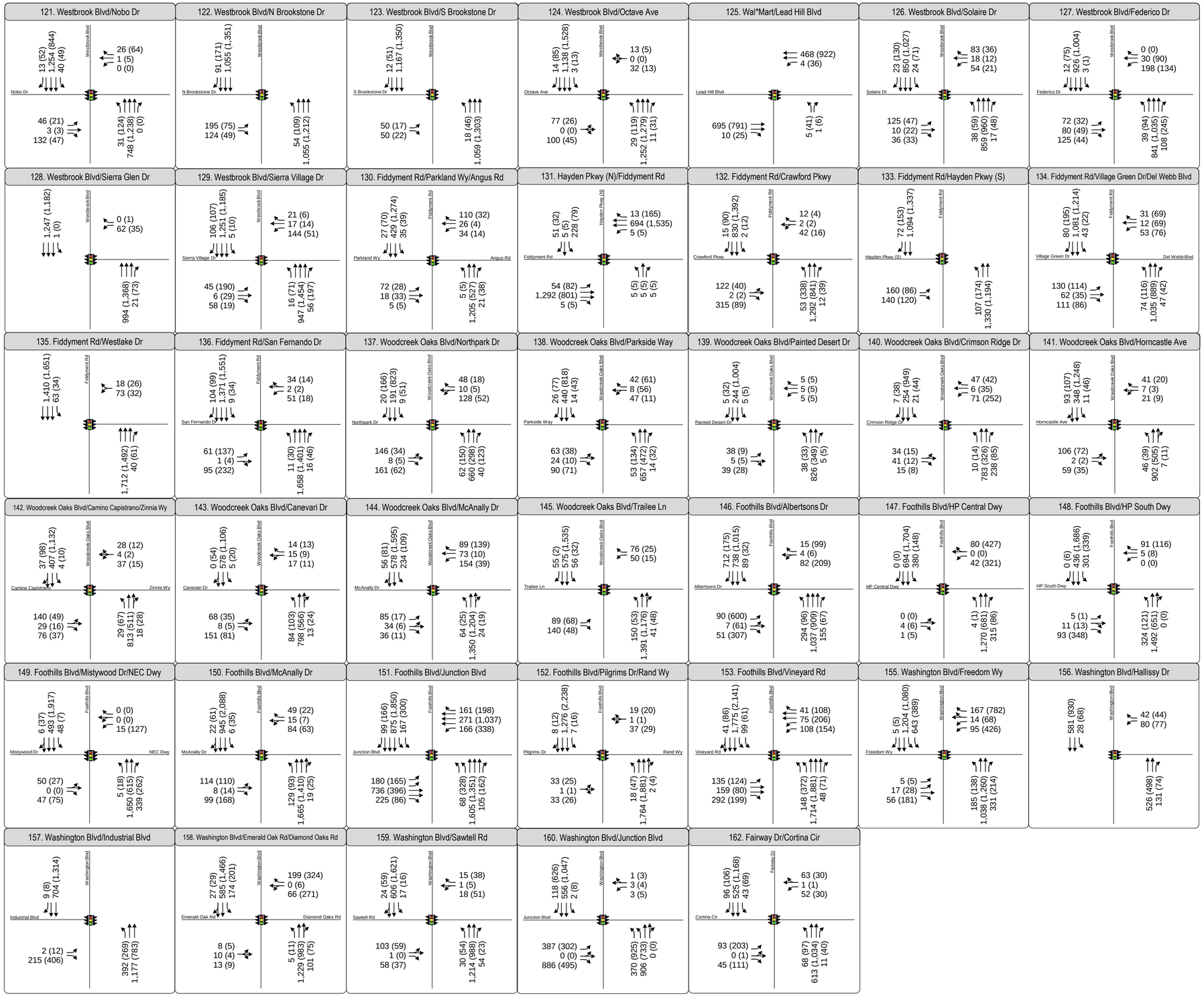


FIGURE 4.3-A9-d

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Constrained Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

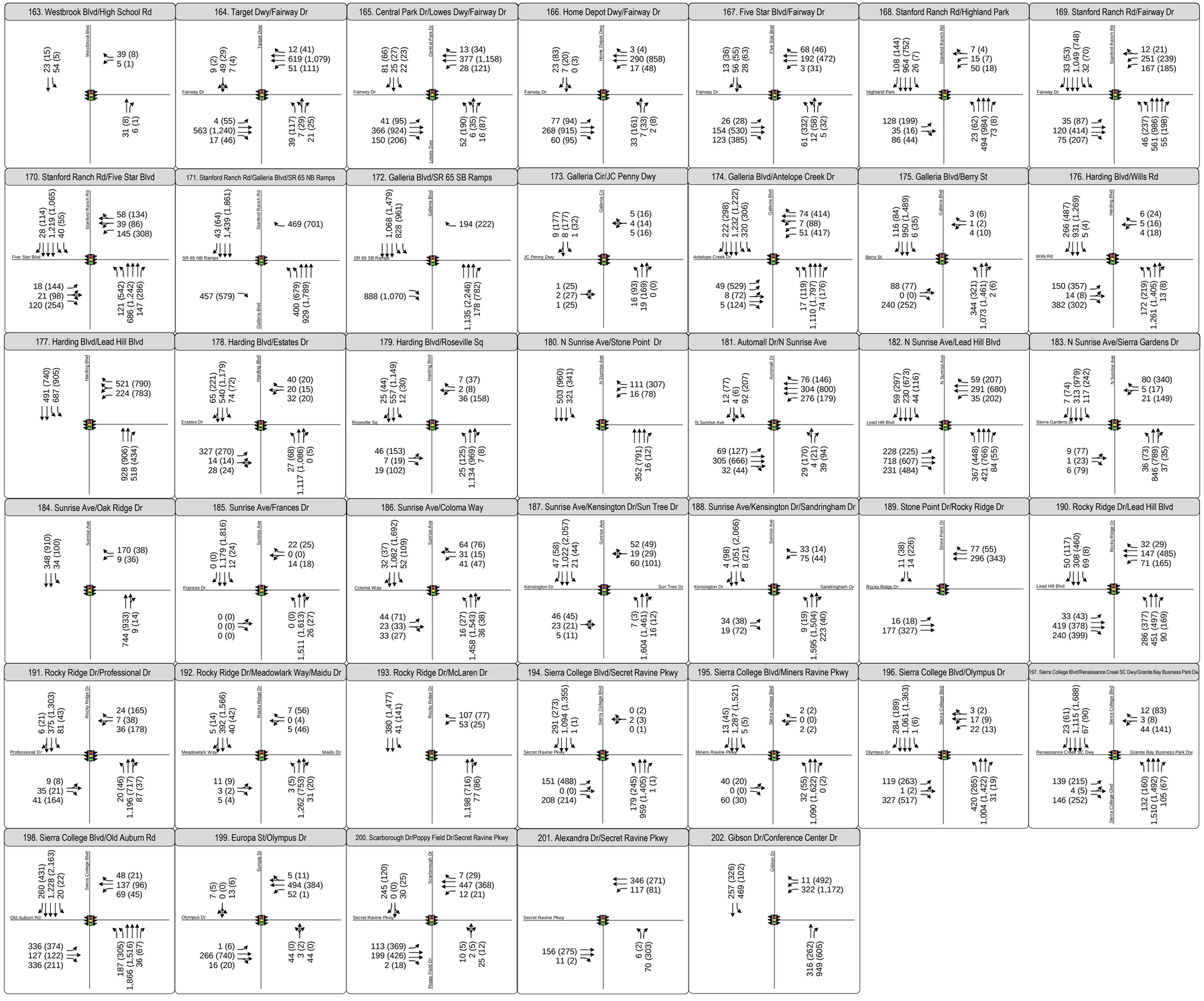


FIGURE 4.3-A9-e

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Constrained Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

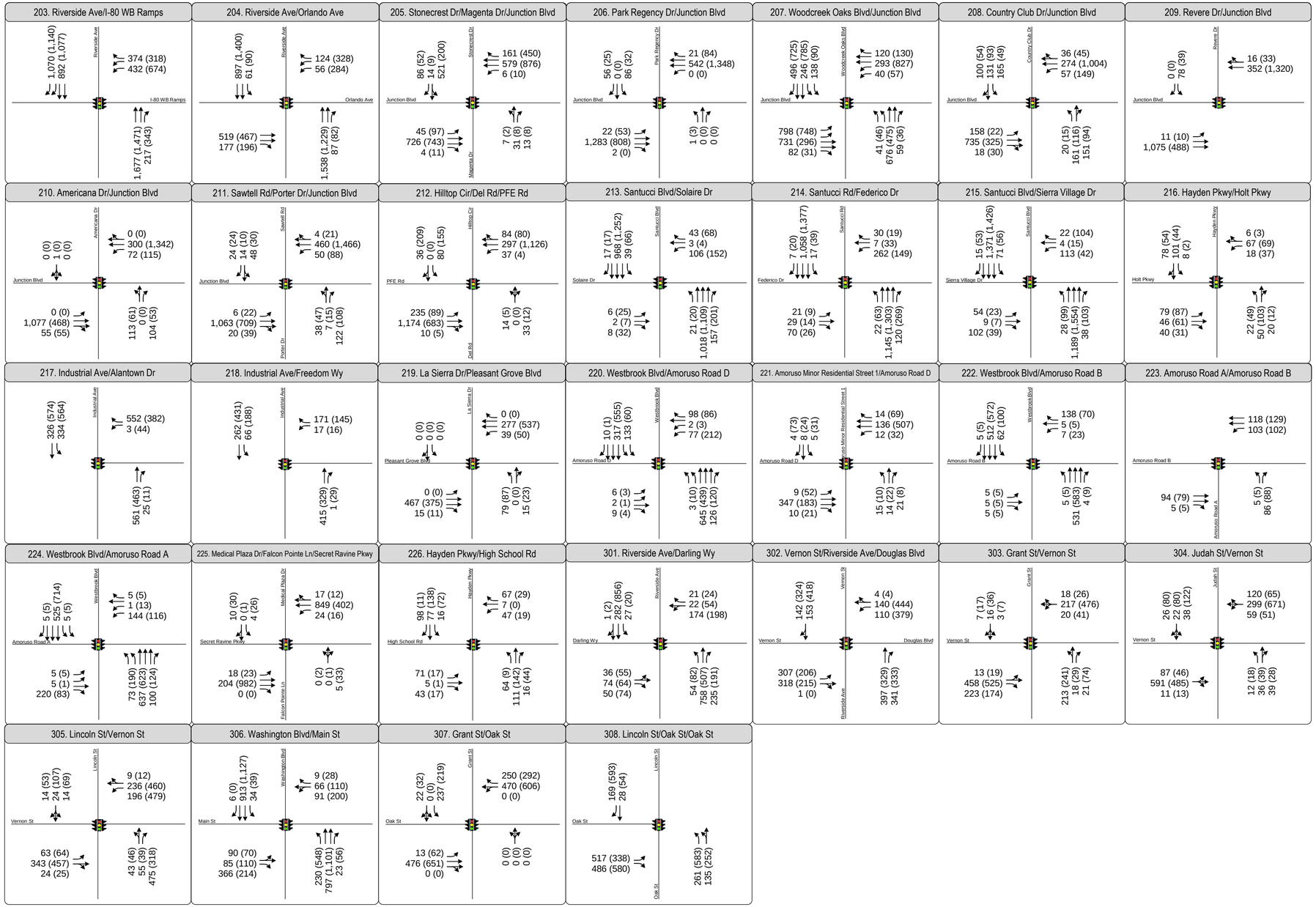


FIGURE 4.3-A9-f

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Constrained Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

Table 4.3A-7 Roseville Signalized Intersection Operations – Cumulative Constrained Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
1	Blue Oaks Blvd/Grasscreek Dr	6	A	6	A
2	Blue Oaks Blvd/Westbrook Blvd	32	C	29	C
3	Blue Oaks Blvd/Creekview Plz	5	A	8	A
4	Blue Oaks Blvd/Westpark Dr	5	A	4	A
5	Blue Oaks Blvd/Hayden Pkwy	28	C	20	C
6	Blue Oaks Blvd/Fiddyment Rd	***57***	***E***[3]	***45***	***D***[3]
7	Blue Oaks Blvd/Orchard View Rd	8	A	11	B
8	Blue Oaks Blvd/Del Webb Blvd	12	B	14	B
9	Blue Oaks Blvd/Crocker Ranch Rd	9	A	15	B
10	Blue Oaks Blvd/Diamond Creek Blvd/Prairie Woods Wy[4]	26	C	***39***	***D***[3]
11	Blue Oaks Blvd/Woodcreek Oaks Blvd[4]	***42***	***D***[3]	***48***	***D***[3]
12	Blue Oaks Blvd/Walgreens Dwy/Roseville Pkwy[4]	3	A	21	C
13	Blue Oaks Blvd/New Meadow Dr[4]	5	A	12	B
14	Blue Oaks Blvd/Collector C[4]	4	A	12	B
15	Blue Oaks Blvd/Foothills Blvd[4]	***77***	***E***[3]	***85***	***F***[3]
16	Blue Oaks Blvd/Fidelity Wy/SR 65 Ramps[4,5]	9	A	***41***	***D***[3]
17	Blue Oaks Blvd/Washington Blvd/SR 65 Ramps[4]	***105***	***F***[3]	***134***	***F***[3]
18	Pleasant Grove Blvd/Santucci Dr	30	C	31	C
19	Pleasant Grove Blvd/Silver Spruce Dr	6	A	6	A
20	Pleasant Grove Blvd/Westbrook Blvd	21	C	25	C
21	Pleasant Grove Blvd/Sierra Trail Dr	10	A	9	A
24	Pleasant Grove Blvd/Upland Dr	9	A	8	A
25	Pleasant Grove Blvd/Fiddyment Rd	***57***	***E***[3]	***46***	***D***[3]
26	Pleasant Grove Blvd/Sun City Blvd	8	A	26	C
27	Pleasant Grove Blvd/Rose Creek Rd	6	A	10	B
28	Pleasant Grove Blvd/Michener Dr	9	A	30	C
29	Pleasant Grove Blvd/Woodcreek Oaks Blvd	***55***	***E***[3]	***55***	***E***[3]
30	Pleasant Grove Blvd/Country Club Dr	26	C	20	B
31	Pleasant Grove Blvd/Foothills Blvd[4]	***60***	***E***[3]	***82***	***F***[3]
32	Pleasant Grove Blvd/Washington Blvd[4]	***49***	***D***[3]	***145***	***F***[3]
33	Pleasant Grove Blvd/Hallissy Dr/Gold Coast Dr[4]	23	C	***40***	***D***[3]
34	Pleasant Grove Blvd/Roseville Pkwy[4]	***84***	***F***[3]	***104***	***F***[3]
35	Pleasant Grove Blvd/Highland Pointe Dr[4]	34	C	***124***	***F***[3]
36	Pleasant Grove Blvd/SR 65 SB Ramps[4]	10	B	20	B
37	Pleasant Grove Blvd/SR 65 NB Ramps[4]	14	B	19	B
38	Pleasant Grove Blvd/Fairway Dr[4]	***48***	***D***[3]	***57***	***E***[3]
39	Pleasant Grove Blvd/Highland Park Dr	23	C	28	C
40	Vista Grande Blvd/Santucci Blvd	12	B	14	B
41	Vista Grande Blvd/Silver Spruce Dr	15	B	15	B
42	Vista Grande Blvd/Westbrook Blvd	14	B	16	B
43	Vista Grande Blvd/Vista Park Dr	12	B	12	B
44	Vista Grande Blvd/Market St	15	B	14	B
45	Vista Grande Blvd/Monarch Grove St	12	B	12	B
46	Vista Grande Blvd/Upland Dr	14	B	14	B
47	Fiddyment Rd/Westhills Dr	28	C	15	B
48	Baseline Rd/Regional Park Access	14	B	21	C
49	Baseline Rd/Watt Ave	36	D	***52***	***D***[3]
50	Baseline Rd/KT-41 Access	9	A	18	B
51	Baseline Rd/Westbrook Blvd	34	C	***37***	***D***[3]
52	Baseline Rd/KT-43 Access	4	A	6	A

Table 4.3A-7 Roseville Signalized Intersection Operations – Cumulative Constrained Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
53	Baseline Rd/Market St	19	B	20	C
54	Baseline Rd/DF-40 Access	8	A	31	C
55	Baseline Rd/Upland Dr	7	A	9	A
56	Baseline Rd/Fiddyment Rd/Walerga Rd	***57***	***E***[3]	***66***	***E***[3]
57	Baseline Rd/Junction Blvd	17	B	17	B
58	Baseline Rd/Woodcreek Oaks Blvd/Cook Riolo Rd	***108***	***F***[3]	***133***	***F***[3]
59	Baseline Rd/Foothills Blvd	***56***	***E***[3]	***43***	***D***[3]
60	Foothills Blvd/HP Central Dwy/Roseville Pkwy	34	C	***44***	***D***[3]
61	Roseville Pkwy/Washington Blvd	31	C	***53***	***D***[3]
62	Roseville Pkwy/Trestle Dr	15	B	13	B
63	Roseville Pkwy/Gibson Dr (W)[4]	***90***	***F***[3]	***63***	***E***[3]
64	Roseville Pkwy/Chase Dr[4]	6	A	31	C
65	Roseville Pkwy/Gibson Dr (E)[4]	30	C	***77***	***E***[3]
66	Roseville Pkwy/West Dr[4]	10	B	22	C
67	Roseville Pkwy/Reserve Dr[4]	28	C	***60***	***E***[3]
68	Roseville Pkwy/Galleria Blvd[4]	***47***	***D***[3]	***68***	***E***[3]
69	Roseville Pkwy/Creekside Ridge Dr[4]	19	B	***44***	***D***[3]
70	Roseville Pkwy/Taylor Rd[4]	***58***	***E***[3]	***108***	***F***[3]
71	E Roseville Pkwy/N Sunrise Ave[4]	16	B	***83***	***F***[3]
72	E Roseville Pkwy/Secret Ravine Pkwy[4]	29	C	***51***	***D***[3]
73	E Roseville Pkwy/Alexandra Dr[4]	8	A	17	B
74	E Roseville Pkwy/Rocky Ridge Dr[4]	6	A	20	B
75	E Roseville Pkwy/Orvietto Dr/Lead Hill Blvd[4]	29	C	32	C
76	E Roseville Pkwy/Olympus Dr[4]	26	C	***49***	***D***[3]
77	E Roseville Pkwy/Douglas Blvd[4]	***63***	***E***	***67***	***E***[3]
78	E Roseville Pkwy/Village Dr	20	B	19	B
79	E Roseville Pkwy/Eureka Rd	31	C	***40***	***D***[3]
80	E Roseville Pkwy/N Cirby Way	10	A	15	B
81	E Roseville Pkwy/Sierra College Blvd	33	C	35	C
82	Atlantic St/Yosemite St	16	B	16	B
83	Atlantic St/Tiger Way/Center St	16	B	25	C
84	Atlantic St/Wills Rd	24	C	19	B
85	Atlantic St/I-80 WB Ramps[4,5]	6	A	***43***	***D***[3]
86	Eureka Rd/Taylor Rd/I-80 EB Ramps[4,5]	34	C	***79***	***E***[3]
87	Eureka Rd/N Sunrise Ave[4]	26	C	***61***	***E***[3]
88	Eureka Rd/Rocky Ridge Dr	***40***	***D***[3]	***62***	***E***[3]
89	Lead Hill Blvd/Eureka Rd	***36***	***D***[3]	***52***	***D***[3]
90	Douglas Blvd/Eureka Road[4]	***38***	***D***[3]	***74***	***E***[3]
91	Eureka Rd/Deer Valley Apts Dwy	11	B	12	B
92	Eureka Rd/Ashland Dr	15	B	17	B
93	Eureka Rd/Sierra College Blvd	***47***	***D***[3]	***40***	***D***[3]
94	Douglas Blvd/Judah St/Barjo Alley	9	A	12	B
95	Douglas Blvd/Park Dr	10	B	10	B
96	Douglas Blvd/Keehner Ave	12	B	13	B
97	Douglas Blvd/Folsom Rd	17	B	22	C
98	Douglas Blvd/Harding Blvd[4]	22	C	***84***	***F***[3]
99	Douglas Blvd/I-80 WB Ramps[4]	13	B	***53***	***D***[3]
100	Douglas Blvd/I-80 EB Ramps[4,5]	11	B	***36***	***D***[3]
101	Douglas Blvd/N Sunrise Ave[4]	34	C	***81***	***F***[3]
102	Douglas Blvd/Santa Clara Dr[4]	29	C	33	C

Table 4.3A-7 Roseville Signalized Intersection Operations – Cumulative Constrained Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
103	Douglas Blvd/Sierra Gardens Dr[4]	21	C	30	C
104	Douglas Blvd/Target Dwy[4]	16	B	32	C
105	Douglas Blvd/Rocky Ridge Dr[4]	***37***	***D***[3]	***61***	***E***[3]
106	Douglas Blvd/Sierra College Blvd	***52***	***D***[3]	***74***	***E***[3]
107	Cirby Wy/Foothills Blvd/Roseville Rd[4]	***44***	***D***[3]	***78***	***E***[3]
108	Cirby Wy/Vernon St[4]	***54***	***D***[3]	***71***	***E***[3]
109	Cirby Wy/Northridge Dr/Lindsay Dr[4]	15	B	25	C
110	Cirby Wy/Melody Ln[4,5]	10	B	19	B
111	Cirby Wy/Riverside Ave[4]	***60***	***E***[3]	***100***	***F***[3]
112	Cirby Wy/Orlando Ave/Marlin Dr	***92***	***F***[3]	31	C
113	Cirby Wy/San Simeon Dr	32	C	35	C
114	Cirby Wy/Sunrise Ave	***57***	***E***[3]	***76***	***E***[3]
115	Cirby Wy/Oakridge Dr	***47***	***D***[3]	***47***	***D***[3]
116	Cirby Wy/Parkview Dr	11	B	8	A
117	Cirby Wy/Rocky Ridge Dr	***38***	***D***[3]	33	C
118	Cirby Wy/Champion Oaks Dr	15	B	16	B
119	Cirby Wy/Old Auburn Rd	21	C	26	C
120	Westbrook Blvd/Holt Pkwy	15	B	14	B
121	Westbrook Blvd/Nobo Dr	11	B	13	B
122	Westbrook Blvd/N Brookstone Dr	7	A	6	A
123	Westbrook Blvd/S Brookstone Dr	5	A	4	A
124	Westbrook Blvd/Octave Ave/Payson Ave	12	B	10	A
125	Lead Hill Blvd/Wal*Mart	4	A	6	A
126	Westbrook Blvd/Solaire Dr	15	B	13	B
127	Westbrook Blvd/Frederico Dr	16	B	13	B
128	Westbrook Blvd/Sierra Glen Dr	5	A	3	A
129	Westbrook Blvd/Sierra Village Dr	14	B	16	B
130	Fiddyment Rd/Angus Rd	13	B	10	A
131	Fiddyment Rd/Hayden Pkwy (N)	21	C	20	C
132	Fiddyment Rd/Crawford Pkwy	20	C	24	C
133	Fiddyment Rd/Hayden Pkwy (South)	11	B	13	B
134	Fiddyment Rd/Village Green Dr	22	C	24	C
135	Fiddyment Rd/Westlake Dr	7	A	6	A
136	Fiddyment Rd/San Fernando Dr	12	B	16	B
137	Woodcreek Oaks Blvd/Northpark Dr	19	B	16	B
138	Woodcreek Oaks Blvd/Parkside Wy	15	B	16	B
139	Woodcreek Oaks Blvd/Painted Desert Dr	10	A	9	A
140	Woodcreek Oaks Blvd/Crimson Ridge Dr	11	B	14	B
141	Woodcreek Oaks Blvd/Horncastle Ave	16	B	22	C
142	Woodcreek Oaks Blvd/Camino Capistrano/Zinnia Way	16	B	19	B
143	Woodcreek Oaks Blvd/Canevari Dr/Arsenault Dr	16	B	20	B
144	Woodcreek Oaks Blvd/McAnally Dr	55	E	30	C
145	Woodcreek Oaks Blvd/Trailee Ln	16	B	14	B
146	Foothills Blvd/Albertsons Dr	22	C	33	C
147	Foothills Blvd/HP South Dwy	30	C	33	C
148	Foothills Blvd/NEC	24	C	18	B
149	Foothills Blvd/Mistywood Dr	12	B	16	B
150	Foothills Blvd/McAnally Dr	18	B	23	C
151	Foothills Blvd/Junction Blvd	***46***	***D***[3]	***52***	***D***[3]
152	Foothills Blvd/Pilgrim Dr/Rand Wy	14	B	16	B

Table 4.3A-7 Roseville Signalized Intersection Operations – Cumulative Constrained Conditions					
Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
153	Foothills Blvd/Vineyard Rd	34	C	33	C
155	Washington Blvd/Freedom Wy	30	C	***40***	***D***[3]
156	Washington Blvd/Hallisy Dr	8	A	8	A
157	Washington Blvd/Industrial Ave	15	B	17	B
158	Washington Blvd/Diamond Oaks Rd/Emerald Oak Rd	18	B	33	C
159	Washington Blvd/Sawtell Rd/Derek Pl	15	B	***54***	***D***[3]
160	Washington Blvd/Junction Blvd	21	C	***38***	***D***[3]
162	Fairway Dr/Cortina Cir	17	B	19	B
163	Westpark Dr/High School Rd	9	A	9	A
164	Fairway Dr/Target Dwy/Rosehall Dr	11	B	15	B
165	Fairway Dr/Central Park Dr/Lowes Dwy	12	B	20	C
166	Fairway Dr/Home Depot Dwy	11	B	18	B
167	Fairway Dr/Five Star Blvd	11	B	15	B
168	Stanford Ranch Rd/Highland Park Dr	15	B	13	B
169	Stanford Ranch Rd/Fairway Dr[4]	26	C	32	C
170	Stanford Ranch Rd/Five Star Blvd[4]	20	B	***44***	***D***[3]
171	Stanford Ranch Rd/SR 65 NB Ramps[4,5]	5	A	14	B
172	Galleria Blvd/SR 65 SB Ramps[4,5]	22	C	31	C
173	Galleria Cir/JC Penny Dwy	17	B	14	B
174	Galleria Blvd/Antelope Creek Dr[4]	19	B	35	C
175	Galleria Blvd/Berry St	***56***	***E***[3]	31	C
176	Harding Blvd/Wills Rd	25	C	29	C
177	Harding Blvd/Lead Hill Blvd	26	C	***42***	***D***[3]
178	Harding Blvd/Estates Dr[4]	17	B	***46***	***D***[3]
179	Harding Blvd/Roseville Sq[4]	12	B	***45***	***D***[3]
180	N Sunrise Ave/Stone Point Dr	11	B	20	B
181	N Sunrise Ave/Automall Dr	27	C	23	C
182	N Sunrise Ave/Lead Hill Blvd	29	C	***51***	***D***[3]
183	N Sunrise Ave/Sierra Gardens Dr	14	B	27	C
184	Sunrise Ave/Oak Ridge Dr	9	A	8	A
185	Sunrise Ave/Frances Dr	4	A	5	A
186	Sunrise Ave/Coloma Wy	18	B	25	C
187	Sunrise Ave/Sun Tree Dr/Kensington Dr	9	A	20	B
188	Sunrise Ave/Sandringham Dr/Kensington Dr[5]	22	C	20	C
189	Rocky Ridge Dr/Stone Point Dr	6	A	9	A
190	Rocky Ridge Dr/Lead Hill Blvd	23	C	29	C
191	Rocky Ridge Dr/Professional Dr	17	B	29	C
192	Rocky Ridge Dr/Meadowlark Wy/Maidu Dr	7	A	19	B
193	Rocky Ridge Dr/McLaren Dr	8	A	6	A
194	Sierra College Blvd/Secret Ravine Pkwy	26	C	35	C
195	Sierra College Blvd/Miners Ravine Pkwy	24	C	12	B
196	Sierra College Blvd/Olympus Dr	30	C	27	C
197	Sierra College Blvd/Renaissance Creek SC Dwy/Granite Bay Business Park Dwy	30	C	32	C
198	Sierra College Blvd/Old Auburn Rd	***35***	***D***[3]	***47***	***D***[3]
199	Olympus Dr/Europa St	12	B	7	A
200	Secret Ravine Pkwy/Scarborough Dr/Poppy Field Dr	18	B	23	C
201	Secret Ravine Pkwy/Alexandra Dr	9	A	11	B
202	Gibson Dr/Convention Center Dr	***56***	***E***[3]	17	B
203	Riverside Ave/I-80 WB Ramps[4]	20	B	***55***	***E***[3]

Table 4.3A-7 Roseville Signalized Intersection Operations – Cumulative Constrained Conditions

Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
204	Riverside Ave/I-80 EB Ramps/Orlando Dr[4]	28	C	***40***	***D***[3]
205	Junction Blvd/Stonecrest Dr/Magenta Dr	25	C	18	B
206	Junction Blvd/Park Regency Dr	10	A	11	B
207	Junction Blvd/Woodcreek Oaks Blvd	33	C	***56***	***E***[3]
208	Junction Blvd/Country Club Dr	27	C	23	C
209	Junction Blvd/Revere Dr	6	A	8	A
210	Junction Blvd/Americana Dr	15	B	8	A
211	Junction Blvd/Sawtell Rd/Porter Dr	21	C	31	C
212	PFE Rd/Hilltop Cir/Del Rd	24	C	21	C
213	Santucci Blvd/Solaire Dr	12	B	15	B
214	Santucci Blvd/Federico Dr	17	B	15	B
215	Santucci Blvd/Sierra Village Dr	16	B	15	B
216	Hayden Pkwy/Holt Pkwy	15	B	15	B
217	Industrial Ave/Alantown Dr	21	C	17	B
218	Industrial Ave/Freedom Wy	7	A	6	A
219	Pleasant Grove Blvd/La Sierra Dr	6	A	6	A
220	Westbrook Blvd/Amoruso Road D	13	B	13	B
221	Amoruso Road D/Minor Residential Street 1	13	B	14	B
222	Westbrook Blvd/Amoruso Road B	13	B	12	B
223	Amoruso Road B/Amoruso Road A	10	B	11	B
224	Westbrook Blvd/Amoruso Road D	16	B	14	B
225	Secret Ravine Pkwy/Medical Plz/Falcon Pointe Dr	8	A	10	A
226	Hayden Pkwy/High School Rd/Bellanca Wy	13	B	12	B
227	Junction Blvd / Event Center Dr[6]	-	C	-	C
228	Cirby Way/Kaiser Dwy	***70***	***E***[3]	35	C
P1	Riverside Ave/Darling Way[7]	22	C	20	C
P2	Douglas Blvd/Riverside Ave/Vernon St[7]	20	C	27	C
P3	Vernon St/Grant St[7]	6	A	7	A
P4	Vernon St/Judah St[7]	5	A	8	A
P5	Vernon St/Lincoln St[7]	11	B	23	C
P6	Washington Blvd/Main St[7]	***35***	***D***[3]	***82***	***F***[3]
P7	Oak St/Grant St[7]	7	A	8	A
P8	Oak St/Lincoln St[7]	16	B	15	B
P9	Pleasant Grove Blvd/Market St[7]	34	C	35	C
P10	Pleasant Grove Blvd/Monument Dr/Kirkhill Dr[7]	14	B	***42***	***D***[3]

Notes:

1. Delay is reported as seconds per vehicle and represent the average delay for the overall intersection.
2. "LOS" represents level of service, calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).
3. Bold and italicized text signifies that the intersection operates unacceptably according to the City's LOS policy.
4. For the PM peak hour, this intersection was analyzed in a SimTraffic 10 microsimulation model to account for interaction between traffic signals, queue spillback, etc. SimTraffic results represent the average of 10 runs.
5. Because of restrictions in Synchro 10, *Highway Capacity Manual 2000* (Transportation Research Board, 2000) methodologies for calculating delay and level of service are applied at this intersection.
6. Forecasts are not available for this intersection. Results show as LOS C or better.
7. Intersection is located in City's Pedestrian Overlay District (POD), which is exempt from the City's LOS policies.

Source: Fehr & Peers, 2020

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	374	183	18	75	34
Future Volume (veh/h)	12	374	183	18	75	34
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	394	193	19	79	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	25	2079	999	309	352	313
Arrive On Green	0.01	0.41	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1781	5274	5274	1577	1781	1585
Grp Volume(v), veh/h	13	394	193	19	79	36
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1577	1781	1585
Q Serve(g_s), s	0.1	1.0	0.6	0.2	0.8	0.4
Cycle Q Clear(g_c), s	0.1	1.0	0.6	0.2	0.8	0.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	25	2079	999	309	352	313
V/C Ratio(X)	0.52	0.19	0.19	0.06	0.22	0.11
Avail Cap(c_a), veh/h	704	7315	5045	1558	2024	1801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	3.9	6.8	6.6	6.8	6.7
Incr Delay (d2), s/veh	16.0	0.0	0.1	0.1	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.0	3.9	6.9	6.7	7.1	6.8
LnGrp LOS	C	A	A	A	A	A
Approach Vol, veh/h		407	212		115	
Approach Delay, s/veh		4.6	6.9		7.0	
Approach LOS		A	A		A	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	12.2	8.0	4.3	8.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	23.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	3.0	2.8	2.1	2.6
Green Ext Time (p_c), s	2.3	0.3	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	355	31	241	107	142	19	575	593	461	851	75
Future Volume (veh/h)	63	355	31	241	107	142	19	575	593	461	851	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	374	33	254	113	149	20	605	624	485	896	79
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	651	202	344	917	285	33	1537	840	445	2719	844
Arrive On Green	0.05	0.13	0.13	0.10	0.18	0.18	0.02	0.30	0.30	0.25	0.53	0.53
Sat Flow, veh/h	1781	5106	1585	3456	5106	1585	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	66	374	33	254	113	149	20	605	624	485	896	79
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1585	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	2.6	5.0	1.3	5.1	1.3	6.1	0.8	6.8	14.5	18.0	7.2	1.8
Cycle Q Clear(g_c), s	2.6	5.0	1.3	5.1	1.3	6.1	0.8	6.8	14.5	18.0	7.2	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	85	651	202	344	917	285	33	1537	840	445	2719	844
V/C Ratio(X)	0.78	0.57	0.16	0.74	0.12	0.52	0.61	0.39	0.74	1.09	0.33	0.09
Avail Cap(c_a), veh/h	198	2055	638	384	2055	638	198	2055	1122	445	2763	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	29.6	28.0	31.5	24.8	26.8	35.1	20.0	22.7	27.0	9.6	8.3
Incr Delay (d2), s/veh	14.2	0.8	0.4	6.6	0.1	1.5	17.2	0.2	1.9	69.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.9	0.5	2.3	0.5	2.2	0.5	2.4	4.3	15.4	2.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.2	30.4	28.4	38.1	24.9	28.3	52.3	20.1	24.5	96.3	9.6	8.3
LnGrp LOS	D	C	C	D	C	C	D	C	C	F	A	A
Approach Vol, veh/h		473			516			1249			1460	
Approach Delay, s/veh		32.7			32.4			22.8			38.3	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	25.7	11.2	13.2	5.3	42.4	7.4	16.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	29.0	8.0	29.0	8.0	39.0	8.0	29.0
Max Q Clear Time (g_c+I1), s	20.0	16.5	7.1	7.0	2.8	9.2	4.6	8.1
Green Ext Time (p_c), s	0.0	5.2	0.1	2.2	0.0	6.7	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	31.6
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	77	1305	462	49	74	53
Future Volume (veh/h)	77	1305	462	49	74	53
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	1374	486	52	78	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	118	2979	1932	598	247	220
Arrive On Green	0.07	0.58	0.38	0.38	0.14	0.14
Sat Flow, veh/h	1781	5274	5274	1581	1781	1585
Grp Volume(v), veh/h	81	1374	486	52	78	56
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1581	1781	1585
Q Serve(g_s), s	1.3	4.4	1.9	0.6	1.1	0.9
Cycle Q Clear(g_c), s	1.3	4.4	1.9	0.6	1.1	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	118	2979	1932	598	247	220
V/C Ratio(X)	0.69	0.46	0.25	0.09	0.32	0.25
Avail Cap(c_a), veh/h	495	5673	3545	1098	1237	1101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.2	3.4	6.2	5.8	11.2	11.1
Incr Delay (d2), s/veh	6.9	0.1	0.1	0.1	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.3	0.1	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.0	3.5	6.2	5.8	11.9	11.7
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1455	538		134	
Approach Delay, s/veh		4.5	6.2		11.8	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		20.8		8.0	5.9	14.9
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	8.0	20.0
Max Q Clear Time (g_c+I1), s		6.4		3.1	3.3	3.9
Green Ext Time (p_c), s		10.4		0.3	0.1	2.8

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1304	75	1	455	56	13
Future Volume (veh/h)	1304	75	1	455	56	13
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1373	79	1	479	59	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2552	791	6	3195	222	198
Arrive On Green	0.50	0.50	0.00	0.63	0.12	0.12
Sat Flow, veh/h	5274	1582	1781	5274	1781	1585
Grp Volume(v), veh/h	1373	79	1	479	59	14
Grp Sat Flow(s),veh/h/ln	1702	1582	1781	1702	1781	1585
Q Serve(g_s), s	5.9	0.8	0.0	1.2	1.0	0.3
Cycle Q Clear(g_c), s	5.9	0.8	0.0	1.2	1.0	0.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2552	791	6	3195	222	198
V/C Ratio(X)	0.54	0.10	0.18	0.15	0.27	0.07
Avail Cap(c_a), veh/h	3663	1135	445	4937	1167	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.5	4.2	16.0	2.5	12.7	12.4
Incr Delay (d2), s/veh	0.2	0.1	14.8	0.0	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.0	0.0	0.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.7	4.3	30.7	2.5	13.3	12.5
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	1452			480	73	
Approach Delay, s/veh	5.6			2.6	13.2	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		8.0	4.0	20.0			24.1
Change Period (Y+Rc), s		4.0	4.0	4.0			4.0
Max Green Setting (Gmax), s		21.0	8.0	23.0			31.0
Max Q Clear Time (g_c+I1), s		3.0	2.0	7.9			3.2
Green Ext Time (p_c), s		0.1	0.0	8.1			3.1

Intersection Summary	
HCM 6th Ctrl Delay	5.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	1234	25	91	322	58	35	100	137	309	86	98
Future Volume (veh/h)	58	1234	25	91	322	58	35	100	137	309	86	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	1299	26	96	339	61	37	105	144	325	91	103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	1757	545	123	1885	585	50	235	199	372	573	485
Arrive On Green	0.04	0.34	0.34	0.07	0.37	0.37	0.03	0.13	0.13	0.21	0.31	0.31
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	61	1299	26	96	339	61	37	105	144	325	91	103
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.7	17.7	0.9	4.2	3.6	2.0	1.6	4.1	6.9	14.0	2.8	3.8
Cycle Q Clear(g_c), s	2.7	17.7	0.9	4.2	3.6	2.0	1.6	4.1	6.9	14.0	2.8	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	1757	545	123	1885	585	50	235	199	372	573	485
V/C Ratio(X)	0.78	0.74	0.05	0.78	0.18	0.10	0.74	0.45	0.72	0.87	0.16	0.21
Avail Cap(c_a), veh/h	180	2127	660	157	2063	640	202	756	640	517	1086	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	22.9	17.3	36.3	16.9	16.4	38.2	32.1	33.3	30.3	20.0	20.4
Incr Delay (d2), s/veh	15.2	1.1	0.0	17.3	0.0	0.1	18.9	1.3	4.9	11.5	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	6.9	0.3	2.4	1.3	0.7	1.0	1.9	2.9	7.0	1.2	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.7	24.0	17.4	53.6	16.9	16.5	57.1	33.4	38.3	41.8	20.2	20.6
LnGrp LOS	D	C	B	D	B	B	E	C	D	D	C	C
Approach Vol, veh/h		1386			496			286			519	
Approach Delay, s/veh		25.1			24.0			38.9			33.8	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	14.9	10.5	32.3	7.2	29.3	8.5	34.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	23.0	32.0	7.0	33.0	9.0	46.0	8.0	32.0
Max Q Clear Time (g_c+I1), s	16.0	8.9	6.2	19.7	3.6	5.8	4.7	5.6
Green Ext Time (p_c), s	0.6	1.0	0.0	7.5	0.0	0.9	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	1320	107	333	385	88	24	1061	459	303	768	127
Future Volume (veh/h)	209	1320	107	333	385	88	24	1061	459	303	768	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	220	1389	24	351	405	10	25	1117	298	319	808	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	696	1296	400	329	645	198	448	1224	543	329	1026	455
Arrive On Green	0.20	0.25	0.25	0.10	0.13	0.13	0.13	0.34	0.34	0.10	0.29	0.29
Sat Flow, veh/h	3456	5106	1576	3456	5106	1566	3456	3554	1578	3456	3554	1577
Grp Volume(v), veh/h	220	1389	24	351	405	10	25	1117	298	319	808	52
Grp Sat Flow(s),veh/h/ln	1728	1702	1576	1728	1702	1566	1728	1777	1578	1728	1777	1577
Q Serve(g_s), s	5.1	24.0	0.7	9.0	7.1	0.4	0.6	28.4	14.4	8.7	19.8	2.3
Cycle Q Clear(g_c), s	5.1	24.0	0.7	9.0	7.1	0.4	0.6	28.4	14.4	8.7	19.8	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	696	1296	400	329	645	198	448	1224	543	329	1026	455
V/C Ratio(X)	0.32	1.07	0.06	1.07	0.63	0.05	0.06	0.91	0.55	0.97	0.79	0.11
Avail Cap(c_a), veh/h	696	1296	400	329	1188	364	448	1240	551	329	1240	550
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	35.3	11.5	42.8	39.2	21.5	36.1	29.6	25.1	42.6	30.9	24.7
Incr Delay (d2), s/veh	0.1	46.7	0.1	68.6	1.5	0.2	0.0	10.7	1.9	41.2	3.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	14.7	0.4	6.7	2.9	0.2	0.2	12.6	5.2	5.4	8.2	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	82.0	11.6	111.4	40.7	21.7	36.1	40.3	26.9	83.9	34.7	24.9
LnGrp LOS	C	F	B	F	D	C	D	D	C	F	C	C
Approach Vol, veh/h		1633			766			1440			1179	
Approach Delay, s/veh		74.2			72.8			37.5			47.6	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	38.6	13.0	30.0	18.3	33.3	25.0	18.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	6.0	* 6
Max Green Setting (Gmax), s	9.0	33.0	9.0	24.0	9.0	* 33	11.0	* 22
Max Q Clear Time (g_c+I1), s	10.7	30.4	11.0	26.0	2.6	21.8	7.1	9.1
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	5.1	0.2	2.1

Intersection Summary	
HCM 6th Ctrl Delay	57.2
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	2077	0	0	701	90	0	0	0	216	0	9
Future Volume (veh/h)	3	2077	0	0	701	90	0	0	0	216	0	9
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	3	2186	0	0	738	95				227	0	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2				2	0	2
Cap, veh/h	9	3282	1019	124	2905	902				330	0	294
Arrive On Green	0.00	0.64	0.00	0.00	0.57	0.57				0.19	0.00	0.19
Sat Flow, veh/h	1781	5106	1585	179	5106	1585				1781	0	1585
Grp Volume(v), veh/h	3	2186	0	0	738	95				227	0	9
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	179	1702	1585				1781	0	1585
Q Serve(g_s), s	0.1	15.5	0.0	0.0	4.2	1.6				6.9	0.0	0.3
Cycle Q Clear(g_c), s	0.1	15.5	0.0	0.0	4.2	1.6				6.9	0.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	9	3282	1019	124	2905	902				330	0	294
V/C Ratio(X)	0.35	0.67	0.00	0.00	0.25	0.11				0.69	0.00	0.03
Avail Cap(c_a), veh/h	368	3780	1173	124	2905	902				828	0	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	6.5	0.0	0.0	6.3	5.7				22.1	0.0	19.4
Incr Delay (d2), s/veh	8.5	0.5	0.0	0.0	0.1	0.1				1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.8	0.0	0.0	1.2	0.4				2.8	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.3	6.9	0.0	0.0	6.4	5.8				23.1	0.0	19.4
LnGrp LOS	D	A	A	A	A	A				C	A	B
Approach Vol, veh/h		2189			833						236	
Approach Delay, s/veh		7.0			6.3						22.9	
Approach LOS		A			A						C	

Timer - Assigned Phs				4		6	7	8				
Phs Duration (G+Y+Rc), s				43.3		14.8	4.3	39.0				
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0				
Max Green Setting (Gmax), s				43.0		27.0	12.0	27.0				
Max Q Clear Time (g_c+I1), s				17.5		8.9	2.1	6.2				
Green Ext Time (p_c), s				19.8		0.5	0.0	6.1				

Intersection Summary												
HCM 6th Ctrl Delay			8.0									
HCM 6th LOS			A									

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2317	10	76	796	10	87
Future Volume (veh/h)	2317	10	76	796	10	87
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2439	11	80	838	11	92
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3098	962	167	3833	201	178
Arrive On Green	0.61	0.61	0.09	0.75	0.11	0.11
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	2439	11	80	838	11	92
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	28.7	0.2	3.4	3.9	0.4	4.4
Cycle Q Clear(g_c), s	28.7	0.2	3.4	3.9	0.4	4.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	3098	962	167	3833	201	178
V/C Ratio(X)	0.79	0.01	0.48	0.22	0.05	0.52
Avail Cap(c_a), veh/h	3266	1014	201	4099	672	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	6.2	34.3	3.0	31.6	33.3
Incr Delay (d2), s/veh	1.4	0.0	0.8	0.0	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	0.1	1.5	0.9	0.2	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	6.2	35.1	3.0	31.6	34.2
LnGrp LOS	B	A	D	A	C	C
Approach Vol, veh/h	2450			918	103	
Approach Delay, s/veh	13.2			5.8	33.9	
Approach LOS	B			A	C	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		13.9	11.5	54.4			65.9
Change Period (Y+Rc), s		4.9	4.0	6.0			6.0
Max Green Setting (Gmax), s		30.1	9.0	51.0			64.0
Max Q Clear Time (g_c+I1), s		6.4	5.4	30.7			5.9
Green Ext Time (p_c), s		0.2	0.0	17.7			7.8

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	2365	789	212	191	24
Future Volume (veh/h)	11	2365	789	212	191	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	2489	831	223	201	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	32	3417	3014	932	294	261
Arrive On Green	0.02	0.67	0.59	0.59	0.16	0.16
Sat Flow, veh/h	1781	5274	5274	1578	1781	1585
Grp Volume(v), veh/h	12	2489	831	223	201	25
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1578	1781	1585
Q Serve(g_s), s	0.4	20.7	5.2	4.4	7.0	0.9
Cycle Q Clear(g_c), s	0.4	20.7	5.2	4.4	7.0	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	32	3417	3014	932	294	261
V/C Ratio(X)	0.38	0.73	0.28	0.24	0.68	0.10
Avail Cap(c_a), veh/h	217	3741	3014	932	841	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	7.0	6.6	6.4	25.8	23.3
Incr Delay (d2), s/veh	2.7	0.8	0.1	0.2	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.3	1.3	1.1	2.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.6	7.8	6.7	6.6	26.9	23.3
LnGrp LOS	C	A	A	A	C	C
Approach Vol, veh/h		2501	1054		226	
Approach Delay, s/veh		7.9	6.6		26.5	
Approach LOS		A	A		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	49.9	15.7	5.2	44.7
Change Period (Y+Rc), s	6.0	4.9	4.0	6.0
Max Green Setting (Gmax), s	48.1	31.0	8.0	38.1
Max Q Clear Time (g_c+I1), s	22.7	9.0	2.4	7.2
Green Ext Time (p_c), s	21.3	0.5	0.0	8.6

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	2269	83	28	863	145	35	7	35	271	41	17
Future Volume (veh/h)	144	2269	83	28	863	145	35	7	35	271	41	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	152	2388	87	29	908	153	37	7	37	333	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	3291	1022	58	2956	918	138	145	122	411	216	0
Arrive On Green	0.10	0.64	0.64	0.03	0.58	0.58	0.08	0.08	0.08	0.12	0.00	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	3563	1870	0
Grp Volume(v), veh/h	152	2388	87	29	908	153	37	7	37	333	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	0
Q Serve(g_s), s	12.6	46.8	3.1	2.4	13.7	6.7	2.9	0.5	3.3	13.7	0.0	0.0
Cycle Q Clear(g_c), s	12.6	46.8	3.1	2.4	13.7	6.7	2.9	0.5	3.3	13.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	175	3291	1022	58	2956	918	138	145	122	411	216	0
V/C Ratio(X)	0.87	0.73	0.09	0.50	0.31	0.17	0.27	0.05	0.30	0.81	0.00	0.00
Avail Cap(c_a), veh/h	273	3291	1022	143	2956	918	143	150	127	998	524	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	66.7	17.8	10.0	71.3	16.2	14.7	65.2	64.1	65.4	64.7	0.0	0.0
Incr Delay (d2), s/veh	10.5	1.4	0.2	2.4	0.3	0.4	1.8	0.2	2.3	4.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	17.3	1.1	1.1	5.2	2.5	1.4	0.3	1.4	6.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	19.2	10.2	73.8	16.4	15.1	67.0	64.3	67.7	68.7	0.0	0.0
LnGrp LOS	E	B	B	E	B	B	E	E	E	E	A	A
Approach Vol, veh/h		2627			1090			81			333	
Approach Delay, s/veh		22.3			17.8			67.1			68.7	
Approach LOS		C			B			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.2	8.9	102.7		22.2	18.8	92.8				
Change Period (Y+Rc), s		4.6	4.0	6.0		4.9	4.0	6.0				
Max Green Setting (Gmax), s		12.0	12.0	64.5		42.0	23.0	53.5				
Max Q Clear Time (g_c+I1), s		5.3	4.4	48.8		15.7	14.6	15.7				
Green Ext Time (p_c), s		0.2	0.0	15.0		1.6	0.2	15.0				

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	2027	313	168	833	295	118	492	315	390	257	87
Future Volume (veh/h)	37	2027	313	168	833	295	118	492	315	390	257	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	2134	137	177	877	140	124	518	192	411	271	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	2574	634	502	2579	801	729	629	280	460	352	157
Arrive On Green	0.07	0.53	0.53	0.15	0.51	0.51	0.21	0.18	0.18	0.13	0.10	0.10
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	39	2134	137	177	877	140	124	518	192	411	271	7
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.6	41.7	6.9	6.9	15.4	4.3	4.4	21.1	17.0	17.6	11.2	0.5
Cycle Q Clear(g_c), s	1.6	41.7	6.9	6.9	15.4	4.3	4.4	21.1	17.0	17.6	11.2	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	2574	634	502	2579	801	729	629	280	460	352	157
V/C Ratio(X)	0.21	0.83	0.22	0.35	0.34	0.17	0.17	0.82	0.68	0.89	0.77	0.04
Avail Cap(c_a), veh/h	276	2574	634	502	2579	801	729	836	373	530	1097	489
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.7	30.8	22.7	57.7	22.2	7.2	48.4	59.5	57.8	64.0	65.9	46.2
Incr Delay (d2), s/veh	0.2	3.3	0.8	0.2	0.4	0.5	0.0	5.7	4.2	14.7	4.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	14.7	2.6	3.0	6.1	2.6	1.9	9.9	7.0	8.6	5.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.9	34.1	23.4	57.9	22.5	7.6	48.5	65.2	62.0	78.7	70.6	46.3
LnGrp LOS	E	C	C	E	C	A	D	E	E	E	E	D
Approach Vol, veh/h		2310			1194			834			689	
Approach Delay, s/veh		34.0			26.0			62.0			75.2	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	32.2	27.8	66.0	35.6	20.6	12.0	81.8
Change Period (Y+Rc), s	4.0	5.7	6.0	* 6	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	23.0	35.3	12.0	* 60	12.0	46.3	12.0	60.0
Max Q Clear Time (g_c+I1), s	19.6	23.1	8.9	43.7	6.4	13.2	3.6	17.4
Green Ext Time (p_c), s	0.4	3.5	0.1	15.3	0.1	1.7	0.0	14.8

Intersection Summary	
HCM 6th Ctrl Delay	42.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	2613	5	5	1229	74	5	5	5	22	5	10
Future Volume (veh/h)	11	2613	5	5	1229	74	5	5	5	22	5	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	2751	5	5	1294	78	5	5	5	23	5	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	5201	1281	9	5166	1273	95	50	42	48	14	31
Arrive On Green	0.02	1.00	1.00	0.01	0.80	0.80	0.03	0.03	0.03	0.03	0.03	0.03
Sat Flow, veh/h	1781	6434	1585	1781	6434	1585	3563	1870	1585	1781	520	1144
Grp Volume(v), veh/h	12	2751	5	5	1294	78	5	5	5	23	0	16
Grp Sat Flow(s),veh/h/ln	1781	1609	1585	1781	1609	1585	1781	1870	1585	1781	0	1664
Q Serve(g_s), s	1.0	0.0	0.0	0.4	7.4	1.5	0.2	0.4	0.5	1.9	0.0	1.4
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.4	7.4	1.5	0.2	0.4	0.5	1.9	0.0	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	19	5201	1281	9	5166	1273	95	50	42	48	0	44
V/C Ratio(X)	0.64	0.53	0.00	0.56	0.25	0.06	0.05	0.10	0.12	0.48	0.00	0.36
Avail Cap(c_a), veh/h	83	5201	1281	83	5166	1273	926	486	412	83	0	78
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	73.1	0.0	0.0	74.5	3.6	3.1	71.2	71.2	71.3	72.0	0.0	71.7
Incr Delay (d2), s/veh	31.3	0.4	0.0	43.9	0.0	0.0	0.2	0.9	1.2	7.4	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.0	0.3	1.9	0.4	0.1	0.2	0.2	1.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.4	0.4	0.0	118.4	3.7	3.1	71.4	72.1	72.5	79.4	0.0	76.6
LnGrp LOS	F	A	A	F	A	A	E	E	E	E	A	E
Approach Vol, veh/h		2768			1377			15			39	
Approach Delay, s/veh		0.8			4.1			72.0			78.3	
Approach LOS		A			A			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		9.0	5.8	126.2		9.0	6.6	125.4				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		39.0	7.0	77.0		7.0	7.0	77.0				
Max Q Clear Time (g_c+I1), s		2.5	2.4	2.0		3.9	3.0	9.4				
Green Ext Time (p_c), s		0.0	0.0	51.3		0.0	0.0	12.3				

Intersection Summary	
HCM 6th Ctrl Delay	2.9
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	2714	5	5	1260	62	5	5	5	246	5	45
Future Volume (veh/h)	13	2714	5	5	1260	62	5	5	5	246	5	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	2857	5	5	1326	65	5	5	5	263	0	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	5093	1255	116	4808	1184	22	23	20	321	0	143
Arrive On Green	0.04	1.00	1.00	1.00	1.00	1.00	0.01	0.01	0.01	0.09	0.00	0.09
Sat Flow, veh/h	1781	6434	1585	91	6434	1585	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	14	2857	5	5	1326	65	5	5	5	263	0	47
Grp Sat Flow(s),veh/h/ln	1781	1609	1585	91	1609	1585	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.5	10.9	0.0	4.2
Cycle Q Clear(g_c), s	1.2	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.5	10.9	0.0	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	5093	1255	116	4808	1184	22	23	20	321	0	143
V/C Ratio(X)	0.44	0.56	0.00	0.04	0.28	0.05	0.23	0.22	0.25	0.82	0.00	0.33
Avail Cap(c_a), veh/h	143	5093	1255	116	4808	1184	297	312	264	525	0	234
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	71.6	0.0	0.0	0.0	0.0	0.0	73.4	73.3	73.4	67.1	0.0	64.0
Incr Delay (d2), s/veh	2.9	0.4	0.0	0.3	0.1	0.0	5.1	4.6	6.6	2.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.2	5.1	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.5	0.4	0.0	0.3	0.1	0.0	78.4	77.9	80.0	69.1	0.0	64.5
LnGrp LOS	E	A	A	A	A	A	E	E	F	E	A	E
Approach Vol, veh/h		2876			1396			15			310	
Approach Delay, s/veh		0.7			0.1			78.8			68.4	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	6.9	124.7	18.4	6.7	118.1
Change Period (Y+Rc), s	5.0	6.0	4.9	4.0	6.0
Max Green Setting (Gmax), s	25.0	87.0	22.1	12.0	71.0
Max Q Clear Time (g_c+I1), s	2.5	2.0	12.9	3.2	2.0
Green Ext Time (p_c), s	0.0	73.7	0.6	0.0	21.6

Intersection Summary	
HCM 6th Ctrl Delay	5.3
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	3291	10	10	1318	10	10	10	10	10	10	10
Future Volume (veh/h)	10	3291	10	10	1318	10	10	10	10	10	10	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	3464	11	11	1387	11	11	11	11	11	11	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	4582	1129	44	4582	1129	119	125	145	39	39	39
Arrive On Green	0.05	1.00	1.00	0.02	0.71	0.71	0.07	0.07	0.07	0.07	0.07	0.07
Sat Flow, veh/h	1781	6434	1585	1781	6434	1585	1781	1870	1585	579	579	579
Grp Volume(v), veh/h	11	3464	11	11	1387	11	11	11	11	33	0	0
Grp Sat Flow(s),veh/h/ln	1781	1609	1585	1781	1609	1585	1781	1870	1585	1737	0	0
Q Serve(g_s), s	0.9	0.0	0.0	0.9	11.9	0.3	0.9	0.8	1.0	2.7	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	0.0	0.9	11.9	0.3	0.9	0.8	1.0	2.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.33		0.33
Lane Grp Cap(c), veh/h	44	4582	1129	44	4582	1129	119	125	145	116	0	0
V/C Ratio(X)	0.25	0.76	0.01	0.25	0.30	0.01	0.09	0.09	0.08	0.28	0.00	0.00
Avail Cap(c_a), veh/h	119	4582	1129	119	4582	1129	190	200	208	185	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	70.0	0.0	0.0	71.8	7.9	6.3	65.7	65.7	62.4	66.6	0.0	0.0
Incr Delay (d2), s/veh	3.0	1.2	0.0	2.6	0.2	0.0	0.3	0.3	0.2	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.0	0.4	3.8	0.1	0.4	0.4	0.4	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.0	1.2	0.0	74.5	8.1	6.3	66.1	66.0	62.6	67.9	0.0	0.0
LnGrp LOS	E	A	A	E	A	A	E	E	E	E	A	A
Approach Vol, veh/h		3486			1409			33			33	
Approach Delay, s/veh		1.4			8.6			64.9			67.9	
Approach LOS		A			A			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	8.2	112.8		14.5	8.2	112.8				
Change Period (Y+Rc), s		4.5	4.5	6.0		4.5	4.5	6.0				
Max Green Setting (Gmax), s		16.0	10.0	88.5		16.0	10.0	88.5				
Max Q Clear Time (g_c+I1), s		4.7	2.9	2.0		3.0	2.9	13.9				
Green Ext Time (p_c), s		0.1	0.0	85.7		0.0	0.0	31.0				

Intersection Summary	
HCM 6th Ctrl Delay	4.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	2252	405	652	1228	667	262	515	283	790	501	63
Future Volume (veh/h)	228	2252	405	652	1228	667	262	515	283	790	501	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	240	2371	284	686	1293	340	276	542	0	832	527	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	323	2145	528	622	2617	645	964	498		737	780	426
Arrive On Green	0.19	0.67	0.67	0.18	0.41	0.41	0.19	0.14	0.00	0.21	0.15	0.15
Sat Flow, veh/h	3456	6434	1585	3456	6434	1585	5023	3554	1585	3456	5106	2790
Grp Volume(v), veh/h	240	2371	284	686	1293	340	276	542	0	832	527	8
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1585	1674	1777	1585	1728	1702	1395
Q Serve(g_s), s	9.8	50.0	8.3	27.0	22.4	12.8	7.0	21.0	0.0	32.0	14.6	0.4
Cycle Q Clear(g_c), s	9.8	50.0	8.3	27.0	22.4	12.8	7.0	21.0	0.0	32.0	14.6	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	323	2145	528	622	2617	645	964	498		737	780	426
V/C Ratio(X)	0.74	1.11	0.54	1.10	0.49	0.53	0.29	1.09		1.13	0.68	0.02
Avail Cap(c_a), veh/h	369	2145	528	622	2617	645	964	498		737	1385	757
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.3	25.0	6.7	61.5	33.0	9.4	51.8	64.5	0.0	59.0	60.0	54.0
Incr Delay (d2), s/veh	3.2	52.0	2.2	67.5	0.7	3.1	0.1	66.8	0.0	74.5	3.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	18.6	3.9	17.4	8.7	4.7	2.9	13.8	0.0	21.1	6.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	77.0	8.9	129.0	33.7	12.4	51.9	131.3	0.0	133.5	63.7	54.0
LnGrp LOS	E	F	A	F	C	B	D	F		F	E	D
Approach Vol, veh/h		2895			2319			818	A		1367	
Approach Delay, s/veh		69.1			58.8			104.5			106.1	
Approach LOS		E			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.8	28.2	20.0	67.0	36.0	27.0	31.0	56.0
Change Period (Y+Rc), s	6.0	* 5.3	6.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	13.0	* 41	16.0	* 61	32.0	21.0	27.0	50.0
Max Q Clear Time (g_c+I1), s	9.0	16.6	11.8	24.4	34.0	23.0	29.0	52.0
Green Ext Time (p_c), s	0.3	6.3	0.2	24.2	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	76.6
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	3214	96	119	1742	10	16
Future Volume (veh/h)	3214	96	119	1742	10	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3383	101	125	1834	11	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	4083	1268	146	5887	33	159
Arrive On Green	0.80	0.80	0.16	1.00	0.02	0.02
Sat Flow, veh/h	5274	1585	1781	6696	1781	1585
Grp Volume(v), veh/h	3383	101	125	1834	11	17
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1609	1781	1585
Q Serve(g_s), s	59.0	2.0	10.2	0.0	0.9	1.5
Cycle Q Clear(g_c), s	59.0	2.0	10.2	0.0	0.9	1.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	4083	1268	146	5887	33	159
V/C Ratio(X)	0.83	0.08	0.86	0.31	0.34	0.11
Avail Cap(c_a), veh/h	4083	1268	214	5887	190	299
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.75	0.75	1.00	1.00
Uniform Delay (d), s/veh	8.9	3.2	61.8	0.0	72.7	61.4
Incr Delay (d2), s/veh	2.1	0.1	15.5	0.0	5.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.8	0.6	4.8	0.0	0.5	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	3.3	77.3	0.0	78.6	61.7
LnGrp LOS	B	A	E	A	E	E
Approach Vol, veh/h	3484			1959	28	
Approach Delay, s/veh	10.8			5.0	68.3	
Approach LOS	B			A	E	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		7.8	17.3	125.0			142.2
Change Period (Y+Rc), s		5.0	5.0	5.0			5.0
Max Green Setting (Gmax), s		16.0	18.0	101.0			124.0
Max Q Clear Time (g_c+I1), s		3.5	12.2	61.0			2.0
Green Ext Time (p_c), s		0.0	0.1	37.6			22.7

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2561	669	511	961	332	642	0	422	59	516	258
Future Volume (veh/h)	0	2561	669	511	961	332	642	0	422	59	516	258
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	2696	521	538	1012	0	676	0	272	62	543	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	0	2247	697	438	3030		0	0	0	226	450	
Arrive On Green	0.00	0.59	0.59	0.13	0.59	0.00	0.00	0.00	0.00	0.13	0.13	0.00
Sat Flow, veh/h	0	5274	1585	3456	5106	1585		0		1781	3554	1585
Grp Volume(v), veh/h	0	2696	521	538	1012	0		0.0		62	543	0
Grp Sat Flow(s),veh/h/ln	0	1702	1585	1728	1702	1585				1781	1777	1585
Q Serve(g_s), s	0.0	66.0	36.3	19.0	15.1	0.0				4.7	19.0	0.0
Cycle Q Clear(g_c), s	0.0	66.0	36.3	19.0	15.1	0.0				4.7	19.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2247	697	438	3030					226	450	
V/C Ratio(X)	0.00	1.20	0.75	1.23	0.33					0.27	1.21	
Avail Cap(c_a), veh/h	0	2247	697	438	3030					226	450	
HCM Platoon Ratio	1.00	1.33	1.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.43	0.43	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	31.1	25.0	65.5	15.5	0.0				59.3	65.5	0.0
Incr Delay (d2), s/veh	0.0	92.0	2.3	121.8	0.3	0.0				0.2	112.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	41.8	12.0	15.6	5.7	0.0				2.1	15.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	123.1	27.2	187.3	15.8	0.0				59.5	177.7	0.0
LnGrp LOS	A	F	C	F	B					E	F	
Approach Vol, veh/h		3217			1550	A					605	A
Approach Delay, s/veh		107.6			75.3						165.6	
Approach LOS		F			E						F	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		25.0	23.0	72.0				95.0				
Change Period (Y+Rc), s		6.0	4.0	6.0				6.0				
Max Green Setting (Gmax), s		19.0	19.0	66.0				89.0				
Max Q Clear Time (g_c+I1), s		21.0	21.0	68.0				17.1				
Green Ext Time (p_c), s		0.0	0.0	0.0				12.6				

Intersection Summary	
HCM 6th Ctrl Delay	104.8
HCM 6th LOS	F

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	414	609	96	203	69	366	699	2	74	319	0
Future Volume (veh/h)	0	414	609	96	203	69	366	699	2	74	319	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	436	350	101	214	29	385	736	1	78	336	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	1016	453	130	1555	694	381	992	442	163	768	342
Arrive On Green	0.00	0.29	0.29	0.07	0.44	0.44	0.11	0.28	0.28	0.05	0.22	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	0	436	350	101	214	29	385	736	1	78	336	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.0	6.3	12.9	3.5	2.3	0.7	7.0	12.0	0.0	1.4	5.2	0.0
Cycle Q Clear(g_c), s	0.0	6.3	12.9	3.5	2.3	0.7	7.0	12.0	0.0	1.4	5.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	3	1016	453	130	1555	694	381	992	442	163	768	342
V/C Ratio(X)	0.00	0.43	0.77	0.78	0.14	0.04	1.01	0.74	0.00	0.48	0.44	0.00
Avail Cap(c_a), veh/h	196	1622	724	196	1622	724	381	1511	674	381	1455	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	18.5	20.8	28.9	10.7	10.2	28.3	20.8	16.5	29.5	21.6	0.0
Incr Delay (d2), s/veh	0.0	0.3	2.8	10.5	0.0	0.0	48.9	1.1	0.0	2.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.3	4.5	1.8	0.8	0.2	5.2	4.4	0.0	0.6	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.7	23.6	39.4	10.7	10.3	77.2	21.9	16.5	31.7	22.0	0.0
LnGrp LOS	A	B	C	D	B	B	F	C	B	C	C	A
Approach Vol, veh/h		786			344			1122			414	
Approach Delay, s/veh		20.9			19.1			40.9			23.8	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	22.7	9.6	23.2	12.0	18.7	0.0	32.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	27.0	7.0	29.0	7.0	26.0	7.0	29.0
Max Q Clear Time (g_c+I1), s	3.4	14.0	5.5	14.9	9.0	7.2	0.0	4.3
Green Ext Time (p_c), s	0.0	3.8	0.0	3.3	0.0	1.8	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	467	15	39	277	79	15
Future Volume (veh/h)	467	15	39	277	79	15
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	492	16	41	292	83	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1218	543	549	1218	335	298
Arrive On Green	0.34	0.34	0.34	0.34	0.19	0.19
Sat Flow, veh/h	3647	1585	891	3647	1781	1585
Grp Volume(v), veh/h	492	16	41	292	83	16
Grp Sat Flow(s),veh/h/ln	1777	1585	891	1777	1781	1585
Q Serve(g_s), s	2.2	0.1	0.8	1.3	0.8	0.2
Cycle Q Clear(g_c), s	2.2	0.1	3.0	1.3	0.8	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1218	543	549	1218	335	298
V/C Ratio(X)	0.40	0.03	0.07	0.24	0.25	0.05
Avail Cap(c_a), veh/h	7676	3424	2169	7676	2007	1786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.3	4.6	6.5	5.0	7.4	7.1
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.1	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.6	4.7	6.6	5.1	7.8	7.2
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	508			333	99	
Approach Delay, s/veh	5.5			5.3	7.7	
Approach LOS	A			A	A	

Timer - Assigned Phs		2		4			8
Phs Duration (G+Y+Rc), s		9.0		12.3			12.3
Change Period (Y+Rc), s		5.0		5.0			5.0
Max Green Setting (Gmax), s		24.0		46.0			46.0
Max Q Clear Time (g_c+I1), s		2.8		4.2			5.0
Green Ext Time (p_c), s		0.2		3.4			2.1

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	472	7	33	239	195	28	965	75	309	856	105
Future Volume (veh/h)	132	472	7	33	239	195	28	965	75	309	856	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	497	7	35	252	205	29	1016	79	325	901	111
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	790	352	99	655	292	87	1619	503	436	2136	663
Arrive On Green	0.07	0.22	0.22	0.03	0.18	0.18	0.03	0.32	0.32	0.13	0.42	0.42
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	139	497	7	35	252	205	29	1016	79	325	901	111
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.6	8.3	0.2	0.7	4.1	7.9	0.5	11.1	2.3	5.9	8.2	2.9
Cycle Q Clear(g_c), s	2.6	8.3	0.2	0.7	4.1	7.9	0.5	11.1	2.3	5.9	8.2	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	790	352	99	655	292	87	1619	503	436	2136	663
V/C Ratio(X)	0.60	0.63	0.02	0.35	0.39	0.70	0.34	0.63	0.16	0.75	0.42	0.17
Avail Cap(c_a), veh/h	581	1738	775	581	1738	775	581	3200	993	581	3200	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	23.0	19.9	31.2	23.4	25.0	31.4	19.0	16.1	27.6	13.4	11.9
Incr Delay (d2), s/veh	2.5	0.8	0.0	2.1	0.4	3.1	2.2	0.4	0.1	3.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.2	0.1	0.3	1.6	3.0	0.2	3.8	0.8	2.4	2.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	23.8	19.9	33.3	23.8	28.1	33.6	19.4	16.2	31.2	13.6	12.0
LnGrp LOS	C	C	B	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		643			492			1124			1337	
Approach Delay, s/veh		25.6			26.3			19.6			17.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	25.7	6.9	19.5	6.6	32.4	9.4	17.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	41.0	11.0	32.0	11.0	41.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	7.9	13.1	2.7	10.3	2.5	10.2	4.6	9.9
Green Ext Time (p_c), s	0.3	7.6	0.0	3.1	0.0	6.9	0.2	2.1

Intersection Summary	
HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	853	3	18	456	9	11	0	87	37	0	0
Future Volume (veh/h)	0	853	3	18	456	9	11	0	87	37	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	898	3	19	480	9	12	0	92	39	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1349	602	34	1811	808	22	0	194	64	272	0
Arrive On Green	0.00	0.38	0.38	0.02	0.51	0.51	0.01	0.00	0.12	0.04	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	0	1585	1781	1870	0
Grp Volume(v), veh/h	0	898	3	19	480	9	12	0	92	39	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	0
Q Serve(g_s), s	0.0	7.6	0.0	0.4	2.8	0.1	0.2	0.0	2.0	0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.6	0.0	0.4	2.8	0.1	0.2	0.0	2.0	0.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	5	1349	602	34	1811	808	22	0	194	64	272	0
V/C Ratio(X)	0.00	0.67	0.00	0.55	0.27	0.01	0.54	0.00	0.48	0.61	0.00	0.00
Avail Cap(c_a), veh/h	395	1969	878	395	1969	878	395	0	1361	395	1606	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.3	7.0	17.6	5.0	4.4	17.7	0.0	14.8	17.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	13.3	0.1	0.0	18.5	0.0	1.8	9.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.7	0.0	0.2	0.4	0.0	0.2	0.0	0.6	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.9	7.0	30.8	5.1	4.4	36.2	0.0	16.6	26.2	0.0	0.0
LnGrp LOS	A	A	A	C	A	A	D	A	B	C	A	A
Approach Vol, veh/h		901			508			104			39	
Approach Delay, s/veh		9.9			6.0			18.8			26.2	
Approach LOS		A			A			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	8.4	4.7	17.7	4.5	9.3	0.0	22.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	31.0	8.0	20.0	8.0	31.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	2.8	4.0	2.4	9.6	2.2	0.0	0.0	4.8
Green Ext Time (p_c), s	0.0	0.5	0.0	4.1	0.0	0.0	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	732	12	100	422	80	31	113	229	29	203	100
Future Volume (veh/h)	52	732	12	100	422	80	31	113	229	29	203	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	771	13	105	444	84	33	119	241	31	214	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	964	430	140	861	162	72	259	284	34	238	117
Arrive On Green	0.06	0.27	0.27	0.08	0.29	0.29	0.18	0.18	0.18	0.22	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	2985	561	402	1449	1585	157	1080	530
Grp Volume(v), veh/h	55	771	13	105	263	265	152	0	241	350	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1769	1850	0	1585	1767	0	0
Q Serve(g_s), s	2.4	16.3	0.5	4.7	10.0	10.1	5.9	0.0	11.9	15.6	0.0	0.0
Cycle Q Clear(g_c), s	2.4	16.3	0.5	4.7	10.0	10.1	5.9	0.0	11.9	15.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.32	0.22		1.00	0.09		0.30
Lane Grp Cap(c), veh/h	109	964	430	140	512	510	331	0	284	389	0	0
V/C Ratio(X)	0.50	0.80	0.03	0.75	0.51	0.52	0.46	0.00	0.85	0.90	0.00	0.00
Avail Cap(c_a), veh/h	264	1164	519	264	582	580	478	0	409	443	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.8	27.4	21.7	36.5	24.1	24.1	29.7	0.0	32.1	30.7	0.0	0.0
Incr Delay (d2), s/veh	1.3	4.1	0.0	3.1	1.4	1.4	0.4	0.0	7.8	18.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	6.9	0.2	2.0	4.0	4.1	2.6	0.0	4.8	8.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	31.5	21.7	39.6	25.4	25.5	30.1	0.0	39.9	48.7	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	C	A	D	D	A	A
Approach Vol, veh/h		839			633			393			350	
Approach Delay, s/veh		31.8			27.8			36.1			48.7	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.1	10.3	27.6		19.8	9.0	29.0
Change Period (Y+Rc), s		5.3	4.0	5.7		5.3	4.0	5.7
Max Green Setting (Gmax), s		20.3	12.0	26.5		20.9	12.0	26.5
Max Q Clear Time (g_c+I1), s		17.6	6.7	18.3		13.9	4.4	12.1
Green Ext Time (p_c), s		0.2	0.1	3.6		0.6	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	958	7	95	564	41	26	27	39	53	6	7
Future Volume (veh/h)	16	958	7	95	564	41	26	27	39	53	6	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	1008	7	100	594	43	27	28	41	56	6	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	1531	11	129	1702	759	35	37	54	79	8	78
Arrive On Green	0.02	0.42	0.42	0.07	0.48	0.48	0.07	0.07	0.07	0.05	0.05	0.05
Sat Flow, veh/h	1781	3618	25	1781	3554	1585	482	500	732	1616	173	1585
Grp Volume(v), veh/h	17	495	520	100	594	43	96	0	0	62	0	7
Grp Sat Flow(s),veh/h/ln	1781	1777	1866	1781	1777	1585	1714	0	0	1790	0	1585
Q Serve(g_s), s	0.5	11.4	11.4	2.8	5.3	0.7	2.8	0.0	0.0	1.7	0.0	0.2
Cycle Q Clear(g_c), s	0.5	11.4	11.4	2.8	5.3	0.7	2.8	0.0	0.0	1.7	0.0	0.2
Prop In Lane	1.00		0.01	1.00		1.00	0.28		0.43	0.90		1.00
Lane Grp Cap(c), veh/h	30	752	790	129	1702	759	126	0	0	88	0	78
V/C Ratio(X)	0.57	0.66	0.66	0.78	0.35	0.06	0.76	0.00	0.00	0.71	0.00	0.09
Avail Cap(c_a), veh/h	419	1298	1363	419	2597	1158	709	0	0	705	0	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.9	11.8	11.8	23.3	8.3	7.1	23.2	0.0	0.0	23.9	0.0	23.2
Incr Delay (d2), s/veh	6.2	1.7	1.6	3.8	0.2	0.1	3.6	0.0	0.0	3.9	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.5	3.7	1.1	1.4	0.2	1.1	0.0	0.0	0.8	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	13.5	13.4	27.0	8.5	7.2	26.8	0.0	0.0	27.8	0.0	23.4
LnGrp LOS	C	B	B	C	A	A	C	A	A	C	A	C
Approach Vol, veh/h		1032			737			96			69	
Approach Delay, s/veh		13.7			11.0			26.8			27.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.4	7.7	27.3		8.7	4.9	30.1				
Change Period (Y+Rc), s		4.9	4.0	5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		20.1	12.0	37.3		21.1	12.0	37.3				
Max Q Clear Time (g_c+I1), s		3.7	4.8	13.4		4.8	2.5	7.3				
Green Ext Time (p_c), s		0.1	0.1	8.2		0.2	0.0	5.4				

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1341	76	30	526	53	98
Future Volume (veh/h)	1341	76	30	526	53	98
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1412	80	32	554	56	103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1910	852	52	2395	199	177
Arrive On Green	0.54	0.54	0.03	0.67	0.11	0.11
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	1412	80	32	554	56	103
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	14.2	1.1	0.8	2.8	1.3	2.9
Cycle Q Clear(g_c), s	14.2	1.1	0.8	2.8	1.3	2.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1910	852	52	2395	199	177
V/C Ratio(X)	0.74	0.09	0.62	0.23	0.28	0.58
Avail Cap(c_a), veh/h	2441	1089	268	3356	612	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.3	5.2	22.4	2.9	19.0	19.7
Incr Delay (d2), s/veh	0.9	0.0	11.3	0.0	0.8	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.2	0.5	0.2	0.5	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.2	5.3	33.7	3.0	19.8	22.7
LnGrp LOS	A	A	C	A	B	C
Approach Vol, veh/h	1492			586	159	
Approach Delay, s/veh	9.0			4.7	21.7	
Approach LOS	A			A	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		10.2	6.4	30.0		36.4
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		16.0	7.0	32.0		44.0
Max Q Clear Time (g_c+I1), s		4.9	2.8	16.2		4.8
Green Ext Time (p_c), s		0.3	0.0	8.8		3.7

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	678	365	540	362	79	194	1263	884	112	1047	33
Future Volume (veh/h)	79	678	365	540	362	79	194	1263	884	112	1047	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	714	188	568	381	66	204	1329	772	118	1102	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	862	384	520	806	138	268	2114	656	233	2062	640
Arrive On Green	0.08	0.24	0.24	0.10	0.27	0.27	0.08	0.41	0.41	0.07	0.40	0.40
Sat Flow, veh/h	3456	3554	1585	5023	3033	521	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	83	714	188	568	222	225	204	1329	772	118	1102	12
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1674	1777	1777	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.6	22.1	11.8	12.0	12.1	12.4	6.7	23.9	48.0	3.8	19.0	0.5
Cycle Q Clear(g_c), s	2.6	22.1	11.8	12.0	12.1	12.4	6.7	23.9	48.0	3.8	19.0	0.5
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	862	384	520	472	472	268	2114	656	233	2062	640
V/C Ratio(X)	0.30	0.83	0.49	1.09	0.47	0.48	0.76	0.63	1.18	0.51	0.53	0.02
Avail Cap(c_a), veh/h	298	990	442	520	521	521	537	2114	656	238	2062	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	41.6	37.7	52.0	35.7	35.8	52.4	26.9	34.0	52.2	26.3	20.8
Incr Delay (d2), s/veh	0.2	6.1	1.7	67.0	1.1	1.1	1.7	0.8	94.7	0.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	10.0	4.6	8.1	5.2	5.3	2.8	9.1	34.2	1.6	7.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.5	47.7	39.4	119.0	36.8	36.9	54.1	27.7	128.7	52.8	26.7	20.8
LnGrp LOS	D	D	D	F	D	D	D	C	F	D	C	C
Approach Vol, veh/h		985			1015			2305			1232	
Approach Delay, s/veh		46.3			82.8			63.9			29.2	
Approach LOS		D			F			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	54.0	16.0	34.1	13.0	52.8	13.3	36.8
Change Period (Y+Rc), s	4.0	6.0	4.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	48.0	12.0	* 32	18.0	38.0	10.0	34.0
Max Q Clear Time (g_c+I1), s	5.8	50.0	14.0	24.1	8.7	21.0	4.6	14.4
Green Ext Time (p_c), s	0.0	0.0	0.0	4.0	0.3	8.6	0.1	2.5

Intersection Summary	
HCM 6th Ctrl Delay	56.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	1516	870	47	105	25
Future Volume (veh/h)	11	1516	870	47	105	25
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1596	916	0	111	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	44	2205	1793		271	
Arrive On Green	0.02	0.62	0.50	0.00	0.15	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	12	1596	916	0	111	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.3	13.6	7.6	0.0	2.5	0.0
Cycle Q Clear(g_c), s	0.3	13.6	7.6	0.0	2.5	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	44	2205	1793		271	
V/C Ratio(X)	0.27	0.72	0.51		0.41	
Avail Cap(c_a), veh/h	324	2750	1804		1054	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	21.0	5.7	7.3	0.0	16.8	0.0
Incr Delay (d2), s/veh	1.2	0.9	0.4	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.8	1.6	0.0	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.2	6.7	7.7	0.0	17.2	0.0
LnGrp LOS	C	A	A		B	
Approach Vol, veh/h		1608	916	A	111	A
Approach Delay, s/veh		6.8	7.7		17.2	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		33.3		10.7	5.1	28.2
Change Period (Y+Rc), s		6.0		4.0	4.0	* 6
Max Green Setting (Gmax), s		34.0		26.0	8.0	* 22
Max Q Clear Time (g_c+I1), s		15.6		4.5	2.3	9.6
Green Ext Time (p_c), s		11.7		0.2	0.0	5.7

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	1612	934	18	50	11
Future Volume (veh/h)	5	1612	934	18	50	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	5	1697	983	19	53	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	17	2375	2028	39	158	36
Arrive On Green	0.01	0.67	0.57	0.57	0.11	0.11
Sat Flow, veh/h	1781	3647	3659	69	1400	317
Grp Volume(v), veh/h	5	1697	490	512	66	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1858	1743	0
Q Serve(g_s), s	0.1	13.4	7.3	7.3	1.5	0.0
Cycle Q Clear(g_c), s	0.1	13.4	7.3	7.3	1.5	0.0
Prop In Lane	1.00			0.04	0.80	0.18
Lane Grp Cap(c), veh/h	17	2375	1011	1057	197	0
V/C Ratio(X)	0.30	0.71	0.48	0.48	0.34	0.00
Avail Cap(c_a), veh/h	482	2828	1011	1057	786	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.8	4.7	5.7	5.7	18.1	0.0
Incr Delay (d2), s/veh	3.6	0.9	0.6	0.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.2	1.4	1.4	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.4	5.6	6.3	6.3	18.5	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		1702	1002		66	
Approach Delay, s/veh		5.7	6.3		18.5	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	35.3	9.0	4.4	30.9
Change Period (Y+Rc), s	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	35.3	20.0	12.0	19.3
Max Q Clear Time (g_c+I1), s	15.4	3.5	2.1	9.3
Green Ext Time (p_c), s	14.2	0.1	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	22	1632	890	24	104	47
Future Volume (veh/h)	22	1632	890	24	104	47
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	1718	937	25	109	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	68	2273	1855	49	276	246
Arrive On Green	0.04	0.64	0.52	0.52	0.16	0.16
Sat Flow, veh/h	1781	3647	3628	94	1781	1585
Grp Volume(v), veh/h	23	1718	471	491	109	49
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1852	1781	1585
Q Serve(g_s), s	0.7	17.6	8.9	8.9	2.9	1.4
Cycle Q Clear(g_c), s	0.7	17.6	8.9	8.9	2.9	1.4
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	68	2273	932	972	276	246
V/C Ratio(X)	0.34	0.76	0.51	0.51	0.39	0.20
Avail Cap(c_a), veh/h	273	2679	932	972	683	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	6.6	8.0	8.0	19.8	19.2
Incr Delay (d2), s/veh	1.1	1.3	0.7	0.7	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.1	2.3	2.4	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.5	7.8	8.7	8.7	20.2	19.3
LnGrp LOS	C	A	A	A	C	B
Approach Vol, veh/h		1741	962		158	
Approach Delay, s/veh		8.1	8.7		19.9	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	40.0	12.1	6.0	34.1
Change Period (Y+Rc), s	6.7	4.0	4.0	6.7
Max Green Setting (Gmax), s	39.3	20.0	8.0	27.3
Max Q Clear Time (g_c+I1), s	19.6	4.9	2.7	10.9
Green Ext Time (p_c), s	13.8	0.3	0.0	6.1

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	1485	171	311	776	133	94	674	721	301	456	218
Future Volume (veh/h)	77	1485	171	311	776	133	94	674	721	301	456	218
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	81	1563	0	327	817	0	99	709	0	317	480	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	1725		371	2150		138	765		356	1025	
Arrive On Green	0.04	0.38	0.00	0.12	0.47	0.00	0.04	0.24	0.00	0.11	0.32	0.00
Sat Flow, veh/h	3110	4595	1427	3110	4595	1427	3110	3198	1427	3110	3198	1427
Grp Volume(v), veh/h	81	1563	0	327	817	0	99	709	0	317	480	0
Grp Sat Flow(s),veh/h/ln	1555	1532	1427	1555	1532	1427	1555	1599	1427	1555	1599	1427
Q Serve(g_s), s	3.9	48.3	0.0	15.5	17.3	0.0	4.7	32.5	0.0	15.1	18.0	0.0
Cycle Q Clear(g_c), s	3.9	48.3	0.0	15.5	17.3	0.0	4.7	32.5	0.0	15.1	18.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	1725		371	2150		138	765		356	1025	
V/C Ratio(X)	0.69	0.91		0.88	0.38		0.72	0.93		0.89	0.47	
Avail Cap(c_a), veh/h	166	1725		394	2150		187	795		373	1025	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.3	44.3	0.0	65.0	25.8	0.0	70.8	55.8	0.0	65.5	40.7	0.0
Incr Delay (d2), s/veh	2.6	8.4	0.0	18.6	0.2	0.0	4.4	17.0	0.0	20.9	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	18.8	0.0	7.0	6.1	0.0	1.9	14.6	0.0	6.9	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	52.8	0.0	83.6	26.0	0.0	75.2	72.8	0.0	86.4	41.3	0.0
LnGrp LOS	E	D		F	C		E	E		F	D	
Approach Vol, veh/h		1644	A		1144	A		808	A		797	A
Approach Delay, s/veh		53.8			42.5			73.1			59.2	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.9	41.6	23.6	62.0	10.6	53.8	9.7	75.9
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	18.0	* 37	19.0	* 56	9.0	46.3	8.0	67.3
Max Q Clear Time (g_c+I1), s	17.1	34.5	17.5	50.3	6.7	20.0	5.9	19.3
Green Ext Time (p_c), s	0.1	1.4	0.1	4.7	0.0	3.8	0.0	7.8

Intersection Summary	
HCM 6th Ctrl Delay	55.4
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2301	31	119	1000	150	257
Future Volume (veh/h)	2301	31	119	1000	150	257
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2422	33	125	1053	158	271
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3249	44	147	3755	327	291
Arrive On Green	0.63	0.63	0.08	0.74	0.18	0.18
Sat Flow, veh/h	5359	71	1781	5274	1781	1585
Grp Volume(v), veh/h	1587	868	125	1053	158	271
Grp Sat Flow(s),veh/h/ln	1702	1857	1781	1702	1781	1585
Q Serve(g_s), s	49.0	49.3	10.4	10.3	11.9	25.3
Cycle Q Clear(g_c), s	49.0	49.3	10.4	10.3	11.9	25.3
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2131	1162	147	3755	327	291
V/C Ratio(X)	0.74	0.75	0.85	0.28	0.48	0.93
Avail Cap(c_a), veh/h	2131	1162	214	3755	346	307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	19.7	67.9	6.6	54.8	60.3
Incr Delay (d2), s/veh	2.4	4.4	13.5	0.2	0.4	32.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.3	20.7	5.2	3.3	5.4	12.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.1	24.1	81.4	6.8	55.3	92.3
LnGrp LOS	C	C	F	A	E	F
Approach Vol, veh/h	2455			1178	429	
Approach Delay, s/veh	22.8			14.7	78.7	
Approach LOS	C			B	E	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		32.5	16.4	99.6			116.0
Change Period (Y+Rc), s		4.9	4.0	5.7			5.7
Max Green Setting (Gmax), s		29.1	18.0	88.3			110.3
Max Q Clear Time (g_c+I1), s		27.3	12.4	51.3			12.3
Green Ext Time (p_c), s		0.3	0.1	25.2			43.2

Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	597	1847	162	463	926	195	170	1344	646	114	443	113
Future Volume (veh/h)	597	1847	162	463	926	195	170	1344	646	114	443	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	628	1944	90	487	975	111	179	1415	519	120	466	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	755	2035	632	502	1440	447	225	1566	486	164	1860	458
Arrive On Green	0.22	0.40	0.40	0.10	0.28	0.28	0.06	0.31	0.31	0.05	0.29	0.29
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	5106	1585	3456	6434	1585
Grp Volume(v), veh/h	628	1944	90	487	975	111	179	1415	519	120	466	28
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1702	1585	1728	1609	1585
Q Serve(g_s), s	26.0	55.5	5.4	14.5	25.4	6.8	7.7	39.9	46.0	5.1	8.3	1.1
Cycle Q Clear(g_c), s	26.0	55.5	5.4	14.5	25.4	6.8	7.7	39.9	46.0	5.1	8.3	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	755	2035	632	502	1440	447	225	1566	486	164	1860	458
V/C Ratio(X)	0.83	0.96	0.14	0.97	0.68	0.25	0.80	0.90	1.07	0.73	0.25	0.06
Avail Cap(c_a), veh/h	755	2035	632	502	1440	447	299	1566	486	184	1860	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.0	43.8	28.8	67.3	47.8	29.6	69.2	49.9	52.0	70.5	40.9	12.9
Incr Delay (d2), s/veh	7.4	11.9	0.5	32.2	2.6	1.3	7.6	7.9	60.1	10.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	24.7	2.1	7.6	10.9	3.3	3.6	17.7	25.9	2.5	3.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	55.7	29.2	99.4	50.4	30.9	76.7	57.8	112.1	80.5	41.0	13.0
LnGrp LOS	E	E	C	F	D	C	E	E	F	F	D	B
Approach Vol, veh/h		2662			1573			2113			614	
Approach Delay, s/veh		56.6			64.2			72.7			47.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	52.4	21.0	65.5	13.7	49.8	38.5	48.0
Change Period (Y+Rc), s	4.0	* 6.4	6.0	5.7	4.0	6.4	5.7	5.7
Max Green Setting (Gmax), s	8.0	* 46	15.0	59.3	13.0	40.6	32.3	42.3
Max Q Clear Time (g_c+I1), s	7.1	48.0	16.5	57.5	9.7	10.3	28.0	27.4
Green Ext Time (p_c), s	0.0	0.0	0.0	1.8	0.1	4.0	0.6	8.4

Intersection Summary	
HCM 6th Ctrl Delay	62.4
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1960	190	169	1023	69	230	881	327	60	505	330
Future Volume (veh/h)	160	1960	190	169	1023	69	230	881	327	60	505	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	2063	119	178	1077	0	242	927	0	63	532	188
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	2179	676	367	2475		404	975		150	656	293
Arrive On Green	0.08	0.57	0.57	0.11	0.48	0.00	0.12	0.27	0.00	0.04	0.18	0.18
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	168	2063	119	178	1077	0	242	927	0	63	532	188
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	7.2	56.7	5.4	7.3	20.7	0.0	10.0	38.4	0.0	2.7	21.5	13.8
Cycle Q Clear(g_c), s	7.2	56.7	5.4	7.3	20.7	0.0	10.0	38.4	0.0	2.7	21.5	13.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	2179	676	367	2475		404	975		150	656	293
V/C Ratio(X)	0.79	0.95	0.18	0.48	0.44		0.60	0.95		0.42	0.81	0.64
Avail Cap(c_a), veh/h	276	2179	676	367	2475		404	986		276	867	387
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	30.9	19.8	63.2	25.2	0.0	62.9	53.4	0.0	69.9	58.6	39.9
Incr Delay (d2), s/veh	8.1	10.3	0.6	0.4	0.2	0.0	1.7	18.1	0.0	0.7	5.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	21.8	2.0	3.2	8.2	0.0	4.4	19.2	0.0	1.2	10.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	41.2	20.3	63.5	25.4	0.0	64.6	71.5	0.0	70.6	64.1	43.6
LnGrp LOS	E	D	C	E	C		E	E		E	E	D
Approach Vol, veh/h		2350			1255	A		1169	A		783	
Approach Delay, s/veh		42.6			30.8			70.1			59.7	
Approach LOS		D			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	47.6	21.9	70.0	24.0	34.1	13.2	78.7
Change Period (Y+Rc), s	4.0	6.4	6.0	6.0	6.4	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	12.0	41.6	10.0	64.0	17.0	* 37	12.0	64.0
Max Q Clear Time (g_c+I1), s	4.7	40.4	9.3	58.7	12.0	23.5	9.2	22.7
Green Ext Time (p_c), s	0.0	0.8	0.0	4.8	0.3	4.2	0.1	9.7

Intersection Summary	
HCM 6th Ctrl Delay	48.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	2282	29	21	1127	84	57	49	39	95	5	29
Future Volume (veh/h)	26	2282	29	21	1127	84	57	49	39	95	5	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	2402	0	22	1186	0	60	52	0	100	5	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	2938		329	3840		77	69		121	116	
Arrive On Green	0.02	0.58	0.00	0.37	1.00	0.00	0.04	0.04	0.00	0.07	0.06	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	27	2402	0	22	1186	0	60	52	0	100	5	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.3	56.6	0.0	1.2	0.0	0.0	5.0	4.1	0.0	8.3	0.4	0.0
Cycle Q Clear(g_c), s	2.3	56.6	0.0	1.2	0.0	0.0	5.0	4.1	0.0	8.3	0.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	2938		329	3840		77	69		121	116	
V/C Ratio(X)	0.79	0.82		0.07	0.31		0.78	0.76		0.83	0.04	
Avail Cap(c_a), veh/h	143	2938		329	3840		143	237		178	263	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	73.3	25.5	0.0	39.0	0.0	0.0	71.1	71.6	0.0	69.0	66.2	0.0
Incr Delay (d2), s/veh	13.7	2.7	0.0	0.0	0.1	0.0	6.4	11.7	0.0	11.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	22.1	0.0	0.5	0.0	0.0	2.4	2.2	0.0	4.2	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.0	28.2	0.0	39.0	0.1	0.0	77.5	83.3	0.0	80.9	66.4	0.0
LnGrp LOS	F	C		D	A		E	F		F	E	
Approach Vol, veh/h		2429	A		1208	A		112	A		105	A
Approach Delay, s/veh		28.9			0.8			80.2			80.2	
Approach LOS		C			A			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	10.4	33.4	92.0	10.4	14.2	6.9	118.5
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	15.0	* 19	12.0	* 86	12.0	21.1	12.0	86.3
Max Q Clear Time (g_c+I1), s	10.3	6.1	3.2	58.6	7.0	2.4	4.3	2.0
Green Ext Time (p_c), s	0.0	0.1	0.0	25.4	0.0	0.0	0.0	20.2

Intersection Summary	
HCM 6th Ctrl Delay	22.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1274	1092	917	832	192	575	1127	502	183	1106	24
Future Volume (veh/h)	22	1274	1092	917	832	192	575	1127	502	183	1106	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	1341	0	965	876	0	605	1186	0	193	1164	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	1294		898	2325		553	1481		248	1123	
Arrive On Green	0.06	0.34	0.00	0.26	0.46	0.00	0.05	0.10	0.00	0.07	0.22	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	23	1341	0	965	876	0	605	1186	0	193	1164	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.9	38.0	0.0	39.0	16.9	0.0	24.0	34.1	0.0	8.2	33.0	0.0
Cycle Q Clear(g_c), s	0.9	38.0	0.0	39.0	16.9	0.0	24.0	34.1	0.0	8.2	33.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	1294		898	2325		553	1481		248	1123	
V/C Ratio(X)	0.14	1.04		1.07	0.38		1.09	0.80		0.78	1.04	
Avail Cap(c_a), veh/h	207	1294		898	2325		553	1481		422	1123	
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.5	49.7	0.0	55.5	26.9	0.0	71.0	63.6	0.0	68.4	58.5	0.0
Incr Delay (d2), s/veh	0.1	35.0	0.0	52.0	0.5	0.0	66.5	3.4	0.0	7.5	36.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	19.1	0.0	23.0	6.8	0.0	16.3	16.1	0.0	3.8	17.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.7	84.8	0.0	107.5	27.3	0.0	137.5	67.0	0.0	75.9	95.2	0.0
LnGrp LOS	E	F		F	C		F	E		E	F	
Approach Vol, veh/h		1364	A		1841	A		1791	A		1357	A
Approach Delay, s/veh		84.5			69.3			90.8			92.4	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	51.5	43.0	44.0	27.0	41.0	13.0	74.0
Change Period (Y+Rc), s	5.7	8.0	4.0	6.0	3.0	* 8	6.0	* 5.7
Max Green Setting (Gmax), s	18.3	31.0	39.0	38.0	24.0	* 33	9.0	* 68
Max Q Clear Time (g_c+I1), s	10.2	36.1	41.0	40.0	26.0	35.0	2.9	18.9
Green Ext Time (p_c), s	0.6	0.0	0.0	0.0	0.0	0.0	0.0	11.8

Intersection Summary	
HCM 6th Ctrl Delay	83.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	3	140	60	26	61	173	1598	102	327	1620	165
Future Volume (veh/h)	199	3	140	60	26	61	173	1598	102	327	1620	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	209	3	147	63	27	64	182	1682	107	344	1705	174
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	202	171	192	104	88	232	2657	169	910	3248	1008
Arrive On Green	0.11	0.11	0.11	0.06	0.06	0.06	0.07	0.43	0.43	0.26	0.64	0.64
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	6228	396	3456	5106	1585
Grp Volume(v), veh/h	209	3	147	63	27	64	182	1303	486	344	1705	174
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1609	1799	1728	1702	1585
Q Serve(g_s), s	8.6	0.2	13.7	2.6	2.1	6.0	7.8	31.8	31.8	12.2	27.4	6.7
Cycle Q Clear(g_c), s	8.6	0.2	13.7	2.6	2.1	6.0	7.8	31.8	31.8	12.2	27.4	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	373	202	171	192	104	88	232	2059	768	910	3248	1008
V/C Ratio(X)	0.56	0.01	0.86	0.33	0.26	0.73	0.78	0.63	0.63	0.38	0.52	0.17
Avail Cap(c_a), veh/h	438	237	201	415	224	190	346	2059	768	910	3248	1008
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.5	59.8	65.8	68.1	67.9	69.7	68.9	33.8	33.8	45.2	14.9	11.2
Incr Delay (d2), s/veh	1.3	0.0	26.3	1.0	1.3	10.8	6.8	1.5	4.0	0.3	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.1	6.8	1.2	1.0	2.7	3.6	12.4	14.4	5.2	9.9	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.8	59.8	92.1	69.1	69.2	80.5	75.7	35.3	37.7	45.5	15.1	11.2
LnGrp LOS	E	E	F	E	E	F	E	D	D	D	B	B
Approach Vol, veh/h		359			154			1971			2223	
Approach Delay, s/veh		76.0			73.9			39.6			19.5	
Approach LOS		E			E			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	46.5	70.0		20.2	14.1	102.4		13.3
Change Period (Y+Rc), s	7.0	6.0		4.0	4.0	* 7		5.0
Max Green Setting (Gmax), s	27.0	64.0		19.0	15.0	* 79		18.0
Max Q Clear Time (g_c+I1), s	14.2	33.8		15.7	9.8	29.4		8.0
Green Ext Time (p_c), s	1.2	27.8		0.5	0.3	43.8		0.4

Intersection Summary	
HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1182	355	0	1556	364	0	0	0	73	0	563
Future Volume (veh/h)	0	1182	355	0	1556	364	0	0	0	73	0	563
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2067	2067	0	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	0	1244	374	0	1638	0				77	0	593
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	3413	1060	0	3089					858	0	693
Arrive On Green	0.00	0.60	0.60	0.00	0.80	0.00				0.25	0.00	0.25
Sat Flow, veh/h	0	5828	1751	0	5274	1585				3456	0	2790
Grp Volume(v), veh/h	0	1244	374	0	1638	0				77	0	593
Grp Sat Flow(s),veh/h/ln	0	1881	1751	0	1702	1585				1728	0	1395
Q Serve(g_s), s	0.0	8.4	8.0	0.0	8.2	0.0				1.3	0.0	15.2
Cycle Q Clear(g_c), s	0.0	8.4	8.0	0.0	8.2	0.0				1.3	0.0	15.2
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3413	1060	0	3089					858	0	693
V/C Ratio(X)	0.00	0.36	0.35	0.00	0.53					0.09	0.00	0.86
Avail Cap(c_a), veh/h	0	3413	1060	0	3089					1138	0	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.5	7.4	0.0	3.7	0.0				21.7	0.0	26.9
Incr Delay (d2), s/veh	0.0	0.3	0.9	0.0	0.2	0.0				0.0	0.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.6	2.5	0.0	1.5	0.0				0.5	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.8	8.4	0.0	3.9	0.0				21.7	0.0	31.9
LnGrp LOS	A	A	A	A	A					C	A	C
Approach Vol, veh/h		1618			1638	A					670	
Approach Delay, s/veh		7.9			3.9						30.7	
Approach LOS		A			A						C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		51.1		23.9		51.1
Change Period (Y+Rc), s		5.7		5.3		5.7
Max Green Setting (Gmax), s		39.3		24.7		39.3
Max Q Clear Time (g_c+I1), s		10.4		17.2		10.2
Green Ext Time (p_c), s		14.7		1.4		14.2

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	917	338	94	1373	547	722
Future Volume (veh/h)	917	338	94	1373	547	722
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	2067	2067	1870	1870	1870	1870
Adj Flow Rate, veh/h	965	0	99	1445	576	760
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2332		126	2744	1453	807
Arrive On Green	0.83	0.00	0.14	1.00	0.29	0.29
Sat Flow, veh/h	5828	1751	1781	5274	5023	2790
Grp Volume(v), veh/h	965	0	99	1445	576	760
Grp Sat Flow(s),veh/h/ln	1881	1751	1781	1702	1674	1395
Q Serve(g_s), s	3.4	0.0	4.0	0.0	6.9	20.0
Cycle Q Clear(g_c), s	3.4	0.0	4.0	0.0	6.9	20.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2332		126	2744	1453	807
V/C Ratio(X)	0.41		0.79	0.53	0.40	0.94
Avail Cap(c_a), veh/h	2332		285	2744	1453	807
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.93	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.1	0.0	31.7	0.0	21.4	26.0
Incr Delay (d2), s/veh	0.1	0.0	4.1	0.7	0.1	18.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.7	0.2	2.6	8.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.2	0.0	35.7	0.7	21.5	44.8
LnGrp LOS	A		D	A	C	D
Approach Vol, veh/h	965	A		1544	1336	
Approach Delay, s/veh	4.2			3.0	34.7	
Approach LOS	A			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.3	36.7				46.0	29.0
Change Period (Y+Rc), s	4.0	5.7				5.7	7.3
Max Green Setting (Gmax), s	12.0	24.3				40.3	21.7
Max Q Clear Time (g_c+I1), s	6.0	5.4				2.0	22.0
Green Ext Time (p_c), s	0.0	6.0				15.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	257	296	302	245	25	473	781	256	91	805	80
Future Volume (veh/h)	105	257	296	302	245	25	473	781	256	91	805	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	2067	2067	2067	1870	1870	1870
Adj Flow Rate, veh/h	111	271	26	318	258	4	498	822	206	96	847	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	356	159	368	574	256	645	2494	960	140	1542	479
Arrive On Green	0.05	0.10	0.10	0.11	0.16	0.16	0.17	0.44	0.44	0.04	0.30	0.30
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3818	5642	1751	3456	5106	1585
Grp Volume(v), veh/h	111	271	26	318	258	4	498	822	206	96	847	31
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1909	1881	1751	1728	1702	1585
Q Serve(g_s), s	4.8	11.1	1.2	13.6	9.8	0.3	18.7	14.3	9.0	4.1	20.8	1.2
Cycle Q Clear(g_c), s	4.8	11.1	1.2	13.6	9.8	0.3	18.7	14.3	9.0	4.1	20.8	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	356	159	368	574	256	645	2494	960	140	1542	479
V/C Ratio(X)	0.71	0.76	0.16	0.87	0.45	0.02	0.77	0.33	0.21	0.69	0.55	0.06
Avail Cap(c_a), veh/h	276	694	310	530	964	430	840	2494	960	276	1542	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.7	65.7	17.1	66.0	56.8	52.9	59.6	27.3	17.3	71.0	43.8	12.6
Incr Delay (d2), s/veh	2.3	4.4	0.6	7.4	0.9	0.0	2.3	0.4	0.5	2.2	1.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	5.2	0.9	6.3	4.5	0.1	9.1	6.4	3.7	1.8	8.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	70.2	17.7	73.4	57.7	52.9	61.9	27.7	17.8	73.3	45.2	12.9
LnGrp LOS	E	E	B	E	E	D	E	C	B	E	D	B
Approach Vol, veh/h		408			580			1526			974	
Approach Delay, s/veh		67.6			66.3			37.5			47.0	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	72.0	20.0	20.7	31.1	51.0	10.8	29.9
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	* 5.7
Max Green Setting (Gmax), s	12.0	66.3	23.0	29.3	33.0	* 45	12.0	* 41
Max Q Clear Time (g_c+I1), s	6.1	16.3	15.6	13.1	20.7	22.8	6.8	11.8
Green Ext Time (p_c), s	0.1	13.1	0.4	1.9	0.8	8.9	0.1	2.5

Intersection Summary	
HCM 6th Ctrl Delay	48.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	22	54	145	15	42	19	652	166	61	823	1
Future Volume (veh/h)	10	22	54	145	15	42	19	652	166	61	823	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	11	23	57	153	16	44	20	686	175	64	866	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	28	69	174	66	181	23	2989	928	79	2191	977
Arrive On Green	0.01	0.06	0.06	0.11	0.17	0.17	0.01	0.65	0.65	0.05	0.69	0.69
Sat Flow, veh/h	1603	429	1063	1603	397	1090	1603	4595	1427	1603	3198	1427
Grp Volume(v), veh/h	11	0	80	153	0	60	20	686	175	64	866	1
Grp Sat Flow(s),veh/h/ln	1603	0	1492	1603	0	1487	1603	1532	1427	1603	1599	1427
Q Serve(g_s), s	1.0	0.0	7.9	14.1	0.0	5.3	1.9	9.2	7.3	5.9	17.5	0.0
Cycle Q Clear(g_c), s	1.0	0.0	7.9	14.1	0.0	5.3	1.9	9.2	7.3	5.9	17.5	0.0
Prop In Lane	1.00		0.71	1.00		0.73	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	0	97	174	0	247	23	2989	928	79	2191	977
V/C Ratio(X)	0.92	0.00	0.83	0.88	0.00	0.24	0.86	0.23	0.19	0.81	0.40	0.00
Avail Cap(c_a), veh/h	86	0	199	310	0	406	86	2989	928	139	2191	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.4	0.0	69.3	65.9	0.0	54.3	73.7	10.8	10.4	70.6	10.2	7.4
Incr Delay (d2), s/veh	55.9	0.0	14.0	5.4	0.0	0.4	26.0	0.2	0.5	7.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.4	6.1	0.0	2.0	0.9	3.0	2.4	2.6	5.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	130.3	0.0	83.3	71.3	0.0	54.8	99.8	11.0	10.9	77.7	10.4	7.4
LnGrp LOS	F	A	F	E	A	D	F	B	B	E	B	A
Approach Vol, veh/h		91			213			881			931	
Approach Delay, s/veh		89.0			66.6			13.0			15.0	
Approach LOS		F			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	103.6	20.3	14.7	6.2	108.8	5.1	29.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	13.0	69.0	29.0	20.0	8.0	74.0	8.0	41.0
Max Q Clear Time (g_c+I1), s	7.9	11.2	16.1	9.9	3.9	19.5	3.0	7.3
Green Ext Time (p_c), s	0.0	8.5	0.2	0.1	0.0	8.9	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	8	24	60	3	72	6	1211	47	46	1373	3
Future Volume (veh/h)	9	8	24	60	3	72	6	1211	47	46	1373	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	8	25	63	3	76	6	1275	49	48	1445	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	110	49	91	256	114	12	1839	571	74	2019	627
Arrive On Green	0.01	0.03	0.03	0.05	0.07	0.07	0.01	0.36	0.36	0.04	0.40	0.40
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	9	8	25	63	3	76	6	1275	49	48	1445	3
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.2	0.1	0.6	1.3	0.0	1.8	0.1	8.2	0.8	1.0	9.2	0.0
Cycle Q Clear(g_c), s	0.2	0.1	0.6	1.3	0.0	1.8	0.1	8.2	0.8	1.0	9.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	110	49	91	256	114	12	1839	571	74	2019	627
V/C Ratio(X)	0.53	0.07	0.51	0.70	0.01	0.66	0.52	0.69	0.09	0.65	0.72	0.00
Avail Cap(c_a), veh/h	506	2937	1310	506	2937	1310	506	2110	655	506	2110	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	18.2	18.5	18.1	16.7	17.5	19.2	10.6	8.2	18.3	9.9	7.1
Incr Delay (d2), s/veh	23.3	0.3	8.0	9.2	0.0	6.5	32.1	0.8	0.1	9.1	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.7	0.0	0.8	0.1	2.0	0.2	0.5	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.4	18.5	26.5	27.3	16.7	24.0	51.3	11.4	8.2	27.4	11.0	7.1
LnGrp LOS	D	B	C	C	B	C	D	B	A	C	B	A
Approach Vol, veh/h		42			142			1330			1496	
Approach Delay, s/veh		28.4			25.3			11.5			11.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	18.9	7.0	6.2	5.2	20.3	5.4	7.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.0	10.2	3.3	2.6	2.1	11.2	2.2	3.8
Green Ext Time (p_c), s	0.0	3.7	0.1	0.1	0.0	3.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	118	4	2	82	8	7	1	0	28	5	1
Future Volume (veh/h)	1	118	4	2	82	8	7	1	0	28	5	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	124	4	2	86	8	7	1	0	29	5	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	417	186	5	421	188	13	5	5	522	536	454
Arrive On Green	0.00	0.12	0.12	0.00	0.12	0.12	0.01	0.00	0.00	0.29	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	1	124	4	2	86	8	7	1	0	29	5	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	1.1	0.1	0.0	0.7	0.2	0.1	0.0	0.0	0.4	0.1	0.0
Cycle Q Clear(g_c), s	0.0	1.1	0.1	0.0	0.7	0.2	0.1	0.0	0.0	0.4	0.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	417	186	5	421	188	13	5	5	522	536	454
V/C Ratio(X)	0.19	0.30	0.02	0.38	0.20	0.04	0.52	0.18	0.00	0.06	0.01	0.00
Avail Cap(c_a), veh/h	366	1771	790	366	1823	813	366	1426	1208	574	1590	1347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	13.8	13.3	17.0	13.6	13.3	16.9	17.0	0.0	8.7	8.7	8.7
Incr Delay (d2), s/veh	16.9	0.4	0.0	40.4	0.2	0.1	28.0	15.2	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.0	0.1	0.2	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	14.2	13.4	57.4	13.8	13.4	44.9	32.2	0.0	8.7	8.7	8.7
LnGrp LOS	C	B	B	E	B	B	D	C	A	A	A	A
Approach Vol, veh/h		129			96			8			35	
Approach Delay, s/veh		14.3			14.7			43.3			8.7	
Approach LOS		B			B			D			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	5.0	5.1	9.0	5.3	14.8	5.0	9.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	* 5
Max Green Setting (Gmax), s	11.0	26.0	7.0	17.0	7.0	29.0	7.0	* 18
Max Q Clear Time (g_c+I1), s	2.4	2.0	2.0	3.1	2.1	2.1	2.0	2.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	125	12	103	52	86	11	883	118	102	1246	8
Future Volume (veh/h)	35	125	12	103	52	86	11	883	118	102	1246	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	132	13	108	55	91	12	929	124	107	1312	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	259	116	139	425	189	22	2014	625	137	2345	728
Arrive On Green	0.03	0.07	0.07	0.08	0.12	0.12	0.01	0.39	0.39	0.08	0.46	0.46
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	37	132	13	108	55	91	12	929	124	107	1312	8
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.1	1.9	0.4	3.2	0.7	2.9	0.4	7.2	2.8	3.2	10.1	0.1
Cycle Q Clear(g_c), s	1.1	1.9	0.4	3.2	0.7	2.9	0.4	7.2	2.8	3.2	10.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	56	259	116	139	425	189	22	2014	625	137	2345	728
V/C Ratio(X)	0.66	0.51	0.11	0.78	0.13	0.48	0.55	0.46	0.20	0.78	0.56	0.01
Avail Cap(c_a), veh/h	232	2114	943	331	2378	1061	232	2630	816	232	2725	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	24.0	23.3	24.3	21.2	22.1	26.4	12.1	10.7	24.4	10.6	7.9
Incr Delay (d2), s/veh	4.8	0.6	0.2	3.5	0.1	0.7	7.9	0.5	0.4	3.6	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.8	0.1	1.4	0.3	1.0	0.2	2.2	0.9	1.3	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	24.6	23.5	27.8	21.2	22.8	34.3	12.5	11.1	28.0	11.2	7.9
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	B	A
Approach Vol, veh/h		182			254			1065			1427	
Approach Delay, s/veh		25.7			24.6			12.6			12.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	26.5	9.2	8.9	5.7	30.0	6.7	11.4
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	7.0	27.7	10.0	32.0	7.0	28.7	7.0	36.0
Max Q Clear Time (g_c+I1), s	5.2	9.2	5.2	3.9	2.4	12.1	3.1	4.9
Green Ext Time (p_c), s	0.0	11.2	0.0	0.5	0.0	12.6	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	374	0	3	211	0	40	0	4	0	0	1
Future Volume (veh/h)	2	374	0	3	211	0	40	0	4	0	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	394	0	3	222	0	42	0	4	0	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	800	357	6	804	358	69	587	497	5	228	194
Arrive On Green	0.00	0.23	0.00	0.00	0.23	0.00	0.04	0.00	0.31	0.00	0.00	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	2	394	0	3	222	0	42	0	4	0	0	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	3.2	0.0	0.1	1.7	0.0	0.8	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.2	0.0	0.1	1.7	0.0	0.8	0.0	0.1	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	800	357	6	804	358	69	587	497	5	228	194
V/C Ratio(X)	0.37	0.49	0.00	0.51	0.28	0.00	0.61	0.00	0.01	0.00	0.00	0.01
Avail Cap(c_a), veh/h	381	2822	1259	381	2822	1259	381	1771	1501	381	1656	1404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	16.3	11.1	0.0	16.3	10.5	0.0	15.5	0.0	7.7	0.0	0.0	12.6
Incr Delay (d2), s/veh	36.8	0.5	0.0	55.6	0.2	0.0	8.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.9	0.0	0.1	0.5	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.1	11.5	0.0	71.9	10.6	0.0	23.8	0.0	7.7	0.0	0.0	12.6
LnGrp LOS	D	B	A	E	B	A	C	A	A	A	A	B
Approach Vol, veh/h		396			225			46			1	
Approach Delay, s/veh		11.7			11.5			22.4			12.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	15.3	5.1	12.4	6.3	9.0	5.1	12.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	26.0	7.0	29.0	7.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.1	5.2	2.8	2.0	2.0	3.7
Green Ext Time (p_c), s	0.0	0.0	0.0	2.4	0.0	0.0	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	381	69	17	143	4	83	26	32	5	146	21
Future Volume (veh/h)	38	381	69	17	143	4	83	26	32	5	146	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	401	73	18	151	4	87	27	34	5	154	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	777	346	33	751	335	118	412	349	10	298	253
Arrive On Green	0.03	0.22	0.22	0.02	0.21	0.21	0.07	0.22	0.22	0.01	0.16	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	40	401	73	18	151	4	87	27	34	5	154	22
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.7	3.3	1.3	0.3	1.2	0.1	1.6	0.4	0.6	0.1	2.5	0.4
Cycle Q Clear(g_c), s	0.7	3.3	1.3	0.3	1.2	0.1	1.6	0.4	0.6	0.1	2.5	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	46	777	346	33	751	335	118	412	349	10	298	253
V/C Ratio(X)	0.87	0.52	0.21	0.55	0.20	0.01	0.74	0.07	0.10	0.52	0.52	0.09
Avail Cap(c_a), veh/h	399	1751	781	399	1751	781	399	1480	1254	399	1480	1254
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	11.5	10.7	16.3	10.9	10.4	15.4	10.3	10.4	16.6	12.9	12.0
Incr Delay (d2), s/veh	36.1	0.5	0.3	13.5	0.1	0.0	8.6	0.1	0.1	36.8	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.0	0.3	0.2	0.3	0.0	0.8	0.1	0.2	0.1	0.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.4	12.1	11.0	29.8	11.0	10.5	24.0	10.4	10.5	53.4	14.3	12.1
LnGrp LOS	D	B	B	C	B	B	C	B	B	D	B	B
Approach Vol, veh/h		514			173			148			181	
Approach Delay, s/veh		15.0			13.0			18.4			15.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	11.9	5.1	11.8	6.7	9.8	5.4	11.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	26.5	7.5	16.5	7.5	26.5	7.5	16.5
Max Q Clear Time (g_c+I1), s	2.1	2.6	2.3	5.3	3.6	4.5	2.7	3.2
Green Ext Time (p_c), s	0.0	0.2	0.0	2.1	0.1	0.8	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	523	8	13	162	0	19	3	108	0	2	17
Future Volume (veh/h)	13	523	8	13	162	0	19	3	108	0	2	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	551	8	14	171	0	20	3	114	0	2	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	26	1037	462	26	1037	462	36	510	432	5	210	178
Arrive On Green	0.01	0.29	0.29	0.01	0.29	0.00	0.02	0.27	0.27	0.00	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	14	551	8	14	171	0	20	3	114	0	2	18
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	4.6	0.1	0.3	1.3	0.0	0.4	0.0	2.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.3	4.6	0.1	0.3	1.3	0.0	0.4	0.0	2.0	0.0	0.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	26	1037	462	26	1037	462	36	510	432	5	210	178
V/C Ratio(X)	0.54	0.53	0.02	0.54	0.16	0.00	0.56	0.01	0.26	0.00	0.01	0.10
Avail Cap(c_a), veh/h	350	3291	1468	350	3291	1468	350	1522	1290	350	1470	1246
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	10.6	9.0	17.4	9.4	0.0	17.3	9.4	10.2	0.0	14.1	14.2
Incr Delay (d2), s/veh	16.4	0.4	0.0	16.4	0.1	0.0	12.8	0.0	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.3	0.0	0.2	0.4	0.0	0.3	0.0	0.5	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	11.0	9.0	33.9	9.5	0.0	30.1	9.4	10.5	0.0	14.1	14.4
LnGrp LOS	C	B	A	C	A	A	C	A	B	A	B	B
Approach Vol, veh/h		573			185			137			20	
Approach Delay, s/veh		11.5			11.3			13.3			14.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	14.7	5.5	15.4	5.7	9.0	5.5	15.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	29.0	7.0	33.0	7.0	28.0	7.0	33.0
Max Q Clear Time (g_c+I1), s	0.0	4.0	2.3	6.6	2.4	2.4	2.3	3.3
Green Ext Time (p_c), s	0.0	0.3	0.0	3.8	0.0	0.0	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	487	103	91	148	3	19	64	27	17	80	8
Future Volume (veh/h)	41	487	103	91	148	3	19	64	27	17	80	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	513	108	96	156	3	20	67	28	18	84	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	1177	525	123	1287	574	36	194	165	32	191	162
Arrive On Green	0.04	0.33	0.33	0.07	0.36	0.36	0.02	0.10	0.10	0.02	0.10	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	43	513	108	96	156	3	20	67	28	18	84	8
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.9	4.4	1.9	2.1	1.1	0.0	0.4	1.3	0.6	0.4	1.7	0.2
Cycle Q Clear(g_c), s	0.9	4.4	1.9	2.1	1.1	0.0	0.4	1.3	0.6	0.4	1.7	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	1177	525	123	1287	574	36	194	165	32	191	162
V/C Ratio(X)	0.63	0.44	0.21	0.78	0.12	0.01	0.56	0.34	0.17	0.56	0.44	0.05
Avail Cap(c_a), veh/h	523	2432	1085	523	2432	1085	523	788	668	523	788	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	10.2	9.4	17.9	8.3	8.0	19.0	16.3	16.0	19.1	16.5	15.9
Incr Delay (d2), s/veh	9.3	0.5	0.4	10.1	0.1	0.0	13.2	1.0	0.5	14.1	1.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.3	0.5	1.1	0.3	0.0	0.3	0.5	0.2	0.3	0.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	10.8	9.8	28.0	8.4	8.0	32.2	17.4	16.5	33.1	18.1	16.0
LnGrp LOS	C	B	A	C	A	A	C	B	B	C	B	B
Approach Vol, veh/h		664			255			115			110	
Approach Delay, s/veh		11.7			15.8			19.7			20.4	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	8.6	7.2	18.2	5.3	8.5	6.0	19.4
Change Period (Y+Rc), s	4.5	4.5	4.5	5.2	4.5	4.5	4.5	5.2
Max Green Setting (Gmax), s	11.5	16.5	11.5	26.8	11.5	16.5	11.5	26.8
Max Q Clear Time (g_c+I1), s	2.4	3.3	4.1	6.4	2.4	3.7	2.9	3.1
Green Ext Time (p_c), s	0.0	0.3	0.1	6.6	0.0	0.3	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	542	0	39	0	0	148	25	1696	10	410	1434	203
Future Volume (veh/h)	542	0	39	0	0	148	25	1696	10	410	1434	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	571	0	41	0	0	156	26	1785	11	432	1509	214
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	695	0	0	2	0	0	37	1912	594	476	3170	984
Arrive On Green	0.20	0.00	0.00	0.00	0.00	0.00	0.02	0.37	0.37	0.27	0.62	0.62
Sat Flow, veh/h	3456	571		1781	0		1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	571	39.0		0	0.0		26	1785	11	432	1509	214
Grp Sat Flow(s),veh/h/ln	1728	D		1781			1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	15.1			0.0			1.4	32.1	0.4	22.4	15.2	5.6
Cycle Q Clear(g_c), s	15.1			0.0			1.4	32.1	0.4	22.4	15.2	5.6
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	695			2			37	1912	594	476	3170	984
V/C Ratio(X)	0.82			0.00			0.70	0.93	0.02	0.91	0.48	0.22
Avail Cap(c_a), veh/h	1485			131			131	1927	598	710	3640	1130
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			0.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5			0.0			46.4	28.7	18.8	33.8	9.7	7.9
Incr Delay (d2), s/veh	2.5			0.0			21.0	9.0	0.0	11.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4			0.0			0.8	13.5	0.2	10.6	4.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0			0.0			67.4	37.7	18.8	45.1	9.8	8.0
LnGrp LOS	D			A			E	D	B	D	A	A
Approach Vol, veh/h								1822			2155	
Approach Delay, s/veh								38.0			16.7	
Approach LOS								D			B	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	30.5	40.7	0.0	7.0	64.2	24.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	38.0	36.0	7.0	7.0	68.0	41.0
Max Q Clear Time (g_c+I1), s	24.4	34.1	0.0	3.4	17.2	17.1
Green Ext Time (p_c), s	1.1	1.7	0.0	0.0	16.3	2.1

Intersection Summary	
HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1612	33	28	1486	12	0	8	2	105	20	20
Future Volume (veh/h)	8	1612	33	28	1486	12	0	8	2	105	20	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	1697	35	29	1564	13	0	8	2	111	21	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	2191	680	47	2283	709	3	145	123	143	476	403
Arrive On Green	0.01	0.43	0.43	0.03	0.45	0.45	0.00	0.08	0.08	0.08	0.25	0.25
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	8	1697	35	29	1564	13	0	8	2	111	21	21
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.2	14.7	0.7	0.8	12.6	0.2	0.0	0.2	0.1	3.2	0.4	0.5
Cycle Q Clear(g_c), s	0.2	14.7	0.7	0.8	12.6	0.2	0.0	0.2	0.1	3.2	0.4	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	2191	680	47	2283	709	3	145	123	143	476	403
V/C Ratio(X)	0.53	0.77	0.05	0.62	0.69	0.02	0.00	0.06	0.02	0.77	0.04	0.05
Avail Cap(c_a), veh/h	138	2370	736	138	2370	736	138	1230	1042	276	1374	1165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	12.6	8.6	24.9	11.4	8.0	0.0	22.1	22.0	23.3	14.5	14.6
Incr Delay (d2), s/veh	26.5	1.5	0.0	12.5	0.8	0.0	0.0	0.2	0.1	8.6	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.2	0.2	0.5	3.4	0.1	0.0	0.1	0.0	1.6	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	14.2	8.6	37.4	12.2	8.0	0.0	22.3	22.1	31.9	14.6	14.6
LnGrp LOS	D	B	A	D	B	A	A	C	C	C	B	B
Approach Vol, veh/h		1740			1606			10			153	
Approach Delay, s/veh		14.2			12.6			22.2			27.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	9.0	6.4	27.2	0.0	18.2	5.4	28.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	34.0	4.0	24.0	4.0	38.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	5.2	2.2	2.8	16.7	0.0	2.5	2.2	14.6
Green Ext Time (p_c), s	0.1	0.0	0.0	5.5	0.0	0.1	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	428	1277	32	363	1188	56	60	771	221	160	881	545
Future Volume (veh/h)	428	1277	32	363	1188	56	60	771	221	160	881	545
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	451	1344	10	382	1251	17	63	812	61	168	927	365
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	472	1673	519	450	1641	509	118	1348	419	235	1522	472
Arrive On Green	0.14	0.33	0.33	0.13	0.32	0.32	0.03	0.26	0.26	0.07	0.30	0.30
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	451	1344	10	382	1251	17	63	812	61	168	927	365
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	12.3	22.9	0.4	10.3	21.0	0.7	1.7	13.3	2.8	4.5	14.8	20.0
Cycle Q Clear(g_c), s	12.3	22.9	0.4	10.3	21.0	0.7	1.7	13.3	2.8	4.5	14.8	20.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	472	1673	519	450	1641	509	118	1348	419	235	1522	472
V/C Ratio(X)	0.96	0.80	0.02	0.85	0.76	0.03	0.54	0.60	0.15	0.71	0.61	0.77
Avail Cap(c_a), veh/h	472	1930	599	472	1930	599	254	1984	616	254	1984	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	29.2	21.7	40.5	29.0	22.2	45.3	30.7	26.8	43.5	28.7	30.5
Incr Delay (d2), s/veh	30.4	2.2	0.0	13.2	1.6	0.0	3.7	0.4	0.2	8.4	0.4	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	9.0	0.1	5.0	8.2	0.3	0.8	5.2	1.0	2.1	5.7	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.3	31.5	21.7	53.7	30.6	22.2	49.0	31.1	27.0	51.9	29.1	35.0
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1805			1650			936			1460	
Approach Delay, s/veh		41.4			35.9			32.0			33.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	30.1	17.4	36.2	8.2	33.4	18.0	35.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	37.0	13.0	36.0	7.0	37.0	13.0	36.0
Max Q Clear Time (g_c+I1), s	6.5	15.3	12.3	24.9	3.7	22.0	14.3	23.0
Green Ext Time (p_c), s	0.0	5.4	0.1	6.3	0.0	6.4	0.0	6.6

Intersection Summary	
HCM 6th Ctrl Delay	36.3
HCM 6th LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	244	1357	1113	116	50	79
Future Volume (veh/h)	244	1357	1113	116	50	79
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	257	1428	1172	122	53	83
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	333	3448	1927	598	182	162
Arrive On Green	0.19	0.68	0.38	0.38	0.10	0.10
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	257	1428	1172	122	53	83
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	6.2	5.7	8.3	2.3	1.2	2.2
Cycle Q Clear(g_c), s	6.2	5.7	8.3	2.3	1.2	2.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	333	3448	1927	598	182	162
V/C Ratio(X)	0.77	0.41	0.61	0.20	0.29	0.51
Avail Cap(c_a), veh/h	871	5788	2724	846	1148	1022
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	3.3	11.3	9.4	18.7	19.1
Incr Delay (d2), s/veh	3.8	0.1	0.3	0.2	0.9	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.4	2.2	0.6	0.5	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.2	3.4	11.6	9.6	19.6	21.6
LnGrp LOS	C	A	B	A	B	C
Approach Vol, veh/h		1685	1294		136	
Approach Delay, s/veh		6.1	11.4		20.8	
Approach LOS		A	B		C	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			35.4		9.6	13.4	22.0
Change Period (Y+Rc), s			5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s			51.0		29.0	22.0	24.0
Max Q Clear Time (g_c+I1), s			7.7		4.2	8.2	10.3
Green Ext Time (p_c), s			13.0		0.4	0.6	6.6

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	367	1029	11	180	721	185	28	549	560	299	672	481
Future Volume (veh/h)	367	1029	11	180	721	185	28	549	560	299	672	481
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	386	1083	12	189	759	195	29	578	589	315	707	327
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	1396	433	252	1326	412	75	1962	609	266	2244	697
Arrive On Green	0.09	0.27	0.27	0.07	0.26	0.26	0.02	0.38	0.38	0.08	0.44	0.44
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	386	1083	12	189	759	195	29	578	589	315	707	327
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	9.0	20.3	0.6	5.6	13.4	10.8	0.9	8.2	37.8	8.0	9.4	15.1
Cycle Q Clear(g_c), s	9.0	20.3	0.6	5.6	13.4	10.8	0.9	8.2	37.8	8.0	9.4	15.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	1396	433	252	1326	412	75	1962	609	266	2244	697
V/C Ratio(X)	1.29	0.78	0.03	0.75	0.57	0.47	0.38	0.29	0.97	1.18	0.32	0.47
Avail Cap(c_a), veh/h	299	1818	564	266	1769	549	233	1965	610	266	2244	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	34.8	27.6	47.3	33.5	32.5	50.1	22.2	31.3	48.0	18.9	20.6
Incr Delay (d2), s/veh	153.2	1.6	0.0	10.8	0.4	0.8	3.2	0.1	28.2	114.4	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	8.2	0.2	2.7	5.3	4.1	0.4	3.1	18.1	7.6	3.5	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	200.7	36.4	27.7	58.0	33.8	33.3	53.3	22.3	59.5	162.3	19.0	21.1
LnGrp LOS	F	D	C	E	C	C	D	C	E	F	B	C
Approach Vol, veh/h		1481			1143			1196			1349	
Approach Delay, s/veh		79.2			37.8			41.4			53.0	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	44.9	12.6	33.4	7.3	50.7	14.0	32.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	40.0	8.0	37.0	7.0	41.0	9.0	36.0
Max Q Clear Time (g_c+I1), s	10.0	39.8	7.6	22.3	2.9	17.1	11.0	15.4
Green Ext Time (p_c), s	0.0	0.1	0.0	6.1	0.0	5.9	0.0	5.4

Intersection Summary	
HCM 6th Ctrl Delay	54.4
HCM 6th LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1889	1054	143	0	32
Future Volume (veh/h)	0	1889	1054	143	0	32
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1988	1109	151	0	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	4	3546	3546	1101	156	138
Arrive On Green	0.00	0.69	0.69	0.69	0.00	0.09
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	0	1988	1109	151	0	34
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.0	8.9	3.9	1.5	0.0	0.9
Cycle Q Clear(g_c), s	0.0	8.9	3.9	1.5	0.0	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	4	3546	3546	1101	156	138
V/C Ratio(X)	0.00	0.56	0.31	0.14	0.00	0.25
Avail Cap(c_a), veh/h	156	5572	4569	1418	1166	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	3.5	2.7	2.4	0.0	19.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	3.6	2.8	2.4	0.0	20.4
LnGrp LOS	A	A	A	A	A	C
Approach Vol, veh/h		1988	1260		34	
Approach Delay, s/veh		3.6	2.7		20.4	
Approach LOS		A	A		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	36.8	9.0	0.0	36.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	50.0	30.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	10.9	2.9	0.0	5.9
Green Ext Time (p_c), s	20.9	0.1	0.0	9.4

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1731	149	4	922	61	191	62	12	186	115	83
Future Volume (veh/h)	8	1731	149	4	922	61	191	62	12	186	115	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	1822	157	4	971	64	201	65	13	196	121	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	2116	657	8	2096	651	251	219	186	245	213	181
Arrive On Green	0.01	0.41	0.41	0.00	0.41	0.41	0.14	0.12	0.12	0.14	0.11	0.11
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	8	1822	157	4	971	64	201	65	13	196	121	87
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.2	17.9	3.5	0.1	7.6	1.4	6.0	1.8	0.4	5.9	3.4	2.8
Cycle Q Clear(g_c), s	0.2	17.9	3.5	0.1	7.6	1.4	6.0	1.8	0.4	5.9	3.4	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	2116	657	8	2096	651	251	219	186	245	213	181
V/C Ratio(X)	0.54	0.86	0.24	0.52	0.46	0.10	0.80	0.30	0.07	0.80	0.57	0.48
Avail Cap(c_a), veh/h	162	2130	661	162	2130	661	323	1153	977	323	1153	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	14.7	10.5	27.4	11.8	10.0	22.9	22.3	21.7	23.0	23.1	22.9
Incr Delay (d2), s/veh	26.8	4.1	0.4	45.5	0.3	0.1	10.6	0.7	0.2	10.1	2.4	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.9	1.0	0.1	2.2	0.4	3.0	0.7	0.1	2.9	1.5	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.0	18.8	10.9	72.9	12.1	10.1	33.5	23.0	21.8	33.1	25.5	24.9
LnGrp LOS	D	B	B	E	B	B	C	C	C	C	C	C
Approach Vol, veh/h		1987			1039			279			404	
Approach Delay, s/veh		18.3			12.3			30.5			29.1	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	10.5	4.2	28.9	11.8	10.3	4.5	28.6
Change Period (Y+Rc), s	4.0	4.0	4.0	6.0	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	10.0	34.0	5.0	23.0	10.0	34.0	5.0	23.0
Max Q Clear Time (g_c+I1), s	7.9	3.8	2.1	19.9	8.0	5.4	2.2	9.6
Green Ext Time (p_c), s	0.1	0.3	0.0	2.9	0.1	0.9	0.0	8.0

Intersection Summary	
HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	183	1746	929	152	55	58
Future Volume (veh/h)	183	1746	929	152	55	58
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	1838	978	160	58	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	253	3253	1867	579	185	164
Arrive On Green	0.14	0.64	0.37	0.37	0.10	0.10
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	193	1838	978	160	58	61
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	4.0	7.9	5.8	2.7	1.2	1.4
Cycle Q Clear(g_c), s	4.0	7.9	5.8	2.7	1.2	1.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	253	3253	1867	579	185	164
V/C Ratio(X)	0.76	0.57	0.52	0.28	0.31	0.37
Avail Cap(c_a), veh/h	554	4633	2382	740	1385	1233
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	4.0	9.6	8.6	16.0	16.1
Incr Delay (d2), s/veh	4.8	0.2	0.2	0.3	1.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.3	1.3	0.6	0.5	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.7	4.1	9.8	8.9	17.0	17.5
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		2031	1138		119	
Approach Delay, s/veh		5.7	9.7		17.2	
Approach LOS		A	A		B	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			29.6		9.0	10.5	19.1
Change Period (Y+Rc), s			5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s			35.0		30.0	12.0	18.0
Max Q Clear Time (g_c+I1), s			9.9		3.4	6.0	7.8
Green Ext Time (p_c), s			14.7		0.3	0.2	4.8

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	81	1720	1041	61	132	40
Future Volume (veh/h)	81	1720	1041	61	132	40
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	1811	1096	64	139	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	109	3119	2225	691	243	216
Arrive On Green	0.06	0.61	0.44	0.44	0.14	0.14
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	85	1811	1096	64	139	42
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	1.9	8.5	6.1	0.9	2.9	0.9
Cycle Q Clear(g_c), s	1.9	8.5	6.1	0.9	2.9	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	109	3119	2225	691	243	216
V/C Ratio(X)	0.78	0.58	0.49	0.09	0.57	0.19
Avail Cap(c_a), veh/h	338	4325	2776	862	1419	1262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	4.6	8.0	6.6	16.0	15.2
Incr Delay (d2), s/veh	11.2	0.2	0.2	0.1	2.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.7	1.3	0.2	1.1	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.5	4.8	8.2	6.6	18.1	15.6
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1896	1160		181	
Approach Delay, s/veh		5.9	8.1		17.5	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	29.7	9.9	6.9	22.7
Change Period (Y+Rc), s	5.5	4.5	4.5	5.5
Max Green Setting (Gmax), s	33.5	31.5	7.5	21.5
Max Q Clear Time (g_c+I1), s	10.5	4.9	3.9	8.1
Green Ext Time (p_c), s	13.7	0.5	0.0	6.0

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	433	1293	75	311	778	198	217	1011	266	276	882	649
Future Volume (veh/h)	433	1293	75	311	778	198	217	1011	266	276	882	649
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	456	1361	22	327	819	80	228	1064	134	291	928	527
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	399	1678	529	307	1544	479	292	1424	442	356	1518	471
Arrive On Green	0.12	0.33	0.33	0.09	0.31	0.31	0.08	0.28	0.28	0.10	0.30	0.30
Sat Flow, veh/h	3456	5025	1585	3456	5025	1560	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	456	1361	22	327	819	80	228	1064	134	291	928	527
Grp Sat Flow(s),veh/h/ln	1728	1675	1585	1728	1675	1560	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	13.0	27.9	1.1	10.0	15.2	4.2	7.3	21.4	7.5	9.3	17.6	33.5
Cycle Q Clear(g_c), s	13.0	27.9	1.1	10.0	15.2	4.2	7.3	21.4	7.5	9.3	17.6	33.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	399	1678	529	307	1544	479	292	1424	442	356	1518	471
V/C Ratio(X)	1.14	0.81	0.04	1.07	0.53	0.17	0.78	0.75	0.30	0.82	0.61	1.12
Avail Cap(c_a), veh/h	399	1696	535	307	1607	499	368	1633	507	430	1724	535
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	34.3	25.3	51.3	32.3	28.5	50.5	37.0	32.0	49.4	34.0	39.6
Incr Delay (d2), s/veh	90.0	3.4	0.1	69.7	0.3	0.2	8.1	2.2	0.7	10.0	0.8	77.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	11.0	0.4	7.2	5.9	1.5	3.5	9.1	2.9	4.3	6.9	22.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	139.8	37.6	25.4	121.0	32.6	28.6	58.6	39.2	32.7	59.4	34.8	117.1
LnGrp LOS	F	D	C	F	C	C	E	D	C	E	C	F
Approach Vol, veh/h		1839			1226			1426			1746	
Approach Delay, s/veh		62.8			55.9			41.7			63.7	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	37.4	15.0	43.6	14.5	39.5	18.0	40.6
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	* 6
Max Green Setting (Gmax), s	14.0	36.0	10.0	38.0	12.0	38.0	13.0	* 36
Max Q Clear Time (g_c+I1), s	11.3	23.4	12.0	29.9	9.3	19.6	15.0	17.2
Green Ext Time (p_c), s	0.3	8.0	0.0	7.7	0.2	6.2	0.0	11.4

Intersection Summary	
HCM 6th Ctrl Delay	56.9
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	696	1144	0	0	671	60	5	0	0	106	0	668
Future Volume (veh/h)	696	1144	0	0	671	60	5	0	0	106	0	668
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	0	1870	0	1870
Adj Flow Rate, veh/h	733	1204	0	0	706	63	5	0	0	112	0	703
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	0	2	0	2
Cap, veh/h	774	2406	0	0	1345	600	82	0	0	243	0	0
Arrive On Green	0.22	0.68	0.00	0.00	0.38	0.38	0.05	0.00	0.00	0.14	0.00	0.00
Sat Flow, veh/h	3456	3647	0	0	3647	1585	1781	5		1781	112	
Grp Volume(v), veh/h	733	1204	0	0	706	63	5	24.6		112	21.8	
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1585	1781	C		1781	C	
Q Serve(g_s), s	11.2	8.9	0.0	0.0	8.3	1.4	0.1			3.1		
Cycle Q Clear(g_c), s	11.2	8.9	0.0	0.0	8.3	1.4	0.1			3.1		
Prop In Lane	1.00		0.00	0.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	774	2406	0	0	1345	600	82			243		
V/C Ratio(X)	0.95	0.50	0.00	0.00	0.52	0.10	0.06			0.46		
Avail Cap(c_a), veh/h	774	2852	0	0	1791	799	798			299		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00			1.00		
Uniform Delay (d), s/veh	20.5	4.2	0.0	0.0	12.9	10.8	24.4			21.3		
Incr Delay (d2), s/veh	20.3	0.2	0.0	0.0	0.5	0.1	0.1			0.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	5.8	1.0	0.0	0.0	2.5	0.4	0.1			1.1		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.8	4.5	0.0	0.0	13.4	10.9	24.6			21.8		
LnGrp LOS	D	A	A	A	B	B	C			C		
Approach Vol, veh/h		1937			769							
Approach Delay, s/veh		18.2			13.2							
Approach LOS		B			B							

Timer - Assigned Phs	1			4	5		7	8				
Phs Duration (G+Y+Rc), s	11.3			42.3	6.5		16.0	26.3				
Change Period (Y+Rc), s	4.0			6.0	4.0		4.0	6.0				
Max Green Setting (Gmax), s	9.0			43.0	24.0		12.0	27.0				
Max Q Clear Time (g_c+I1), s	5.1			10.9	2.1		13.2	10.3				
Green Ext Time (p_c), s	0.1			24.7	0.0		0.0	10.0				

Intersection Summary												
HCM 6th Ctrl Delay			17.0									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	1160	106	44	731	0	197	473	104	227	178	57
Future Volume (veh/h)	47	1160	106	44	731	0	197	473	104	227	178	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	1221	56	46	769	0	207	498	45	239	187	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	1106	489	59	1098		176	422	514	205	160	
Arrive On Green	0.04	0.31	0.31	0.03	0.31	0.00	0.32	0.32	0.32	0.20	0.20	0.00
Sat Flow, veh/h	1781	3554	1572	1781	3554	1585	541	1302	1585	1021	799	1585
Grp Volume(v), veh/h	49	1221	56	46	769	0	705	0	45	426	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1572	1781	1777	1585	1843	0	1585	1819	0	1585
Q Serve(g_s), s	4.1	47.0	3.8	3.9	28.8	0.0	49.0	0.0	3.0	30.3	0.0	0.0
Cycle Q Clear(g_c), s	4.1	47.0	3.8	3.9	28.8	0.0	49.0	0.0	3.0	30.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.29		1.00	0.56		1.00
Lane Grp Cap(c), veh/h	63	1106	489	59	1098		598	0	514	365	0	
V/C Ratio(X)	0.78	1.10	0.11	0.78	0.70		1.18	0.00	0.09	1.17	0.00	
Avail Cap(c_a), veh/h	94	1106	489	94	1098		598	0	514	365	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	72.3	52.0	37.1	72.4	46.0	0.0	51.0	0.0	35.5	60.4	0.0	0.0
Incr Delay (d2), s/veh	10.5	60.2	0.2	7.8	2.5	0.0	96.9	0.0	0.0	100.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	29.6	1.5	1.9	12.8	0.0	38.2	0.0	1.2	24.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.7	112.3	37.3	80.3	48.5	0.0	147.9	0.0	35.5	161.2	0.0	0.0
LnGrp LOS	F	F	D	F	D		F	A	D	F	A	
Approach Vol, veh/h		1326			815	A		750			426	A
Approach Delay, s/veh		108.0			50.2			141.2			161.2	
Approach LOS		F			D			F			F	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		53.0	9.0	53.0		36.0	9.3	52.7				
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0				
Max Green Setting (Gmax), s		49.0	8.0	47.0		30.3	8.0	45.0				
Max Q Clear Time (g_c+I1), s		51.0	5.9	49.0		32.3	6.1	30.8				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0	0.0	5.5				

Intersection Summary	
HCM 6th Ctrl Delay	108.2
HCM 6th LOS	F

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	316	726	75	123	53	246	1615	62	59	1157	142
Future Volume (veh/h)	105	316	726	75	123	53	246	1615	62	59	1157	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	333	616	79	129	22	259	1700	20	62	1218	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1480	660	95	1509	673	308	1800	559	79	1572	
Arrive On Green	0.05	0.42	0.42	0.05	0.42	0.42	0.09	0.35	0.35	0.04	0.31	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	111	333	616	79	129	22	259	1700	20	62	1218	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	4.8	9.0	55.6	6.6	3.3	1.2	11.1	48.5	1.2	5.2	32.5	0.0
Cycle Q Clear(g_c), s	4.8	9.0	55.6	6.6	3.3	1.2	11.1	48.5	1.2	5.2	32.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	1480	660	95	1509	673	308	1800	559	79	1572	
V/C Ratio(X)	0.71	0.22	0.93	0.83	0.09	0.03	0.84	0.94	0.04	0.79	0.78	
Avail Cap(c_a), veh/h	299	1587	708	95	1509	673	369	1800	559	95	1572	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.6	28.2	41.8	70.3	25.8	25.2	67.3	47.1	31.8	71.0	47.2	0.0
Incr Delay (d2), s/veh	2.2	0.1	19.4	41.7	0.1	0.0	13.9	11.6	0.1	24.3	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	3.8	24.3	4.0	1.4	0.5	5.4	21.6	0.5	2.8	13.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	28.3	61.1	112.0	25.8	25.2	81.2	58.7	32.0	95.3	49.9	0.0
LnGrp LOS	E	C	E	F	C	C	F	E	C	F	D	
Approach Vol, veh/h		1060			230			1979			1280	A
Approach Delay, s/veh		52.0			55.4			61.4			52.1	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	58.9	12.0	68.5	17.4	52.2	10.8	69.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	8.0	47.0	8.0	67.0	16.0	39.0	13.0	* 63
Max Q Clear Time (g_c+I1), s	7.2	50.5	8.6	57.6	13.1	34.5	6.8	5.3
Green Ext Time (p_c), s	0.0	0.0	0.0	4.8	0.3	3.0	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	56.3
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	410	214	231	338	392	290	1193	207	364	590	120
Future Volume (veh/h)	20	410	214	231	338	392	290	1193	207	364	590	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	432	0	243	356	413	305	1256	218	383	621	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	520		326	751	536	388	1368	757	445	1467	
Arrive On Green	0.04	0.15	0.00	0.09	0.21	0.21	0.11	0.38	0.38	0.13	0.41	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1574	3456	3554	1579	3456	3554	1585
Grp Volume(v), veh/h	21	432	0	243	356	413	305	1256	218	383	621	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1574	1728	1777	1579	1728	1777	1585
Q Serve(g_s), s	0.5	10.1	0.0	5.9	7.5	18.1	7.3	28.7	7.1	9.3	10.6	0.0
Cycle Q Clear(g_c), s	0.5	10.1	0.0	5.9	7.5	18.1	7.3	28.7	7.1	9.3	10.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	520		326	751	536	388	1368	757	445	1467	
V/C Ratio(X)	0.15	0.83		0.74	0.47	0.77	0.79	0.92	0.29	0.86	0.42	
Avail Cap(c_a), veh/h	364	582		445	751	536	525	1413	778	445	1467	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.5	35.5	0.0	37.7	29.6	25.3	36.9	25.0	13.4	36.5	17.9	0.0
Incr Delay (d2), s/veh	0.2	8.1	0.0	4.5	0.5	6.7	3.7	9.9	0.3	15.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.9	0.0	2.6	3.2	8.2	3.1	12.2	2.5	4.6	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.7	43.5	0.0	42.2	30.0	32.0	40.7	34.9	13.7	52.2	18.1	0.0
LnGrp LOS	D	D		D	C	C	D	C	B	D	B	
Approach Vol, veh/h		453	A		1012			1779			1004	A
Approach Delay, s/veh		43.3			33.7			33.3			31.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	38.9	13.1	17.5	13.6	41.3	7.5	23.1
Change Period (Y+Rc), s	5.0	6.0	5.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	34.0	11.0	* 14	13.0	33.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	11.3	30.7	7.9	12.1	9.3	12.6	2.5	9.5
Green Ext Time (p_c), s	0.0	2.2	0.2	0.4	0.3	3.7	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	613	95	53	763	498	63	497	24	469	825	133
Future Volume (veh/h)	38	613	95	53	763	498	63	497	24	469	825	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	645	99	56	803	0	66	523	0	494	868	140
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	858	380	309	913		268	894		612	1248	554
Arrive On Green	0.07	0.24	0.24	0.09	0.26	0.00	0.08	0.25	0.00	0.18	0.35	0.35
Sat Flow, veh/h	3456	3554	1575	3456	3554	1585	3456	3554	1585	3456	3554	1578
Grp Volume(v), veh/h	40	645	99	56	803	0	66	523	0	494	868	140
Grp Sat Flow(s),veh/h/ln	1728	1777	1575	1728	1777	1585	1728	1777	1585	1728	1777	1578
Q Serve(g_s), s	0.9	13.3	4.0	1.2	17.1	0.0	1.4	10.2	0.0	10.9	16.6	5.0
Cycle Q Clear(g_c), s	0.9	13.3	4.0	1.2	17.1	0.0	1.4	10.2	0.0	10.9	16.6	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	858	380	309	913		268	894		612	1248	554
V/C Ratio(X)	0.16	0.75	0.26	0.18	0.88		0.25	0.59		0.81	0.70	0.25
Avail Cap(c_a), veh/h	437	1034	458	437	989		656	1348		1049	1753	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	27.8	24.3	33.3	28.2	0.0	34.3	26.0	0.0	31.2	22.0	18.3
Incr Delay (d2), s/veh	0.1	1.9	0.1	0.1	8.7	0.0	0.2	1.2	0.0	1.0	1.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	5.6	1.5	0.5	8.1	0.0	0.6	4.3	0.0	4.5	6.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	29.7	24.4	33.4	36.9	0.0	34.5	27.2	0.0	32.2	23.4	18.7
LnGrp LOS	C	C	C	C	D		C	C		C	C	B
Approach Vol, veh/h		784			859	A		589	A		1502	
Approach Delay, s/veh		29.3			36.7			28.0			25.8	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	25.9	11.1	24.1	10.1	33.8	9.8	25.3
Change Period (Y+Rc), s	4.0	6.0	4.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	24.0	30.0	10.0	* 23	15.0	39.0	10.0	22.0
Max Q Clear Time (g_c+I1), s	12.9	12.2	3.2	15.3	3.4	18.6	2.9	19.1
Green Ext Time (p_c), s	1.2	4.3	0.0	1.5	0.1	9.2	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	10	172	20	3	1	66	1212	7	3	1106	22
Future Volume (veh/h)	29	10	172	20	3	1	66	1212	7	3	1106	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	11	181	21	3	1	69	1276	7	3	1164	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	69	231	35	5	2	87	1721	768	4	1556	694
Arrive On Green	0.15	0.15	0.15	0.02	0.02	0.02	0.05	0.48	0.48	0.00	0.44	0.44
Sat Flow, veh/h	1331	472	1585	1497	214	71	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	42	0	181	25	0	0	69	1276	7	3	1164	23
Grp Sat Flow(s),veh/h/ln	1804	0	1585	1783	0	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.1	0.0	5.8	0.7	0.0	0.0	2.0	15.3	0.1	0.1	14.5	0.4
Cycle Q Clear(g_c), s	1.1	0.0	5.8	0.7	0.0	0.0	2.0	15.3	0.1	0.1	14.5	0.4
Prop In Lane	0.74		1.00	0.84		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	263	0	231	41	0	0	87	1721	768	4	1556	694
V/C Ratio(X)	0.16	0.00	0.78	0.60	0.00	0.00	0.79	0.74	0.01	0.69	0.75	0.03
Avail Cap(c_a), veh/h	539	0	473	270	0	0	269	1721	768	269	1612	719
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	21.8	25.6	0.0	0.0	24.9	11.0	7.1	26.4	12.4	8.5
Incr Delay (d2), s/veh	0.1	0.0	2.2	5.2	0.0	0.0	6.0	1.9	0.0	53.2	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	2.1	0.4	0.0	0.0	0.9	4.2	0.0	0.1	4.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	24.0	30.7	0.0	0.0	30.9	12.9	7.1	79.5	14.5	8.5
LnGrp LOS	B	A	C	C	A	A	C	B	A	E	B	A
Approach Vol, veh/h		223			25			1352			1190	
Approach Delay, s/veh		23.2			30.7			13.8			14.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	31.6		5.2	6.6	29.2		11.9
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.2
Max Green Setting (Gmax), s	8.0	24.0		8.0	8.0	24.0		15.8
Max Q Clear Time (g_c+I1), s	2.1	17.3		2.7	4.0	16.5		7.8
Green Ext Time (p_c), s	0.0	6.2		0.0	0.0	6.7		0.2

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	827	2301	0	0	1801	37	0	0	0	15	0	442
Future Volume (veh/h)	827	2301	0	0	1801	37	0	0	0	15	0	442
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	871	2422	0	0	1896	0				16	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	677	3676	0	1	1566					380	0	
Arrive On Green	0.38	0.72	0.00	0.00	0.41	0.00				0.21	0.00	0.00
Sat Flow, veh/h	1781	5274	0	1781	5106	1585				1781	0	1585
Grp Volume(v), veh/h	871	2422	0	0	1896	0				16	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1702	1585				1781	0	1585
Q Serve(g_s), s	57.0	37.9	0.0	0.0	46.0	0.0				1.1	0.0	0.0
Cycle Q Clear(g_c), s	57.0	37.9	0.0	0.0	46.0	0.0				1.1	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	677	3676	0	1	1566					380	0	
V/C Ratio(X)	1.29	0.66	0.00	0.00	1.21					0.04	0.00	
Avail Cap(c_a), veh/h	677	3676	0	83	1566					380	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.90	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	46.5	11.2	0.0	0.0	44.4	0.0				46.8	0.0	0.0
Incr Delay (d2), s/veh	140.0	0.9	0.0	0.0	100.5	0.0				0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	50.6	12.8	0.0	0.0	32.1	0.0				0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	186.5	12.1	0.0	0.0	144.9	0.0				47.0	0.0	0.0
LnGrp LOS	F	B	A	A	F					D	A	
Approach Vol, veh/h		3293			1896	A					16	A
Approach Delay, s/veh		58.3			144.9						47.0	
Approach LOS		E			F						D	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	113.0		37.0	62.0	51.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	96.0		32.0	57.0	46.0
Max Q Clear Time (g_c+I1), s	0.0	39.9		3.1	59.0	48.0
Green Ext Time (p_c), s	0.0	34.6		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	89.8
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2265	53	66	1794	43	137
Future Volume (veh/h)	2265	53	66	1794	43	137
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2384	0	69	1888	45	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3494		87	3881	101	
Arrive On Green	1.00	0.00	0.05	0.76	0.06	0.00
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	2384	0	69	1888	45	0
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	0.0	0.0	5.7	21.1	3.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	5.7	21.1	3.7	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	3494		87	3881	101	
V/C Ratio(X)	0.68		0.79	0.49	0.45	
Avail Cap(c_a), veh/h	3494		166	3881	302	
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	70.6	6.9	68.5	0.0
Incr Delay (d2), s/veh	0.8	0.0	5.9	0.4	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.7	6.6	1.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.8	0.0	76.4	7.3	69.7	0.0
LnGrp LOS	A		E	A	E	
Approach Vol, veh/h	2384	A		1957	45	A
Approach Delay, s/veh	0.8			9.7	69.7	
Approach LOS	A			A	E	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		13.1	11.3	108.7		120.0
Change Period (Y+Rc), s		4.6	4.0	6.0		6.0
Max Green Setting (Gmax), s		25.4	14.0	96.0		114.0
Max Q Clear Time (g_c+I1), s		5.7	7.7	2.0		23.1
Green Ext Time (p_c), s		0.1	0.0	49.6		29.2

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	2183	0	35	1667	995	2	3	32	417	3	186
Future Volume (veh/h)	225	2183	0	35	1667	995	2	3	32	417	3	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	237	2298	0	37	1755	0	2	3	34	441	0	196
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	3332	1034	48	3418		54	4	42	804	0	238
Arrive On Green	0.15	0.65	0.00	0.03	0.53	0.00	0.03	0.03	0.03	0.15	0.00	0.15
Sat Flow, veh/h	1781	5106	1585	1781	6434	1585	1781	124	1406	5344	0	1585
Grp Volume(v), veh/h	237	2298	0	37	1755	0	2	0	37	441	0	196
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1609	1585	1781	0	1530	1781	0	1585
Q Serve(g_s), s	19.6	42.7	0.0	3.1	26.4	0.0	0.2	0.0	3.6	11.5	0.0	18.0
Cycle Q Clear(g_c), s	19.6	42.7	0.0	3.1	26.4	0.0	0.2	0.0	3.6	11.5	0.0	18.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.92	1.00		1.00
Lane Grp Cap(c), veh/h	264	3332	1034	48	3418		54	0	46	804	0	238
V/C Ratio(X)	0.90	0.69	0.00	0.77	0.51		0.04	0.00	0.80	0.55	0.00	0.82
Avail Cap(c_a), veh/h	380	3332	1034	143	3418		143	0	122	1176	0	349
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.8	16.5	0.0	72.5	22.7	0.0	70.6	0.0	72.3	59.0	0.0	61.8
Incr Delay (d2), s/veh	17.8	1.2	0.0	22.7	0.1	0.0	0.3	0.0	26.1	0.6	0.0	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	15.6	0.0	1.7	9.7	0.0	0.1	0.0	1.8	5.3	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.6	17.7	0.0	95.2	22.8	0.0	70.9	0.0	98.4	59.6	0.0	71.9
LnGrp LOS	F	B	A	F	C		E	A	F	E	A	E
Approach Vol, veh/h		2535			1792	A		39			637	
Approach Delay, s/veh		23.5			24.3			97.0			63.4	
Approach LOS		C			C			F			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		8.5	8.0	103.6		29.9	26.2	85.4				
Change Period (Y+Rc), s		4.0	4.0	5.7		7.3	4.0	5.7				
Max Green Setting (Gmax), s		12.0	12.0	72.0		33.0	32.0	52.0				
Max Q Clear Time (g_c+I1), s		5.6	5.1	44.7		20.0	21.6	28.4				
Green Ext Time (p_c), s		0.0	0.0	26.6		2.6	0.6	21.4				

Intersection Summary	
HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	4	48	7	0	76	9	2645	33	134	2487	5
Future Volume (veh/h)	42	4	48	7	0	76	9	2645	33	134	2487	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	4	51	7	0	80	9	2784	35	141	2618	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	8	81	226	0	101	15	4555	1120	185	3846	1191
Arrive On Green	0.05	0.05	0.05	0.06	0.00	0.06	0.01	0.71	0.71	0.11	1.00	1.00
Sat Flow, veh/h	1639	149	1540	3563	0	1585	1781	6434	1582	3456	5106	1582
Grp Volume(v), veh/h	48	0	51	7	0	80	9	2784	35	141	2618	5
Grp Sat Flow(s),veh/h/ln	1788	0	1540	1781	0	1585	1781	1609	1582	1728	1702	1582
Q Serve(g_s), s	3.9	0.0	4.9	0.3	0.0	7.5	0.8	33.4	1.0	6.0	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	4.9	0.3	0.0	7.5	0.8	33.4	1.0	6.0	0.0	0.0
Prop In Lane	0.92		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	0	81	226	0	101	15	4555	1120	185	3846	1191
V/C Ratio(X)	0.51	0.00	0.63	0.03	0.00	0.79	0.61	0.61	0.03	0.76	0.68	0.00
Avail Cap(c_a), veh/h	191	0	164	1021	0	454	143	4555	1120	276	3846	1191
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.2	0.0	69.7	65.9	0.0	69.3	74.1	11.3	6.5	66.0	0.0	0.0
Incr Delay (d2), s/veh	3.9	0.0	7.2	0.0	0.0	12.0	13.9	0.3	0.0	3.0	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.1	0.1	0.0	3.3	0.4	10.7	0.3	2.6	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	0.0	76.9	66.0	0.0	81.2	88.0	11.5	6.6	69.0	1.0	0.0
LnGrp LOS	E	A	E	E	A	F	F	B	A	E	A	A
Approach Vol, veh/h		99			87			2828			2764	
Approach Delay, s/veh		75.1			80.0			11.7			4.5	
Approach LOS		E			F			B			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.8	5.3	119.4		13.5	12.0	112.6				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		16.0	12.0	60.6		43.0	12.0	60.6				
Max Q Clear Time (g_c+I1), s		6.9	2.8	2.0		9.5	8.0	35.4				
Green Ext Time (p_c), s		0.2	0.0	38.9		0.3	0.1	21.7				

Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	2118	314	180	2366	38	308	89	133	53	14	6
Future Volume (veh/h)	8	2118	314	180	2366	38	308	89	133	53	14	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	2229	331	189	2491	0	209	255	140	36	44	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	817	3028	741	700	2811		275	289	245	88	92	
Arrive On Green	0.24	0.47	0.47	0.41	0.87	0.00	0.15	0.15	0.15	0.05	0.05	0.00
Sat Flow, veh/h	3456	6434	1575	3456	6434	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	8	2229	331	189	2491	0	209	255	140	36	44	0
Grp Sat Flow(s),veh/h/ln	1728	1609	1575	1728	1609	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	42.1	21.1	5.5	32.5	0.0	16.9	20.0	12.3	2.9	3.4	0.0
Cycle Q Clear(g_c), s	0.3	42.1	21.1	5.5	32.5	0.0	16.9	20.0	12.3	2.9	3.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	817	3028	741	700	2811		275	289	245	88	92	
V/C Ratio(X)	0.01	0.74	0.45	0.27	0.89		0.76	0.88	0.57	0.41	0.48	
Avail Cap(c_a), veh/h	817	3028	741	700	3071		333	349	296	190	200	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.8	32.2	26.6	37.2	7.4	0.0	60.7	62.1	58.8	69.2	69.4	0.0
Incr Delay (d2), s/veh	0.0	1.6	1.9	0.1	3.4	0.0	7.3	18.8	1.6	3.0	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	16.1	8.1	2.2	3.7	0.0	8.3	11.1	5.0	1.4	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	33.8	28.6	37.3	10.8	0.0	68.0	80.9	60.4	72.2	73.2	0.0
LnGrp LOS	D	C	C	D	B		E	F	E	E	E	
Approach Vol, veh/h		2568			2680	A		604			80	A
Approach Delay, s/veh		33.1			12.6			71.7			72.7	
Approach LOS		C			B			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		27.2	34.4	77.0		11.4	39.5	71.9				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		28.0	17.0	70.6		16.0	16.0	71.6				
Max Q Clear Time (g_c+I1), s		22.0	7.5	44.1		5.4	2.3	34.5				
Green Ext Time (p_c), s		1.2	0.2	22.8		0.1	0.0	31.1				

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	1453	543	75	1624	480	559	624	52	537	495	378
Future Volume (veh/h)	293	1453	543	75	1624	480	559	624	52	537	495	378
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	308	1529	0	79	1709	0	588	657	0	565	521	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	347	2394		119	1866		644	876		873	612	
Arrive On Green	0.20	0.74	0.00	0.07	0.58	0.00	0.19	0.17	0.00	0.06	0.06	0.00
Sat Flow, veh/h	3456	6434	1585	3456	6434	1585	3456	5106	1585	5023	3554	1585
Grp Volume(v), veh/h	308	1529	0	79	1709	0	588	657	0	565	521	0
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1585	1728	1702	1585	1674	1777	1585
Q Serve(g_s), s	13.0	17.4	0.0	3.3	35.7	0.0	25.0	18.4	0.0	16.5	21.8	0.0
Cycle Q Clear(g_c), s	13.0	17.4	0.0	3.3	35.7	0.0	25.0	18.4	0.0	16.5	21.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	347	2394		119	1866		644	876		873	612	
V/C Ratio(X)	0.89	0.64		0.66	0.92		0.91	0.75		0.65	0.85	
Avail Cap(c_a), veh/h	369	2394		184	1866		875	1304		873	687	
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.1	14.3	0.0	69.0	29.9	0.0	59.8	59.1	0.0	66.2	68.8	0.0
Incr Delay (d2), s/veh	20.3	0.6	0.0	2.4	8.6	0.0	9.4	2.0	0.0	1.7	10.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	4.0	0.0	1.5	10.6	0.0	11.6	7.9	0.0	7.6	11.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.4	14.9	0.0	71.3	38.4	0.0	69.2	61.0	0.0	67.9	79.0	0.0
LnGrp LOS	E	B		E	D		E	E		E	E	
Approach Vol, veh/h		1837	A		1788	A		1245	A		1086	A
Approach Delay, s/veh		25.7			39.9			64.9			73.2	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.8	31.7	9.2	62.2	31.9	33.5	21.5	49.9
Change Period (Y+Rc), s	7.7	6.0	4.0	6.4	4.0	* 7.7	6.4	6.4
Max Green Setting (Gmax), s	25.7	38.3	8.0	53.9	38.0	* 29	16.0	43.5
Max Q Clear Time (g_c+I1), s	18.5	20.4	5.3	19.4	27.0	23.8	15.0	37.7
Green Ext Time (p_c), s	1.3	5.4	0.0	17.2	0.9	2.0	0.1	5.0

Intersection Summary	
HCM 6th Ctrl Delay	46.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	1867	5	18	2120	389	7	3	2	61	0	37
Future Volume (veh/h)	78	1867	5	18	2120	389	7	3	2	61	0	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.94	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	1965	5	19	2232	343	5	6	2	64	0	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	4300	11	23	3860	947	20	21	17	138	0	61
Arrive On Green	0.06	0.64	0.64	0.01	0.60	0.60	0.01	0.01	0.01	0.04	0.00	0.04
Sat Flow, veh/h	1781	6676	17	1781	6434	1578	1781	1870	1496	3563	0	1585
Grp Volume(v), veh/h	82	1420	550	19	2232	343	5	6	2	64	0	39
Grp Sat Flow(s),veh/h/ln	1781	1609	1867	1781	1609	1578	1781	1870	1496	1781	0	1585
Q Serve(g_s), s	6.8	22.3	22.3	1.6	31.9	16.7	0.4	0.5	0.2	2.6	0.0	3.6
Cycle Q Clear(g_c), s	6.8	22.3	22.3	1.6	31.9	16.7	0.4	0.5	0.2	2.6	0.0	3.6
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	102	3108	1203	23	3860	947	20	21	17	138	0	61
V/C Ratio(X)	0.81	0.46	0.46	0.81	0.58	0.36	0.25	0.29	0.12	0.46	0.00	0.64
Avail Cap(c_a), veh/h	202	3185	1232	95	3860	947	95	100	80	390	0	173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	69.9	13.5	13.5	73.8	18.4	15.3	73.5	73.6	73.4	70.6	0.0	71.1
Incr Delay (d2), s/veh	5.5	0.2	0.4	21.4	0.6	1.1	2.4	2.8	1.2	3.0	0.0	12.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	7.6	8.9	0.9	11.3	6.0	0.2	0.2	0.1	1.3	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	13.6	13.9	95.3	19.0	16.4	76.0	76.3	74.6	73.6	0.0	83.9
LnGrp LOS	E	B	B	F	B	B	E	E	E	E	A	F
Approach Vol, veh/h		2052			2594			13			103	
Approach Delay, s/veh		16.2			19.2			75.9			77.5	
Approach LOS		B			B			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.7	6.0	102.6		10.4	12.6	96.0				
Change Period (Y+Rc), s		4.0	4.0	6.0		4.6	4.0	6.0				
Max Green Setting (Gmax), s		8.0	8.0	99.0		16.4	17.0	90.0				
Max Q Clear Time (g_c+I1), s		2.5	3.6	24.3		5.6	8.8	33.9				
Green Ext Time (p_c), s		0.0	0.0	38.0		0.2	0.0	45.0				

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	1763	95	302	1878	180	458	239	228	1105	257	165
Future Volume (veh/h)	133	1763	95	302	1878	180	458	239	228	1105	257	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1988	1988	1988	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	140	1856	64	318	1977	115	482	252	80	1163	271	59
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	2135	1116	889	3130	969	934	305	134	991	363	160
Arrive On Green	0.05	0.39	0.39	0.26	0.61	0.61	0.27	0.09	0.09	0.29	0.10	0.10
Sat Flow, veh/h	3673	5427	1678	3456	5106	1581	3456	3554	1557	3456	3554	1562
Grp Volume(v), veh/h	140	1856	64	318	1977	115	482	252	80	1163	271	59
Grp Sat Flow(s),veh/h/ln	1837	1809	1678	1728	1702	1581	1728	1777	1557	1728	1777	1562
Q Serve(g_s), s	5.6	47.3	0.0	11.3	36.7	2.4	17.7	10.5	7.4	43.0	11.1	5.6
Cycle Q Clear(g_c), s	5.6	47.3	0.0	11.3	36.7	2.4	17.7	10.5	7.4	43.0	11.1	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	2135	1116	889	3130	969	934	305	134	991	363	160
V/C Ratio(X)	0.75	0.87	0.06	0.36	0.63	0.12	0.52	0.83	0.60	1.17	0.75	0.37
Avail Cap(c_a), veh/h	196	2135	1116	889	3130	969	934	332	145	991	758	333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.2	41.9	8.8	45.6	18.3	3.3	46.4	67.4	66.1	53.5	65.4	70.3
Incr Delay (d2), s/veh	13.9	5.2	0.1	0.2	0.6	0.1	0.4	15.0	6.3	89.1	3.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	21.4	0.7	4.8	13.7	1.5	7.6	5.3	3.1	30.6	5.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.1	47.1	8.9	45.8	18.9	3.5	46.8	82.4	72.4	142.6	69.0	72.0
LnGrp LOS	F	D	A	D	B	A	D	F	E	F	E	E
Approach Vol, veh/h		2060			2410			814			1493	
Approach Delay, s/veh		48.4			21.7			60.3			126.4	
Approach LOS		D			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	47.0	18.9	44.8	65.0	44.6	21.3	11.6	98.2
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	43.0	14.0	14.0	* 59	25.0	32.0	8.0	65.0
Max Q Clear Time (g_c+I1), s	45.0	12.5	13.3	49.3	19.7	13.1	7.6	38.7
Green Ext Time (p_c), s	0.0	0.3	0.1	8.9	0.7	1.9	0.0	22.8

Intersection Summary	
HCM 6th Ctrl Delay	57.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	2061	471	253	1959	77	126	227	159	19	70	122
Future Volume (veh/h)	306	2061	471	253	1959	77	126	227	159	19	70	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	322	2169	0	266	2062	81	133	239	0	20	74	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	3137		309	3054	946	503	270		25	101	151
Arrive On Green	0.21	1.00	0.00	0.18	1.00	1.00	0.10	0.14	0.00	0.01	0.05	0.05
Sat Flow, veh/h	3456	5106	1585	3456	5106	1581	5023	1870	1585	1781	1870	2790
Grp Volume(v), veh/h	322	2169	0	266	2062	81	133	239	0	20	74	128
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1581	1674	1870	1585	1781	1870	1395
Q Serve(g_s), s	13.5	0.0	0.0	11.2	0.0	0.0	3.7	18.8	0.0	1.7	5.8	5.6
Cycle Q Clear(g_c), s	13.5	0.0	0.0	11.2	0.0	0.0	3.7	18.8	0.0	1.7	5.8	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	3137		309	3054	946	503	270		25	101	151
V/C Ratio(X)	0.88	0.69		0.86	0.68	0.09	0.26	0.89		0.81	0.73	0.85
Avail Cap(c_a), veh/h	484	3137		415	3054	946	546	303		95	180	268
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	0.0	0.0	60.7	0.0	0.0	62.4	63.0	0.0	73.8	69.9	48.2
Incr Delay (d2), s/veh	11.6	1.3	0.0	10.5	0.7	0.1	0.1	25.0	0.0	20.1	3.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.4	0.0	4.9	0.2	0.0	1.6	10.8	0.0	0.9	2.9	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	1.3	0.0	71.1	0.7	0.1	62.5	88.0	0.0	93.8	73.7	53.2
LnGrp LOS	E	A		E	A	A	E	F		F	E	D
Approach Vol, veh/h		2491	A		2409			372	A		222	
Approach Delay, s/veh		10.1			8.4			78.8			63.7	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	28.4	17.4	98.1	21.7	12.7	19.9	95.7
Change Period (Y+Rc), s	4.0	* 6.7	4.0	6.0	6.7	4.6	4.0	6.0
Max Green Setting (Gmax), s	8.0	* 24	18.0	80.0	16.3	14.4	21.0	77.0
Max Q Clear Time (g_c+I1), s	3.7	20.8	13.2	2.0	5.7	7.8	15.5	2.0
Green Ext Time (p_c), s	0.0	0.6	0.2	50.1	0.2	0.3	0.3	46.5

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	1785	4	9	1692	99	1	0	0	123	0	672
Future Volume (veh/h)	369	1785	4	9	1692	99	1	0	0	123	0	672
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	388	1879	4	9	1781	103	1	0	0	129	0	705
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	425	2859	6	11	2097	649	2	2	2	380	0	338
Arrive On Green	0.25	1.00	1.00	0.01	0.41	0.41	0.00	0.00	0.00	0.11	0.00	0.11
Sat Flow, veh/h	3456	5261	11	1781	5106	1579	1781	1870	1585	3563	0	3170
Grp Volume(v), veh/h	388	1216	667	9	1781	103	1	0	0	129	0	705
Grp Sat Flow(s),veh/h/ln	1728	1702	1868	1781	1702	1579	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	16.4	0.0	0.0	0.8	47.3	6.2	0.1	0.0	0.0	5.0	0.0	16.0
Cycle Q Clear(g_c), s	16.4	0.0	0.0	0.8	47.3	6.2	0.1	0.0	0.0	5.0	0.0	16.0
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	425	1850	1015	11	2097	649	2	2	2	380	0	338
V/C Ratio(X)	0.91	0.66	0.66	0.81	0.85	0.16	0.52	0.00	0.00	0.34	0.00	2.08
Avail Cap(c_a), veh/h	438	1850	1015	95	2097	649	392	411	349	380	0	338
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.8	0.0	0.0	74.4	40.0	27.9	74.9	0.0	0.0	62.1	0.0	67.0
Incr Delay (d2), s/veh	22.4	0.9	1.7	37.9	4.5	0.5	61.8	0.0	0.0	0.2	0.0	498.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.2	0.5	0.5	20.0	2.4	0.1	0.0	0.0	2.3	0.0	29.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.2	0.9	1.7	112.3	44.5	28.4	136.7	0.0	0.0	62.3	0.0	565.2
LnGrp LOS	E	A	A	F	D	C	F	A	A	E	A	F
Approach Vol, veh/h		2271			1893			1			834	
Approach Delay, s/veh		14.4			44.0			136.7			487.4	
Approach LOS		B			D			F			F	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		4.2	4.9	87.9		22.0	24.8	68.0				
Change Period (Y+Rc), s		4.0	4.0	6.4		6.0	6.4	* 6.4				
Max Green Setting (Gmax), s		33.0	8.0	72.6		16.0	19.0	* 62				
Max Q Clear Time (g_c+I1), s		2.1	2.8	2.0		18.0	18.4	49.3				
Green Ext Time (p_c), s		0.0	0.0	30.5		0.0	0.1	9.8				

Intersection Summary	
HCM 6th Ctrl Delay	104.5
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	196	97	1663	59	56	1780
Future Volume (veh/h)	196	97	1663	59	56	1780
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	206	102	1751	62	59	1874
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	260	231	3050	947	75	3538
Arrive On Green	0.15	0.15	0.79	0.79	0.04	0.69
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	206	102	1751	62	59	1874
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	8.4	4.4	9.7	0.6	2.5	13.4
Cycle Q Clear(g_c), s	8.4	4.4	9.7	0.6	2.5	13.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	260	231	3050	947	75	3538
V/C Ratio(X)	0.79	0.44	0.57	0.07	0.78	0.53
Avail Cap(c_a), veh/h	577	514	3050	947	190	3538
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	1.00	1.00
Uniform Delay (d), s/veh	30.9	29.2	4.1	3.2	35.6	5.6
Incr Delay (d2), s/veh	4.1	1.0	0.7	0.1	6.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	4.0	1.9	0.2	1.1	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.0	30.2	4.8	3.3	42.1	6.2
LnGrp LOS	D	C	A	A	D	A
Approach Vol, veh/h	308		1813			1933
Approach Delay, s/veh	33.4		4.8			7.3
Approach LOS	C		A			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				58.4		16.6	7.2	51.2
Change Period (Y+Rc), s				6.4		5.7	4.0	6.4
Max Green Setting (Gmax), s				38.6		24.3	8.0	26.6
Max Q Clear Time (g_c+I1), s				15.4		10.4	4.5	11.7
Green Ext Time (p_c), s				16.8		0.6	0.0	11.0

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	114	45	173	1618	1704	250
Future Volume (veh/h)	114	45	173	1618	1704	250
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	47	182	1703	1794	263
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	170	78	229	3823	3349	1040
Arrive On Green	0.05	0.05	0.13	1.00	1.00	1.00
Sat Flow, veh/h	3456	1585	3456	5274	5274	1585
Grp Volume(v), veh/h	120	47	182	1703	1794	263
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1702	1585
Q Serve(g_s), s	5.1	4.4	7.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.1	4.4	7.7	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	170	78	229	3823	3349	1040
V/C Ratio(X)	0.71	0.60	0.80	0.45	0.54	0.25
Avail Cap(c_a), veh/h	606	278	645	3823	3349	1040
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.87	0.87	0.79	0.79
Uniform Delay (d), s/veh	70.2	69.9	64.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.0	2.8	2.1	0.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.8	3.2	0.1	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	72.3	72.7	66.2	0.3	0.5	0.5
LnGrp LOS	E	E	E	A	A	A
Approach Vol, veh/h	167			1885	2057	
Approach Delay, s/veh	72.4			6.7	0.5	
Approach LOS	E			A	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		13.1	13.9	104.4		118.3
Change Period (Y+Rc), s		5.7	4.0	6.0		* 6
Max Green Setting (Gmax), s		26.3	28.0	80.0		* 1.1E2
Max Q Clear Time (g_c+I1), s		7.1	9.7	2.0		2.0
Green Ext Time (p_c), s		0.3	0.3	41.3		36.0

Intersection Summary	
HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	5	122	6	30	0	170	1755	6	7	1565	173
Future Volume (veh/h)	34	5	122	6	30	0	170	1755	6	7	1565	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	0	128	6	32	0	179	1847	6	7	1647	182
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	0	150	11	147	0	202	3074	954	12	2529	785
Arrive On Green	0.02	0.00	0.09	0.01	0.08	0.00	0.11	0.60	0.60	0.01	0.50	0.50
Sat Flow, veh/h	3563	0	1585	1781	1870	0	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	40	0	128	6	32	0	179	1847	6	7	1647	182
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.7	0.0	11.9	0.5	2.4	0.0	14.9	33.8	0.2	0.6	36.0	9.8
Cycle Q Clear(g_c), s	1.7	0.0	11.9	0.5	2.4	0.0	14.9	33.8	0.2	0.6	36.0	9.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	0	150	11	147	0	202	3074	954	12	2529	785
V/C Ratio(X)	0.52	0.00	0.85	0.57	0.22	0.00	0.89	0.60	0.01	0.58	0.65	0.23
Avail Cap(c_a), veh/h	190	0	254	95	324	0	333	3074	954	95	2529	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	72.6	0.0	66.9	74.4	64.7	0.0	65.5	18.6	11.9	74.3	28.2	21.6
Incr Delay (d2), s/veh	2.0	0.0	16.5	16.8	0.5	0.0	8.9	0.9	0.0	13.6	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	5.4	0.3	1.2	0.0	7.1	12.8	0.1	0.3	14.3	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.6	0.0	83.4	91.2	65.3	0.0	74.4	19.5	11.9	87.9	28.8	21.8
LnGrp LOS	E	A	F	F	E	A	E	B	B	F	C	C
Approach Vol, veh/h		168			38			2032			1836	
Approach Delay, s/veh		81.3			69.4			24.3			28.4	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	20.2	21.0	80.0	7.2	17.8	5.0	96.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	8.0	24.0	28.0	70.3	8.0	* 26	8.0	90.3
Max Q Clear Time (g_c+I1), s	2.5	13.9	16.9	38.0	3.7	4.4	2.6	35.8
Green Ext Time (p_c), s	0.0	0.3	0.2	23.1	0.0	0.1	0.0	35.3

Intersection Summary	
HCM 6th Ctrl Delay	28.9
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	29	14	164	387	286	25	1617	122	107	1596	42
Future Volume (veh/h)	34	29	14	164	387	286	25	1617	122	107	1596	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	31	15	173	407	0	26	1702	0	113	1680	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	74	36	196	520		33	3180		134	3478	91
Arrive On Green	0.03	0.06	0.06	0.11	0.15	0.00	0.02	0.62	0.00	0.08	0.68	0.68
Sat Flow, veh/h	1781	1191	576	1781	3554	1585	1781	5106	1585	1781	5116	134
Grp Volume(v), veh/h	36	0	46	173	407	0	26	1702	0	113	1118	606
Grp Sat Flow(s),veh/h/ln	1781	0	1767	1781	1777	1585	1781	1702	1585	1781	1702	1846
Q Serve(g_s), s	3.0	0.0	3.8	14.4	16.6	0.0	2.2	28.3	0.0	9.4	23.5	23.5
Cycle Q Clear(g_c), s	3.0	0.0	3.8	14.4	16.6	0.0	2.2	28.3	0.0	9.4	23.5	23.5
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	46	0	110	196	520		33	3180		134	2314	1255
V/C Ratio(X)	0.78	0.00	0.42	0.88	0.78		0.79	0.54		0.84	0.48	0.48
Avail Cap(c_a), veh/h	143	0	249	333	860		143	3180		143	2314	1255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.6	0.0	67.7	65.8	61.7	0.0	73.3	16.0	0.0	68.5	11.5	11.5
Incr Delay (d2), s/veh	9.9	0.0	7.2	7.1	4.1	0.0	14.4	0.3	0.0	30.9	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	1.9	6.9	7.7	0.0	1.1	10.4	0.0	5.4	8.4	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.5	0.0	74.9	72.9	65.8	0.0	87.7	16.3	0.0	99.4	12.2	12.8
LnGrp LOS	F	A	E	E	E		F	B		F	B	B
Approach Vol, veh/h		82			580	A		1728	A		1837	
Approach Delay, s/veh		78.2			67.9			17.3			17.7	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	15.1	6.8	107.7	7.9	27.7	15.3	99.1
Change Period (Y+Rc), s	4.0	* 5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	28.0	* 21	12.0	70.3	12.0	36.3	12.0	70.3
Max Q Clear Time (g_c+I1), s	16.4	5.8	4.2	25.5	5.0	18.6	11.4	30.3
Green Ext Time (p_c), s	0.2	0.3	0.0	26.3	0.0	3.4	0.0	25.0

Intersection Summary	
HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1194	71	38	1599	669	299	1047	48	1056	516	147
Future Volume (veh/h)	89	1194	71	38	1599	669	299	1047	48	1056	516	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	1257	23	40	1683	0	315	1102	10	1112	543	71
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	1801	557	70	1702		363	1211	374	1242	1995	617
Arrive On Green	0.04	0.35	0.35	0.02	0.33	0.00	0.11	0.24	0.24	0.08	0.13	0.13
Sat Flow, veh/h	3456	5106	1578	3456	5106	1585	3456	5106	1575	5023	5106	1579
Grp Volume(v), veh/h	94	1257	23	40	1683	0	315	1102	10	1112	543	71
Grp Sat Flow(s),veh/h/ln	1728	1702	1578	1728	1702	1585	1728	1702	1575	1674	1702	1579
Q Serve(g_s), s	4.0	31.7	1.4	1.7	49.2	0.0	13.5	31.5	0.6	32.9	14.4	6.0
Cycle Q Clear(g_c), s	4.0	31.7	1.4	1.7	49.2	0.0	13.5	31.5	0.6	32.9	14.4	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	1801	557	70	1702		363	1211	374	1242	1995	617
V/C Ratio(X)	0.69	0.70	0.04	0.57	0.99		0.87	0.91	0.03	0.90	0.27	0.12
Avail Cap(c_a), veh/h	184	1801	557	184	1702		484	1236	381	1242	1995	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.1	41.7	31.9	72.8	49.7	0.0	66.1	55.6	34.7	67.0	46.1	42.4
Incr Delay (d2), s/veh	2.8	2.3	0.1	2.7	19.2	0.0	10.0	10.3	0.0	8.5	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	13.4	0.6	0.8	23.3	0.0	6.3	14.4	0.3	15.8	6.6	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	44.0	32.0	75.6	68.9	0.0	76.0	65.9	34.7	75.4	46.4	42.8
LnGrp LOS	E	D	C	E	E		E	E	C	E	D	D
Approach Vol, veh/h		1374			1723	A		1427			1726	
Approach Delay, s/veh		45.8			69.0			67.9			65.0	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	58.9	19.8	64.3	9.9	56.0	42.8	41.3
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	5.7	* 5.7
Max Green Setting (Gmax), s	8.0	50.0	21.0	51.3	8.0	50.0	36.0	* 36
Max Q Clear Time (g_c+I1), s	3.7	33.7	15.5	16.4	6.0	51.2	34.9	33.5
Green Ext Time (p_c), s	0.0	9.5	0.3	6.3	0.0	0.0	0.4	2.1

Intersection Summary	
HCM 6th Ctrl Delay	62.6
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	0	24	31	0	76	31	1250	21	13	572	9
Future Volume (veh/h)	38	0	24	31	0	76	31	1250	21	13	572	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	0	25	33	0	80	33	1316	22	14	602	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	0	168	261	0	232	86	1622	27	43	1539	23
Arrive On Green	0.11	0.00	0.11	0.15	0.00	0.15	0.05	0.45	0.45	0.02	0.43	0.43
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3577	60	1781	3584	54
Grp Volume(v), veh/h	40	0	25	33	0	80	33	654	684	14	298	313
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1860	1781	1777	1861
Q Serve(g_s), s	1.3	0.0	0.9	1.1	0.0	3.0	1.2	20.8	20.9	0.5	7.5	7.6
Cycle Q Clear(g_c), s	1.3	0.0	0.9	1.1	0.0	3.0	1.2	20.8	20.9	0.5	7.5	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.03
Lane Grp Cap(c), veh/h	189	0	168	261	0	232	86	806	844	43	763	799
V/C Ratio(X)	0.21	0.00	0.15	0.13	0.00	0.34	0.38	0.81	0.81	0.33	0.39	0.39
Avail Cap(c_a), veh/h	272	0	242	1114	0	992	217	903	945	217	903	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	26.6	24.3	0.0	25.1	30.2	15.5	15.5	31.5	12.8	12.8
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.1	0.0	0.3	1.0	5.8	5.6	1.6	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.3	0.4	0.0	1.0	0.5	8.2	8.5	0.2	2.6	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	0.0	26.8	24.4	0.0	25.5	31.3	21.3	21.1	33.1	13.4	13.4
LnGrp LOS	C	A	C	C	A	C	C	C	C	C	B	B
Approach Vol, veh/h		65			113			1371			625	
Approach Delay, s/veh		26.9			25.2			21.4			13.8	
Approach LOS		C			C			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		10.9	7.2	33.8		13.6	5.6	35.4
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		10.0	8.0	33.3		41.0	8.0	33.3
Max Q Clear Time (g_c+I1), s		3.3	3.2	9.6		5.0	2.5	22.9
Green Ext Time (p_c), s		0.0	0.0	4.5		0.3	0.0	6.9

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	273	495	64	743	498	442	836	172	103	459	18
Future Volume (veh/h)	23	273	495	64	743	498	442	836	172	103	459	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2001	1924	1924	2001	1924	1924	2001	1924	1924	1954	1879	1879
Adj Flow Rate, veh/h	24	287	429	67	782	260	465	880	96	108	483	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	94	1017	699	167	1156	513	563	1209	537	358	992	440
Arrive On Green	0.05	0.28	0.28	0.09	0.32	0.32	0.15	0.33	0.33	0.10	0.28	0.28
Sat Flow, veh/h	1906	3656	1622	1906	3656	1623	3698	3656	1623	3611	3571	1584
Grp Volume(v), veh/h	24	287	429	67	782	260	465	880	96	108	483	4
Grp Sat Flow(s),veh/h/ln	1906	1828	1622	1906	1828	1623	1849	1828	1623	1806	1785	1584
Q Serve(g_s), s	1.2	5.8	19.4	3.2	17.7	12.4	11.6	20.1	4.0	2.6	10.7	0.2
Cycle Q Clear(g_c), s	1.2	5.8	19.4	3.2	17.7	12.4	11.6	20.1	4.0	2.6	10.7	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	1017	699	167	1156	513	563	1209	537	358	992	440
V/C Ratio(X)	0.25	0.28	0.61	0.40	0.68	0.51	0.83	0.73	0.18	0.30	0.49	0.01
Avail Cap(c_a), veh/h	201	1399	869	201	1399	621	701	1322	587	381	992	440
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	26.8	20.9	41.0	28.2	26.4	39.0	28.0	22.6	39.7	28.6	24.8
Incr Delay (d2), s/veh	0.5	0.3	1.5	0.6	1.4	1.3	5.4	2.3	0.3	0.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.4	6.8	1.4	7.3	4.6	5.4	8.4	1.5	1.1	4.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.9	27.1	22.4	41.5	29.7	27.7	44.4	30.2	22.9	39.9	29.2	24.8
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		740			1109			1441			595	
Approach Delay, s/veh		24.9			29.9			34.3			31.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	32.1	18.4	32.1	8.7	35.7	13.4	37.1
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	10.0	36.3	18.0	26.3	10.0	36.3	10.0	34.3
Max Q Clear Time (g_c+I1), s	5.2	7.8	13.6	12.7	3.2	19.7	4.6	22.1
Green Ext Time (p_c), s	0.1	2.3	0.9	6.3	0.0	10.0	0.1	9.1

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	805	31	36	1041	120	126
Future Volume (veh/h)	805	31	36	1041	120	126
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	847	33	38	1096	126	133
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1340	598	121	1906	430	382
Arrive On Green	0.38	0.38	0.07	0.54	0.24	0.24
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	847	33	38	1096	126	133
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	8.5	0.6	0.9	9.0	2.5	3.0
Cycle Q Clear(g_c), s	8.5	0.6	0.9	9.0	2.5	3.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1340	598	121	1906	430	382
V/C Ratio(X)	0.63	0.06	0.32	0.57	0.29	0.35
Avail Cap(c_a), veh/h	2224	992	327	3340	1062	945
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	8.6	19.4	6.8	13.5	13.7
Incr Delay (d2), s/veh	0.9	0.1	0.6	0.5	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.1	0.3	1.6	0.9	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.0	8.7	19.9	7.2	13.7	13.9
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h	880			1134	259	
Approach Delay, s/veh	11.8			7.7	13.8	
Approach LOS	B			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.5	7.0	22.2		29.1
Change Period (Y+Rc), s		4.0	4.0	5.7		* 5.7
Max Green Setting (Gmax), s		26.0	8.0	27.3		* 41
Max Q Clear Time (g_c+I1), s		5.0	2.9	10.5		11.0
Green Ext Time (p_c), s		0.6	0.0	5.9		10.7

Intersection Summary	
HCM 6th Ctrl Delay	10.0
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	145	654	59	403	259	366	1653	32	94	820	29
Future Volume (veh/h)	78	145	654	59	403	259	366	1653	32	94	820	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	153	0	62	424	0	385	1740	0	99	863	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	519		252	528		458	2510		376	2474	
Arrive On Green	0.07	0.15	0.00	0.07	0.15	0.00	0.13	0.49	0.00	0.11	0.48	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	82	153	0	62	424	0	385	1740	0	99	863	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.7	4.6	0.0	2.0	13.8	0.0	13.1	31.5	0.0	3.2	12.6	0.0
Cycle Q Clear(g_c), s	2.7	4.6	0.0	2.0	13.8	0.0	13.1	31.5	0.0	3.2	12.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	519		252	528		458	2510		376	2474	
V/C Ratio(X)	0.34	0.29		0.25	0.80		0.84	0.69		0.26	0.35	
Avail Cap(c_a), veh/h	288	690		288	702		1008	2510		376	2474	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.1	45.7	0.0	52.5	49.4	0.0	50.8	23.5	0.0	49.1	19.2	0.0
Incr Delay (d2), s/veh	0.3	0.5	0.0	0.2	6.5	0.0	1.6	1.6	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.0	0.0	0.9	6.5	0.0	5.5	11.7	0.0	1.3	4.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	46.3	0.0	52.7	55.9	0.0	52.4	25.1	0.0	49.2	19.3	0.0
LnGrp LOS	D	D		D	E		D	C		D	B	
Approach Vol, veh/h		235	A		486	A		2125	A		962	A
Approach Delay, s/veh		48.8			55.5			30.1			22.4	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	65.0	12.7	23.2	19.9	64.1	12.4	23.5
Change Period (Y+Rc), s	6.0	* 6	4.0	5.7	4.0	6.0	4.0	* 5.7
Max Green Setting (Gmax), s	8.0	* 59	10.0	23.3	35.0	32.0	10.0	* 24
Max Q Clear Time (g_c+I1), s	5.2	33.5	4.0	6.6	15.1	14.6	4.7	15.8
Green Ext Time (p_c), s	0.0	14.7	0.0	0.8	0.9	5.5	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	790	0	5	517	412	0	0	0	391	0	177
Future Volume (veh/h)	162	790	0	5	517	412	0	0	0	391	0	177
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1841	1841	0	1841	1841	1841				1841	0	1841
Adj Flow Rate, veh/h	171	832	0	5	544	434				412	0	186
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	4	4	0	4	4	4				4	0	4
Cap, veh/h	214	1873	0	0	1198	531				493	0	629
Arrive On Green	0.12	0.54	0.00	0.00	0.34	0.34				0.28	0.00	0.28
Sat Flow, veh/h	1753	3589	0	0	3497	1549				1753	0	1560
Grp Volume(v), veh/h	171	832	0	0	544	434				412	0	186
Grp Sat Flow(s),veh/h/ln	1753	1749	0	0	1749	1549				1753	0	1560
Q Serve(g_s), s	5.3	8.2	0.0	0.0	6.8	14.4				12.4	0.0	4.5
Cycle Q Clear(g_c), s	5.3	8.2	0.0	0.0	6.8	14.4				12.4	0.0	4.5
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	214	1873	0	0	1198	531				493	0	629
V/C Ratio(X)	0.80	0.44	0.00	0.00	0.45	0.82				0.84	0.00	0.30
Avail Cap(c_a), veh/h	249	1873	0	0	1473	652				872	0	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	24.0	8.0	0.0	0.0	14.4	16.9				19.0	0.0	11.4
Incr Delay (d2), s/veh	12.6	0.2	0.0	0.0	0.3	6.7				1.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	2.1	0.0	0.0	2.2	5.0				4.8	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	8.1	0.0	0.0	14.7	23.6				20.4	0.0	11.5
LnGrp LOS	D	A	A	A	B	C				C	A	B
Approach Vol, veh/h		1003			978						598	
Approach Delay, s/veh		13.0			18.6						17.7	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	35.8		20.4	10.9	25.0
Change Period (Y+Rc), s	4.0	5.7		4.6	4.0	5.7
Max Green Setting (Gmax), s	28.0	24.7		28.0	8.0	23.7
Max Q Clear Time (g_c+I1), s	0.0	10.2		14.4	7.3	16.4
Green Ext Time (p_c), s	0.0	3.4		1.4	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	183	982	10	3	894	190	10	12	14	150	6	54
Future Volume (veh/h)	183	982	10	3	894	190	10	12	14	150	6	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1885	1826	1826	1885	1885	1885	1791	1791	1732
Adj Flow Rate, veh/h	193	1034	11	3	941	200	11	13	15	158	6	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	1	5	5	1	1	1	1	1	5
Cap, veh/h	239	1783	19	4	1291	568	59	26	30	210	8	183
Arrive On Green	0.14	0.51	0.51	0.00	0.37	0.37	0.03	0.03	0.03	0.13	0.13	0.13
Sat Flow, veh/h	1739	3516	37	1795	3469	1527	1795	798	921	1646	63	1433
Grp Volume(v), veh/h	193	510	535	3	941	200	11	0	28	164	0	57
Grp Sat Flow(s),veh/h/ln	1739	1735	1819	1795	1735	1527	1795	0	1719	1709	0	1433
Q Serve(g_s), s	5.8	11.0	11.0	0.1	12.5	5.1	0.3	0.0	0.9	5.0	0.0	1.9
Cycle Q Clear(g_c), s	5.8	11.0	11.0	0.1	12.5	5.1	0.3	0.0	0.9	5.0	0.0	1.9
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.54	0.96		1.00
Lane Grp Cap(c), veh/h	239	880	923	4	1291	568	59	0	56	218	0	183
V/C Ratio(X)	0.81	0.58	0.58	0.68	0.73	0.35	0.19	0.00	0.50	0.75	0.00	0.31
Avail Cap(c_a), veh/h	292	880	923	268	1441	634	268	0	256	255	0	214
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.5	9.2	9.2	26.8	14.5	12.2	25.3	0.0	25.5	22.6	0.0	21.3
Incr Delay (d2), s/veh	10.6	1.0	0.9	52.0	1.7	0.4	1.5	0.0	6.6	10.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.0	3.1	0.1	4.1	1.4	0.2	0.0	0.4	2.5	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	10.2	10.1	78.8	16.2	12.6	26.8	0.0	32.1	32.7	0.0	22.2
LnGrp LOS	C	B	B	E	B	B	C	A	C	C	A	C
Approach Vol, veh/h		1238			1144			39			221	
Approach Delay, s/veh		13.7			15.7			30.6			30.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.1	32.9		5.8	11.4	25.7		10.9				
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	8.0	25.3		8.0	9.0	22.3		8.0				
Max Q Clear Time (g_c+I1), s	2.1	13.0		2.9	7.8	14.5		7.0				
Green Ext Time (p_c), s	0.0	7.4		0.0	0.0	5.3		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		16.2
HCM 6th LOS		B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	919	255	287	978	136	242
Future Volume (veh/h)	919	255	287	978	136	242
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	967	268	302	1029	143	255
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1007	638	352	2064	217	506
Arrive On Green	0.28	0.28	0.20	0.58	0.12	0.12
Sat Flow, veh/h	3647	1571	1781	3647	1781	1585
Grp Volume(v), veh/h	967	268	302	1029	143	255
Grp Sat Flow(s),veh/h/ln	1777	1571	1781	1777	1781	1585
Q Serve(g_s), s	16.1	7.3	9.8	10.3	4.6	0.0
Cycle Q Clear(g_c), s	16.1	7.3	9.8	10.3	4.6	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1007	638	352	2064	217	506
V/C Ratio(X)	0.96	0.42	0.86	0.50	0.66	0.50
Avail Cap(c_a), veh/h	1007	638	386	2064	475	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	12.8	23.3	7.4	25.2	16.6
Incr Delay (d2), s/veh	19.4	0.4	15.1	0.9	1.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	2.8	5.0	2.6	1.9	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.6	13.2	38.4	8.3	26.4	16.9
LnGrp LOS	D	B	D	A	C	B
Approach Vol, veh/h	1235			1331	398	
Approach Delay, s/veh	34.7			15.1	20.3	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.8	23.0		11.3		40.8
Change Period (Y+Rc), s	6.0	* 6		4.0		6.0
Max Green Setting (Gmax), s	13.0	* 17		16.0		34.0
Max Q Clear Time (g_c+I1), s	11.8	18.1		6.6		12.3
Green Ext Time (p_c), s	0.1	0.0		0.7		4.2

Intersection Summary	
HCM 6th Ctrl Delay	24.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	975	310	524	675	0	1279
Future Volume (vph)	975	310	524	675	0	1279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7	5.7	4.0	4.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1554	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1554	3433	3539		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1026	326	552	711	0	1346
RTOR Reduction (vph)	0	79	0	0	0	0
Lane Group Flow (vph)	1026	247	552	711	0	1346
Confl. Peds. (#/hr)		5				
Turn Type	NA	Perm	Prot	NA		Free
Protected Phases	2		1	1 2		
Permitted Phases		2				Free
Actuated Green, G (s)	33.6	33.6	16.7	60.0		60.0
Effective Green, g (s)	33.6	33.6	16.7	54.3		60.0
Actuated g/C Ratio	0.56	0.56	0.28	0.90		1.00
Clearance Time (s)	5.7	5.7	4.0			
Vehicle Extension (s)	3.4	3.4	2.0			
Lane Grp Cap (vph)	2847	870	955	3202		1611
v/s Ratio Prot	0.20		0.16	0.20		
v/s Ratio Perm		0.16				c0.84
v/c Ratio	0.36	0.28	0.58	0.22		0.84
Uniform Delay, d1	7.3	6.9	18.6	0.3		0.0
Progression Factor	0.43	0.23	1.02	1.00		1.00
Incremental Delay, d2	0.3	0.7	0.4	0.0		5.3
Delay (s)	3.4	2.3	19.5	0.3		5.3
Level of Service	A	A	B	A		A
Approach Delay (s)	3.1			8.7	5.3	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBT	WBR	WBR2	NBL2	NBT	NBR	SBL	SBR	SBR2
Lane Configurations												
Traffic Volume (vph)	146	1744	364	709	791	868	190	539	718	193	300	53
Future Volume (vph)	146	1744	364	709	791	868	190	539	718	193	300	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.7	4.0	5.7	5.7	5.7	4.0	5.3	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.86	0.86	1.00	1.00	0.95	1.00	0.97	0.88	
Frpb, ped/bikes	1.00	1.00	0.98	0.99	1.00	1.00	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	0.95	0.85	0.85	1.00	1.00	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1548	4519	1362	1583	1770	3539	1562	3433	2787	
Flt Permitted	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1548	4519	1362	1583	1770	3539	1562	3433	2787	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	154	1836	383	746	833	914	200	567	756	203	316	56
RTOR Reduction (vph)	0	0	0	0	0	168	0	0	0	0	97	0
Lane Group Flow (vph)	154	1836	383	1163	416	746	200	567	756	203	275	0
Confl. Peds. (#/hr)			5		5				5		5	
Turn Type	Prot	NA	Free	NA	Prot	Perm	Prot	NA	Free	Prot	pm+ov	
Protected Phases	5	2		6	6		3	8		7	5	
Permitted Phases			Free			6			Free		4	
Actuated Green, G (s)	13.3	68.2	120.0	50.9	50.9	50.9	42.1	26.8	120.0	10.0	13.3	
Effective Green, g (s)	13.3	68.2	120.0	50.9	50.9	50.9	42.1	26.8	120.0	10.0	13.3	
Actuated g/C Ratio	0.11	0.57	1.00	0.42	0.42	0.42	0.35	0.22	1.00	0.08	0.11	
Clearance Time (s)	4.0	5.7		5.7	5.7	5.7	4.0	5.3		4.0	4.0	
Vehicle Extension (s)	2.0	3.4		3.4	3.4	3.4	4.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	380	2011	1548	1916	577	671	620	790	1562	286	308	
v/s Ratio Prot	0.04	c0.52		0.26	0.31		0.11	c0.16		c0.06	0.10	
v/s Ratio Perm			0.25			c0.47			0.48			
v/c Ratio	0.41	0.91	0.25	0.61	0.72	1.11	0.32	0.72	0.48	0.71	0.89	
Uniform Delay, d1	49.7	23.2	0.0	26.8	28.7	34.5	28.5	43.1	0.0	53.6	52.6	
Progression Factor	0.99	0.88	1.00	0.54	0.53	0.62	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	5.9	0.4	0.5	3.6	66.1	0.4	3.4	1.1	6.5	25.6	
Delay (s)	49.2	26.2	0.4	15.0	18.8	87.4	28.9	46.5	1.1	60.0	78.2	
Level of Service	D	C	A	B	B	F	C	D	A	E	E	
Approach Delay (s)		23.5		42.2				21.6				
Approach LOS		C		D				C				

Intersection Summary			
HCM 2000 Control Delay	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	282	1997	344	50	1992	59	164	153	232	84	228	265
Future Volume (veh/h)	282	1997	344	50	1992	59	164	153	232	84	228	265
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	297	2102	0	53	2097	0	173	161	0	88	240	278
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	345	2745		215	3126		417	957		273	864	266
Arrive On Green	0.20	1.00	0.00	0.06	0.49	0.00	0.08	0.19	0.00	0.08	0.17	0.17
Sat Flow, veh/h	3456	5106	1585	3456	6434	1585	5023	5106	1585	3456	5106	1571
Grp Volume(v), veh/h	297	2102	0	53	2097	0	173	161	0	88	240	278
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1609	1585	1674	1702	1585	1728	1702	1571
Q Serve(g_s), s	10.0	0.0	0.0	1.8	29.8	0.0	3.9	3.2	0.0	2.9	4.9	20.3
Cycle Q Clear(g_c), s	10.0	0.0	0.0	1.8	29.8	0.0	3.9	3.2	0.0	2.9	4.9	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	345	2745		215	3126		417	957		273	864	266
V/C Ratio(X)	0.86	0.77		0.25	0.67		0.41	0.17		0.32	0.28	1.05
Avail Cap(c_a), veh/h	346	2745		259	3126		419	957		317	864	266
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	0.0	0.0	53.6	23.5	0.0	52.2	40.9	0.0	52.2	43.5	49.9
Incr Delay (d2), s/veh	18.6	1.4	0.0	0.2	1.2	0.0	0.2	0.1	0.0	0.3	0.2	67.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.4	0.0	0.8	11.0	0.0	1.6	1.3	0.0	1.2	2.1	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.8	1.4	0.0	53.8	24.7	0.0	52.5	41.0	0.0	52.5	43.7	117.6
LnGrp LOS	E	A		D	C		D	D		D	D	F
Approach Vol, veh/h		2399	A		2150	A		334	A		606	
Approach Delay, s/veh		9.4			25.4			47.0			78.9	
Approach LOS		A			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	27.8	11.5	70.2	15.3	26.0	17.7	64.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.7	5.3	* 5.7	5.7	* 5.7
Max Green Setting (Gmax), s	11.0	19.7	9.0	61.3	10.0	* 20	12.0	* 58
Max Q Clear Time (g_c+I1), s	4.9	5.2	3.8	2.0	5.9	22.3	12.0	31.8
Green Ext Time (p_c), s	0.1	0.9	0.0	34.9	0.1	0.0	0.0	20.1

Intersection Summary	
HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	1214	193	38	570	38	146	1135	55	37	534	58
Future Volume (veh/h)	214	1214	193	38	570	38	146	1135	55	37	534	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	225	1278	0	40	600	0	154	1195	0	39	562	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	281	1386		51	1199		327	1987		50	1119	
Arrive On Green	0.08	0.39	0.00	0.03	0.34	0.00	0.18	0.39	0.00	0.03	0.22	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	225	1278	0	40	600	0	154	1195	0	39	562	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	7.7	41.1	0.0	2.7	16.1	0.0	9.3	22.4	0.0	2.6	11.6	0.0
Cycle Q Clear(g_c), s	7.7	41.1	0.0	2.7	16.1	0.0	9.3	22.4	0.0	2.6	11.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1386		51	1199		327	1987		50	1119	
V/C Ratio(X)	0.80	0.92		0.78	0.50		0.47	0.60		0.78	0.50	
Avail Cap(c_a), veh/h	317	1430		119	1333		327	1987		119	1119	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.2	34.9	0.0	57.9	31.7	0.0	43.8	29.2	0.0	58.0	41.1	0.0
Incr Delay (d2), s/veh	10.8	10.2	0.0	9.2	0.4	0.0	0.4	0.6	0.0	9.5	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	18.7	0.0	1.3	6.8	0.0	4.0	8.9	0.0	1.3	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.0	45.1	0.0	67.1	32.1	0.0	44.1	29.9	0.0	67.4	42.7	0.0
LnGrp LOS	E	D		E	C		D	C		E	D	
Approach Vol, veh/h		1503	A		640	A		1349	A		601	A
Approach Delay, s/veh		48.1			34.3			31.5			44.3	
Approach LOS		D			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	52.8	27.8	32.0	13.7	46.5	7.4	52.4
Change Period (Y+Rc), s	4.0	* 6	5.7	* 5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	8.0	* 48	18.0	* 26	11.0	45.0	8.0	36.3
Max Q Clear Time (g_c+I1), s	4.7	43.1	11.3	13.6	9.7	18.1	4.6	24.4
Green Ext Time (p_c), s	0.0	3.7	0.1	3.2	0.1	4.0	0.0	6.7

Intersection Summary	
HCM 6th Ctrl Delay	39.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	119	133	65	139	99	129	1515	44	120	1316	20
Future Volume (veh/h)	88	119	133	65	139	99	129	1515	44	120	1316	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	125	0	68	146	0	136	1595	0	126	1385	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	276		87	218		163	2140		153	2182	
Arrive On Green	0.07	0.08	0.00	0.05	0.06	0.00	0.09	0.42	0.00	0.09	0.43	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	93	125	0	68	146	0	136	1595	0	126	1385	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	6.2	4.0	0.0	4.5	4.8	0.0	9.0	31.7	0.0	8.4	25.6	0.0
Cycle Q Clear(g_c), s	6.2	4.0	0.0	4.5	4.8	0.0	9.0	31.7	0.0	8.4	25.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	276		87	218		163	2140		153	2182	
V/C Ratio(X)	0.80	0.45		0.78	0.67		0.83	0.75		0.83	0.63	
Avail Cap(c_a), veh/h	193	699		148	610		252	2140		238	2182	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.3	52.9	0.0	56.4	55.1	0.0	53.6	29.4	0.0	54.0	27.0	0.0
Incr Delay (d2), s/veh	4.6	1.4	0.0	5.6	4.9	0.0	7.6	2.4	0.0	7.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	1.8	0.0	2.1	2.3	0.0	4.3	12.7	0.0	4.0	10.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.9	54.3	0.0	62.0	60.0	0.0	61.2	31.8	0.0	60.9	27.7	0.0
LnGrp LOS	E	D		E	E		E	C		E	C	
Approach Vol, veh/h		218	A		214	A		1731	A		1511	A
Approach Delay, s/veh		56.7			60.6			34.2			30.5	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	15.7	15.0	57.0	11.9	13.7	16.0	56.0
Change Period (Y+Rc), s	4.0	6.4	4.0	5.7	4.0	6.4	5.7	* 5.7
Max Green Setting (Gmax), s	10.0	23.6	17.0	49.3	13.0	20.6	16.0	* 50
Max Q Clear Time (g_c+I1), s	6.5	6.0	11.0	27.6	8.2	6.8	10.4	33.7
Green Ext Time (p_c), s	0.0	0.5	0.1	11.3	0.1	0.6	0.1	10.9

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1267	452	71	1166	686	449	665	24	506	620	87
Future Volume (veh/h)	210	1267	452	71	1166	686	449	665	24	506	620	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	1334	278	75	1227	0	473	700	22	533	653	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	2013	625	121	1702		535	1128	35	626	812	94
Arrive On Green	0.16	0.79	0.79	0.04	0.33	0.00	0.15	0.22	0.22	0.12	0.17	0.17
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5086	159	5023	4643	535
Grp Volume(v), veh/h	221	1334	278	75	1227	0	473	468	254	533	477	252
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1842	1674	1702	1774
Q Serve(g_s), s	7.4	13.9	3.3	2.6	25.3	0.0	16.1	14.9	14.9	12.5	16.1	16.4
Cycle Q Clear(g_c), s	7.4	13.9	3.3	2.6	25.3	0.0	16.1	14.9	14.9	12.5	16.1	16.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		0.30
Lane Grp Cap(c), veh/h	274	2013	625	121	1702		535	755	408	626	595	310
V/C Ratio(X)	0.81	0.66	0.44	0.62	0.72		0.88	0.62	0.62	0.85	0.80	0.81
Avail Cap(c_a), veh/h	374	2013	625	230	1702		662	823	445	753	681	355
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	9.2	2.0	57.1	35.1	0.0	49.7	42.1	42.2	51.4	47.5	47.6
Incr Delay (d2), s/veh	6.2	1.0	0.8	1.9	2.7	0.0	10.2	1.5	2.8	6.9	6.6	12.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.0	1.8	1.1	10.5	0.0	7.6	6.3	7.0	5.5	7.3	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	10.1	2.8	59.0	37.8	0.0	59.9	43.6	45.0	58.4	54.1	60.5
LnGrp LOS	E	B	A	E	D		E	D	D	E	D	E
Approach Vol, veh/h		1833			1302	A		1195			1262	
Approach Delay, s/veh		14.5			39.0			50.4			57.2	
Approach LOS		B			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	53.3	24.6	27.0	15.5	46.0	18.9	32.6
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	8.0	45.0	23.0	* 24	13.0	* 40	18.0	29.0
Max Q Clear Time (g_c+I1), s	4.6	15.9	18.1	18.4	9.4	27.3	14.5	16.9
Green Ext Time (p_c), s	0.0	17.8	0.5	2.6	0.1	8.3	0.5	4.4

Intersection Summary	
HCM 6th Ctrl Delay	37.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	720	4	6	1137	14	7	0	2	26	5	77
Future Volume (veh/h)	30	720	4	6	1137	14	7	0	2	26	5	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	758	4	6	1197	13	7	0	2	27	5	72
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	1798	9	20	1649	18	42	0	37	220	41	230
Arrive On Green	0.05	0.50	0.50	0.01	0.46	0.46	0.02	0.00	0.02	0.15	0.15	0.15
Sat Flow, veh/h	1781	3625	19	1781	3601	39	1781	0	1585	1514	280	1585
Grp Volume(v), veh/h	32	372	390	6	591	619	7	0	2	32	0	72
Grp Sat Flow(s),veh/h/ln	1781	1777	1867	1781	1777	1863	1781	0	1585	1795	0	1585
Q Serve(g_s), s	0.9	7.3	7.3	0.2	14.7	14.7	0.2	0.0	0.1	0.8	0.0	2.2
Cycle Q Clear(g_c), s	0.9	7.3	7.3	0.2	14.7	14.7	0.2	0.0	0.1	0.8	0.0	2.2
Prop In Lane	1.00		0.01	1.00		0.02	1.00		1.00	0.84		1.00
Lane Grp Cap(c), veh/h	88	881	926	20	814	853	42	0	37	261	0	230
V/C Ratio(X)	0.36	0.42	0.42	0.30	0.73	0.73	0.17	0.00	0.05	0.12	0.00	0.31
Avail Cap(c_a), veh/h	261	1051	1104	261	1051	1102	1272	0	1132	1775	0	1567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.1	8.8	8.8	26.8	12.0	12.0	26.1	0.0	26.1	20.3	0.0	20.9
Incr Delay (d2), s/veh	0.9	0.6	0.5	3.1	2.6	2.5	0.7	0.0	0.2	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.2	2.3	0.1	4.9	5.1	0.1	0.0	0.0	0.3	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	9.3	9.3	29.9	14.6	14.5	26.8	0.0	26.3	20.4	0.0	21.2
LnGrp LOS	C	A	A	C	B	B	C	A	C	C	A	C
Approach Vol, veh/h		794			1216			9			104	
Approach Delay, s/veh		10.0			14.6			26.7			20.9	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	32.8		5.3	6.7	30.7		11.9
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	32.3		39.0	8.0	32.3		54.0
Max Q Clear Time (g_c+I1), s	2.2	9.3		2.2	2.9	16.7		4.2
Green Ext Time (p_c), s	0.0	5.8		0.0	0.0	8.3		0.3

Intersection Summary		
HCM 6th Ctrl Delay		13.2
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	465	33	34	1241	72	47	4	22	31	21	16
Future Volume (veh/h)	55	465	33	34	1241	72	47	4	22	31	21	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	489	35	36	1306	76	49	4	23	33	22	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	1634	117	64	1649	736	199	16	191	117	78	170
Arrive On Green	0.06	0.49	0.49	0.04	0.46	0.46	0.12	0.12	0.12	0.11	0.11	0.11
Sat Flow, veh/h	1781	3364	240	1781	3554	1585	1653	135	1585	1090	726	1585
Grp Volume(v), veh/h	58	258	266	36	1306	76	53	0	23	55	0	17
Grp Sat Flow(s),veh/h/ln	1781	1777	1827	1781	1777	1585	1788	0	1585	1816	0	1585
Q Serve(g_s), s	2.2	6.2	6.2	1.4	22.0	1.9	1.9	0.0	0.9	2.0	0.0	0.7
Cycle Q Clear(g_c), s	2.2	6.2	6.2	1.4	22.0	1.9	1.9	0.0	0.9	2.0	0.0	0.7
Prop In Lane	1.00		0.13	1.00		1.00	0.92		1.00	0.60		1.00
Lane Grp Cap(c), veh/h	103	863	888	64	1649	736	216	0	191	194	0	170
V/C Ratio(X)	0.56	0.30	0.30	0.56	0.79	0.10	0.25	0.00	0.12	0.28	0.00	0.10
Avail Cap(c_a), veh/h	202	863	888	202	1725	769	278	0	247	540	0	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	10.9	10.9	33.5	16.0	10.7	28.2	0.0	27.7	29.0	0.0	28.5
Incr Delay (d2), s/veh	1.8	0.9	0.9	2.9	4.0	0.3	0.2	0.0	0.1	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.2	2.3	0.6	8.3	0.6	0.8	0.0	0.3	0.9	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	11.8	11.8	36.4	20.0	10.9	28.4	0.0	27.8	29.3	0.0	28.6
LnGrp LOS	C	B	B	D	C	B	C	A	C	C	A	C
Approach Vol, veh/h		582			1418			76			72	
Approach Delay, s/veh		14.0			19.9			28.2			29.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.5	6.5	40.0		11.6	8.1	38.5
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		11.0	8.0	34.3		21.0	8.0	34.3
Max Q Clear Time (g_c+I1), s		3.9	3.4	8.2		4.0	4.2	24.0
Green Ext Time (p_c), s		0.0	0.0	6.8		0.1	0.0	8.8

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	371	75	32	656	297	535	1340	36	238	909	148
Future Volume (veh/h)	147	371	75	32	656	297	535	1340	36	238	909	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	155	391	0	34	691	0	563	1411	0	251	957	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	942		195	779		626	1876		307	1332	
Arrive On Green	0.10	0.27	0.00	0.06	0.22	0.00	0.18	0.37	0.00	0.09	0.26	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	155	391	0	34	691	0	563	1411	0	251	957	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	10.3	10.9	0.0	1.1	22.6	0.0	19.1	29.0	0.0	8.6	20.5	0.0
Cycle Q Clear(g_c), s	10.3	10.9	0.0	1.1	22.6	0.0	19.1	29.0	0.0	8.6	20.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	942		195	779		626	1876		307	1332	
V/C Ratio(X)	0.85	0.41		0.17	0.89		0.90	0.75		0.82	0.72	
Avail Cap(c_a), veh/h	238	1016		288	838		720	1885		346	1332	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.0	36.4	0.0	53.9	45.4	0.0	48.0	33.2	0.0	53.7	40.3	0.0
Incr Delay (d2), s/veh	16.3	0.5	0.0	0.2	11.5	0.0	12.1	2.0	0.0	11.5	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	4.7	0.0	0.5	10.9	0.0	8.9	11.4	0.0	4.1	8.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.2	36.9	0.0	54.1	56.9	0.0	60.1	35.1	0.0	65.2	43.7	0.0
LnGrp LOS	E	D		D	E		E	D		E	D	
Approach Vol, veh/h		546	A		725	A		1974	A		1208	A
Approach Delay, s/veh		46.1			56.8			42.3			48.2	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	49.8	10.8	37.5	27.4	37.0	16.3	32.0
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	5.7
Max Green Setting (Gmax), s	12.0	44.3	10.0	34.3	25.0	* 31	16.0	28.3
Max Q Clear Time (g_c+I1), s	10.6	31.0	3.1	12.9	21.1	22.5	12.3	24.6
Green Ext Time (p_c), s	0.1	8.5	0.0	2.8	0.6	4.5	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	46.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	386	0	0	233	211	2	2	0	450	0	5
Future Volume (veh/h)	5	386	0	0	233	211	2	2	0	450	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	406	0	0	245	222	2	2	0	474	0	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	834	0	0	439	903	4	4	0	596	0	531
Arrive On Green	0.00	0.23	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.33	0.00	0.33
Sat Flow, veh/h	0	3647	0	0	1870	1585	912	912	0	1781	0	1585
Grp Volume(v), veh/h	0	406	0	0	245	222	4	0	0	474	0	5
Grp Sat Flow(s),veh/h/ln	0	1777	0	0	1870	1585	1825	0	0	1781	0	1585
Q Serve(g_s), s	0.0	3.0	0.0	0.0	3.5	2.1	0.1	0.0	0.0	7.3	0.0	0.1
Cycle Q Clear(g_c), s	0.0	3.0	0.0	0.0	3.5	2.1	0.1	0.0	0.0	7.3	0.0	0.1
Prop In Lane	0.00		0.00	0.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	834	0	0	439	903	8	0	0	596	0	531
V/C Ratio(X)	0.00	0.49	0.00	0.00	0.56	0.25	0.50	0.00	0.00	0.79	0.00	0.01
Avail Cap(c_a), veh/h	0	4473	0	0	501	955	1326	0	0	1295	0	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.0	0.0	0.0	10.2	3.3	15.0	0.0	0.0	9.1	0.0	6.7
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	1.2	0.1	16.9	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.0	0.0	1.0	0.9	0.1	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.5	0.0	0.0	11.4	3.4	32.0	0.0	0.0	10.1	0.0	6.7
LnGrp LOS	A	B	A	A	B	A	C	A	A	B	A	A
Approach Vol, veh/h		406			467			4			479	
Approach Delay, s/veh		10.5			7.6			32.0			10.0	
Approach LOS		B			A			C			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		12.0		4.1	0.0	12.0		14.1				
Change Period (Y+Rc), s		4.9		4.0	4.0	4.9		4.0				
Max Green Setting (Gmax), s		38.1		22.0	26.0	8.1		22.0				
Max Q Clear Time (g_c+I1), s		5.0		2.1	0.0	5.5		9.3				
Green Ext Time (p_c), s		2.1		0.0	0.0	0.8		1.0				

Intersection Summary												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	836	10	3	423	0	14	0	14	111	3	11
Future Volume (veh/h)	0	836	10	3	423	0	14	0	14	111	3	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	880	0	3	445	0	15	0	15	117	3	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1385		12	1744	0	47	0	47	265	49	195
Arrive On Green	0.00	0.39	0.00	0.01	0.49	0.00	0.06	0.00	0.06	0.15	0.15	0.15
Sat Flow, veh/h	0	3741	0	1781	3647	0	839	0	839	1781	327	1308
Grp Volume(v), veh/h	0	880	0	3	445	0	30	0	0	117	0	15
Grp Sat Flow(s),veh/h/ln	0	1777	0	1781	1777	0	1677	0	0	1781	0	1635
Q Serve(g_s), s	0.0	8.5	0.0	0.1	3.1	0.0	0.7	0.0	0.0	2.5	0.0	0.3
Cycle Q Clear(g_c), s	0.0	8.5	0.0	0.1	3.1	0.0	0.7	0.0	0.0	2.5	0.0	0.3
Prop In Lane	0.00		0.00	1.00		0.00	0.50		0.50	1.00		0.80
Lane Grp Cap(c), veh/h	0	1385		12	1744	0	94	0	0	265	0	243
V/C Ratio(X)	0.00	0.64		0.26	0.26	0.00	0.32	0.00	0.00	0.44	0.00	0.06
Avail Cap(c_a), veh/h	0	1853		336	2859	0	792	0	0	841	0	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.5	0.0	21.0	6.3	0.0	19.2	0.0	0.0	16.4	0.0	15.5
Incr Delay (d2), s/veh	0.0	0.5	0.0	4.2	0.1	0.0	0.7	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	0.0	0.0	0.7	0.0	0.3	0.0	0.0	1.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.0	0.0	25.2	6.4	0.0	19.9	0.0	0.0	16.9	0.0	15.5
LnGrp LOS	A	B		C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		880	A		448			30			132	
Approach Delay, s/veh		11.0			6.5			19.9			16.7	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	4.3	21.4		6.4		25.7		10.3
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s	8.0	22.1		20.0		34.1		20.0
Max Q Clear Time (g_c+I1), s	2.1	10.5		2.7		5.1		4.5
Green Ext Time (p_c), s	0.0	6.0		0.0		4.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	955	15	102	196	36	246
Future Volume (veh/h)	955	15	102	196	36	246
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1005	16	107	206	38	259
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1507	24	137	2098	362	323
Arrive On Green	0.42	0.42	0.08	0.59	0.20	0.20
Sat Flow, veh/h	3673	57	1781	3647	1781	1585
Grp Volume(v), veh/h	499	522	107	206	38	259
Grp Sat Flow(s),veh/h/ln	1777	1860	1781	1777	1781	1585
Q Serve(g_s), s	9.8	9.8	2.5	1.1	0.8	6.7
Cycle Q Clear(g_c), s	9.8	9.8	2.5	1.1	0.8	6.7
Prop In Lane		0.03	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	748	783	137	2098	362	323
V/C Ratio(X)	0.67	0.67	0.78	0.10	0.10	0.80
Avail Cap(c_a), veh/h	950	995	330	2558	619	550
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.1	10.1	19.6	3.8	14.0	16.4
Incr Delay (d2), s/veh	1.3	1.2	3.6	0.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	2.9	1.0	0.2	0.3	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.3	11.3	23.2	3.9	14.0	18.2
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	1021			313	297	
Approach Delay, s/veh	11.3			10.5	17.6	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.3	23.1		12.8		30.4
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9
Max Green Setting (Gmax), s	8.0	23.1		15.0		31.1
Max Q Clear Time (g_c+I1), s	4.5	11.8		8.7		3.1
Green Ext Time (p_c), s	0.0	6.4		0.3		2.2

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1103	4	19	663	82	3	2	8	308	4	39
Future Volume (veh/h)	37	1103	4	19	663	82	3	2	8	308	4	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	1161	4	20	698	86	3	2	8	327	0	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	2576	9	24	2212	272	5	3	12	409	0	182
Arrive On Green	0.03	0.71	0.71	0.01	0.69	0.69	0.01	0.01	0.01	0.11	0.00	0.11
Sat Flow, veh/h	1781	3632	13	1781	3185	392	385	256	1026	3563	0	1585
Grp Volume(v), veh/h	39	568	597	20	389	395	13	0	0	327	0	41
Grp Sat Flow(s),veh/h/ln	1781	1777	1868	1781	1777	1800	1667	0	0	1781	0	1585
Q Serve(g_s), s	2.6	16.4	16.4	1.3	10.3	10.3	0.9	0.0	0.0	10.7	0.0	2.8
Cycle Q Clear(g_c), s	2.6	16.4	16.4	1.3	10.3	10.3	0.9	0.0	0.0	10.7	0.0	2.8
Prop In Lane	1.00		0.01	1.00		0.22	0.23		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	50	1260	1325	24	1234	1250	20	0	0	409	0	182
V/C Ratio(X)	0.78	0.45	0.45	0.83	0.32	0.32	0.67	0.00	0.00	0.80	0.00	0.23
Avail Cap(c_a), veh/h	134	1260	1325	119	1234	1250	269	0	0	754	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.9	7.5	7.5	59.0	7.2	7.2	59.1	0.0	0.0	51.8	0.0	48.3
Incr Delay (d2), s/veh	9.3	1.2	1.1	21.1	0.2	0.2	25.2	0.0	0.0	2.7	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.8	6.1	0.7	3.6	3.7	0.5	0.0	0.0	4.9	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.3	8.6	8.6	80.2	7.3	7.3	84.2	0.0	0.0	54.5	0.0	48.7
LnGrp LOS	E	A	A	F	A	A	F	A	A	D	A	D
Approach Vol, veh/h		1204			804			13			368	
Approach Delay, s/veh		10.5			9.1			84.2			53.9	
Approach LOS		B			A			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	90.0		6.0	7.4	88.3		18.4
Change Period (Y+Rc), s	4.0	4.9		4.6	4.0	4.9		4.6
Max Green Setting (Gmax), s	8.0	49.1		19.4	9.0	48.1		25.4
Max Q Clear Time (g_c+I1), s	3.3	18.4		2.9	4.6	12.3		12.7
Green Ext Time (p_c), s	0.0	22.4		0.0	0.0	17.0		1.0

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	1290	15	56	638	980	14	8	27	435	12	180
Future Volume (veh/h)	157	1290	15	56	638	980	14	8	27	435	12	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	165	1358	16	59	672	1031	15	8	27	467	0	188
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	1691	20	275	2028	905	49	51	43	547	0	243
Arrive On Green	0.20	1.00	1.00	0.15	0.57	0.57	0.03	0.03	0.03	0.15	0.00	0.15
Sat Flow, veh/h	1781	3320	39	1781	3554	1585	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	165	612	762	59	672	1031	15	8	27	467	0	188
Grp Sat Flow(s),veh/h/ln	1781	1496	1863	1781	1777	1585	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	10.9	0.0	0.0	3.5	12.0	68.5	1.0	0.5	2.0	15.3	0.0	13.7
Cycle Q Clear(g_c), s	10.9	0.0	0.0	3.5	12.0	68.5	1.0	0.5	2.0	15.3	0.0	13.7
Prop In Lane	1.00		0.02	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	762	949	275	2028	905	49	51	43	547	0	243
V/C Ratio(X)	0.93	0.80	0.80	0.21	0.33	1.14	0.31	0.16	0.62	0.85	0.00	0.77
Avail Cap(c_a), veh/h	178	762	949	275	2028	905	119	125	106	745	0	332
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.00	0.97
Uniform Delay (d), s/veh	47.6	0.0	0.0	44.4	13.6	25.8	57.2	57.0	57.8	49.5	0.0	48.8
Incr Delay (d2), s/veh	41.2	7.5	6.1	0.1	0.1	76.2	2.2	0.9	8.6	6.0	0.0	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	1.6	1.6	1.5	4.5	41.8	0.5	0.2	0.9	7.2	0.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.7	7.5	6.1	44.5	13.7	101.9	59.4	57.9	66.4	55.5	0.0	54.5
LnGrp LOS	F	A	A	D	B	F	E	E	E	E	A	D
Approach Vol, veh/h		1539			1762			50			655	
Approach Delay, s/veh		15.5			66.4			62.9			55.2	
Approach LOS		B			E			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.4	66.0		7.3	16.0	73.4		23.3
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.9
Max Green Setting (Gmax), s	8.0	* 61		8.0	12.0	57.1		25.1
Max Q Clear Time (g_c+I1), s	5.5	2.0		4.0	12.9	70.5		17.3
Green Ext Time (p_c), s	0.0	14.3		0.0	0.0	0.0		1.1

Intersection Summary	
HCM 6th Ctrl Delay	45.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1184	142	0	1645	691	0	0	0	253	521	143
Future Volume (veh/h)	0	1184	142	0	1645	691	0	0	0	253	521	143
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	1246	149	0	1732	0				266	548	151
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	1812	808	0	1908					570	599	507
Arrive On Green	0.00	0.51	0.51	0.00	1.00	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	3647	1585	0	3741	1585				1781	1870	1585
Grp Volume(v), veh/h	0	1246	149	0	1732	0				266	548	151
Grp Sat Flow(s),veh/h/ln	0	1777	1585	0	1870	1585				1781	1870	1585
Q Serve(g_s), s	0.0	15.9	3.1	0.0	0.0	0.0				7.2	16.9	4.3
Cycle Q Clear(g_c), s	0.0	15.9	3.1	0.0	0.0	0.0				7.2	16.9	4.3
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1812	808	0	1908					570	599	507
V/C Ratio(X)	0.00	0.69	0.18	0.00	0.91					0.47	0.92	0.30
Avail Cap(c_a), veh/h	0	1812	808	0	1908					585	614	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.54	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.1	8.0	0.0	0.0	0.0				16.3	19.6	15.3
Incr Delay (d2), s/veh	0.0	2.2	0.5	0.0	4.5	0.0				0.2	17.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	0.9	0.0	1.2	0.0				2.7	9.5	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.2	8.5	0.0	4.5	0.0				16.5	37.4	15.5
LnGrp LOS	A	B	A	A	A					B	D	B
Approach Vol, veh/h		1395			1732	A					965	
Approach Delay, s/veh		12.7			4.5						28.2	
Approach LOS		B			A						C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		35.5		24.5		35.5
Change Period (Y+Rc), s		4.9		5.3		4.9
Max Green Setting (Gmax), s		30.1		19.7		30.1
Max Q Clear Time (g_c+I1), s		17.9		18.9		2.0
Green Ext Time (p_c), s		7.0		0.3		15.8

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	362	1075	0	0	1195	310	0	0	1434	0	0	1141
Future Volume (vph)	362	1075	0	0	1195	310	0	0	1434	0	0	1141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.9			4.9	4.0			4.0			4.0
Lane Util. Factor	1.00	0.91			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	5085			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	5085			5085	1583			1611			2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	381	1132	0	0	1258	326	0	0	1509	0	0	1201
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	18
Lane Group Flow (vph)	381	1132	0	0	1258	326	0	0	1509	0	0	1183
Turn Type	Prot	NA			NA	Free			Free			Over
Protected Phases	5	2			6							5
Permitted Phases						Free			Free			
Actuated Green, G (s)	28.7	60.0			22.4	60.0			60.0			28.7
Effective Green, g (s)	28.7	60.0			22.4	60.0			60.0			28.7
Actuated g/C Ratio	0.48	1.00			0.37	1.00			1.00			0.48
Clearance Time (s)	4.0	4.9			4.9							4.0
Vehicle Extension (s)	2.0	3.9			3.8							2.0
Lane Grp Cap (vph)	846	5085			1898	1583			1611			1333
v/s Ratio Prot	0.22	0.22			0.25							0.42
v/s Ratio Perm						0.21			c0.94			
v/c Ratio	0.45	0.22			0.66	0.21			0.94			0.89
Uniform Delay, d1	10.4	0.0			15.7	0.0			0.0			14.2
Progression Factor	1.80	1.00			0.60	1.00			1.00			1.00
Incremental Delay, d2	0.1	0.0			1.6	0.3			11.7			7.3
Delay (s)	18.9	0.0			11.0	0.3			11.7			21.5
Level of Service	B	A			B	A			B			C
Approach Delay (s)		4.8			8.8			11.7			21.5	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.9
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	512	1790	186	106	1077	46	314	562	83	54	225	120
Future Volume (veh/h)	512	1790	186	106	1077	46	314	562	83	54	225	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	539	1884	196	112	1134	48	331	592	87	57	237	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1142	2831	1055	165	1684	71	390	775	343	97	682	733
Arrive On Green	0.33	0.55	0.55	0.05	0.26	0.26	0.11	0.22	0.22	0.03	0.13	0.13
Sat Flow, veh/h	3456	5106	1581	3456	6377	269	3456	3554	1574	3456	5106	1567
Grp Volume(v), veh/h	539	1884	196	112	857	325	331	592	87	57	237	126
Grp Sat Flow(s),veh/h/ln	1728	1702	1581	1728	1609	1820	1728	1777	1574	1728	1702	1567
Q Serve(g_s), s	14.8	31.3	5.7	3.8	19.1	19.2	11.3	18.8	5.5	2.0	5.1	1.5
Cycle Q Clear(g_c), s	14.8	31.3	5.7	3.8	19.1	19.2	11.3	18.8	5.5	2.0	5.1	1.5
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1142	2831	1055	165	1274	481	390	775	343	97	682	733
V/C Ratio(X)	0.47	0.67	0.19	0.68	0.67	0.68	0.85	0.76	0.25	0.59	0.35	0.17
Avail Cap(c_a), veh/h	1142	2831	1055	230	1532	578	490	1039	460	230	1094	859
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	18.9	7.6	56.2	39.5	39.5	52.2	44.0	38.8	57.6	47.2	7.5
Incr Delay (d2), s/veh	0.1	0.9	0.3	1.8	1.3	3.4	9.3	3.3	0.7	2.1	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	11.9	1.9	1.7	7.7	9.0	5.3	8.5	2.2	0.9	2.2	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	19.8	7.9	58.1	40.8	43.0	61.5	47.3	39.5	59.7	47.9	7.7
LnGrp LOS	C	B	A	E	D	D	E	D	D	E	D	A
Approach Vol, veh/h		2619			1294			1010			420	
Approach Delay, s/veh		21.4			42.8			51.3			37.5	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	71.4	17.5	21.3	44.6	36.6	7.4	31.5
Change Period (Y+Rc), s	4.0	4.9	4.0	5.3	4.9	* 4.9	4.0	* 5.3
Max Green Setting (Gmax), s	8.0	51.1	17.0	25.7	21.0	* 38	8.0	* 35
Max Q Clear Time (g_c+I1), s	5.8	33.3	13.3	7.1	16.8	21.2	4.0	20.8
Green Ext Time (p_c), s	0.0	15.8	0.3	3.4	0.5	10.5	0.0	5.4

Intersection Summary	
HCM 6th Ctrl Delay	33.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	1827	35	30	1107	25	32	14	43	35	19	36
Future Volume (veh/h)	87	1827	35	30	1107	25	32	14	43	35	19	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	1923	37	32	1165	26	34	15	45	28	32	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	2368	46	519	3539	1095	77	80	68	103	109	90
Arrive On Green	0.04	0.31	0.31	0.58	1.00	1.00	0.04	0.04	0.04	0.06	0.06	0.06
Sat Flow, veh/h	1781	5157	99	1781	5106	1579	1781	1870	1585	1781	1870	1544
Grp Volume(v), veh/h	92	1269	691	32	1165	26	34	15	45	28	32	38
Grp Sat Flow(s),veh/h/ln	1781	1702	1852	1781	1702	1579	1781	1870	1585	1781	1870	1544
Q Serve(g_s), s	6.1	41.3	41.3	0.9	0.0	0.0	2.2	0.9	3.4	1.8	2.0	2.9
Cycle Q Clear(g_c), s	6.1	41.3	41.3	0.9	0.0	0.0	2.2	0.9	3.4	1.8	2.0	2.9
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	1563	850	519	3539	1095	77	80	68	103	109	90
V/C Ratio(X)	0.80	0.81	0.81	0.06	0.33	0.02	0.44	0.19	0.66	0.27	0.29	0.42
Avail Cap(c_a), veh/h	178	1563	850	519	3539	1095	134	140	119	460	483	399
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	36.8	36.8	17.9	0.0	0.0	56.0	55.4	56.6	54.1	54.2	54.6
Incr Delay (d2), s/veh	6.3	4.7	8.4	0.0	0.2	0.0	1.5	0.4	4.0	0.5	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	18.8	21.3	0.4	0.1	0.0	1.0	0.4	1.4	0.8	0.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.9	41.5	45.1	18.0	0.2	0.0	57.5	55.8	60.6	54.6	54.7	55.8
LnGrp LOS	E	D	D	B	A	A	E	E	E	D	D	E
Approach Vol, veh/h		2052			1223			94			98	
Approach Delay, s/veh		43.7			0.6			58.7			55.1	
Approach LOS		D			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	39.9	60.0		9.2	11.8	88.1		11.0
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.0
Max Green Setting (Gmax), s	8.0	* 55		9.0	12.0	51.1		31.0
Max Q Clear Time (g_c+I1), s	2.9	43.3		5.4	8.1	2.0		4.9
Green Ext Time (p_c), s	0.0	10.7		0.0	0.0	25.2		0.2

Intersection Summary	
HCM 6th Ctrl Delay	29.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	1803	35	5	1082	24	111	33	20	35	7	5
Future Volume (veh/h)	13	1803	35	5	1082	24	111	33	20	35	7	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1898	37	5	1139	25	86	78	21	24	24	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	2140	648	43	2217	672	128	102	28	165	137	29
Arrive On Green	0.02	0.84	0.84	0.02	0.43	0.43	0.07	0.07	0.07	0.09	0.09	0.09
Sat Flow, veh/h	1781	5106	1547	1781	5106	1549	1781	1419	382	1781	1481	309
Grp Volume(v), veh/h	14	1898	37	5	1139	25	86	0	99	24	0	29
Grp Sat Flow(s),veh/h/ln	1781	1702	1547	1781	1702	1549	1781	0	1802	1781	0	1790
Q Serve(g_s), s	0.9	28.1	0.5	0.3	19.5	1.1	5.6	0.0	6.5	1.5	0.0	1.8
Cycle Q Clear(g_c), s	0.9	28.1	0.5	0.3	19.5	1.1	5.6	0.0	6.5	1.5	0.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.17
Lane Grp Cap(c), veh/h	17	2140	648	43	2217	672	128	0	130	165	0	166
V/C Ratio(X)	0.84	0.89	0.06	0.12	0.51	0.04	0.67	0.00	0.76	0.15	0.00	0.17
Avail Cap(c_a), veh/h	119	2217	672	119	2217	672	178	0	180	451	0	453
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.8	7.9	5.7	57.3	24.7	19.5	54.3	0.0	54.7	50.1	0.0	50.2
Incr Delay (d2), s/veh	32.1	5.3	0.1	0.4	0.9	0.1	4.5	0.0	10.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.3	0.2	0.2	7.9	0.4	2.7	0.0	3.3	0.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.9	13.2	5.8	57.7	25.6	19.6	58.7	0.0	64.6	50.2	0.0	50.4
LnGrp LOS	F	B	A	E	C	B	E	A	E	D	A	D
Approach Vol, veh/h		1949			1169			185			53	
Approach Delay, s/veh		13.7			25.6			61.9			50.3	
Approach LOS		B			C			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	55.2		15.7	5.1	57.0		12.6
Change Period (Y+Rc), s	4.0	4.9		4.6	4.0	4.9		4.0
Max Green Setting (Gmax), s	8.0	52.1		30.4	8.0	52.1		12.0
Max Q Clear Time (g_c+I1), s	2.3	30.1		3.8	2.9	21.5		8.5
Green Ext Time (p_c), s	0.0	20.2		0.1	0.0	18.7		0.2

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	1722	57	13	1095	8	14	4	10	16	2	21
Future Volume (veh/h)	48	1722	57	13	1095	8	14	4	10	16	2	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	1813	60	14	1153	8	15	4	11	17	2	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	756	4123	136	17	2039	14	18	11	31	20	4	39
Arrive On Green	0.42	0.81	0.81	0.01	0.39	0.39	0.01	0.03	0.03	0.01	0.03	0.03
Sat Flow, veh/h	1781	5076	168	1781	5231	36	1781	425	1170	1781	128	1410
Grp Volume(v), veh/h	51	1215	658	14	750	411	15	0	15	17	0	24
Grp Sat Flow(s),veh/h/ln	1781	1702	1840	1781	1702	1864	1781	0	1595	1781	0	1538
Q Serve(g_s), s	2.0	12.5	12.5	0.9	20.7	20.7	1.0	0.0	1.1	1.1	0.0	1.8
Cycle Q Clear(g_c), s	2.0	12.5	12.5	0.9	20.7	20.7	1.0	0.0	1.1	1.1	0.0	1.8
Prop In Lane	1.00		0.09	1.00		0.02	1.00		0.73	1.00		0.92
Lane Grp Cap(c), veh/h	756	2765	1494	17	1327	726	18	0	42	20	0	43
V/C Ratio(X)	0.07	0.44	0.44	0.84	0.57	0.57	0.85	0.00	0.36	0.84	0.00	0.56
Avail Cap(c_a), veh/h	756	2765	1494	119	1932	1058	119	0	213	119	0	205
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.5	3.3	3.3	59.4	28.7	28.7	59.3	0.0	57.4	59.2	0.0	57.6
Incr Delay (d2), s/veh	0.0	0.5	0.9	32.1	1.2	2.2	64.7	0.0	5.1	56.8	0.0	11.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	3.2	3.6	0.6	8.5	9.5	0.8	0.0	0.5	0.8	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	3.8	4.2	91.5	29.9	30.9	124.0	0.0	62.5	116.0	0.0	68.7
LnGrp LOS	C	A	A	F	C	C	F	A	E	F	A	E
Approach Vol, veh/h		1924			1175			30			41	
Approach Delay, s/veh		4.4			31.0			93.3			88.3	
Approach LOS		A			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	102.4	5.2	7.3	55.8	51.7	5.4	7.2
Change Period (Y+Rc), s	4.0	4.9	4.0	4.0	4.9	* 4.9	4.0	4.0
Max Green Setting (Gmax), s	8.0	71.1	8.0	16.0	11.0	* 68	8.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	14.5	3.0	3.8	4.0	22.7	3.1	3.1
Green Ext Time (p_c), s	0.0	46.5	0.0	0.0	0.0	24.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	1691	89	99	976	106	172	581	406	67	307	26
Future Volume (veh/h)	181	1691	89	99	976	106	172	581	406	67	307	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	1780	0	104	1027	0	181	612	299	71	323	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	2004		533	2464		237	816	361	116	742	329
Arrive On Green	0.05	0.26	0.00	0.31	0.97	0.00	0.07	0.23	0.23	0.03	0.21	0.21
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1575	3456	3554	1574
Grp Volume(v), veh/h	191	1780	0	104	1027	0	181	612	299	71	323	5
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1575	1728	1777	1574
Q Serve(g_s), s	6.6	40.2	0.0	2.7	1.4	0.0	6.2	19.2	21.7	2.4	9.5	0.3
Cycle Q Clear(g_c), s	6.6	40.2	0.0	2.7	1.4	0.0	6.2	19.2	21.7	2.4	9.5	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	2004		533	2464		237	816	361	116	742	329
V/C Ratio(X)	0.77	0.89		0.19	0.42		0.77	0.75	0.83	0.61	0.44	0.02
Avail Cap(c_a), veh/h	317	2004		533	2464		288	1105	489	202	1028	455
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	41.7	0.0	36.0	1.1	0.0	54.9	43.0	44.0	57.2	41.3	37.7
Incr Delay (d2), s/veh	6.2	6.3	0.0	0.1	0.3	0.0	7.3	1.8	7.9	1.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	18.6	0.0	1.1	0.4	0.0	2.9	8.5	9.0	1.1	4.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.3	48.0	0.0	36.1	1.4	0.0	62.3	44.8	51.9	59.1	41.7	37.7
LnGrp LOS	E	D		D	A		E	D	D	E	D	D
Approach Vol, veh/h		1971	A		1131	A		1092			399	
Approach Delay, s/veh		49.4			4.6			49.6			44.8	
Approach LOS		D			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.4	52.0	13.2	31.4	12.6	62.8	10.3	34.2
Change Period (Y+Rc), s	4.9	* 4.9	5.0	6.3	4.0	4.9	6.3	* 6.7
Max Green Setting (Gmax), s	8.0	* 47	10.0	34.7	11.0	44.1	7.0	* 37
Max Q Clear Time (g_c+I1), s	4.7	42.2	8.2	11.5	8.6	3.4	4.4	23.7
Green Ext Time (p_c), s	0.0	4.7	0.1	2.0	0.1	18.5	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	38.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	1561	181	245	1797	153	438	1014	143	185	981	141
Future Volume (veh/h)	159	1561	181	245	1797	153	438	1014	143	185	981	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	984	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	167	1643	64	258	1892	0	461	1067	0	195	1033	147
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	1872	576	352	2052		512	1366		288	1034	316
Arrive On Green	0.08	0.37	0.37	0.10	0.40	0.00	0.15	0.27	0.00	0.08	0.20	0.20
Sat Flow, veh/h	1819	5106	1572	3456	5106	1585	3456	5106	1585	3456	5106	1562
Grp Volume(v), veh/h	167	1643	64	258	1892	0	461	1067	0	195	1033	147
Grp Sat Flow(s),veh/h/ln	909	1702	1572	1728	1702	1585	1728	1702	1585	1728	1702	1562
Q Serve(g_s), s	10.0	36.1	2.0	8.7	42.3	0.0	15.7	23.2	0.0	6.6	24.3	9.9
Cycle Q Clear(g_c), s	10.0	36.1	2.0	8.7	42.3	0.0	15.7	23.2	0.0	6.6	24.3	9.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	1872	576	352	2052		512	1366		288	1034	316
V/C Ratio(X)	1.10	0.88	0.11	0.73	0.92		0.90	0.78		0.68	1.00	0.46
Avail Cap(c_a), veh/h	152	1872	576	352	2052		518	1366		346	1034	316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	35.5	10.1	52.3	34.1	0.0	50.2	40.7	0.0	53.4	47.8	42.1
Incr Delay (d2), s/veh	103.0	6.2	0.4	6.8	7.5	0.0	18.0	3.2	0.0	2.6	27.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	15.2	1.2	4.0	17.8	0.0	7.8	9.6	0.0	2.8	12.4	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	158.0	41.7	10.5	59.1	41.6	0.0	68.3	43.9	0.0	56.0	75.6	43.9
LnGrp LOS	F	D	B	E	D		E	D		E	E	D
Approach Vol, veh/h		1874			2150	A		1528	A		1375	
Approach Delay, s/veh		51.0			43.7			51.3			69.4	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	50.0	21.8	30.0	14.0	54.2	14.0	37.8
Change Period (Y+Rc), s	6.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	12.0	44.0	18.0	24.3	10.0	48.0	12.0	30.3
Max Q Clear Time (g_c+I1), s	10.7	38.1	17.7	26.3	12.0	44.3	8.6	25.2
Green Ext Time (p_c), s	0.1	5.8	0.0	0.0	0.0	3.7	0.1	4.3

Intersection Summary	
HCM 6th Ctrl Delay	52.5
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	363	1282	491	520	1483	854
Future Volume (veh/h)	363	1282	491	520	1483	854
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	382	0	517	387	1561	899
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	424		1037	462	1641	1500
Arrive On Green	0.12	0.00	0.29	0.29	0.47	0.80
Sat Flow, veh/h	3456	2790	3647	1585	3456	1870
Grp Volume(v), veh/h	382	0	517	387	1561	899
Grp Sat Flow(s),veh/h/ln	1728	1395	1777	1585	1728	1870
Q Serve(g_s), s	16.4	0.0	18.1	34.3	64.9	27.5
Cycle Q Clear(g_c), s	16.4	0.0	18.1	34.3	64.9	27.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	424		1037	462	1641	1500
V/C Ratio(X)	0.90		0.50	0.84	0.95	0.60
Avail Cap(c_a), veh/h	431		1037	462	1728	1500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	0.0	44.0	49.8	37.7	5.7
Incr Delay (d2), s/veh	21.4	0.0	0.4	12.7	11.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	0.0	8.0	15.0	29.1	8.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	86.3	0.0	44.4	62.4	49.5	6.3
LnGrp LOS	F		D	E	D	A
Approach Vol, veh/h	382	A	904			2460
Approach Delay, s/veh	86.3		52.1			33.8
Approach LOS	F		D			C

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	77.2	49.1				126.3	23.7
Change Period (Y+Rc), s	6.0	5.3				6.0	5.3
Max Green Setting (Gmax), s	75.0	39.7				120.0	18.7
Max Q Clear Time (g_c+I1), s	66.9	36.3				29.5	18.4
Green Ext Time (p_c), s	4.3	1.5				8.4	0.1

Intersection Summary	
HCM 6th Ctrl Delay	43.5
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	442	1612	31	135	1485	85	64	145	123	52	110	215
Future Volume (veh/h)	442	1612	31	135	1485	85	64	145	123	52	110	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	465	1697	32	142	1563	47	67	153	13	55	116	81
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	461	1736	33	849	2160	963	86	187	158	71	150	127
Arrive On Green	0.13	0.49	0.49	0.25	0.61	0.61	0.05	0.10	0.10	0.04	0.08	0.08
Sat Flow, veh/h	3456	3568	67	3456	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	465	843	886	142	1563	47	67	153	13	55	116	81
Grp Sat Flow(s),veh/h/ln	1728	1777	1858	1728	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	20.0	69.6	70.1	4.8	46.2	1.8	5.6	12.0	0.7	4.6	9.1	5.8
Cycle Q Clear(g_c), s	20.0	69.6	70.1	4.8	46.2	1.8	5.6	12.0	0.7	4.6	9.1	5.8
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	461	865	904	849	2160	963	86	187	158	71	150	127
V/C Ratio(X)	1.01	0.98	0.98	0.17	0.72	0.05	0.78	0.82	0.08	0.78	0.77	0.64
Avail Cap(c_a), veh/h	461	865	904	849	2160	963	190	338	286	190	324	275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	37.6	37.8	44.5	20.6	11.9	70.6	66.2	26.2	71.4	67.7	41.2
Incr Delay (d2), s/veh	44.2	25.2	25.3	0.0	1.3	0.0	5.6	13.3	0.4	6.7	10.1	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	35.0	36.9	2.1	18.5	0.6	2.7	6.5	0.5	2.2	4.8	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.2	62.8	63.1	44.5	21.9	11.9	76.2	79.5	26.5	78.1	77.8	47.7
LnGrp LOS	F	E	E	D	C	B	E	E	C	E	E	D
Approach Vol, veh/h		2194			1752			233			252	
Approach Delay, s/veh		72.8			23.5			75.6			68.2	
Approach LOS		E			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	19.6	42.2	78.3	11.8	17.7	24.0	96.5
Change Period (Y+Rc), s	4.0	4.6	5.3	* 5.3	4.6	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	16.0	27.1	16.0	* 73	16.0	* 26	20.0	69.0
Max Q Clear Time (g_c+I1), s	6.6	14.0	6.8	72.1	7.6	11.1	22.0	48.2
Green Ext Time (p_c), s	0.0	1.0	0.1	0.8	0.0	0.9	0.0	14.6

Intersection Summary	
HCM 6th Ctrl Delay	53.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1823	0	3	1696	7	12	0	28	47	2	24
Future Volume (veh/h)	4	1823	0	3	1696	7	12	0	28	47	2	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	1919	0	3	1785	7	13	0	29	49	2	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	2949	0	4	2191	9	37	10	34	108	3	94
Arrive On Green	0.44	1.00	0.00	0.00	0.60	0.60	0.06	0.00	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1781	3647	0	1781	3630	14	88	171	576	1027	50	1585
Grp Volume(v), veh/h	4	1919	0	3	873	919	42	0	0	51	0	25
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1868	835	0	0	1077	0	1585
Q Serve(g_s), s	0.2	0.0	0.0	0.3	57.5	57.6	0.9	0.0	0.0	0.0	0.0	2.3
Cycle Q Clear(g_c), s	0.2	0.0	0.0	0.3	57.5	57.6	8.1	0.0	0.0	7.2	0.0	2.3
Prop In Lane	1.00		0.00	1.00		0.01	0.31		0.69	0.96		1.00
Lane Grp Cap(c), veh/h	392	2949	0	4	1073	1127	81	0	0	111	0	94
V/C Ratio(X)	0.01	0.65	0.00	0.72	0.81	0.81	0.52	0.00	0.00	0.46	0.00	0.27
Avail Cap(c_a), veh/h	392	2949	0	95	1335	1403	123	0	0	149	0	137
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	0.0	74.8	23.2	23.2	69.0	0.0	0.0	69.8	0.0	67.5
Incr Delay (d2), s/veh	0.0	1.1	0.0	59.5	3.6	3.5	1.9	0.0	0.0	1.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.0	0.2	23.7	24.9	1.7	0.0	0.0	2.0	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	1.1	0.0	134.3	26.8	26.7	70.9	0.0	0.0	70.9	0.0	68.0
LnGrp LOS	C	A	A	F	C	C	E	A	A	E	A	E
Approach Vol, veh/h		1923			1795			42			76	
Approach Delay, s/veh		1.2			26.9			70.9			69.9	
Approach LOS		A			C			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.9	4.4	129.8		15.9	38.3	95.8				
Change Period (Y+Rc), s		7.0	4.0	5.3		7.0	5.3	* 5.3				
Max Green Setting (Gmax), s		13.0	8.0	112.7		13.0	8.0	* 1.1E2				
Max Q Clear Time (g_c+I1), s		10.1	2.3	2.0		9.2	2.2	59.6				
Green Ext Time (p_c), s		0.0	0.0	32.3		0.0	0.0	31.0				

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1896	8	232	1715	0	324
Future Volume (vph)	1896	8	232	1715	0	324
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		6.0	5.3		6.0
Lane Util. Factor	0.91		0.97	0.95		1.00
Frt	1.00		1.00	1.00		0.86
Flt Protected	1.00		0.95	1.00		1.00
Satd. Flow (prot)	5082		3433	3539		1611
Flt Permitted	1.00		0.95	1.00		1.00
Satd. Flow (perm)	5082		3433	3539		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1996	8	244	1805	0	341
RTOR Reduction (vph)	0	0	0	0	0	6
Lane Group Flow (vph)	2004	0	244	1805	0	335
Turn Type	NA		Prot	NA		Over
Protected Phases	4		3	8		3
Permitted Phases						
Actuated Green, G (s)	41.7		20.0	75.0		20.0
Effective Green, g (s)	41.7		20.0	75.0		20.0
Actuated g/C Ratio	0.56		0.27	1.00		0.27
Clearance Time (s)	7.3		6.0	5.3		6.0
Vehicle Extension (s)	3.5		2.0	3.5		2.0
Lane Grp Cap (vph)	2825		915	3539		429
v/s Ratio Prot	c0.39		0.07	0.51		c0.21
v/s Ratio Perm						
v/c Ratio	0.71		0.27	0.51		0.78
Uniform Delay, d1	12.2		21.7	0.0		25.5
Progression Factor	1.01		1.24	1.00		1.00
Incremental Delay, d2	1.2		0.0	0.3		8.3
Delay (s)	13.5		26.9	0.3		33.8
Level of Service	B		C	A		C
Approach Delay (s)	13.5			3.5	33.8	
Approach LOS	B			A	C	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	893	1073	430	920	278	977	733	125	166	346	79
Future Volume (veh/h)	255	893	1073	430	920	278	977	733	125	166	346	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	268	940	0	453	968	167	1028	772	41	175	364	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	1113		438	1215	542	1082	1232	550	221	454	141
Arrive On Green	0.14	0.52	0.00	0.13	0.34	0.34	0.31	0.35	0.35	0.06	0.09	0.09
Sat Flow, veh/h	3456	3554	2790	3456	3554	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	268	940	0	453	968	167	1028	772	41	175	364	4
Grp Sat Flow(s),veh/h/ln	1728	1777	1395	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	11.4	33.9	0.0	19.0	37.0	8.9	43.6	27.2	2.6	7.5	10.5	0.3
Cycle Q Clear(g_c), s	11.4	33.9	0.0	19.0	37.0	8.9	43.6	27.2	2.6	7.5	10.5	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	1113		438	1215	542	1082	1232	550	221	454	141
V/C Ratio(X)	0.89	0.84		1.03	0.80	0.31	0.95	0.63	0.07	0.79	0.80	0.03
Avail Cap(c_a), veh/h	299	1113		438	1215	542	1175	1272	567	299	534	166
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.5	32.6	0.0	65.5	44.6	21.3	50.4	40.9	32.9	69.2	67.0	62.4
Incr Delay (d2), s/veh	26.5	6.3	0.0	52.3	5.5	1.5	14.8	1.1	0.1	6.8	8.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	13.0	0.0	11.5	16.9	3.5	20.7	11.9	1.0	3.5	4.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.9	38.9	0.0	117.8	50.1	22.8	65.1	42.0	32.9	76.1	75.1	62.5
LnGrp LOS	F	D		F	D	C	E	D	C	E	E	E
Approach Vol, veh/h		1208	A		1588			1841			543	
Approach Delay, s/veh		50.2			66.5			54.7			75.3	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	57.3	23.0	52.3	52.3	18.6	18.3	57.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	5.3	* 5.3	5.3	* 5.7
Max Green Setting (Gmax), s	13.0	53.7	19.0	45.7	51.0	* 16	13.0	* 51
Max Q Clear Time (g_c+I1), s	9.5	29.2	21.0	35.9	45.6	12.5	13.4	39.0
Green Ext Time (p_c), s	0.1	7.4	0.0	5.3	1.3	0.9	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	59.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1017	68	88	1439	4	32	0	574	9	2	7
Future Volume (veh/h)	5	1017	68	88	1439	4	32	0	574	9	2	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2106	2106	2106	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	1071	69	93	1515	4	34	0	530	9	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	2325	150	121	2448	6	179	0	267	14	3	16
Arrive On Green	0.00	0.61	0.61	0.14	1.00	1.00	0.10	0.00	0.10	0.01	0.01	0.00
Sat Flow, veh/h	2006	3817	246	1781	3636	10	1781	0	1585	1470	327	1585
Grp Volume(v), veh/h	5	561	579	93	740	779	34	0	530	11	0	0
Grp Sat Flow(s),veh/h/ln	2006	2001	2062	1781	1777	1869	1781	0	1585	1797	0	1585
Q Serve(g_s), s	0.4	22.9	22.9	7.6	0.0	0.0	2.6	0.0	15.1	0.9	0.0	0.0
Cycle Q Clear(g_c), s	0.4	22.9	22.9	7.6	0.0	0.0	2.6	0.0	15.1	0.9	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.01	1.00		1.00	0.82		1.00
Lane Grp Cap(c), veh/h	8	1219	1256	121	1196	1258	179	0	267	18	0	16
V/C Ratio(X)	0.66	0.46	0.46	0.77	0.62	0.62	0.19	0.00	1.98	0.62	0.00	0.00
Avail Cap(c_a), veh/h	107	1219	1256	582	1196	1258	179	0	267	78	0	69
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.70	0.70	0.70	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	74.6	15.9	15.9	63.7	0.0	0.0	61.8	0.0	62.4	74.0	0.0	0.0
Incr Delay (d2), s/veh	31.2	0.4	0.3	2.7	1.7	1.6	0.2	0.0	455.9	12.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	10.2	10.6	3.3	0.6	0.6	1.2	0.0	43.9	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.8	16.3	16.3	66.4	1.7	1.6	62.0	0.0	518.2	86.7	0.0	0.0
LnGrp LOS	F	B	B	E	A	A	E	A	F	F	A	A
Approach Vol, veh/h		1145			1612			564			11	
Approach Delay, s/veh		16.7			5.4			490.7			86.7	
Approach LOS		B			A			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.2	97.1		7.2	4.6	106.7		20.8
Change Period (Y+Rc), s	4.0	5.7		5.7	4.0	* 5.7		5.7
Max Green Setting (Gmax), s	49.0	58.3		6.5	8.0	* 1E2		15.1
Max Q Clear Time (g_c+I1), s	9.6	24.9		2.9	2.4	2.0		17.1
Green Ext Time (p_c), s	0.8	28.4		0.0	0.0	97.7		0.0

Intersection Summary		
HCM 6th Ctrl Delay		91.7
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1596	19	21	1248	0	243	0	257	0	5	0
Future Volume (veh/h)	0	1596	19	21	1248	0	243	0	257	0	5	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	0	1870	0
Adj Flow Rate, veh/h	0	1680	20	22	1314	0	256	0	271	0	5	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	0	2	0
Cap, veh/h	0	2038	24	27	2163	0	273	0	0	0	9	0
Arrive On Green	0.00	0.57	0.57	0.02	0.61	0.00	0.15	0.00	0.00	0.00	0.01	0.00
Sat Flow, veh/h	0	3690	43	1781	3647	0	1781	256		0	1870	0
Grp Volume(v), veh/h	0	829	871	22	1314	0	256	100.2		0	5	0
Grp Sat Flow(s),veh/h/ln	0	1777	1863	1781	1777	0	1781	F		0	1870	0
Q Serve(g_s), s	0.0	56.9	57.1	1.8	34.4	0.0	21.3			0.0	0.4	0.0
Cycle Q Clear(g_c), s	0.0	56.9	57.1	1.8	34.4	0.0	21.3			0.0	0.4	0.0
Prop In Lane	0.00		0.02	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1007	1055	27	2163	0	273			0	9	0
V/C Ratio(X)	0.00	0.82	0.83	0.80	0.61	0.00	0.94			0.00	0.53	0.00
Avail Cap(c_a), veh/h	0	1007	1055	95	2163	0	273			0	287	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.62	0.62	1.00	1.00	0.00	1.00			0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	26.4	26.5	73.6	18.2	0.0	62.8			0.0	74.4	0.0
Incr Delay (d2), s/veh	0.0	3.8	3.7	17.7	1.3	0.0	37.4			0.0	30.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	24.0	25.2	1.0	13.9	0.0	12.5			0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	30.2	30.1	91.3	19.5	0.0	100.2			0.0	105.1	0.0
LnGrp LOS	A	C	C	F	B	A	F			A	F	A
Approach Vol, veh/h		1700			1336						5	
Approach Delay, s/veh		30.2			20.7						105.1	
Approach LOS		C			C						F	

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	6.3	90.7	27.0	3.8		97.0
Change Period (Y+Rc), s	4.0	5.7	4.0	3.0		5.7
Max Green Setting (Gmax), s	8.0	79.3	23.0	23.0		91.3
Max Q Clear Time (g_c+I1), s	3.8	59.1	23.3	2.4		36.4
Green Ext Time (p_c), s	0.0	13.6	0.0	0.0		16.1

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	332	1158	319	123	870	73	425	1187	45	200	741	134
Future Volume (veh/h)	332	1158	319	123	870	73	425	1187	45	200	741	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	349	1219	0	129	916	72	447	1249	16	211	780	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	374	1164		196	966	76	501	1336	585	230	1591	485
Arrive On Green	0.11	0.33	0.00	0.06	0.29	0.29	0.29	0.75	0.75	0.07	0.31	0.31
Sat Flow, veh/h	3456	3554	1585	3456	3332	262	3456	3554	1557	3456	5106	1555
Grp Volume(v), veh/h	349	1219	0	129	488	500	447	1249	16	211	780	36
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1817	1728	1777	1557	1728	1702	1555
Q Serve(g_s), s	12.0	39.3	0.0	4.4	32.3	32.3	14.9	35.3	0.3	7.3	14.9	2.0
Cycle Q Clear(g_c), s	12.0	39.3	0.0	4.4	32.3	32.3	14.9	35.3	0.3	7.3	14.9	2.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	374	1164		196	515	527	501	1336	585	230	1591	485
V/C Ratio(X)	0.93	1.05		0.66	0.95	0.95	0.89	0.94	0.03	0.92	0.49	0.07
Avail Cap(c_a), veh/h	374	1164		236	517	528	605	1336	585	230	1591	485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	40.3	0.0	55.5	41.7	41.7	41.7	13.7	9.3	55.7	33.6	29.1
Incr Delay (d2), s/veh	29.5	39.7	0.0	2.9	27.2	26.8	12.3	13.3	0.1	36.6	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	22.9	0.0	2.0	17.6	17.9	6.1	7.5	0.1	4.3	6.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.5	80.0	0.0	58.4	69.0	68.6	54.0	27.0	9.4	92.2	33.9	29.2
LnGrp LOS	F	F		E	E	E	D	C	A	F	C	C
Approach Vol, veh/h		1568	A		1117			1712			1027	
Approach Delay, s/veh		80.6			67.6			33.9			45.7	
Approach LOS		F			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	45.0	21.4	42.7	17.0	40.1	13.3	50.8
Change Period (Y+Rc), s	5.3	* 5.7	4.0	5.3	4.0	5.3	5.3	* 5.7
Max Green Setting (Gmax), s	8.2	* 39	21.0	32.5	13.0	34.9	8.0	* 45
Max Q Clear Time (g_c+I1), s	6.4	41.3	16.9	16.9	14.0	34.3	9.3	37.3
Green Ext Time (p_c), s	0.0	0.0	0.5	8.5	0.0	0.5	0.0	6.4

Intersection Summary	
HCM 6th Ctrl Delay	56.6
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	1333	10	12	1068	100	46	113	190	22	11	35
Future Volume (veh/h)	69	1333	10	12	1068	100	46	113	190	22	11	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	1403	11	13	1124	102	48	119	95	23	12	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	1699	13	15	1376	125	57	142	169	30	16	40
Arrive On Green	0.05	0.47	0.47	0.01	0.42	0.42	0.11	0.11	0.11	0.03	0.03	0.00
Sat Flow, veh/h	1781	3614	28	1781	3293	298	530	1314	1563	1190	621	1585
Grp Volume(v), veh/h	73	690	724	13	606	620	167	0	95	35	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1865	1781	1777	1815	1844	0	1563	1811	0	1585
Q Serve(g_s), s	6.1	50.4	50.5	1.1	45.2	45.3	13.3	0.0	8.7	2.9	0.0	0.0
Cycle Q Clear(g_c), s	6.1	50.4	50.5	1.1	45.2	45.3	13.3	0.0	8.7	2.9	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.16	0.29		1.00	0.66		1.00
Lane Grp Cap(c), veh/h	93	835	877	15	743	758	199	0	169	45	0	40
V/C Ratio(X)	0.79	0.83	0.83	0.85	0.82	0.82	0.84	0.00	0.56	0.77	0.00	0.00
Avail Cap(c_a), veh/h	428	1074	1128	95	743	758	320	0	271	97	0	85
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	70.3	34.4	34.4	74.3	38.6	38.6	65.6	0.0	63.5	72.7	0.0	0.0
Incr Delay (d2), s/veh	5.5	5.6	5.4	34.4	9.6	9.5	5.3	0.0	1.1	9.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	22.4	23.5	0.6	21.2	21.7	6.6	0.0	3.5	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.7	40.0	39.8	108.7	48.2	48.1	70.9	0.0	64.6	82.6	0.0	0.0
LnGrp LOS	E	D	D	F	D	D	E	A	E	F	A	A
Approach Vol, veh/h		1487			1239			262			35	
Approach Delay, s/veh		41.6			48.8			68.6			82.6	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	75.8		7.8	13.1	68.0		20.2
Change Period (Y+Rc), s	4.0	5.3		4.0	5.3	* 5.3		4.0
Max Green Setting (Gmax), s	8.0	90.7		8.0	36.0	* 63		26.0
Max Q Clear Time (g_c+I1), s	3.1	52.5		4.9	8.1	47.3		15.3
Green Ext Time (p_c), s	0.0	18.0		0.0	0.1	9.2		0.5

Intersection Summary	
HCM 6th Ctrl Delay	47.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	1442	0	26	855	13	81	2	32	64	0	84
Future Volume (veh/h)	39	1442	0	26	855	13	81	2	32	64	0	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	1518	0	27	900	14	85	2	34	67	0	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	1892	0	34	1878	29	236	10	39	380	0	203
Arrive On Green	0.03	0.53	0.00	0.02	0.52	0.52	0.13	0.13	0.13	0.13	0.00	0.13
Sat Flow, veh/h	1781	3647	0	1781	3581	56	690	81	301	1616	0	1585
Grp Volume(v), veh/h	41	1518	0	27	447	467	121	0	0	67	0	88
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1860	1073	0	0	1616	0	1585
Q Serve(g_s), s	1.0	14.5	0.0	0.6	6.6	6.6	3.2	0.0	0.0	0.0	0.0	2.1
Cycle Q Clear(g_c), s	1.0	14.5	0.0	0.6	6.6	6.6	4.8	0.0	0.0	1.5	0.0	2.1
Prop In Lane	1.00		0.00	1.00		0.03	0.70		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	48	1892	0	34	932	976	285	0	0	380	0	203
V/C Ratio(X)	0.85	0.80	0.00	0.78	0.48	0.48	0.42	0.00	0.00	0.18	0.00	0.43
Avail Cap(c_a), veh/h	343	1944	0	343	972	1017	808	0	0	899	0	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	7.9	0.0	20.3	6.3	6.3	18.3	0.0	0.0	16.5	0.0	16.7
Incr Delay (d2), s/veh	13.6	2.5	0.0	13.4	0.4	0.4	0.7	0.0	0.0	0.2	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.4	0.0	0.3	1.4	1.5	1.1	0.0	0.0	0.5	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	10.4	0.0	33.6	6.7	6.7	19.1	0.0	0.0	16.6	0.0	17.8
LnGrp LOS	C	B	A	C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		1559			941			121			155	
Approach Delay, s/veh		11.1			7.5			19.1			17.3	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	27.1		9.3	4.8	27.4		9.3
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	22.7		21.0	8.0	22.7		21.0
Max Q Clear Time (g_c+I1), s	3.0	8.6		6.8	2.6	16.5		4.1
Green Ext Time (p_c), s	0.0	8.0		0.3	0.0	5.6		0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	672	633	749	383	147	341
Future Volume (veh/h)	672	633	749	383	147	341
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	767	582	788	330	155	342
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1195	628	809	338	603	808
Arrive On Green	0.34	0.34	0.33	0.33	0.17	0.17
Sat Flow, veh/h	3563	1870	2536	1021	3456	1585
Grp Volume(v), veh/h	767	582	573	545	155	342
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1687	1728	1585
Q Serve(g_s), s	13.8	22.7	24.0	24.1	2.9	10.2
Cycle Q Clear(g_c), s	13.8	22.7	24.0	24.1	2.9	10.2
Prop In Lane	1.00			0.61	1.00	1.00
Lane Grp Cap(c), veh/h	1195	628	588	558	603	808
V/C Ratio(X)	0.64	0.93	0.97	0.98	0.26	0.42
Avail Cap(c_a), veh/h	1227	644	588	558	1007	994
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	24.2	24.9	25.0	26.9	11.6
Incr Delay (d2), s/veh	0.8	19.0	30.3	31.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	12.3	14.0	13.5	1.1	6.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.1	43.2	55.2	56.7	27.0	11.7
LnGrp LOS	C	D	E	E	C	B
Approach Vol, veh/h		1349	1118		497	
Approach Delay, s/veh		31.2	55.9		16.5	
Approach LOS		C	E		B	

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		29.0				29.3	17.2
Change Period (Y+Rc), s		4.0				4.0	4.0
Max Green Setting (Gmax), s		25.0				26.0	22.0
Max Q Clear Time (g_c+I1), s		26.1				24.7	12.2
Green Ext Time (p_c), s		0.0				0.7	1.0

Intersection Summary	
HCM 6th Ctrl Delay	38.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	507	34	17	970	15	135	15	14	11	8	162
Future Volume (veh/h)	189	507	34	17	970	15	135	15	14	11	8	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	199	534	36	18	1021	16	142	16	15	12	8	171
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	1661	112	48	1350	21	321	26	18	279	152	267
Arrive On Green	0.14	0.49	0.49	0.03	0.38	0.38	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1781	3379	227	1781	3581	56	990	153	109	853	904	1585
Grp Volume(v), veh/h	199	280	290	18	507	530	173	0	0	20	0	171
Grp Sat Flow(s),veh/h/ln	1781	1777	1829	1781	1777	1860	1251	0	0	1756	0	1585
Q Serve(g_s), s	4.6	4.0	4.1	0.4	10.6	10.6	5.3	0.0	0.0	0.0	0.0	4.3
Cycle Q Clear(g_c), s	4.6	4.0	4.1	0.4	10.6	10.6	5.7	0.0	0.0	0.4	0.0	4.3
Prop In Lane	1.00		0.12	1.00		0.03	0.82		0.09	0.60		1.00
Lane Grp Cap(c), veh/h	252	873	899	48	670	701	365	0	0	431	0	267
V/C Ratio(X)	0.79	0.32	0.32	0.37	0.76	0.76	0.47	0.00	0.00	0.05	0.00	0.64
Avail Cap(c_a), veh/h	335	873	899	335	782	819	750	0	0	897	0	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	6.5	6.5	20.3	11.5	11.5	17.1	0.0	0.0	14.8	0.0	16.5
Incr Delay (d2), s/veh	6.3	0.3	0.3	1.8	4.3	4.1	0.4	0.0	0.0	0.0	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.0	1.0	0.2	3.6	3.8	1.5	0.0	0.0	0.1	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	6.9	6.9	22.1	15.8	15.7	17.5	0.0	0.0	14.9	0.0	17.4
LnGrp LOS	C	A	A	C	B	B	B	A	A	B	A	B
Approach Vol, veh/h		769			1055			173			191	
Approach Delay, s/veh		11.3			15.9			17.5			17.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	26.2		11.2	10.0	21.3		11.2
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	18.7		20.0	8.0	18.7		20.0
Max Q Clear Time (g_c+I1), s	2.4	6.1		7.7	6.6	12.6		6.3
Green Ext Time (p_c), s	0.0	3.0		0.3	0.1	3.5		0.4

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	252	376	639	514	319	224
Future Volume (veh/h)	252	376	639	514	319	224
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	321	0	673	489	336	236
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	2	2
Cap, veh/h	527	238	776	892	388	1307
Arrive On Green	0.15	0.00	0.41	0.41	0.22	0.70
Sat Flow, veh/h	3563	1610	1870	1585	1781	1870
Grp Volume(v), veh/h	321	0	673	489	336	236
Grp Sat Flow(s),veh/h/ln	1781	1610	1870	1585	1781	1870
Q Serve(g_s), s	5.1	0.0	19.9	11.8	11.0	2.6
Cycle Q Clear(g_c), s	5.1	0.0	19.9	11.8	11.0	2.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	527	238	776	892	388	1307
V/C Ratio(X)	0.61	0.00	0.87	0.55	0.87	0.18
Avail Cap(c_a), veh/h	1410	637	824	932	470	1441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	16.2	8.4	22.8	3.1
Incr Delay (d2), s/veh	0.4	0.0	9.9	0.9	11.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	9.2	5.0	5.3	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.6	0.0	26.1	9.3	34.7	3.3
LnGrp LOS	C	A	C	A	C	A
Approach Vol, veh/h	321		1162			572
Approach Delay, s/veh	24.6		19.0			21.7
Approach LOS	C		B			C

Timer - Assigned Phs		2			5	6	8
Phs Duration (G+Y+Rc), s		47.7			17.2	30.4	13.0
Change Period (Y+Rc), s		5.3			4.0	5.3	4.0
Max Green Setting (Gmax), s		46.7			16.0	26.7	24.0
Max Q Clear Time (g_c+I1), s		4.6			13.0	21.9	7.1
Green Ext Time (p_c), s		1.6			0.2	3.2	0.7

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	10	99	123	7	92	28	659	61	48	828	13
Future Volume (veh/h)	59	10	99	123	7	92	28	659	61	48	828	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	11	104	129	7	97	29	694	64	51	872	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	166	141	171	253	214	49	1434	445	77	1514	470
Arrive On Green	0.05	0.09	0.09	0.10	0.14	0.14	0.03	0.28	0.28	0.04	0.30	0.30
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	62	11	104	129	7	97	29	694	64	51	872	14
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.4	0.2	2.6	2.9	0.1	2.3	0.7	4.6	1.2	1.1	5.9	0.3
Cycle Q Clear(g_c), s	1.4	0.2	2.6	2.9	0.1	2.3	0.7	4.6	1.2	1.1	5.9	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	166	141	171	253	214	49	1434	445	77	1514	470
V/C Ratio(X)	0.70	0.07	0.74	0.76	0.03	0.45	0.59	0.48	0.14	0.66	0.58	0.03
Avail Cap(c_a), veh/h	350	1471	1247	657	1793	1519	306	2384	740	306	2384	740
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	17.0	18.1	17.9	15.3	16.2	19.6	12.2	11.0	19.2	12.1	10.2
Incr Delay (d2), s/veh	9.7	0.2	7.4	6.6	0.0	1.5	10.9	0.3	0.1	9.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	1.1	1.3	0.1	0.8	0.4	1.3	0.4	0.6	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	17.2	25.5	24.6	15.3	17.7	30.5	12.4	11.1	28.6	12.5	10.2
LnGrp LOS	C	B	C	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		177			233			787			937	
Approach Delay, s/veh		26.1			21.4			13.0			13.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	16.4	8.9	8.6	6.1	17.1	7.0	10.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	19.0	15.0	32.0	7.0	19.0	8.0	39.0
Max Q Clear Time (g_c+I1), s	3.1	6.6	4.9	4.6	2.7	7.9	3.4	4.3
Green Ext Time (p_c), s	0.0	3.6	0.2	0.4	0.0	4.2	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	3	132	0	1	26	31	748	0	40	1254	13
Future Volume (veh/h)	46	3	132	0	1	26	31	748	0	40	1254	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	3	139	0	1	27	33	787	0	42	1320	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	347	294	4	50	42	54	2160	670	66	2192	681
Arrive On Green	0.04	0.19	0.19	0.00	0.03	0.03	0.03	0.42	0.00	0.04	0.43	0.43
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	48	3	139	0	1	27	33	787	0	42	1320	14
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.1	0.1	3.3	0.0	0.0	0.7	0.8	4.4	0.0	1.0	8.4	0.2
Cycle Q Clear(g_c), s	1.1	0.1	3.3	0.0	0.0	0.7	0.8	4.4	0.0	1.0	8.4	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	347	294	4	50	42	54	2160	670	66	2192	681
V/C Ratio(X)	0.66	0.01	0.47	0.00	0.02	0.64	0.61	0.36	0.00	0.64	0.60	0.02
Avail Cap(c_a), veh/h	463	1415	1199	463	1415	1199	463	3139	975	463	3139	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	14.0	15.4	0.0	20.0	20.4	20.3	8.3	0.0	20.1	9.3	6.9
Incr Delay (d2), s/veh	9.8	0.0	1.2	0.0	0.2	15.2	10.6	0.1	0.0	9.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.1	0.0	0.0	0.4	0.4	1.0	0.0	0.5	1.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	14.1	16.6	0.0	20.2	35.6	30.8	8.4	0.0	30.0	9.6	7.0
LnGrp LOS	C	B	B	A	C	D	C	A	A	C	A	A
Approach Vol, veh/h		190			28			820			1376	
Approach Delay, s/veh		19.9			35.0			9.3			10.2	
Approach LOS		B			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	22.9	0.0	12.8	6.3	23.2	6.7	6.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	26.0	11.0	32.0	11.0	26.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.0	6.4	0.0	5.3	2.8	10.4	3.1	2.7
Green Ext Time (p_c), s	0.0	4.9	0.0	0.4	0.0	7.7	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	195	124	54	1055	1055	91
Future Volume (veh/h)	195	124	54	1055	1055	91
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	205	131	57	1111	1111	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	328	292	88	2937	2071	641
Arrive On Green	0.18	0.18	0.05	0.58	0.41	0.41
Sat Flow, veh/h	1781	1585	1781	5274	5274	1581
Grp Volume(v), veh/h	205	131	57	1111	1111	96
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1581
Q Serve(g_s), s	3.5	2.4	1.0	3.9	5.5	1.3
Cycle Q Clear(g_c), s	3.5	2.4	1.0	3.9	5.5	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	328	292	88	2937	2071	641
V/C Ratio(X)	0.63	0.45	0.65	0.38	0.54	0.15
Avail Cap(c_a), veh/h	1073	954	429	4919	3074	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	12.1	15.5	3.8	7.5	6.2
Incr Delay (d2), s/veh	2.0	1.1	7.8	0.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.1	0.5	0.2	0.9	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.5	13.1	23.3	3.9	7.7	6.4
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	336			1168	1207	
Approach Delay, s/veh	13.9			4.9	7.6	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		23.1		10.1	5.6	17.5
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	8.0	20.0
Max Q Clear Time (g_c+I1), s		5.9		5.5	3.0	7.5
Green Ext Time (p_c), s		8.0		0.9	0.0	5.9

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	50	18	1059	1167	12
Future Volume (veh/h)	50	50	18	1059	1167	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	53	19	1115	1228	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	141	125	35	3306	2508	777
Arrive On Green	0.08	0.08	0.02	0.65	0.49	0.49
Sat Flow, veh/h	1781	1585	1781	5274	5274	1582
Grp Volume(v), veh/h	53	53	19	1115	1228	13
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1582
Q Serve(g_s), s	0.8	0.9	0.3	2.9	4.7	0.1
Cycle Q Clear(g_c), s	0.8	0.9	0.3	2.9	4.7	0.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	141	125	35	3306	2508	777
V/C Ratio(X)	0.38	0.42	0.55	0.34	0.49	0.02
Avail Cap(c_a), veh/h	1218	1084	487	5588	4191	1298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	12.8	14.2	2.3	5.0	3.8
Incr Delay (d2), s/veh	1.7	2.3	12.6	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.2	0.0	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.4	15.1	26.8	2.4	5.1	3.8
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	106			1134	1241	
Approach Delay, s/veh	14.8			2.8	5.1	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		22.9		6.3	4.6	18.4
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	8.0	24.0
Max Q Clear Time (g_c+I1), s		4.9		2.9	2.3	6.7
Green Ext Time (p_c), s		8.2		0.2	0.0	7.6

Intersection Summary	
HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	0	100	32	0	13	29	1252	11	3	1138	14
Future Volume (veh/h)	77	0	100	32	0	13	29	1252	11	3	1138	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	0	105	34	0	14	31	1318	12	3	1198	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	0	158	61	0	25	51	2180	675	6	2051	635
Arrive On Green	0.17	0.00	0.17	0.05	0.00	0.05	0.03	0.43	0.43	0.00	0.40	0.40
Sat Flow, veh/h	724	0	938	1215	0	500	1781	5106	1581	1781	5106	1581
Grp Volume(v), veh/h	186	0	0	48	0	0	31	1318	12	3	1198	15
Grp Sat Flow(s),veh/h/ln	1661	0	0	1715	0	0	1781	1702	1581	1781	1702	1581
Q Serve(g_s), s	4.8	0.0	0.0	1.2	0.0	0.0	0.8	9.1	0.2	0.1	8.3	0.3
Cycle Q Clear(g_c), s	4.8	0.0	0.0	1.2	0.0	0.0	0.8	9.1	0.2	0.1	8.3	0.3
Prop In Lane	0.44		0.56	0.71		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	279	0	0	86	0	0	51	2180	675	6	2051	635
V/C Ratio(X)	0.67	0.00	0.00	0.56	0.00	0.00	0.61	0.60	0.02	0.51	0.58	0.02
Avail Cap(c_a), veh/h	1387	0	0	1432	0	0	313	3252	1007	313	3252	1007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	0.0	0.0	21.1	0.0	0.0	21.9	10.1	7.5	22.7	10.6	8.2
Incr Delay (d2), s/veh	2.7	0.0	0.0	5.5	0.0	0.0	11.3	0.3	0.0	56.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	0.6	0.0	0.0	0.4	2.2	0.0	0.1	2.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	0.0	0.0	26.7	0.0	0.0	33.2	10.3	7.5	79.0	10.9	8.2
LnGrp LOS	C	A	A	C	A	A	C	B	A	E	B	A
Approach Vol, veh/h		186			48			1361			1216	
Approach Delay, s/veh		20.5			26.7			10.8			11.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	23.4		11.7	5.3	22.3		6.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	29.0		38.0	8.0	29.0		38.0
Max Q Clear Time (g_c+I1), s	2.1	11.1		6.8	2.8	10.3		3.2
Green Ext Time (p_c), s	0.0	8.4		1.3	0.0	7.7		0.2

Intersection Summary		
HCM 6th Ctrl Delay		11.8
HCM 6th LOS		B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	695	10	4	468	5	1
Future Volume (veh/h)	695	10	4	468	5	1
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	732	11	4	493	5	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1885	841	10	2319	26	23
Arrive On Green	0.53	0.53	0.01	0.65	0.01	0.01
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	732	11	4	493	5	1
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	4.2	0.1	0.1	1.9	0.1	0.0
Cycle Q Clear(g_c), s	4.2	0.1	0.1	1.9	0.1	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1885	841	10	2319	26	23
V/C Ratio(X)	0.39	0.01	0.41	0.21	0.19	0.04
Avail Cap(c_a), veh/h	2552	1138	416	3661	1040	925
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.8	3.8	17.0	2.4	16.7	16.6
Incr Delay (d2), s/veh	0.2	0.0	10.0	0.1	1.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.0	3.8	27.0	2.5	18.0	16.9
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	743			497	6	
Approach Delay, s/veh	5.0			2.7	17.8	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	4.2	23.9				28.1	6.2
Change Period (Y+Rc), s	4.0	5.7				* 5.7	5.7
Max Green Setting (Gmax), s	8.0	24.6				* 35	20.0
Max Q Clear Time (g_c+I1), s	2.1	6.2				3.9	2.1
Green Ext Time (p_c), s	0.0	12.0				11.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.1
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	10	36	54	18	83	38	859	17	24	850	23
Future Volume (veh/h)	125	10	36	54	18	83	38	859	17	24	850	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	11	38	57	19	87	40	904	18	25	895	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	237	201	84	145	123	64	1541	478	43	1482	460
Arrive On Green	0.10	0.13	0.13	0.05	0.08	0.08	0.04	0.30	0.30	0.02	0.29	0.29
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	132	11	38	57	19	87	40	904	18	25	895	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	2.9	0.2	0.9	1.3	0.4	2.1	0.9	6.0	0.3	0.6	6.0	0.4
Cycle Q Clear(g_c), s	2.9	0.2	0.9	1.3	0.4	2.1	0.9	6.0	0.3	0.6	6.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	237	201	84	145	123	64	1541	478	43	1482	460
V/C Ratio(X)	0.77	0.05	0.19	0.68	0.13	0.71	0.63	0.59	0.04	0.58	0.60	0.05
Avail Cap(c_a), veh/h	401	1497	1269	312	1357	1150	312	2299	714	312	2044	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	15.3	15.6	18.8	17.2	18.0	19.0	11.8	9.9	19.3	12.2	10.2
Incr Delay (d2), s/veh	7.1	0.1	0.5	9.4	0.4	7.3	9.6	0.4	0.0	11.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.1	0.3	0.7	0.2	0.9	0.5	1.6	0.1	0.3	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	15.4	16.1	28.1	17.6	25.3	28.6	12.2	9.9	30.9	12.6	10.3
LnGrp LOS	C	B	B	C	B	C	C	B	A	C	B	B
Approach Vol, veh/h		181			163			962			944	
Approach Delay, s/veh		22.4			25.4			12.8			13.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	17.1	6.9	10.1	6.4	16.6	8.8	8.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	18.0	7.0	32.0	7.0	16.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	2.6	8.0	3.3	2.9	2.9	8.0	4.9	4.1
Green Ext Time (p_c), s	0.0	4.1	0.0	0.1	0.0	3.5	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	80	125	198	30	0	39	841	108	3	926	12
Future Volume (veh/h)	72	80	125	198	30	0	39	841	108	3	926	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	84	132	208	32	0	41	885	114	3	975	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	246	208	272	430	364	63	1785	554	6	1621	503
Arrive On Green	0.05	0.13	0.13	0.15	0.23	0.00	0.04	0.35	0.35	0.00	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	76	84	132	208	32	0	41	885	114	3	975	13
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	2.0	1.9	3.7	5.2	0.6	0.0	1.1	6.4	2.4	0.1	7.5	0.3
Cycle Q Clear(g_c), s	2.0	1.9	3.7	5.2	0.6	0.0	1.1	6.4	2.4	0.1	7.5	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	97	246	208	272	430	364	63	1785	554	6	1621	503
V/C Ratio(X)	0.79	0.34	0.63	0.77	0.07	0.00	0.65	0.50	0.21	0.52	0.60	0.03
Avail Cap(c_a), veh/h	419	1319	1118	685	1599	1355	305	1855	576	305	1855	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	18.5	19.3	19.0	14.1	0.0	22.3	12.0	10.7	23.3	13.5	11.0
Incr Delay (d2), s/veh	13.1	0.8	3.2	4.5	0.1	0.0	10.8	0.6	0.5	56.4	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.8	1.4	2.2	0.2	0.0	0.6	1.9	0.7	0.1	2.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	19.3	22.4	23.5	14.2	0.0	33.1	12.6	11.2	79.7	14.5	11.0
LnGrp LOS	C	B	C	C	B	A	C	B	B	E	B	B
Approach Vol, veh/h		292			240			1040			991	
Approach Delay, s/veh		24.8			22.3			13.2			14.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.2	21.4	11.1	10.1	5.7	19.9	6.5	14.7
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	17.0	18.0	33.0	8.0	17.0	11.0	40.0
Max Q Clear Time (g_c+I1), s	2.1	8.4	7.2	5.7	3.1	9.5	4.0	2.6
Green Ext Time (p_c), s	0.0	5.9	0.4	0.8	0.0	5.3	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	62	0	994	21	1	1247
Future Volume (veh/h)	62	0	994	21	1	1247
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	0	1046	22	1	1313
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	100	89	2136	663	6	3034
Arrive On Green	0.06	0.00	0.42	0.42	0.00	0.59
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	65	0	1046	22	1	1313
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	1.0	0.0	4.3	0.2	0.0	4.0
Cycle Q Clear(g_c), s	1.0	0.0	4.3	0.2	0.0	4.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	100	89	2136	663	6	3034
V/C Ratio(X)	0.65	0.00	0.49	0.03	0.16	0.43
Avail Cap(c_a), veh/h	1805	1606	3568	1108	685	6423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.2	0.0	6.1	4.9	14.3	3.2
Incr Delay (d2), s/veh	6.8	0.0	0.2	0.0	11.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.5	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.0	0.0	6.3	4.9	25.9	3.3
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	65		1068			1314
Approach Delay, s/veh	20.0		6.2			3.3
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.0	17.0				22.0	6.6
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	2.0	6.3				6.0	3.0
Green Ext Time (p_c), s	0.0	5.7				10.4	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	6	58	144	17	21	16	947	56	5	1251	106
Future Volume (veh/h)	45	6	58	144	17	21	16	947	56	5	1251	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	6	61	152	18	22	17	997	59	5	1317	112
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	96	82	202	234	198	30	1827	567	10	1767	549
Arrive On Green	0.04	0.05	0.05	0.11	0.12	0.12	0.02	0.36	0.36	0.01	0.35	0.35
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	47	6	61	152	18	22	17	997	59	5	1317	112
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.1	0.1	1.6	3.5	0.4	0.5	0.4	6.6	1.1	0.1	9.6	2.1
Cycle Q Clear(g_c), s	1.1	0.1	1.6	3.5	0.4	0.5	0.4	6.6	1.1	0.1	9.6	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	71	96	82	202	234	198	30	1827	567	10	1767	549
V/C Ratio(X)	0.66	0.06	0.75	0.75	0.08	0.11	0.56	0.55	0.10	0.52	0.75	0.20
Avail Cap(c_a), veh/h	462	1412	1196	672	1632	1383	462	1927	598	462	1927	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	19.1	19.8	18.2	16.4	16.5	20.7	10.9	9.1	21.0	12.2	9.8
Incr Delay (d2), s/veh	9.8	0.3	12.7	5.6	0.1	0.2	14.9	0.3	0.1	37.4	1.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.8	1.6	0.1	0.2	0.3	1.7	0.3	0.1	2.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	19.4	32.5	23.8	16.5	16.7	35.6	11.1	9.2	58.4	13.7	9.9
LnGrp LOS	C	B	C	C	B	B	D	B	A	E	B	A
Approach Vol, veh/h		114			192			1073			1434	
Approach Delay, s/veh		30.7			22.3			11.4			13.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	20.2	9.8	7.2	5.7	19.7	6.7	10.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	16.0	32.0	11.0	16.0	11.0	37.0
Max Q Clear Time (g_c+I1), s	2.1	8.6	5.5	3.6	2.4	11.6	3.1	2.5
Green Ext Time (p_c), s	0.0	3.7	0.3	0.1	0.0	3.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	18	5	34	26	110	5	1205	21	35	429	27
Future Volume (veh/h)	72	18	5	34	26	110	5	1205	21	35	429	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	19	5	36	27	116	5	1268	22	37	452	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	269	227	68	224	189	21	1735	772	70	1832	815
Arrive On Green	0.06	0.14	0.14	0.04	0.12	0.12	0.01	0.49	0.49	0.04	0.52	0.52
Sat Flow, veh/h	1781	1870	1578	1781	1870	1577	1781	3554	1582	1781	3554	1582
Grp Volume(v), veh/h	76	19	5	36	27	116	5	1268	22	37	452	28
Grp Sat Flow(s),veh/h/ln	1781	1870	1578	1781	1870	1577	1781	1777	1582	1781	1777	1582
Q Serve(g_s), s	2.3	0.5	0.1	1.1	0.7	3.9	0.2	15.6	0.4	1.1	3.9	0.5
Cycle Q Clear(g_c), s	2.3	0.5	0.1	1.1	0.7	3.9	0.2	15.6	0.4	1.1	3.9	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	269	227	68	224	189	21	1735	772	70	1832	815
V/C Ratio(X)	0.68	0.07	0.02	0.53	0.12	0.61	0.23	0.73	0.03	0.53	0.25	0.03
Avail Cap(c_a), veh/h	259	882	745	259	882	744	291	2579	1148	259	2450	1091
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	20.4	20.3	26.0	21.7	23.0	27.0	11.2	7.3	26.0	7.4	6.6
Incr Delay (d2), s/veh	7.2	0.1	0.0	6.1	0.2	3.2	5.4	0.6	0.0	6.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.2	0.1	0.5	0.3	1.4	0.1	4.4	0.1	0.5	1.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	20.5	20.3	32.1	21.9	26.3	32.4	11.8	7.3	32.1	7.5	6.6
LnGrp LOS	C	C	C	C	C	C	C	B	A	C	A	A
Approach Vol, veh/h		100			179			1295			517	
Approach Delay, s/veh		29.6			26.8			11.8			9.2	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	30.9	6.1	11.9	4.7	32.4	7.4	10.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	40.0	8.0	26.0	9.0	38.0	8.0	26.0
Max Q Clear Time (g_c+I1), s	3.1	17.6	3.1	2.5	2.2	5.9	4.3	5.9
Green Ext Time (p_c), s	0.0	9.3	0.0	0.1	0.0	2.9	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	1292	5	5	694	13	5	5	5	228	5	51
Future Volume (veh/h)	54	1292	5	5	694	13	5	5	5	228	5	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	57	1360	5	5	731	14	5	5	5	240	5	54
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	1668	744	169	1318	588	231	170	144	266	551	467
Arrive On Green	0.05	0.52	0.52	0.41	0.41	0.41	0.10	0.10	0.10	0.17	0.33	0.33
Sat Flow, veh/h	1603	3198	1427	358	3198	1427	1210	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	57	1360	5	5	731	14	5	5	5	240	5	54
Grp Sat Flow(s),veh/h/ln	1603	1599	1427	358	1599	1427	1210	1683	1427	1603	1683	1427
Q Serve(g_s), s	2.3	23.4	0.1	0.8	11.5	0.4	0.2	0.2	0.2	9.7	0.1	1.8
Cycle Q Clear(g_c), s	2.3	23.4	0.1	17.0	11.5	0.4	0.2	0.2	0.2	9.7	0.1	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	79	1668	744	169	1318	588	231	170	144	266	551	467
V/C Ratio(X)	0.73	0.82	0.01	0.03	0.55	0.02	0.02	0.03	0.03	0.90	0.01	0.12
Avail Cap(c_a), veh/h	145	1883	840	178	1400	625	1679	2186	1852	266	2567	2176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	13.2	7.6	23.3	14.8	11.6	26.9	26.8	26.9	27.1	15.0	15.6
Incr Delay (d2), s/veh	4.7	3.1	0.0	0.1	0.7	0.0	0.0	0.0	0.0	30.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	6.9	0.0	0.1	3.6	0.1	0.1	0.1	0.1	5.7	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	16.3	7.6	23.4	15.6	11.6	26.9	26.9	26.9	57.2	15.0	15.6
LnGrp LOS	D	B	A	C	B	B	C	C	C	E	B	B
Approach Vol, veh/h		1422			750			15			299	
Approach Delay, s/veh		17.0			15.5			26.9			49.0	
Approach LOS		B			B			C			D	

Timer - Assigned Phs		2		4	5	6	7	8
Phs Duration (G+Y+Rc), s		40.5		25.7	7.2	33.3	15.0	10.7
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0	4.0	4.0
Max Green Setting (Gmax), s		39.0		101.0	6.0	29.0	11.0	86.0
Max Q Clear Time (g_c+I1), s		25.4		3.8	4.3	19.0	11.7	2.2
Green Ext Time (p_c), s		9.1		0.2	0.0	4.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	2	315	42	2	12	53	1292	12	2	830	15
Future Volume (veh/h)	122	2	315	42	2	12	53	1292	12	2	830	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	2	332	44	2	13	56	1360	13	2	874	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	7	389	70	3	65	71	1682	750	173	1256	560
Arrive On Green	0.25	0.25	0.25	0.04	0.04	0.04	0.04	0.47	0.47	0.35	0.35	0.35
Sat Flow, veh/h	1755	27	1585	1707	78	1585	1781	3554	1585	395	3554	1585
Grp Volume(v), veh/h	130	0	332	46	0	13	56	1360	13	2	874	16
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1785	0	1585	1781	1777	1585	395	1777	1585
Q Serve(g_s), s	3.7	0.0	12.5	1.6	0.0	0.5	1.9	20.4	0.3	0.3	13.2	0.4
Cycle Q Clear(g_c), s	3.7	0.0	12.5	1.6	0.0	0.5	1.9	20.4	0.3	13.2	13.2	0.4
Prop In Lane	0.98		1.00	0.96		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	437	0	389	73	0	65	71	1682	750	173	1256	560
V/C Ratio(X)	0.30	0.00	0.85	0.63	0.00	0.20	0.79	0.81	0.02	0.01	0.70	0.03
Avail Cap(c_a), veh/h	543	0	482	457	0	406	314	1992	889	173	1256	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	22.5	29.5	0.0	28.9	29.7	14.0	8.7	22.8	17.3	13.2
Incr Delay (d2), s/veh	0.4	0.0	11.7	8.5	0.0	1.5	17.4	2.2	0.0	0.0	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	5.6	0.8	0.0	0.2	1.1	6.6	0.1	0.0	4.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	0.0	34.2	38.0	0.0	30.4	47.1	16.2	8.7	22.9	19.0	13.2
LnGrp LOS	B	A	C	D	A	C	D	B	A	C	B	B
Approach Vol, veh/h		462			59			1429			892	
Approach Delay, s/veh		30.1			36.3			17.4			18.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		34.6		20.3	7.5	27.1		7.6				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		35.0		19.0	11.0	19.0		16.0				
Max Q Clear Time (g_c+I1), s		22.4		14.5	3.9	15.2		3.6				
Green Ext Time (p_c), s		7.2		0.8	0.0	1.9		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			20.3									
HCM 6th LOS			C									

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	160	140	107	1330	1094	72
Future Volume (veh/h)	160	140	107	1330	1094	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	147	113	1400	1152	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	313	279	147	2226	1653	737
Arrive On Green	0.18	0.18	0.08	0.63	0.47	0.47
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	168	147	113	1400	1152	76
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	4.3	4.3	3.1	12.3	13.0	1.4
Cycle Q Clear(g_c), s	4.3	4.3	3.1	12.3	13.0	1.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	313	279	147	2226	1653	737
V/C Ratio(X)	0.54	0.53	0.77	0.63	0.70	0.10
Avail Cap(c_a), veh/h	704	627	423	3161	2037	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	18.9	22.7	5.8	10.7	7.6
Incr Delay (d2), s/veh	0.5	0.6	3.2	0.6	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.8	1.3	2.1	3.7	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.5	19.5	25.9	6.4	11.9	7.7
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	315			1513	1228	
Approach Delay, s/veh	19.5			7.9	11.7	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		37.7		12.9	8.2	29.5
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		45.0		20.0	12.0	29.0
Max Q Clear Time (g_c+I1), s		14.3		6.3	5.1	15.0
Green Ext Time (p_c), s		16.5		0.6	0.1	8.6

Intersection Summary	
HCM 6th Ctrl Delay	10.6
HCM 6th LOS	B

134: Fiddyment Rd & Village Green Dr/Del Webb Blvd

Cumulative Constrained Conditions (V2) - AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	62	111	53	12	31	74	1035	47	43	1081	80
Future Volume (veh/h)	130	62	111	53	12	31	74	1035	47	43	1081	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	65	117	56	13	33	78	1089	49	45	1138	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	233	197	193	203	172	156	1515	676	117	1438	641
Arrive On Green	0.12	0.12	0.12	0.11	0.11	0.11	0.09	0.43	0.43	0.07	0.40	0.40
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	137	65	117	56	13	33	78	1089	49	45	1138	84
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	5.3	2.3	5.0	2.1	0.5	1.4	3.0	18.3	1.3	1.7	20.2	2.4
Cycle Q Clear(g_c), s	5.3	2.3	5.0	2.1	0.5	1.4	3.0	18.3	1.3	1.7	20.2	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	233	197	193	203	172	156	1515	676	117	1438	641
V/C Ratio(X)	0.62	0.28	0.59	0.29	0.06	0.19	0.50	0.72	0.07	0.38	0.79	0.13
Avail Cap(c_a), veh/h	494	519	439	494	519	439	296	1636	730	296	1636	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	28.6	29.8	29.6	28.9	29.3	31.4	17.1	12.2	32.3	18.8	13.5
Incr Delay (d2), s/veh	2.9	0.7	2.9	0.9	0.1	0.6	0.9	1.8	0.1	0.8	3.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.0	2.0	0.9	0.2	0.5	1.2	6.3	0.4	0.7	7.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	29.3	32.8	30.4	29.0	29.8	32.3	18.9	12.3	33.0	21.8	13.7
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	B
Approach Vol, veh/h		319			102			1216			1267	
Approach Delay, s/veh		32.1			30.1			19.5			21.6	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.8	36.8		12.7	10.3	35.2		13.9
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.9
Max Green Setting (Gmax), s	12.0	33.2		20.0	12.0	33.2		20.0
Max Q Clear Time (g_c+I1), s	3.7	20.3		4.1	5.0	22.2		7.3
Green Ext Time (p_c), s	0.0	7.4		0.3	0.0	7.0		1.1

Intersection Summary	
HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	73	18	1712	40	63	1410
Future Volume (veh/h)	73	18	1712	40	63	1410
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	19	1802	42	66	1484
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	101	25	2462	764	94	3399
Arrive On Green	0.07	0.07	0.48	0.48	0.05	0.67
Sat Flow, veh/h	1381	341	5274	1585	1781	5274
Grp Volume(v), veh/h	97	0	1802	42	66	1484
Grp Sat Flow(s),veh/h/ln	1740	0	1702	1585	1781	1702
Q Serve(g_s), s	2.1	0.0	10.8	0.5	1.4	5.2
Cycle Q Clear(g_c), s	2.1	0.0	10.8	0.5	1.4	5.2
Prop In Lane	0.79	0.20		1.00	1.00	
Lane Grp Cap(c), veh/h	127	0	2462	764	94	3399
V/C Ratio(X)	0.77	0.00	0.73	0.05	0.70	0.44
Avail Cap(c_a), veh/h	1319	0	2670	829	512	4806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	7.9	5.3	17.8	3.0
Incr Delay (d2), s/veh	9.2	0.0	1.0	0.0	9.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.0	0.1	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.6	0.0	8.9	5.3	27.0	3.1
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	97		1844			1550
Approach Delay, s/veh	26.6		8.8			4.1
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.0	23.4				30.5	7.8
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	3.4	12.8				7.2	4.1
Green Ext Time (p_c), s	0.1	5.6				12.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1	95	51	2	34	11	1658	16	9	1371	104
Future Volume (veh/h)	61	1	95	51	2	34	11	1658	16	9	1371	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	1	100	54	2	36	12	1745	17	9	1443	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	2	186	76	10	172	22	2545	788	17	2530	784
Arrive On Green	0.05	0.12	0.12	0.04	0.11	0.11	0.01	0.50	0.50	0.01	0.50	0.50
Sat Flow, veh/h	1781	16	1564	1781	84	1506	1781	5106	1582	1781	5106	1582
Grp Volume(v), veh/h	64	0	101	54	0	38	12	1745	17	9	1443	109
Grp Sat Flow(s),veh/h/ln	1781	0	1580	1781	0	1590	1781	1702	1582	1781	1702	1582
Q Serve(g_s), s	1.7	0.0	2.9	1.4	0.0	1.1	0.3	12.6	0.3	0.2	9.6	1.8
Cycle Q Clear(g_c), s	1.7	0.0	2.9	1.4	0.0	1.1	0.3	12.6	0.3	0.2	9.6	1.8
Prop In Lane	1.00		0.99	1.00		0.95	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	85	0	188	76	0	181	22	2545	788	17	2530	784
V/C Ratio(X)	0.75	0.00	0.54	0.71	0.00	0.21	0.55	0.69	0.02	0.54	0.57	0.14
Avail Cap(c_a), veh/h	294	0	1011	294	0	1018	294	2545	788	294	2530	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	20.1	22.9	0.0	19.5	23.8	9.3	6.2	23.9	8.6	6.6
Incr Delay (d2), s/veh	12.6	0.0	2.4	11.6	0.0	0.6	19.5	1.5	0.1	24.1	0.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.0	0.8	0.0	0.4	0.2	3.2	0.1	0.2	2.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	0.0	22.4	34.4	0.0	20.0	43.3	10.8	6.2	47.9	9.5	7.0
LnGrp LOS	D	A	C	C	A	C	D	B	A	D	A	A
Approach Vol, veh/h		165			92			1774			1561	
Approach Delay, s/veh		27.5			28.5			11.0			9.6	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	28.1	6.1	9.8	4.6	28.0	6.3	9.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	24.0	8.0	31.0	8.0	24.0	8.0	31.0
Max Q Clear Time (g_c+I1), s	2.2	14.6	3.4	4.9	2.3	11.6	3.7	3.1
Green Ext Time (p_c), s	0.0	6.9	0.0	0.5	0.0	7.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	8	161	128	10	48	62	660	40	9	191	20
Future Volume (veh/h)	146	8	161	128	10	48	62	660	40	9	191	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	154	8	169	135	11	51	65	695	42	9	201	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	15	266	211	17	202	87	965	431	17	826	369
Arrive On Green	0.17	0.17	0.17	0.13	0.13	0.13	0.05	0.27	0.27	0.01	0.23	0.23
Sat Flow, veh/h	1697	88	1585	1653	135	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	162	0	169	146	0	51	65	695	42	9	201	21
Grp Sat Flow(s),veh/h/ln	1785	0	1585	1788	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.9	0.0	4.7	3.7	0.0	1.4	1.7	8.4	0.9	0.2	2.2	0.5
Cycle Q Clear(g_c), s	3.9	0.0	4.7	3.7	0.0	1.4	1.7	8.4	0.9	0.2	2.2	0.5
Prop In Lane	0.95		1.00	0.92		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	0	266	228	0	202	87	965	431	17	826	369
V/C Ratio(X)	0.54	0.00	0.63	0.64	0.00	0.25	0.75	0.72	0.10	0.54	0.24	0.06
Avail Cap(c_a), veh/h	982	0	872	983	0	872	414	1278	570	414	1278	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	18.3	19.6	0.0	18.6	22.2	15.6	12.9	23.3	14.8	14.1
Incr Delay (d2), s/veh	1.5	0.0	2.5	3.0	0.0	0.6	12.2	1.4	0.1	24.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	1.7	1.5	0.0	0.5	0.9	2.9	0.3	0.2	0.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.0	20.8	22.5	0.0	19.2	34.4	16.9	13.0	47.3	14.9	14.2
LnGrp LOS	B	A	C	C	A	B	C	B	B	D	B	B
Approach Vol, veh/h		331			197			802			231	
Approach Delay, s/veh		20.2			21.7			18.2			16.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	17.8		12.9	7.3	16.0		11.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.0	17.0		26.0	11.0	17.0		26.0
Max Q Clear Time (g_c+I1), s	2.2	10.4		6.7	3.7	4.2		5.7
Green Ext Time (p_c), s	0.0	2.5		1.4	0.1	0.9		0.9

Intersection Summary	
HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	24	90	47	8	42	53	657	14	14	440	26
Future Volume (veh/h)	63	24	90	47	8	42	53	657	14	14	440	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	25	95	49	8	44	56	692	15	15	463	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	54	174	105	17	108	83	1031	460	27	920	410
Arrive On Green	0.11	0.11	0.11	0.07	0.07	0.07	0.05	0.29	0.29	0.02	0.26	0.26
Sat Flow, veh/h	1309	496	1585	1542	252	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	91	0	95	57	0	44	56	692	15	15	463	27
Grp Sat Flow(s),veh/h/ln	1805	0	1585	1793	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.8	0.0	2.2	1.2	0.0	1.0	1.2	6.6	0.3	0.3	4.3	0.5
Cycle Q Clear(g_c), s	1.8	0.0	2.2	1.2	0.0	1.0	1.2	6.6	0.3	0.3	4.3	0.5
Prop In Lane	0.73		1.00	0.86		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	0	174	123	0	108	83	1031	460	27	920	410
V/C Ratio(X)	0.46	0.00	0.55	0.46	0.00	0.41	0.67	0.67	0.03	0.55	0.50	0.07
Avail Cap(c_a), veh/h	1211	0	1064	1204	0	1064	414	1468	655	782	2202	982
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	0.0	16.3	17.4	0.0	17.3	18.2	12.1	9.9	18.9	12.2	10.8
Incr Delay (d2), s/veh	1.7	0.0	2.7	2.7	0.0	2.4	9.0	0.8	0.0	15.9	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.8	0.5	0.0	0.4	0.6	1.9	0.1	0.2	1.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	0.0	19.0	20.1	0.0	19.7	27.2	12.9	9.9	34.8	12.7	10.9
LnGrp LOS	B	A	B	C	A	B	C	B	A	C	B	B
Approach Vol, veh/h		186			101			763			505	
Approach Delay, s/veh		18.4			19.9			13.9			13.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	16.2		9.3	6.8	15.0		7.7
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	16.0		26.0	9.0	24.0		26.0
Max Q Clear Time (g_c+I1), s	2.3	8.6		4.2	3.2	6.3		3.2
Green Ext Time (p_c), s	0.0	2.6		0.7	0.0	2.7		0.4

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	5	39	5	5	5	38	826	5	5	244	5
Future Volume (veh/h)	38	5	39	5	5	5	38	826	5	5	244	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	5	41	5	5	5	40	869	5	5	257	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	15	122	10	99	84	67	1377	614	10	1263	563
Arrive On Green	0.04	0.08	0.08	0.01	0.05	0.05	0.04	0.39	0.39	0.01	0.36	0.36
Sat Flow, veh/h	1781	175	1437	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	40	0	46	5	5	5	40	869	5	5	257	5
Grp Sat Flow(s),veh/h/ln	1781	0	1612	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	0.0	0.8	0.1	0.1	0.1	0.7	6.1	0.1	0.1	1.6	0.1
Cycle Q Clear(g_c), s	0.7	0.0	0.8	0.1	0.1	0.1	0.7	6.1	0.1	0.1	1.6	0.1
Prop In Lane	1.00		0.89	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	0	137	10	99	84	67	1377	614	10	1263	563
V/C Ratio(X)	0.60	0.00	0.34	0.52	0.05	0.06	0.60	0.63	0.01	0.52	0.20	0.01
Avail Cap(c_a), veh/h	460	0	1197	460	1389	1177	460	2066	921	460	2066	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	13.3	15.4	13.9	13.9	14.7	7.7	5.8	15.4	6.9	6.5
Incr Delay (d2), s/veh	8.2	0.0	1.4	36.7	0.2	0.3	8.2	0.5	0.0	36.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.3	0.1	0.0	0.0	0.3	1.1	0.0	0.1	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.9	0.0	14.8	52.0	14.1	14.2	22.9	8.2	5.8	52.0	7.0	6.5
LnGrp LOS	C	A	B	D	B	B	C	A	A	D	A	A
Approach Vol, veh/h		86			15			914			267	
Approach Delay, s/veh		18.6			26.8			8.8			7.8	
Approach LOS		B			C			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.2	16.0	4.2	6.6	5.2	15.0	5.2	5.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	18.0	8.0	23.0	8.0	18.0	8.0	23.0
Max Q Clear Time (g_c+I1), s	2.1	8.1	2.1	2.8	2.7	3.6	2.7	2.1
Green Ext Time (p_c), s	0.0	3.9	0.0	0.1	0.0	1.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	41	15	71	6	47	10	783	238	21	254	7
Future Volume (veh/h)	34	41	15	71	6	47	10	783	238	21	254	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	43	16	75	6	49	11	824	251	22	267	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	75	119	155	163	138	21	1373	611	39	1409	627
Arrive On Green	0.08	0.08	0.08	0.09	0.09	0.09	0.01	0.39	0.39	0.02	0.40	0.40
Sat Flow, veh/h	833	995	1576	1781	1870	1576	1781	3554	1581	1781	3554	1581
Grp Volume(v), veh/h	79	0	16	75	6	49	11	824	251	22	267	7
Grp Sat Flow(s),veh/h/ln	1829	0	1576	1781	1870	1576	1781	1777	1581	1781	1777	1581
Q Serve(g_s), s	1.6	0.0	0.4	1.5	0.1	1.1	0.2	6.9	4.3	0.5	1.8	0.1
Cycle Q Clear(g_c), s	1.6	0.0	0.4	1.5	0.1	1.1	0.2	6.9	4.3	0.5	1.8	0.1
Prop In Lane	0.46		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	119	155	163	138	21	1373	611	39	1409	627
V/C Ratio(X)	0.57	0.00	0.13	0.48	0.04	0.36	0.53	0.60	0.41	0.56	0.19	0.01
Avail Cap(c_a), veh/h	1521	0	1311	1482	1556	1311	382	2193	976	382	2193	976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	16.1	16.2	15.6	16.0	18.3	9.1	8.3	18.1	7.3	6.8
Incr Delay (d2), s/veh	3.7	0.0	0.5	2.3	0.1	1.6	19.8	0.4	0.4	12.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.1	0.6	0.0	0.4	0.2	1.7	1.0	0.3	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	0.0	16.6	18.5	15.7	17.6	38.1	9.6	8.8	30.3	7.4	6.8
LnGrp LOS	C	A	B	B	B	B	D	A	A	C	A	A
Approach Vol, veh/h		95			130			1086			296	
Approach Delay, s/veh		19.8			18.0			9.7			9.1	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	18.4		6.8	4.4	18.8		7.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	23.0		31.0	8.0	23.0		31.0
Max Q Clear Time (g_c+I1), s	2.5	8.9		3.6	2.2	3.8		3.5
Green Ext Time (p_c), s	0.0	5.4		0.4	0.0	1.5		0.4

Intersection Summary			
HCM 6th Ctrl Delay			10.8
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	2	59	21	7	41	46	902	7	11	348	93
Future Volume (veh/h)	106	2	59	21	7	41	46	902	7	11	348	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	112	2	62	22	7	43	48	949	7	12	366	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	269	5	243	150	48	174	84	1449	11	22	1017	269
Arrive On Green	0.15	0.15	0.15	0.11	0.11	0.11	0.05	0.40	0.40	0.01	0.37	0.37
Sat Flow, veh/h	1752	31	1585	1367	435	1585	1781	3616	27	1781	2780	735
Grp Volume(v), veh/h	114	0	62	29	0	43	48	466	490	12	232	232
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1802	0	1585	1781	1777	1866	1781	1777	1738
Q Serve(g_s), s	3.2	0.0	1.9	0.8	0.0	1.4	1.4	11.6	11.6	0.4	5.2	5.3
Cycle Q Clear(g_c), s	3.2	0.0	1.9	0.8	0.0	1.4	1.4	11.6	11.6	0.4	5.2	5.3
Prop In Lane	0.98		1.00	0.76		1.00	1.00		0.01	1.00		0.42
Lane Grp Cap(c), veh/h	273	0	243	197	0	174	84	712	748	22	650	636
V/C Ratio(X)	0.42	0.00	0.26	0.15	0.00	0.25	0.57	0.65	0.65	0.55	0.36	0.36
Avail Cap(c_a), veh/h	653	0	580	660	0	580	391	823	864	391	823	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	20.4	22.0	0.0	22.3	25.5	13.3	13.3	26.8	12.6	12.7
Incr Delay (d2), s/veh	0.4	0.0	0.2	0.1	0.0	0.3	2.2	1.8	1.7	7.9	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.7	0.3	0.0	0.5	0.6	3.9	4.0	0.2	1.7	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	0.0	20.6	22.1	0.0	22.5	27.7	15.1	15.0	34.7	13.1	13.1
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		176			72			1004			476	
Approach Delay, s/veh		21.0			22.4			15.7			13.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	27.6		10.0	6.6	25.7		12.4
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	25.3		20.0	12.0	25.3		20.0
Max Q Clear Time (g_c+I1), s	2.4	13.6		3.4	3.4	7.3		5.2
Green Ext Time (p_c), s	0.0	8.2		0.1	0.0	5.8		0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	29	76	37	4	28	29	813	18	4	407	37
Future Volume (veh/h)	140	29	76	37	4	28	29	813	18	4	407	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	147	31	80	39	4	29	31	856	19	4	428	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	50	255	107	11	79	63	1240	28	12	1055	96
Arrive On Green	0.16	0.16	0.16	0.12	0.12	0.12	0.04	0.35	0.35	0.01	0.32	0.32
Sat Flow, veh/h	1483	313	1585	921	95	685	1781	3554	79	1781	3294	299
Grp Volume(v), veh/h	178	0	80	72	0	0	31	428	447	4	230	237
Grp Sat Flow(s),veh/h/ln	1796	0	1585	1701	0	0	1781	1777	1856	1781	1777	1817
Q Serve(g_s), s	4.4	0.0	2.1	1.9	0.0	0.0	0.8	9.9	9.9	0.1	4.9	4.9
Cycle Q Clear(g_c), s	4.4	0.0	2.1	1.9	0.0	0.0	0.8	9.9	9.9	0.1	4.9	4.9
Prop In Lane	0.83		1.00	0.54		0.40	1.00		0.04	1.00		0.16
Lane Grp Cap(c), veh/h	289	0	255	197	0	0	63	620	648	12	569	582
V/C Ratio(X)	0.62	0.00	0.31	0.37	0.00	0.00	0.49	0.69	0.69	0.35	0.40	0.41
Avail Cap(c_a), veh/h	523	0	461	424	0	0	444	897	938	444	897	918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	0.0	17.8	19.6	0.0	0.0	22.8	13.4	13.4	23.8	12.8	12.8
Incr Delay (d2), s/veh	0.8	0.0	0.3	0.4	0.0	0.0	2.2	1.7	1.6	6.5	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.7	0.7	0.0	0.0	0.3	3.3	3.4	0.1	1.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	0.0	18.1	20.1	0.0	0.0	25.0	15.1	15.0	30.3	13.3	13.3
LnGrp LOS	B	A	B	C	A	A	C	B	B	C	B	B
Approach Vol, veh/h		258			72			906			471	
Approach Delay, s/veh		19.1			20.1			15.4			13.5	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	22.5		11.7	5.7	21.1		9.6
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	24.3		14.0	12.0	24.3		12.0
Max Q Clear Time (g_c+I1), s	2.1	11.9		6.4	2.8	6.9		3.9
Green Ext Time (p_c), s	0.0	4.9		0.5	0.0	2.8		0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	8	151	17	15	14	84	798	13	5	578	0
Future Volume (veh/h)	68	8	151	17	15	14	84	798	13	5	578	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	8	159	18	16	15	88	840	14	5	608	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	33	289	87	77	143	155	1238	21	12	945	0
Arrive On Green	0.18	0.18	0.18	0.09	0.09	0.09	0.09	0.35	0.35	0.01	0.27	0.00
Sat Flow, veh/h	1611	179	1585	965	857	1585	1781	3577	60	1781	3647	0
Grp Volume(v), veh/h	80	0	159	34	0	15	88	417	437	5	608	0
Grp Sat Flow(s),veh/h/ln	1790	0	1585	1822	0	1585	1781	1777	1860	1781	1777	0
Q Serve(g_s), s	1.8	0.0	4.3	0.8	0.0	0.4	2.2	9.5	9.5	0.1	7.2	0.0
Cycle Q Clear(g_c), s	1.8	0.0	4.3	0.8	0.0	0.4	2.2	9.5	9.5	0.1	7.2	0.0
Prop In Lane	0.90		1.00	0.53		1.00	1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h	326	0	289	165	0	143	155	615	644	12	945	0
V/C Ratio(X)	0.25	0.00	0.55	0.21	0.00	0.10	0.57	0.68	0.68	0.42	0.64	0.00
Avail Cap(c_a), veh/h	758	0	671	771	0	671	302	1027	1074	302	1903	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.5	0.0	17.6	19.9	0.0	19.7	20.7	13.2	13.2	23.4	15.4	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.6	0.6	0.0	0.3	1.2	1.8	1.7	8.4	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.6	0.3	0.0	0.2	0.9	3.2	3.3	0.1	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.9	0.0	19.2	20.5	0.0	20.1	21.9	15.0	14.9	31.8	16.3	0.0
LnGrp LOS	B	A	B	C	A	C	C	B	B	C	B	A
Approach Vol, veh/h		239			49			942			613	
Approach Delay, s/veh		18.4			20.4			15.6			16.5	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	18.3		12.6	4.3	22.1		8.3
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	25.3		20.0	8.0	27.3		20.0
Max Q Clear Time (g_c+I1), s	4.2	9.2		6.3	2.1	11.5		2.8
Green Ext Time (p_c), s	0.0	3.4		0.8	0.0	4.5		0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	34	36	154	73	89	64	1350	24	234	578	56
Future Volume (veh/h)	85	34	36	154	73	89	64	1350	24	234	578	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	73	3	162	77	5	67	1421	24	246	608	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	261	212	177	186	158	102	1357	23	263	1553	133
Arrive On Green	0.14	0.14	0.14	0.10	0.10	0.10	0.06	0.38	0.38	0.15	0.47	0.47
Sat Flow, veh/h	1781	1870	1517	1781	1870	1585	1781	3574	60	1781	3307	282
Grp Volume(v), veh/h	62	73	3	162	77	5	67	706	739	246	326	334
Grp Sat Flow(s),veh/h/ln	1781	1870	1517	1781	1870	1585	1781	1777	1858	1781	1777	1812
Q Serve(g_s), s	2.5	2.8	0.1	7.3	3.1	0.2	3.0	30.9	30.9	11.1	9.7	9.7
Cycle Q Clear(g_c), s	2.5	2.8	0.1	7.3	3.1	0.2	3.0	30.9	30.9	11.1	9.7	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.16
Lane Grp Cap(c), veh/h	249	261	212	177	186	158	102	675	705	263	835	851
V/C Ratio(X)	0.25	0.28	0.01	0.91	0.41	0.03	0.65	1.05	1.05	0.94	0.39	0.39
Avail Cap(c_a), veh/h	482	506	410	177	186	158	175	675	705	263	835	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.2	31.3	30.2	36.3	34.4	33.1	37.5	25.2	25.2	34.3	14.0	14.0
Incr Delay (d2), s/veh	0.4	0.4	0.0	43.3	1.1	0.1	2.6	47.3	47.0	38.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.3	0.1	5.3	1.5	0.1	1.3	20.1	21.0	7.2	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	31.8	30.2	79.6	35.5	33.1	40.2	72.5	72.3	72.5	14.4	14.4
LnGrp LOS	C	C	C	E	D	C	D	F	F	E	B	B
Approach Vol, veh/h		138			244			1512			906	
Approach Delay, s/veh		31.6			64.7			70.9			30.2	
Approach LOS		C			E			E			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	36.6		13.4	8.7	43.9		15.4
Change Period (Y+Rc), s	4.0	5.7		5.3	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	30.9		8.1	8.0	34.9		22.0
Max Q Clear Time (g_c+I1), s	13.1	32.9		9.3	5.0	11.7		4.8
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.6		0.3

Intersection Summary	
HCM 6th Ctrl Delay	55.3
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	0	140	50	0	76	150	1391	41	56	575	55
Future Volume (veh/h)	89	0	140	50	0	76	150	1391	41	56	575	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	0	147	53	0	80	158	1464	43	59	605	58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	249	0	0	174	0	0	208	1725	51	104	1532	683
Arrive On Green	0.14	0.00	0.00	0.10	0.00	0.00	0.12	0.49	0.49	0.06	0.43	0.43
Sat Flow, veh/h	1781	94		1781	53		1781	3525	103	1781	3554	1585
Grp Volume(v), veh/h	94	17.5		53	18.8		158	737	770	59	605	58
Grp Sat Flow(s),veh/h/ln	1781	B		1781	B		1781	1777	1852	1781	1777	1585
Q Serve(g_s), s	2.1			1.2			3.8	15.9	16.0	1.4	5.1	0.9
Cycle Q Clear(g_c), s	2.1			1.2			3.8	15.9	16.0	1.4	5.1	0.9
Prop In Lane	1.00			1.00			1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	249			174			208	870	906	104	1532	683
V/C Ratio(X)	0.38			0.30			0.76	0.85	0.85	0.57	0.39	0.08
Avail Cap(c_a), veh/h	487			487			487	903	941	487	1806	806
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1			18.4			18.8	9.8	9.8	20.1	8.6	7.4
Incr Delay (d2), s/veh	0.4			0.4			2.1	7.9	7.8	1.8	0.3	0.1
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8			0.5			1.4	5.6	5.8	0.5	1.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5			18.8			20.9	17.7	17.6	21.9	8.8	7.5
LnGrp LOS	B			B			C	B	B	C	A	A
Approach Vol, veh/h								1665			722	
Approach Delay, s/veh								17.9			9.8	
Approach LOS								B			A	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	6.6	27.2	10.1	9.1	24.6	8.3
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0	5.7	4.0
Max Green Setting (Gmax), s	12.0	22.3	12.0	12.0	22.3	12.0
Max Q Clear Time (g_c+I1), s	3.4	18.0	4.1	5.8	7.1	3.2
Green Ext Time (p_c), s	0.0	3.5	0.1	0.1	4.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	7	51	82	4	15	294	1037	155	89	738	712
Future Volume (veh/h)	90	7	51	82	4	15	294	1037	155	89	738	712
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	0	0	86	4	0	309	1092	0	94	777	244
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	403	0		186	9		356	2168		153	1105	493
Arrive On Green	0.11	0.00	0.00	0.11	0.11	0.00	0.20	0.42	0.00	0.09	0.31	0.31
Sat Flow, veh/h	3563	0	1585	1706	79	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	100	0	0	90	0	0	309	1092	0	94	777	244
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1785	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	1.7	0.0	0.0	3.2	0.0	0.0	11.3	10.5	0.0	3.4	13.0	8.4
Cycle Q Clear(g_c), s	1.7	0.0	0.0	3.2	0.0	0.0	11.3	10.5	0.0	3.4	13.0	8.4
Prop In Lane	1.00		1.00	0.96		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	0		194	0		356	2168		153	1105	493
V/C Ratio(X)	0.25	0.00		0.46	0.00		0.87	0.50		0.61	0.70	0.50
Avail Cap(c_a), veh/h	1058	0		239	0		423	2427		291	1425	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	0.0	28.1	0.0	0.0	26.1	14.2	0.0	29.7	20.5	18.9
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.7	0.0	0.0	13.7	0.3	0.0	3.9	1.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	1.4	0.0	0.0	5.4	3.2	0.0	1.5	4.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	0.0	0.0	29.9	0.0	0.0	39.7	14.5	0.0	33.6	22.1	20.3
LnGrp LOS	C	A		C	A		D	B		C	C	C
Approach Vol, veh/h		100	A		90	A		1401	A		1115	
Approach Delay, s/veh		27.5			29.9			20.1			22.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	34.6		11.6	17.4	26.9		11.3
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	11.0	32.0		20.0	16.0	27.0		9.0
Max Q Clear Time (g_c+I1), s	5.4	12.5		3.7	13.3	15.0		5.2
Green Ext Time (p_c), s	0.1	8.6		0.3	0.2	6.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	4	1	42	0	80	4	1270	315	380	694	0
Future Volume (veh/h)	0	4	1	42	0	80	4	1270	315	380	694	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	4	0	44	0	2	4	1337	261	400	731	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	8	7	58	0	52	7	3005	1340	305	2862	1276
Arrive On Green	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.85	0.85	0.81	0.81	0.00
Sat Flow, veh/h	0	1870	1585	1781	0	1585	1781	3554	1585	318	3554	1585
Grp Volume(v), veh/h	0	4	0	44	0	2	4	1337	261	400	731	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	0	1585	1781	1777	1585	318	1777	1585
Q Serve(g_s), s	0.0	0.2	0.0	2.7	0.0	0.1	0.2	10.3	3.4	83.2	5.6	0.0
Cycle Q Clear(g_c), s	0.0	0.2	0.0	2.7	0.0	0.1	0.2	10.3	3.4	89.0	5.6	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	8	7	58	0	52	7	3005	1340	305	2862	1276
V/C Ratio(X)	0.00	0.51	0.00	0.76	0.00	0.04	0.54	0.44	0.19	1.31	0.26	0.00
Avail Cap(c_a), veh/h	0	271	229	258	0	229	193	3376	1506	305	2862	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	54.9	0.0	53.0	0.0	51.8	54.9	2.1	1.6	22.6	2.6	0.0
Incr Delay (d2), s/veh	0.0	43.4	0.0	18.2	0.0	0.3	49.0	0.1	0.1	162.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	1.5	0.0	0.1	0.2	0.8	0.3	21.8	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	98.4	0.0	71.2	0.0	52.1	103.9	2.2	1.6	184.7	2.7	0.0
LnGrp LOS	A	F	A	E	A	D	F	A	A	F	A	A
Approach Vol, veh/h		4			46			1602			1131	
Approach Delay, s/veh		98.4			70.4			2.4			67.1	
Approach LOS		F			E			A			E	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		97.5		4.5	4.5	93.0		8.6				
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		5.0				
Max Green Setting (Gmax), s		105.0		16.0	12.0	89.0		16.0				
Max Q Clear Time (g_c+I1), s		12.3		2.2	2.2	91.0		4.7				
Green Ext Time (p_c), s		9.2		0.0	0.0	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			29.9									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	11	93	0	5	91	324	1492	0	301	436	0
Future Volume (veh/h)	5	11	93	0	5	91	324	1492	0	301	436	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	12	2	0	5	3	341	1571	0	317	459	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	32	27	14	15	13	392	1890	0	358	1822	813
Arrive On Green	0.02	0.02	0.02	0.00	0.01	0.01	0.22	0.53	0.00	0.20	0.51	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3647	0	1781	3554	1585
Grp Volume(v), veh/h	5	12	2	0	5	3	341	1571	0	317	459	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	0	1781	1777	1585
Q Serve(g_s), s	0.2	0.5	0.1	0.0	0.2	0.2	15.3	30.7	0.0	14.3	6.0	0.0
Cycle Q Clear(g_c), s	0.2	0.5	0.1	0.0	0.2	0.2	15.3	30.7	0.0	14.3	6.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	30	32	27	14	15	13	392	1890	0	358	1822	813
V/C Ratio(X)	0.16	0.38	0.07	0.00	0.33	0.23	0.87	0.83	0.00	0.88	0.25	0.00
Avail Cap(c_a), veh/h	560	588	498	560	588	498	861	2276	0	431	1822	813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.1	40.2	40.0	0.0	40.8	40.8	31.1	16.2	0.0	32.1	11.3	0.0
Incr Delay (d2), s/veh	2.5	7.1	1.1	0.0	12.1	9.0	6.0	2.3	0.0	17.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.0	0.0	0.2	0.1	6.7	10.8	0.0	7.4	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.6	47.3	41.2	0.0	52.9	49.7	37.1	18.6	0.0	49.2	11.3	0.0
LnGrp LOS	D	D	D	A	D	D	D	B	A	D	B	A
Approach Vol, veh/h		19			8			1912			776	
Approach Delay, s/veh		45.4			51.7			21.9			26.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.6	49.0		6.4	23.2	47.4		5.7
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	20.0	53.0		26.0	40.0	33.0		26.0
Max Q Clear Time (g_c+I1), s	16.3	32.7		2.5	17.3	8.0		2.2
Green Ext Time (p_c), s	0.3	11.3		0.0	1.0	2.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	0	47	15	0	0	5	1650	339	48	493	6
Future Volume (veh/h)	50	0	47	15	0	0	5	1650	339	48	493	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	0	49	16	0	0	5	1737	357	51	519	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	0	144	117	0	52	14	2285	1019	65	3495	40
Arrive On Green	0.09	0.00	0.09	0.03	0.00	0.00	0.01	0.64	0.64	0.04	0.67	0.67
Sat Flow, veh/h	1781	0	1585	3563	0	1585	1781	3554	1585	1781	5204	60
Grp Volume(v), veh/h	53	0	49	16	0	0	5	1737	357	51	339	186
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1702	1860
Q Serve(g_s), s	2.6	0.0	2.7	0.4	0.0	0.0	0.3	31.3	9.5	2.6	3.3	3.3
Cycle Q Clear(g_c), s	2.6	0.0	2.7	0.4	0.0	0.0	0.3	31.3	9.5	2.6	3.3	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	162	0	144	117	0	52	14	2285	1019	65	2287	1249
V/C Ratio(X)	0.33	0.00	0.34	0.14	0.00	0.00	0.36	0.76	0.35	0.78	0.15	0.15
Avail Cap(c_a), veh/h	389	0	346	778	0	346	156	3260	1454	156	3123	1706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	39.0	43.0	0.0	0.0	45.2	11.4	7.5	43.7	5.5	5.5
Incr Delay (d2), s/veh	0.4	0.0	0.5	0.2	0.0	0.0	5.7	0.9	0.3	7.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.1	0.2	0.0	0.0	0.1	8.9	2.4	1.2	0.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	0.0	39.5	43.2	0.0	0.0	50.9	12.3	7.8	51.1	5.5	5.6
LnGrp LOS	D	A	D	D	A	A	D	B	A	D	A	A
Approach Vol, veh/h		102			16			2099			576	
Approach Delay, s/veh		39.5			43.2			11.6			9.6	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	64.9		12.3	4.7	67.5		7.0
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	8.0	84.0		20.0	8.0	84.0		20.0
Max Q Clear Time (g_c+I1), s	4.6	33.3		4.7	2.3	5.3		2.4
Green Ext Time (p_c), s	0.0	25.6		0.0	0.0	3.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	8	99	84	15	49	129	1665	19	6	945	22
Future Volume (veh/h)	114	8	99	84	15	49	129	1665	19	6	945	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	8	104	88	16	52	136	1753	20	6	995	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	12	165	132	24	137	173	2435	28	8	1927	45
Arrive On Green	0.11	0.11	0.11	0.09	0.09	0.09	0.10	0.47	0.47	0.00	0.38	0.38
Sat Flow, veh/h	1675	112	1541	1518	276	1585	1781	5204	59	1781	5133	119
Grp Volume(v), veh/h	128	0	104	104	0	52	136	1147	626	6	660	358
Grp Sat Flow(s),veh/h/ln	1787	0	1541	1794	0	1585	1781	1702	1859	1781	1702	1847
Q Serve(g_s), s	4.3	0.0	4.0	3.5	0.0	1.9	4.6	16.7	16.7	0.2	9.3	9.3
Cycle Q Clear(g_c), s	4.3	0.0	4.0	3.5	0.0	1.9	4.6	16.7	16.7	0.2	9.3	9.3
Prop In Lane	0.94		1.00	0.85		1.00	1.00		0.03	1.00		0.06
Lane Grp Cap(c), veh/h	191	0	165	156	0	137	173	1593	870	8	1278	693
V/C Ratio(X)	0.67	0.00	0.63	0.67	0.00	0.38	0.78	0.72	0.72	0.71	0.52	0.52
Avail Cap(c_a), veh/h	582	0	502	584	0	516	260	1720	939	231	1389	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	26.4	27.3	0.0	26.6	27.2	13.2	13.2	30.7	14.9	14.9
Incr Delay (d2), s/veh	1.5	0.0	1.5	1.8	0.0	0.6	4.5	1.9	3.4	33.2	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.5	1.5	0.0	0.7	1.9	4.8	5.7	0.2	2.9	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	0.0	27.9	29.2	0.0	27.3	31.7	15.1	16.6	63.8	15.7	16.3
LnGrp LOS	C	A	C	C	A	C	C	B	B	E	B	B
Approach Vol, veh/h		232			156			1909			1024	
Approach Delay, s/veh		28.0			28.5			16.7			16.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	29.2		10.7	4.3	34.9		11.9				
Change Period (Y+Rc), s	4.0	6.0		5.3	4.0	6.0		5.3				
Max Green Setting (Gmax), s	9.0	25.2		20.1	8.0	31.2		20.1				
Max Q Clear Time (g_c+I1), s	6.6	11.3		5.5	2.2	18.7		6.3				
Green Ext Time (p_c), s	0.0	7.1		0.3	0.0	10.2		0.5				

Intersection Summary			
HCM 6th Ctrl Delay			17.9
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	736	225	166	271	161	68	1605	105	167	875	99
Future Volume (veh/h)	180	736	225	166	271	161	68	1605	105	167	875	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	189	775	125	175	285	71	72	1689	0	176	921	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	842	371	198	1427	438	153	2331		221	2431	
Arrive On Green	0.07	0.24	0.24	0.11	0.28	0.28	0.04	0.46	0.00	0.06	0.48	0.00
Sat Flow, veh/h	3456	3554	1565	1781	5106	1568	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	189	775	125	175	285	71	72	1689	0	176	921	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1565	1781	1702	1568	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	8.1	31.9	9.9	14.5	6.4	5.1	3.1	40.3	0.0	7.5	17.3	0.0
Cycle Q Clear(g_c), s	8.1	31.9	9.9	14.5	6.4	5.1	3.1	40.3	0.0	7.5	17.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	842	371	198	1427	438	153	2331		221	2431	
V/C Ratio(X)	0.80	0.92	0.34	0.88	0.20	0.16	0.47	0.72		0.80	0.38	
Avail Cap(c_a), veh/h	392	884	389	285	1508	463	184	2331		253	2431	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	68.8	55.8	47.5	65.7	41.2	40.8	70.0	33.1	0.0	69.2	25.1	0.0
Incr Delay (d2), s/veh	2.3	14.4	0.7	15.4	0.1	0.2	0.8	1.3	0.0	12.3	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	15.6	3.9	7.3	2.6	2.0	1.3	16.2	0.0	3.7	6.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.1	70.3	48.1	81.1	41.3	41.0	70.8	34.4	0.0	81.6	25.6	0.0
LnGrp LOS	E	E	D	F	D	D	E	C		F	C	
Approach Vol, veh/h		1089			531			1761	A		1097	A
Approach Delay, s/veh		67.9			54.4			35.9			34.6	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	77.4	14.3	47.6	13.6	74.5	20.7	41.3
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	8.0	61.0	17.0	44.3	11.0	* 58	24.0	37.3
Max Q Clear Time (g_c+I1), s	5.1	19.3	10.1	8.4	9.5	42.3	16.5	33.9
Green Ext Time (p_c), s	0.0	7.8	0.2	2.0	0.1	11.5	0.2	1.6

Intersection Summary	
HCM 6th Ctrl Delay	45.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1	33	37	1	19	18	1764	2	7	1276	8
Future Volume (veh/h)	33	1	33	37	1	19	18	1764	2	7	1276	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	1	35	39	1	20	19	1857	2	7	1343	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1	44	138	2	30	710	3998	4	10	1795	11
Arrive On Green	0.05	0.05	0.05	0.05	0.05	0.05	0.40	0.76	0.76	0.01	0.34	0.34
Sat Flow, veh/h	835	24	835	1117	29	573	1781	5268	6	1781	5238	31
Grp Volume(v), veh/h	71	0	0	60	0	0	19	1200	659	7	873	478
Grp Sat Flow(s),veh/h/ln	1694	0	0	1719	0	0	1781	1702	1869	1781	1702	1865
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	0.0	0.5	9.8	9.8	0.3	17.0	17.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	2.4	0.0	0.0	0.5	9.8	9.8	0.3	17.0	17.0
Prop In Lane	0.49		0.49	0.65		0.33	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	161	0	0	170	0	0	710	2583	1419	10	1167	639
V/C Ratio(X)	0.44	0.00	0.00	0.35	0.00	0.00	0.03	0.46	0.46	0.72	0.75	0.75
Avail Cap(c_a), veh/h	499	0	0	498	0	0	710	2583	1419	190	1466	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	0.0	0.0	34.8	0.0	0.0	13.7	3.4	3.4	37.2	21.8	21.8
Incr Delay (d2), s/veh	1.9	0.0	0.0	1.2	0.0	0.0	0.0	0.6	1.1	31.3	1.9	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	1.1	0.0	0.0	0.2	1.4	1.7	0.2	6.2	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	0.0	0.0	36.0	0.0	0.0	13.7	4.0	4.5	68.5	23.7	25.2
LnGrp LOS	D	A	A	D	A	A	B	A	A	E	C	C
Approach Vol, veh/h		71			60			1878			1358	
Approach Delay, s/veh		36.9			36.0			4.2			24.5	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	62.6		8.0	35.6	31.4		8.0
Change Period (Y+Rc), s	4.0	5.7		4.0	5.7	* 5.7		4.0
Max Green Setting (Gmax), s	8.0	32.3		21.0	8.0	* 32		21.0
Max Q Clear Time (g_c+I1), s	2.3	11.8		5.0	2.5	19.0		4.4
Green Ext Time (p_c), s	0.0	12.3		0.2	0.0	6.7		0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	159	292	108	75	41	148	1714	48	99	1775	41
Future Volume (veh/h)	135	159	292	108	75	41	148	1714	48	99	1775	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	142	167	200	114	79	0	156	1804	0	104	1868	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	516	228	158	351		201	2971		148	2913	64
Arrive On Green	0.09	0.15	0.15	0.05	0.10	0.00	0.06	0.58	0.00	0.04	0.57	0.57
Sat Flow, veh/h	1781	3554	1569	3456	3554	1585	3456	5106	1585	3456	5141	113
Grp Volume(v), veh/h	142	167	200	114	79	0	156	1804	0	104	1236	673
Grp Sat Flow(s),veh/h/ln	1781	1777	1569	1728	1777	1585	1728	1702	1585	1728	1702	1850
Q Serve(g_s), s	11.8	6.3	18.7	4.9	3.1	0.0	6.7	34.3	0.0	4.5	37.1	37.1
Cycle Q Clear(g_c), s	11.8	6.3	18.7	4.9	3.1	0.0	6.7	34.3	0.0	4.5	37.1	37.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	164	516	228	158	351		201	2971		148	1929	1048
V/C Ratio(X)	0.87	0.32	0.88	0.72	0.22		0.78	0.61		0.70	0.64	0.64
Avail Cap(c_a), veh/h	190	623	275	207	457		230	2971		253	1929	1048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.2	57.5	62.8	70.6	62.3	0.0	69.7	20.3	0.0	70.8	22.1	22.1
Incr Delay (d2), s/veh	26.3	0.5	24.2	4.9	0.4	0.0	11.4	0.4	0.0	2.2	1.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	2.9	8.9	2.3	1.4	0.0	3.3	13.2	0.0	2.0	14.7	16.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.5	58.0	87.0	75.5	62.7	0.0	81.1	20.7	0.0	73.1	23.8	25.1
LnGrp LOS	F	E	F	E	E		F	C		E	C	C
Approach Vol, veh/h		509			193	A		1960	A		2013	
Approach Delay, s/veh		79.3			70.2			25.5			26.8	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	20.5	10.4	93.3	10.9	27.5	12.7	91.0
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	16.0	19.3	11.0	84.0	9.0	26.3	10.0	85.0
Max Q Clear Time (g_c+I1), s	13.8	5.1	6.5	36.3	6.9	20.7	8.7	39.1
Green Ext Time (p_c), s	0.1	0.3	0.1	16.6	0.0	1.0	0.0	16.5

Intersection Summary	
HCM 6th Ctrl Delay	33.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	17	56	95	14	167	185	1038	331	643	1204	5
Future Volume (veh/h)	5	17	56	95	14	167	185	1038	331	643	1204	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	18	0	100	15	2	195	1093	220	677	1267	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	31	26	150	79	67	219	2200	981	746	2530	1128
Arrive On Green	0.02	0.02	0.00	0.04	0.04	0.04	0.12	0.62	0.62	0.22	0.71	0.71
Sat Flow, veh/h	3456	1870	1585	3563	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	5	18	0	100	15	2	195	1093	220	677	1267	3
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.2	1.4	0.0	4.1	1.2	0.2	16.2	25.4	9.2	28.7	23.9	0.1
Cycle Q Clear(g_c), s	0.2	1.4	0.0	4.1	1.2	0.2	16.2	25.4	9.2	28.7	23.9	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	57	31	26	150	79	67	219	2200	981	746	2530	1128
V/C Ratio(X)	0.09	0.59	0.00	0.67	0.19	0.03	0.89	0.50	0.22	0.91	0.50	0.00
Avail Cap(c_a), veh/h	369	200	169	380	200	169	297	2200	981	898	2530	1128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.7	73.3	0.0	70.8	69.4	68.9	64.8	15.7	12.6	57.4	9.7	6.2
Incr Delay (d2), s/veh	0.7	16.4	0.0	5.0	1.2	0.2	21.5	0.8	0.5	11.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.8	0.0	2.0	0.6	0.1	8.5	10.0	3.3	13.4	8.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	89.7	0.0	75.8	70.5	69.1	86.3	16.5	13.2	68.8	10.4	6.2
LnGrp LOS	E	F	A	E	E	E	F	B	B	E	B	A
Approach Vol, veh/h		23			117			1508			1947	
Approach Delay, s/veh		86.1			75.0			25.1			30.7	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	36.4	96.8		6.5	22.4	110.8		10.3				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	39.0	63.0		16.0	25.0	77.0		16.0				
Max Q Clear Time (g_c+I1), s	30.7	27.4		3.4	18.2	25.9		6.1				
Green Ext Time (p_c), s	1.7	9.8		0.0	0.3	11.7		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	30.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	80	42	526	131	28	581
Future Volume (veh/h)	80	42	526	131	28	581
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	44	554	138	29	612
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	337	300	1213	541	76	1798
Arrive On Green	0.19	0.19	0.34	0.34	0.04	0.51
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	84	44	554	138	29	612
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	1.3	0.8	4.0	2.1	0.5	3.4
Cycle Q Clear(g_c), s	1.3	0.8	4.0	2.1	0.5	3.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	337	300	1213	541	76	1798
V/C Ratio(X)	0.25	0.15	0.46	0.26	0.38	0.34
Avail Cap(c_a), veh/h	1305	1161	2277	1016	435	3362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.3	11.1	8.4	7.8	15.3	4.8
Incr Delay (d2), s/veh	0.4	0.2	0.5	0.5	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	1.1	0.5	0.2	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.7	11.3	8.9	8.3	16.5	5.1
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	128		692			641
Approach Delay, s/veh	11.6		8.8			5.6
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.4	17.2				22.6	10.2
Change Period (Y+Rc), s	4.0	6.0				6.0	4.0
Max Green Setting (Gmax), s	8.0	21.0				31.0	24.0
Max Q Clear Time (g_c+I1), s	2.5	6.0				5.4	3.3
Green Ext Time (p_c), s	0.0	5.2				5.9	0.4

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	215	392	1177	704	9
Future Volume (veh/h)	2	215	392	1177	704	9
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	226	413	1239	741	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	314	279	477	2252	963	430
Arrive On Green	0.18	0.18	0.27	0.63	0.27	0.27
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	2	226	413	1239	741	9
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	0.0	7.2	11.6	10.3	10.1	0.2
Cycle Q Clear(g_c), s	0.0	7.2	11.6	10.3	10.1	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	314	279	477	2252	963	430
V/C Ratio(X)	0.01	0.81	0.87	0.55	0.77	0.02
Avail Cap(c_a), veh/h	542	482	576	2635	1149	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	20.8	18.4	5.4	17.7	14.1
Incr Delay (d2), s/veh	0.0	5.6	11.5	0.2	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	5.7	2.4	4.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.9	26.4	29.8	5.6	20.3	14.1
LnGrp LOS	B	C	C	A	C	B
Approach Vol, veh/h	228			1652	750	
Approach Delay, s/veh	26.3			11.7	20.3	
Approach LOS	C			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		38.3		14.3	19.1	19.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		39.0		16.0	17.0	17.0
Max Q Clear Time (g_c+I1), s		12.3		9.2	13.6	12.1
Green Ext Time (p_c), s		10.8		0.4	0.5	2.2

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	10	13	66	0	199	5	1229	101	174	585	27
Future Volume (veh/h)	8	10	13	66	0	199	5	1229	101	174	585	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	11	14	69	0	209	5	1294	106	183	616	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	121	114	350	0	259	17	1631	133	225	2103	96
Arrive On Green	0.16	0.16	0.16	0.16	0.00	0.16	0.01	0.49	0.49	0.13	0.61	0.61
Sat Flow, veh/h	200	736	689	1425	0	1571	1781	3325	272	1781	3461	157
Grp Volume(v), veh/h	33	0	0	69	0	209	5	690	710	183	316	328
Grp Sat Flow(s),veh/h/ln	1625	0	0	1425	0	1571	1781	1777	1820	1781	1777	1841
Q Serve(g_s), s	0.0	0.0	0.0	1.4	0.0	8.1	0.2	20.3	20.5	6.3	5.3	5.3
Cycle Q Clear(g_c), s	1.0	0.0	0.0	2.4	0.0	8.1	0.2	20.3	20.5	6.3	5.3	5.3
Prop In Lane	0.24		0.42	1.00		1.00	1.00		0.15	1.00		0.09
Lane Grp Cap(c), veh/h	339	0	0	350	0	259	17	872	893	225	1080	1119
V/C Ratio(X)	0.10	0.00	0.00	0.20	0.00	0.81	0.30	0.79	0.80	0.81	0.29	0.29
Avail Cap(c_a), veh/h	574	0	0	562	0	500	227	885	907	227	1080	1119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	0.0	0.0	22.9	0.0	25.3	30.9	13.3	13.4	26.7	5.9	5.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	2.3	3.7	5.4	5.4	18.3	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.9	0.0	3.0	0.1	7.1	7.3	3.5	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	0.0	0.0	23.0	0.0	27.5	34.6	18.7	18.8	45.0	6.1	6.1
LnGrp LOS	C	A	A	C	A	C	C	B	B	D	A	A
Approach Vol, veh/h		33			278			1405			827	
Approach Delay, s/veh		22.4			26.4			18.8			14.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	36.5		14.4	4.6	43.9		14.4
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	31.3		20.0	8.0	29.3		20.0
Max Q Clear Time (g_c+I1), s	8.3	22.5		3.0	2.2	7.3		10.1
Green Ext Time (p_c), s	0.0	8.3		0.0	0.0	11.1		0.4

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	1	58	18	1	15	30	1214	54	17	606	24
Future Volume (veh/h)	103	1	58	18	1	15	30	1214	54	17	606	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	1	61	19	1	16	32	1278	57	18	638	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	1	133	45	2	41	403	2419	1077	22	1561	61
Arrive On Green	0.08	0.08	0.08	0.03	0.03	0.03	0.23	0.68	0.68	0.01	0.45	0.45
Sat Flow, veh/h	1766	16	1585	1696	89	1542	1781	3554	1583	1781	3486	136
Grp Volume(v), veh/h	109	0	61	20	0	16	32	1278	57	18	325	338
Grp Sat Flow(s),veh/h/ln	1782	0	1585	1786	0	1542	1781	1777	1583	1781	1777	1845
Q Serve(g_s), s	5.4	0.0	3.3	1.0	0.0	0.9	1.3	16.1	1.1	0.9	11.1	11.1
Cycle Q Clear(g_c), s	5.4	0.0	3.3	1.0	0.0	0.9	1.3	16.1	1.1	0.9	11.1	11.1
Prop In Lane	0.99		1.00	0.95		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	150	0	133	47	0	41	403	2419	1077	22	796	826
V/C Ratio(X)	0.73	0.00	0.46	0.42	0.00	0.39	0.08	0.53	0.05	0.84	0.41	0.41
Avail Cap(c_a), veh/h	317	0	282	159	0	137	403	2419	1077	158	796	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	39.3	43.1	0.0	43.1	27.4	7.2	4.8	44.4	16.8	16.8
Incr Delay (d2), s/veh	2.5	0.0	0.9	2.2	0.0	2.3	0.0	0.5	0.1	25.5	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.3	0.5	0.0	0.4	0.5	4.1	0.3	0.5	4.2	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	0.0	40.2	45.4	0.0	45.4	27.5	7.6	4.8	69.9	18.3	18.3
LnGrp LOS	D	A	D	D	A	D	C	A	A	E	B	B
Approach Vol, veh/h		170			36			1367			681	
Approach Delay, s/veh		41.8			45.4			8.0			19.7	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.1	46.0		6.4	5.1	67.0		11.6
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	* 40		8.0	8.0	40.3		16.0
Max Q Clear Time (g_c+I1), s	3.3	13.1		3.0	2.9	18.1		7.4
Green Ext Time (p_c), s	0.0	15.5		0.0	0.0	20.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	387	0	886	3	3	1	370	906	0	2	556	118
Future Volume (veh/h)	387	0	886	3	3	1	370	906	0	2	556	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	407	0	0	3	3	1	389	954	0	2	585	124
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	509	0		29	22	7	462	2276	0	7	1854	827
Arrive On Green	0.14	0.00	0.00	0.02	0.02	0.02	0.13	0.64	0.00	0.00	0.52	0.52
Sat Flow, veh/h	3563	0	1585	1781	1342	447	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	407	0	0	3	0	4	389	954	0	2	585	124
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1790	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	9.9	0.0	0.0	0.1	0.0	0.2	9.9	11.9	0.0	0.1	8.5	3.7
Cycle Q Clear(g_c), s	9.9	0.0	0.0	0.1	0.0	0.2	9.9	11.9	0.0	0.1	8.5	3.7
Prop In Lane	1.00		1.00	1.00		0.25	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	509	0		29	0	29	462	2276	0	7	1854	827
V/C Ratio(X)	0.80	0.00		0.10	0.00	0.14	0.84	0.42	0.00	0.30	0.32	0.15
Avail Cap(c_a), veh/h	910	0		238	0	239	499	2276	0	158	1854	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	0.0	0.0	43.6	0.0	43.7	38.0	7.9	0.0	44.7	12.3	11.2
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.6	0.0	0.8	10.7	0.6	0.0	8.7	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	0.1	0.0	0.1	4.8	4.2	0.0	0.1	2.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.0	0.0	44.2	0.0	44.5	48.7	8.5	0.0	53.5	12.5	11.3
LnGrp LOS	D	A		D	A	D	D	A	A	D	B	B
Approach Vol, veh/h		407	A		7			1343			711	
Approach Delay, s/veh		38.4			44.4			20.2			12.4	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	63.3		5.4	15.0	52.6		16.9
Change Period (Y+Rc), s	4.0	5.7		4.0	3.0	* 5.7		4.0
Max Green Setting (Gmax), s	8.0	29.3		12.0	13.0	* 26		23.0
Max Q Clear Time (g_c+I1), s	2.1	13.9		2.2	11.9	10.5		11.9
Green Ext Time (p_c), s	0.0	6.0		0.0	0.2	4.4		0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1	15	0	1	25	30	859	0	23	816	66
Future Volume (veh/h)	89	1	15	0	1	25	30	859	0	23	816	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	1	16	0	1	26	32	904	0	24	859	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	7	115	0	48	41	53	1334	595	42	1229	99
Arrive On Green	0.08	0.08	0.08	0.00	0.03	0.03	0.03	0.38	0.00	0.02	0.37	0.37
Sat Flow, veh/h	1781	94	1505	0	1870	1585	1781	3554	1585	1781	3331	268
Grp Volume(v), veh/h	94	0	17	0	1	26	32	904	0	24	458	470
Grp Sat Flow(s),veh/h/ln	1781	0	1599	0	1870	1585	1781	1777	1585	1781	1777	1822
Q Serve(g_s), s	2.1	0.0	0.4	0.0	0.0	0.7	0.7	8.5	0.0	0.5	8.8	8.8
Cycle Q Clear(g_c), s	2.1	0.0	0.4	0.0	0.0	0.7	0.7	8.5	0.0	0.5	8.8	8.8
Prop In Lane	1.00		0.94	0.00		1.00	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	137	0	123	0	48	41	53	1334	595	42	656	672
V/C Ratio(X)	0.69	0.00	0.14	0.00	0.02	0.63	0.60	0.68	0.00	0.58	0.70	0.70
Avail Cap(c_a), veh/h	977	0	877	0	1026	869	488	1772	790	488	886	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	17.3	0.0	19.0	19.4	19.2	10.5	0.0	19.4	10.8	10.8
Incr Delay (d2), s/veh	6.0	0.0	0.5	0.0	0.2	15.0	10.4	0.7	0.0	11.9	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.1	0.0	0.0	0.4	0.4	2.6	0.0	0.3	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	0.0	17.8	0.0	19.2	34.3	29.6	11.1	0.0	31.3	12.3	12.3
LnGrp LOS	C	A	B	A	B	C	C	B	A	C	B	B
Approach Vol, veh/h		111			27			936			952	
Approach Delay, s/veh		23.1			33.8			11.8			12.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	20.1		8.1	6.2	19.8		6.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.0	20.0		22.0	11.0	20.0		22.0
Max Q Clear Time (g_c+I1), s	2.5	10.5		4.1	2.7	10.8		2.7
Green Ext Time (p_c), s	0.0	4.3		0.3	0.0	4.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	0	45	52	1	63	68	613	11	43	525	96
Future Volume (veh/h)	93	0	45	52	1	63	68	613	11	43	525	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	0	47	55	1	66	72	645	12	45	553	101
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	544	0	242	257	3	226	156	1109	495	98	995	444
Arrive On Green	0.15	0.00	0.15	0.14	0.14	0.14	0.09	0.31	0.31	0.06	0.28	0.28
Sat Flow, veh/h	3563	0	1585	1781	24	1565	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	98	0	47	55	0	67	72	645	12	45	553	101
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1589	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.2	0.0	1.3	1.4	0.0	1.9	2.0	7.9	0.3	1.3	6.8	2.5
Cycle Q Clear(g_c), s	1.2	0.0	1.3	1.4	0.0	1.9	2.0	7.9	0.3	1.3	6.8	2.5
Prop In Lane	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	544	0	242	257	0	229	156	1109	495	98	995	444
V/C Ratio(X)	0.18	0.00	0.19	0.21	0.00	0.29	0.46	0.58	0.02	0.46	0.56	0.23
Avail Cap(c_a), veh/h	1383	0	615	691	0	617	415	2462	1098	415	2462	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	19.1	19.5	0.0	19.7	22.4	14.9	12.3	23.6	15.8	14.3
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.2	0.0	0.3	0.8	0.7	0.0	1.2	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.5	0.5	0.0	0.7	0.8	2.7	0.1	0.5	2.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	0.0	19.2	19.6	0.0	20.0	23.2	15.6	12.3	24.8	16.5	14.6
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		145			122			729			699	
Approach Delay, s/veh		19.1			19.8			16.3			16.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	21.4		11.4	8.5	19.7		11.9
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	12.0	35.7		20.0	12.0	35.7		20.0
Max Q Clear Time (g_c+I1), s	3.3	9.9		3.9	4.0	8.8		3.3
Green Ext Time (p_c), s	0.0	6.0		0.2	0.0	5.6		0.2

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	39	31	6	54	23
Future Volume (veh/h)	5	39	31	6	54	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	41	33	6	57	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	140	125	220	186	144	822
Arrive On Green	0.08	0.08	0.12	0.12	0.08	0.44
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	5	41	33	6	57	24
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	0.1	0.5	0.3	0.1	0.6	0.2
Cycle Q Clear(g_c), s	0.1	0.5	0.3	0.1	0.6	0.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	140	125	220	186	144	822
V/C Ratio(X)	0.04	0.33	0.15	0.03	0.40	0.03
Avail Cap(c_a), veh/h	1803	1605	1983	1681	601	3065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.8	9.0	8.2	8.1	9.1	3.3
Incr Delay (d2), s/veh	0.1	1.5	0.3	0.1	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.9	10.6	8.5	8.2	10.8	3.3
LnGrp LOS	A	B	A	A	B	A
Approach Vol, veh/h	46		39			81
Approach Delay, s/veh	10.4		8.5			8.6
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.7	7.4				14.1	6.6
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	7.0	22.0				34.0	21.0
Max Q Clear Time (g_c+I1), s	2.6	2.3				2.2	2.5
Green Ext Time (p_c), s	0.0	0.1				0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	563	17	51	619	12	39	7	21	7	49	9
Future Volume (veh/h)	4	563	17	51	619	12	39	7	21	7	49	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	593	18	54	652	13	46	0	22	7	52	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	1111	496	84	1267	565	199	0	89	10	78	13
Arrive On Green	0.00	0.31	0.31	0.05	0.36	0.36	0.06	0.00	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	187	1390	241
Grp Volume(v), veh/h	4	593	18	54	652	13	46	0	22	68	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1818	0	0
Q Serve(g_s), s	0.1	4.6	0.3	1.0	4.8	0.2	0.4	0.0	0.4	1.2	0.0	0.0
Cycle Q Clear(g_c), s	0.1	4.6	0.3	1.0	4.8	0.2	0.4	0.0	0.4	1.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.10		0.13
Lane Grp Cap(c), veh/h	6	1111	496	84	1267	565	199	0	89	102	0	0
V/C Ratio(X)	0.69	0.53	0.04	0.64	0.51	0.02	0.23	0.00	0.25	0.67	0.00	0.00
Avail Cap(c_a), veh/h	638	2789	1244	638	2789	1244	1594	0	709	759	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.7	9.5	8.0	15.7	8.5	7.0	15.1	0.0	15.1	15.5	0.0	0.0
Incr Delay (d2), s/veh	41.8	0.6	0.0	3.0	0.5	0.0	0.2	0.0	0.5	2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.1	0.1	0.4	1.0	0.0	0.1	0.0	0.1	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.5	10.1	8.0	18.7	9.0	7.0	15.3	0.0	15.7	18.3	0.0	0.0
LnGrp LOS	E	B	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		615			719			68			68	
Approach Delay, s/veh		10.3			9.7			15.5			18.3	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.9	5.6	16.2		5.9	4.1	17.7				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		14.0	12.0	26.3		15.0	12.0	26.3				
Max Q Clear Time (g_c+I1), s		3.2	3.0	6.6		2.4	2.1	6.8				
Green Ext Time (p_c), s		0.1	0.0	3.9		0.1	0.0	4.3				

Intersection Summary	
HCM 6th Ctrl Delay	10.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	366	150	28	377	13	52	6	16	22	25	81
Future Volume (veh/h)	41	366	150	28	377	13	52	6	16	22	25	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	385	158	29	397	14	59	0	17	23	26	85
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	1049	468	38	1020	455	214	0	95	162	170	144
Arrive On Green	0.03	0.30	0.30	0.02	0.29	0.29	0.06	0.00	0.06	0.09	0.09	0.09
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	1781	1870	1585
Grp Volume(v), veh/h	43	385	158	29	397	14	59	0	17	23	26	85
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	1585
Q Serve(g_s), s	0.8	2.9	2.7	0.6	3.1	0.2	0.5	0.0	0.4	0.4	0.4	1.8
Cycle Q Clear(g_c), s	0.8	2.9	2.7	0.6	3.1	0.2	0.5	0.0	0.4	0.4	0.4	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	1049	468	38	1020	455	214	0	95	162	170	144
V/C Ratio(X)	0.82	0.37	0.34	0.77	0.39	0.03	0.28	0.00	0.18	0.14	0.15	0.59
Avail Cap(c_a), veh/h	415	1964	876	415	1964	876	829	0	369	814	854	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	9.6	9.5	16.7	9.8	8.8	15.4	0.0	15.3	14.4	14.4	15.0
Incr Delay (d2), s/veh	11.1	0.3	0.6	11.6	0.3	0.0	0.3	0.0	0.3	0.6	0.6	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.6	0.3	0.8	0.1	0.2	0.0	0.1	0.1	0.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.7	9.9	10.1	28.4	10.2	8.9	15.7	0.0	15.7	14.9	15.0	20.3
LnGrp LOS	C	A	B	C	B	A	B	A	B	B	B	C
Approach Vol, veh/h		586			440			76			134	
Approach Delay, s/veh		11.2			11.3			15.7			18.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.1	4.7	15.9		7.7	5.0	15.6				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.6	4.0	5.7				
Max Green Setting (Gmax), s		8.0	8.0	19.0		15.7	8.0	19.0				
Max Q Clear Time (g_c+I1), s		2.5	2.6	4.9		3.8	2.8	5.1				
Green Ext Time (p_c), s		0.1	0.0	5.2		0.6	0.0	4.6				

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	268	60	17	290	3	33	7	2	0	7	23
Future Volume (veh/h)	77	268	60	17	290	3	33	7	2	0	7	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	282	63	18	305	3	35	7	2	0	7	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	1096	489	25	950	424	62	12	66	0	57	48
Arrive On Green	0.06	0.31	0.31	0.01	0.27	0.27	0.04	0.04	0.04	0.00	0.03	0.03
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1496	299	1585	0	1870	1585
Grp Volume(v), veh/h	81	282	63	18	305	3	42	0	2	0	7	24
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1796	0	1585	0	1870	1585
Q Serve(g_s), s	1.3	1.7	0.8	0.3	1.9	0.0	0.6	0.0	0.0	0.0	0.1	0.4
Cycle Q Clear(g_c), s	1.3	1.7	0.8	0.3	1.9	0.0	0.6	0.0	0.0	0.0	0.1	0.4
Prop In Lane	1.00		1.00	1.00		1.00	0.83		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	98	1096	489	25	950	424	74	0	66	0	57	48
V/C Ratio(X)	0.82	0.26	0.13	0.72	0.32	0.01	0.57	0.00	0.03	0.00	0.12	0.49
Avail Cap(c_a), veh/h	508	2405	1073	508	2152	960	1407	0	1242	0	1466	1242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	7.3	7.0	13.8	8.2	7.5	13.2	0.0	12.9	0.0	13.2	13.4
Incr Delay (d2), s/veh	6.4	0.2	0.2	13.6	0.3	0.0	7.9	0.0	0.2	0.0	1.1	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.3	0.2	0.2	0.4	0.0	0.4	0.0	0.0	0.0	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	7.5	7.2	27.4	8.5	7.6	21.1	0.0	13.1	0.0	14.4	22.5
LnGrp LOS	B	A	A	C	A	A	C	A	B	A	B	C
Approach Vol, veh/h		426			326			44			31	
Approach Delay, s/veh		9.7			9.6			20.7			20.7	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.9	4.4	13.7		5.2	5.5	12.5
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	4.0	5.0
Max Green Setting (Gmax), s		22.0	8.0	19.0		22.0	8.0	17.0
Max Q Clear Time (g_c+I1), s		2.4	2.3	3.7		2.6	3.3	3.9
Green Ext Time (p_c), s		0.1	0.0	4.0		0.1	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	154	123	3	192	68	61	12	5	28	56	13
Future Volume (veh/h)	26	154	123	3	192	68	61	12	5	28	56	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	162	129	3	202	72	73	0	5	29	59	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	820	470	7	627	280	233	0	104	48	97	125
Arrive On Green	0.02	0.23	0.23	0.00	0.18	0.18	0.07	0.00	0.07	0.08	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	606	1234	1585
Grp Volume(v), veh/h	27	162	129	3	202	72	73	0	5	88	0	14
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1840	0	1585
Q Serve(g_s), s	0.4	1.0	1.7	0.0	1.4	1.1	0.5	0.0	0.1	1.3	0.0	0.2
Cycle Q Clear(g_c), s	0.4	1.0	1.7	0.0	1.4	1.1	0.5	0.0	0.1	1.3	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.33		1.00
Lane Grp Cap(c), veh/h	36	820	470	7	627	280	233	0	104	145	0	125
V/C Ratio(X)	0.75	0.20	0.27	0.46	0.32	0.26	0.31	0.00	0.05	0.61	0.00	0.11
Avail Cap(c_a), veh/h	522	2342	1148	522	2212	986	3130	0	1393	539	0	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.3	8.5	7.4	13.6	9.8	9.7	12.2	0.0	12.0	12.2	0.0	11.7
Incr Delay (d2), s/veh	10.7	0.2	0.5	17.6	0.5	0.8	0.9	0.0	0.2	1.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.4	0.0	0.3	0.3	0.2	0.0	0.0	0.5	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	8.7	7.9	31.2	10.3	10.5	13.1	0.0	12.2	13.7	0.0	11.8
LnGrp LOS	C	A	A	C	B	B	B	A	B	B	A	B
Approach Vol, veh/h		318			277			78			102	
Approach Delay, s/veh		9.6			10.6			13.0			13.4	
Approach LOS		A			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.8	4.1	11.3		6.2	5.6	9.8				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	5.0	* 5				
Max Green Setting (Gmax), s		24.0	8.0	18.0		8.0	8.0	* 17				
Max Q Clear Time (g_c+I1), s		2.5	2.0	3.7		3.3	2.4	3.4				
Green Ext Time (p_c), s		0.3	0.0	1.6		0.1	0.0	1.5				

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	35	86	50	15	7	23	494	73	26	964	108
Future Volume (veh/h)	128	35	86	50	15	7	23	494	73	26	964	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1870	1870	1870	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	135	37	91	53	16	7	24	520	77	27	1015	114
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	329	66	163	377	78	34	47	1870	579	59	2150	666
Arrive On Green	0.19	0.14	0.14	0.11	0.06	0.06	0.03	0.39	0.39	0.03	0.39	0.39
Sat Flow, veh/h	1776	476	1172	3456	1232	539	1692	4849	1501	1931	5535	1714
Grp Volume(v), veh/h	135	0	128	53	0	23	24	520	77	27	1015	114
Grp Sat Flow(s),veh/h/ln	1776	0	1648	1728	0	1771	1692	1616	1501	1931	1845	1714
Q Serve(g_s), s	3.9	0.0	4.2	0.8	0.0	0.7	0.8	4.2	1.9	0.8	7.9	0.9
Cycle Q Clear(g_c), s	3.9	0.0	4.2	0.8	0.0	0.7	0.8	4.2	1.9	0.8	7.9	0.9
Prop In Lane	1.00		0.71	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	329	0	230	377	0	112	47	1870	579	59	2150	666
V/C Ratio(X)	0.41	0.00	0.56	0.14	0.00	0.20	0.51	0.28	0.13	0.46	0.47	0.17
Avail Cap(c_a), veh/h	329	0	572	660	0	686	235	2080	644	268	2374	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	0.0	23.1	23.2	0.0	25.6	27.6	12.2	11.5	27.5	13.2	1.6
Incr Delay (d2), s/veh	0.3	0.0	1.8	0.1	0.0	0.3	3.2	0.2	0.2	2.1	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	1.6	0.3	0.0	0.3	0.3	1.2	0.6	0.3	2.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	24.9	23.3	0.0	25.9	30.8	12.3	11.7	29.5	13.5	1.9
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	A
Approach Vol, veh/h		263			76			621			1156	
Approach Delay, s/veh		22.9			24.1			13.0			12.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	28.2	10.3	13.3	5.6	28.4	16.0	7.7
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	5.3	* 4
Max Green Setting (Gmax), s	8.0	24.7	11.0	20.0	8.0	24.7	10.0	* 22
Max Q Clear Time (g_c+I1), s	2.8	6.2	2.8	6.2	2.8	9.9	5.9	2.7
Green Ext Time (p_c), s	0.0	9.4	0.0	0.6	0.0	12.5	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	120	75	167	251	12	46	561	55	32	1049	33
Future Volume (veh/h)	35	120	75	167	251	12	46	561	55	32	1049	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	126	79	176	264	13	48	591	58	34	1104	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	478	213	223	304	15	81	3330	1034	61	3300	1024
Arrive On Green	0.03	0.13	0.13	0.06	0.17	0.17	0.05	1.00	1.00	0.02	0.65	0.65
Sat Flow, veh/h	1781	3554	1585	3456	1768	87	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	37	126	79	176	0	277	48	591	58	34	1104	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	0	1855	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	3.1	4.8	6.8	7.5	0.0	21.8	2.0	0.0	0.0	1.5	14.6	1.2
Cycle Q Clear(g_c), s	3.1	4.8	6.8	7.5	0.0	21.8	2.0	0.0	0.0	1.5	14.6	1.2
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	48	478	213	223	0	319	81	3330	1034	61	3300	1024
V/C Ratio(X)	0.78	0.26	0.37	0.79	0.00	0.87	0.59	0.18	0.06	0.56	0.33	0.03
Avail Cap(c_a), veh/h	166	988	441	369	0	540	276	3330	1034	276	3300	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.5	58.3	59.1	69.2	0.0	60.4	70.8	0.0	0.0	73.1	12.0	9.6
Incr Delay (d2), s/veh	9.6	0.4	1.4	2.4	0.0	9.7	2.6	0.1	0.1	3.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.2	2.8	3.4	0.0	11.1	0.9	0.0	0.0	0.7	5.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.1	58.7	60.6	71.5	0.0	70.1	73.3	0.1	0.1	76.1	12.1	9.6
LnGrp LOS	F	E	E	E	A	E	E	A	A	E	B	A
Approach Vol, veh/h		242			453			697			1173	
Approach Delay, s/veh		62.9			70.7			5.2			13.8	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	104.2	13.7	25.5	7.5	103.3	8.0	31.1
Change Period (Y+Rc), s	4.0	* 6.4	4.0	5.3	4.0	6.4	4.0	5.3
Max Green Setting (Gmax), s	12.0	* 62	16.0	41.7	12.0	60.6	14.0	43.7
Max Q Clear Time (g_c+I1), s	3.5	2.0	9.5	8.8	4.0	16.6	5.1	23.8
Green Ext Time (p_c), s	0.0	11.3	0.2	1.4	0.0	15.6	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	26.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	21	120	145	39	58	121	686	147	40	1219	28
Future Volume (veh/h)	18	21	120	145	39	58	121	686	147	40	1219	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	0	141	156	38	61	127	722	155	42	1283	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	0	188	274	50	80	173	2757	978	667	3488	1083
Arrive On Green	0.06	0.00	0.06	0.08	0.08	0.08	0.10	1.00	1.00	0.19	0.68	0.68
Sat Flow, veh/h	1781	0	3170	3563	646	1037	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	19	0	141	156	0	99	127	722	155	42	1283	29
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1684	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	1.5	0.0	6.6	6.3	0.0	8.7	5.4	0.0	0.0	1.5	16.0	0.9
Cycle Q Clear(g_c), s	1.5	0.0	6.6	6.3	0.0	8.7	5.4	0.0	0.0	1.5	16.0	0.9
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	0	188	274	0	129	173	2757	978	667	3488	1083
V/C Ratio(X)	0.18	0.00	0.75	0.57	0.00	0.77	0.73	0.26	0.16	0.06	0.37	0.03
Avail Cap(c_a), veh/h	222	0	395	563	0	266	346	2757	978	667	3488	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.1	0.0	69.4	66.9	0.0	67.9	66.5	0.0	0.0	49.4	10.1	7.7
Incr Delay (d2), s/veh	0.8	0.0	5.8	1.9	0.0	9.1	5.9	0.2	0.3	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	2.8	3.0	0.0	4.1	2.4	0.1	0.1	0.6	5.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	0.0	75.3	68.7	0.0	77.0	72.4	0.2	0.3	49.5	10.2	7.7
LnGrp LOS	E	A	E	E	A	E	E	A	A	D	B	A
Approach Vol, veh/h		160			255			1004			1354	
Approach Delay, s/veh		74.4			71.9			9.4			11.3	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.0	86.0		14.2	12.5	106.5		16.8				
Change Period (Y+Rc), s	4.0	5.0		5.3	5.0	4.0		5.3				
Max Green Setting (Gmax), s	7.0	81.0		18.7	15.0	73.0		23.7				
Max Q Clear Time (g_c+I1), s	3.5	2.0		8.6	7.4	18.0		10.7				
Green Ext Time (p_c), s	0.0	6.1		0.4	0.2	20.6		0.9				

Intersection Summary			
HCM 6th Ctrl Delay			19.8
HCM 6th LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	457	0	0	469	400	929	0	0	1439	43
Future Volume (vph)	0	0	457	0	0	469	400	929	0	0	1439	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			4.0	4.0	5.0			5.0	5.0
Lane Util. Factor			1.00			1.00	0.97	0.91			0.91	1.00
Frt			0.86			0.86	1.00	1.00			1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1611			1611	3433	5085			5085	1583
Flt Permitted			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)			1611			1611	3433	5085			5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	481	0	0	494	421	978	0	0	1515	45
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	14
Lane Group Flow (vph)	0	0	481	0	0	494	421	978	0	0	1515	31
Turn Type			Free			Free	Prot	NA			NA	Perm
Protected Phases							5	2			6	
Permitted Phases			Free			Free						6
Actuated Green, G (s)			75.0			75.0	14.3	75.0			51.7	51.7
Effective Green, g (s)			75.0			75.0	14.3	75.0			51.7	51.7
Actuated g/C Ratio			1.00			1.00	0.19	1.00			0.69	0.69
Clearance Time (s)							4.0	5.0			5.0	5.0
Vehicle Extension (s)							3.0	3.0			3.0	3.0
Lane Grp Cap (vph)			1611			1611	654	5085			3505	1091
v/s Ratio Prot							c0.12	0.19			c0.30	
v/s Ratio Perm			0.30			0.31						0.02
v/c Ratio			0.30			0.31	0.64	0.19			0.43	0.03
Uniform Delay, d1			0.0			0.0	28.0	0.0			5.2	3.7
Progression Factor			1.00			1.00	1.06	1.00			0.78	0.30
Incremental Delay, d2			0.5			0.5	2.0	0.1			0.4	0.0
Delay (s)			0.5			0.5	31.6	0.1			4.4	1.2
Level of Service			A			A	C	A			A	A
Approach Delay (s)		0.5			0.5			9.6			4.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	888	0	0	194	0	1135	178	828	1068	0
Future Volume (vph)	0	0	888	0	0	194	0	1135	178	828	1068	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.3			4.0		5.7	5.7	5.7	5.7	
Lane Util. Factor			0.88			1.00		0.91	1.00	0.97	0.91	
Frt			0.85			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			2787			1611		5085	1583	3433	5085	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			2787			1611		5085	1583	3433	5085	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	935	0	0	204	0	1195	187	872	1124	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	27	0	0	0
Lane Group Flow (vph)	0	0	935	0	0	204	0	1195	160	872	1124	0
Turn Type			Perm			Free		NA	Perm	Prot	NA	
Protected Phases								2		1	6	
Permitted Phases			5			Free			2			
Actuated Green, G (s)			61.8			150.0		79.3	79.3	59.3	77.2	
Effective Green, g (s)			61.8			150.0		79.3	79.3	59.3	77.2	
Actuated g/C Ratio			0.41			1.00		0.53	0.53	0.40	0.51	
Clearance Time (s)			5.3					5.7	5.7	5.7	5.7	
Vehicle Extension (s)			3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)			1148			1611		2688	836	1357	2617	
v/s Ratio Prot								0.23		c0.25	c0.22	
v/s Ratio Perm			c0.34			0.13			0.10			
v/c Ratio			0.81			0.13		0.44	0.19	0.64	0.43	
Uniform Delay, d1			39.0			0.0		21.8	18.5	36.8	22.7	
Progression Factor			1.00			1.00		0.55	0.33	0.60	0.76	
Incremental Delay, d2			4.5			0.2		0.5	0.5	1.0	0.5	
Delay (s)			43.6			0.2		12.4	6.7	23.1	17.7	
Level of Service			D			A		B	A	C	B	
Approach Delay (s)		43.6			0.2			11.7			20.0	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	11.4
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	2	1	5	4	5	16	19	0	1	8	9
Future Volume (veh/h)	1	2	1	5	4	5	16	19	0	1	8	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	2	1	5	4	5	17	20	0	1	8	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	4	2	7	6	7	24	702	0	8	149	167
Arrive On Green	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.20	0.00	0.00	0.18	0.18
Sat Flow, veh/h	442	884	442	617	494	617	1781	3647	0	1781	804	904
Grp Volume(v), veh/h	4	0	0	14	0	0	17	20	0	1	0	17
Grp Sat Flow(s),veh/h/ln	1769	0	0	1728	0	0	1781	1777	0	1781	0	1708
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2
Prop In Lane	0.25		0.25	0.36		0.36	1.00		0.00	1.00		0.53
Lane Grp Cap(c), veh/h	8	0	0	19	0	0	24	702	0	8	0	316
V/C Ratio(X)	0.49	0.00	0.00	0.72	0.00	0.00	0.71	0.03	0.00	0.12	0.00	0.05
Avail Cap(c_a), veh/h	1308	0	0	639	0	0	659	986	0	659	0	474
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.7	0.0	0.0	10.7	0.0	0.0	10.6	7.0	0.0	10.8	0.0	7.3
Incr Delay (d2), s/veh	38.9	0.0	0.0	17.2	0.0	0.0	13.3	0.0	0.0	2.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.7	0.0	0.0	27.9	0.0	0.0	23.9	7.0	0.0	13.2	0.0	7.3
LnGrp LOS	D	A	A	C	A	A	C	A	A	B	A	A
Approach Vol, veh/h		4			14			37			18	
Approach Delay, s/veh		49.7			27.9			14.8			7.6	
Approach LOS		D			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.0	8.3		4.2	4.3	8.0		5.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		5.0
Max Green Setting (Gmax), s	8.0	6.0		8.0	8.0	6.0		16.0
Max Q Clear Time (g_c+I1), s	2.0	2.1		2.2	2.2	2.2		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 6th Ctrl Delay		17.4
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	8	5	51	7	74	17	1110	74	320	1232	222
Future Volume (veh/h)	49	8	5	51	7	74	17	1110	74	320	1232	222
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	52	8	0	54	7	0	18	1168	0	337	1297	234
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	5	5	5
Cap, veh/h	131	46		131	46		47	2514		399	3034	937
Arrive On Green	0.02	0.02	0.00	0.02	0.02	0.00	0.01	0.50	0.00	0.24	1.00	1.00
Sat Flow, veh/h	5344	1870	1585	5344	1870	1585	3374	4985	1547	3374	4985	1540
Grp Volume(v), veh/h	52	8	0	54	7	0	18	1168	0	337	1297	234
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1687	1662	1547	1687	1662	1540
Q Serve(g_s), s	1.4	0.6	0.0	1.5	0.5	0.0	0.8	22.8	0.0	14.3	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.6	0.0	1.5	0.5	0.0	0.8	22.8	0.0	14.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	46		131	46		47	2514		399	3034	937
V/C Ratio(X)	0.40	0.17		0.41	0.15		0.38	0.46		0.84	0.43	0.25
Avail Cap(c_a), veh/h	499	175		467	163		292	2514		720	3034	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.1	71.7	0.0	72.1	71.6	0.0	73.3	24.1	0.0	55.9	0.0	0.0
Incr Delay (d2), s/veh	1.9	1.8	0.0	2.8	2.1	0.0	1.8	0.2	0.0	1.9	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.3	0.0	0.7	0.3	0.0	0.4	8.8	0.0	5.4	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.0	73.5	0.0	74.9	73.7	0.0	75.1	24.3	0.0	57.8	0.4	0.6
LnGrp LOS	E	E		E	E		E	C		E	A	A
Approach Vol, veh/h		60	A		61	A		1186	A		1868	
Approach Delay, s/veh		73.9			74.8			25.1			10.8	
Approach LOS		E			E			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.8	81.4		8.6	6.1	97.0		7.7
Change Period (Y+Rc), s	4.0	5.7		4.9	4.0	5.7		4.0
Max Green Setting (Gmax), s	32.0	72.3		13.1	13.0	91.3		14.0
Max Q Clear Time (g_c+I1), s	16.3	24.8		3.5	2.8	2.0		3.4
Green Ext Time (p_c), s	1.5	34.9		0.2	0.0	65.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	0	240	4	1	3	344	1073	2	6	950	116
Future Volume (veh/h)	88	0	240	4	1	3	344	1073	2	6	950	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	0	27	4	1	0	362	1129	2	6	1000	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	0	220	19	5	21	225	1918	3	14	1451	647
Arrive On Green	0.14	0.00	0.14	0.01	0.01	0.00	0.13	0.53	0.53	0.01	0.41	0.41
Sat Flow, veh/h	1781	0	1585	1439	360	1585	1781	3640	6	1781	3554	1585
Grp Volume(v), veh/h	93	0	27	5	0	0	362	551	580	6	1000	62
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1798	0	1585	1781	1777	1869	1781	1777	1585
Q Serve(g_s), s	3.0	0.0	0.9	0.2	0.0	0.0	8.0	13.5	13.5	0.2	14.7	1.5
Cycle Q Clear(g_c), s	3.0	0.0	0.9	0.2	0.0	0.0	8.0	13.5	13.5	0.2	14.7	1.5
Prop In Lane	1.00		1.00	0.80		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	0	220	24	0	21	225	936	985	14	1451	647
V/C Ratio(X)	0.38	0.00	0.12	0.21	0.00	0.00	1.61	0.59	0.59	0.43	0.69	0.10
Avail Cap(c_a), veh/h	563	0	501	569	0	501	225	1410	1483	225	2820	1258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	23.9	30.9	0.0	0.0	27.6	10.3	10.3	31.2	15.4	11.5
Incr Delay (d2), s/veh	0.4	0.0	0.1	1.6	0.0	0.0	292.8	0.9	0.8	7.4	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.3	0.1	0.0	0.0	21.4	4.0	4.2	0.1	4.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.1	0.0	23.9	32.5	0.0	0.0	320.4	11.1	11.1	38.6	16.3	11.6
LnGrp LOS	C	A	C	C	A	A	F	B	B	D	B	B
Approach Vol, veh/h		120			5			1493			1068	
Approach Delay, s/veh		24.8			32.5			86.1			16.1	
Approach LOS		C			C			F			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	39.3		5.7	12.0	31.8		13.7
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.9
Max Green Setting (Gmax), s	8.0	50.2		20.0	8.0	50.2		20.0
Max Q Clear Time (g_c+I1), s	2.2	15.5		2.2	10.0	16.7		5.0
Green Ext Time (p_c), s	0.0	9.2		0.0	0.0	9.2		0.2

Intersection Summary	
HCM 6th Ctrl Delay	55.5
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	14	382	4	5	6	172	1261	13	5	931	266
Future Volume (veh/h)	150	14	382	4	5	6	172	1261	13	5	931	266
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	169	0	402	4	5	6	181	1327	14	5	980	280
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1017	0	452	11	14	22	256	1780	19	7	1506	672
Arrive On Green	0.29	0.00	0.29	0.01	0.01	0.01	0.07	0.49	0.49	0.00	0.42	0.42
Sat Flow, veh/h	3563	0	1585	813	1017	1585	3456	3602	38	1781	3554	1585
Grp Volume(v), veh/h	169	0	402	9	0	6	181	654	687	5	980	280
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1830	0	1585	1728	1777	1864	1781	1777	1585
Q Serve(g_s), s	3.1	0.0	21.0	0.4	0.0	0.3	4.4	25.5	25.5	0.2	19.0	10.7
Cycle Q Clear(g_c), s	3.1	0.0	21.0	0.4	0.0	0.3	4.4	25.5	25.5	0.2	19.0	10.7
Prop In Lane	1.00		1.00	0.44		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	1017	0	452	26	0	22	256	878	921	7	1506	672
V/C Ratio(X)	0.17	0.00	0.89	0.35	0.00	0.27	0.71	0.75	0.75	0.71	0.65	0.42
Avail Cap(c_a), veh/h	1237	0	550	635	0	550	320	1121	1176	165	2201	982
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	29.5	42.2	0.0	42.2	39.1	17.5	17.5	43.0	19.8	17.4
Incr Delay (d2), s/veh	0.1	0.0	14.3	8.0	0.0	6.4	3.3	3.3	3.2	39.6	1.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	9.6	0.2	0.0	0.2	1.9	10.0	10.4	0.2	7.3	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	0.0	43.8	50.2	0.0	48.5	42.4	20.8	20.7	82.6	20.9	18.3
LnGrp LOS	C	A	D	D	A	D	D	C	C	F	C	B
Approach Vol, veh/h		571			15			1522			1265	
Approach Delay, s/veh		37.7			49.5			23.3			20.6	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	48.2		5.2	10.4	42.1		28.7
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		4.0
Max Green Setting (Gmax), s	8.0	54.5		30.0	8.0	53.5		30.0
Max Q Clear Time (g_c+I1), s	2.2	27.5		2.4	6.4	21.0		23.0
Green Ext Time (p_c), s	0.0	15.2		0.0	0.1	15.6		1.7

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	224	521	928	518	687	491
Future Volume (veh/h)	224	521	928	518	687	491
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	236	548	977	545	723	517
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	328	1270	1381	616	748	2422
Arrive On Green	0.18	0.18	0.39	0.39	0.22	0.68
Sat Flow, veh/h	1781	3170	3647	1585	3456	3647
Grp Volume(v), veh/h	236	548	977	545	723	517
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1728	1777
Q Serve(g_s), s	8.6	0.0	16.1	22.2	14.4	3.8
Cycle Q Clear(g_c), s	8.6	0.0	16.1	22.2	14.4	3.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	328	1270	1381	616	748	2422
V/C Ratio(X)	0.72	0.43	0.71	0.88	0.97	0.21
Avail Cap(c_a), veh/h	617	1784	1420	633	748	2422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	15.1	17.9	19.7	26.9	4.1
Incr Delay (d2), s/veh	1.1	0.1	1.7	14.2	24.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	6.3	9.8	8.2	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.7	15.1	19.6	33.9	51.7	4.2
LnGrp LOS	C	B	B	C	D	A
Approach Vol, veh/h	784		1522			1240
Approach Delay, s/veh	18.9		24.7			31.9
Approach LOS	B		C			C

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			52.5		16.8	20.3	32.2
Change Period (Y+Rc), s			5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s			46.7		24.0	15.0	* 28
Max Q Clear Time (g_c+I1), s			5.8		10.6	16.4	24.2
Green Ext Time (p_c), s			3.3		2.1	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	14	28	32	20	40	27	1117	0	74	540	65
Future Volume (veh/h)	327	14	28	32	20	40	27	1117	0	74	540	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	382	0	0	34	21	42	28	1176	0	78	568	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	520	273	0	60	37	85	33	1614	0	100	1571	188
Arrive On Green	0.15	0.00	0.00	0.05	0.05	0.05	0.02	0.45	0.00	0.06	0.49	0.49
Sat Flow, veh/h	3563	1870	0	1122	693	1585	1781	3647	0	1781	3197	382
Grp Volume(v), veh/h	382	0	0	55	0	42	28	1176	0	78	315	321
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1814	0	1585	1781	1777	0	1781	1777	1802
Q Serve(g_s), s	6.1	0.0	0.0	1.8	0.0	1.5	0.9	16.1	0.0	2.6	6.5	6.6
Cycle Q Clear(g_c), s	6.1	0.0	0.0	1.8	0.0	1.5	0.9	16.1	0.0	2.6	6.5	6.6
Prop In Lane	1.00		0.00	0.62		1.00	1.00		0.00	1.00		0.21
Lane Grp Cap(c), veh/h	520	273	0	97	0	85	33	1614	0	100	873	885
V/C Ratio(X)	0.74	0.00	0.00	0.57	0.00	0.49	0.84	0.73	0.00	0.78	0.36	0.36
Avail Cap(c_a), veh/h	1136	596	0	579	0	505	239	1915	0	239	945	959
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	0.0	0.0	27.5	0.0	27.4	29.1	13.3	0.0	27.8	9.4	9.4
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.9	0.0	1.6	18.4	1.4	0.0	5.0	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	0.8	0.0	0.6	0.5	5.5	0.0	1.2	2.1	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.1	0.0	0.0	29.4	0.0	29.1	47.5	14.7	0.0	32.7	9.6	9.6
LnGrp LOS	C	A	A	C	A	C	D	B	A	C	A	A
Approach Vol, veh/h		382			97			1204			714	
Approach Delay, s/veh		25.1			29.3			15.5			12.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	32.4		7.2	5.1	34.6		12.7
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	* 32		19.0	8.0	31.7		19.0
Max Q Clear Time (g_c+I1), s	4.6	18.1		3.8	2.9	8.6		8.1
Green Ext Time (p_c), s	0.0	9.0		0.1	0.0	4.2		0.6

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	7	19	36	2	7	25	1134	7	12	557	25
Future Volume (veh/h)	46	7	19	36	2	7	25	1134	7	12	557	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	7	20	38	2	7	26	1194	7	13	586	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	12	87	67	4	63	416	1852	11	18	927	41
Arrive On Green	0.05	0.05	0.05	0.04	0.04	0.04	0.23	0.51	0.51	0.01	0.27	0.27
Sat Flow, veh/h	1564	228	1585	1696	89	1585	1781	3622	21	1781	3466	154
Grp Volume(v), veh/h	55	0	20	40	0	7	26	586	615	13	300	312
Grp Sat Flow(s),veh/h/ln	1792	0	1585	1786	0	1585	1781	1777	1867	1781	1777	1843
Q Serve(g_s), s	1.3	0.0	0.5	1.0	0.0	0.2	0.5	10.6	10.6	0.3	6.5	6.6
Cycle Q Clear(g_c), s	1.3	0.0	0.5	1.0	0.0	0.2	0.5	10.6	10.6	0.3	6.5	6.6
Prop In Lane	0.87		1.00	0.95		1.00	1.00		0.01	1.00		0.08
Lane Grp Cap(c), veh/h	98	0	87	71	0	63	416	909	954	18	475	493
V/C Ratio(X)	0.56	0.00	0.23	0.56	0.00	0.11	0.06	0.64	0.64	0.73	0.63	0.63
Avail Cap(c_a), veh/h	815	0	721	812	0	721	648	1176	1235	324	691	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	19.9	20.7	0.0	20.4	13.1	7.8	7.8	21.7	14.2	14.2
Incr Delay (d2), s/veh	1.9	0.0	0.5	2.6	0.0	0.3	0.0	1.2	1.1	18.8	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.4	0.0	0.1	0.2	2.8	2.9	0.2	2.4	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.2	0.0	20.4	23.3	0.0	20.6	13.1	9.0	9.0	40.5	16.3	16.2
LnGrp LOS	C	A	C	C	A	C	B	A	A	D	B	B
Approach Vol, veh/h		75			47			1227			625	
Approach Delay, s/veh		21.7			22.9			9.1			16.8	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	27.4		5.7	15.2	16.7		6.4
Change Period (Y+Rc), s	4.0	4.9		4.0	4.9	* 4.9		4.0
Max Green Setting (Gmax), s	8.0	29.1		20.0	16.0	* 17		20.0
Max Q Clear Time (g_c+I1), s	2.3	12.6		3.0	2.5	8.6		3.3
Green Ext Time (p_c), s	0.0	9.9		0.1	0.0	3.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	16	111	352	16	321	503
Future Volume (veh/h)	16	111	352	16	321	503
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	117	371	17	338	529
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	637	292	1380	428	412	3029
Arrive On Green	0.18	0.18	0.27	0.27	0.23	0.59
Sat Flow, veh/h	3456	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	17	117	371	17	338	529
Grp Sat Flow(s),veh/h/ln	1728	1585	1702	1585	1781	1702
Q Serve(g_s), s	0.2	2.8	2.5	0.3	7.8	2.0
Cycle Q Clear(g_c), s	0.2	2.8	2.5	0.3	7.8	2.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	637	292	1380	428	412	3029
V/C Ratio(X)	0.03	0.40	0.27	0.04	0.82	0.17
Avail Cap(c_a), veh/h	1587	728	3552	1103	654	5896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.6	15.7	12.5	11.7	15.9	4.0
Incr Delay (d2), s/veh	0.0	0.3	0.2	0.1	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.8	0.7	0.1	2.5	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.6	16.0	12.7	11.8	18.1	4.1
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	134		388			867
Approach Delay, s/veh	15.8		12.6			9.5
Approach LOS	B		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.1	17.5				31.5	12.0
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0
Max Green Setting (Gmax), s	16.0	30.3				50.3	20.0
Max Q Clear Time (g_c+I1), s	9.8	4.5				4.0	4.8
Green Ext Time (p_c), s	0.4	7.3				13.4	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	305	32	276	304	76	29	4	39	92	4	12
Future Volume (veh/h)	69	305	32	276	304	76	29	4	39	92	4	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	321	34	291	320	80	31	4	41	100	0	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	794	82	301	1193	370	212	27	212	582	0	259
Arrive On Green	0.10	0.17	0.17	0.17	0.23	0.23	0.13	0.13	0.13	0.16	0.00	0.16
Sat Flow, veh/h	1781	4699	488	1781	5106	1585	1586	205	1585	3563	0	1585
Grp Volume(v), veh/h	73	231	124	291	320	80	35	0	41	100	0	13
Grp Sat Flow(s),veh/h/ln	1781	1702	1783	1781	1702	1585	1791	0	1585	1781	0	1585
Q Serve(g_s), s	1.8	2.9	2.9	7.7	2.4	1.9	0.8	0.0	1.1	1.1	0.0	0.3
Cycle Q Clear(g_c), s	1.8	2.9	2.9	7.7	2.4	1.9	0.8	0.0	1.1	1.1	0.0	0.3
Prop In Lane	1.00		0.27	1.00		1.00	0.89		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	575	301	301	1193	370	239	0	212	582	0	259
V/C Ratio(X)	0.39	0.40	0.41	0.97	0.27	0.22	0.15	0.00	0.19	0.17	0.00	0.05
Avail Cap(c_a), veh/h	752	2207	1156	301	1908	592	378	0	335	752	0	335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	17.5	17.6	19.5	14.8	14.6	18.1	0.0	18.3	17.1	0.0	16.7
Incr Delay (d2), s/veh	0.5	0.9	1.8	42.6	0.2	0.6	0.1	0.0	0.2	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.0	1.2	6.2	0.8	0.6	0.3	0.0	0.4	0.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	18.5	19.4	62.2	15.1	15.2	18.2	0.0	18.4	17.1	0.0	16.7
LnGrp LOS	C	B	B	E	B	B	B	A	B	B	A	B
Approach Vol, veh/h		428			691			76			113	
Approach Delay, s/veh		19.1			34.9			18.3			17.1	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	13.3		11.7	8.9	16.4		10.3
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	30.7		10.0	20.0	17.7		10.0
Max Q Clear Time (g_c+I1), s	9.7	4.9		3.1	3.8	4.4		3.1
Green Ext Time (p_c), s	0.0	3.0		0.1	0.1	2.7		0.1

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	718	231	35	291	59	367	421	84	44	230	59
Future Volume (veh/h)	228	718	231	35	291	59	367	421	84	44	230	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	2145	2145	2145
Adj Flow Rate, veh/h	240	756	243	37	306	62	386	443	88	46	242	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1106	493	105	803	358	429	1504	467	138	710	221
Arrive On Green	0.14	0.31	0.31	0.06	0.23	0.23	0.24	0.29	0.29	0.07	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	2043	5857	1818
Grp Volume(v), veh/h	240	756	243	37	306	62	386	443	88	46	242	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	2043	1952	1818
Q Serve(g_s), s	9.3	12.9	8.7	1.4	5.1	2.2	14.6	4.7	2.9	1.5	2.6	2.2
Cycle Q Clear(g_c), s	9.3	12.9	8.7	1.4	5.1	2.2	14.6	4.7	2.9	1.5	2.6	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	1106	493	105	803	358	429	1504	467	138	710	221
V/C Ratio(X)	0.94	0.68	0.49	0.35	0.38	0.17	0.90	0.29	0.19	0.33	0.34	0.28
Avail Cap(c_a), veh/h	256	1218	543	205	1095	488	462	2940	913	294	2698	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	20.9	19.5	31.4	22.8	21.7	25.5	18.9	18.3	30.9	28.0	27.8
Incr Delay (d2), s/veh	38.7	2.0	1.6	0.8	0.5	0.4	18.6	0.2	0.3	0.5	0.4	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	5.3	3.1	0.6	2.1	0.8	7.8	1.7	1.0	0.7	1.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.1	22.9	21.0	32.2	23.2	22.0	44.1	19.1	18.6	31.4	28.4	28.9
LnGrp LOS	E	C	C	C	C	C	D	B	B	C	C	C
Approach Vol, veh/h		1239			405			917			350	
Approach Delay, s/veh		31.3			23.9			29.6			28.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	26.9	20.7	13.7	14.0	21.0	8.7	25.8
Change Period (Y+Rc), s	4.0	* 5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	8.0	* 24	18.0	32.0	10.0	21.4	10.0	40.0
Max Q Clear Time (g_c+I1), s	3.4	14.9	16.6	4.6	11.3	7.1	3.5	6.7
Green Ext Time (p_c), s	0.0	6.7	0.2	3.8	0.0	3.7	0.0	5.9

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	1	6	21	5	80	36	846	37	117	313	7
Future Volume (veh/h)	9	1	6	21	5	80	36	846	37	117	313	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1988	1988	1988	1870	1945	1870	2145	2231	2145
Adj Flow Rate, veh/h	9	1	6	22	5	84	38	891	39	123	329	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	6	57	203	46	360	88	1412	62	171	2593	774
Arrive On Green	0.04	0.04	0.04	0.13	0.13	0.13	0.05	0.39	0.39	0.08	0.43	0.43
Sat Flow, veh/h	1611	179	1585	1556	354	1682	1781	3605	158	2043	6091	1818
Grp Volume(v), veh/h	10	0	6	27	0	84	38	457	473	123	329	7
Grp Sat Flow(s),veh/h/ln	1790	0	1585	1910	0	1682	1781	1848	1915	2043	2030	1818
Q Serve(g_s), s	0.3	0.0	0.2	0.6	0.0	2.0	1.0	9.6	9.6	2.8	1.6	0.1
Cycle Q Clear(g_c), s	0.3	0.0	0.2	0.6	0.0	2.0	1.0	9.6	9.6	2.8	1.6	0.1
Prop In Lane	0.90		1.00	0.81		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	64	0	57	249	0	360	88	724	750	171	2593	774
V/C Ratio(X)	0.16	0.00	0.11	0.11	0.00	0.23	0.43	0.63	0.63	0.72	0.13	0.01
Avail Cap(c_a), veh/h	334	0	296	819	0	862	295	804	833	339	2776	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	0.0	22.5	18.5	0.0	15.7	22.3	11.9	11.9	21.6	8.4	8.0
Incr Delay (d2), s/veh	0.4	0.0	0.3	0.1	0.0	0.1	1.2	2.3	2.2	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.2	0.0	0.6	0.4	3.4	3.5	1.3	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	0.0	22.8	18.6	0.0	15.8	23.5	14.2	14.1	23.7	8.5	8.0
LnGrp LOS	C	A	C	B	A	B	C	B	B	C	A	A
Approach Vol, veh/h		16			111			968			459	
Approach Delay, s/veh		22.9			16.5			14.5			12.5	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.7	6.4	25.9		10.3	8.0	24.2				
Change Period (Y+Rc), s		4.0	4.0	5.3		4.0	4.0	5.3				
Max Green Setting (Gmax), s		9.0	8.0	22.0		20.7	8.0	21.0				
Max Q Clear Time (g_c+I1), s		2.3	3.0	3.6		4.0	4.8	11.6				
Green Ext Time (p_c), s		0.0	0.0	4.8		0.2	0.1	7.2				

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	170	744	9	34	348
Future Volume (veh/h)	9	170	744	9	34	348
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	179	783	9	36	366
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	354	315	1268	15	106	1893
Arrive On Green	0.20	0.20	0.35	0.35	0.06	0.53
Sat Flow, veh/h	1781	1585	3692	41	1781	3647
Grp Volume(v), veh/h	9	179	387	405	36	366
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1863	1781	1777
Q Serve(g_s), s	0.1	3.4	6.0	6.0	0.6	1.8
Cycle Q Clear(g_c), s	0.1	3.4	6.0	6.0	0.6	1.8
Prop In Lane	1.00	1.00		0.02	1.00	
Lane Grp Cap(c), veh/h	354	315	626	657	106	1893
V/C Ratio(X)	0.03	0.57	0.62	0.62	0.34	0.19
Avail Cap(c_a), veh/h	1086	966	1072	1124	430	3314
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	12.0	8.9	8.9	15.0	4.0
Incr Delay (d2), s/veh	0.0	0.6	1.4	1.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	1.5	1.6	0.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.7	12.6	10.2	10.2	15.7	4.1
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	188		792			402
Approach Delay, s/veh	12.5		10.2			5.1
Approach LOS	B		B			A

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			22.6		10.6	6.0	16.6
Change Period (Y+Rc), s			4.9		4.0	4.0	* 4.9
Max Green Setting (Gmax), s			30.9		20.2	8.0	* 20
Max Q Clear Time (g_c+I1), s			3.8		5.4	2.6	8.0
Green Ext Time (p_c), s			1.5		0.4	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	14	0	22	0	1511	26	12	1179	0
Future Volume (veh/h)	0	0	0	14	0	22	0	1511	26	12	1179	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	15	0	23	0	1591	27	13	1241	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	4	3	58	0	51	3	2552	43	18	2840	1267
Arrive On Green	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.71	0.71	0.01	0.80	0.00
Sat Flow, veh/h	0	1870	1585	1781	0	1585	1781	3576	61	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	15	0	23	0	790	828	13	1241	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	0	1585	1781	1777	1859	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.4	0.0	0.8	0.0	12.1	12.2	0.4	5.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.4	0.0	0.8	0.0	12.1	12.2	0.4	5.7	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	0	4	3	58	0	51	3	1268	1327	18	2840	1267
V/C Ratio(X)	0.00	0.00	0.00	0.26	0.00	0.45	0.00	0.62	0.62	0.74	0.44	0.00
Avail Cap(c_a), veh/h	0	849	720	809	0	720	371	1583	1657	270	2840	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	25.0	0.0	25.1	0.0	3.9	3.9	26.1	1.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	2.3	0.0	1.4	1.3	20.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.3	0.0	1.7	1.8	0.2	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	25.8	0.0	27.4	0.0	5.3	5.2	46.1	1.9	0.0
LnGrp LOS	A	A	A	C	A	C	A	A	A	D	A	A
Approach Vol, veh/h		0			38			1618			1254	
Approach Delay, s/veh		0.0			26.8			5.3			2.3	
Approach LOS					C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	42.6		5.7	0.0	47.2		0.0
Change Period (Y+Rc), s	4.0	4.9		4.0	5.0	4.9		4.0
Max Green Setting (Gmax), s	8.0	47.1		24.0	11.0	38.1		24.0
Max Q Clear Time (g_c+I1), s	2.4	14.2		2.8	0.0	7.7		0.0
Green Ext Time (p_c), s	0.0	23.6		0.0	0.0	15.9		0.0

Intersection Summary		
HCM 6th Ctrl Delay		4.3
HCM 6th LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	23	33	41	31	64	16	1458	36	52	1082	32
Future Volume (veh/h)	44	23	33	41	31	64	16	1458	36	52	1082	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	24	35	43	33	67	17	1535	38	55	1139	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	61	89	168	51	103	49	1921	47	109	2029	61
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.54	0.54	0.06	0.58	0.58
Sat Flow, veh/h	1781	687	1002	1781	539	1094	1781	3543	88	1781	3522	105
Grp Volume(v), veh/h	46	0	59	43	0	100	17	769	804	55	574	599
Grp Sat Flow(s),veh/h/ln	1781	0	1690	1781	0	1633	1781	1777	1854	1781	1777	1850
Q Serve(g_s), s	2.0	0.0	2.7	1.8	0.0	4.8	0.8	28.4	28.5	2.4	16.5	16.5
Cycle Q Clear(g_c), s	2.0	0.0	2.7	1.8	0.0	4.8	0.8	28.4	28.5	2.4	16.5	16.5
Prop In Lane	1.00		0.59	1.00		0.67	1.00		0.05	1.00		0.06
Lane Grp Cap(c), veh/h	159	0	151	168	0	154	49	963	1005	109	1023	1066
V/C Ratio(X)	0.29	0.00	0.39	0.26	0.00	0.65	0.35	0.80	0.80	0.50	0.56	0.56
Avail Cap(c_a), veh/h	351	0	333	351	0	321	175	1174	1225	175	1183	1231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	34.9	34.1	0.0	35.5	38.8	15.0	15.1	37.0	10.8	10.8
Incr Delay (d2), s/veh	0.9	0.0	1.4	0.7	0.0	3.9	1.6	3.9	3.8	1.3	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.2	0.8	0.0	2.1	0.3	10.3	10.8	1.0	5.3	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	0.0	36.3	34.8	0.0	39.4	40.4	18.9	18.8	38.3	11.5	11.4
LnGrp LOS	D	A	D	C	A	D	D	B	B	D	B	B
Approach Vol, veh/h		105			143			1590			1228	
Approach Delay, s/veh		36.0			38.0			19.1			12.7	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	52.1		11.3	9.0	49.4		11.7
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	* 54		16.0	8.0	53.7		16.0
Max Q Clear Time (g_c+I1), s	2.8	18.5		4.7	4.4	30.5		6.8
Green Ext Time (p_c), s	0.0	9.0		0.2	0.0	13.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	23	5	60	19	52	7	1604	16	21	1022	47
Future Volume (veh/h)	46	23	5	60	19	52	7	1604	16	21	1022	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1945	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	48	24	5	63	20	55	7	1688	17	22	1076	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	62	31	7	75	24	66	9	2450	25	27	2450	1109
Arrive On Green	0.05	0.05	0.05	0.09	0.09	0.09	0.01	1.00	1.00	0.02	0.70	0.70
Sat Flow, veh/h	1162	581	121	809	257	706	1781	3547	36	1781	3497	1583
Grp Volume(v), veh/h	77	0	0	138	0	0	7	831	874	22	1076	49
Grp Sat Flow(s),veh/h/ln	1864	0	0	1772	0	0	1781	1749	1834	1781	1749	1583
Q Serve(g_s), s	4.9	0.0	0.0	9.2	0.0	0.0	0.5	0.0	0.0	1.5	16.0	1.1
Cycle Q Clear(g_c), s	4.9	0.0	0.0	9.2	0.0	0.0	0.5	0.0	0.0	1.5	16.0	1.1
Prop In Lane	0.62		0.06	0.46		0.40	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	100	0	0	165	0	0	9	1208	1267	27	2450	1109
V/C Ratio(X)	0.77	0.00	0.00	0.84	0.00	0.00	0.76	0.69	0.69	0.82	0.44	0.04
Avail Cap(c_a), veh/h	155	0	0	207	0	0	119	1208	1267	119	2450	1109
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.48	0.48	0.48	0.81	0.81	0.81
Uniform Delay (d), s/veh	56.0	0.0	0.0	53.5	0.0	0.0	59.3	0.0	0.0	58.9	7.8	5.6
Incr Delay (d2), s/veh	4.6	0.0	0.0	17.6	0.0	0.0	19.6	1.6	1.5	16.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	4.9	0.0	0.0	0.3	0.5	0.5	0.8	5.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	0.0	0.0	71.1	0.0	0.0	78.9	1.6	1.5	75.3	7.9	5.6
LnGrp LOS	E	A	A	E	A	A	E	A	A	E	A	A
Approach Vol, veh/h		77			138			1712			1147	
Approach Delay, s/veh		60.6			71.1			1.8			9.1	
Approach LOS		E			E			A			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.4	5.8	88.6		15.2	4.6	89.8				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		10.0	8.0	70.3		14.0	8.0	70.3				
Max Q Clear Time (g_c+I1), s		6.9	3.5	2.0		11.2	2.5	18.0				
Green Ext Time (p_c), s		0.0	0.0	57.1		0.1	0.0	28.7				

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	0	19	75	0	33	9	1595	223	8	1051	4
Future Volume (vph)	34	0	19	75	0	33	9	1595	223	8	1051	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00		0.97	1.00		0.97	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Frt	1.00		0.85	1.00		0.85	1.00	0.98		1.00	1.00	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1529	1770		1529	1770	3458		1770	3537	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770		1529	1770		1529	1770	3458		1770	3537	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	36	0	20	79	0	35	9	1679	235	8	1106	4
RTOR Reduction (vph)	0	0	19	0	0	32	0	6	0	0	0	0
Lane Group Flow (vph)	36	0	1	79	0	3	9	1908	0	8	1110	0
Confl. Peds. (#/hr)	4		4	4		4	4		4	4		4
Confl. Bikes (#/hr)			2			2			2			2
Turn Type	Prot		Perm	Prot		Perm	Prot	NA		Prot	NA	
Protected Phases	6			5			7	4		3	8	
Permitted Phases			6			5						
Actuated Green, G (s)	8.6		8.6	8.6		8.6	1.3	75.5		1.2	75.4	
Effective Green, g (s)	8.6		8.6	8.6		8.6	1.3	75.5		1.2	75.4	
Actuated g/C Ratio	0.07		0.07	0.07		0.07	0.01	0.63		0.01	0.63	
Clearance Time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Vehicle Extension (s)	2.0		2.0	2.0		2.0	2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	126		109	126		109	19	2175		17	2222	
v/s Ratio Prot	0.02			c0.04			c0.01	c0.55		0.00	0.31	
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.29		0.01	0.63		0.02	0.47	0.88		0.47	0.50	
Uniform Delay, d1	52.8		51.8	54.1		51.8	59.0	18.4		59.1	12.1	
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00		1.06	1.04	
Incremental Delay, d2	0.5		0.0	6.8		0.0	6.6	5.4		6.7	0.2	
Delay (s)	53.2		51.8	61.0		51.8	65.6	23.8		69.4	12.7	
Level of Service	D		D	E		D	E	C		E	B	
Approach Delay (s)		52.7			58.2			24.0			13.1	
Approach LOS		D			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	177	296	77	14	11
Future Volume (veh/h)	16	177	296	77	14	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	186	312	81	15	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	24	1750	1050	468	37	33
Arrive On Green	0.01	0.49	0.30	0.30	0.02	0.02
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	17	186	312	81	15	12
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.2	0.6	1.5	0.8	0.2	0.2
Cycle Q Clear(g_c), s	0.2	0.6	1.5	0.8	0.2	0.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	24	1750	1050	468	37	33
V/C Ratio(X)	0.71	0.11	0.30	0.17	0.41	0.36
Avail Cap(c_a), veh/h	1309	7392	4128	1841	1971	1754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	3.0	5.9	5.7	10.5	10.5
Incr Delay (d2), s/veh	13.3	0.0	0.3	0.3	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	0.1	0.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.0	3.0	6.2	6.0	13.2	13.0
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		203	393		27	
Approach Delay, s/veh		4.8	6.2		13.1	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		16.4		5.4	4.3	12.1
Change Period (Y+Rc), s		5.7		4.9	4.0	5.7
Max Green Setting (Gmax), s		45.3		24.1	16.0	25.3
Max Q Clear Time (g_c+I1), s		2.6		2.2	2.2	3.5
Green Ext Time (p_c), s		1.5		0.0	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	419	240	71	147	32	286	451	90	69	308	50
Future Volume (veh/h)	33	419	240	71	147	32	286	451	90	69	308	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	441	0	75	155	0	301	475	0	73	324	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	694		156	844		353	986		154	589	
Arrive On Green	0.05	0.20	0.00	0.09	0.24	0.00	0.20	0.28	0.00	0.09	0.17	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	35	441	0	75	155	0	301	475	0	73	324	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.0	6.1	0.0	2.2	1.9	0.0	8.8	6.0	0.0	2.1	4.5	0.0
Cycle Q Clear(g_c), s	1.0	6.1	0.0	2.2	1.9	0.0	8.8	6.0	0.0	2.1	4.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	81	694		156	844		353	986		154	589	
V/C Ratio(X)	0.43	0.64		0.48	0.18		0.85	0.48		0.47	0.55	
Avail Cap(c_a), veh/h	265	1321		265	1413		364	1783		265	1519	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.0	19.9	0.0	23.4	16.4	0.0	20.8	16.2	0.0	23.4	20.6	0.0
Incr Delay (d2), s/veh	1.4	1.5	0.0	0.9	0.2	0.0	16.1	0.7	0.0	0.8	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.3	0.0	0.8	0.7	0.0	4.8	2.2	0.0	0.8	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.4	21.4	0.0	24.2	16.6	0.0	36.9	17.0	0.0	24.3	22.2	0.0
LnGrp LOS	C	C		C	B		D	B		C	C	
Approach Vol, veh/h		476	A		230	A		776	A		397	A
Approach Delay, s/veh		21.8			19.1			24.7			22.6	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	16.2	14.7	14.2	6.4	18.5	8.6	20.2
Change Period (Y+Rc), s	4.0	5.7	4.0	5.3	4.0	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	8.0	20.0	11.0	23.0	8.0	* 21	8.0	27.0
Max Q Clear Time (g_c+I1), s	4.2	8.1	10.8	6.5	3.0	3.9	4.1	8.0
Green Ext Time (p_c), s	0.0	2.4	0.0	2.4	0.0	1.0	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	35	41	36	7	24	20	1196	87	81	375	6
Future Volume (veh/h)	9	35	41	36	7	24	20	1196	87	81	375	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	37	43	38	7	0	21	1259	92	85	395	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	62	66	49	9		291	2361	172	107	2082	
Arrive On Green	0.04	0.04	0.04	0.03	0.03	0.00	0.16	0.70	0.70	0.06	0.59	0.00
Sat Flow, veh/h	362	1490	1585	1515	279	1585	1781	3358	245	1781	3647	0
Grp Volume(v), veh/h	46	0	43	45	0	0	21	665	686	85	395	0
Grp Sat Flow(s),veh/h/ln	1852	0	1585	1795	0	1585	1781	1777	1826	1781	1777	0
Q Serve(g_s), s	2.9	0.0	3.2	3.0	0.0	0.0	1.2	21.3	21.4	5.7	6.2	0.0
Cycle Q Clear(g_c), s	2.9	0.0	3.2	3.0	0.0	0.0	1.2	21.3	21.4	5.7	6.2	0.0
Prop In Lane	0.20		1.00	0.84		1.00	1.00		0.13	1.00		0.00
Lane Grp Cap(c), veh/h	77	0	66	58	0		291	1249	1284	107	2082	
V/C Ratio(X)	0.59	0.00	0.65	0.77	0.00		0.07	0.53	0.53	0.79	0.19	
Avail Cap(c_a), veh/h	171	0	147	166	0		291	1249	1284	134	2082	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.5	0.0	56.6	57.6	0.0	0.0	42.5	8.5	8.5	55.7	11.6	0.0
Incr Delay (d2), s/veh	5.3	0.0	7.7	14.7	0.0	0.0	0.0	0.5	0.5	17.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	1.4	1.6	0.0	0.0	0.5	6.9	7.1	3.0	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.8	0.0	64.3	72.3	0.0	0.0	42.6	9.0	9.0	73.6	11.8	0.0
LnGrp LOS	E	A	E	E	A		D	A	A	E	B	
Approach Vol, veh/h		89			45	A		1372			480	A
Approach Delay, s/veh		63.0			72.3			9.5			22.7	
Approach LOS		E			E			A			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		9.9	25.3	76.0		8.8	11.2	90.1				
Change Period (Y+Rc), s		4.9	5.7	* 5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		11.1	8.0	* 70		11.1	9.0	69.3				
Max Q Clear Time (g_c+I1), s		5.2	3.2	8.2		5.0	7.7	23.4				
Green Ext Time (p_c), s		0.1	0.0	2.5		0.0	0.0	11.3				

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	3	5	5	0	7	3	1262	31	40	392	5
Future Volume (veh/h)	11	3	5	5	0	7	3	1262	31	40	392	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	3	5	5	0	7	3	1328	33	42	413	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	0	26	60	0	26	391	2974	74	54	2286	28
Arrive On Green	0.02	0.02	0.02	0.02	0.00	0.02	0.22	0.84	0.84	0.03	0.64	0.64
Sat Flow, veh/h	0	0	1585	0	0	1585	1781	3543	88	1781	3596	44
Grp Volume(v), veh/h	15	0	5	5	0	7	3	665	696	42	204	214
Grp Sat Flow(s),veh/h/ln	0	0	1585	0	0	1585	1781	1777	1855	1781	1777	1863
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	0.5	0.2	11.5	11.6	2.8	5.7	5.7
Cycle Q Clear(g_c), s	1.9	0.0	0.4	1.9	0.0	0.5	0.2	11.5	11.6	2.8	5.7	5.7
Prop In Lane	0.80		1.00	1.00		1.00	1.00		0.05	1.00		0.02
Lane Grp Cap(c), veh/h	54	0	26	60	0	26	391	1491	1557	54	1130	1184
V/C Ratio(X)	0.28	0.00	0.19	0.08	0.00	0.27	0.01	0.45	0.45	0.78	0.18	0.18
Avail Cap(c_a), veh/h	302	0	291	295	0	291	391	1491	1557	119	1130	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	58.3	60.0	0.0	58.3	36.6	2.5	2.5	57.8	9.0	9.0
Incr Delay (d2), s/veh	1.0	0.0	1.4	0.2	0.0	2.1	0.0	0.3	0.3	8.7	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.2	0.0	0.2	0.1	2.5	2.6	1.4	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.0	0.0	59.6	60.2	0.0	60.4	36.6	2.7	2.7	66.5	9.3	9.3
LnGrp LOS	E	A	E	E	A	E	D	A	A	E	A	A
Approach Vol, veh/h		20			12			1364			460	
Approach Delay, s/veh		60.7			60.3			2.8			14.5	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	32.1	82.0		5.9	7.6	106.4		5.9
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	* 76		22.0	8.0	76.3		22.0
Max Q Clear Time (g_c+I1), s	2.2	7.7		3.9	4.8	13.6		3.9
Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	16.4		0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	53	107	1198	77	41	380
Future Volume (veh/h)	53	107	1198	77	41	380
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	113	1261	81	43	400
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	180	160	2173	139	52	2619
Arrive On Green	0.10	0.10	0.64	0.64	0.06	1.00
Sat Flow, veh/h	1781	1585	3484	217	1781	3647
Grp Volume(v), veh/h	56	113	660	682	43	400
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1831	1781	1777
Q Serve(g_s), s	1.8	4.1	12.7	12.8	1.4	0.0
Cycle Q Clear(g_c), s	1.8	4.1	12.7	12.8	1.4	0.0
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	180	160	1139	1174	52	2619
V/C Ratio(X)	0.31	0.70	0.58	0.58	0.82	0.15
Avail Cap(c_a), veh/h	594	528	1139	1174	238	2619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	26.1	6.1	6.2	28.1	0.0
Incr Delay (d2), s/veh	0.4	2.1	0.8	0.8	11.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.7	3.3	3.4	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.4	28.2	7.0	7.0	39.2	0.1
LnGrp LOS	C	C	A	A	D	A
Approach Vol, veh/h	169		1342			443
Approach Delay, s/veh	27.3		7.0			3.9
Approach LOS	C		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		49.9		10.1	5.8	44.2
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		30.3		20.0	8.0	18.3
Max Q Clear Time (g_c+I1), s		2.0		6.1	3.4	14.8
Green Ext Time (p_c), s		2.4		0.3	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	0	208	0	2	0	179	959	1	1	1094	291
Future Volume (veh/h)	151	0	208	0	2	0	179	959	1	1	1094	291
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1856	1870	1870	1870	1664	1708	1723	2067	2007	2052
Adj Flow Rate, veh/h	159	0	219	0	2	0	188	1009	1	1	1152	306
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	3	2	2	2	6	3	2	2	6	3
Cap, veh/h	653	0	285	0	8	0	179	1599	719	4	1456	664
Arrive On Green	0.18	0.00	0.18	0.00	0.00	0.00	0.11	0.49	0.49	0.00	0.38	0.38
Sat Flow, veh/h	3534	0	1544	0	1870	0	1585	3246	1460	1968	3813	1739
Grp Volume(v), veh/h	159	0	219	0	2	0	188	1009	1	1	1152	306
Grp Sat Flow(s),veh/h/ln	1767	0	1544	0	1870	0	1585	1623	1460	1968	1906	1739
Q Serve(g_s), s	2.7	0.0	9.5	0.0	0.1	0.0	8.0	16.2	0.0	0.0	19.0	9.4
Cycle Q Clear(g_c), s	2.7	0.0	9.5	0.0	0.1	0.0	8.0	16.2	0.0	0.0	19.0	9.4
Prop In Lane	1.00		1.00	0.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	653	0	285	0	8	0	179	1599	719	4	1456	664
V/C Ratio(X)	0.24	0.00	0.77	0.00	0.25	0.00	1.05	0.63	0.00	0.23	0.79	0.46
Avail Cap(c_a), veh/h	997	0	436	0	528	0	179	1599	719	222	1485	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	27.4	0.0	35.2	0.0	31.4	13.2	9.1	35.3	19.4	16.4
Incr Delay (d2), s/veh	0.3	0.0	6.3	0.0	21.5	0.0	81.5	1.0	0.0	9.7	3.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.7	0.0	0.1	0.0	6.8	4.6	0.0	0.0	7.4	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	0.0	33.8	0.0	56.7	0.0	112.9	14.2	9.1	45.0	22.6	17.2
LnGrp LOS	C	A	C	A	E	A	F	B	A	D	C	B
Approach Vol, veh/h		378			2			1198			1459	
Approach Delay, s/veh		30.1			56.7			29.7			21.5	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	41.3		6.3	12.0	33.5		19.1
Change Period (Y+Rc), s	4.0	6.4		6.0	4.0	6.4		6.0
Max Green Setting (Gmax), s	8.0	24.6		20.0	8.0	27.6		20.0
Max Q Clear Time (g_c+I1), s	2.0	18.2		2.1	10.0	21.0		11.5
Green Ext Time (p_c), s	0.0	5.4		0.0	0.0	6.1		1.6

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	60	2	0	2	32	1090	0	5	1287	13
Future Volume (veh/h)	40	0	60	2	0	2	32	1090	0	5	1287	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	0	63	2	0	2	34	1147	0	5	1355	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	0	257	19	0	17	55	1469	655	12	1384	617
Arrive On Green	0.16	0.00	0.16	0.01	0.00	0.01	0.03	0.41	0.00	0.01	0.39	0.39
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	42	0	63	2	0	2	34	1147	0	5	1355	14
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.9	0.0	1.6	0.1	0.0	0.1	0.9	12.6	0.0	0.1	17.0	0.2
Cycle Q Clear(g_c), s	0.9	0.0	1.6	0.1	0.0	0.1	0.9	12.6	0.0	0.1	17.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	0	257	19	0	17	55	1469	655	12	1384	617
V/C Ratio(X)	0.15	0.00	0.25	0.10	0.00	0.12	0.62	0.78	0.00	0.42	0.98	0.02
Avail Cap(c_a), veh/h	473	0	421	788	0	701	473	1469	655	473	1384	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	16.5	22.1	0.0	22.1	21.6	11.5	0.0	22.4	13.6	8.5
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.9	0.0	1.1	4.2	3.0	0.0	8.4	19.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.5	0.0	0.0	0.0	0.4	3.6	0.0	0.1	8.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	0.0	16.7	23.0	0.0	23.2	25.9	14.5	0.0	30.7	33.0	8.5
LnGrp LOS	B	A	B	C	A	C	C	B	A	C	C	A
Approach Vol, veh/h		105			4			1181			1374	
Approach Delay, s/veh		16.6			23.1			14.8			32.8	
Approach LOS		B			C			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.3	5.4	24.0		4.5	4.3	25.1				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		12.0	12.0	17.6		20.0	12.0	17.6				
Max Q Clear Time (g_c+I1), s		3.6	2.9	19.0		2.1	2.1	14.6				
Green Ext Time (p_c), s		0.2	0.0	0.0		0.0	0.0	2.1				

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	1	327	22	17	3	420	1004	31	1	1061	284
Future Volume (veh/h)	119	1	327	22	17	3	420	1004	31	1	1061	284
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	0	29	14	31	0	442	1057	17	1	1117	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	0	165	124	260	0	423	2010	897	3	1684	523
Arrive On Green	0.10	0.00	0.10	0.07	0.07	0.00	0.24	0.57	0.57	0.00	0.33	0.33
Sat Flow, veh/h	3563	0	1585	1781	3741	0	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	126	0	29	14	31	0	442	1057	17	1	1117	84
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	2.8	0.0	1.4	0.6	0.7	0.0	20.0	15.5	0.4	0.0	15.8	3.2
Cycle Q Clear(g_c), s	2.8	0.0	1.4	0.6	0.7	0.0	20.0	15.5	0.4	0.0	15.8	3.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	0	165	124	260	0	423	2010	897	3	1684	523
V/C Ratio(X)	0.34	0.00	0.18	0.11	0.12	0.00	1.04	0.53	0.02	0.34	0.66	0.16
Avail Cap(c_a), veh/h	846	0	377	190	400	0	423	2010	897	169	1771	550
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	0.0	34.4	36.7	36.7	0.0	32.1	11.3	8.0	42.0	24.2	20.0
Incr Delay (d2), s/veh	0.9	0.0	0.8	0.6	0.3	0.0	55.8	0.4	0.0	23.6	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.6	0.3	0.3	0.0	14.4	4.9	0.1	0.0	5.7	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	0.0	35.2	37.4	37.1	0.0	87.9	11.7	8.0	65.5	25.3	20.2
LnGrp LOS	D	A	D	D	D	A	F	B	A	E	C	C
Approach Vol, veh/h		155			45			1516			1202	
Approach Delay, s/veh		35.8			37.2			33.9			25.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.1	54.0		14.5	24.0	34.2		11.6				
Change Period (Y+Rc), s	4.0	* 6.4		5.7	4.0	6.4		5.7				
Max Green Setting (Gmax), s	8.0	* 44		20.0	20.0	29.2		9.0				
Max Q Clear Time (g_c+I1), s	2.0	17.5		4.8	22.0	17.8		2.7				
Green Ext Time (p_c), s	0.0	21.5		0.7	0.0	10.0		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	4	146	44	3	12	132	1510	105	67	1115	23
Future Volume (veh/h)	139	4	146	44	3	12	132	1510	105	67	1115	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	149	0	154	46	3	13	139	1589	111	71	1174	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	414	0	184	134	9	127	167	2098	651	412	2873	892
Arrive On Green	0.12	0.00	0.12	0.08	0.08	0.08	0.09	0.41	0.41	0.23	0.56	0.56
Sat Flow, veh/h	3563	0	1585	1677	109	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	149	0	154	49	0	13	139	1589	111	71	1174	24
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1787	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	4.6	0.0	11.4	3.1	0.0	0.9	9.2	31.9	5.3	3.8	15.7	0.8
Cycle Q Clear(g_c), s	4.6	0.0	11.4	3.1	0.0	0.9	9.2	31.9	5.3	3.8	15.7	0.8
Prop In Lane	1.00		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	414	0	184	143	0	127	167	2098	651	412	2873	892
V/C Ratio(X)	0.36	0.00	0.84	0.34	0.00	0.10	0.83	0.76	0.17	0.17	0.41	0.03
Avail Cap(c_a), veh/h	623	0	277	313	0	277	282	2098	651	412	2873	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	0.0	51.9	52.2	0.0	51.2	53.5	30.2	22.4	36.9	14.9	11.6
Incr Delay (d2), s/veh	0.2	0.0	8.2	0.5	0.0	0.1	4.1	2.6	0.6	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	5.0	1.4	0.0	0.4	4.2	12.8	2.0	1.6	5.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	0.0	60.1	52.7	0.0	51.3	57.6	32.9	23.0	37.0	15.1	11.7
LnGrp LOS	D	A	E	D	A	D	E	C	C	D	B	B
Approach Vol, veh/h		303			62			1839			1269	
Approach Delay, s/veh		54.7			52.4			34.1			16.3	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	33.5	55.0		13.6	15.2	73.2		17.9
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	11.0	* 49		21.0	19.0	41.3		21.0
Max Q Clear Time (g_c+I1), s	5.8	33.9		5.1	11.2	17.7		13.4
Green Ext Time (p_c), s	0.0	12.3		0.1	0.1	12.8		0.5

Intersection Summary	
HCM 6th Ctrl Delay	29.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	127	336	69	137	48	187	1866	36	20	1228	260
Future Volume (veh/h)	336	127	336	69	137	48	187	1866	36	20	1228	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	354	134	205	73	144	4	197	1964	17	21	1293	108
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	433	367	135	174	148	230	2506	778	67	2358	732
Arrive On Green	0.21	0.23	0.23	0.08	0.09	0.09	0.07	0.49	0.49	0.04	0.46	0.46
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	354	134	205	73	144	4	197	1964	17	21	1293	108
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	23.4	7.1	13.7	4.7	9.1	0.3	6.8	38.2	0.7	1.4	21.9	4.7
Cycle Q Clear(g_c), s	23.4	7.1	13.7	4.7	9.1	0.3	6.8	38.2	0.7	1.4	21.9	4.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	433	367	135	174	148	230	2506	778	67	2358	732
V/C Ratio(X)	0.93	0.31	0.56	0.54	0.83	0.03	0.86	0.78	0.02	0.31	0.55	0.15
Avail Cap(c_a), veh/h	430	519	440	148	223	189	230	2506	778	134	2358	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	38.2	40.7	53.4	53.4	49.5	55.4	25.3	15.7	56.2	23.3	18.6
Incr Delay (d2), s/veh	23.8	0.6	2.1	1.2	20.7	0.1	24.6	2.5	0.1	1.0	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	3.2	5.4	2.1	5.1	0.1	3.6	14.6	0.2	0.6	8.2	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	38.8	42.8	54.7	74.1	49.6	80.0	27.8	15.8	57.2	23.7	18.8
LnGrp LOS	E	D	D	D	E	D	E	C	B	E	C	B
Approach Vol, veh/h		693			221			2178			1422	
Approach Delay, s/veh		55.9			67.2			32.4			23.8	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	64.9	13.1	33.5	12.0	61.4	29.7	16.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	9.0	48.0	10.0	33.3	8.0	49.0	29.0	14.3
Max Q Clear Time (g_c+I1), s	3.4	40.2	6.7	15.7	8.8	23.9	25.4	11.1
Green Ext Time (p_c), s	0.0	6.8	0.0	2.0	0.0	13.0	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	35.0
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	266	16	52	494	5	44	3	44	13	0	7
Future Volume (veh/h)	1	266	16	52	494	5	44	3	44	13	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	280	17	55	520	5	46	3	46	14	0	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	915	55	125	1214	12	110	7	110	48	0	24
Arrive On Green	0.00	0.27	0.27	0.07	0.34	0.34	0.14	0.14	0.14	0.04	0.00	0.04
Sat Flow, veh/h	1781	3405	206	1781	3606	35	815	53	815	1140	0	570
Grp Volume(v), veh/h	1	145	152	55	256	269	95	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1833	1781	1777	1864	1683	0	0	1711	0	0
Q Serve(g_s), s	0.0	2.4	2.4	1.1	4.1	4.1	1.9	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.4	2.4	1.1	4.1	4.1	1.9	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.02	0.48		0.48	0.67		0.33
Lane Grp Cap(c), veh/h	5	477	493	125	598	628	228	0	0	72	0	0
V/C Ratio(X)	0.21	0.30	0.31	0.44	0.43	0.43	0.42	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	584	889	917	584	889	932	1104	0	0	1075	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.2	10.7	10.7	16.3	9.4	9.4	14.5	0.0	0.0	17.0	0.0	0.0
Incr Delay (d2), s/veh	7.5	0.6	0.6	0.9	0.8	0.8	0.5	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.7	0.4	1.1	1.1	0.6	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	11.3	11.3	17.2	10.2	10.2	14.9	0.0	0.0	17.8	0.0	0.0
LnGrp LOS	C	B	B	B	B	B	B	A	A	B	A	A
Approach Vol, veh/h		298			580			95			21	
Approach Delay, s/veh		11.3			10.9			14.9			17.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.5	6.6	15.5		9.0	4.1	18.0				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		23.0	12.0	18.3		24.0	12.0	18.3				
Max Q Clear Time (g_c+I1), s		2.4	3.1	4.4		3.9	2.0	6.1				
Green Ext Time (p_c), s		0.0	0.0	3.9		0.1	0.0	6.2				

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	199	2	12	447	7	10	2	25	30	0	245
Future Volume (veh/h)	113	199	2	12	447	7	10	2	25	30	0	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	209	2	13	471	7	11	2	26	32	0	258
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	1017	453	30	720	321	35	6	84	369	0	328
Arrive On Green	0.10	0.29	0.29	0.02	0.20	0.20	0.08	0.08	0.08	0.21	0.00	0.21
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	465	85	1099	1781	0	1585
Grp Volume(v), veh/h	119	209	2	13	471	7	39	0	0	32	0	258
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1649	0	0	1781	0	1585
Q Serve(g_s), s	3.1	2.1	0.0	0.3	5.8	0.2	1.1	0.0	0.0	0.7	0.0	7.3
Cycle Q Clear(g_c), s	3.1	2.1	0.0	0.3	5.8	0.2	1.1	0.0	0.0	0.7	0.0	7.3
Prop In Lane	1.00		1.00	1.00		1.00	0.28		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	178	1017	453	30	720	321	126	0	0	369	0	328
V/C Ratio(X)	0.67	0.21	0.00	0.44	0.65	0.02	0.31	0.00	0.00	0.09	0.00	0.79
Avail Cap(c_a), veh/h	449	1420	633	449	1420	633	416	0	0	1023	0	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.6	12.9	12.1	23.2	17.4	15.2	20.8	0.0	0.0	15.2	0.0	17.9
Incr Delay (d2), s/veh	1.6	0.1	0.0	3.8	1.2	0.0	0.5	0.0	0.0	0.0	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.7	0.0	0.2	2.0	0.1	0.4	0.0	0.0	0.3	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	13.0	12.1	26.9	18.6	15.2	21.3	0.0	0.0	15.3	0.0	19.5
LnGrp LOS	C	B	B	C	B	B	C	A	A	B	A	B
Approach Vol, veh/h		330			491			39			290	
Approach Delay, s/veh		16.3			18.8			21.3			19.0	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		7.6	4.8	19.6		15.5	8.8	15.6
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0
Max Green Setting (Gmax), s		12.0	12.0	19.0		27.3	12.0	19.0
Max Q Clear Time (g_c+I1), s		3.1	2.3	4.1		9.3	5.1	7.8
Green Ext Time (p_c), s		0.0	0.0	0.8		0.7	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	156	11	117	346	6	70
Future Volume (veh/h)	156	11	117	346	6	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	12	123	364	6	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	409	182	166	1481	297	264
Arrive On Green	0.12	0.12	0.09	0.42	0.17	0.17
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	164	12	123	364	6	74
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	1.0	0.2	1.6	1.6	0.1	1.0
Cycle Q Clear(g_c), s	1.0	0.2	1.6	1.6	0.1	1.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	409	182	166	1481	297	264
V/C Ratio(X)	0.40	0.07	0.74	0.25	0.02	0.28
Avail Cap(c_a), veh/h	2369	1057	816	4738	1336	1189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	9.5	10.6	4.5	8.4	8.7
Incr Delay (d2), s/veh	0.6	0.2	6.3	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.6	0.1	0.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.5	9.6	16.9	4.6	8.4	9.3
LnGrp LOS	B	A	B	A	A	A
Approach Vol, veh/h	176			487	80	
Approach Delay, s/veh	10.4			7.7	9.2	
Approach LOS	B			A	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		9.0	7.2	7.8		15.0
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		18.0	11.0	16.0		32.0
Max Q Clear Time (g_c+I1), s		3.0	3.6	3.0		3.6
Green Ext Time (p_c), s		0.2	0.1	0.7		2.2

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	322	11	316	949	469	257
Future Volume (veh/h)	322	11	316	949	469	257
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	339	1	333	771	494	271
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	401	184	933	791	457	1493
Arrive On Green	0.12	0.12	0.50	0.50	0.26	0.80
Sat Flow, veh/h	3456	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	339	1	333	771	494	271
Grp Sat Flow(s),veh/h/ln	1728	1585	1870	1585	1781	1870
Q Serve(g_s), s	11.2	0.1	12.7	55.5	30.0	4.0
Cycle Q Clear(g_c), s	11.2	0.1	12.7	55.5	30.0	4.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	401	184	933	791	457	1493
V/C Ratio(X)	0.84	0.01	0.36	0.97	1.08	0.18
Avail Cap(c_a), veh/h	473	217	944	800	457	1503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	45.7	17.9	28.6	43.5	2.8
Incr Delay (d2), s/veh	11.6	0.0	0.2	25.5	65.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	5.5	25.7	21.4	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	62.3	45.7	18.1	54.1	109.1	2.8
LnGrp LOS	E	D	B	D	F	A
Approach Vol, veh/h	340		1104			765
Approach Delay, s/veh	62.2		43.2			71.5
Approach LOS	E		D			E

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	35.0	63.4				98.4	18.6
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	30.0	59.0				94.0	16.0
Max Q Clear Time (g_c+I1), s	32.0	57.5				6.0	13.2
Green Ext Time (p_c), s	0.0	0.9				1.8	0.3

Intersection Summary	
HCM 6th Ctrl Delay	55.9
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	432	0	374	0	1677	217	0	892	1070
Future Volume (veh/h)	0	0	0	432	0	374	0	1677	217	0	892	1070
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				455	0	394	0	1765	0	0	939	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				939	0	431	0	2171		0	2171	
Arrive On Green				0.27	0.00	0.27	0.00	0.61	0.00	0.00	0.61	0.00
Sat Flow, veh/h				3456	0	1585	0	3647	1585	0	3647	2790
Grp Volume(v), veh/h				455	0	394	0	1765	0	0	939	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1777	1585	0	1777	1395
Q Serve(g_s), s				10.0	0.0	21.7	0.0	34.7	0.0	0.0	12.6	0.0
Cycle Q Clear(g_c), s				10.0	0.0	21.7	0.0	34.7	0.0	0.0	12.6	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				939	0	431	0	2171		0	2171	
V/C Ratio(X)				0.48	0.00	0.91	0.00	0.81		0.00	0.43	
Avail Cap(c_a), veh/h				1045	0	479	0	2445		0	2445	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.6	0.0	31.9	0.0	13.6	0.0	0.0	9.3	0.0
Incr Delay (d2), s/veh				0.1	0.0	19.9	0.0	2.1	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.0	0.0	10.3	0.0	11.9	0.0	0.0	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				27.7	0.0	51.7	0.0	15.7	0.0	0.0	9.5	0.0
LnGrp LOS				C	A	D	A	B		A	A	
Approach Vol, veh/h					849			1765	A		939	A
Approach Delay, s/veh					38.9			15.7			9.5	
Approach LOS					D			B			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	60.4		60.4		29.8			
Change Period (Y+Rc), s	5.3		5.3		5.3			
Max Green Setting (Gmax), s	62.1		62.1		27.3			
Max Q Clear Time (g_c+I1), s	36.7		14.6		23.7			
Green Ext Time (p_c), s	18.5		11.1		0.8			

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	519	177	56	0	124	0	1538	87	61	897	0
Future Volume (veh/h)	0	519	177	56	0	124	0	1538	87	61	897	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	0	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	546	186	59	0	131	0	1619	92	64	944	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	0	639	285	200	0	0	0	1939	865	93	2244	0
Arrive On Green	0.00	0.18	0.18	0.06	0.00	0.00	0.00	0.55	0.55	0.05	0.63	0.00
Sat Flow, veh/h	0	3647	1585	3456	59		0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	0	546	186	59	54.1		0	1619	92	64	944	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1728	D		0	1777	1585	1781	1777	0
Q Serve(g_s), s	0.0	17.6	12.9	1.9			0.0	45.0	3.3	4.2	15.8	0.0
Cycle Q Clear(g_c), s	0.0	17.6	12.9	1.9			0.0	45.0	3.3	4.2	15.8	0.0
Prop In Lane	0.00		1.00	1.00			0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	639	285	200			0	1939	865	93	2244	0
V/C Ratio(X)	0.00	0.85	0.65	0.29			0.00	0.83	0.11	0.69	0.42	0.00
Avail Cap(c_a), veh/h	0	721	322	701			0	2238	998	120	2598	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	47.0	45.1	53.4			0.0	22.4	13.0	55.1	10.9	0.0
Incr Delay (d2), s/veh	0.0	8.9	3.7	0.7			0.0	2.7	0.1	5.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.6	5.4	0.9			0.0	18.0	1.1	2.0	5.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	55.9	48.8	54.1			0.0	25.1	13.0	60.9	11.1	0.0
LnGrp LOS	A	E	D	D			A	C	B	E	B	A
Approach Vol, veh/h		732						1711			1008	
Approach Delay, s/veh		54.1						24.5			14.3	
Approach LOS		D						C			B	

Timer - Assigned Phs	1	2				6	7	8				
Phs Duration (G+Y+Rc), s	10.1	69.4				79.6	12.1	26.6				
Change Period (Y+Rc), s	4.0	4.9				4.9	5.3	5.3				
Max Green Setting (Gmax), s	8.0	74.5				86.5	24.0	24.0				
Max Q Clear Time (g_c+I1), s	6.2	47.0				17.8	3.9	19.6				
Green Ext Time (p_c), s	0.0	17.6				10.3	0.1	1.6				

Intersection Summary			
HCM 6th Ctrl Delay			28.2
HCM 6th LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	726	4	6	579	161	7	31	13	521	14	86
Future Volume (veh/h)	45	726	4	6	579	161	7	31	13	521	14	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	764	4	6	609	169	7	33	14	548	15	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1002	447	11	901	402	31	144	149	609	17	556
Arrive On Green	0.03	0.28	0.28	0.01	0.25	0.25	0.09	0.09	0.09	0.35	0.35	0.35
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	324	1530	1585	1736	48	1585
Grp Volume(v), veh/h	47	764	4	6	609	169	40	0	14	563	0	91
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1854	0	1585	1784	0	1585
Q Serve(g_s), s	1.8	13.3	0.1	0.2	10.4	6.0	1.3	0.0	0.5	20.2	0.0	2.7
Cycle Q Clear(g_c), s	1.8	13.3	0.1	0.2	10.4	6.0	1.3	0.0	0.5	20.2	0.0	2.7
Prop In Lane	1.00		1.00	1.00		1.00	0.17		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	62	1002	447	11	901	402	175	0	149	626	0	556
V/C Ratio(X)	0.76	0.76	0.01	0.53	0.68	0.42	0.23	0.00	0.09	0.90	0.00	0.16
Avail Cap(c_a), veh/h	211	1105	493	211	1053	470	989	0	845	951	0	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.3	22.2	17.5	33.4	22.7	21.1	28.3	0.0	27.9	20.8	0.0	15.1
Incr Delay (d2), s/veh	7.0	3.0	0.0	13.8	1.5	0.8	0.2	0.0	0.1	5.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.2	0.0	0.1	4.0	2.1	0.6	0.0	0.2	8.5	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.3	25.2	17.5	47.3	24.2	21.9	28.5	0.0	28.0	26.5	0.0	15.1
LnGrp LOS	D	C	B	D	C	C	C	A	C	C	A	B
Approach Vol, veh/h		815			784			54			654	
Approach Delay, s/veh		26.0			23.9			28.4			24.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	25.0		10.4	6.3	23.1		27.7
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	8.0	21.0		36.0	8.0	20.0		36.0
Max Q Clear Time (g_c+I1), s	2.2	15.3		3.3	3.8	12.4		22.2
Green Ext Time (p_c), s	0.0	3.8		0.1	0.0	4.3		1.5

Intersection Summary	
HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1283	2	0	542	21	1	0	0	86	0	56
Future Volume (veh/h)	22	1283	2	0	542	21	1	0	0	86	0	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	1351	2	0	571	22	1	0	0	91	0	59
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	1930	861	4	1424	635	4	59	50	117	179	152
Arrive On Green	0.02	0.54	0.54	0.00	0.40	0.40	0.00	0.00	0.00	0.07	0.00	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	23	1351	2	0	571	22	1	0	0	91	0	59
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.5	11.7	0.0	0.0	4.8	0.4	0.0	0.0	0.0	2.1	0.0	1.5
Cycle Q Clear(g_c), s	0.5	11.7	0.0	0.0	4.8	0.4	0.0	0.0	0.0	2.1	0.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	1930	861	4	1424	635	4	59	50	117	179	152
V/C Ratio(X)	0.58	0.70	0.00	0.00	0.40	0.03	0.23	0.00	0.00	0.78	0.00	0.39
Avail Cap(c_a), veh/h	470	2728	1217	470	2728	1217	470	718	608	470	718	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.2	7.0	4.4	0.0	8.9	7.6	20.8	0.0	0.0	19.2	0.0	17.7
Incr Delay (d2), s/veh	12.4	0.5	0.0	0.0	0.2	0.0	25.9	0.0	0.0	10.7	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	0.0	0.0	1.2	0.1	0.0	0.0	0.0	1.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	7.5	4.4	0.0	9.1	7.6	46.6	0.0	0.0	29.8	0.0	19.3
LnGrp LOS	C	A	A	A	A	A	D	A	A	C	A	B
Approach Vol, veh/h		1376			593			1			150	
Approach Delay, s/veh		7.9			9.0			46.6			25.7	
Approach LOS		A			A			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	6.3	0.0	27.6	5.0	9.0	5.9	21.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	4.1	0.0	0.0	13.7	2.0	3.5	2.5	6.8
Green Ext Time (p_c), s	0.1	0.0	0.0	9.0	0.0	0.1	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	798	731	82	40	293	120	41	676	59	138	246	496
Future Volume (veh/h)	798	731	82	40	293	120	41	676	59	138	246	496
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	840	769	0	42	308	0	43	712	0	145	259	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	942	1058		366	465		213	826		332	1038	
Arrive On Green	0.27	0.30	0.00	0.11	0.13	0.00	0.06	0.23	0.00	0.10	0.29	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	840	769	0	42	308	0	43	712	0	145	259	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	18.7	15.5	0.0	0.9	6.6	0.0	0.9	15.4	0.0	3.2	4.4	0.0
Cycle Q Clear(g_c), s	18.7	15.5	0.0	0.9	6.6	0.0	0.9	15.4	0.0	3.2	4.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	942	1058		366	465		213	826		332	1038	
V/C Ratio(X)	0.89	0.73		0.11	0.66		0.20	0.86		0.44	0.25	
Avail Cap(c_a), veh/h	1082	1838		366	1081		346	890		692	1259	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.9	25.1	0.0	32.3	33.0	0.0	35.6	29.4	0.0	34.1	21.6	0.0
Incr Delay (d2), s/veh	8.0	1.7	0.0	0.1	2.8	0.0	0.2	8.7	0.0	0.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	6.0	0.0	0.3	2.8	0.0	0.4	7.0	0.0	1.3	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	26.8	0.0	32.4	35.8	0.0	35.8	38.1	0.0	34.4	21.8	0.0
LnGrp LOS	D	C		C	D		D	D		C	C	
Approach Vol, veh/h		1609	A		350	A		755	A		404	A
Approach Delay, s/veh		31.5			35.4			38.0			26.3	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	29.5	8.9	29.0	25.8	16.2	13.4	24.6
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	5.7	* 6
Max Green Setting (Gmax), s	8.0	41.3	8.0	28.3	25.0	24.3	16.0	* 20
Max Q Clear Time (g_c+I1), s	2.9	17.5	2.9	6.4	20.7	8.6	5.2	17.4
Green Ext Time (p_c), s	0.0	6.3	0.0	1.8	1.1	1.9	0.2	1.2

Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	735	18	57	274	36	20	161	151	165	131	100
Future Volume (veh/h)	158	735	18	57	274	36	20	161	151	165	131	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	166	774	19	60	288	38	21	169	159	174	138	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	1011	25	110	746	97	70	209	197	216	314	239
Arrive On Green	0.11	0.29	0.29	0.06	0.24	0.24	0.04	0.24	0.24	0.12	0.32	0.32
Sat Flow, veh/h	1781	3545	87	1781	3160	413	1781	886	834	1781	986	750
Grp Volume(v), veh/h	166	388	405	60	161	165	21	0	328	174	0	243
Grp Sat Flow(s),veh/h/ln	1781	1777	1855	1781	1777	1796	1781	0	1720	1781	0	1735
Q Serve(g_s), s	5.8	12.6	12.6	2.1	4.8	4.9	0.7	0.0	11.3	6.0	0.0	7.0
Cycle Q Clear(g_c), s	5.8	12.6	12.6	2.1	4.8	4.9	0.7	0.0	11.3	6.0	0.0	7.0
Prop In Lane	1.00		0.05	1.00		0.23	1.00		0.48	1.00		0.43
Lane Grp Cap(c), veh/h	198	507	529	110	419	424	70	0	407	216	0	553
V/C Ratio(X)	0.84	0.77	0.77	0.54	0.38	0.39	0.30	0.00	0.81	0.80	0.00	0.44
Avail Cap(c_a), veh/h	198	714	745	170	685	693	226	0	713	254	0	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.4	20.6	20.6	28.7	20.2	20.3	29.4	0.0	22.7	26.9	0.0	17.0
Incr Delay (d2), s/veh	24.8	3.9	3.8	1.6	0.8	0.8	0.9	0.0	5.2	12.6	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	5.1	5.3	0.9	1.9	1.9	0.3	0.0	4.8	3.1	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.2	24.5	24.4	30.2	21.0	21.0	30.3	0.0	27.9	39.5	0.0	17.8
LnGrp LOS	D	C	C	C	C	C	C	A	C	D	A	B
Approach Vol, veh/h		959			386			349			417	
Approach Delay, s/veh		29.2			22.4			28.0			26.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	19.8	7.9	23.7	6.5	25.0	11.0	20.6
Change Period (Y+Rc), s	4.0	4.9	4.0	5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	9.0	26.1	6.0	25.3	8.0	27.1	7.0	24.3
Max Q Clear Time (g_c+I1), s	8.0	13.3	4.1	14.6	2.7	9.0	7.8	6.9
Green Ext Time (p_c), s	0.0	1.6	0.0	3.4	0.0	1.2	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	1075	352	16	78	0
Future Volume (veh/h)	11	1075	352	16	78	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1132	371	17	82	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	249	2008	787	36	238	212
Arrive On Green	0.14	0.56	0.23	0.23	0.13	0.00
Sat Flow, veh/h	1781	3647	3554	158	1781	1585
Grp Volume(v), veh/h	12	1132	190	198	82	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1842	1781	1585
Q Serve(g_s), s	0.2	5.9	2.7	2.7	1.2	0.0
Cycle Q Clear(g_c), s	0.2	5.9	2.7	2.7	1.2	0.0
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	249	2008	404	419	238	212
V/C Ratio(X)	0.05	0.56	0.47	0.47	0.34	0.00
Avail Cap(c_a), veh/h	494	4225	1496	1551	1667	1483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.7	4.0	9.6	9.6	11.4	0.0
Incr Delay (d2), s/veh	0.0	0.3	1.1	1.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.7	0.7	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.8	4.3	10.8	10.8	11.7	0.0
LnGrp LOS	B	A	B	B	B	A
Approach Vol, veh/h		1144	388		82	
Approach Delay, s/veh		4.4	10.8		11.7	
Approach LOS		A	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		22.0		6.9	9.7	12.3
Change Period (Y+Rc), s		5.7		3.0	5.7	* 5.7
Max Green Setting (Gmax), s		34.3		27.0	8.0	* 24
Max Q Clear Time (g_c+I1), s		7.9		3.2	2.2	4.7
Green Ext Time (p_c), s		8.4		0.1	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1077	55	72	300	0	113	0	104	0	1	0
Future Volume (veh/h)	0	1077	55	72	300	0	113	0	104	0	1	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1134	58	76	316	0	119	0	109	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	1449	74	117	2016	0	275	0	245	0	4	0
Arrive On Green	0.00	0.42	0.42	0.07	0.57	0.00	0.15	0.00	0.15	0.00	0.00	0.00
Sat Flow, veh/h	1781	3440	176	1781	3647	0	1781	0	1585	0	1870	0
Grp Volume(v), veh/h	0	586	606	76	316	0	119	0	109	0	1	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1839	1781	1777	0	1781	0	1585	0	1870	0
Q Serve(g_s), s	0.0	14.1	14.1	2.1	2.1	0.0	3.0	0.0	3.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.1	14.1	2.1	2.1	0.0	3.0	0.0	3.1	0.0	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	4	749	775	117	2016	0	275	0	245	0	4	0
V/C Ratio(X)	0.00	0.78	0.78	0.65	0.16	0.00	0.43	0.00	0.45	0.00	0.24	0.00
Avail Cap(c_a), veh/h	287	906	938	287	2016	0	287	0	256	0	302	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	12.4	12.4	22.6	5.1	0.0	19.0	0.0	19.1	0.0	24.7	0.0
Incr Delay (d2), s/veh	0.0	4.1	4.0	2.3	0.0	0.0	0.4	0.0	0.5	0.0	10.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.9	5.1	0.8	0.5	0.0	1.2	0.0	1.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.5	16.4	24.9	5.1	0.0	19.4	0.0	19.5	0.0	35.6	0.0
LnGrp LOS	A	B	B	C	A	A	B	A	B	A	D	A
Approach Vol, veh/h		1192			392			228			1	
Approach Delay, s/veh		16.4			9.0			19.5			35.6	
Approach LOS		B			A			B			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	26.6		11.7	0.0	33.8		4.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	25.3		8.0	8.0	26.3		8.0
Max Q Clear Time (g_c+I1), s	4.1	16.1		5.1	0.0	4.1		2.0
Green Ext Time (p_c), s	0.0	4.8		0.2	0.0	1.7		0.0

Intersection Summary			
HCM 6th Ctrl Delay			15.2
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1063	20	50	460	4	38	7	122	48	14	24
Future Volume (veh/h)	6	1063	20	50	460	4	38	7	122	48	14	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	1119	21	53	484	4	40	7	128	51	15	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	1304	24	160	1612	13	130	14	472	124	22	472
Arrive On Green	0.01	0.37	0.37	0.09	0.45	0.45	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1781	3568	67	1781	3612	30	35	46	1585	30	75	1585
Grp Volume(v), veh/h	6	557	583	53	238	250	47	0	128	66	0	25
Grp Sat Flow(s),veh/h/ln	1781	1777	1858	1781	1777	1865	80	0	1585	105	0	1585
Q Serve(g_s), s	0.2	16.1	16.1	1.5	4.8	4.8	0.5	0.0	3.4	0.5	0.0	0.6
Cycle Q Clear(g_c), s	0.2	16.1	16.1	1.5	4.8	4.8	16.5	0.0	3.4	16.5	0.0	0.6
Prop In Lane	1.00		0.04	1.00		0.02	0.85		1.00	0.77		1.00
Lane Grp Cap(c), veh/h	17	650	679	160	793	832	144	0	472	146	0	472
V/C Ratio(X)	0.36	0.86	0.86	0.33	0.30	0.30	0.33	0.00	0.27	0.45	0.00	0.05
Avail Cap(c_a), veh/h	257	714	746	257	793	832	336	0	685	329	0	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.3	16.3	16.3	23.7	9.8	9.8	23.6	0.0	14.9	22.8	0.0	13.9
Incr Delay (d2), s/veh	4.8	9.9	9.6	0.4	0.3	0.3	0.5	0.0	0.1	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.7	7.0	0.6	1.4	1.4	0.6	0.0	1.1	0.9	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.1	26.2	25.8	24.1	10.1	10.1	24.1	0.0	15.0	23.7	0.0	13.9
LnGrp LOS	C	C	C	C	B	B	C	A	B	C	A	B
Approach Vol, veh/h		1146			541			175			91	
Approach Delay, s/veh		26.1			11.5			17.4			21.0	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	26.1		21.0	4.5	30.6		21.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	22.3		24.0	8.0	21.3		24.0
Max Q Clear Time (g_c+I1), s	3.5	18.1		18.5	2.2	6.8		18.5
Green Ext Time (p_c), s	0.0	2.4		0.2	0.0	2.2		0.1

Intersection Summary		
HCM 6th Ctrl Delay		21.0
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	1174	10	37	297	84	14	0	33	80	0	36
Future Volume (veh/h)	235	1174	10	37	297	84	14	0	33	80	0	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	247	1236	11	39	313	88	15	0	35	84	0	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	306	1409	13	102	759	210	43	0	101	248	0	221
Arrive On Green	0.17	0.39	0.39	0.06	0.28	0.28	0.09	0.00	0.09	0.14	0.00	0.14
Sat Flow, veh/h	1781	3609	32	1781	2750	760	492	0	1147	1781	0	1585
Grp Volume(v), veh/h	247	608	639	39	200	201	50	0	0	84	0	38
Grp Sat Flow(s),veh/h/ln	1781	1777	1865	1781	1777	1733	1639	0	0	1781	0	1585
Q Serve(g_s), s	7.3	17.3	17.3	1.1	5.0	5.2	1.6	0.0	0.0	2.3	0.0	1.2
Cycle Q Clear(g_c), s	7.3	17.3	17.3	1.1	5.0	5.2	1.6	0.0	0.0	2.3	0.0	1.2
Prop In Lane	1.00		0.02	1.00		0.44	0.30		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	306	694	728	102	491	479	144	0	0	248	0	221
V/C Ratio(X)	0.81	0.88	0.88	0.38	0.41	0.42	0.35	0.00	0.00	0.34	0.00	0.17
Avail Cap(c_a), veh/h	589	728	764	393	532	519	572	0	0	622	0	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	15.4	15.4	24.7	16.1	16.1	23.4	0.0	0.0	21.2	0.0	20.7
Incr Delay (d2), s/veh	1.9	11.7	11.2	0.9	0.7	0.8	0.5	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.3	7.6	0.4	1.7	1.7	0.6	0.0	0.0	0.9	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	27.1	26.6	25.6	16.8	16.9	23.9	0.0	0.0	21.5	0.0	20.8
LnGrp LOS	C	C	C	C	B	B	C	A	A	C	A	C
Approach Vol, veh/h		1494			440			50			122	
Approach Delay, s/veh		26.3			17.6			23.9			21.2	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	26.9		8.8	13.3	20.7		11.6
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	22.3		19.0	18.0	16.3		19.0
Max Q Clear Time (g_c+I1), s	3.1	19.3		3.6	9.3	7.2		4.3
Green Ext Time (p_c), s	0.0	2.0		0.1	0.3	1.4		0.2

Intersection Summary		
HCM 6th Ctrl Delay		24.1
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	2	8	106	3	43	21	1018	157	39	968	17
Future Volume (veh/h)	6	2	8	106	3	43	21	1018	157	39	968	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	2	8	112	3	45	22	1072	165	41	1019	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	20	17	143	158	134	39	1796	557	66	1873	581
Arrive On Green	0.01	0.01	0.01	0.08	0.08	0.08	0.02	0.35	0.35	0.04	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	6	2	8	112	3	45	22	1072	165	41	1019	18
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.0	0.2	2.4	0.1	1.0	0.5	6.6	2.9	0.9	6.1	0.3
Cycle Q Clear(g_c), s	0.1	0.0	0.2	2.4	0.1	1.0	0.5	6.6	2.9	0.9	6.1	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	20	17	143	158	134	39	1796	557	66	1873	581
V/C Ratio(X)	0.52	0.10	0.48	0.78	0.02	0.34	0.57	0.60	0.30	0.62	0.54	0.03
Avail Cap(c_a), veh/h	325	1558	1320	325	1655	1403	325	2392	743	325	2392	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	18.8	18.9	17.3	16.1	16.6	18.6	10.2	9.0	18.2	9.6	7.8
Incr Delay (d2), s/veh	32.1	2.2	19.7	8.9	0.0	1.5	12.3	0.3	0.3	9.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	1.2	0.0	0.4	0.3	1.6	0.8	0.5	1.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	21.0	38.6	26.3	16.2	18.0	31.0	10.5	9.3	27.5	9.9	7.8
LnGrp LOS	D	C	D	C	B	B	C	B	A	C	A	A
Approach Vol, veh/h		16			160			1259			1078	
Approach Delay, s/veh		41.1			23.8			10.7			10.5	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	18.5	8.1	5.4	5.8	19.1	5.2	8.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	18.0	7.0	32.0	7.0	18.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	2.9	8.6	4.4	2.2	2.5	8.1	2.1	3.0
Green Ext Time (p_c), s	0.0	4.9	0.1	0.0	0.0	4.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	29	70	262	7	30	22	1145	120	17	1058	7
Future Volume (veh/h)	21	29	70	262	7	30	22	1145	120	17	1058	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	31	74	276	7	32	23	1205	126	18	1114	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	132	112	346	456	386	39	1738	539	31	1717	533
Arrive On Green	0.02	0.07	0.07	0.19	0.24	0.24	0.02	0.34	0.34	0.02	0.34	0.34
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	22	31	74	276	7	32	23	1205	126	18	1114	7
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.6	0.8	2.4	7.8	0.2	0.8	0.7	10.8	3.0	0.5	9.8	0.2
Cycle Q Clear(g_c), s	0.6	0.8	2.4	7.8	0.2	0.8	0.7	10.8	3.0	0.5	9.8	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	132	112	346	456	386	39	1738	539	31	1717	533
V/C Ratio(X)	0.59	0.23	0.66	0.80	0.02	0.08	0.60	0.69	0.23	0.58	0.65	0.01
Avail Cap(c_a), veh/h	235	1129	957	740	1765	1496	235	2120	658	235	2120	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	23.3	24.0	20.4	15.2	15.5	25.7	15.1	12.5	25.8	14.9	11.7
Incr Delay (d2), s/veh	14.1	0.9	6.5	4.3	0.0	0.1	13.8	0.8	0.2	15.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	1.0	3.3	0.1	0.3	0.4	3.4	0.9	0.3	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	24.2	30.5	24.6	15.2	15.6	39.5	15.8	12.7	41.4	15.4	11.7
LnGrp LOS	D	C	C	C	B	B	D	B	B	D	B	B
Approach Vol, veh/h		127			315			1354			1139	
Approach Delay, s/veh		30.6			23.5			16.0			15.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	23.0	15.3	8.7	6.1	22.8	6.1	17.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	22.0	22.0	32.0	7.0	22.0	7.0	50.0
Max Q Clear Time (g_c+I1), s	2.5	12.8	9.8	4.4	2.7	11.8	2.6	2.8
Green Ext Time (p_c), s	0.0	5.2	0.6	0.3	0.0	5.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	9	102	113	4	22	28	1189	38	71	1371	15
Future Volume (veh/h)	54	9	102	113	4	22	28	1189	38	71	1371	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	9	107	119	4	23	29	1252	40	75	1443	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	169	143	154	249	211	47	1834	569	95	1970	612
Arrive On Green	0.04	0.09	0.09	0.09	0.13	0.13	0.03	0.36	0.36	0.05	0.39	0.39
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	57	9	107	119	4	23	29	1252	40	75	1443	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.6	0.2	3.3	3.2	0.1	0.6	0.8	10.3	0.8	2.1	12.0	0.3
Cycle Q Clear(g_c), s	1.6	0.2	3.3	3.2	0.1	0.6	0.8	10.3	0.8	2.1	12.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	169	143	154	249	211	47	1834	569	95	1970	612
V/C Ratio(X)	0.73	0.05	0.75	0.77	0.02	0.11	0.61	0.68	0.07	0.79	0.73	0.03
Avail Cap(c_a), veh/h	252	1210	1026	324	1286	1090	252	2241	696	252	2241	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	20.6	21.9	22.1	18.6	18.9	23.8	13.4	10.4	23.1	13.0	9.4
Incr Delay (d2), s/veh	12.1	0.1	7.5	7.9	0.0	0.2	12.1	0.6	0.1	13.6	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.1	1.4	1.6	0.0	0.2	0.4	3.0	0.3	1.1	3.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	20.7	29.4	30.0	18.6	19.1	36.0	14.1	10.5	36.8	14.1	9.4
LnGrp LOS	D	C	C	C	B	B	D	B	B	D	B	A
Approach Vol, veh/h		173			146			1321			1534	
Approach Delay, s/veh		31.0			28.0			14.5			15.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	23.1	9.3	9.5	6.3	24.4	7.2	11.6
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	7.0	21.7	9.0	32.0	7.0	21.7	7.0	34.0
Max Q Clear Time (g_c+I1), s	4.1	12.3	5.2	5.3	2.8	14.0	3.6	2.6
Green Ext Time (p_c), s	0.0	5.3	0.1	0.4	0.0	5.1	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	46	40	18	67	6	22	50	20	8	101	78
Future Volume (veh/h)	79	46	40	18	67	6	22	50	20	8	101	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	48	42	19	71	6	23	53	21	8	106	82
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	304	256	35	196	17	41	258	102	15	183	142
Arrive On Green	0.07	0.16	0.16	0.02	0.12	0.12	0.02	0.20	0.20	0.01	0.19	0.19
Sat Flow, veh/h	1781	1870	1575	1781	1700	144	1781	1272	504	1781	975	754
Grp Volume(v), veh/h	83	48	42	19	0	77	23	0	74	8	0	188
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	0	1843	1781	0	1777	1781	0	1730
Q Serve(g_s), s	1.4	0.7	0.7	0.3	0.0	1.1	0.4	0.0	1.0	0.1	0.0	2.9
Cycle Q Clear(g_c), s	1.4	0.7	0.7	0.3	0.0	1.1	0.4	0.0	1.0	0.1	0.0	2.9
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.28	1.00		0.44
Lane Grp Cap(c), veh/h	119	304	256	35	0	212	41	0	360	15	0	325
V/C Ratio(X)	0.70	0.16	0.16	0.55	0.00	0.36	0.55	0.00	0.21	0.52	0.00	0.58
Avail Cap(c_a), veh/h	751	1671	1407	450	0	1336	510	0	1827	450	0	1720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.5	10.7	10.7	14.4	0.0	12.1	14.3	0.0	9.8	14.6	0.0	11.0
Incr Delay (d2), s/veh	7.2	0.2	0.3	12.6	0.0	1.0	11.1	0.0	0.3	24.9	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.2	0.2	0.2	0.0	0.4	0.2	0.0	0.3	0.1	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	10.9	11.0	27.1	0.0	13.2	25.4	0.0	10.1	39.5	0.0	12.6
LnGrp LOS	C	B	B	C	A	B	C	A	B	D	A	B
Approach Vol, veh/h		173			96			97			196	
Approach Delay, s/veh		15.6			15.9			13.7			13.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	10.5	5.1	9.3	5.2	10.1	6.5	7.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	30.5	7.5	26.5	8.5	29.5	12.5	21.5
Max Q Clear Time (g_c+I1), s	2.1	3.0	2.3	2.7	2.4	4.9	3.4	3.1
Green Ext Time (p_c), s	0.0	0.3	0.0	0.3	0.0	1.0	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	552	561	25	334	326
Future Volume (veh/h)	3	552	561	25	334	326
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	162	591	11	352	343
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	230	205	699	593	411	1297
Arrive On Green	0.13	0.13	0.37	0.37	0.23	0.69
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	3	162	591	11	352	343
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	0.1	5.6	16.3	0.2	10.7	3.9
Cycle Q Clear(g_c), s	0.1	5.6	16.3	0.2	10.7	3.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	230	205	699	593	411	1297
V/C Ratio(X)	0.01	0.79	0.84	0.02	0.86	0.26
Avail Cap(c_a), veh/h	505	450	929	787	505	1625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	23.8	16.2	11.1	20.8	3.2
Incr Delay (d2), s/veh	0.0	6.7	5.6	0.0	11.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.3	7.1	0.1	5.3	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.4	30.5	21.7	11.1	32.4	3.4
LnGrp LOS	C	C	C	B	C	A
Approach Vol, veh/h	165		602			695
Approach Delay, s/veh	30.3		21.5			18.1
Approach LOS	C		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	18.0	26.1				44.1	12.3
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	16.0	28.0				49.0	16.0
Max Q Clear Time (g_c+I1), s	12.7	18.3				5.9	7.6
Green Ext Time (p_c), s	0.4	2.8				2.3	0.3

Intersection Summary	
HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	17	171	415	1	66	262
Future Volume (veh/h)	17	171	415	1	66	262
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	180	437	1	69	276
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	274	244	768	651	568	768
Arrive On Green	0.15	0.15	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1781	1585	1870	1585	951	1870
Grp Volume(v), veh/h	18	180	437	1	69	276
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	951	1870
Q Serve(g_s), s	0.2	2.2	3.7	0.0	1.2	2.1
Cycle Q Clear(g_c), s	0.2	2.2	3.7	0.0	5.0	2.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	274	244	768	651	568	768
V/C Ratio(X)	0.07	0.74	0.57	0.00	0.12	0.36
Avail Cap(c_a), veh/h	1379	1227	2263	1918	1328	2263
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.5	8.3	4.7	3.6	6.6	4.2
Incr Delay (d2), s/veh	0.1	4.3	0.7	0.0	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.1	0.0	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.6	12.7	5.4	3.6	6.7	4.5
LnGrp LOS	A	B	A	A	A	A
Approach Vol, veh/h	198		438			345
Approach Delay, s/veh	12.2		5.3			4.9
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		13.5				13.5	7.2
Change Period (Y+Rc), s		5.0				5.0	4.0
Max Green Setting (Gmax), s		25.0				25.0	16.0
Max Q Clear Time (g_c+I1), s		5.7				7.0	4.2
Green Ext Time (p_c), s		2.3				1.6	0.4

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	467	15	39	277	0	79	0	15	0	0	0
Future Volume (veh/h)	0	467	15	39	277	0	79	0	15	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	492	16	41	292	0	83	0	16	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	1189	529	71	1956	872	128	0	155	8	8	0
Arrive On Green	0.00	0.33	0.33	0.04	0.55	0.00	0.07	0.00	0.10	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1580	1781	3554	1585	1781	0	1580	1781	1870	0
Grp Volume(v), veh/h	0	492	16	41	292	0	83	0	16	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1580	1781	1777	1585	1781	0	1580	1781	1870	0
Q Serve(g_s), s	0.0	2.4	0.2	0.5	0.9	0.0	1.0	0.0	0.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.4	0.2	0.5	0.9	0.0	1.0	0.0	0.2	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	8	1189	529	71	1956	872	128	0	155	8	8	0
V/C Ratio(X)	0.00	0.41	0.03	0.57	0.15	0.00	0.65	0.00	0.10	0.00	0.00	0.00
Avail Cap(c_a), veh/h	626	4059	1805	626	4059	1810	548	0	2220	626	2711	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.8	5.1	10.7	2.5	0.0	10.3	0.0	9.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	7.1	0.0	0.0	5.4	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.0	0.3	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.1	5.1	17.8	2.5	0.0	15.7	0.0	9.6	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		508			333			99			0	
Approach Delay, s/veh		6.1			4.4			14.7			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	6.2	4.9	11.6	5.6	0.6	0.0	16.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	32.0	8.0	26.0	7.0	33.0	8.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.2	2.5	4.4	3.0	0.0	0.0	2.9
Green Ext Time (p_c), s	0.0	0.0	0.0	3.1	0.1	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	2	9	77	2	98	3	645	126	133	317	10
Future Volume (veh/h)	6	2	9	77	2	98	3	645	126	133	317	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	2	9	81	2	103	3	679	133	140	334	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	142	121	209	243	206	11	1314	408	280	1711	531
Arrive On Green	0.01	0.08	0.08	0.06	0.13	0.13	0.00	0.26	0.26	0.08	0.34	0.34
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	6	2	9	81	2	103	3	679	133	140	334	11
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.1	0.0	0.2	0.9	0.0	2.3	0.0	4.3	2.6	1.5	1.8	0.2
Cycle Q Clear(g_c), s	0.1	0.0	0.2	0.9	0.0	2.3	0.0	4.3	2.6	1.5	1.8	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	22	142	121	209	243	206	11	1314	408	280	1711	531
V/C Ratio(X)	0.27	0.01	0.07	0.39	0.01	0.50	0.26	0.52	0.33	0.50	0.20	0.02
Avail Cap(c_a), veh/h	998	786	666	998	786	666	998	2279	707	998	2279	707
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	16.3	16.3	17.2	14.4	15.4	18.9	12.1	11.5	16.8	9.0	8.5
Incr Delay (d2), s/veh	6.3	0.0	0.3	1.2	0.0	1.9	11.9	0.3	0.5	1.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.3	0.0	0.8	0.0	1.2	0.7	0.5	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.1	16.3	16.6	18.4	14.4	17.3	30.9	12.4	11.9	18.1	9.1	8.5
LnGrp LOS	C	B	B	B	B	B	C	B	B	B	A	A
Approach Vol, veh/h		17			186			815			485	
Approach Delay, s/veh		19.6			17.7			12.4			11.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	14.8	7.3	7.9	5.1	17.8	5.2	10.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	3.5	6.3	2.9	2.2	2.0	3.8	2.1	4.3
Green Ext Time (p_c), s	0.2	3.5	0.1	0.0	0.0	1.6	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	347	10	12	136	14	15	14	21	5	8	4
Future Volume (veh/h)	9	347	10	12	136	14	15	14	21	5	8	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	365	11	13	143	15	16	15	22	5	8	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	763	340	24	777	347	83	87	74	215	226	192
Arrive On Green	0.01	0.21	0.21	0.01	0.22	0.22	0.05	0.05	0.05	0.12	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	9	365	11	13	143	15	16	15	22	5	8	4
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.2	3.0	0.2	0.2	1.1	0.2	0.3	0.3	0.4	0.1	0.1	0.1
Cycle Q Clear(g_c), s	0.2	3.0	0.2	0.2	1.1	0.2	0.3	0.3	0.4	0.1	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	763	340	24	777	347	83	87	74	215	226	192
V/C Ratio(X)	0.53	0.48	0.03	0.54	0.18	0.04	0.19	0.17	0.30	0.02	0.04	0.02
Avail Cap(c_a), veh/h	592	2577	1149	592	2577	1149	1292	1356	1149	861	904	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	11.4	10.3	16.2	10.5	10.2	15.2	15.2	15.3	12.8	12.8	12.8
Incr Delay (d2), s/veh	22.8	0.5	0.0	17.1	0.1	0.1	1.1	0.9	2.2	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.9	0.0	0.2	0.3	0.1	0.1	0.1	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	11.8	10.3	33.3	10.6	10.2	16.3	16.1	17.5	12.9	12.9	12.9
LnGrp LOS	D	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		385			171			53			17	
Approach Delay, s/veh		12.4			12.3			16.7			12.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		6.5	5.5	12.1		9.0	5.3	12.2
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		24.0	11.0	24.0		16.0	11.0	24.0
Max Q Clear Time (g_c+I1), s		2.4	2.2	5.0		2.1	2.2	3.1
Green Ext Time (p_c), s		0.1	0.0	2.2		0.0	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	5	7	5	138	5	531	4	62	512	5
Future Volume (veh/h)	5	5	5	7	5	138	5	531	4	62	512	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	5	5	7	5	145	5	559	4	65	539	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	228	193	13	232	196	10	1181	367	96	1429	443
Arrive On Green	0.01	0.12	0.12	0.01	0.12	0.12	0.01	0.23	0.23	0.05	0.28	0.28
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	5	5	5	7	5	145	5	559	4	65	539	5
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.1	0.1	0.1	0.1	3.0	0.1	3.2	0.1	1.2	2.9	0.1
Cycle Q Clear(g_c), s	0.1	0.1	0.1	0.1	0.1	3.0	0.1	3.2	0.1	1.2	2.9	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	228	193	13	232	196	10	1181	367	96	1429	443
V/C Ratio(X)	0.52	0.02	0.03	0.52	0.02	0.74	0.52	0.47	0.01	0.68	0.38	0.01
Avail Cap(c_a), veh/h	574	876	742	574	876	742	574	2541	789	574	2541	789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	13.2	13.2	16.9	13.1	14.4	16.9	11.3	10.1	15.9	9.9	8.9
Incr Delay (d2), s/veh	36.9	0.0	0.1	28.1	0.0	5.4	36.9	0.3	0.0	8.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	1.1	0.1	0.8	0.0	0.6	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	13.2	13.3	44.9	13.2	19.8	53.8	11.6	10.1	23.9	10.1	8.9
LnGrp LOS	D	B	B	D	B	B	D	B	B	C	B	A
Approach Vol, veh/h		15			157			568			609	
Approach Delay, s/veh		26.8			20.7			12.0			11.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	12.9	5.3	9.2	5.2	14.6	5.2	9.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	3.2	5.2	2.1	2.1	2.1	4.9	2.1	5.0
Green Ext Time (p_c), s	0.1	2.7	0.0	0.0	0.0	2.6	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	94	5	103	118	5	86
Future Volume (veh/h)	94	5	103	118	5	86
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	5	108	124	5	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	490	219	157	1624	144	128
Arrive On Green	0.14	0.14	0.09	0.46	0.08	0.08
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	99	5	108	124	5	91
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	0.5	0.1	1.3	0.4	0.1	1.2
Cycle Q Clear(g_c), s	0.5	0.1	1.3	0.4	0.1	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	490	219	157	1624	144	128
V/C Ratio(X)	0.20	0.02	0.69	0.08	0.03	0.71
Avail Cap(c_a), veh/h	3611	1611	1234	4268	905	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.3	8.1	9.6	3.3	9.2	9.7
Incr Delay (d2), s/veh	0.2	0.0	5.2	0.0	0.1	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.0	0.0	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.5	8.1	14.8	3.3	9.3	16.7
LnGrp LOS	A	A	B	A	A	B
Approach Vol, veh/h	104			232	96	
Approach Delay, s/veh	8.5			8.7	16.3	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		6.8	6.9	8.0		14.9
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		11.0	15.0	22.0		26.0
Max Q Clear Time (g_c+I1), s		3.2	3.3	2.5		2.4
Green Ext Time (p_c), s		0.1	0.2	0.5		0.6

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	220	144	1	5	73	637	100	5	525	5
Future Volume (veh/h)	5	5	220	144	1	5	73	637	100	5	525	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	5	232	152	1	5	77	671	105	5	553	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	351	297	275	489	415	195	1301	404	19	1041	323
Arrive On Green	0.01	0.19	0.19	0.08	0.26	0.26	0.06	0.25	0.25	0.01	0.20	0.20
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	5	5	232	152	1	5	77	671	105	5	553	5
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.1	0.1	5.9	1.8	0.0	0.1	0.9	4.8	2.2	0.1	4.1	0.1
Cycle Q Clear(g_c), s	0.1	0.1	5.9	1.8	0.0	0.1	0.9	4.8	2.2	0.1	4.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	19	351	297	275	489	415	195	1301	404	19	1041	323
V/C Ratio(X)	0.27	0.01	0.78	0.55	0.00	0.01	0.40	0.52	0.26	0.27	0.53	0.02
Avail Cap(c_a), veh/h	899	707	599	899	707	599	899	2052	637	899	2052	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	14.0	16.4	18.7	11.5	11.6	19.3	13.5	12.6	21.0	15.0	13.4
Incr Delay (d2), s/veh	7.5	0.0	4.5	1.7	0.0	0.0	1.3	0.3	0.3	7.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.2	0.7	0.0	0.0	0.3	1.4	0.7	0.0	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	14.0	20.8	20.5	11.5	11.6	20.6	13.8	12.9	28.4	15.5	13.5
LnGrp LOS	C	B	C	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		242			158			853			563	
Approach Delay, s/veh		20.8			20.1			14.3			15.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	15.8	8.4	12.9	7.4	13.6	5.2	16.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	2.1	6.8	3.8	7.9	2.9	6.1	2.1	2.1
Green Ext Time (p_c), s	0.0	3.3	0.3	0.5	0.1	2.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	204	0	24	849	17	0	0	5	4	0	10
Future Volume (veh/h)	18	204	0	24	849	17	0	0	5	4	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	215	0	25	894	18	0	0	5	4	0	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	1405	627	45	1428	29	0	0	18	38	0	34
Arrive On Green	0.02	0.40	0.00	0.03	0.40	0.40	0.00	0.00	0.01	0.02	0.00	0.02
Sat Flow, veh/h	1781	3554	1585	1781	3562	72	0	0	1578	1781	0	1578
Grp Volume(v), veh/h	19	215	0	25	446	466	0	0	5	4	0	11
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1857	0	0	1578	1781	0	1578
Q Serve(g_s), s	0.3	1.1	0.0	0.4	5.9	5.9	0.0	0.0	0.1	0.1	0.0	0.2
Cycle Q Clear(g_c), s	0.3	1.1	0.0	0.4	5.9	5.9	0.0	0.0	0.1	0.1	0.0	0.2
Prop In Lane	1.00		1.00	1.00		0.04	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	35	1405	627	45	712	745	0	0	18	38	0	34
V/C Ratio(X)	0.55	0.15	0.00	0.56	0.63	0.63	0.00	0.00	0.28	0.10	0.00	0.32
Avail Cap(c_a), veh/h	487	2185	975	487	1093	1142	0	0	1132	1278	0	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.2	5.7	0.0	14.1	7.0	7.0	0.0	0.0	14.4	14.0	0.0	14.1
Incr Delay (d2), s/veh	12.6	0.0	0.0	10.4	0.9	0.9	0.0	0.0	8.2	1.2	0.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.0	0.2	1.0	1.0	0.0	0.0	0.1	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.8	5.7	0.0	24.5	7.9	7.9	0.0	0.0	22.6	15.2	0.0	19.5
LnGrp LOS	C	A	A	C	A	A	A	A	C	B	A	B
Approach Vol, veh/h		234			937			5			15	
Approach Delay, s/veh		7.5			8.3			22.6			18.4	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.3	4.7	15.6		4.6	4.6	15.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	8.0	18.0		21.0	8.0	18.0
Max Q Clear Time (g_c+I1), s		2.1	2.4	3.1		2.2	2.3	7.9
Green Ext Time (p_c), s		0.0	0.0	1.0		0.0	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	5	43	47	7	67	64	111	16	16	77	98
Future Volume (veh/h)	71	5	43	47	7	67	64	111	16	16	77	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	5	45	49	7	71	67	117	17	17	81	103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	259	218	81	225	190	105	368	310	32	291	245
Arrive On Green	0.06	0.14	0.14	0.05	0.12	0.12	0.06	0.20	0.20	0.02	0.16	0.16
Sat Flow, veh/h	1781	1870	1575	1781	1870	1575	1781	1870	1577	1781	1870	1575
Grp Volume(v), veh/h	75	5	45	49	7	71	67	117	17	17	81	103
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1575	1781	1870	1577	1781	1870	1575
Q Serve(g_s), s	1.1	0.1	0.7	0.7	0.1	1.1	1.0	1.4	0.2	0.3	1.0	1.6
Cycle Q Clear(g_c), s	1.1	0.1	0.7	0.7	0.1	1.1	1.0	1.4	0.2	0.3	1.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	259	218	81	225	190	105	368	310	32	291	245
V/C Ratio(X)	0.66	0.02	0.21	0.60	0.03	0.37	0.64	0.32	0.05	0.54	0.28	0.42
Avail Cap(c_a), veh/h	535	1546	1302	535	1546	1302	535	1617	1363	535	1617	1361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	9.9	10.2	12.5	10.3	10.8	12.3	9.2	8.7	13.0	9.9	10.1
Incr Delay (d2), s/veh	6.3	0.0	0.5	7.0	0.1	1.2	6.4	0.5	0.1	13.4	0.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.4	0.0	0.3	0.5	0.4	0.1	0.2	0.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	9.9	10.6	19.4	10.4	12.0	18.6	9.7	8.8	26.4	10.4	11.3
LnGrp LOS	B	A	B	B	B	B	B	A	A	C	B	B
Approach Vol, veh/h		125			127			201			201	
Approach Delay, s/veh		15.3			14.8			12.6			12.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	9.2	5.2	7.7	5.6	8.1	5.7	7.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	23.0	8.0	22.0	8.0	23.0	8.0	22.0
Max Q Clear Time (g_c+I1), s	2.3	3.4	2.7	2.7	3.0	3.6	3.1	3.1
Green Ext Time (p_c), s	0.0	0.5	0.0	0.1	0.0	0.7	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	74	50	174	22	21	54	758	235	27	282	1
Future Volume (veh/h)	36	74	50	174	22	21	54	758	235	27	282	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	78	53	183	23	22	57	798	247	28	297	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	135	173	229	29	228	85	871	738	64	1648	6
Arrive On Green	0.11	0.11	0.11	0.14	0.14	0.14	0.05	0.47	0.47	0.04	0.45	0.45
Sat Flow, veh/h	603	1237	1585	1591	200	1585	1781	1870	1585	1781	3633	12
Grp Volume(v), veh/h	116	0	53	206	0	22	57	798	247	28	145	153
Grp Sat Flow(s),veh/h/ln	1840	0	1585	1791	0	1585	1781	1870	1585	1781	1777	1868
Q Serve(g_s), s	4.2	0.0	2.2	7.8	0.0	0.8	2.2	28.1	7.0	1.1	3.4	3.4
Cycle Q Clear(g_c), s	4.2	0.0	2.2	7.8	0.0	0.8	2.2	28.1	7.0	1.1	3.4	3.4
Prop In Lane	0.33		1.00	0.89		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	201	0	173	258	0	228	85	871	738	64	806	848
V/C Ratio(X)	0.58	0.00	0.31	0.80	0.00	0.10	0.67	0.92	0.33	0.44	0.18	0.18
Avail Cap(c_a), veh/h	678	0	584	660	0	584	227	1265	1072	202	1204	1266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	0.0	29.0	29.2	0.0	26.2	33.0	17.6	11.9	33.3	11.5	11.5
Incr Delay (d2), s/veh	1.0	0.0	0.4	2.2	0.0	0.1	3.4	6.3	0.1	1.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.8	3.4	0.0	0.3	1.0	12.1	2.2	0.5	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.8	0.0	29.3	31.4	0.0	26.3	36.4	23.8	12.0	35.1	11.6	11.6
LnGrp LOS	C	A	C	C	A	C	D	C	B	D	B	B
Approach Vol, veh/h		169			228			1102			326	
Approach Delay, s/veh		30.4			30.9			21.8			13.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	38.1		11.7	7.4	37.3		14.2
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	8.0	47.7		26.0	9.0	* 48		26.0
Max Q Clear Time (g_c+I1), s	3.1	30.1		6.2	4.2	5.4		9.8
Green Ext Time (p_c), s	0.0	2.8		0.3	0.0	1.1		0.4

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	307	318	1	110	140	4	0	397	341	0	153	142
Future Volume (veh/h)	307	318	1	110	140	4	0	397	341	0	153	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	323	335	1	116	147	4	0	418	359	0	161	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	495	518	2	267	271	7	0	580	492	0	580	
Arrive On Green	0.28	0.28	0.28	0.15	0.15	0.15	0.00	0.31	0.31	0.00	0.31	0.00
Sat Flow, veh/h	1781	1864	6	1781	1812	49	0	1870	1585	0	1870	0
Grp Volume(v), veh/h	323	0	336	116	0	151	0	418	359	0	161	0
Grp Sat Flow(s),veh/h/ln	1781	0	1869	1781	0	1861	0	1870	1585	0	1870	0
Q Serve(g_s), s	8.4	0.0	8.3	3.1	0.0	3.9	0.0	10.4	10.6	0.0	3.4	0.0
Cycle Q Clear(g_c), s	8.4	0.0	8.3	3.1	0.0	3.9	0.0	10.4	10.6	0.0	3.4	0.0
Prop In Lane	1.00		0.00	1.00		0.03	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	495	0	520	267	0	279	0	580	492	0	580	
V/C Ratio(X)	0.65	0.00	0.65	0.43	0.00	0.54	0.00	0.72	0.73	0.00	0.28	
Avail Cap(c_a), veh/h	736	0	772	272	0	285	0	708	600	0	812	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	16.7	0.0	16.6	20.2	0.0	20.6	0.0	16.0	16.1	0.0	13.6	0.0
Incr Delay (d2), s/veh	3.1	0.0	2.9	2.4	0.0	3.7	0.0	4.3	5.4	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	3.5	1.3	0.0	1.8	0.0	4.5	4.0	0.0	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	0.0	19.5	22.6	0.0	24.3	0.0	20.3	21.5	0.0	13.8	0.0
LnGrp LOS	B	A	B	C	A	C	A	C	C	A	B	
Approach Vol, veh/h		659			267			777			161	A
Approach Delay, s/veh		19.6			23.6			20.9			13.8	
Approach LOS		B			C			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.0		21.5		18.7		21.5				
Change Period (Y+Rc), s		* 4.2		5.3		4.2		* 5.3				
Max Green Setting (Gmax), s		* 8		22.7		21.6		* 20				
Max Q Clear Time (g_c+I1), s		5.9		5.4		10.4		12.6				
Green Ext Time (p_c), s		0.4		0.4		4.2		3.7				

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	458	223	20	217	18	213	18	21	3	16	7
Future Volume (veh/h)	13	458	223	20	217	18	213	18	21	3	16	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	482	235	21	228	19	224	19	22	3	17	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	778	670	205	669	53	620	25	306	200	186	70
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	19	1840	1585	55	1582	125	1532	130	1585	65	965	361
Grp Volume(v), veh/h	496	0	235	268	0	0	243	0	22	27	0	0
Grp Sat Flow(s),veh/h/ln	1858	0	1585	1762	0	0	1662	0	1585	1391	0	0
Q Serve(g_s), s	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.4	0.0	2.1	2.1	0.0	0.0	2.7	0.0	0.2	2.7	0.0	0.0
Prop In Lane	0.03		1.00	0.08		0.07	0.92		1.00	0.11		0.26
Lane Grp Cap(c), veh/h	959	0	670	927	0	0	645	0	306	456	0	0
V/C Ratio(X)	0.52	0.00	0.35	0.29	0.00	0.00	0.38	0.00	0.07	0.06	0.00	0.00
Avail Cap(c_a), veh/h	2402	0	1915	2222	0	0	1764	0	1559	1815	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.8	0.0	4.2	4.2	0.0	0.0	8.0	0.0	7.1	7.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.2	0.0	4.4	4.3	0.0	0.0	8.2	0.0	7.1	7.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		731			268			265			27	
Approach Delay, s/veh		4.9			4.3			8.1			7.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	13.2	8.1	13.2	8.1
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 26	21.0	* 26	21.0
Max Q Clear Time (g_c+I1), s	6.4	4.7	4.1	4.7
Green Ext Time (p_c), s	2.6	0.5	0.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	591	11	59	299	120	12	36	39	38	22	26
Future Volume (veh/h)	87	591	11	59	299	120	12	36	39	38	22	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	622	12	62	315	126	13	38	41	40	23	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	855	16	246	629	230	474	65	70	264	13	15
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	130	1580	29	107	1161	424	1355	823	888	290	167	196
Grp Volume(v), veh/h	726	0	0	503	0	0	13	0	79	90	0	0
Grp Sat Flow(s),veh/h/ln	1739	0	0	1693	0	0	1355	0	1711	652	0	0
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	6.7	0.0	0.0	3.9	0.0	0.0	0.1	0.0	1.0	1.7	0.0	0.0
Prop In Lane	0.13		0.02	0.12		0.25	1.00		0.52	0.44		0.30
Lane Grp Cap(c), veh/h	1129	0	0	1104	0	0	474	0	134	292	0	0
V/C Ratio(X)	0.64	0.00	0.00	0.46	0.00	0.00	0.03	0.00	0.59	0.31	0.00	0.00
Avail Cap(c_a), veh/h	2832	0	0	2685	0	0	1498	0	1427	1433	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.7	0.0	0.0	3.2	0.0	0.0	9.2	0.0	9.6	10.6	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.5	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.2	0.0	0.0	3.4	0.0	0.0	9.2	0.0	11.1	10.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	B	B	A	A
Approach Vol, veh/h		726			503			92			90	
Approach Delay, s/veh		4.2			3.4			10.9			10.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.9		5.7		15.9		5.7				
Change Period (Y+Rc), s		* 4.2		4.0		* 4.2		4.0				
Max Green Setting (Gmax), s		* 34		18.0		* 34		18.0				
Max Q Clear Time (g_c+I1), s		8.7		3.0		5.9		3.7				
Green Ext Time (p_c), s		3.0		0.1		2.0		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	343	24	196	236	9	43	55	475	14	24	14
Future Volume (veh/h)	63	343	24	196	236	9	43	55	475	14	24	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	361	20	206	248	7	45	58	143	15	25	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	511	28	268	719	20	269	125	193	215	113	4
Arrive On Green	0.04	0.29	0.29	0.15	0.40	0.40	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1781	1756	97	1781	1810	51	689	1026	1585	322	924	31
Grp Volume(v), veh/h	66	0	381	206	0	255	103	0	143	41	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1853	1781	0	1861	1715	0	1585	1277	0	0
Q Serve(g_s), s	1.0	0.0	5.1	3.1	0.0	2.7	0.0	0.0	2.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	5.1	3.1	0.0	2.7	1.5	0.0	2.4	1.5	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03	0.44		1.00	0.37		0.02
Lane Grp Cap(c), veh/h	78	0	539	268	0	740	394	0	193	332	0	0
V/C Ratio(X)	0.84	0.00	0.71	0.77	0.00	0.34	0.26	0.00	0.74	0.12	0.00	0.00
Avail Cap(c_a), veh/h	510	0	1247	574	0	1319	1067	0	851	969	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.3	0.0	8.8	11.4	0.0	5.9	11.4	0.0	11.8	11.0	0.0	0.0
Incr Delay (d2), s/veh	8.8	0.0	1.4	1.8	0.0	0.2	0.1	0.0	2.1	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.5	1.0	0.0	0.6	0.4	0.0	0.7	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.1	0.0	10.2	13.2	0.0	6.1	11.5	0.0	13.9	11.1	0.0	0.0
LnGrp LOS	C	A	B	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		447			461			246			41	
Approach Delay, s/veh		12.0			9.3			12.9			11.1	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	12.3		7.4	5.2	15.3		7.4
Change Period (Y+Rc), s	4.0	* 4.2		4.0	4.0	* 4.2		4.0
Max Green Setting (Gmax), s	9.0	* 19		15.0	8.0	* 20		15.0
Max Q Clear Time (g_c+I1), s	5.1	7.1		3.5	3.0	4.7		3.5
Green Ext Time (p_c), s	0.2	1.0		0.0	0.0	0.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	85	366	91	66	9	230	797	23	34	913	6
Future Volume (veh/h)	90	85	366	91	66	9	230	797	23	34	913	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	89	50	96	69	2	242	839	8	36	961	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	156	281	184	132	275	273	999	446	271	1082	
Arrive On Green	0.18	0.18	0.18	0.17	0.17	0.17	0.15	0.28	0.28	0.15	0.30	0.00
Sat Flow, veh/h	941	882	1585	1057	760	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	184	0	50	165	0	2	242	839	8	36	961	0
Grp Sat Flow(s),veh/h/ln	1823	0	1585	1817	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.2	0.0	2.1	6.5	0.0	0.1	10.4	17.4	0.3	1.4	20.2	0.0
Cycle Q Clear(g_c), s	7.2	0.0	2.1	6.5	0.0	0.1	10.4	17.4	0.3	1.4	20.2	0.0
Prop In Lane	0.52		1.00	0.58		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	323	0	281	316	0	275	273	999	446	271	1082	
V/C Ratio(X)	0.57	0.00	0.18	0.52	0.00	0.01	0.89	0.84	0.02	0.13	0.89	
Avail Cap(c_a), veh/h	325	0	283	324	0	283	273	1137	507	271	1137	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.5	0.0	27.4	29.4	0.0	26.8	32.6	26.5	20.4	28.8	26.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.1	0.6	0.0	0.0	27.0	5.5	0.0	0.1	8.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.8	2.8	0.0	0.0	6.3	7.5	0.1	0.6	9.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	0.0	27.5	30.0	0.0	26.8	59.6	32.1	20.4	28.9	34.8	0.0
LnGrp LOS	C	A	C	C	A	C	E	C	C	C	C	
Approach Vol, veh/h		234			167			1089			997	A
Approach Delay, s/veh		30.2			30.0			38.1			34.6	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.9	26.9		17.6	15.0	27.9		17.9
Change Period (Y+Rc), s	4.0	4.9		4.0	3.0	* 4		4.0
Max Green Setting (Gmax), s	10.0	25.1		14.0	12.0	* 25		14.0
Max Q Clear Time (g_c+I1), s	3.4	19.4		8.5	12.4	22.2		9.2
Green Ext Time (p_c), s	0.0	2.6		0.2	0.0	1.7		0.2

Intersection Summary	
HCM 6th Ctrl Delay	35.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	476	0	0	470	250	0	0	0	237	0	22
Future Volume (veh/h)	13	476	0	0	470	250	0	0	0	237	0	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	501	0	0	495	263	0	0	0	270	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	26	2005	0	0	768	648	0	6	0	564	296	0
Arrive On Green	0.01	0.56	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.16	0.00	0.00
Sat Flow, veh/h	1781	3647	0	0	1870	1577	0	1870	0	3563	1870	0
Grp Volume(v), veh/h	14	501	0	0	495	263	0	0	0	270	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1577	0	1870	0	1781	1870	0
Q Serve(g_s), s	0.2	2.1	0.0	0.0	6.1	3.4	0.0	0.0	0.0	2.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	2.1	0.0	0.0	6.1	3.4	0.0	0.0	0.0	2.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	26	2005	0	0	768	648	0	6	0	564	296	0
V/C Ratio(X)	0.53	0.25	0.00	0.00	0.64	0.41	0.00	0.00	0.00	0.48	0.00	0.00
Avail Cap(c_a), veh/h	494	3696	0	0	1427	1203	0	519	0	2717	1427	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.1	3.2	0.0	0.0	6.8	6.0	0.0	0.0	0.0	11.1	0.0	0.0
Incr Delay (d2), s/veh	15.8	0.1	0.0	0.0	0.9	0.4	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.0	0.0	1.4	0.7	0.0	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	3.3	0.0	0.0	7.7	6.4	0.0	0.0	0.0	11.7	0.0	0.0
LnGrp LOS	C	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		515			758			0			270	
Approach Delay, s/veh		4.0			7.3			0.0			11.7	
Approach LOS		A			A						B	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		0.0		20.3		8.6	4.4	15.8				
Change Period (Y+Rc), s		4.0		4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		8.0		30.0		22.0	8.0	22.0				
Max Q Clear Time (g_c+I1), s		0.0		4.1		4.0	2.2	8.1				
Green Ext Time (p_c), s		0.0		3.5		0.8	0.0	3.6				

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	517	486	261	135	28	169
Future Volume (veh/h)	517	486	261	135	28	169
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	544	512	208	235	29	178
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	704	626	267	773	313	264
Arrive On Green	0.40	0.40	0.15	0.41	0.17	0.17
Sat Flow, veh/h	1781	1585	1781	1870	1870	1576
Grp Volume(v), veh/h	544	512	208	235	29	178
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1576
Q Serve(g_s), s	11.1	12.0	4.7	3.5	0.5	4.4
Cycle Q Clear(g_c), s	11.1	12.0	4.7	3.5	0.5	4.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	704	626	267	773	313	264
V/C Ratio(X)	0.77	0.82	0.78	0.30	0.09	0.67
Avail Cap(c_a), veh/h	896	797	427	1389	762	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.0	11.3	17.1	8.2	14.7	16.3
Incr Delay (d2), s/veh	3.2	5.3	4.9	0.2	0.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.9	2.0	1.1	0.2	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.2	16.6	22.0	8.4	14.8	19.3
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	1056			443	207	
Approach Delay, s/veh	15.4			14.8	18.7	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		21.3		20.5	10.3	11.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0		21.0	10.0	17.0
Max Q Clear Time (g_c+I1), s		5.5		14.0	6.7	6.4
Green Ext Time (p_c), s		1.4		2.5	0.2	0.5

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	217	396	75	30	12
Future Volume (veh/h)	34	217	396	75	30	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	228	417	79	32	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	64	2414	1334	413	313	279
Arrive On Green	0.04	0.47	0.26	0.26	0.18	0.18
Sat Flow, veh/h	1781	5274	5274	1579	1781	1585
Grp Volume(v), veh/h	36	228	417	79	32	13
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1579	1781	1585
Q Serve(g_s), s	0.5	0.6	1.5	0.9	0.3	0.2
Cycle Q Clear(g_c), s	0.5	0.6	1.5	0.9	0.3	0.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	64	2414	1334	413	313	279
V/C Ratio(X)	0.56	0.09	0.31	0.19	0.10	0.05
Avail Cap(c_a), veh/h	626	6505	4486	1387	1800	1602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	3.3	6.8	6.5	7.9	7.8
Incr Delay (d2), s/veh	7.6	0.0	0.1	0.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.1	0.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	3.3	6.9	6.8	8.0	7.9
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h		264	496		45	
Approach Delay, s/veh		5.4	6.9		8.0	
Approach LOS		A	A		A	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	14.8	8.0	4.8	9.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	23.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	2.6	2.3	2.5	3.5
Green Ext Time (p_c), s	1.3	0.1	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	170	19	805	389	429	25	875	335	224	609	58
Future Volume (veh/h)	58	170	19	805	389	429	25	875	335	224	609	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	179	20	847	409	452	26	921	353	236	641	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	530	165	964	1729	537	39	1346	736	276	2027	629
Arrive On Green	0.04	0.10	0.10	0.28	0.34	0.34	0.02	0.26	0.26	0.16	0.40	0.40
Sat Flow, veh/h	1781	5106	1585	3456	5106	1585	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	61	179	20	847	409	452	26	921	353	236	641	61
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1585	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	2.7	2.6	0.9	18.9	4.6	21.3	1.2	13.1	8.6	10.4	7.0	1.9
Cycle Q Clear(g_c), s	2.7	2.6	0.9	18.9	4.6	21.3	1.2	13.1	8.6	10.4	7.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	79	530	165	964	1729	537	39	1346	736	276	2027	629
V/C Ratio(X)	0.78	0.34	0.12	0.88	0.24	0.84	0.67	0.68	0.48	0.85	0.32	0.10
Avail Cap(c_a), veh/h	221	1837	570	1114	2850	885	133	1837	1003	331	2407	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	33.6	32.8	27.8	19.2	24.7	39.1	26.7	25.0	33.2	16.8	15.3
Incr Delay (d2), s/veh	15.0	0.4	0.3	7.4	0.1	3.9	17.8	0.6	0.5	16.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.0	0.3	7.9	1.6	7.6	0.7	4.9	2.6	5.5	2.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.1	33.9	33.1	35.2	19.2	28.6	57.0	27.3	25.5	49.9	16.9	15.3
LnGrp LOS	D	C	C	D	B	C	E	C	C	D	B	B
Approach Vol, veh/h		260			1708			1300			938	
Approach Delay, s/veh		38.4			29.6			27.4			25.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	25.3	26.5	12.4	5.8	36.0	7.6	31.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	29.0	26.0	29.0	6.0	38.0	10.0	45.0
Max Q Clear Time (g_c+I1), s	12.4	15.1	20.9	4.6	3.2	9.0	4.7	23.3
Green Ext Time (p_c), s	0.2	6.2	1.6	1.0	0.0	4.5	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	84	664	1487	101	77	112
Future Volume (veh/h)	84	664	1487	101	77	112
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	699	1565	106	81	118
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	115	3283	2394	741	245	218
Arrive On Green	0.06	0.64	0.47	0.47	0.14	0.14
Sat Flow, veh/h	1781	5274	5274	1582	1781	1585
Grp Volume(v), veh/h	88	699	1565	106	81	118
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1582	1781	1585
Q Serve(g_s), s	1.8	2.1	8.6	1.4	1.5	2.5
Cycle Q Clear(g_c), s	1.8	2.1	8.6	1.4	1.5	2.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	115	3283	2394	741	245	218
V/C Ratio(X)	0.76	0.21	0.65	0.14	0.33	0.54
Avail Cap(c_a), veh/h	390	4476	2797	867	976	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.8	2.7	7.4	5.5	14.2	14.7
Incr Delay (d2), s/veh	10.0	0.0	0.4	0.1	0.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.5	0.2	0.6	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.8	2.7	7.9	5.6	15.0	16.7
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		787	1671		199	
Approach Delay, s/veh		5.4	7.7		16.0	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	27.5	9.0	6.4	21.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	32.0	20.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	4.1	4.5	3.8	10.6
Green Ext Time (p_c), s	4.7	0.5	0.1	6.5

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	732	9	7	1576	12	1
Future Volume (veh/h)	732	9	7	1576	12	1
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	771	9	7	1659	13	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2533	785	13	3205	221	197
Arrive On Green	0.50	0.50	0.01	0.63	0.12	0.12
Sat Flow, veh/h	5274	1582	1781	5274	1781	1585
Grp Volume(v), veh/h	771	9	7	1659	13	1
Grp Sat Flow(s),veh/h/ln	1702	1582	1781	1702	1781	1585
Q Serve(g_s), s	2.9	0.1	0.1	5.8	0.2	0.0
Cycle Q Clear(g_c), s	2.9	0.1	0.1	5.8	0.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2533	785	13	3205	221	197
V/C Ratio(X)	0.30	0.01	0.52	0.52	0.06	0.01
Avail Cap(c_a), veh/h	3644	1129	442	4911	1161	1033
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.8	4.1	15.9	3.3	12.5	12.4
Incr Delay (d2), s/veh	0.1	0.0	27.9	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.9	4.1	43.8	3.4	12.6	12.4
LnGrp LOS	A	A	D	A	B	B
Approach Vol, veh/h	780			1666	14	
Approach Delay, s/veh	4.9			3.6	12.6	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		8.0	4.2	20.0		24.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		21.0	8.0	23.0		31.0
Max Q Clear Time (g_c+I1), s		2.2	2.1	4.9		7.8
Green Ext Time (p_c), s		0.0	0.0	4.6		12.5

Intersection Summary	
HCM 6th Ctrl Delay	4.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	561	52	128	1449	242	63	83	70	120	77	71
Future Volume (veh/h)	121	561	52	128	1449	242	63	83	70	120	77	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	591	55	135	1525	255	66	87	74	126	81	75
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	2135	663	171	2160	671	84	161	136	166	246	209
Arrive On Green	0.09	0.42	0.42	0.10	0.42	0.42	0.05	0.09	0.09	0.09	0.13	0.13
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	127	591	55	135	1525	255	66	87	74	126	81	75
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.5	5.0	1.4	4.8	16.0	7.2	2.4	2.9	2.9	4.5	2.6	2.8
Cycle Q Clear(g_c), s	4.5	5.0	1.4	4.8	16.0	7.2	2.4	2.9	2.9	4.5	2.6	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	2135	663	171	2160	671	84	161	136	166	246	209
V/C Ratio(X)	0.78	0.28	0.08	0.79	0.71	0.38	0.78	0.54	0.54	0.76	0.33	0.36
Avail Cap(c_a), veh/h	219	2586	803	191	2507	778	246	918	778	629	1320	1119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	12.5	11.4	28.8	15.5	12.9	30.7	28.6	28.6	28.8	25.7	25.8
Incr Delay (d2), s/veh	12.3	0.1	0.1	18.0	0.8	0.4	14.4	2.8	3.3	6.9	0.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.7	0.4	2.8	5.6	0.1	1.3	1.4	1.2	2.2	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.3	12.5	11.5	46.9	16.2	13.3	45.1	31.4	31.9	35.8	26.4	26.8
LnGrp LOS	D	B	B	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h		773			1915			227			282	
Approach Delay, s/veh		17.2			18.0			35.5			30.7	
Approach LOS		B			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	10.6	11.2	32.3	8.1	13.6	10.9	32.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	23.0	32.0	7.0	33.0	9.0	46.0	8.0	32.0
Max Q Clear Time (g_c+I1), s	6.5	4.9	6.8	7.0	4.4	4.8	6.5	18.0
Green Ext Time (p_c), s	0.3	0.7	0.0	4.5	0.0	0.7	0.0	9.6

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	615	32	417	1484	300	57	859	344	143	1105	264
Future Volume (veh/h)	124	615	32	417	1484	300	57	859	344	143	1105	264
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	131	647	5	439	1562	147	60	904	113	151	1163	112
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	837	258	776	1621	501	237	1241	551	279	1220	542
Arrive On Green	0.07	0.16	0.16	0.22	0.32	0.32	0.07	0.35	0.35	0.08	0.34	0.34
Sat Flow, veh/h	3456	5106	1571	3456	5106	1578	3456	3554	1578	3456	3554	1578
Grp Volume(v), veh/h	131	647	5	439	1562	147	60	904	113	151	1163	112
Grp Sat Flow(s),veh/h/ln	1728	1702	1571	1728	1702	1578	1728	1777	1578	1728	1777	1578
Q Serve(g_s), s	4.0	13.4	0.3	12.4	33.2	5.8	1.8	24.5	2.9	4.6	35.2	5.5
Cycle Q Clear(g_c), s	4.0	13.4	0.3	12.4	33.2	5.8	1.8	24.5	2.9	4.6	35.2	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	837	258	776	1621	501	237	1241	551	279	1220	542
V/C Ratio(X)	0.53	0.77	0.02	0.57	0.96	0.29	0.25	0.73	0.21	0.54	0.95	0.21
Avail Cap(c_a), veh/h	251	1065	328	776	1621	501	282	1241	551	282	1225	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.4	44.1	38.7	38.0	37.0	15.9	48.7	31.3	6.7	48.7	35.3	25.6
Incr Delay (d2), s/veh	1.0	3.3	0.0	0.6	14.8	0.5	0.2	2.6	0.4	1.1	16.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	5.6	0.1	5.0	14.9	2.7	0.8	10.1	1.9	1.9	16.6	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.4	47.4	38.7	38.6	51.8	16.4	48.9	33.9	7.0	49.8	51.4	26.0
LnGrp LOS	D	D	D	D	D	B	D	C	A	D	D	C
Approach Vol, veh/h		783			2148			1077			1426	
Approach Delay, s/veh		47.9			46.7			31.9			49.3	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	44.5	28.8	24.1	13.6	43.9	11.9	41.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	9.0	38.0	20.0	23.0	9.0	* 38	8.0	35.0
Max Q Clear Time (g_c+I1), s	6.6	26.5	14.4	15.4	3.8	37.2	6.0	35.2
Green Ext Time (p_c), s	0.1	6.1	0.6	2.5	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.6
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1092	0	0	2196	278	0	0	0	149	0	4
Future Volume (veh/h)	7	1092	0	0	2196	278	0	0	0	149	0	4
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	7	1149	0	0	2312	293				157	0	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2				2	0	2
Cap, veh/h	20	3124	970	140	2669	829				344	0	306
Arrive On Green	0.01	0.61	0.00	0.00	0.52	0.52				0.19	0.00	0.19
Sat Flow, veh/h	1781	5106	1585	489	5106	1585				1781	0	1585
Grp Volume(v), veh/h	7	1149	0	0	2312	293				157	0	4
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	489	1702	1585				1781	0	1585
Q Serve(g_s), s	0.2	5.8	0.0	0.0	20.2	5.5				4.0	0.0	0.1
Cycle Q Clear(g_c), s	0.2	5.8	0.0	0.0	20.2	5.5				4.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	20	3124	970	140	2669	829				344	0	306
V/C Ratio(X)	0.35	0.37	0.00	0.00	0.87	0.35				0.46	0.00	0.01
Avail Cap(c_a), veh/h	417	4284	1330	143	2690	835				939	0	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	25.2	5.0	0.0	0.0	10.7	7.2				18.3	0.0	16.7
Incr Delay (d2), s/veh	3.9	0.1	0.0	0.0	3.3	0.4				0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.3	0.0	0.0	6.3	1.5				1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.1	5.1	0.0	0.0	14.0	7.5				18.7	0.0	16.7
LnGrp LOS	C	A	A	A	B	A				B	A	B
Approach Vol, veh/h		1156			2605						161	
Approach Delay, s/veh		5.2			13.3						18.6	
Approach LOS		A			B						B	

Timer - Assigned Phs				4		6	7	8				
Phs Duration (G+Y+Rc), s				37.4		13.9	4.6	32.8				
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0				
Max Green Setting (Gmax), s				43.0		27.0	12.0	27.0				
Max Q Clear Time (g_c+I1), s				7.8		6.0	2.2	22.2				
Green Ext Time (p_c), s				11.0		0.3	0.0	4.6				

Intersection Summary												
HCM 6th Ctrl Delay			11.1									
HCM 6th LOS			B									

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1250	23	209	2461	17	113
Future Volume (veh/h)	1250	23	209	2461	17	113
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1316	24	220	2591	18	119
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2897	899	208	3758	219	195
Arrive On Green	0.57	0.57	0.12	0.74	0.12	0.12
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	1316	24	220	2591	18	119
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	11.6	0.5	9.0	21.0	0.7	5.5
Cycle Q Clear(g_c), s	11.6	0.5	9.0	21.0	0.7	5.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2897	899	208	3758	219	195
V/C Ratio(X)	0.45	0.03	1.06	0.69	0.08	0.61
Avail Cap(c_a), veh/h	3376	1048	208	4236	695	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.7	7.3	34.1	5.5	30.0	32.1
Incr Delay (d2), s/veh	0.2	0.0	78.7	0.5	0.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.2	8.3	5.0	0.3	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.9	7.3	112.8	6.0	30.0	33.3
LnGrp LOS	A	A	F	A	C	C
Approach Vol, veh/h	1340			2811	137	
Approach Delay, s/veh	9.8			14.3	32.8	
Approach LOS	A			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.4	13.0	49.8		62.8
Change Period (Y+Rc), s		4.9	4.0	6.0		6.0
Max Green Setting (Gmax), s		30.1	9.0	51.0		64.0
Max Q Clear Time (g_c+I1), s		7.5	11.0	13.6		23.0
Green Ext Time (p_c), s		0.3	0.0	13.8		33.8

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	1303	2621	190	165	13
Future Volume (veh/h)	27	1303	2621	190	165	13
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	1372	2759	200	174	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	65	3439	2943	910	287	256
Arrive On Green	0.04	0.67	0.58	0.58	0.16	0.16
Sat Flow, veh/h	1781	5274	5274	1578	1781	1585
Grp Volume(v), veh/h	28	1372	2759	200	174	14
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1578	1781	1585
Q Serve(g_s), s	1.0	7.9	32.9	4.1	6.0	0.5
Cycle Q Clear(g_c), s	1.0	7.9	32.9	4.1	6.0	0.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	65	3439	2943	910	287	256
V/C Ratio(X)	0.43	0.40	0.94	0.22	0.61	0.05
Avail Cap(c_a), veh/h	216	3722	2948	911	837	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	4.8	12.9	6.8	25.7	23.4
Incr Delay (d2), s/veh	1.7	0.1	6.8	0.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.6	10.3	1.0	2.5	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.8	4.9	19.6	7.0	26.5	23.4
LnGrp LOS	C	A	B	A	C	C
Approach Vol, veh/h		1400	2959		188	
Approach Delay, s/veh		5.5	18.8		26.3	
Approach LOS		A	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		50.4		15.5	6.4	44.0
Change Period (Y+Rc), s		6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s		48.1		31.0	8.0	38.1
Max Q Clear Time (g_c+I1), s		9.9		8.0	3.0	34.9
Green Ext Time (p_c), s		13.4		0.4	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	290	445	126	422	69	734	462	7	69	763	0
Future Volume (veh/h)	0	290	445	126	422	69	734	462	7	69	763	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	305	128	133	444	20	773	486	3	73	803	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	470	210	166	1024	457	871	1721	768	139	969	432
Arrive On Green	0.00	0.13	0.13	0.09	0.29	0.29	0.25	0.48	0.48	0.04	0.27	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	0	305	128	133	444	20	773	486	3	73	803	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.0	6.5	6.1	5.9	8.1	0.7	17.2	6.5	0.1	1.7	17.0	0.0
Cycle Q Clear(g_c), s	0.0	6.5	6.1	5.9	8.1	0.7	17.2	6.5	0.1	1.7	17.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	2	470	210	166	1024	457	871	1721	768	139	969	432
V/C Ratio(X)	0.00	0.65	0.61	0.80	0.43	0.04	0.89	0.28	0.00	0.53	0.83	0.00
Avail Cap(c_a), veh/h	156	1288	575	178	1333	594	950	1821	812	302	1155	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	32.9	32.8	35.6	23.2	20.5	28.8	12.3	10.7	37.6	27.3	0.0
Incr Delay (d2), s/veh	0.0	1.5	2.9	21.4	0.3	0.0	9.7	0.1	0.0	3.1	4.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.7	2.4	3.4	3.2	0.3	7.7	2.2	0.0	0.7	7.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.4	35.6	56.9	23.5	20.6	38.5	12.4	10.7	40.7	31.8	0.0
LnGrp LOS	A	C	D	E	C	C	D	B	B	D	C	A
Approach Vol, veh/h		433			597			1262			876	
Approach Delay, s/veh		34.8			30.8			28.4			32.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	43.7	12.4	15.6	25.2	26.8	0.0	28.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	41.0	8.0	29.0	22.0	26.0	7.0	30.0
Max Q Clear Time (g_c+I1), s	3.7	8.5	7.9	8.5	19.2	19.0	0.0	10.1
Green Ext Time (p_c), s	0.0	3.1	0.0	2.1	0.9	2.8	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	375	11	50	537	87	23
Future Volume (veh/h)	375	11	50	537	87	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	395	12	53	565	92	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1366	609	617	1366	313	279
Arrive On Green	0.38	0.38	0.38	0.38	0.18	0.18
Sat Flow, veh/h	3647	1585	978	3647	1781	1585
Grp Volume(v), veh/h	395	12	53	565	92	24
Grp Sat Flow(s),veh/h/ln	1777	1585	978	1777	1781	1585
Q Serve(g_s), s	1.8	0.1	0.9	2.6	1.0	0.3
Cycle Q Clear(g_c), s	1.8	0.1	2.7	2.6	1.0	0.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1366	609	617	1366	313	279
V/C Ratio(X)	0.29	0.02	0.09	0.41	0.29	0.09
Avail Cap(c_a), veh/h	7188	3206	2220	7188	1880	1673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.8	4.3	5.8	5.1	8.1	7.8
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.2	0.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.0	4.4	5.8	5.3	8.7	8.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	407			618	116	
Approach Delay, s/veh	4.9			5.4	8.5	
Approach LOS	A			A	A	

Timer - Assigned Phs		2		4			8
Phs Duration (G+Y+Rc), s		9.0		13.7			13.7
Change Period (Y+Rc), s		5.0		5.0			5.0
Max Green Setting (Gmax), s		24.0		46.0			46.0
Max Q Clear Time (g_c+I1), s		3.0		3.8			4.7
Green Ext Time (p_c), s		0.3		2.7			4.3

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	346	10	69	506	336	22	973	47	258	1150	178
Future Volume (veh/h)	120	346	10	69	506	336	22	973	47	258	1150	178
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	364	11	73	533	354	23	1024	49	272	1211	187
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	1070	477	141	1005	448	70	1514	470	364	1949	605
Arrive On Green	0.06	0.30	0.30	0.04	0.28	0.28	0.02	0.30	0.30	0.11	0.38	0.38
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	126	364	11	73	533	354	23	1024	49	272	1211	187
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.8	6.2	0.4	1.6	9.9	16.1	0.5	13.8	1.8	6.0	15.0	6.5
Cycle Q Clear(g_c), s	2.8	6.2	0.4	1.6	9.9	16.1	0.5	13.8	1.8	6.0	15.0	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	1070	477	141	1005	448	70	1514	470	364	1949	605
V/C Ratio(X)	0.62	0.34	0.02	0.52	0.53	0.79	0.33	0.68	0.10	0.75	0.62	0.31
Avail Cap(c_a), veh/h	487	1458	650	487	1458	650	487	2683	833	487	2683	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	21.2	19.2	36.7	23.6	25.8	37.7	24.1	19.9	33.9	19.6	16.9
Incr Delay (d2), s/veh	3.0	0.2	0.0	2.9	0.4	4.1	2.7	0.5	0.1	4.4	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.4	0.1	0.7	3.9	6.1	0.2	5.1	0.6	2.6	5.3	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	21.4	19.2	39.6	24.1	30.0	40.4	24.7	20.0	38.3	19.9	17.2
LnGrp LOS	D	C	B	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		501			960			1096			1670	
Approach Delay, s/veh		25.7			27.4			24.8			22.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	28.1	8.2	28.5	6.6	34.8	9.6	27.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	41.0	11.0	32.0	11.0	41.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	8.0	15.8	3.6	8.2	2.5	17.0	4.8	18.1
Green Ext Time (p_c), s	0.3	7.4	0.1	2.2	0.0	9.4	0.2	4.0

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	641	11	85	907	35	4	0	32	16	0	0
Future Volume (veh/h)	0	641	11	85	907	35	4	0	32	16	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	675	12	89	955	37	4	0	34	17	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1138	507	120	1800	803	8	0	189	31	247	0
Arrive On Green	0.00	0.32	0.32	0.07	0.51	0.51	0.00	0.00	0.12	0.02	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	0	1585	1781	1870	0
Grp Volume(v), veh/h	0	675	12	89	955	37	4	0	34	17	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	0
Q Serve(g_s), s	0.0	5.4	0.2	1.6	6.1	0.4	0.1	0.0	0.6	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.4	0.2	1.6	6.1	0.4	0.1	0.0	0.6	0.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	5	1138	507	120	1800	803	8	0	189	31	247	0
V/C Ratio(X)	0.00	0.59	0.02	0.74	0.53	0.05	0.51	0.00	0.18	0.55	0.00	0.00
Avail Cap(c_a), veh/h	424	2115	943	424	2115	943	424	0	1462	424	1726	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.6	7.8	15.4	5.6	4.2	16.7	0.0	13.3	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	8.8	0.2	0.0	44.2	0.0	0.5	14.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	0.0	0.8	0.7	0.0	0.1	0.0	0.2	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.1	7.8	24.2	5.8	4.2	60.8	0.0	13.8	30.5	0.0	0.0
LnGrp LOS	A	B	A	C	A	A	E	A	B	C	A	A
Approach Vol, veh/h		687			1081			38			17	
Approach Delay, s/veh		10.0			7.3			18.7			30.5	
Approach LOS		B			A			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	8.0	6.3	14.8	4.1	8.4	0.0	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	31.0	8.0	20.0	8.0	31.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	2.3	2.6	3.6	7.4	2.1	0.0	0.0	8.1
Green Ext Time (p_c), s	0.0	0.1	0.1	3.4	0.0	0.0	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	523	44	204	808	31	77	308	285	4	138	43
Future Volume (veh/h)	43	523	44	204	808	31	77	308	285	4	138	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	551	46	215	851	33	81	324	300	4	145	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	819	365	257	1114	43	89	357	382	5	180	56
Arrive On Green	0.06	0.23	0.23	0.14	0.32	0.32	0.24	0.24	0.24	0.13	0.13	0.13
Sat Flow, veh/h	1781	3554	1585	1781	3488	135	370	1481	1585	37	1341	416
Grp Volume(v), veh/h	45	551	46	215	434	450	405	0	300	194	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1846	1852	0	1585	1794	0	0
Q Serve(g_s), s	2.0	11.4	1.9	9.5	17.8	17.8	17.2	0.0	14.4	8.5	0.0	0.0
Cycle Q Clear(g_c), s	2.0	11.4	1.9	9.5	17.8	17.8	17.2	0.0	14.4	8.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.07	0.20		1.00	0.02		0.23
Lane Grp Cap(c), veh/h	98	819	365	257	568	590	446	0	382	240	0	0
V/C Ratio(X)	0.46	0.67	0.13	0.84	0.76	0.76	0.91	0.00	0.79	0.81	0.00	0.00
Avail Cap(c_a), veh/h	264	1329	593	418	818	850	466	0	399	443	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	37.1	28.4	24.7	33.8	24.8	24.8	29.9	0.0	28.8	34.1	0.0	0.0
Incr Delay (d2), s/veh	1.2	1.7	0.3	3.7	4.0	3.9	20.3	0.0	8.6	2.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.7	0.7	4.1	7.4	7.6	9.8	0.0	5.9	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	30.0	25.0	37.5	28.8	28.7	50.1	0.0	37.4	36.5	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	D	A	D	D	A	A
Approach Vol, veh/h		642			1099			705			194	
Approach Delay, s/veh		30.3			30.5			44.7			36.5	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.2	15.7	24.4		24.8	8.5	31.6
Change Period (Y+Rc), s		5.3	4.0	5.7		5.3	4.0	5.7
Max Green Setting (Gmax), s		20.0	19.0	30.3		20.4	12.0	37.3
Max Q Clear Time (g_c+I1), s		10.5	11.5	13.4		19.2	4.0	19.8
Green Ext Time (p_c), s		0.3	0.2	4.1		0.3	0.0	6.1

Intersection Summary	
HCM 6th Ctrl Delay	34.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	601	30	35	716	4	175	395	66	4	190	23
Future Volume (veh/h)	23	601	30	35	716	4	175	395	66	4	190	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	633	29	37	754	1	184	416	66	4	200	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	831	38	47	876	391	197	446	71	5	241	208
Arrive On Green	0.02	0.24	0.24	0.03	0.25	0.25	0.39	0.39	0.39	0.13	0.13	0.13
Sat Flow, veh/h	1781	3460	158	1781	3554	1585	501	1132	180	37	1832	1585
Grp Volume(v), veh/h	24	325	337	37	754	1	666	0	0	204	0	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1842	1781	1777	1585	1813	0	0	1869	0	1585
Q Serve(g_s), s	1.3	15.9	16.0	1.9	19.0	0.0	33.0	0.0	0.0	10.0	0.0	0.1
Cycle Q Clear(g_c), s	1.3	15.9	16.0	1.9	19.0	0.0	33.0	0.0	0.0	10.0	0.0	0.1
Prop In Lane	1.00		0.09	1.00		1.00	0.28		0.10	0.02		1.00
Lane Grp Cap(c), veh/h	35	427	442	47	876	391	714	0	0	246	0	208
V/C Ratio(X)	0.68	0.76	0.76	0.79	0.86	0.00	0.93	0.00	0.00	0.83	0.00	0.01
Avail Cap(c_a), veh/h	228	480	497	228	959	428	834	0	0	401	0	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.6	33.1	33.1	45.4	33.8	26.6	27.2	0.0	0.0	39.7	0.0	35.4
Incr Delay (d2), s/veh	8.2	7.5	7.3	10.3	8.2	0.0	14.7	0.0	0.0	3.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.3	7.6	1.0	8.7	0.0	16.3	0.0	0.0	4.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	40.6	40.4	55.6	41.9	26.6	41.9	0.0	0.0	43.0	0.0	35.4
LnGrp LOS	D	D	D	E	D	C	D	A	A	D	A	D
Approach Vol, veh/h		686			792			666			206	
Approach Delay, s/veh		41.0			42.6			41.9			42.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		17.2	6.5	28.2		41.8	5.9	28.8
Change Period (Y+Rc), s		4.9	4.0	5.7		4.9	4.0	5.7
Max Green Setting (Gmax), s		20.1	12.0	25.3		43.1	12.0	25.3
Max Q Clear Time (g_c+I1), s		12.0	3.9	18.0		35.0	3.3	21.0
Green Ext Time (p_c), s		0.4	0.0	2.6		2.0	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	42.0
HCM 6th LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	804	89	97	1337	102	37
Future Volume (veh/h)	804	89	97	1337	102	37
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	846	94	102	1407	107	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1488	664	130	2211	207	184
Arrive On Green	0.42	0.42	0.07	0.62	0.12	0.12
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	846	94	102	1407	107	39
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	6.9	1.4	2.2	9.5	2.2	0.9
Cycle Q Clear(g_c), s	6.9	1.4	2.2	9.5	2.2	0.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1488	664	130	2211	207	184
V/C Ratio(X)	0.57	0.14	0.79	0.64	0.52	0.21
Avail Cap(c_a), veh/h	2974	1327	326	4090	745	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	6.9	17.4	4.5	15.9	15.3
Incr Delay (d2), s/veh	0.3	0.1	10.1	0.3	2.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.3	1.0	0.6	0.9	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.8	7.0	27.5	4.8	17.9	15.9
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	940			1509	146	
Approach Delay, s/veh	8.6			6.4	17.3	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		9.4	7.8	21.0			28.8
Change Period (Y+Rc), s		5.0	5.0	5.0			5.0
Max Green Setting (Gmax), s		16.0	7.0	32.0			44.0
Max Q Clear Time (g_c+I1), s		4.2	4.2	8.9			11.5
Green Ext Time (p_c), s		0.3	0.1	5.9			12.3

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	509	275	1020	881	136	368	1084	484	104	1211	54
Future Volume (veh/h)	70	509	275	1020	881	136	368	1084	484	104	1211	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	536	41	1074	927	132	387	1141	170	109	1275	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	623	278	1166	1017	145	462	1726	536	244	1404	436
Arrive On Green	0.08	0.18	0.18	0.23	0.33	0.33	0.13	0.34	0.34	0.07	0.28	0.28
Sat Flow, veh/h	3456	3554	1585	5023	3123	445	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	74	536	41	1074	527	532	387	1141	170	109	1275	14
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1674	1777	1790	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.2	16.0	2.4	22.7	31.0	31.0	11.9	20.7	8.7	3.3	26.3	0.7
Cycle Q Clear(g_c), s	2.2	16.0	2.4	22.7	31.0	31.0	11.9	20.7	8.7	3.3	26.3	0.7
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	623	278	1166	578	583	462	1726	536	244	1404	436
V/C Ratio(X)	0.26	0.86	0.15	0.92	0.91	0.91	0.84	0.66	0.32	0.45	0.91	0.03
Avail Cap(c_a), veh/h	317	682	304	1199	597	602	730	2129	661	254	1425	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	43.6	38.0	40.8	35.2	35.2	46.0	30.7	26.7	48.6	38.1	28.9
Incr Delay (d2), s/veh	0.2	11.0	0.4	11.1	18.5	18.4	2.6	0.9	0.7	0.5	9.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.6	0.9	10.1	15.5	15.6	5.0	8.0	3.2	1.4	11.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	54.6	38.4	51.9	53.7	53.6	48.6	31.7	27.4	49.0	47.2	28.9
LnGrp LOS	D	D	D	D	D	D	D	C	C	D	D	C
Approach Vol, veh/h		651			2133			1698			1398	
Approach Delay, s/veh		52.7			52.8			35.1			47.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	42.8	29.3	25.1	18.6	36.0	12.9	41.5
Change Period (Y+Rc), s	4.0	6.0	4.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	45.4	26.0	* 21	23.0	30.4	10.0	36.6
Max Q Clear Time (g_c+I1), s	5.3	22.7	24.7	18.0	13.9	28.3	4.2	33.0
Green Ext Time (p_c), s	0.0	11.8	0.5	1.2	0.7	1.7	0.1	2.1

Intersection Summary	
HCM 6th Ctrl Delay	46.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	1023	1685	196	137	15
Future Volume (veh/h)	20	1023	1685	196	137	15
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	1077	1774	0	144	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	73	2189	1733		294	
Arrive On Green	0.04	0.62	0.49	0.00	0.17	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	21	1077	1774	0	144	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.5	7.6	22.3	0.0	3.4	0.0
Cycle Q Clear(g_c), s	0.5	7.6	22.3	0.0	3.4	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	73	2189	1733		294	
V/C Ratio(X)	0.29	0.49	1.02		0.49	
Avail Cap(c_a), veh/h	312	2642	1733		1013	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	21.3	4.8	11.7	0.0	17.3	0.0
Incr Delay (d2), s/veh	0.8	0.3	27.8	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.1	11.7	0.0	1.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.1	5.1	39.5	0.0	17.8	0.0
LnGrp LOS	C	A	F		B	
Approach Vol, veh/h		1098	1774	A	144	A
Approach Delay, s/veh		5.4	39.5		17.8	
Approach LOS		A	D		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	34.2	11.6	5.9	28.3
Change Period (Y+Rc), s	6.0	4.0	4.0	* 6
Max Green Setting (Gmax), s	34.0	26.0	8.0	* 22
Max Q Clear Time (g_c+I1), s	9.6	5.4	2.5	24.3
Green Ext Time (p_c), s	8.6	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	14	1144	1929	40	55	11
Future Volume (veh/h)	14	1144	1929	40	55	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	15	1204	2031	42	58	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	45	2708	2416	50	138	29
Arrive On Green	0.03	0.76	0.68	0.68	0.10	0.10
Sat Flow, veh/h	1781	3647	3654	73	1426	295
Grp Volume(v), veh/h	15	1204	1010	1063	71	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1857	1746	0
Q Serve(g_s), s	0.6	8.4	29.1	29.6	2.6	0.0
Cycle Q Clear(g_c), s	0.6	8.4	29.1	29.6	2.6	0.0
Prop In Lane	1.00			0.04	0.82	0.17
Lane Grp Cap(c), veh/h	45	2708	1206	1260	170	0
V/C Ratio(X)	0.33	0.44	0.84	0.84	0.42	0.00
Avail Cap(c_a), veh/h	207	3112	1272	1330	507	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.0	2.9	8.2	8.3	29.3	0.0
Incr Delay (d2), s/veh	1.6	0.2	5.3	5.4	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.0	7.8	8.3	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.6	3.1	13.6	13.7	29.9	0.0
LnGrp LOS	C	A	B	B	C	A
Approach Vol, veh/h		1219	2073		71	
Approach Delay, s/veh		3.5	13.6		29.9	
Approach LOS		A	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		58.2		10.7	5.7	52.4
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		60.3		20.0	8.0	49.3
Max Q Clear Time (g_c+I1), s		10.4		4.6	2.6	31.6
Green Ext Time (p_c), s		14.5		0.1	0.0	15.1

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	1156	1921	55	40	31
Future Volume (veh/h)	37	1156	1921	55	40	31
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	1217	2022	56	42	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105	2482	1970	54	147	131
Arrive On Green	0.06	0.70	0.56	0.56	0.08	0.08
Sat Flow, veh/h	1781	3647	3625	97	1781	1585
Grp Volume(v), veh/h	39	1217	1012	1066	42	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1852	1781	1585
Q Serve(g_s), s	1.0	7.7	27.3	27.3	1.1	0.1
Cycle Q Clear(g_c), s	1.0	7.7	27.3	27.3	1.1	0.1
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	105	2482	991	1033	147	131
V/C Ratio(X)	0.37	0.49	1.02	1.03	0.28	0.02
Avail Cap(c_a), veh/h	291	2854	991	1033	728	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	3.4	10.8	10.8	21.1	20.6
Incr Delay (d2), s/veh	0.8	0.2	34.0	36.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.6	14.9	16.2	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.0	3.6	44.9	47.2	21.5	20.6
LnGrp LOS	C	A	F	F	C	C
Approach Vol, veh/h		1256	2078		44	
Approach Delay, s/veh		4.2	46.1		21.4	
Approach LOS		A	D		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	40.9	8.1	6.9	34.0
Change Period (Y+Rc), s	6.7	4.0	4.0	6.7
Max Green Setting (Gmax), s	39.3	20.0	8.0	27.3
Max Q Clear Time (g_c+I1), s	9.7	3.1	3.0	29.3
Green Ext Time (p_c), s	11.6	0.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	1064	155	708	1747	319	234	419	689	244	862	215
Future Volume (veh/h)	103	1064	155	708	1747	319	234	419	689	244	862	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	108	1120	0	745	1839	0	246	441	0	257	907	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	1204		1023	2551		249	528		598	923	
Arrive On Green	0.05	0.26	0.00	0.33	0.56	0.00	0.08	0.17	0.00	0.19	0.29	0.00
Sat Flow, veh/h	3110	4595	1427	3110	4595	1427	3110	3198	1427	3110	3198	1427
Grp Volume(v), veh/h	108	1120	0	745	1839	0	246	441	0	257	907	0
Grp Sat Flow(s),veh/h/ln	1555	1532	1427	1555	1532	1427	1555	1599	1427	1555	1599	1427
Q Serve(g_s), s	5.1	35.7	0.0	31.7	44.5	0.0	11.9	20.0	0.0	10.9	42.2	0.0
Cycle Q Clear(g_c), s	5.1	35.7	0.0	31.7	44.5	0.0	11.9	20.0	0.0	10.9	42.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	147	1204		1023	2551		249	528		598	923	
V/C Ratio(X)	0.74	0.93		0.73	0.72		0.99	0.84		0.43	0.98	
Avail Cap(c_a), veh/h	166	1204		1023	2551		249	774		598	923	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.5	54.0	0.0	44.4	24.7	0.0	68.9	60.6	0.0	53.3	53.0	0.0
Incr Delay (d2), s/veh	11.2	13.8	0.0	2.3	1.2	0.0	53.7	7.2	0.0	0.2	25.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	14.8	0.0	12.1	15.3	0.0	6.5	8.5	0.0	4.2	19.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.7	67.8	0.0	46.7	25.9	0.0	122.6	67.9	0.0	53.5	78.3	0.0
LnGrp LOS	F	E		D	C		F	E		D	E	
Approach Vol, veh/h		1228	A		2584	A		687	A		1164	A
Approach Delay, s/veh		69.1			31.9			87.5			72.8	
Approach LOS		E			C			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	30.5	55.0	45.0	16.0	49.0	11.1	89.0
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	19.0	* 36	36.0	* 39	12.0	43.3	8.0	67.3
Max Q Clear Time (g_c+I1), s	12.9	22.0	33.7	37.7	13.9	44.2	7.1	46.5
Green Ext Time (p_c), s	0.3	2.7	0.6	1.2	0.0	0.0	0.0	14.9

Intersection Summary	
HCM 6th Ctrl Delay	55.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1783	142	188	2609	21	105
Future Volume (veh/h)	1783	142	188	2609	21	105
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1877	149	198	2746	22	111
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2880	228	222	3823	148	132
Arrive On Green	0.60	0.60	0.12	0.75	0.08	0.08
Sat Flow, veh/h	4989	381	1781	5274	1781	1585
Grp Volume(v), veh/h	1323	703	198	2746	22	111
Grp Sat Flow(s),veh/h/ln	1702	1798	1781	1702	1781	1585
Q Serve(g_s), s	38.4	38.8	16.4	43.9	1.7	10.4
Cycle Q Clear(g_c), s	38.4	38.8	16.4	43.9	1.7	10.4
Prop In Lane		0.21	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2033	1074	222	3823	148	132
V/C Ratio(X)	0.65	0.65	0.89	0.72	0.15	0.84
Avail Cap(c_a), veh/h	2033	1074	368	3823	322	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	20.0	64.7	10.2	63.8	67.8
Incr Delay (d2), s/veh	1.6	3.1	8.5	1.2	0.2	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	15.9	7.8	13.7	0.8	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.5	23.1	73.2	11.4	64.0	73.1
LnGrp LOS	C	C	E	B	E	E
Approach Vol, veh/h	2026			2944	133	
Approach Delay, s/veh	22.1			15.6	71.6	
Approach LOS	C			B	E	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		17.4	22.7	95.3		118.0
Change Period (Y+Rc), s		4.9	4.0	5.7		5.7
Max Green Setting (Gmax), s		27.1	31.0	77.3		112.3
Max Q Clear Time (g_c+I1), s		12.4	18.4	40.8		45.9
Green Ext Time (p_c), s		0.2	0.3	19.3		66.1

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	15	37	191	35	124	85	1153	203	96	692	2
Future Volume (veh/h)	10	15	37	191	35	124	85	1153	203	96	692	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	11	16	39	201	37	131	89	1214	214	101	728	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	20	48	223	58	204	107	2822	876	120	1989	887
Arrive On Green	0.01	0.05	0.05	0.14	0.18	0.18	0.07	0.61	0.61	0.07	0.62	0.62
Sat Flow, veh/h	1603	434	1059	1603	325	1151	1603	4595	1427	1603	3198	1427
Grp Volume(v), veh/h	11	0	55	201	0	168	89	1214	214	101	728	2
Grp Sat Flow(s),veh/h/ln	1603	0	1493	1603	0	1476	1603	1532	1427	1603	1599	1427
Q Serve(g_s), s	1.0	0.0	5.5	18.5	0.0	15.9	8.2	20.8	10.2	9.3	16.7	0.1
Cycle Q Clear(g_c), s	1.0	0.0	5.5	18.5	0.0	15.9	8.2	20.8	10.2	9.3	16.7	0.1
Prop In Lane	1.00		0.71	1.00		0.78	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	0	68	223	0	261	107	2822	876	120	1989	887
V/C Ratio(X)	0.92	0.00	0.81	0.90	0.00	0.64	0.83	0.43	0.24	0.84	0.37	0.00
Avail Cap(c_a), veh/h	32	0	179	417	0	531	160	2822	876	160	1989	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.4	0.0	71.0	63.5	0.0	57.3	69.2	15.2	13.1	68.5	13.9	10.7
Incr Delay (d2), s/veh	56.0	0.0	17.8	5.2	0.0	2.3	12.8	0.5	0.7	20.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.4	7.9	0.0	6.1	3.7	7.0	3.5	4.4	5.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	130.4	0.0	88.7	68.7	0.0	59.6	82.0	15.7	13.8	88.6	14.1	10.7
LnGrp LOS	F	A	F	E	A	E	F	B	B	F	B	B
Approach Vol, veh/h		66			369			1517			831	
Approach Delay, s/veh		95.7			64.6			19.3			23.1	
Approach LOS		F			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	98.1	24.9	11.8	14.0	99.3	5.1	31.6
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	15.0	59.0	39.0	18.0	15.0	59.0	3.0	54.0
Max Q Clear Time (g_c+I1), s	11.3	22.8	20.5	7.5	10.2	18.7	3.0	17.9
Green Ext Time (p_c), s	0.0	15.5	0.4	0.1	0.0	6.9	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	3	9	43	7	55	23	1601	57	67	1483	9
Future Volume (veh/h)	4	3	9	43	7	55	23	1601	57	67	1483	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	3	9	45	7	58	24	1685	60	71	1561	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	58	26	70	183	81	42	1997	620	97	2156	669
Arrive On Green	0.00	0.02	0.02	0.04	0.05	0.05	0.02	0.39	0.39	0.05	0.42	0.42
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	4	3	9	45	7	58	24	1685	60	71	1561	9
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.0	0.2	1.0	0.1	1.4	0.5	12.0	1.0	1.6	10.2	0.1
Cycle Q Clear(g_c), s	0.1	0.0	0.2	1.0	0.1	1.4	0.5	12.0	1.0	1.6	10.2	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	8	58	26	70	183	81	42	1997	620	97	2156	669
V/C Ratio(X)	0.52	0.05	0.35	0.64	0.04	0.71	0.58	0.84	0.10	0.73	0.72	0.01
Avail Cap(c_a), veh/h	489	2835	1265	489	2835	1265	489	2037	632	489	2156	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	19.4	19.5	19.0	18.1	18.7	19.4	11.1	7.7	18.7	9.6	6.7
Incr Delay (d2), s/veh	44.5	0.4	7.7	9.4	0.1	10.9	11.9	3.4	0.1	10.1	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.5	0.0	0.7	0.3	3.3	0.2	0.8	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.5	19.8	27.2	28.4	18.2	29.6	31.3	14.5	7.8	28.7	10.9	6.7
LnGrp LOS	E	B	C	C	B	C	C	B	A	C	B	A
Approach Vol, veh/h		16			110			1769			1641	
Approach Delay, s/veh		35.1			28.4			14.5			11.6	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	20.7	6.6	5.7	5.9	21.9	5.2	7.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.6	14.0	3.0	2.2	2.5	12.2	2.1	3.4
Green Ext Time (p_c), s	0.1	1.7	0.0	0.0	0.0	2.9	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	78	7	1	111	33	5	1	3	13	4	2
Future Volume (veh/h)	1	78	7	1	111	33	5	1	3	13	4	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	82	7	1	117	35	5	1	3	14	4	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	416	185	5	416	185	10	8	7	521	545	462
Arrive On Green	0.00	0.12	0.12	0.00	0.12	0.12	0.01	0.00	0.00	0.29	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	1	82	7	1	117	35	5	1	3	14	4	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.7	0.1	0.0	1.0	0.7	0.1	0.0	0.1	0.2	0.1	0.0
Cycle Q Clear(g_c), s	0.0	0.7	0.1	0.0	1.0	0.7	0.1	0.0	0.1	0.2	0.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	416	185	5	416	185	10	8	7	521	545	462
V/C Ratio(X)	0.19	0.20	0.04	0.19	0.28	0.19	0.52	0.12	0.43	0.03	0.01	0.00
Avail Cap(c_a), veh/h	365	1767	788	365	1819	811	365	1422	1205	573	1587	1345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	13.6	13.4	17.0	13.8	13.6	17.0	17.0	17.0	8.6	8.6	8.6
Incr Delay (d2), s/veh	16.9	0.2	0.1	16.9	0.4	0.5	36.9	6.6	37.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	0.0	0.3	0.2	0.1	0.0	0.1	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	13.9	13.5	34.0	14.1	14.1	53.8	23.5	54.6	8.6	8.6	8.6
LnGrp LOS	C	B	B	C	B	B	D	C	D	A	A	A
Approach Vol, veh/h		90			153			9			20	
Approach Delay, s/veh		14.1			14.3			50.7			8.6	
Approach LOS		B			B			D			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	5.1	5.0	9.0	5.2	15.0	5.0	9.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	* 5
Max Green Setting (Gmax), s	11.0	26.0	7.0	17.0	7.0	29.0	7.0	* 18
Max Q Clear Time (g_c+I1), s	2.2	2.1	2.0	2.7	2.1	2.1	2.0	3.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	65	10	181	100	37	40	1437	173	59	1110	40
Future Volume (veh/h)	13	65	10	181	100	37	40	1437	173	59	1110	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	68	11	191	105	39	42	1513	182	62	1168	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	24	160	71	237	585	261	57	2475	768	79	2538	788
Arrive On Green	0.01	0.05	0.05	0.13	0.16	0.16	0.03	0.48	0.48	0.04	0.50	0.50
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	14	68	11	191	105	39	42	1513	182	62	1168	42
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.5	1.3	0.5	7.2	1.8	1.5	1.6	15.0	4.6	2.4	10.3	0.9
Cycle Q Clear(g_c), s	0.5	1.3	0.5	7.2	1.8	1.5	1.6	15.0	4.6	2.4	10.3	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	24	160	71	237	585	261	57	2475	768	79	2538	788
V/C Ratio(X)	0.58	0.42	0.15	0.81	0.18	0.15	0.74	0.61	0.24	0.79	0.46	0.05
Avail Cap(c_a), veh/h	180	1640	732	899	3178	1417	180	2703	839	180	2703	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	32.2	31.8	29.2	24.9	24.8	33.3	13.1	10.4	32.8	11.4	9.0
Incr Delay (d2), s/veh	7.8	0.7	0.4	2.5	0.1	0.1	6.7	0.7	0.4	6.3	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.5	0.2	3.1	0.7	0.5	0.8	4.7	1.5	1.1	3.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.8	32.9	32.2	31.6	25.0	24.9	40.0	13.8	10.8	39.2	11.7	9.1
LnGrp LOS	D	C	C	C	C	C	D	B	B	D	B	A
Approach Vol, veh/h		93			335			1737			1272	
Approach Delay, s/veh		34.1			28.8			14.1			13.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	38.9	14.2	8.1	7.2	39.8	5.9	16.4
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	7.0	36.7	35.0	32.0	7.0	36.7	7.0	62.0
Max Q Clear Time (g_c+I1), s	4.4	17.0	9.2	3.3	3.6	12.3	2.5	3.8
Green Ext Time (p_c), s	0.0	16.6	0.2	0.2	0.0	15.7	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	297	0	1	321	0	24	0	1	0	0	2
Future Volume (veh/h)	2	297	0	1	321	0	24	0	1	0	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	313	0	1	338	0	25	0	1	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	722	322	6	719	320	44	587	498	6	240	204
Arrive On Green	0.00	0.20	0.00	0.00	0.20	0.00	0.02	0.00	0.31	0.00	0.00	0.13
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	2	313	0	1	338	0	25	0	1	0	0	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	2.4	0.0	0.0	2.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.4	0.0	0.0	2.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	6	722	322	6	719	320	44	587	498	6	240	204
V/C Ratio(X)	0.35	0.43	0.00	0.17	0.47	0.00	0.56	0.00	0.00	0.00	0.00	0.01
Avail Cap(c_a), veh/h	400	2967	1323	400	2967	1323	400	1862	1578	400	1742	1476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	10.8	0.0	15.5	11.0	0.0	15.0	0.0	7.3	0.0	0.0	11.8
Incr Delay (d2), s/veh	32.9	0.4	0.0	13.9	0.5	0.0	10.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.7	0.0	0.0	0.8	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.4	11.2	0.0	29.4	11.4	0.0	25.6	0.0	7.3	0.0	0.0	11.9
LnGrp LOS	D	B	A	C	B	A	C	A	A	A	A	B
Approach Vol, veh/h		315			339			26			2	
Approach Delay, s/veh		11.5			11.5			24.9			11.9	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	14.8	5.0	11.3	5.8	9.0	5.1	11.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	26.0	7.0	29.0	7.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.0	2.0	4.4	2.4	2.0	2.0	4.6
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	0.0	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	238	47	42	380	7	58	129	20	3	52	41
Future Volume (veh/h)	25	238	47	42	380	7	58	129	20	3	52	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	251	49	44	400	7	61	136	21	3	55	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	689	307	73	777	347	94	335	284	6	242	205
Arrive On Green	0.02	0.19	0.19	0.04	0.22	0.22	0.05	0.18	0.18	0.00	0.13	0.13
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	26	251	49	44	400	7	61	136	21	3	55	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.5	1.9	0.8	0.8	3.1	0.1	1.0	2.0	0.3	0.1	0.8	0.7
Cycle Q Clear(g_c), s	0.5	1.9	0.8	0.8	3.1	0.1	1.0	2.0	0.3	0.1	0.8	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	28	689	307	73	777	347	94	335	284	6	242	205
V/C Ratio(X)	0.92	0.36	0.16	0.61	0.51	0.02	0.65	0.41	0.07	0.51	0.23	0.21
Avail Cap(c_a), veh/h	433	1899	847	433	1899	847	433	1605	1360	433	1605	1360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.2	10.8	10.3	14.6	10.6	9.5	14.3	11.2	10.5	15.4	12.1	12.0
Incr Delay (d2), s/veh	58.8	0.3	0.2	7.9	0.5	0.0	7.3	0.8	0.1	55.5	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.5	0.2	0.4	0.9	0.0	0.5	0.7	0.1	0.1	0.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	11.1	10.6	22.5	11.1	9.5	21.7	12.0	10.7	70.9	12.5	12.5
LnGrp LOS	E	B	B	C	B	A	C	B	B	E	B	B
Approach Vol, veh/h		326			451			218			101	
Approach Delay, s/veh		16.0			12.2			14.6			14.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	10.0	5.8	10.5	6.1	8.5	5.0	11.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	26.5	7.5	16.5	7.5	26.5	7.5	16.5
Max Q Clear Time (g_c+I1), s	2.1	4.0	2.8	3.9	3.0	2.8	2.5	5.1
Green Ext Time (p_c), s	0.0	0.7	0.0	1.3	0.0	0.3	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	301	18	77	541	0	14	0	36	0	0	5
Future Volume (veh/h)	2	301	18	77	541	0	14	0	36	0	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	317	19	81	569	0	15	0	38	0	0	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	854	381	111	1068	476	28	507	430	5	213	180
Arrive On Green	0.00	0.24	0.24	0.06	0.30	0.00	0.02	0.00	0.27	0.00	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	2	317	19	81	569	0	15	0	38	0	0	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	2.6	0.3	1.6	4.7	0.0	0.3	0.0	0.6	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	2.6	0.3	1.6	4.7	0.0	0.3	0.0	0.6	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	854	381	111	1068	476	28	507	430	5	213	180
V/C Ratio(X)	0.40	0.37	0.05	0.73	0.53	0.00	0.54	0.00	0.09	0.00	0.00	0.03
Avail Cap(c_a), veh/h	354	3332	1486	354	3332	1486	354	1541	1306	354	1488	1261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	17.5	11.1	10.3	16.2	10.3	0.0	17.2	0.0	9.6	0.0	0.0	13.9
Incr Delay (d2), s/veh	43.3	0.3	0.1	8.9	0.4	0.0	15.6	0.0	0.1	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.8	0.1	0.8	1.3	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	11.4	10.3	25.1	10.7	0.0	32.8	0.0	9.7	0.0	0.0	13.9
LnGrp LOS	E	B	B	C	B	A	C	A	A	A	A	B
Approach Vol, veh/h		338			650			53			5	
Approach Delay, s/veh		11.6			12.5			16.2			13.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	14.5	7.2	13.5	5.5	9.0	5.1	15.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	29.0	7.0	33.0	7.0	28.0	7.0	33.0
Max Q Clear Time (g_c+I1), s	0.0	2.6	3.6	4.6	2.3	2.1	2.0	6.7
Green Ext Time (p_c), s	0.0	0.1	0.0	2.1	0.0	0.0	0.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	274	44	62	510	0	59	129	95	5	100	49
Future Volume (veh/h)	20	274	44	62	510	0	59	129	95	5	100	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	288	46	65	537	0	62	136	100	5	105	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	1050	468	93	1161	518	90	303	257	10	219	185
Arrive On Green	0.02	0.30	0.30	0.05	0.33	0.00	0.05	0.16	0.16	0.01	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	21	288	46	65	537	0	62	136	100	5	105	52
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.5	2.4	0.8	1.4	4.6	0.0	1.3	2.5	2.2	0.1	2.0	1.2
Cycle Q Clear(g_c), s	0.5	2.4	0.8	1.4	4.6	0.0	1.3	2.5	2.2	0.1	2.0	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	1050	468	93	1161	518	90	303	257	10	219	185
V/C Ratio(X)	0.56	0.27	0.10	0.70	0.46	0.00	0.69	0.45	0.39	0.52	0.48	0.28
Avail Cap(c_a), veh/h	532	2471	1102	532	2471	1102	532	801	679	532	801	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	10.4	9.8	18.0	10.3	0.0	18.0	14.6	14.4	19.1	15.9	15.5
Incr Delay (d2), s/veh	12.7	0.3	0.2	9.2	0.6	0.0	9.1	1.0	1.0	37.2	1.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.7	0.2	0.7	1.4	0.0	0.7	0.9	0.7	0.1	0.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.4	10.7	10.0	27.2	10.9	0.0	27.1	15.6	15.4	56.3	17.6	16.4
LnGrp LOS	C	B	B	C	B	A	C	B	B	E	B	B
Approach Vol, veh/h		355			602			298			162	
Approach Delay, s/veh		11.8			12.7			18.0			18.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	10.7	6.5	16.6	6.4	9.0	5.3	17.8
Change Period (Y+Rc), s	4.5	4.5	4.5	5.2	4.5	4.5	4.5	5.2
Max Green Setting (Gmax), s	11.5	16.5	11.5	26.8	11.5	16.5	11.5	26.8
Max Q Clear Time (g_c+I1), s	2.1	4.5	3.4	4.4	3.3	4.0	2.5	6.6
Green Ext Time (p_c), s	0.0	0.8	0.1	3.5	0.1	0.5	0.0	6.0

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	0	7	3	0	487	40	1454	23	214	1674	619
Future Volume (veh/h)	377	0	7	3	0	487	40	1454	23	214	1674	619
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	397	0	7	3	0	513	42	1531	24	225	1762	652
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	535	0	0	6	0	0	55	2516	781	276	3150	978
Arrive On Green	0.15	0.00	0.00	0.00	0.00	0.00	0.03	0.49	0.49	0.16	0.62	0.62
Sat Flow, veh/h	3456	397		1781	3		1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	397	32.7		3	95.8		42	1531	24	225	1762	652
Grp Sat Flow(s),veh/h/ln	1728	C		1781	F		1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	8.3			0.1			1.8	16.5	0.6	9.3	15.3	20.3
Cycle Q Clear(g_c), s	8.3			0.1			1.8	16.5	0.6	9.3	15.3	20.3
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	535			6			55	2516	781	276	3150	978
V/C Ratio(X)	0.74			0.52			0.76	0.61	0.03	0.81	0.56	0.67
Avail Cap(c_a), veh/h	1864			164			164	2516	781	891	4568	1418
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.7			37.8			36.5	14.0	9.9	31.1	8.5	9.5
Incr Delay (d2), s/veh	2.1			58.0			19.2	0.4	0.0	5.8	0.2	0.8
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5			0.1			1.0	5.3	0.2	4.1	4.1	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7			95.8			55.7	14.4	9.9	36.8	8.7	10.3
LnGrp LOS	C			F			E	B	A	D	A	B
Approach Vol, veh/h								1597			2639	
Approach Delay, s/veh								15.4			11.5	
Approach LOS								B			B	

Timer - Assigned Phs	1	2	3		5	6	7
Phs Duration (G+Y+Rc), s	16.8	42.5	5.2		7.4	51.9	16.8
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	38.0	36.0	7.0		7.0	68.0	41.0
Max Q Clear Time (g_c+I1), s	11.3	18.5	2.1		3.8	22.3	10.3
Green Ext Time (p_c), s	0.6	9.7	0.0		0.0	24.5	1.4

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	1871	19	66	1847	45	0	21	8	146	10	7
Future Volume (veh/h)	17	1871	19	66	1847	45	0	21	8	146	10	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	1969	20	69	1944	47	0	22	8	154	11	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	2143	665	87	2303	715	3	132	111	195	501	425
Arrive On Green	0.02	0.42	0.42	0.05	0.45	0.45	0.00	0.07	0.07	0.11	0.27	0.27
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	18	1969	20	69	1944	47	0	22	8	154	11	7
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.6	20.7	0.4	2.2	19.2	1.0	0.0	0.6	0.3	4.8	0.2	0.2
Cycle Q Clear(g_c), s	0.6	20.7	0.4	2.2	19.2	1.0	0.0	0.6	0.3	4.8	0.2	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	2143	665	87	2303	715	3	132	111	195	501	425
V/C Ratio(X)	0.58	0.92	0.03	0.79	0.84	0.07	0.00	0.17	0.07	0.79	0.02	0.02
Avail Cap(c_a), veh/h	125	2154	669	125	2303	715	125	1118	947	251	1249	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	15.6	9.7	26.8	13.8	8.8	0.0	24.9	24.7	24.7	15.3	15.3
Incr Delay (d2), s/veh	16.0	6.9	0.0	19.5	3.1	0.0	0.0	0.6	0.3	12.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.4	0.1	1.3	6.0	0.3	0.0	0.3	0.1	2.5	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	22.5	9.7	46.3	16.9	8.9	0.0	25.5	25.0	36.7	15.4	15.3
LnGrp LOS	D	C	A	D	B	A	A	C	C	D	B	B
Approach Vol, veh/h		2007			2060			30			172	
Approach Delay, s/veh		22.6			17.7			25.3			34.5	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	9.0	7.8	28.9	0.0	20.2	6.0	30.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	34.0	4.0	24.0	4.0	38.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	6.8	2.6	4.2	22.7	0.0	2.2	2.6	21.2
Green Ext Time (p_c), s	0.0	0.1	0.0	1.2	0.0	0.0	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	623	1437	59	215	1467	101	53	1031	298	84	935	489
Future Volume (veh/h)	623	1437	59	215	1467	101	53	1031	298	84	935	489
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	656	1513	20	226	1544	31	56	1085	99	88	984	286
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	480	2021	627	300	1755	545	109	1416	439	143	1467	455
Arrive On Green	0.14	0.40	0.40	0.09	0.34	0.34	0.03	0.28	0.28	0.04	0.29	0.29
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	656	1513	20	226	1544	31	56	1085	99	88	984	286
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	14.0	25.6	0.8	6.4	28.6	1.3	1.6	19.6	4.8	2.5	17.1	15.8
Cycle Q Clear(g_c), s	14.0	25.6	0.8	6.4	28.6	1.3	1.6	19.6	4.8	2.5	17.1	15.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	480	2021	627	300	1755	545	109	1416	439	143	1467	455
V/C Ratio(X)	1.37	0.75	0.03	0.75	0.88	0.06	0.52	0.77	0.23	0.61	0.67	0.63
Avail Cap(c_a), veh/h	480	2021	627	480	1826	567	240	1826	567	240	1826	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	26.1	18.6	44.9	31.1	22.1	48.0	33.4	28.1	47.5	31.7	31.2
Incr Delay (d2), s/veh	177.4	1.6	0.0	3.8	5.2	0.0	3.7	1.5	0.3	4.2	0.7	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.6	9.9	0.3	2.8	11.8	0.5	0.7	7.8	1.8	1.1	6.7	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	220.7	27.7	18.6	48.7	36.3	22.2	51.8	34.9	28.3	51.7	32.4	32.7
LnGrp LOS	F	C	B	D	D	C	D	C	C	D	C	C
Approach Vol, veh/h		2189			1801			1240			1358	
Approach Delay, s/veh		85.5			37.6			35.1			33.7	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	32.9	13.8	44.8	8.2	33.9	19.0	39.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	36.0	14.0	36.0	7.0	36.0	14.0	36.0
Max Q Clear Time (g_c+I1), s	4.5	21.6	8.4	27.6	3.6	19.1	16.0	30.6
Green Ext Time (p_c), s	0.0	6.3	0.3	5.7	0.0	6.8	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	52.2
HCM 6th LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	186	1476	1509	108	140	350
Future Volume (veh/h)	186	1476	1509	108	140	350
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	196	1554	1588	114	147	368
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	248	2930	1829	568	487	433
Arrive On Green	0.14	0.57	0.36	0.36	0.27	0.27
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	196	1554	1588	114	147	368
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	7.0	12.2	18.9	3.3	4.3	14.4
Cycle Q Clear(g_c), s	7.0	12.2	18.9	3.3	4.3	14.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	248	2930	1829	568	487	433
V/C Ratio(X)	0.79	0.53	0.87	0.20	0.30	0.85
Avail Cap(c_a), veh/h	600	3986	1876	582	791	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	8.5	19.5	14.5	18.8	22.5
Incr Delay (d2), s/veh	5.6	0.1	4.6	0.2	0.3	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	3.1	7.0	1.0	1.7	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.8	8.7	24.1	14.7	19.2	28.0
LnGrp LOS	C	A	C	B	B	C
Approach Vol, veh/h		1750	1702		515	
Approach Delay, s/veh		11.4	23.5		25.5	
Approach LOS		B	C		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		42.5		22.8	14.1	28.4
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		51.0		29.0	22.0	24.0
Max Q Clear Time (g_c+I1), s		14.2		16.4	9.0	20.9
Green Ext Time (p_c), s		14.1		1.5	0.4	2.5

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	555	1029	32	647	1161	311	20	748	332	202	618	435
Future Volume (veh/h)	555	1029	32	647	1161	311	20	748	332	202	618	435
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	584	1083	8	681	1222	230	21	787	71	213	651	129
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	684	1444	448	791	1602	497	61	1089	338	282	1417	440
Arrive On Green	0.20	0.28	0.28	0.23	0.31	0.31	0.02	0.21	0.21	0.08	0.28	0.28
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	584	1083	8	681	1222	230	21	787	71	213	651	129
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	16.9	20.0	0.4	19.6	22.3	12.0	0.6	14.8	3.8	6.2	10.9	6.6
Cycle Q Clear(g_c), s	16.9	20.0	0.4	19.6	22.3	12.0	0.6	14.8	3.8	6.2	10.9	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	684	1444	448	791	1602	497	61	1089	338	282	1417	440
V/C Ratio(X)	0.85	0.75	0.02	0.86	0.76	0.46	0.35	0.72	0.21	0.75	0.46	0.29
Avail Cap(c_a), veh/h	969	1777	552	1136	2024	628	134	1876	582	401	2271	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	33.8	26.7	38.3	32.0	28.5	50.2	37.8	33.5	46.5	30.9	29.4
Incr Delay (d2), s/veh	5.4	1.4	0.0	4.9	1.4	0.7	3.4	0.9	0.3	5.0	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	8.0	0.1	8.4	8.8	4.4	0.3	6.0	1.4	2.8	4.3	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.4	35.2	26.7	43.2	33.4	29.2	53.6	38.8	33.8	51.4	31.2	29.8
LnGrp LOS	D	D	C	D	C	C	D	D	C	D	C	C
Approach Vol, veh/h		1675			2133			879			993	
Approach Delay, s/veh		38.7			36.0			38.7			35.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	27.1	28.7	34.3	6.8	33.7	25.5	37.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	38.0	34.0	36.0	4.0	46.0	29.0	41.0
Max Q Clear Time (g_c+I1), s	8.2	16.8	21.6	22.0	2.6	12.9	18.9	24.3
Green Ext Time (p_c), s	0.2	5.2	2.1	5.9	0.0	4.9	1.6	8.1

Intersection Summary	
HCM 6th Ctrl Delay	37.1
HCM 6th LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1563	1964	90	0	155
Future Volume (veh/h)	0	1563	1964	90	0	155
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1645	2067	95	0	163
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	4	3311	3311	1028	264	235
Arrive On Green	0.00	0.65	0.65	0.65	0.00	0.15
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	0	1645	2067	95	0	163
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.0	8.2	11.8	1.1	0.0	4.8
Cycle Q Clear(g_c), s	0.0	8.2	11.8	1.1	0.0	4.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	4	3311	3311	1028	264	235
V/C Ratio(X)	0.00	0.50	0.62	0.09	0.00	0.69
Avail Cap(c_a), veh/h	145	5192	4258	1322	1087	967
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	4.5	5.1	3.2	0.0	19.9
Incr Delay (d2), s/veh	0.0	0.1	0.2	0.0	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	1.5	0.1	0.0	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	4.6	5.3	3.3	0.0	23.5
LnGrp LOS	A	A	A	A	A	C
Approach Vol, veh/h		1645	2162		163	
Approach Delay, s/veh		4.6	5.2		23.5	
Approach LOS		A	A		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		36.9		12.3	0.0	36.9
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		50.0		30.0	4.0	41.0
Max Q Clear Time (g_c+I1), s		10.2		6.8	0.0	13.8
Green Ext Time (p_c), s		15.8		0.5	0.0	18.1

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	1315	170	18	1854	196	176	109	10	108	70	24
Future Volume (veh/h)	78	1315	170	18	1854	196	176	109	10	108	70	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	1384	179	19	1952	206	185	115	11	114	74	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	2296	713	33	2090	649	233	240	204	148	151	128
Arrive On Green	0.06	0.45	0.45	0.02	0.41	0.41	0.13	0.13	0.13	0.08	0.08	0.08
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	82	1384	179	19	1952	206	185	115	11	114	74	25
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.6	11.5	3.9	0.6	20.5	5.0	5.7	3.2	0.3	3.5	2.1	0.8
Cycle Q Clear(g_c), s	2.6	11.5	3.9	0.6	20.5	5.0	5.7	3.2	0.3	3.5	2.1	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	104	2296	713	33	2090	649	233	240	204	148	151	128
V/C Ratio(X)	0.79	0.60	0.25	0.58	0.93	0.32	0.80	0.48	0.05	0.77	0.49	0.19
Avail Cap(c_a), veh/h	159	2296	713	159	2091	649	317	1132	960	317	1132	960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	11.7	9.6	27.4	15.9	11.3	23.7	22.7	21.5	25.2	24.7	24.1
Incr Delay (d2), s/veh	13.5	0.6	0.4	15.5	8.7	0.5	9.4	1.5	0.1	8.2	2.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.3	1.1	0.4	7.6	1.4	2.8	1.4	0.1	1.7	1.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	12.3	9.9	42.8	24.5	11.8	33.1	24.2	21.6	33.4	27.1	24.8
LnGrp LOS	D	B	A	D	C	B	C	C	C	C	C	C
Approach Vol, veh/h		1645			2177			311			213	
Approach Delay, s/veh		13.4			23.5			29.4			30.2	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	11.2	5.0	31.3	11.3	8.5	7.3	29.0
Change Period (Y+Rc), s	4.0	4.0	4.0	6.0	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	10.0	34.0	5.0	23.0	10.0	34.0	5.0	23.0
Max Q Clear Time (g_c+I1), s	5.5	5.2	2.6	13.5	7.7	4.1	4.6	22.5
Green Ext Time (p_c), s	0.1	0.6	0.0	7.9	0.1	0.4	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	153	1281	1791	125	193	277
Future Volume (veh/h)	153	1281	1791	125	193	277
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	161	1348	1885	132	203	292
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	208	2883	1789	555	429	382
Arrive On Green	0.12	0.56	0.35	0.35	0.24	0.24
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	161	1348	1885	132	203	292
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	4.5	8.0	18.0	3.0	5.0	8.8
Cycle Q Clear(g_c), s	4.5	8.0	18.0	3.0	5.0	8.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	208	2883	1789	555	429	382
V/C Ratio(X)	0.77	0.47	1.05	0.24	0.47	0.77
Avail Cap(c_a), veh/h	416	3478	1789	555	1040	925
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	6.6	16.7	11.8	16.7	18.2
Incr Delay (d2), s/veh	6.0	0.1	37.1	0.2	0.8	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.7	11.4	0.9	1.9	7.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.0	6.7	53.8	12.0	17.5	21.4
LnGrp LOS	C	A	F	B	B	C
Approach Vol, veh/h		1509	2017		495	
Approach Delay, s/veh		9.0	51.1		19.8	
Approach LOS		A	D		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	34.0	17.4	11.0	23.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	35.0	30.0	12.0	18.0
Max Q Clear Time (g_c+I1), s	10.0	10.8	6.5	20.0
Green Ext Time (p_c), s	10.0	1.6	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.4
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	1374	1906	58	75	10
Future Volume (veh/h)	100	1374	1906	58	75	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	105	1446	2006	61	79	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	135	3421	2494	774	168	149
Arrive On Green	0.08	0.67	0.49	0.49	0.09	0.09
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	105	1446	2006	61	79	11
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	2.5	5.5	14.0	0.9	1.8	0.3
Cycle Q Clear(g_c), s	2.5	5.5	14.0	0.9	1.8	0.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	135	3421	2494	774	168	149
V/C Ratio(X)	0.78	0.42	0.80	0.08	0.47	0.07
Avail Cap(c_a), veh/h	315	4033	2588	803	1323	1177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.3	3.2	9.1	5.8	18.2	17.5
Incr Delay (d2), s/veh	9.4	0.1	1.9	0.0	2.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.2	3.2	0.2	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.7	3.3	11.0	5.8	20.2	17.7
LnGrp LOS	C	A	B	A	C	B
Approach Vol, veh/h		1551	2067		90	
Approach Delay, s/veh		5.0	10.9		19.9	
Approach LOS		A	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		33.9		8.5	7.7	26.2
Change Period (Y+Rc), s		5.5		4.5	4.5	5.5
Max Green Setting (Gmax), s		33.5		31.5	7.5	21.5
Max Q Clear Time (g_c+I1), s		7.5		3.8	4.5	16.0
Green Ext Time (p_c), s		11.1		0.2	0.1	4.7

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	601	1057	135	293	1488	193	163	770	367	277	1303	306
Future Volume (veh/h)	601	1057	135	293	1488	193	163	770	367	277	1303	306
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	633	1113	40	308	1566	114	172	811	144	292	1372	164
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	575	1715	541	374	1423	442	226	1450	450	288	1541	478
Arrive On Green	0.17	0.34	0.34	0.11	0.28	0.28	0.07	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	3456	5025	1585	3456	5025	1560	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	633	1113	40	308	1566	114	172	811	144	292	1372	164
Grp Sat Flow(s),veh/h/ln	1728	1675	1585	1728	1675	1560	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	20.0	22.5	2.0	10.5	34.0	6.8	5.9	16.2	8.6	10.0	30.8	9.7
Cycle Q Clear(g_c), s	20.0	22.5	2.0	10.5	34.0	6.8	5.9	16.2	8.6	10.0	30.8	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	575	1715	541	374	1423	442	226	1450	450	288	1541	478
V/C Ratio(X)	1.10	0.65	0.07	0.82	1.10	0.26	0.76	0.56	0.32	1.01	0.89	0.34
Avail Cap(c_a), veh/h	575	1715	541	489	1423	442	230	1488	462	288	1573	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	33.5	26.7	52.4	43.1	33.3	55.2	36.6	33.9	55.1	40.0	32.7
Incr Delay (d2), s/veh	67.8	1.1	0.1	8.5	56.5	0.3	13.5	0.7	0.8	56.9	7.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	8.7	0.8	4.9	20.9	2.5	3.0	6.8	3.3	6.4	13.1	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	117.9	34.6	26.8	60.9	99.5	33.6	68.7	37.3	34.7	111.9	47.1	33.4
LnGrp LOS	F	C	C	E	F	C	E	D	C	F	D	C
Approach Vol, veh/h		1786			1988			1127			1828	
Approach Delay, s/veh		63.9			89.8			41.8			56.2	
Approach LOS		E			F			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	40.1	18.0	47.0	12.9	42.2	25.0	40.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	* 6
Max Green Setting (Gmax), s	10.0	35.0	17.0	36.0	8.0	37.0	20.0	* 34
Max Q Clear Time (g_c+I1), s	12.0	18.2	12.5	24.5	7.9	32.8	22.0	36.0
Green Ext Time (p_c), s	0.0	7.4	0.5	10.2	0.0	3.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	783	1031	0	0	1070	109	0	0	0	66	0	876
Future Volume (veh/h)	783	1031	0	0	1070	109	0	0	0	66	0	876
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	0	1870	0	1870
Adj Flow Rate, veh/h	824	1085	0	0	1126	43	0	0	0	69	0	293
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	0	2	0	2
Cap, veh/h	926	2638	0	0	1461	652	3	0	0	178	0	0
Arrive On Green	0.27	0.74	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.10	0.00	0.00
Sat Flow, veh/h	3456	3647	0	0	3647	1585	1781	0		1781	69	
Grp Volume(v), veh/h	824	1085	0	0	1126	43	0	0.0		69	27.2	
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1585	1781			1781	C	
Q Serve(g_s), s	14.5	7.2	0.0	0.0	17.3	1.0	0.0			2.3		
Cycle Q Clear(g_c), s	14.5	7.2	0.0	0.0	17.3	1.0	0.0			2.3		
Prop In Lane	1.00		0.00	0.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	926	2638	0	0	1461	652	3			178		
V/C Ratio(X)	0.89	0.41	0.00	0.00	0.77	0.07	0.00			0.39		
Avail Cap(c_a), veh/h	981	2747	0	0	1513	675	674			253		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00			1.00		
Uniform Delay (d), s/veh	22.3	3.0	0.0	0.0	16.1	11.3	0.0			26.7		
Incr Delay (d2), s/veh	9.3	0.2	0.0	0.0	2.6	0.1	0.0			0.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	6.1	0.7	0.0	0.0	6.0	0.3	0.0			0.9		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	3.2	0.0	0.0	18.7	11.4	0.0			27.2		
LnGrp LOS	C	A	A	A	B	B	A			C		
Approach Vol, veh/h		1909			1169							
Approach Delay, s/veh		15.4			18.4							
Approach LOS		B			B							

Timer - Assigned Phs	1			4	5		7	8				
Phs Duration (G+Y+Rc), s	10.3			53.1	0.0		21.0	32.1				
Change Period (Y+Rc), s	4.0			6.0	4.0		4.0	6.0				
Max Green Setting (Gmax), s	9.0			49.0	24.0		18.0	27.0				
Max Q Clear Time (g_c+I1), s	4.3			9.2	0.0		16.5	19.3				
Green Ext Time (p_c), s	0.0			26.6	0.0		0.5	6.8				

Intersection Summary												
HCM 6th Ctrl Delay			16.8									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	999	83	49	1117	0	149	315	54	142	597	48
Future Volume (veh/h)	75	999	83	49	1117	0	149	315	54	142	597	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	1052	32	52	1176	0	157	332	9	149	628	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	1121	496	67	1068		116	245	311	114	482	
Arrive On Green	0.05	0.32	0.32	0.04	0.30	0.00	0.20	0.20	0.20	0.32	0.32	0.00
Sat Flow, veh/h	1781	3554	1572	1781	3554	1585	591	1250	1585	355	1497	1585
Grp Volume(v), veh/h	79	1052	32	52	1176	0	489	0	9	777	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1572	1781	1777	1585	1841	0	1585	1853	0	1585
Q Serve(g_s), s	6.7	44.0	2.2	4.4	46.0	0.0	30.0	0.0	0.7	49.3	0.0	0.0
Cycle Q Clear(g_c), s	6.7	44.0	2.2	4.4	46.0	0.0	30.0	0.0	0.7	49.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.32		1.00	0.19		1.00
Lane Grp Cap(c), veh/h	93	1121	496	67	1068		361	0	311	597	0	
V/C Ratio(X)	0.85	0.94	0.06	0.78	1.10		1.35	0.00	0.03	1.30	0.00	
Avail Cap(c_a), veh/h	93	1121	496	93	1068		361	0	311	597	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	71.9	50.9	36.6	73.0	53.5	0.0	61.5	0.0	49.7	51.9	0.0	0.0
Incr Delay (d2), s/veh	46.4	14.8	0.1	15.5	59.4	0.0	176.8	0.0	0.0	147.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	21.4	0.8	2.3	28.8	0.0	31.6	0.0	0.3	46.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.3	65.7	36.7	88.5	112.9	0.0	238.3	0.0	49.7	199.5	0.0	0.0
LnGrp LOS	F	E	D	F	F		F	A	D	F	A	
Approach Vol, veh/h		1163			1228	A		498			777	A
Approach Delay, s/veh		68.5			111.8			234.9			199.5	
Approach LOS		E			F			F			F	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		34.0	9.7	54.3		55.0	12.0	52.0				
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0				
Max Green Setting (Gmax), s		30.0	8.0	46.0		49.3	8.0	46.0				
Max Q Clear Time (g_c+I1), s		32.0	6.4	46.0		51.3	8.7	48.0				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0	0.0	0.0				

Intersection Summary	
HCM 6th Ctrl Delay	133.4
HCM 6th LOS	F

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	293	342	93	431	117	537	1540	88	145	1968	175
Future Volume (veh/h)	200	293	342	93	431	117	537	1540	88	145	1968	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	211	308	120	98	454	35	565	1621	42	153	2072	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	562	251	119	525	234	605	2589	804	181	2214	
Arrive On Green	0.08	0.16	0.16	0.07	0.15	0.15	0.17	0.51	0.51	0.10	0.43	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	211	308	120	98	454	35	565	1621	42	153	2072	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	7.2	9.6	8.3	6.5	15.0	2.3	19.3	27.5	1.6	10.1	46.4	0.0
Cycle Q Clear(g_c), s	7.2	9.6	8.3	6.5	15.0	2.3	19.3	27.5	1.6	10.1	46.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	562	251	119	525	234	605	2589	804	181	2214	
V/C Ratio(X)	0.79	0.55	0.48	0.83	0.86	0.15	0.93	0.63	0.05	0.85	0.94	
Avail Cap(c_a), veh/h	288	592	264	119	563	251	605	2589	804	267	2214	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.4	46.6	46.0	55.3	50.0	44.6	48.8	21.4	15.0	53.0	32.4	0.0
Incr Delay (d2), s/veh	11.7	1.5	2.4	33.9	14.0	0.6	21.8	1.2	0.1	10.2	8.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	4.2	3.3	4.0	7.4	0.9	9.8	10.2	0.6	4.9	19.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.2	48.1	48.4	89.2	64.0	45.2	70.7	22.5	15.1	63.2	40.8	0.0
LnGrp LOS	E	D	D	F	E	D	E	C	B	E	D	
Approach Vol, veh/h		639			587			2228			2225	A
Approach Delay, s/veh		54.1			67.1			34.6			42.3	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	66.8	12.0	25.0	25.0	58.0	13.2	23.7
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	18.0	54.0	8.0	20.0	21.0	51.0	10.0	* 19
Max Q Clear Time (g_c+I1), s	12.1	29.5	8.5	11.6	21.3	48.4	9.2	17.0
Green Ext Time (p_c), s	0.1	10.8	0.0	1.9	0.0	2.3	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	427	276	348	658	415	197	773	232	321	1377	7
Future Volume (veh/h)	136	427	276	348	658	415	197	773	232	321	1377	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	143	449	0	366	693	437	207	814	244	338	1449	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	339	589		427	719	513	280	1249	751	425	1438	
Arrive On Green	0.10	0.17	0.00	0.12	0.20	0.20	0.08	0.35	0.35	0.12	0.40	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1573	3456	3554	1578	3456	3554	1585
Grp Volume(v), veh/h	143	449	0	366	693	437	207	814	244	338	1449	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1573	1728	1777	1578	1728	1777	1585
Q Serve(g_s), s	3.5	10.7	0.0	9.2	17.2	18.0	5.2	17.1	8.5	8.5	36.0	0.0
Cycle Q Clear(g_c), s	3.5	10.7	0.0	9.2	17.2	18.0	5.2	17.1	8.5	8.5	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	589		427	719	513	280	1249	751	425	1438	
V/C Ratio(X)	0.42	0.76		0.86	0.96	0.85	0.74	0.65	0.32	0.80	1.01	
Avail Cap(c_a), veh/h	350	639		427	719	513	311	1249	751	583	1438	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.7	35.4	0.0	38.2	35.1	28.0	40.0	24.3	14.5	37.9	26.5	0.0
Incr Delay (d2), s/veh	0.3	4.3	0.0	15.7	24.8	12.9	6.7	1.4	0.3	5.3	25.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.0	0.0	4.8	9.7	10.2	2.3	6.6	3.0	3.6	18.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.0	39.7	0.0	53.9	60.0	40.9	46.6	25.6	14.8	43.2	52.0	0.0
LnGrp LOS	D	D		D	E	D	D	C	B	D	F	
Approach Vol, veh/h		592	A		1496			1265			1787	A
Approach Delay, s/veh		39.3			52.9			27.0			50.3	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	37.3	16.0	19.7	11.2	42.0	12.7	23.0
Change Period (Y+Rc), s	5.0	6.0	5.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	15.0	28.0	11.0	* 16	8.0	36.0	9.0	18.0
Max Q Clear Time (g_c+I1), s	10.5	19.1	11.2	12.7	7.2	38.0	5.5	19.2
Green Ext Time (p_c), s	0.5	2.8	0.0	0.7	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	857	82	46	891	486	94	448	49	375	1248	167
Future Volume (veh/h)	88	857	82	46	891	486	94	448	49	375	1248	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	902	23	48	938	0	99	472	0	395	1314	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	988	438	263	912		273	1117		444	1292	574
Arrive On Green	0.10	0.28	0.28	0.08	0.26	0.00	0.08	0.31	0.00	0.13	0.36	0.36
Sat Flow, veh/h	3456	3554	1576	3456	3554	1585	3456	3554	1585	3456	3554	1579
Grp Volume(v), veh/h	93	902	23	48	938	0	99	472	0	395	1314	88
Grp Sat Flow(s),veh/h/ln	1728	1777	1576	1728	1777	1585	1728	1777	1585	1728	1777	1579
Q Serve(g_s), s	2.3	23.0	1.0	1.2	24.0	0.0	2.5	9.8	0.0	10.5	34.0	3.5
Cycle Q Clear(g_c), s	2.3	23.0	1.0	1.2	24.0	0.0	2.5	9.8	0.0	10.5	34.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	337	988	438	263	912		273	1117		444	1292	574
V/C Ratio(X)	0.28	0.91	0.05	0.18	1.03		0.36	0.42		0.89	1.02	0.15
Avail Cap(c_a), veh/h	370	988	438	370	912		296	1140		444	1292	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	32.7	24.7	40.5	34.7	0.0	40.8	25.3	0.0	40.1	29.7	20.0
Incr Delay (d2), s/veh	0.2	12.3	0.0	0.1	37.2	0.0	0.3	0.5	0.0	19.0	29.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	11.3	0.4	0.5	14.8	0.0	1.1	4.1	0.0	5.6	19.1	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.3	45.0	24.8	40.6	72.0	0.0	41.1	25.8	0.0	59.1	59.0	20.3
LnGrp LOS	D	D	C	D	F		D	C		E	F	C
Approach Vol, veh/h		1018			986	A		571	A		1797	
Approach Delay, s/veh		44.0			70.5			28.5			57.2	
Approach LOS		D			E			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	35.4	11.1	31.0	11.4	40.0	13.1	29.0
Change Period (Y+Rc), s	4.0	6.0	4.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	12.0	30.0	10.0	* 25	8.0	34.0	10.0	24.0
Max Q Clear Time (g_c+I1), s	12.5	11.8	3.2	25.0	4.5	36.0	4.3	26.0
Green Ext Time (p_c), s	0.0	3.8	0.0	0.0	0.1	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	4	80	23	5	0	149	1342	16	4	1197	14
Future Volume (veh/h)	9	4	80	23	5	0	149	1342	16	4	1197	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	4	84	24	5	0	157	1413	17	4	1260	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	39	110	38	8	0	202	2144	956	6	1753	782
Arrive On Green	0.07	0.07	0.07	0.03	0.03	0.00	0.11	0.60	0.60	0.00	0.49	0.49
Sat Flow, veh/h	1252	556	1585	1486	310	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	13	0	84	29	0	0	157	1413	17	4	1260	15
Grp Sat Flow(s),veh/h/ln	1808	0	1585	1796	0	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.4	0.0	3.2	1.0	0.0	0.0	5.2	16.0	0.3	0.1	17.0	0.3
Cycle Q Clear(g_c), s	0.4	0.0	3.2	1.0	0.0	0.0	5.2	16.0	0.3	0.1	17.0	0.3
Prop In Lane	0.69		1.00	0.83		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	0	110	46	0	0	202	2144	956	6	1753	782
V/C Ratio(X)	0.10	0.00	0.76	0.63	0.00	0.00	0.78	0.66	0.02	0.70	0.72	0.02
Avail Cap(c_a), veh/h	469	0	411	118	0	0	526	2274	1014	234	1753	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	0.0	27.9	29.4	0.0	0.0	26.3	8.0	4.8	30.3	12.1	7.9
Incr Delay (d2), s/veh	0.1	0.0	4.1	5.3	0.0	0.0	2.5	0.8	0.0	43.8	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.2	0.5	0.0	0.0	2.1	3.6	0.1	0.1	5.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	31.9	34.7	0.0	0.0	28.7	8.7	4.9	74.1	13.7	7.9
LnGrp LOS	C	A	C	C	A	A	C	A	A	E	B	A
Approach Vol, veh/h		97			29			1587			1279	
Approach Delay, s/veh		31.2			34.7			10.7			13.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	42.8		5.6	10.9	36.1		8.4
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.2
Max Green Setting (Gmax), s	8.0	39.0		4.0	18.0	24.0		15.8
Max Q Clear Time (g_c+I1), s	2.1	18.0		3.0	7.2	19.0		5.2
Green Ext Time (p_c), s	0.0	18.8		0.0	0.2	4.7		0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	0	11	40	0	71	105	933	19	20	1152	8
Future Volume (veh/h)	22	0	11	40	0	71	105	933	19	20	1152	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	0	12	42	0	75	111	982	20	21	1213	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	0	113	260	0	232	163	1719	35	60	1538	10
Arrive On Green	0.07	0.00	0.07	0.15	0.00	0.15	0.09	0.48	0.48	0.03	0.42	0.42
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3562	73	1781	3619	24
Grp Volume(v), veh/h	23	0	12	42	0	75	111	490	512	21	596	625
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1857	1781	1777	1866
Q Serve(g_s), s	0.8	0.0	0.5	1.4	0.0	2.8	4.0	13.1	13.1	0.8	19.3	19.3
Cycle Q Clear(g_c), s	0.8	0.0	0.5	1.4	0.0	2.8	4.0	13.1	13.1	0.8	19.3	19.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.01
Lane Grp Cap(c), veh/h	127	0	113	260	0	232	163	858	896	60	755	793
V/C Ratio(X)	0.18	0.00	0.11	0.16	0.00	0.32	0.68	0.57	0.57	0.35	0.79	0.79
Avail Cap(c_a), veh/h	267	0	238	1096	0	976	214	888	929	214	888	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	0.0	28.9	24.9	0.0	25.5	29.3	12.3	12.3	31.5	16.6	16.6
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.1	0.0	0.3	2.6	1.2	1.2	1.3	5.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	0.6	0.0	1.0	1.7	4.5	4.7	0.3	7.6	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.3	0.0	29.1	25.0	0.0	25.8	32.0	13.5	13.5	32.7	21.5	21.3
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		35			117			1113			1242	
Approach Delay, s/veh		29.2			25.5			15.3			21.6	
Approach LOS		C			C			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		8.8	10.1	34.0		13.7	6.3	37.8				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		10.0	8.0	33.3		41.0	8.0	33.3				
Max Q Clear Time (g_c+I1), s		2.8	6.0	21.3		4.8	2.8	15.1				
Green Ext Time (p_c), s		0.0	0.0	7.0		0.3	0.0	7.3				

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	645	580	177	525	101	390	600	102	586	820	37
Future Volume (veh/h)	26	645	580	177	525	101	390	600	102	586	820	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2001	1924	1924	2001	1924	1924	2001	1924	1924	1954	1879	1879
Adj Flow Rate, veh/h	27	679	551	186	553	37	411	632	24	617	863	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	100	836	601	224	1074	477	523	981	435	703	1148	510
Arrive On Green	0.05	0.23	0.23	0.12	0.29	0.29	0.14	0.27	0.27	0.19	0.32	0.32
Sat Flow, veh/h	1906	3656	1620	1906	3656	1622	3698	3656	1622	3611	3571	1585
Grp Volume(v), veh/h	27	679	551	186	553	37	411	632	24	617	863	10
Grp Sat Flow(s),veh/h/ln	1906	1828	1620	1906	1828	1622	1849	1828	1622	1806	1785	1585
Q Serve(g_s), s	1.4	17.9	23.2	9.7	12.8	1.7	10.9	15.5	1.1	16.9	22.0	0.4
Cycle Q Clear(g_c), s	1.4	17.9	23.2	9.7	12.8	1.7	10.9	15.5	1.1	16.9	22.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	836	601	224	1074	477	523	981	435	703	1148	510
V/C Ratio(X)	0.27	0.81	0.92	0.83	0.51	0.08	0.79	0.64	0.06	0.88	0.75	0.02
Avail Cap(c_a), veh/h	187	910	634	356	1234	547	946	1234	547	781	1148	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	37.1	30.6	43.8	29.9	25.9	42.2	32.9	27.6	39.8	30.9	23.5
Incr Delay (d2), s/veh	0.5	5.9	18.5	4.4	0.7	0.1	1.0	1.3	0.1	9.6	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	8.2	14.8	4.6	5.4	0.6	4.8	6.6	0.4	8.0	9.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	43.1	49.1	48.3	30.5	26.1	43.2	34.2	27.7	49.4	34.0	23.6
LnGrp LOS	D	D	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1257			776			1067			1490	
Approach Delay, s/veh		45.8			34.6			37.5			40.3	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	28.9	18.4	38.4	9.3	35.6	23.8	33.0
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	19.0	25.3	26.0	30.3	10.0	34.3	22.0	34.3
Max Q Clear Time (g_c+I1), s	11.7	19.9	12.9	24.0	3.4	14.8	18.9	17.5
Green Ext Time (p_c), s	0.3	3.4	1.5	5.1	0.0	8.9	0.9	9.2

Intersection Summary	
HCM 6th Ctrl Delay	40.2
HCM 6th LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1300	66	183	957	52	82
Future Volume (veh/h)	1300	66	183	957	52	82
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1368	69	193	1007	55	86
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1610	718	238	2336	307	273
Arrive On Green	0.45	0.45	0.13	0.66	0.17	0.17
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	1368	69	193	1007	55	86
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	19.5	1.4	6.0	7.7	1.5	2.7
Cycle Q Clear(g_c), s	19.5	1.4	6.0	7.7	1.5	2.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1610	718	238	2336	307	273
V/C Ratio(X)	0.85	0.10	0.81	0.43	0.18	0.31
Avail Cap(c_a), veh/h	1704	760	250	2559	813	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	8.9	24.0	4.7	20.1	20.6
Incr Delay (d2), s/veh	4.5	0.1	15.7	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.4	3.2	1.3	0.6	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.3	9.0	39.7	4.9	20.2	20.9
LnGrp LOS	B	A	D	A	C	C
Approach Vol, veh/h	1437			1200	141	
Approach Delay, s/veh	17.8			10.5	20.6	
Approach LOS	B			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		13.8	11.6	31.5		43.1
Change Period (Y+Rc), s		4.0	4.0	5.7		* 5.7
Max Green Setting (Gmax), s		26.0	8.0	27.3		* 41
Max Q Clear Time (g_c+I1), s		4.7	8.0	21.5		9.7
Green Ext Time (p_c), s		0.3	0.0	4.3		9.7

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	436	754	44	325	72	377	1247	55	147	1859	129
Future Volume (veh/h)	126	436	754	44	325	72	377	1247	55	147	1859	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	459	0	46	342	0	397	1313	0	155	1957	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	531		226	500		466	2553		360	2482	
Arrive On Green	0.07	0.15	0.00	0.07	0.14	0.00	0.13	0.50	0.00	0.10	0.49	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	133	459	0	46	342	0	397	1313	0	155	1957	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	4.4	15.1	0.0	1.5	11.0	0.0	13.5	20.8	0.0	5.0	38.3	0.0
Cycle Q Clear(g_c), s	4.4	15.1	0.0	1.5	11.0	0.0	13.5	20.8	0.0	5.0	38.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	531		226	500		466	2553		360	2482	
V/C Ratio(X)	0.52	0.86		0.20	0.68		0.85	0.51		0.43	0.79	
Avail Cap(c_a), veh/h	259	572		288	613		720	2553		360	2482	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.5	49.8	0.0	53.1	49.0	0.0	50.7	20.2	0.0	50.4	25.7	0.0
Incr Delay (d2), s/veh	0.8	13.3	0.0	0.2	3.4	0.0	3.7	0.7	0.0	0.3	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.5	0.0	0.6	5.0	0.0	5.8	7.6	0.0	2.1	14.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	63.1	0.0	53.3	52.4	0.0	54.4	20.9	0.0	50.7	27.6	0.0
LnGrp LOS	D	E		D	D		D	C		D	C	
Approach Vol, veh/h		592	A		388	A		1710	A		2112	A
Approach Delay, s/veh		61.1			52.5			28.7			29.3	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	66.0	11.8	23.6	20.2	64.3	12.9	22.6
Change Period (Y+Rc), s	6.0	* 6	4.0	5.7	4.0	6.0	4.0	* 5.7
Max Green Setting (Gmax), s	11.0	* 60	10.0	19.3	25.0	46.0	9.0	* 21
Max Q Clear Time (g_c+I1), s	7.0	22.8	3.5	17.1	15.5	40.3	6.4	13.0
Green Ext Time (p_c), s	0.1	12.0	0.0	0.7	0.7	4.8	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	34.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	858	0	5	1002	507	0	0	0	355	0	105
Future Volume (veh/h)	96	858	0	5	1002	507	0	0	0	355	0	105
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1841	1841	0	1841	1841	1841				1841	0	1841
Adj Flow Rate, veh/h	101	903	0	5	1055	534				374	0	111
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	4	4	0	4	4	4				4	0	4
Cap, veh/h	129	1932	0	0	1418	629				453	0	518
Arrive On Green	0.07	0.55	0.00	0.00	0.41	0.41				0.26	0.00	0.26
Sat Flow, veh/h	1753	3589	0	0	3497	1550				1753	0	1560
Grp Volume(v), veh/h	101	903	0	0	1055	534				374	0	111
Grp Sat Flow(s),veh/h/ln	1753	1749	0	0	1749	1550				1753	0	1560
Q Serve(g_s), s	3.1	8.5	0.0	0.0	14.0	17.0				11.0	0.0	2.8
Cycle Q Clear(g_c), s	3.1	8.5	0.0	0.0	14.0	17.0				11.0	0.0	2.8
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	129	1932	0	0	1418	629				453	0	518
V/C Ratio(X)	0.78	0.47	0.00	0.00	0.74	0.85				0.83	0.00	0.21
Avail Cap(c_a), veh/h	257	1932	0	0	1521	674				901	0	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	24.8	7.4	0.0	0.0	13.8	14.7				19.0	0.0	13.1
Incr Delay (d2), s/veh	3.9	0.2	0.0	0.0	1.9	9.5				1.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.0	0.0	0.0	4.5	6.1				4.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.7	7.5	0.0	0.0	15.7	24.2				20.5	0.0	13.2
LnGrp LOS	C	A	A	A	B	C				C	A	B
Approach Vol, veh/h		1004			1589						485	
Approach Delay, s/veh		9.7			18.6						18.8	
Approach LOS		A			B						B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	35.8		18.7	8.0	27.8
Change Period (Y+Rc), s	4.0	5.7		4.6	4.0	5.7
Max Green Setting (Gmax), s	28.0	24.7		28.0	8.0	23.7
Max Q Clear Time (g_c+I1), s	0.0	10.5		13.0	5.1	19.0
Green Ext Time (p_c), s	0.0	3.7		1.1	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	1057	20	7	1344	354	16	17	12	74	19	191
Future Volume (veh/h)	146	1057	20	7	1344	354	16	17	12	74	19	191
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1885	1826	1826	1885	1885	1885	1791	1791	1732
Adj Flow Rate, veh/h	154	1113	21	7	1415	373	17	18	13	78	20	201
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	1	5	5	1	1	1	1	1	5
Cap, veh/h	190	1859	35	10	1492	658	62	35	25	239	61	252
Arrive On Green	0.11	0.53	0.53	0.01	0.43	0.43	0.03	0.03	0.03	0.17	0.17	0.17
Sat Flow, veh/h	1739	3483	66	1795	3469	1529	1795	1018	735	1371	352	1442
Grp Volume(v), veh/h	154	554	580	7	1415	373	17	0	31	98	0	201
Grp Sat Flow(s),veh/h/ln	1739	1735	1814	1795	1735	1529	1795	0	1753	1722	0	1442
Q Serve(g_s), s	6.1	15.4	15.4	0.3	27.6	12.9	0.6	0.0	1.2	3.5	0.0	9.4
Cycle Q Clear(g_c), s	6.1	15.4	15.4	0.3	27.6	12.9	0.6	0.0	1.2	3.5	0.0	9.4
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.42	0.80		1.00
Lane Grp Cap(c), veh/h	190	926	968	10	1492	658	62	0	61	301	0	252
V/C Ratio(X)	0.81	0.60	0.60	0.72	0.95	0.57	0.27	0.00	0.51	0.33	0.00	0.80
Avail Cap(c_a), veh/h	198	926	968	204	1494	659	204	0	199	392	0	328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.6	11.2	11.2	34.9	19.3	15.1	33.1	0.0	33.4	25.4	0.0	27.9
Incr Delay (d2), s/veh	19.5	1.1	1.0	30.0	13.0	1.1	2.3	0.0	6.5	0.6	0.0	10.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	4.8	5.0	0.2	11.8	3.9	0.3	0.0	0.6	1.5	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	12.3	12.3	64.9	32.3	16.3	35.4	0.0	39.9	26.0	0.0	37.9
LnGrp LOS	D	B	B	E	C	B	D	A	D	C	A	D
Approach Vol, veh/h		1288			1795			48			299	
Approach Delay, s/veh		16.8			29.1			38.3			34.0	
Approach LOS		B			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	43.3		6.4	11.7	36.0		16.3
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	30.3		8.0	8.0	30.3		16.0
Max Q Clear Time (g_c+I1), s	2.3	17.4		3.2	8.1	29.6		11.4
Green Ext Time (p_c), s	0.0	8.3		0.0	0.0	0.6		0.9

Intersection Summary	
HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	813	346	316	1522	252	436
Future Volume (veh/h)	813	346	316	1522	252	436
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	856	364	333	1602	265	459
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1020	740	486	2274	324	721
Arrive On Green	0.29	0.29	0.27	0.64	0.18	0.18
Sat Flow, veh/h	3647	1571	1781	3647	1781	1585
Grp Volume(v), veh/h	856	364	333	1602	265	459
Grp Sat Flow(s),veh/h/ln	1777	1571	1781	1777	1781	1585
Q Serve(g_s), s	17.0	12.0	12.5	22.2	10.7	0.0
Cycle Q Clear(g_c), s	17.0	12.0	12.5	22.2	10.7	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1020	740	486	2274	324	721
V/C Ratio(X)	0.84	0.49	0.68	0.70	0.82	0.64
Avail Cap(c_a), veh/h	1137	791	486	2274	404	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.89	0.89	1.00	1.00
Uniform Delay (d), s/veh	25.1	13.8	24.4	8.8	29.5	15.7
Incr Delay (d2), s/veh	5.3	0.5	2.9	1.7	8.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	5.4	5.1	6.1	5.1	9.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.4	14.3	27.3	10.5	37.8	16.7
LnGrp LOS	C	B	C	B	D	B
Approach Vol, veh/h	1220			1935	724	
Approach Delay, s/veh	25.6			13.4	24.4	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	26.5	27.5		17.7		54.0
Change Period (Y+Rc), s	6.0	* 6		4.0		6.0
Max Green Setting (Gmax), s	20.0	* 24		17.0		48.0
Max Q Clear Time (g_c+I1), s	14.5	19.0		12.7		24.2
Green Ext Time (p_c), s	0.4	2.6		0.9		8.0

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	917	252	108	1191	36	348	681	24	57	1124	117
Future Volume (veh/h)	113	917	252	108	1191	36	348	681	24	57	1124	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	965	0	114	1254	0	366	717	0	60	1183	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	1139		131	1232		443	2412		77	1304	
Arrive On Green	0.05	0.32	0.00	0.07	0.35	0.00	0.25	0.47	0.00	0.04	0.26	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	119	965	0	114	1254	0	366	717	0	60	1183	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	5.1	38.0	0.0	9.5	52.0	0.0	29.1	12.9	0.0	5.0	33.7	0.0
Cycle Q Clear(g_c), s	5.1	38.0	0.0	9.5	52.0	0.0	29.1	12.9	0.0	5.0	33.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	1139		131	1232		443	2412		77	1304	
V/C Ratio(X)	0.73	0.85		0.87	1.02		0.83	0.30		0.78	0.91	
Avail Cap(c_a), veh/h	184	1168		131	1232		443	2412		131	1304	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.5	47.5	0.0	68.8	49.0	0.0	53.3	24.3	0.0	71.1	54.1	0.0
Incr Delay (d2), s/veh	9.7	6.2	0.0	41.8	30.2	0.0	11.5	0.1	0.0	6.4	10.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	17.4	0.0	5.8	27.5	0.0	14.2	5.2	0.0	2.4	15.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.2	53.8	0.0	110.6	79.2	0.0	64.7	24.4	0.0	77.5	64.9	0.0
LnGrp LOS	F	D		F	F		E	C		E	E	
Approach Vol, veh/h		1084	A		1368	A		1083	A		1243	A
Approach Delay, s/veh		56.7			81.8			38.0			65.5	
Approach LOS		E			F			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	54.1	43.0	44.0	11.1	58.0	10.4	76.6
Change Period (Y+Rc), s	4.0	* 6	5.7	* 5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	11.0	* 49	32.0	* 38	8.0	52.0	11.0	59.3
Max Q Clear Time (g_c+I1), s	11.5	40.0	31.1	35.7	7.1	54.0	7.0	14.9
Green Ext Time (p_c), s	0.0	4.7	0.1	1.9	0.0	0.0	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	61.9
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	428	225	64	207	152	315	1402	89	153	1662	76
Future Volume (veh/h)	123	428	225	64	207	152	315	1402	89	153	1662	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	129	451	0	67	218	0	332	1476	0	161	1749	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	520		85	388		354	2393		188	1974	
Arrive On Green	0.08	0.15	0.00	0.05	0.11	0.00	0.20	0.47	0.00	0.11	0.39	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	129	451	0	67	218	0	332	1476	0	161	1749	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	10.7	18.6	0.0	5.6	8.7	0.0	27.5	32.4	0.0	13.3	47.9	0.0
Cycle Q Clear(g_c), s	10.7	18.6	0.0	5.6	8.7	0.0	27.5	32.4	0.0	13.3	47.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	520		85	388		354	2393		188	1974	
V/C Ratio(X)	0.86	0.87		0.79	0.56		0.94	0.62		0.86	0.89	
Avail Cap(c_a), veh/h	178	654		95	488		404	2393		285	2053	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.7	62.6	0.0	70.7	63.4	0.0	59.1	29.8	0.0	66.0	42.9	0.0
Incr Delay (d2), s/veh	25.1	10.4	0.0	28.5	1.8	0.0	26.3	1.2	0.0	9.8	5.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	9.0	0.0	3.2	4.0	0.0	14.8	13.2	0.0	6.5	20.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.8	73.0	0.0	99.2	65.2	0.0	85.5	31.0	0.0	75.8	48.1	0.0
LnGrp LOS	F	E		F	E		F	C		E	D	
Approach Vol, veh/h		580	A		285	A		1808	A		1910	A
Approach Delay, s/veh		77.4			73.2			41.0			50.4	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	28.4	33.8	63.7	16.7	22.8	21.5	76.0
Change Period (Y+Rc), s	4.0	6.4	4.0	5.7	4.0	6.4	5.7	* 5.7
Max Green Setting (Gmax), s	8.0	27.6	34.0	60.3	15.0	20.6	24.0	* 70
Max Q Clear Time (g_c+I1), s	7.6	20.6	29.5	49.9	12.7	10.7	15.3	34.4
Green Ext Time (p_c), s	0.0	1.3	0.3	8.1	0.0	0.8	0.2	15.7

Intersection Summary	
HCM 6th Ctrl Delay	51.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	1248	12	1	907	14	6	0	2	15	4	39
Future Volume (veh/h)	63	1248	12	1	907	14	6	0	2	15	4	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	1314	13	1	955	15	6	0	2	16	4	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	1870	18	3	1566	25	37	0	33	163	41	179
Arrive On Green	0.08	0.52	0.52	0.00	0.44	0.44	0.02	0.00	0.02	0.11	0.11	0.11
Sat Flow, veh/h	1781	3605	36	1781	3581	56	1781	0	1585	1439	360	1585
Grp Volume(v), veh/h	66	647	680	1	474	496	6	0	2	20	0	41
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1860	1781	0	1585	1798	0	1585
Q Serve(g_s), s	1.8	14.1	14.2	0.0	10.5	10.5	0.2	0.0	0.1	0.5	0.0	1.2
Cycle Q Clear(g_c), s	1.8	14.1	14.2	0.0	10.5	10.5	0.2	0.0	0.1	0.5	0.0	1.2
Prop In Lane	1.00		0.02	1.00		0.03	1.00		1.00	0.80		1.00
Lane Grp Cap(c), veh/h	148	922	967	3	777	814	37	0	33	204	0	179
V/C Ratio(X)	0.45	0.70	0.70	0.29	0.61	0.61	0.16	0.00	0.06	0.10	0.00	0.23
Avail Cap(c_a), veh/h	243	1223	1283	243	1223	1281	695	0	618	702	0	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.4	9.3	9.3	25.6	11.1	11.1	24.7	0.0	24.6	20.4	0.0	20.7
Incr Delay (d2), s/veh	0.8	1.9	1.8	16.0	1.3	1.3	0.7	0.0	0.3	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.0	4.2	0.0	3.3	3.5	0.1	0.0	0.0	0.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	11.2	11.1	41.6	12.4	12.3	25.4	0.0	24.9	20.5	0.0	20.9
LnGrp LOS	C	B	B	D	B	B	C	A	C	C	A	C
Approach Vol, veh/h		1393			971			8			61	
Approach Delay, s/veh		11.7			12.4			25.3			20.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.1	32.3		5.1	8.3	28.1		9.8				
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	7.0	35.3		20.0	7.0	35.3		20.0				
Max Q Clear Time (g_c+I1), s	2.0	16.2		2.2	3.8	12.5		3.2				
Green Ext Time (p_c), s	0.0	10.4		0.0	0.0	7.8		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		12.3
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1216	50	57	756	10	35	3	28	10	8	5
Future Volume (veh/h)	26	1216	50	57	756	10	35	3	28	10	8	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1280	53	60	796	11	37	3	29	11	8	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	1726	71	91	1819	811	201	16	193	57	42	86
Arrive On Green	0.04	0.50	0.50	0.05	0.51	0.51	0.12	0.12	0.12	0.05	0.05	0.05
Sat Flow, veh/h	1781	3477	144	1781	3554	1585	1654	134	1585	1052	765	1585
Grp Volume(v), veh/h	27	653	680	60	796	11	40	0	29	19	0	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1844	1781	1777	1585	1788	0	1585	1818	0	1585
Q Serve(g_s), s	0.9	18.7	18.8	2.1	9.0	0.2	1.3	0.0	1.0	0.6	0.0	0.2
Cycle Q Clear(g_c), s	0.9	18.7	18.8	2.1	9.0	0.2	1.3	0.0	1.0	0.6	0.0	0.2
Prop In Lane	1.00		0.08	1.00		1.00	0.92		1.00	0.58		1.00
Lane Grp Cap(c), veh/h	64	882	915	91	1819	811	217	0	193	99	0	86
V/C Ratio(X)	0.42	0.74	0.74	0.66	0.44	0.01	0.18	0.00	0.15	0.19	0.00	0.06
Avail Cap(c_a), veh/h	223	953	989	223	1905	850	307	0	273	597	0	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.2	12.8	12.8	29.8	9.8	7.7	25.3	0.0	25.1	28.9	0.0	28.7
Incr Delay (d2), s/veh	1.7	5.5	5.4	3.0	0.8	0.0	0.2	0.0	0.1	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.2	7.4	0.9	2.9	0.1	0.5	0.0	0.4	0.3	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	18.4	18.2	32.8	10.6	7.7	25.4	0.0	25.3	29.3	0.0	28.8
LnGrp LOS	C	B	B	C	B	A	C	A	C	C	A	C
Approach Vol, veh/h		1360			867			69			24	
Approach Delay, s/veh		18.6			12.1			25.4			29.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.8	7.3	37.5		7.5	6.3	38.4				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		11.0	8.0	34.3		21.0	8.0	34.3				
Max Q Clear Time (g_c+I1), s		3.3	4.1	20.8		2.6	2.9	11.0				
Green Ext Time (p_c), s		0.0	0.0	11.0		0.0	0.0	10.9				

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	723	472	40	531	240	113	1321	34	287	1581	199
Future Volume (veh/h)	107	723	472	40	531	240	113	1321	34	287	1581	199
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	761	0	42	559	0	119	1391	0	302	1664	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	848		217	794		254	2095		363	2183	
Arrive On Green	0.08	0.24	0.00	0.06	0.22	0.00	0.07	0.41	0.00	0.11	0.43	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	113	761	0	42	559	0	119	1391	0	302	1664	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	7.5	24.9	0.0	1.4	17.4	0.0	4.0	26.5	0.0	10.3	33.2	0.0
Cycle Q Clear(g_c), s	7.5	24.9	0.0	1.4	17.4	0.0	4.0	26.5	0.0	10.3	33.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	848		217	794		254	2095		363	2183	
V/C Ratio(X)	0.82	0.90		0.19	0.70		0.47	0.66		0.83	0.76	
Avail Cap(c_a), veh/h	208	897		288	794		259	2095		490	2183	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.5	44.3	0.0	53.4	42.9	0.0	53.3	28.7	0.0	52.7	29.2	0.0
Incr Delay (d2), s/veh	8.4	11.9	0.0	0.2	3.3	0.0	0.5	1.0	0.0	6.7	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	12.0	0.0	0.6	7.8	0.0	1.7	10.2	0.0	4.6	12.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.8	56.2	0.0	53.5	46.2	0.0	53.8	29.7	0.0	59.3	31.8	0.0
LnGrp LOS	E	E		D	D		D	C		E	C	
Approach Vol, veh/h		874	A		601	A		1510	A		1966	A
Approach Delay, s/veh		57.1			46.7			31.6			36.0	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	54.9	11.5	34.3	14.5	57.0	13.3	32.5
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	5.7
Max Green Setting (Gmax), s	17.0	43.3	10.0	30.3	9.0	* 51	14.0	26.3
Max Q Clear Time (g_c+I1), s	12.3	28.5	3.4	26.9	6.0	35.2	9.5	19.4
Green Ext Time (p_c), s	0.3	9.0	0.0	1.7	0.1	11.2	0.1	2.3

Intersection Summary	
HCM 6th Ctrl Delay	39.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	491	0	0	633	373	1	1	0	434	0	13
Future Volume (veh/h)	5	491	0	0	633	373	1	1	0	434	0	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	517	0	0	666	393	1	1	0	457	0	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	1701	0	0	895	1229	2	2	0	528	0	470
Arrive On Green	0.00	0.48	0.00	0.00	0.48	0.48	0.00	0.00	0.00	0.30	0.00	0.30
Sat Flow, veh/h	0	3647	0	0	1870	1585	912	912	0	1781	0	1585
Grp Volume(v), veh/h	0	517	0	0	666	393	2	0	0	457	0	14
Grp Sat Flow(s),veh/h/ln	0	1777	0	0	1870	1585	1825	0	0	1781	0	1585
Q Serve(g_s), s	0.0	5.1	0.0	0.0	16.7	4.3	0.1	0.0	0.0	14.1	0.0	0.4
Cycle Q Clear(g_c), s	0.0	5.1	0.0	0.0	16.7	4.3	0.1	0.0	0.0	14.1	0.0	0.4
Prop In Lane	0.00		0.00	0.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1701	0	0	895	1229	4	0	0	528	0	470
V/C Ratio(X)	0.00	0.30	0.00	0.00	0.74	0.32	0.50	0.00	0.00	0.87	0.00	0.03
Avail Cap(c_a), veh/h	0	4422	0	0	1359	1622	693	0	0	1168	0	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.2	0.0	0.0	12.2	1.9	28.9	0.0	0.0	19.3	0.0	14.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	1.3	0.2	31.8	0.0	0.0	1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.6	0.0	0.0	5.7	2.7	0.1	0.0	0.0	5.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.3	0.0	0.0	13.5	2.1	60.7	0.0	0.0	21.0	0.0	14.5
LnGrp LOS	A	A	A	A	B	A	E	A	A	C	A	B
Approach Vol, veh/h		517			1059			2			471	
Approach Delay, s/veh		9.3			9.3			60.7			20.8	
Approach LOS		A			A			E			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		32.6		4.1	0.0	32.6		21.2				
Change Period (Y+Rc), s		4.9		4.0	4.0	4.9		4.0				
Max Green Setting (Gmax), s		72.1		22.0	26.0	42.1		38.0				
Max Q Clear Time (g_c+I1), s		7.1		2.1	0.0	18.7		16.1				
Green Ext Time (p_c), s		2.9		0.0	0.0	9.0		1.1				

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	967	9	3	969	0	19	0	19	75	5	18
Future Volume (veh/h)	0	967	9	3	969	0	19	0	19	75	5	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1018	0	3	1020	0	20	0	20	79	5	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1471		12	1814	0	59	0	59	231	44	168
Arrive On Green	0.00	0.41	0.00	0.01	0.51	0.00	0.07	0.00	0.07	0.13	0.13	0.13
Sat Flow, veh/h	0	3741	0	1781	3647	0	839	0	839	1781	341	1296
Grp Volume(v), veh/h	0	1018	0	3	1020	0	40	0	0	79	0	24
Grp Sat Flow(s),veh/h/ln	0	1777	0	1781	1777	0	1677	0	0	1781	0	1637
Q Serve(g_s), s	0.0	10.5	0.0	0.1	8.8	0.0	1.0	0.0	0.0	1.8	0.0	0.6
Cycle Q Clear(g_c), s	0.0	10.5	0.0	0.1	8.8	0.0	1.0	0.0	0.0	1.8	0.0	0.6
Prop In Lane	0.00		0.00	1.00		0.00	0.50		0.50	1.00		0.79
Lane Grp Cap(c), veh/h	0	1471		12	1814	0	118	0	0	231	0	212
V/C Ratio(X)	0.00	0.69		0.26	0.56	0.00	0.34	0.00	0.00	0.34	0.00	0.11
Avail Cap(c_a), veh/h	0	1765		320	2724	0	754	0	0	801	0	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.7	0.0	22.0	7.5	0.0	19.7	0.0	0.0	17.6	0.0	17.1
Incr Delay (d2), s/veh	0.0	0.9	0.0	4.2	0.3	0.0	0.6	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.0	0.0	0.0	2.0	0.0	0.4	0.0	0.0	0.7	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.6	0.0	26.2	7.8	0.0	20.3	0.0	0.0	18.0	0.0	17.2
LnGrp LOS	A	B		C	A	A	C	A	A	B	A	B
Approach Vol, veh/h		1018	A		1023			40			103	
Approach Delay, s/veh		11.6			7.8			20.3			17.8	
Approach LOS		B			A			C			B	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	4.3	23.3		7.1		27.6		9.8				
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9		4.0				
Max Green Setting (Gmax), s	8.0	22.1		20.0		34.1		20.0				
Max Q Clear Time (g_c+I1), s	2.1	12.5		3.0		10.8		3.8				
Green Ext Time (p_c), s	0.0	5.9		0.0		10.6		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			10.3									
HCM 6th LOS			B									

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1020	48	186	509	37	192
Future Volume (veh/h)	1020	48	186	509	37	192
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1074	51	196	536	39	202
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1468	70	246	2303	290	258
Arrive On Green	0.43	0.43	0.14	0.65	0.16	0.16
Sat Flow, veh/h	3547	164	1781	3647	1781	1585
Grp Volume(v), veh/h	552	573	196	536	39	202
Grp Sat Flow(s),veh/h/ln	1777	1841	1781	1777	1781	1585
Q Serve(g_s), s	12.2	12.2	5.0	2.9	0.9	5.8
Cycle Q Clear(g_c), s	12.2	12.2	5.0	2.9	0.9	5.8
Prop In Lane		0.09	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	755	782	246	2303	290	258
V/C Ratio(X)	0.73	0.73	0.80	0.23	0.13	0.78
Avail Cap(c_a), veh/h	871	902	302	2344	567	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.3	11.3	19.7	3.4	16.9	18.9
Incr Delay (d2), s/veh	2.8	2.7	9.1	0.1	0.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	4.0	2.4	0.4	0.3	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.1	14.0	28.8	3.5	17.0	20.9
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	1125			732	241	
Approach Delay, s/veh	14.0			10.3	20.2	
Approach LOS	B			B	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.5	24.9		11.7		35.5
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9
Max Green Setting (Gmax), s	8.0	23.1		15.0		31.1
Max Q Clear Time (g_c+I1), s	7.0	14.2		7.8		4.9
Green Ext Time (p_c), s	0.0	5.8		0.3		6.3

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1137	4	16	1303	90	5	4	12	475	4	56
Future Volume (veh/h)	60	1137	4	16	1303	90	5	4	12	475	4	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	1197	4	17	1372	95	5	4	13	503	0	59
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	2383	8	20	2097	145	7	5	17	586	0	261
Arrive On Green	0.05	0.66	0.66	0.01	0.62	0.62	0.02	0.02	0.02	0.16	0.00	0.16
Sat Flow, veh/h	1781	3633	12	1781	3372	233	380	304	989	3563	0	1585
Grp Volume(v), veh/h	63	585	616	17	721	746	22	0	0	503	0	59
Grp Sat Flow(s),veh/h/ln	1781	1777	1868	1781	1777	1828	1673	0	0	1781	0	1585
Q Serve(g_s), s	4.2	20.3	20.3	1.1	31.0	31.3	1.6	0.0	0.0	16.5	0.0	3.9
Cycle Q Clear(g_c), s	4.2	20.3	20.3	1.1	31.0	31.3	1.6	0.0	0.0	16.5	0.0	3.9
Prop In Lane	1.00		0.01	1.00		0.13	0.23		0.59	1.00		1.00
Lane Grp Cap(c), veh/h	81	1166	1226	20	1105	1137	29	0	0	586	0	261
V/C Ratio(X)	0.78	0.50	0.50	0.84	0.65	0.66	0.76	0.00	0.00	0.86	0.00	0.23
Avail Cap(c_a), veh/h	134	1166	1226	119	1105	1137	271	0	0	754	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.53	0.53	0.53	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.7	10.6	10.6	59.2	14.4	14.5	58.7	0.0	0.0	48.8	0.0	43.5
Incr Delay (d2), s/veh	5.8	1.5	1.5	16.4	0.8	0.8	25.4	0.0	0.0	7.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.7	8.1	0.6	11.9	12.3	0.9	0.0	0.0	7.9	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	12.1	12.1	75.6	15.2	15.3	84.1	0.0	0.0	56.1	0.0	43.8
LnGrp LOS	E	B	B	E	B	B	F	A	A	E	A	D
Approach Vol, veh/h		1264			1484			22			562	
Approach Delay, s/veh		14.6			15.9			84.1			54.8	
Approach LOS		B			B			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	83.6		6.7	9.5	79.5		24.3
Change Period (Y+Rc), s	4.0	4.9		4.6	4.0	4.9		4.6
Max Green Setting (Gmax), s	8.0	49.1		19.4	9.0	48.1		25.4
Max Q Clear Time (g_c+I1), s	3.1	22.3		3.6	6.2	33.3		18.5
Green Ext Time (p_c), s	0.0	20.6		0.0	0.0	13.7		1.3

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	1793	442	331	1803	199	475	1243	210	227	1159	55
Future Volume (veh/h)	370	1793	442	331	1803	199	475	1243	210	227	1159	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	389	1887	277	348	1898	0	500	1308	0	239	1220	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	403	1830	563	346	1830		490	1417		288	1119	343
Arrive On Green	0.12	0.36	0.36	0.10	0.36	0.00	0.14	0.28	0.00	0.08	0.22	0.22
Sat Flow, veh/h	3456	5106	1572	3456	5106	1585	3456	5106	1585	3456	5106	1563
Grp Volume(v), veh/h	389	1887	277	348	1898	0	500	1308	0	239	1220	11
Grp Sat Flow(s),veh/h/ln	1728	1702	1572	1728	1702	1585	1728	1702	1585	1728	1702	1563
Q Serve(g_s), s	13.4	43.0	10.7	12.0	43.0	0.0	17.0	29.9	0.0	8.2	26.3	0.7
Cycle Q Clear(g_c), s	13.4	43.0	10.7	12.0	43.0	0.0	17.0	29.9	0.0	8.2	26.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	1830	563	346	1830		490	1417		288	1119	343
V/C Ratio(X)	0.96	1.03	0.49	1.01	1.04		1.02	0.92		0.83	1.09	0.03
Avail Cap(c_a), veh/h	403	1830	563	346	1830		490	1417		288	1119	343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	38.5	12.6	54.0	38.5	0.0	51.5	42.1	0.0	54.2	46.8	36.8
Incr Delay (d2), s/veh	35.4	29.5	3.1	50.2	31.4	0.0	46.2	10.5	0.0	17.1	54.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	21.9	3.8	7.5	22.2	0.0	10.2	13.1	0.0	4.1	16.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.2	68.0	15.7	104.2	69.9	0.0	97.7	52.6	0.0	71.3	101.8	36.9
LnGrp LOS	F	F	B	F	F		F	D		E	F	D
Approach Vol, veh/h		2553			2246	A		1808	A		1470	
Approach Delay, s/veh		65.4			75.2			65.1			96.3	
Approach LOS		E			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	49.0	21.0	32.0	18.0	49.0	14.0	39.0
Change Period (Y+Rc), s	6.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	12.0	43.0	17.0	26.3	14.0	43.0	10.0	33.3
Max Q Clear Time (g_c+I1), s	14.0	45.0	19.0	28.3	15.4	45.0	10.2	31.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	73.7
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1413	147	350	1429	4	60	4	436	8	2	15
Future Volume (veh/h)	33	1413	147	350	1429	4	60	4	436	8	2	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2106	2106	2106	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	1487	150	368	1504	4	63	4	396	8	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	1718	172	397	2424	6	169	11	513	13	3	14
Arrive On Green	0.02	0.47	0.47	0.45	1.00	1.00	0.10	0.10	0.10	0.01	0.01	0.00
Sat Flow, veh/h	2006	3673	368	1781	3636	10	1680	107	1585	1439	360	1585
Grp Volume(v), veh/h	35	805	832	368	735	773	67	0	396	10	0	0
Grp Sat Flow(s),veh/h/ln	2006	2001	2040	1781	1777	1869	1786	0	1585	1798	0	1585
Q Serve(g_s), s	2.6	53.7	55.1	29.3	0.0	0.0	5.3	0.0	15.1	0.8	0.0	0.0
Cycle Q Clear(g_c), s	2.6	53.7	55.1	29.3	0.0	0.0	5.3	0.0	15.1	0.8	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.01	0.94		1.00	0.80		1.00
Lane Grp Cap(c), veh/h	48	936	954	397	1185	1246	180	0	513	16	0	14
V/C Ratio(X)	0.73	0.86	0.87	0.93	0.62	0.62	0.37	0.00	0.77	0.61	0.00	0.00
Avail Cap(c_a), veh/h	120	936	954	475	1185	1246	180	0	513	78	0	69
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.56	0.56	0.56	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	72.7	35.5	35.9	40.5	0.0	0.0	63.0	0.0	45.8	74.1	0.0	0.0
Incr Delay (d2), s/veh	7.9	8.3	9.1	13.5	1.4	1.3	0.5	0.0	6.5	13.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	27.5	28.9	11.8	0.5	0.5	2.4	0.0	14.1	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.6	43.9	45.0	54.0	1.4	1.3	63.5	0.0	52.3	87.0	0.0	0.0
LnGrp LOS	F	D	D	D	A	A	E	A	D	F	A	A
Approach Vol, veh/h		1672			1876			463			10	
Approach Delay, s/veh		45.2			11.7			53.9			87.0	
Approach LOS		D			B			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	37.4	75.9		7.1	7.6	105.7		20.8
Change Period (Y+Rc), s	4.0	5.7		5.7	4.0	* 5.7		5.7
Max Green Setting (Gmax), s	40.0	67.3		6.5	9.0	* 1E2		15.1
Max Q Clear Time (g_c+I1), s	31.3	57.1		2.8	4.6	2.0		17.1
Green Ext Time (p_c), s	2.1	10.1		0.0	0.0	96.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1424	352	79	1568	0	210	0	26	0	5	0
Future Volume (veh/h)	0	1424	352	79	1568	0	210	0	26	0	5	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	1499	359	83	1651	0	221	0	3	0	5	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	0	2	0
Cap, veh/h	0	1629	377	95	2305	0	243	0	216	0	9	0
Arrive On Green	0.00	0.57	0.57	0.05	0.65	0.00	0.14	0.00	0.14	0.00	0.01	0.00
Sat Flow, veh/h	0	2958	663	1781	3647	0	1781	0	1585	0	1870	0
Grp Volume(v), veh/h	0	911	947	83	1651	0	221	0	3	0	5	0
Grp Sat Flow(s),veh/h/ln	0	1777	1751	1781	1777	0	1781	0	1585	0	1870	0
Q Serve(g_s), s	0.0	68.0	76.3	6.9	45.7	0.0	18.3	0.0	0.2	0.0	0.4	0.0
Cycle Q Clear(g_c), s	0.0	68.0	76.3	6.9	45.7	0.0	18.3	0.0	0.2	0.0	0.4	0.0
Prop In Lane	0.00		0.38	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	1010	996	95	2305	0	243	0	216	0	9	0
V/C Ratio(X)	0.00	0.90	0.95	0.87	0.72	0.00	0.91	0.00	0.01	0.00	0.53	0.00
Avail Cap(c_a), veh/h	0	1010	996	95	2305	0	273	0	243	0	212	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.47	0.47	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	28.6	30.4	70.5	17.3	0.0	63.8	0.0	56.0	0.0	74.4	0.0
Incr Delay (d2), s/veh	0.0	5.9	10.5	52.4	1.9	0.0	28.3	0.0	0.0	0.0	16.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	29.0	33.1	4.5	18.0	0.0	10.3	0.0	0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.5	40.9	122.9	19.2	0.0	92.2	0.0	56.0	0.0	90.8	0.0
LnGrp LOS	A	C	D	F	B	A	F	A	E	A	F	A
Approach Vol, veh/h		1858			1734			224			5	
Approach Delay, s/veh		37.8			24.2			91.7			90.8	
Approach LOS		D			C			F			F	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	12.0	91.0		24.5		103.0		3.8
Change Period (Y+Rc), s	4.0	5.7		4.0		5.7		3.0
Max Green Setting (Gmax), s	8.0	85.3		23.0		97.3		17.0
Max Q Clear Time (g_c+I1), s	8.9	78.3		20.3		47.7		2.4
Green Ext Time (p_c), s	0.0	6.1		0.1		23.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	437	899	279	739	1091	65	336	1008	193	204	1188	355
Future Volume (veh/h)	437	899	279	739	1091	65	336	1008	193	204	1188	355
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	460	946	0	778	1148	65	354	1061	111	215	1251	189
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	974		783	1270	72	369	1102	482	207	1402	427
Arrive On Green	0.14	0.27	0.00	0.23	0.37	0.37	0.07	0.21	0.21	0.06	0.27	0.27
Sat Flow, veh/h	3456	3554	1585	3456	3415	193	3456	3554	1555	3456	5106	1553
Grp Volume(v), veh/h	460	946	0	778	597	616	354	1061	111	215	1251	189
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1831	1728	1777	1555	1728	1702	1553
Q Serve(g_s), s	19.8	39.5	0.0	33.7	47.7	47.7	15.3	44.4	8.9	9.0	35.3	15.1
Cycle Q Clear(g_c), s	19.8	39.5	0.0	33.7	47.7	47.7	15.3	44.4	8.9	9.0	35.3	15.1
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	484	974		783	661	681	369	1102	482	207	1402	427
V/C Ratio(X)	0.95	0.97		0.99	0.90	0.90	0.96	0.96	0.23	1.04	0.89	0.44
Avail Cap(c_a), veh/h	484	974		783	661	681	369	1102	482	207	1402	427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	53.9	0.0	57.9	44.5	44.6	69.3	58.6	44.5	70.5	52.3	44.9
Incr Delay (d2), s/veh	28.6	22.1	0.0	30.4	16.0	15.8	36.2	19.6	1.1	72.5	7.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	20.3	0.0	17.8	23.5	24.2	8.8	23.4	3.7	6.0	15.8	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.5	76.0	0.0	88.2	60.6	60.4	105.5	78.1	45.6	143.0	60.0	46.0
LnGrp LOS	F	E		F	E	E	F	E	D	F	E	D
Approach Vol, veh/h		1406	A		1991			1526			1655	
Approach Delay, s/veh		81.4			71.3			82.1			69.2	
Approach LOS		F			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	39.3	46.8	20.0	46.5	25.0	61.1	14.3	52.2
Change Period (Y+Rc), s	5.3	* 5.7	4.0	5.3	4.0	5.3	5.3	* 5.7
Max Green Setting (Gmax), s	34.0	* 41	16.0	39.9	21.0	54.5	9.0	* 47
Max Q Clear Time (g_c+I1), s	35.7	41.5	17.3	37.3	21.8	49.7	11.0	46.4
Green Ext Time (p_c), s	0.0	0.0	0.0	2.4	0.0	4.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	75.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	1086	12	47	1431	15	18	22	41	30	225	171
Future Volume (veh/h)	78	1086	12	47	1431	15	18	22	41	30	225	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	1143	13	49	1506	16	19	23	0	32	237	81
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	1806	21	63	1698	18	33	40	64	35	258	250
Arrive On Green	0.06	0.50	0.50	0.04	0.47	0.47	0.04	0.04	0.00	0.16	0.16	0.16
Sat Flow, veh/h	1781	3599	41	1781	3602	38	827	1002	1585	221	1638	1585
Grp Volume(v), veh/h	82	564	592	49	742	780	42	0	0	269	0	81
Grp Sat Flow(s),veh/h/ln	1781	1777	1863	1781	1777	1863	1829	0	1585	1859	0	1585
Q Serve(g_s), s	6.8	34.8	34.8	4.1	56.9	57.0	3.4	0.0	0.0	21.4	0.0	6.8
Cycle Q Clear(g_c), s	6.8	34.8	34.8	4.1	56.9	57.0	3.4	0.0	0.0	21.4	0.0	6.8
Prop In Lane	1.00		0.02	1.00		0.02	0.45		1.00	0.12		1.00
Lane Grp Cap(c), veh/h	102	892	935	63	837	878	74	0	64	293	0	250
V/C Ratio(X)	0.80	0.63	0.63	0.78	0.89	0.89	0.57	0.00	0.00	0.92	0.00	0.32
Avail Cap(c_a), veh/h	190	920	965	107	837	878	244	0	211	322	0	275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	69.9	27.3	27.3	71.8	36.0	36.0	70.7	0.0	0.0	62.2	0.0	56.1
Incr Delay (d2), s/veh	5.5	1.9	1.8	7.4	13.3	12.9	2.6	0.0	0.0	27.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	14.9	15.6	2.0	26.9	28.2	1.7	0.0	0.0	12.4	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.3	29.2	29.1	79.2	49.3	48.9	73.3	0.0	0.0	89.8	0.0	56.4
LnGrp LOS	E	C	C	E	D	D	E	A	A	F	A	E
Approach Vol, veh/h		1238			1571			42			350	
Approach Delay, s/veh		32.2			50.1			73.3			82.0	
Approach LOS		C			D			E			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	80.6		27.6	13.9	76.0		10.0
Change Period (Y+Rc), s	4.0	5.3		4.0	5.3	* 5.3		4.0
Max Green Setting (Gmax), s	9.0	77.7		26.0	16.0	* 71		20.0
Max Q Clear Time (g_c+I1), s	6.1	36.8		23.4	8.8	59.0		5.4
Green Ext Time (p_c), s	0.0	13.5		0.3	0.1	8.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1117	0	7	1537	14	10	0	5	19	0	25
Future Volume (veh/h)	31	1117	0	7	1537	14	10	0	5	19	0	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	1176	0	7	1618	15	11	0	5	20	0	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	2137	0	10	2106	20	190	0	13	256	0	64
Arrive On Green	0.02	0.60	0.00	0.01	0.58	0.58	0.04	0.00	0.04	0.04	0.00	0.04
Sat Flow, veh/h	1781	3647	0	1781	3608	33	725	0	329	1610	0	1585
Grp Volume(v), veh/h	33	1176	0	7	796	837	16	0	0	20	0	26
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1864	1054	0	0	1610	0	1585
Q Serve(g_s), s	0.7	7.4	0.0	0.1	12.8	12.8	0.4	0.0	0.0	0.0	0.0	0.6
Cycle Q Clear(g_c), s	0.7	7.4	0.0	0.1	12.8	12.8	0.8	0.0	0.0	0.4	0.0	0.6
Prop In Lane	1.00		0.00	1.00		0.02	0.69		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	41	2137	0	10	1037	1088	204	0	0	256	0	64
V/C Ratio(X)	0.80	0.55	0.00	0.70	0.77	0.77	0.08	0.00	0.00	0.08	0.00	0.40
Avail Cap(c_a), veh/h	378	2138	0	378	1069	1122	948	0	0	984	0	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.3	4.5	0.0	18.7	5.9	5.9	18.0	0.0	0.0	17.6	0.0	17.7
Incr Delay (d2), s/veh	12.1	0.3	0.0	27.7	3.4	3.3	0.1	0.0	0.0	0.1	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.8	0.0	0.1	2.5	2.6	0.1	0.0	0.0	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	4.8	0.0	46.5	9.4	9.2	18.1	0.0	0.0	17.7	0.0	20.7
LnGrp LOS	C	A	A	D	A	A	B	A	A	B	A	C
Approach Vol, veh/h		1209			1640			16			46	
Approach Delay, s/veh		5.5			9.5			18.1			19.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	27.3		5.5	4.2	28.0		5.5
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	22.7		21.0	8.0	22.7		21.0
Max Q Clear Time (g_c+I1), s	2.7	14.8		2.8	2.1	9.4		2.6
Green Ext Time (p_c), s	0.0	7.2		0.0	0.0	9.7		0.1

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	539	481	746	216	782	724
Future Volume (veh/h)	539	481	746	216	782	724
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	598	462	785	193	823	724
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	953	500	885	218	937	854
Arrive On Green	0.27	0.27	0.31	0.31	0.27	0.27
Sat Flow, veh/h	3563	1870	2921	695	3456	1585
Grp Volume(v), veh/h	598	462	493	485	823	724
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1745	1728	1585
Q Serve(g_s), s	12.0	19.5	21.4	21.4	18.5	22.0
Cycle Q Clear(g_c), s	12.0	19.5	21.4	21.4	18.5	22.0
Prop In Lane	1.00			0.40	1.00	1.00
Lane Grp Cap(c), veh/h	953	500	556	547	937	854
V/C Ratio(X)	0.63	0.92	0.89	0.89	0.88	0.85
Avail Cap(c_a), veh/h	966	507	789	775	937	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	28.9	26.5	26.5	28.3	13.7
Incr Delay (d2), s/veh	0.9	22.0	6.9	7.0	9.2	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	11.1	9.4	9.2	8.3	15.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.1	50.9	33.4	33.5	37.4	21.3
LnGrp LOS	C	D	C	C	D	C
Approach Vol, veh/h		1060	978		1547	
Approach Delay, s/veh		37.5	33.5		29.9	
Approach LOS		D	C		C	

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		29.4				25.7	26.0
Change Period (Y+Rc), s		4.0				4.0	4.0
Max Green Setting (Gmax), s		36.0				22.0	22.0
Max Q Clear Time (g_c+I1), s		23.4				21.5	24.0
Green Ext Time (p_c), s		2.0				0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	772	305	34	711	12	52	9	9	29	14	295
Future Volume (veh/h)	61	772	305	34	711	12	52	9	9	29	14	295
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	813	321	36	748	13	55	9	9	31	15	311
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	995	392	87	1337	23	343	57	36	371	154	387
Arrive On Green	0.07	0.40	0.40	0.05	0.37	0.37	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1781	2489	981	1781	3574	62	809	232	146	950	630	1585
Grp Volume(v), veh/h	64	580	554	36	372	389	73	0	0	46	0	311
Grp Sat Flow(s),veh/h/ln	1781	1777	1694	1781	1777	1859	1187	0	0	1580	0	1585
Q Serve(g_s), s	1.5	12.6	12.6	0.8	7.2	7.2	1.1	0.0	0.0	0.0	0.0	8.0
Cycle Q Clear(g_c), s	1.5	12.6	12.6	0.8	7.2	7.2	2.0	0.0	0.0	0.8	0.0	8.0
Prop In Lane	1.00		0.58	1.00		0.03	0.75		0.12	0.67		1.00
Lane Grp Cap(c), veh/h	133	711	677	87	665	696	436	0	0	525	0	387
V/C Ratio(X)	0.48	0.82	0.82	0.42	0.56	0.56	0.17	0.00	0.00	0.09	0.00	0.80
Avail Cap(c_a), veh/h	329	767	731	329	767	803	689	0	0	856	0	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.2	11.6	11.6	20.0	10.7	10.7	13.0	0.0	0.0	12.7	0.0	15.4
Incr Delay (d2), s/veh	1.0	7.0	7.5	1.2	1.2	1.1	0.1	0.0	0.0	0.0	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.7	4.6	0.3	2.2	2.3	0.5	0.0	0.0	0.3	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	18.6	19.1	21.2	11.9	11.8	13.1	0.0	0.0	12.7	0.0	16.9
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	B
Approach Vol, veh/h		1198			797			73			357	
Approach Delay, s/veh		18.9			12.3			13.1			16.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	22.6		14.6	7.2	21.5		14.6
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	18.7		20.0	8.0	18.7		20.0
Max Q Clear Time (g_c+I1), s	2.8	14.6		4.0	3.5	9.2		10.0
Green Ext Time (p_c), s	0.0	2.7		0.1	0.0	3.5		0.7

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	502	388	317	358	347	580
Future Volume (veh/h)	502	388	317	358	347	580
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	468	472	334	377	365	611
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	2	2
Cap, veh/h	575	520	476	915	407	1012
Arrive On Green	0.32	0.32	0.25	0.25	0.23	0.54
Sat Flow, veh/h	1781	1610	1870	1585	1781	1870
Grp Volume(v), veh/h	468	472	334	377	365	611
Grp Sat Flow(s),veh/h/ln	1781	1610	1870	1585	1781	1870
Q Serve(g_s), s	16.5	19.2	11.1	9.0	13.6	15.2
Cycle Q Clear(g_c), s	16.5	19.2	11.1	9.0	13.6	15.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	575	520	476	915	407	1012
V/C Ratio(X)	0.81	0.91	0.70	0.41	0.90	0.60
Avail Cap(c_a), veh/h	625	565	730	1130	417	1277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	22.2	23.2	8.0	25.6	10.7
Incr Delay (d2), s/veh	6.8	16.9	3.0	0.5	20.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	8.8	4.9	5.6	7.5	5.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.1	39.1	26.2	8.5	46.2	11.6
LnGrp LOS	C	D	C	A	D	B
Approach Vol, veh/h	940		711			976
Approach Delay, s/veh	33.6		16.8			24.5
Approach LOS	C		B			C

Timer - Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		42.3			19.6	22.7		26.1
Change Period (Y+Rc), s		5.3			4.0	5.3		4.0
Max Green Setting (Gmax), s		46.7			16.0	26.7		24.0
Max Q Clear Time (g_c+I1), s		17.2			15.6	13.1		21.2
Green Ext Time (p_c), s		5.0			0.0	4.3		0.9

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	8	34	71	10	67	91	845	136	103	745	65
Future Volume (veh/h)	24	8	34	71	10	67	91	845	136	103	745	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	8	36	75	11	71	96	889	143	108	784	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	73	62	102	134	113	122	1606	499	138	1653	513
Arrive On Green	0.02	0.04	0.04	0.06	0.07	0.07	0.07	0.31	0.31	0.08	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	25	8	36	75	11	71	96	889	143	108	784	68
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.5	0.2	0.9	1.6	0.2	1.7	2.1	5.6	2.7	2.3	4.8	1.2
Cycle Q Clear(g_c), s	0.5	0.2	0.9	1.6	0.2	1.7	2.1	5.6	2.7	2.3	4.8	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	43	73	62	102	134	113	122	1606	499	138	1653	513
V/C Ratio(X)	0.58	0.11	0.58	0.74	0.08	0.63	0.79	0.55	0.29	0.78	0.47	0.13
Avail Cap(c_a), veh/h	365	1533	1299	684	1868	1583	319	2484	771	319	2484	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	18.1	18.5	18.1	16.9	17.6	17.9	11.1	10.1	17.7	10.6	9.3
Incr Delay (d2), s/veh	11.5	0.7	8.5	10.0	0.3	5.6	10.8	0.3	0.3	9.3	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.4	0.9	0.1	0.7	1.0	1.4	0.8	1.1	1.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	18.8	26.9	28.1	17.2	23.2	28.7	11.4	10.4	27.0	10.8	9.4
LnGrp LOS	C	B	C	C	B	C	C	B	B	C	B	A
Approach Vol, veh/h		69			157			1128			960	
Approach Delay, s/veh		27.2			25.1			12.7			12.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	17.3	7.2	6.5	7.7	17.6	6.0	7.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	19.0	15.0	32.0	7.0	19.0	8.0	39.0
Max Q Clear Time (g_c+I1), s	4.3	7.6	3.6	2.9	4.1	6.8	2.5	3.7
Green Ext Time (p_c), s	0.1	4.6	0.1	0.1	0.0	4.1	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	3	47	0	5	64	124	1238	0	49	844	52
Future Volume (veh/h)	21	3	47	0	5	64	124	1238	0	49	844	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	3	49	0	5	67	131	1303	0	52	888	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	357	302	4	100	85	171	2142	665	77	1871	581
Arrive On Green	0.02	0.19	0.19	0.00	0.05	0.05	0.10	0.42	0.00	0.04	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	22	3	49	0	5	67	131	1303	0	52	888	55
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.5	0.1	1.1	0.0	0.1	1.8	3.1	8.6	0.0	1.2	5.8	1.0
Cycle Q Clear(g_c), s	0.5	0.1	1.1	0.0	0.1	1.8	3.1	8.6	0.0	1.2	5.8	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	38	357	302	4	100	85	171	2142	665	77	1871	581
V/C Ratio(X)	0.57	0.01	0.16	0.00	0.05	0.79	0.77	0.61	0.00	0.68	0.47	0.09
Avail Cap(c_a), veh/h	453	1384	1173	453	1384	1173	453	3069	953	453	3069	953
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	14.2	14.6	0.0	19.4	20.2	19.1	9.8	0.0	20.4	10.5	9.0
Incr Delay (d2), s/veh	12.9	0.0	0.2	0.0	0.2	14.8	7.0	0.3	0.0	10.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.4	0.0	0.0	0.9	1.4	2.0	0.0	0.6	1.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	14.2	14.9	0.0	19.6	35.0	26.0	10.1	0.0	30.5	10.7	9.1
LnGrp LOS	C	B	B	A	B	C	C	B	A	C	B	A
Approach Vol, veh/h		74			72			1434			995	
Approach Delay, s/veh		20.5			33.9			11.5			11.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	23.2	0.0	13.2	9.2	20.9	5.9	7.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	26.0	11.0	32.0	11.0	26.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.2	10.6	0.0	3.1	5.1	7.8	2.5	3.8
Green Ext Time (p_c), s	0.0	7.5	0.0	0.1	0.1	5.6	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	75	49	109	1212	1351	171
Future Volume (veh/h)	75	49	109	1212	1351	171
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	52	115	1276	1422	180
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	150	133	147	3455	2423	751
Arrive On Green	0.08	0.08	0.08	0.68	0.47	0.47
Sat Flow, veh/h	1781	1585	1781	5274	5274	1582
Grp Volume(v), veh/h	79	52	115	1276	1422	180
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1582
Q Serve(g_s), s	1.4	1.0	2.1	3.6	6.8	2.3
Cycle Q Clear(g_c), s	1.4	1.0	2.1	3.6	6.8	2.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	150	133	147	3455	2423	751
V/C Ratio(X)	0.53	0.39	0.78	0.37	0.59	0.24
Avail Cap(c_a), veh/h	1065	948	426	4887	3054	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	14.5	15.0	2.3	6.4	5.2
Incr Delay (d2), s/veh	2.8	1.8	8.8	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	1.0	0.0	0.9	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.5	16.3	23.8	2.4	6.6	5.4
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	131			1391	1602	
Approach Delay, s/veh	17.1			4.2	6.5	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		26.6		6.8	6.8	19.9
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	8.0	20.0
Max Q Clear Time (g_c+I1), s		5.6		3.4	4.1	8.8
Green Ext Time (p_c), s		9.6		0.3	0.1	7.0

Intersection Summary	
HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	22	46	1303	1350	51
Future Volume (veh/h)	17	22	46	1303	1350	51
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	23	48	1372	1421	54
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	68	61	78	3588	2704	838
Arrive On Green	0.04	0.04	0.04	0.70	0.53	0.53
Sat Flow, veh/h	1781	1585	1781	5274	5274	1582
Grp Volume(v), veh/h	18	23	48	1372	1421	54
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1582
Q Serve(g_s), s	0.3	0.4	0.8	3.4	5.6	0.5
Cycle Q Clear(g_c), s	0.3	0.4	0.8	3.4	5.6	0.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	68	61	78	3588	2704	838
V/C Ratio(X)	0.26	0.38	0.62	0.38	0.53	0.06
Avail Cap(c_a), veh/h	1153	1026	461	5287	3965	1229
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	14.5	14.5	1.9	4.7	3.5
Incr Delay (d2), s/veh	2.0	3.8	7.7	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.4	0.0	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.5	18.3	22.2	1.9	4.9	3.6
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	41			1420	1475	
Approach Delay, s/veh	17.5			2.6	4.8	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		25.7		5.2	5.4	20.4
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	8.0	24.0
Max Q Clear Time (g_c+I1), s		5.4		2.4	2.8	7.6
Green Ext Time (p_c), s		10.5		0.1	0.0	8.7

Intersection Summary	
HCM 6th Ctrl Delay	3.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	0	45	13	0	5	119	1279	31	13	1528	85
Future Volume (veh/h)	26	0	45	13	0	5	119	1279	31	13	1528	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	0	47	14	0	5	125	1346	33	14	1608	89
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	0	72	37	0	13	161	2838	879	25	2448	758
Arrive On Green	0.07	0.00	0.07	0.03	0.00	0.03	0.09	0.56	0.56	0.01	0.48	0.48
Sat Flow, veh/h	600	0	1044	1268	0	453	1781	5106	1582	1781	5106	1582
Grp Volume(v), veh/h	74	0	0	19	0	0	125	1346	33	14	1608	89
Grp Sat Flow(s),veh/h/ln	1644	0	0	1721	0	0	1781	1702	1582	1781	1702	1582
Q Serve(g_s), s	2.1	0.0	0.0	0.5	0.0	0.0	3.3	7.7	0.5	0.4	11.5	1.5
Cycle Q Clear(g_c), s	2.1	0.0	0.0	0.5	0.0	0.0	3.3	7.7	0.5	0.4	11.5	1.5
Prop In Lane	0.36		0.64	0.74		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	0	0	50	0	0	161	2838	879	25	2448	758
V/C Ratio(X)	0.65	0.00	0.00	0.38	0.00	0.00	0.77	0.47	0.04	0.55	0.66	0.12
Avail Cap(c_a), veh/h	1295	0	0	1357	0	0	296	3071	952	296	3071	951
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	0.0	23.0	0.0	0.0	21.4	6.5	4.9	23.6	9.5	6.9
Incr Delay (d2), s/veh	6.1	0.0	0.0	4.7	0.0	0.0	7.7	0.1	0.0	17.6	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.3	0.0	0.0	1.5	1.5	0.1	0.3	2.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	0.0	0.0	27.7	0.0	0.0	29.1	6.6	4.9	41.2	9.9	7.0
LnGrp LOS	C	A	A	C	A	A	C	A	A	D	A	A
Approach Vol, veh/h		74			19			1504			1711	
Approach Delay, s/veh		28.0			27.7			8.4			10.0	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	30.8		7.3	8.4	27.1		5.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	29.0		38.0	8.0	29.0		38.0
Max Q Clear Time (g_c+I1), s	2.4	9.7		4.1	5.3	13.5		2.5
Green Ext Time (p_c), s	0.0	9.0		0.4	0.1	9.6		0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	791	25	36	922	41	6
Future Volume (veh/h)	791	25	36	922	41	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	833	26	38	971	43	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1816	810	75	2294	165	147
Arrive On Green	0.51	0.51	0.04	0.65	0.09	0.09
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	833	26	38	971	43	6
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	6.5	0.4	0.9	5.8	1.0	0.1
Cycle Q Clear(g_c), s	6.5	0.4	0.9	5.8	1.0	0.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1816	810	75	2294	165	147
V/C Ratio(X)	0.46	0.03	0.50	0.42	0.26	0.04
Avail Cap(c_a), veh/h	2010	897	328	2884	819	729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.8	5.3	20.4	3.8	18.4	18.0
Incr Delay (d2), s/veh	0.3	0.0	1.9	0.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.1	0.4	0.7	0.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.1	5.3	22.3	4.0	18.7	18.0
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	859			1009	49	
Approach Delay, s/veh	7.0			4.7	18.6	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.8	27.9				33.8	9.7
Change Period (Y+Rc), s	4.0	5.7				* 5.7	5.7
Max Green Setting (Gmax), s	8.0	24.6				* 35	20.0
Max Q Clear Time (g_c+I1), s	2.9	8.5				7.8	3.0
Green Ext Time (p_c), s	0.0	11.9				20.3	0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	22	33	21	12	36	59	960	48	71	1027	130
Future Volume (veh/h)	47	22	33	21	12	36	59	960	48	71	1027	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	23	35	22	13	38	62	1011	51	75	1081	137
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	120	102	39	82	69	90	1707	530	102	1743	541
Arrive On Green	0.04	0.06	0.06	0.02	0.04	0.04	0.05	0.33	0.33	0.06	0.34	0.34
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	49	23	35	22	13	38	62	1011	51	75	1081	137
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.0	0.4	0.8	0.5	0.3	0.9	1.3	6.3	0.8	1.6	6.8	2.4
Cycle Q Clear(g_c), s	1.0	0.4	0.8	0.5	0.3	0.9	1.3	6.3	0.8	1.6	6.8	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	76	120	102	39	82	69	90	1707	530	102	1743	541
V/C Ratio(X)	0.65	0.19	0.34	0.57	0.16	0.55	0.69	0.59	0.10	0.73	0.62	0.25
Avail Cap(c_a), veh/h	419	1562	1324	326	1416	1200	326	2399	745	326	2133	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	17.0	17.1	18.6	17.6	17.9	17.9	10.6	8.8	17.8	10.5	9.1
Incr Delay (d2), s/veh	9.0	0.8	2.0	12.3	0.9	6.6	9.1	0.3	0.1	9.7	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.2	0.3	0.3	0.1	0.4	0.6	1.5	0.2	0.8	1.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	17.7	19.1	30.9	18.5	24.5	26.9	10.9	8.8	27.4	10.9	9.3
LnGrp LOS	C	B	B	C	B	C	C	B	A	C	B	A
Approach Vol, veh/h		107			73			1124			1293	
Approach Delay, s/veh		22.4			25.4			11.7			11.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	17.8	5.8	7.5	6.9	18.1	6.6	6.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	18.0	7.0	32.0	7.0	16.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	3.6	8.3	2.5	2.8	3.3	8.8	3.0	2.9
Green Ext Time (p_c), s	0.0	4.5	0.0	0.2	0.0	4.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	49	44	134	90	0	94	1035	245	1	1004	75
Future Volume (veh/h)	32	49	44	134	90	0	94	1035	245	1	1004	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	52	46	141	95	0	99	1089	258	1	1057	79
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	55	121	102	188	260	220	127	2182	677	4	1824	566
Arrive On Green	0.03	0.06	0.06	0.11	0.14	0.00	0.07	0.43	0.43	0.00	0.36	0.36
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	34	52	46	141	95	0	99	1089	258	1	1057	79
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.8	1.1	1.2	3.3	2.0	0.0	2.3	6.6	4.7	0.0	7.1	1.4
Cycle Q Clear(g_c), s	0.8	1.1	1.2	3.3	2.0	0.0	2.3	6.6	4.7	0.0	7.1	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	55	121	102	188	260	220	127	2182	677	4	1824	566
V/C Ratio(X)	0.61	0.43	0.45	0.75	0.37	0.00	0.78	0.50	0.38	0.24	0.58	0.14
Avail Cap(c_a), veh/h	463	1457	1235	757	1767	1497	337	2182	677	337	2050	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	19.1	19.1	18.4	16.5	0.0	19.3	8.8	8.3	21.1	11.0	9.2
Incr Delay (d2), s/veh	10.5	2.4	3.1	5.9	0.9	0.0	10.0	0.5	1.0	26.8	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.5	0.5	1.4	0.8	0.0	1.1	1.6	1.3	0.0	1.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	21.5	22.1	24.3	17.4	0.0	29.3	9.3	9.3	47.9	11.9	9.5
LnGrp LOS	C	C	C	C	B	A	C	A	A	D	B	A
Approach Vol, veh/h		132			236			1446			1137	
Approach Delay, s/veh		24.1			21.5			10.7			11.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.0	23.1	8.5	6.7	7.0	20.1	5.3	9.9
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	17.0	18.0	33.0	8.0	17.0	11.0	40.0
Max Q Clear Time (g_c+I1), s	2.0	8.6	5.3	3.2	4.3	9.1	2.8	4.0
Green Ext Time (p_c), s	0.0	6.9	0.3	0.4	0.1	6.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	35	1	1368	73	0	1182
Future Volume (veh/h)	35	1	1368	73	0	1182
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	1	1440	77	0	1244
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	66	58	2972	922	7	2972
Arrive On Green	0.04	0.04	0.58	0.58	0.00	0.58
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	37	1	1440	77	0	1244
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	0.5	0.0	4.3	0.6	0.0	3.5
Cycle Q Clear(g_c), s	0.5	0.0	4.3	0.6	0.0	3.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	66	58	2972	922	7	2972
V/C Ratio(X)	0.56	0.02	0.48	0.08	0.00	0.42
Avail Cap(c_a), veh/h	1969	1752	3892	1208	747	7006
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	12.2	3.2	2.4	0.0	3.0
Incr Delay (d2), s/veh	7.4	0.1	0.1	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.8	12.3	3.3	2.4	0.0	3.1
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	38		1517			1244
Approach Delay, s/veh	19.6		3.3			3.1
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	0.0	20.3				20.3	6.0
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	0.0	6.3				5.5	2.5
Green Ext Time (p_c), s	0.0	7.9				9.7	0.1

Intersection Summary	
HCM 6th Ctrl Delay	3.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	29	19	51	14	6	71	1454	197	10	1185	107
Future Volume (veh/h)	190	29	19	51	14	6	71	1454	197	10	1185	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	31	20	54	15	6	75	1531	207	11	1247	113
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	226	191	78	38	33	97	1899	589	20	1679	521
Arrive On Green	0.14	0.12	0.12	0.04	0.02	0.02	0.05	0.37	0.37	0.01	0.33	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	200	31	20	54	15	6	75	1531	207	11	1247	113
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	4.8	0.7	0.5	1.3	0.4	0.2	1.8	11.9	4.2	0.3	9.6	2.3
Cycle Q Clear(g_c), s	4.8	0.7	0.5	1.3	0.4	0.2	1.8	11.9	4.2	0.3	9.6	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	257	226	191	78	38	33	97	1899	589	20	1679	521
V/C Ratio(X)	0.78	0.14	0.10	0.69	0.39	0.18	0.77	0.81	0.35	0.54	0.74	0.22
Avail Cap(c_a), veh/h	443	1353	1147	644	1564	1326	443	1899	589	443	1847	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	17.4	17.3	20.9	21.4	21.3	20.6	12.5	10.0	21.8	13.2	10.7
Incr Delay (d2), s/veh	5.1	0.3	0.2	10.4	6.3	2.7	12.2	2.7	0.4	20.4	1.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.3	0.2	0.7	0.2	0.1	1.0	3.5	1.2	0.2	2.8	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	17.7	17.6	31.2	27.7	24.0	32.9	15.1	10.4	42.2	14.7	10.9
LnGrp LOS	C	B	B	C	C	C	C	B	B	D	B	B
Approach Vol, veh/h		251			75			1813			1371	
Approach Delay, s/veh		22.2			29.9			15.3			14.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	21.5	6.9	10.3	7.4	19.5	11.4	5.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	16.0	32.0	11.0	16.0	11.0	37.0
Max Q Clear Time (g_c+I1), s	2.3	13.9	3.3	2.7	3.8	11.6	6.8	2.4
Green Ext Time (p_c), s	0.0	1.7	0.1	0.1	0.1	3.0	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	33	5	14	4	32	5	527	38	39	1274	70
Future Volume (veh/h)	28	33	5	14	4	32	5	527	38	39	1274	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	35	5	15	4	34	5	555	40	41	1341	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	189	159	34	162	136	22	1788	796	78	1901	846
Arrive On Green	0.03	0.10	0.10	0.02	0.09	0.09	0.01	0.50	0.50	0.04	0.53	0.53
Sat Flow, veh/h	1781	1870	1576	1781	1870	1576	1781	3554	1582	1781	3554	1582
Grp Volume(v), veh/h	29	35	5	15	4	34	5	555	40	41	1341	74
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1870	1576	1781	1777	1582	1781	1777	1582
Q Serve(g_s), s	0.8	0.8	0.1	0.4	0.1	1.0	0.1	4.4	0.6	1.1	13.5	1.1
Cycle Q Clear(g_c), s	0.8	0.8	0.1	0.4	0.1	1.0	0.1	4.4	0.6	1.1	13.5	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	189	159	34	162	136	22	1788	796	78	1901	846
V/C Ratio(X)	0.49	0.19	0.03	0.45	0.02	0.25	0.23	0.31	0.05	0.52	0.71	0.09
Avail Cap(c_a), veh/h	297	1012	853	297	1012	853	334	2959	1317	297	2811	1252
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	19.8	19.5	23.3	20.1	20.5	23.5	7.0	6.1	22.5	8.3	5.5
Incr Delay (d2), s/veh	6.1	0.5	0.1	9.0	0.1	0.9	5.4	0.1	0.0	5.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.3	0.0	0.2	0.0	0.3	0.1	1.0	0.1	0.5	3.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	20.2	19.5	32.3	20.1	21.4	28.9	7.1	6.1	27.8	8.8	5.5
LnGrp LOS	C	C	B	C	C	C	C	A	A	C	A	A
Approach Vol, veh/h		69			53			600			1456	
Approach Delay, s/veh		23.8			24.4			7.2			9.2	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	28.2	4.9	8.9	4.6	29.7	5.6	8.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	40.0	8.0	26.0	9.0	38.0	8.0	26.0
Max Q Clear Time (g_c+I1), s	3.1	6.4	2.4	2.8	2.1	15.5	2.8	3.0
Green Ext Time (p_c), s	0.0	3.8	0.0	0.1	0.0	10.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	801	5	5	1535	165	5	5	5	79	5	32
Future Volume (veh/h)	82	801	5	5	1535	165	5	5	5	79	5	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	86	843	5	5	1616	174	5	5	5	83	5	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	2115	944	403	1748	780	182	130	110	148	367	311
Arrive On Green	0.07	0.66	0.66	0.55	0.55	0.55	0.08	0.08	0.08	0.09	0.22	0.22
Sat Flow, veh/h	1603	3198	1427	585	3198	1427	1232	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	86	843	5	5	1616	174	5	5	5	83	5	34
Grp Sat Flow(s),veh/h/ln	1603	1599	1427	585	1599	1427	1232	1683	1427	1603	1683	1427
Q Serve(g_s), s	4.4	10.0	0.1	0.3	38.4	5.2	0.3	0.2	0.3	4.1	0.2	1.6
Cycle Q Clear(g_c), s	4.4	10.0	0.1	0.9	38.4	5.2	0.3	0.2	0.3	4.1	0.2	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	107	2115	944	403	1748	780	182	130	110	148	367	311
V/C Ratio(X)	0.81	0.40	0.01	0.01	0.92	0.22	0.03	0.04	0.05	0.56	0.01	0.11
Avail Cap(c_a), veh/h	155	2160	963	408	1774	791	250	223	189	174	487	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	6.5	4.8	8.8	17.2	9.7	35.4	35.4	35.4	36.0	25.4	26.0
Incr Delay (d2), s/veh	11.3	0.2	0.0	0.0	8.9	0.3	0.0	0.0	0.1	1.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.5	0.0	0.0	13.4	1.5	0.1	0.1	0.1	1.6	0.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.5	6.7	4.8	8.9	26.1	10.0	35.5	35.5	35.5	37.2	25.4	26.0
LnGrp LOS	D	A	A	A	C	A	D	D	D	D	C	C
Approach Vol, veh/h		934			1795			15			122	
Approach Delay, s/veh		10.6			24.5			35.5			33.6	
Approach LOS		B			C			D			C	

Timer - Assigned Phs		2		4	5	6	7	8
Phs Duration (G+Y+Rc), s		60.8		22.1	9.5	51.3	11.7	10.4
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0	4.0	4.0
Max Green Setting (Gmax), s		56.0		24.0	8.0	46.0	9.0	11.0
Max Q Clear Time (g_c+I1), s		12.0		3.6	6.4	40.4	6.1	2.3
Green Ext Time (p_c), s		9.1		0.1	0.0	4.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	2	89	16	2	4	338	841	39	12	1392	90
Future Volume (veh/h)	40	2	89	16	2	4	338	841	39	12	1392	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	2	94	17	2	4	356	885	41	13	1465	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	6	125	30	4	30	391	2692	1201	365	1740	776
Arrive On Green	0.08	0.08	0.08	0.02	0.02	0.02	0.22	0.76	0.76	0.49	0.49	0.49
Sat Flow, veh/h	1704	81	1585	1602	188	1585	1781	3554	1585	604	3554	1585
Grp Volume(v), veh/h	44	0	94	19	0	4	356	885	41	13	1465	95
Grp Sat Flow(s),veh/h/ln	1785	0	1585	1790	0	1585	1781	1777	1585	604	1777	1585
Q Serve(g_s), s	2.4	0.0	6.0	1.1	0.0	0.3	20.2	8.3	0.7	1.2	37.1	3.4
Cycle Q Clear(g_c), s	2.4	0.0	6.0	1.1	0.0	0.3	20.2	8.3	0.7	1.2	37.1	3.4
Prop In Lane	0.95		1.00	0.89		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	141	0	125	33	0	30	391	2692	1201	365	1740	776
V/C Ratio(X)	0.31	0.00	0.75	0.57	0.00	0.14	0.91	0.33	0.03	0.04	0.84	0.12
Avail Cap(c_a), veh/h	327	0	291	277	0	245	481	3259	1454	431	2127	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	0.0	46.7	50.4	0.0	50.0	39.4	4.1	3.1	13.8	22.9	14.3
Incr Delay (d2), s/veh	1.2	0.0	8.7	14.2	0.0	2.0	18.8	0.1	0.0	0.0	2.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	2.7	0.6	0.0	0.1	10.5	2.1	0.1	0.2	14.5	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	0.0	55.4	64.6	0.0	52.0	58.2	4.1	3.1	13.8	25.7	14.4
LnGrp LOS	D	A	E	E	A	D	E	A	A	B	C	B
Approach Vol, veh/h		138			23			1282			1573	
Approach Delay, s/veh		52.5			62.4			19.1			24.9	
Approach LOS		D			E			B			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		83.5		13.2	27.7	55.7		6.9				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		95.0		19.0	28.0	62.0		16.0				
Max Q Clear Time (g_c+I1), s		10.3		8.0	22.2	39.1		3.1				
Green Ext Time (p_c), s		7.0		0.3	0.6	11.7		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			24.0									
HCM 6th LOS			C									

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	86	120	174	1194	1337	153
Future Volume (veh/h)	86	120	174	1194	1337	153
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	126	183	1257	1407	161
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	269	239	230	2404	1699	758
Arrive On Green	0.15	0.15	0.13	0.68	0.48	0.48
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	91	126	183	1257	1407	161
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	2.6	4.2	5.8	10.2	19.8	3.4
Cycle Q Clear(g_c), s	2.6	4.2	5.8	10.2	19.8	3.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	269	239	230	2404	1699	758
V/C Ratio(X)	0.34	0.53	0.79	0.52	0.83	0.21
Avail Cap(c_a), veh/h	616	548	369	2763	1781	794
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	22.7	24.5	4.7	13.0	8.8
Incr Delay (d2), s/veh	0.3	0.7	2.4	0.3	3.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	3.8	2.3	1.7	6.5	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.3	23.3	26.8	5.0	16.7	9.0
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	217			1440	1568	
Approach Delay, s/veh	22.9			7.8	16.0	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		45.1		12.7	11.5	33.7
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		45.0		20.0	12.0	29.0
Max Q Clear Time (g_c+I1), s		12.2		6.2	7.8	21.8
Green Ext Time (p_c), s		14.8		0.4	0.1	5.9

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

134: Fiddyment Rd & Village Green Dr/Del Webb Blvd

Cumulative Constrained Conditions (V2) - PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	35	86	76	69	69	116	889	42	22	1214	195
Future Volume (veh/h)	114	35	86	76	69	69	116	889	42	22	1214	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	37	91	80	73	73	122	936	44	23	1278	205
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	217	184	206	217	184	171	1673	746	72	1475	658
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.10	0.47	0.47	0.04	0.42	0.42
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	120	37	91	80	73	73	122	936	44	23	1278	205
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.9	1.4	4.2	3.2	2.8	3.3	5.1	14.6	1.2	1.0	25.3	6.7
Cycle Q Clear(g_c), s	4.9	1.4	4.2	3.2	2.8	3.3	5.1	14.6	1.2	1.0	25.3	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	217	184	206	217	184	171	1673	746	72	1475	658
V/C Ratio(X)	0.58	0.17	0.49	0.39	0.34	0.40	0.71	0.56	0.06	0.32	0.87	0.31
Avail Cap(c_a), veh/h	462	485	411	462	485	411	277	1673	746	277	1530	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	30.7	31.9	31.6	31.4	31.6	33.8	14.7	11.1	36.0	20.6	15.1
Incr Delay (d2), s/veh	2.7	0.4	2.1	1.2	0.9	1.5	2.1	0.7	0.1	0.9	5.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.6	1.7	1.4	1.3	1.3	2.1	4.8	0.3	0.4	9.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	31.1	34.1	32.8	32.3	33.0	35.9	15.3	11.2	36.9	26.4	15.7
LnGrp LOS	C	C	C	C	C	C	D	B	B	D	C	B
Approach Vol, veh/h		248			226			1102			1506	
Approach Delay, s/veh		34.1			32.7			17.4			25.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	42.3		13.8	11.4	38.0		13.9
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.9
Max Green Setting (Gmax), s	12.0	33.2		20.0	12.0	33.2		20.0
Max Q Clear Time (g_c+I1), s	3.0	16.6		5.3	7.1	27.3		6.9
Green Ext Time (p_c), s	0.0	7.5		0.7	0.1	4.7		0.8

Intersection Summary	
HCM 6th Ctrl Delay	23.7
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	32	26	1492	61	34	1651
Future Volume (veh/h)	32	26	1492	61	34	1651
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	27	1571	64	36	1738
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	48	38	2464	765	60	3372
Arrive On Green	0.05	0.05	0.48	0.48	0.03	0.66
Sat Flow, veh/h	928	737	5274	1585	1781	5274
Grp Volume(v), veh/h	62	0	1571	64	36	1738
Grp Sat Flow(s),veh/h/ln	1691	0	1702	1585	1781	1702
Q Serve(g_s), s	1.3	0.0	8.0	0.8	0.7	6.1
Cycle Q Clear(g_c), s	1.3	0.0	8.0	0.8	0.7	6.1
Prop In Lane	0.55	0.44		1.00	1.00	
Lane Grp Cap(c), veh/h	88	0	2464	765	60	3372
V/C Ratio(X)	0.71	0.00	0.64	0.08	0.60	0.52
Avail Cap(c_a), veh/h	1412	0	2940	913	564	5291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	0.0	6.7	4.8	16.6	3.0
Incr Delay (d2), s/veh	10.0	0.0	0.3	0.0	9.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.2	0.1	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.2	0.0	7.1	4.9	25.7	3.2
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	62		1635			1774
Approach Delay, s/veh	26.2		7.0			3.6
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.2	21.8				27.9	6.8
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	2.7	10.0				8.1	3.3
Green Ext Time (p_c), s	0.0	6.8				14.6	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	4	232	18	2	14	30	1401	46	34	1551	99
Future Volume (veh/h)	137	4	232	18	2	14	30	1401	46	34	1551	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	144	4	244	19	2	15	32	1475	48	36	1633	104
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	6	340	33	25	189	50	2245	695	55	2258	699
Arrive On Green	0.10	0.22	0.22	0.02	0.13	0.13	0.03	0.44	0.44	0.03	0.44	0.44
Sat Flow, veh/h	1781	26	1559	1781	189	1418	1781	5106	1581	1781	5106	1581
Grp Volume(v), veh/h	144	0	248	19	0	17	32	1475	48	36	1633	104
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1607	1781	1702	1581	1781	1702	1581
Q Serve(g_s), s	4.3	0.0	7.9	0.6	0.0	0.5	1.0	12.4	1.0	1.1	14.3	2.1
Cycle Q Clear(g_c), s	4.3	0.0	7.9	0.6	0.0	0.5	1.0	12.4	1.0	1.1	14.3	2.1
Prop In Lane	1.00		0.98	1.00		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	0	346	33	0	214	50	2245	695	55	2258	699
V/C Ratio(X)	0.78	0.00	0.72	0.58	0.00	0.08	0.64	0.66	0.07	0.66	0.72	0.15
Avail Cap(c_a), veh/h	261	0	900	261	0	913	261	2245	695	261	2258	699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	19.8	26.6	0.0	20.7	26.3	12.1	8.8	26.2	12.5	9.1
Incr Delay (d2), s/veh	9.5	0.0	2.8	15.3	0.0	0.2	12.7	1.5	0.2	12.5	2.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	2.8	0.4	0.0	0.2	0.5	3.7	0.3	0.6	4.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	0.0	22.6	41.9	0.0	20.9	38.9	13.6	9.0	38.7	14.5	9.5
LnGrp LOS	C	A	C	D	A	C	D	B	A	D	B	A
Approach Vol, veh/h		392			36			1555			1773	
Approach Delay, s/veh		26.5			32.0			14.0			14.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	28.0	5.0	15.9	5.5	28.1	9.6	11.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	24.0	8.0	31.0	8.0	24.0	8.0	31.0
Max Q Clear Time (g_c+I1), s	3.1	14.4	2.6	9.9	3.0	16.3	6.3	2.5
Green Ext Time (p_c), s	0.0	6.2	0.0	1.4	0.0	5.7	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	5	62	52	5	18	150	298	123	51	823	166
Future Volume (veh/h)	34	5	62	52	5	18	150	298	123	51	823	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	5	65	55	5	19	158	314	129	54	866	175
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	15	107	91	8	88	206	1398	624	77	1143	510
Arrive On Green	0.07	0.07	0.07	0.06	0.06	0.06	0.12	0.39	0.39	0.04	0.32	0.32
Sat Flow, veh/h	1573	219	1585	1639	149	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	41	0	65	60	0	19	158	314	129	54	866	175
Grp Sat Flow(s),veh/h/ln	1792	0	1585	1788	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.0	0.0	1.8	1.5	0.0	0.5	3.9	2.7	2.4	1.4	9.9	3.8
Cycle Q Clear(g_c), s	1.0	0.0	1.8	1.5	0.0	0.5	3.9	2.7	2.4	1.4	9.9	3.8
Prop In Lane	0.88		1.00	0.92		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	121	0	107	99	0	88	206	1398	624	77	1143	510
V/C Ratio(X)	0.34	0.00	0.61	0.60	0.00	0.22	0.77	0.22	0.21	0.70	0.76	0.34
Avail Cap(c_a), veh/h	1025	0	907	1023	0	907	431	1398	624	431	1329	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	20.6	21.0	0.0	20.5	19.5	9.2	9.1	21.4	13.8	11.8
Incr Delay (d2), s/veh	1.6	0.0	5.5	5.8	0.0	1.2	5.9	0.1	0.2	10.7	2.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	0.7	0.0	0.2	1.7	0.8	0.6	0.7	3.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	26.1	26.8	0.0	21.7	25.4	9.3	9.3	32.1	16.0	12.2
LnGrp LOS	C	A	C	C	A	C	C	A	A	C	B	B
Approach Vol, veh/h		106			79			601			1095	
Approach Delay, s/veh		24.5			25.6			13.5			16.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.0	22.9		8.1	10.3	19.6		7.5
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.0	17.0		26.0	11.0	17.0		26.0
Max Q Clear Time (g_c+I1), s	3.4	4.7		3.8	5.9	11.9		3.5
Green Ext Time (p_c), s	0.0	1.8		0.3	0.2	2.7		0.3

Intersection Summary			
HCM 6th Ctrl Delay			16.2
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	10	71	11	56	61	134	472	32	43	818	77
Future Volume (veh/h)	38	10	71	11	56	61	134	472	32	43	818	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	11	75	12	59	64	141	497	34	45	861	81
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	30	124	24	116	119	182	1446	645	66	1215	542
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.41	0.41	0.04	0.34	0.34
Sat Flow, veh/h	1412	388	1585	313	1541	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	51	0	75	71	0	64	141	497	34	45	861	81
Grp Sat Flow(s),veh/h/ln	1800	0	1585	1855	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.3	0.0	2.3	1.8	0.0	1.9	3.8	4.8	0.6	1.2	10.5	1.8
Cycle Q Clear(g_c), s	1.3	0.0	2.3	1.8	0.0	1.9	3.8	4.8	0.6	1.2	10.5	1.8
Prop In Lane	0.78		1.00	0.17		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	140	0	124	140	0	119	182	1446	645	66	1215	542
V/C Ratio(X)	0.36	0.00	0.61	0.51	0.00	0.54	0.77	0.34	0.05	0.68	0.71	0.15
Avail Cap(c_a), veh/h	942	0	830	971	0	830	323	1446	645	610	1717	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.7	0.0	22.2	22.1	0.0	22.1	21.7	10.2	8.9	23.6	14.2	11.3
Incr Delay (d2), s/veh	1.6	0.0	4.7	2.8	0.0	3.7	6.9	0.1	0.0	11.5	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.9	0.8	0.0	0.8	1.7	1.4	0.2	0.7	3.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	0.0	26.9	24.9	0.0	25.8	28.6	10.3	9.0	35.1	15.0	11.5
LnGrp LOS	C	A	C	C	A	C	C	B	A	D	B	B
Approach Vol, veh/h		126			135			672			987	
Approach Delay, s/veh		25.4			25.4			14.1			15.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	25.2		8.9	10.1	22.0		8.7
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	16.0		26.0	9.0	24.0		26.0
Max Q Clear Time (g_c+I1), s	3.2	6.8		4.3	5.8	12.5		3.9
Green Ext Time (p_c), s	0.1	2.1		0.4	0.1	4.5		0.5

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	5	28	5	5	5	33	349	5	5	1004	32
Future Volume (veh/h)	9	5	28	5	5	5	33	349	5	5	1004	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	5	29	5	5	5	35	367	5	5	1057	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	11	66	10	82	70	59	1620	723	10	1521	679
Arrive On Green	0.01	0.05	0.05	0.01	0.04	0.04	0.03	0.46	0.46	0.01	0.43	0.43
Sat Flow, veh/h	1781	238	1383	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	9	0	34	5	5	5	35	367	5	5	1057	34
Grp Sat Flow(s),veh/h/ln	1781	0	1621	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.2	0.0	0.7	0.1	0.1	0.1	0.6	2.1	0.1	0.1	8.0	0.4
Cycle Q Clear(g_c), s	0.2	0.0	0.7	0.1	0.1	0.1	0.6	2.1	0.1	0.1	8.0	0.4
Prop In Lane	1.00		0.85	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	0	78	10	82	70	59	1620	723	10	1521	679
V/C Ratio(X)	0.53	0.00	0.44	0.52	0.06	0.07	0.59	0.23	0.01	0.52	0.69	0.05
Avail Cap(c_a), veh/h	432	0	1131	432	1305	1106	432	1940	865	432	1940	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	15.3	16.4	15.1	15.1	15.7	5.4	4.9	16.4	7.7	5.5
Incr Delay (d2), s/veh	22.8	0.0	3.8	36.8	0.3	0.4	9.0	0.1	0.0	36.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.1	0.0	0.0	0.3	0.3	0.0	0.1	1.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	0.0	19.1	53.1	15.4	15.6	24.7	5.5	4.9	53.1	8.4	5.5
LnGrp LOS	D	A	B	D	B	B	C	A	A	D	A	A
Approach Vol, veh/h		43			15			407			1096	
Approach Delay, s/veh		23.3			28.0			7.2			8.6	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.2	19.0	4.2	5.6	5.1	18.1	4.3	5.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	18.0	8.0	23.0	8.0	18.0	8.0	23.0
Max Q Clear Time (g_c+I1), s	2.1	4.1	2.1	2.7	2.6	10.0	2.2	2.1
Green Ext Time (p_c), s	0.0	1.8	0.0	0.1	0.0	4.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	12	8	252	35	42	14	326	85	44	949	38
Future Volume (veh/h)	15	12	8	252	35	42	14	326	85	44	949	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	13	8	265	37	44	15	343	89	46	999	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	34	65	373	392	331	27	1290	574	69	1374	611
Arrive On Green	0.04	0.04	0.04	0.21	0.21	0.21	0.02	0.36	0.36	0.04	0.39	0.39
Sat Flow, veh/h	1004	816	1574	1781	1870	1581	1781	3554	1581	1781	3554	1581
Grp Volume(v), veh/h	29	0	8	265	37	44	15	343	89	46	999	40
Grp Sat Flow(s),veh/h/ln	1820	0	1574	1781	1870	1581	1781	1777	1581	1781	1777	1581
Q Serve(g_s), s	0.7	0.0	0.2	6.4	0.7	1.0	0.4	3.1	1.7	1.2	11.0	0.7
Cycle Q Clear(g_c), s	0.7	0.0	0.2	6.4	0.7	1.0	0.4	3.1	1.7	1.2	11.0	0.7
Prop In Lane	0.55		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	65	373	392	331	27	1290	574	69	1374	611
V/C Ratio(X)	0.39	0.00	0.12	0.71	0.09	0.13	0.56	0.27	0.16	0.67	0.73	0.07
Avail Cap(c_a), veh/h	1227	0	1061	1201	1261	1065	310	1777	791	310	1777	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	21.3	16.9	14.7	14.8	22.5	10.3	9.9	21.8	12.0	8.9
Incr Delay (d2), s/veh	3.3	0.0	0.8	2.5	0.1	0.2	16.6	0.1	0.1	10.6	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	2.5	0.3	0.3	0.3	0.9	0.5	0.6	3.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	0.0	22.1	19.4	14.8	15.0	39.1	10.4	10.0	32.4	13.1	8.9
LnGrp LOS	C	A	C	B	B	B	D	B	B	C	B	A
Approach Vol, veh/h		37			346			447			1085	
Approach Delay, s/veh		24.2			18.3			11.3			13.8	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	20.7		5.9	4.7	21.8		13.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	23.0		31.0	8.0	23.0		31.0
Max Q Clear Time (g_c+I1), s	3.2	5.1		2.7	2.4	13.0		8.4
Green Ext Time (p_c), s	0.0	2.2		0.1	0.0	4.7		1.1

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	2	35	9	3	20	39	505	11	46	1248	107
Future Volume (veh/h)	72	2	35	9	3	20	39	505	11	46	1248	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	2	37	9	3	21	41	532	12	48	1314	113
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	6	211	87	29	102	75	1601	36	67	1478	127
Arrive On Green	0.13	0.13	0.13	0.06	0.06	0.06	0.04	0.45	0.45	0.04	0.45	0.45
Sat Flow, veh/h	1738	46	1585	1352	451	1585	1781	3553	80	1781	3312	284
Grp Volume(v), veh/h	78	0	37	12	0	21	41	266	278	48	703	724
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1803	0	1585	1781	1777	1856	1781	1777	1819
Q Serve(g_s), s	2.2	0.0	1.2	0.4	0.0	0.7	1.3	5.4	5.5	1.5	20.4	20.6
Cycle Q Clear(g_c), s	2.2	0.0	1.2	0.4	0.0	0.7	1.3	5.4	5.5	1.5	20.4	20.6
Prop In Lane	0.97		1.00	0.75		1.00	1.00		0.04	1.00		0.16
Lane Grp Cap(c), veh/h	238	0	211	116	0	102	75	801	836	67	793	812
V/C Ratio(X)	0.33	0.00	0.18	0.10	0.00	0.21	0.55	0.33	0.33	0.72	0.89	0.89
Avail Cap(c_a), veh/h	633	0	562	640	0	562	379	801	836	379	798	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	0.0	21.7	24.8	0.0	25.0	26.5	10.0	10.0	26.8	14.3	14.4
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	0.4	2.3	0.3	0.3	5.3	12.0	12.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.4	0.1	0.0	0.3	0.5	1.6	1.7	0.7	8.6	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	0.0	21.8	25.0	0.0	25.4	28.8	10.3	10.3	32.1	26.3	26.6
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		115			33			585			1475	
Approach Delay, s/veh		22.2			25.2			11.6			26.6	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	31.1		7.6	6.4	30.8		11.5
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	25.3		20.0	12.0	25.3		20.0
Max Q Clear Time (g_c+I1), s	3.5	7.5		2.7	3.3	22.6		4.2
Green Ext Time (p_c), s	0.0	6.7		0.0	0.0	2.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	16	37	15	2	12	67	511	28	10	1132	98
Future Volume (veh/h)	49	16	37	15	2	12	67	511	28	10	1132	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	17	39	16	2	13	71	538	29	11	1192	103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	53	189	54	7	44	108	1615	87	30	1413	122
Arrive On Green	0.12	0.12	0.12	0.06	0.06	0.06	0.06	0.47	0.47	0.02	0.43	0.43
Sat Flow, veh/h	1358	444	1585	877	110	712	1781	3429	185	1781	3310	286
Grp Volume(v), veh/h	69	0	39	31	0	0	71	278	289	11	639	656
Grp Sat Flow(s),veh/h/ln	1802	0	1585	1698	0	0	1781	1777	1837	1781	1777	1819
Q Serve(g_s), s	1.9	0.0	1.2	0.9	0.0	0.0	2.1	5.3	5.3	0.3	17.2	17.3
Cycle Q Clear(g_c), s	1.9	0.0	1.2	0.9	0.0	0.0	2.1	5.3	5.3	0.3	17.2	17.3
Prop In Lane	0.75		1.00	0.52		0.42	1.00		0.10	1.00		0.16
Lane Grp Cap(c), veh/h	215	0	189	105	0	0	108	837	865	30	759	777
V/C Ratio(X)	0.32	0.00	0.21	0.29	0.00	0.00	0.65	0.33	0.33	0.37	0.84	0.84
Avail Cap(c_a), veh/h	471	0	415	381	0	0	399	837	865	399	807	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	0.0	21.3	24.0	0.0	0.0	24.6	8.9	8.9	26.0	13.7	13.8
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.6	0.0	0.0	2.5	0.3	0.3	2.7	7.9	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.4	0.4	0.0	0.0	0.9	1.6	1.6	0.1	6.8	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	21.5	24.6	0.0	0.0	27.1	9.2	9.2	28.8	21.6	21.6
LnGrp LOS	C	A	C	C	A	A	C	A	A	C	C	C
Approach Vol, veh/h		108			31			638			1306	
Approach Delay, s/veh		21.7			24.6			11.2			21.7	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	30.9		10.4	7.3	28.6		7.3
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	24.3		14.0	12.0	24.3		12.0
Max Q Clear Time (g_c+I1), s	2.3	7.3		3.9	4.1	19.3		2.9
Green Ext Time (p_c), s	0.0	3.5		0.2	0.0	3.5		0.0

Intersection Summary			
HCM 6th Ctrl Delay			18.5
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	5	81	11	9	13	103	566	24	20	1106	54
Future Volume (veh/h)	35	5	81	11	9	13	103	566	24	20	1106	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	5	85	12	9	14	108	596	25	21	1164	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	29	216	70	52	106	153	1606	67	44	1383	68
Arrive On Green	0.14	0.14	0.14	0.07	0.07	0.07	0.09	0.46	0.46	0.02	0.40	0.40
Sat Flow, veh/h	1578	213	1585	1039	779	1585	1781	3475	146	1781	3448	169
Grp Volume(v), veh/h	42	0	85	21	0	14	108	304	317	21	600	621
Grp Sat Flow(s),veh/h/ln	1791	0	1585	1818	0	1585	1781	1777	1844	1781	1777	1840
Q Serve(g_s), s	1.2	0.0	2.8	0.6	0.0	0.5	3.4	6.4	6.4	0.7	17.4	17.5
Cycle Q Clear(g_c), s	1.2	0.0	2.8	0.6	0.0	0.5	3.4	6.4	6.4	0.7	17.4	17.5
Prop In Lane	0.88		1.00	0.57		1.00	1.00		0.08	1.00		0.09
Lane Grp Cap(c), veh/h	244	0	216	122	0	106	153	821	852	44	713	738
V/C Ratio(X)	0.17	0.00	0.39	0.17	0.00	0.13	0.70	0.37	0.37	0.48	0.84	0.84
Avail Cap(c_a), veh/h	626	0	554	636	0	554	249	848	880	249	786	814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	22.5	25.2	0.0	25.1	25.4	10.0	10.0	27.5	15.5	15.5
Incr Delay (d2), s/veh	0.3	0.0	1.2	0.7	0.0	0.6	2.2	0.4	0.4	2.9	8.0	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.1	0.3	0.0	0.2	1.4	2.0	2.1	0.3	7.2	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.2	0.0	23.7	25.8	0.0	25.7	27.6	10.4	10.3	30.5	23.5	23.3
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		127			35			729			1242	
Approach Delay, s/veh		23.2			25.8			12.9			23.5	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	28.6		11.8	5.4	32.1		7.8
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	25.3		20.0	8.0	27.3		20.0
Max Q Clear Time (g_c+I1), s	5.4	19.5		4.8	2.7	8.4		2.6
Green Ext Time (p_c), s	0.0	3.5		0.4	0.0	3.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	19.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	6	11	39	10	139	25	1204	19	109	1595	81
Future Volume (veh/h)	17	6	11	39	10	139	25	1204	19	109	1595	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	14	0	41	11	8	26	1267	19	115	1679	82
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	185	157	142	149	126	61	1649	25	148	1755	85
Arrive On Green	0.10	0.10	0.00	0.08	0.08	0.08	0.03	0.46	0.46	0.08	0.51	0.51
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3582	54	1781	3446	167
Grp Volume(v), veh/h	12	14	0	41	11	8	26	628	658	115	861	900
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1859	1781	1777	1836
Q Serve(g_s), s	0.4	0.5	0.0	1.5	0.4	0.3	1.0	20.2	20.2	4.3	31.5	32.3
Cycle Q Clear(g_c), s	0.4	0.5	0.0	1.5	0.4	0.3	1.0	20.2	20.2	4.3	31.5	32.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	176	185	157	142	149	126	61	818	856	148	905	935
V/C Ratio(X)	0.07	0.08	0.00	0.29	0.07	0.06	0.43	0.77	0.77	0.78	0.95	0.96
Avail Cap(c_a), veh/h	573	602	510	211	222	188	208	818	856	313	907	938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	28.0	0.0	29.6	29.1	29.1	32.4	15.4	15.4	30.7	16.0	16.1
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.8	0.2	0.2	1.8	4.7	4.5	3.3	19.2	20.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.0	0.7	0.2	0.1	0.4	7.4	7.8	1.8	14.3	15.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	28.1	0.0	30.5	29.3	29.3	34.1	20.1	19.9	34.0	35.1	37.0
LnGrp LOS	C	C	A	C	C	C	C	C	B	C	D	D
Approach Vol, veh/h		26			60			1312			1876	
Approach Delay, s/veh		28.1			30.1			20.3			36.0	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	37.2		10.7	6.3	40.5		10.8
Change Period (Y+Rc), s	4.0	5.7		5.3	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	28.9		8.1	8.0	34.9		22.0
Max Q Clear Time (g_c+I1), s	6.3	22.2		3.5	3.0	34.3		2.5
Green Ext Time (p_c), s	0.1	4.0		0.0	0.0	0.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	0	48	15	0	25	53	1176	48	32	1535	2
Future Volume (veh/h)	68	0	48	15	0	25	53	1176	48	32	1535	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	0	51	16	0	26	56	1238	51	34	1616	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	213	0	0	65	0	0	120	1845	76	69	1782	795
Arrive On Green	0.12	0.00	0.00	0.04	0.00	0.00	0.07	0.53	0.53	0.04	0.50	0.50
Sat Flow, veh/h	1781	72		1781	16		1781	3478	143	1781	3554	1585
Grp Volume(v), veh/h	72	18.1		16	21.4		56	632	657	34	1616	2
Grp Sat Flow(s),veh/h/ln	1781	B		1781	C		1781	1777	1845	1781	1777	1585
Q Serve(g_s), s	1.6			0.4			1.3	11.4	11.4	0.8	18.3	0.0
Cycle Q Clear(g_c), s	1.6			0.4			1.3	11.4	11.4	0.8	18.3	0.0
Prop In Lane	1.00			1.00			1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	213			65			120	942	978	69	1782	795
V/C Ratio(X)	0.34			0.25			0.47	0.67	0.67	0.49	0.91	0.00
Avail Cap(c_a), veh/h	486			486			486	942	978	486	1801	803
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8			20.6			19.8	7.5	7.5	20.7	10.0	5.5
Incr Delay (d2), s/veh	0.3			0.7			1.0	2.2	2.2	2.0	7.3	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6			0.2			0.5	2.9	3.0	0.3	5.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1			21.4			20.8	9.8	9.7	22.8	17.3	5.5
LnGrp LOS	B			C			C	A	A	C	B	A
Approach Vol, veh/h								1345			1652	
Approach Delay, s/veh								10.2			17.4	
Approach LOS								B			B	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	5.7	29.0	9.3	7.0	27.8	5.6
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0	5.7	4.0
Max Green Setting (Gmax), s	12.0	22.3	12.0	12.0	22.3	12.0
Max Q Clear Time (g_c+I1), s	2.8	13.4	3.6	3.3	20.3	2.4
Green Ext Time (p_c), s	0.0	5.9	0.0	0.0	1.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	600	61	307	209	6	99	96	909	67	32	1015	175
Future Volume (veh/h)	600	61	307	209	6	99	96	909	67	32	1015	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	678	0	0	220	6	0	101	957	0	34	1068	184
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	801	0		207	6		131	1891		84	1224	546
Arrive On Green	0.22	0.00	0.00	0.12	0.12	0.00	0.07	0.37	0.00	0.05	0.34	0.34
Sat Flow, veh/h	3563	0	1585	1736	47	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	678	0	0	226	0	0	101	957	0	34	1068	184
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1784	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	13.8	0.0	0.0	9.0	0.0	0.0	4.2	11.0	0.0	1.4	21.3	6.5
Cycle Q Clear(g_c), s	13.8	0.0	0.0	9.0	0.0	0.0	4.2	11.0	0.0	1.4	21.3	6.5
Prop In Lane	1.00		1.00	0.97		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	801	0		213	0		131	1891		84	1224	546
V/C Ratio(X)	0.85	0.00		1.06	0.00		0.77	0.51		0.40	0.87	0.34
Avail Cap(c_a), veh/h	943	0		213	0		377	2163		259	1270	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	0.0	33.3	0.0	0.0	34.4	18.4	0.0	34.9	23.2	18.4
Incr Delay (d2), s/veh	6.0	0.0	0.0	79.5	0.0	0.0	3.6	0.4	0.0	3.1	7.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	0.0	8.5	0.0	0.0	1.8	3.7	0.0	0.6	8.7	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	0.0	0.0	112.7	0.0	0.0	38.0	18.8	0.0	38.0	30.4	19.0
LnGrp LOS	C	A		F	A		D	B		D	C	B
Approach Vol, veh/h		678	A		226	A		1058	A		1286	
Approach Delay, s/veh		34.0			112.7			20.6			29.0	
Approach LOS		C			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	34.0		21.0	9.5	32.0		13.0
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	11.0	32.0		20.0	16.0	27.0		9.0
Max Q Clear Time (g_c+I1), s	3.4	13.0		15.8	6.2	23.3		11.0
Green Ext Time (p_c), s	0.0	7.4		1.2	0.1	2.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	6	5	321	0	427	1	681	86	148	1704	0
Future Volume (veh/h)	0	6	5	321	0	427	1	681	86	148	1704	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	6	5	338	0	449	1	717	91	156	1794	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	19	16	460	0	409	2	2172	969	413	2037	909
Arrive On Green	0.00	0.01	0.01	0.26	0.00	0.26	0.00	0.61	0.61	0.57	0.57	0.00
Sat Flow, veh/h	0	1870	1585	1781	0	1585	1781	3554	1585	675	3554	1585
Grp Volume(v), veh/h	0	6	5	338	0	449	1	717	91	156	1794	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	0	1585	1781	1777	1585	675	1777	1585
Q Serve(g_s), s	0.0	0.3	0.3	18.8	0.0	28.0	0.1	10.6	2.6	15.9	47.1	0.0
Cycle Q Clear(g_c), s	0.0	0.3	0.3	18.8	0.0	28.0	0.1	10.6	2.6	22.4	47.1	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	19	16	460	0	409	2	2172	969	413	2037	909
V/C Ratio(X)	0.00	0.31	0.30	0.73	0.00	1.10	0.51	0.33	0.09	0.38	0.88	0.00
Avail Cap(c_a), veh/h	0	276	234	460	0	409	197	3049	1360	505	2525	1126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	53.2	53.2	36.8	0.0	40.2	54.1	10.3	8.7	16.7	19.9	0.0
Incr Delay (d2), s/veh	0.0	8.7	9.9	6.0	0.0	73.1	131.3	0.1	0.0	0.6	3.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	9.0	0.0	19.2	0.1	3.5	0.8	2.2	17.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	61.9	63.2	42.8	0.0	113.3	185.4	10.3	8.7	17.3	23.3	0.0
LnGrp LOS	A	E	E	D	A	F	F	B	A	B	C	A
Approach Vol, veh/h		11			787			809			1950	
Approach Delay, s/veh		62.5			83.0			10.4			22.8	
Approach LOS		E			F			B			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		70.3		5.1	4.1	66.1		33.0				
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		5.0				
Max Green Setting (Gmax), s		93.0		16.0	12.0	77.0		28.0				
Max Q Clear Time (g_c+I1), s		12.6		2.3	2.1	49.1		30.0				
Green Ext Time (p_c), s		3.5		0.0	0.0	13.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	33.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	13	348	0	8	116	121	651	0	339	1686	6
Future Volume (veh/h)	1	13	348	0	8	116	121	651	0	339	1686	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	14	14	0	8	4	127	685	0	357	1775	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	45	38	21	22	19	159	1714	0	410	2213	987
Arrive On Green	0.02	0.02	0.02	0.00	0.01	0.01	0.09	0.48	0.00	0.23	0.62	0.62
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3647	0	1781	3554	1585
Grp Volume(v), veh/h	1	14	14	0	8	4	127	685	0	357	1775	3
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	0	1781	1777	1585
Q Serve(g_s), s	0.0	0.6	0.7	0.0	0.3	0.2	5.5	9.8	0.0	15.3	29.9	0.1
Cycle Q Clear(g_c), s	0.0	0.6	0.7	0.0	0.3	0.2	5.5	9.8	0.0	15.3	29.9	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	45	38	21	22	19	159	1714	0	410	2213	987
V/C Ratio(X)	0.02	0.31	0.37	0.00	0.37	0.22	0.80	0.40	0.00	0.87	0.80	0.00
Avail Cap(c_a), veh/h	584	613	520	584	613	520	180	1748	0	764	2913	1299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	38.1	38.1	0.0	38.9	38.8	35.4	13.2	0.0	29.4	11.3	5.7
Incr Delay (d2), s/veh	0.2	4.0	6.0	0.0	9.9	5.7	19.7	0.2	0.0	5.8	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.0	0.2	0.1	3.1	3.4	0.0	6.7	8.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.0	42.0	44.1	0.0	48.8	44.5	55.1	13.3	0.0	35.2	12.5	5.7
LnGrp LOS	D	D	D	A	D	D	E	B	A	D	B	A
Approach Vol, veh/h		29			12			812			2135	
Approach Delay, s/veh		42.9			47.3			19.8			16.3	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.2	43.2		6.9	12.1	54.4		5.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	34.0	39.0		26.0	8.0	65.0		26.0
Max Q Clear Time (g_c+I1), s	17.3	11.8		2.7	7.5	31.9		2.3
Green Ext Time (p_c), s	0.9	4.5		0.1	0.0	17.5		0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	0	75	127	0	0	18	615	262	7	1917	37
Future Volume (veh/h)	27	0	75	127	0	0	18	615	262	7	1917	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	0	79	134	0	0	19	647	276	7	2018	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	0	168	398	0	177	46	1910	852	13	2676	50
Arrive On Green	0.11	0.00	0.11	0.11	0.00	0.00	0.03	0.54	0.54	0.01	0.52	0.52
Sat Flow, veh/h	1781	0	1585	3563	0	1585	1781	3554	1585	1781	5160	97
Grp Volume(v), veh/h	28	0	79	134	0	0	19	647	276	7	1331	725
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1702	1853
Q Serve(g_s), s	1.1	0.0	3.6	2.6	0.0	0.0	0.8	7.8	7.4	0.3	23.4	23.5
Cycle Q Clear(g_c), s	1.1	0.0	3.6	2.6	0.0	0.0	0.8	7.8	7.4	0.3	23.4	23.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	189	0	168	398	0	177	46	1910	852	13	1765	961
V/C Ratio(X)	0.15	0.00	0.47	0.34	0.00	0.00	0.41	0.34	0.32	0.54	0.75	0.75
Avail Cap(c_a), veh/h	470	0	418	940	0	418	188	2250	1004	188	2065	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	31.9	31.1	0.0	0.0	36.3	9.9	9.8	37.5	14.4	14.4
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.2	0.0	0.0	2.1	0.1	0.3	12.6	1.5	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.4	1.1	0.0	0.0	0.3	2.3	2.0	0.2	7.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.9	0.0	32.6	31.3	0.0	0.0	38.5	10.1	10.1	50.1	16.0	17.3
LnGrp LOS	C	A	C	C	A	A	D	B	B	D	B	B
Approach Vol, veh/h		107			134			942			2063	
Approach Delay, s/veh		32.2			31.3			10.7			16.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	46.7		12.1	6.0	45.3		12.5
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	8.0	48.0		20.0	8.0	46.0		20.0
Max Q Clear Time (g_c+I1), s	2.3	9.8		5.6	2.8	25.5		4.6
Green Ext Time (p_c), s	0.0	6.6		0.0	0.0	13.8		0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	14	168	63	7	22	93	1410	25	35	2088	61
Future Volume (veh/h)	110	14	168	63	7	22	93	1410	25	35	2088	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	15	177	66	7	23	98	1484	26	37	2198	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	28	212	93	10	91	125	2931	51	46	2668	77
Arrive On Green	0.14	0.14	0.14	0.06	0.06	0.06	0.07	0.57	0.57	0.03	0.52	0.52
Sat Flow, veh/h	1586	205	1550	1618	172	1585	1781	5167	91	1781	5098	148
Grp Volume(v), veh/h	131	0	177	73	0	23	98	978	532	37	1465	797
Grp Sat Flow(s),veh/h/ln	1791	0	1550	1789	0	1585	1781	1702	1853	1781	1702	1842
Q Serve(g_s), s	6.6	0.0	10.8	3.9	0.0	1.3	5.3	16.9	16.9	2.0	35.0	35.2
Cycle Q Clear(g_c), s	6.6	0.0	10.8	3.9	0.0	1.3	5.3	16.9	16.9	2.0	35.0	35.2
Prop In Lane	0.89		1.00	0.90		1.00	1.00		0.05	1.00		0.08
Lane Grp Cap(c), veh/h	245	0	212	103	0	91	125	1931	1051	46	1782	964
V/C Ratio(X)	0.53	0.00	0.83	0.71	0.00	0.25	0.79	0.51	0.51	0.80	0.82	0.83
Avail Cap(c_a), veh/h	371	0	321	371	0	328	220	2077	1131	92	1831	991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	40.8	44.9	0.0	43.7	44.4	12.7	12.7	47.0	19.4	19.4
Incr Delay (d2), s/veh	0.7	0.0	6.8	3.3	0.0	0.5	4.1	0.5	0.8	10.9	3.6	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	4.5	1.8	0.0	0.5	2.3	5.4	6.0	1.0	12.3	14.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.7	0.0	47.6	48.3	0.0	44.3	48.5	13.2	13.6	57.9	22.9	26.0
LnGrp LOS	D	A	D	D	A	D	D	B	B	E	C	C
Approach Vol, veh/h		308			96			1608			2299	
Approach Delay, s/veh		44.2			47.3			15.5			24.5	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	56.8		10.9	6.5	61.0		18.6
Change Period (Y+Rc), s	4.0	6.0		5.3	4.0	6.0		5.3
Max Green Setting (Gmax), s	12.0	52.2		20.1	5.0	59.2		20.1
Max Q Clear Time (g_c+I1), s	7.3	37.2		5.9	4.0	18.9		12.8
Green Ext Time (p_c), s	0.1	13.6		0.1	0.0	20.2		0.5

Intersection Summary			
HCM 6th Ctrl Delay			23.1
HCM 6th LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	396	86	338	1037	198	328	1351	162	300	1850	166
Future Volume (veh/h)	165	396	86	338	1037	198	328	1351	162	300	1850	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	417	10	356	1092	82	345	1422	0	316	1947	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	501	219	327	1317	404	346	2067		369	2101	
Arrive On Green	0.07	0.14	0.14	0.18	0.26	0.26	0.10	0.40	0.00	0.11	0.41	0.00
Sat Flow, veh/h	3456	3554	1551	1781	5106	1567	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	174	417	10	356	1092	82	345	1422	0	316	1947	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1551	1781	1702	1567	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	5.9	13.7	0.7	22.0	24.2	4.9	12.0	27.6	0.0	10.8	43.5	0.0
Cycle Q Clear(g_c), s	5.9	13.7	0.7	22.0	24.2	4.9	12.0	27.6	0.0	10.8	43.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	501	219	327	1317	404	346	2067		369	2101	
V/C Ratio(X)	0.76	0.83	0.05	1.09	0.83	0.20	1.00	0.69		0.86	0.93	
Avail Cap(c_a), veh/h	230	572	250	327	1417	435	346	2067		374	2101	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.1	50.2	44.6	49.0	42.0	34.9	54.0	29.5	0.0	52.7	33.6	0.0
Incr Delay (d2), s/veh	12.1	9.6	0.1	76.1	4.2	0.3	47.9	1.2	0.0	16.6	8.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	6.5	0.3	16.3	10.2	1.8	7.3	10.8	0.0	5.4	18.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	59.7	44.7	125.1	46.2	35.2	101.9	30.6	0.0	69.2	42.2	0.0
LnGrp LOS	E	E	D	F	D	D	F	C		E	D	
Approach Vol, veh/h		601			1530			1767	A		2263	A
Approach Delay, s/veh		61.6			64.0			44.5			46.0	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	55.4	12.0	36.6	16.8	54.6	26.0	22.6
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	12.0	47.0	8.0	33.3	13.0	* 46	22.0	19.3
Max Q Clear Time (g_c+I1), s	14.0	45.5	7.9	26.2	12.8	29.6	24.0	15.7
Green Ext Time (p_c), s	0.0	1.3	0.0	3.8	0.0	10.2	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	51.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1	26	29	1	20	47	1881	4	16	2238	12
Future Volume (veh/h)	25	1	26	29	1	20	47	1881	4	16	2238	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	1	27	31	1	21	49	1980	4	17	2356	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	2	34	87	1	27	492	4395	9	20	2915	16
Arrive On Green	0.04	0.04	0.04	0.04	0.04	0.04	0.28	0.84	0.84	0.01	0.56	0.56
Sat Flow, veh/h	809	58	867	1011	33	685	1781	5262	11	1781	5240	29
Grp Volume(v), veh/h	54	0	0	53	0	0	49	1281	703	17	1530	839
Grp Sat Flow(s),veh/h/ln	1733	0	0	1729	0	0	1781	1702	1868	1781	1702	1865
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.0	2.5	11.9	11.9	1.1	43.5	43.5
Cycle Q Clear(g_c), s	3.5	0.0	0.0	3.5	0.0	0.0	2.5	11.9	11.9	1.1	43.5	43.5
Prop In Lane	0.48		0.50	0.58		0.40	1.00		0.01	1.00		0.02
Lane Grp Cap(c), veh/h	113	0	0	115	0	0	492	2843	1561	20	1894	1038
V/C Ratio(X)	0.48	0.00	0.00	0.46	0.00	0.00	0.10	0.45	0.45	0.84	0.81	0.81
Avail Cap(c_a), veh/h	315	0	0	314	0	0	492	2843	1561	119	2164	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	0.0	57.0	0.0	0.0	32.3	2.6	2.6	59.2	21.5	21.5
Incr Delay (d2), s/veh	3.1	0.0	0.0	2.8	0.0	0.0	0.0	0.5	0.9	27.4	2.3	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	1.7	0.0	0.0	1.0	2.0	2.4	0.7	16.0	18.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	0.0	59.9	0.0	0.0	32.4	3.1	3.6	86.6	23.7	25.6
LnGrp LOS	E	A	A	E	A	A	C	A	A	F	C	C
Approach Vol, veh/h		54			53			2033			2386	
Approach Delay, s/veh		60.2			59.9			4.0			24.8	
Approach LOS		E			E			A			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	105.9		8.7	38.8	72.5		8.7
Change Period (Y+Rc), s	4.0	5.7		4.0	5.7	* 5.7		4.0
Max Green Setting (Gmax), s	8.0	77.3		21.0	9.0	* 76		21.0
Max Q Clear Time (g_c+I1), s	3.1	13.9		5.5	4.5	45.5		5.5
Green Ext Time (p_c), s	0.0	22.8		0.1	0.0	21.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	80	199	154	206	108	372	1881	71	61	2141	86
Future Volume (veh/h)	124	80	199	154	206	108	372	1881	71	61	2141	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	131	84	42	162	217	0	392	1980	0	64	2254	90
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	369	162	207	276		438	3449		102	2913	116
Arrive On Green	0.09	0.10	0.10	0.06	0.08	0.00	0.13	0.68	0.00	0.03	0.58	0.58
Sat Flow, veh/h	1781	3554	1562	3456	3554	1585	3456	5106	1585	3456	5038	200
Grp Volume(v), veh/h	131	84	42	162	217	0	392	1980	0	64	1520	824
Grp Sat Flow(s),veh/h/ln	1781	1777	1562	1728	1777	1585	1728	1702	1585	1728	1702	1834
Q Serve(g_s), s	10.9	3.3	3.7	6.9	9.0	0.0	16.8	30.8	0.0	2.7	51.0	51.7
Cycle Q Clear(g_c), s	10.9	3.3	3.7	6.9	9.0	0.0	16.8	30.8	0.0	2.7	51.0	51.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	153	369	162	207	276		438	3449		102	1968	1060
V/C Ratio(X)	0.86	0.23	0.26	0.78	0.79		0.89	0.57		0.63	0.77	0.78
Avail Cap(c_a), veh/h	190	481	211	230	339		484	3449		184	1968	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.6	61.7	61.9	69.6	68.0	0.0	64.5	12.9	0.0	72.0	24.1	24.2
Incr Delay (d2), s/veh	22.2	0.4	1.1	12.7	10.6	0.0	16.7	0.7	0.0	2.3	3.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	1.5	1.5	3.4	4.5	0.0	8.3	11.2	0.0	1.2	20.4	23.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.9	62.1	63.0	82.3	78.5	0.0	81.2	13.6	0.0	74.3	27.1	29.9
LnGrp LOS	F	E	E	F	E		F	B		E	C	C
Approach Vol, veh/h		257			379	A		2372	A		2408	
Approach Delay, s/veh		76.4			80.1			24.8			29.3	
Approach LOS		E			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	17.3	8.4	107.3	13.0	21.3	23.0	92.7
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	16.0	14.3	8.0	92.0	10.0	20.3	21.0	79.0
Max Q Clear Time (g_c+I1), s	12.9	11.0	4.7	32.8	8.9	5.7	18.8	53.7
Green Ext Time (p_c), s	0.1	0.3	0.0	20.8	0.0	0.5	0.3	16.8

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	28	181	426	68	782	138	1260	214	389	1080	5
Future Volume (veh/h)	5	28	181	426	68	782	138	1260	214	389	1080	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	29	2	448	0	439	145	1326	142	409	1137	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	42	36	599	0	533	167	2047	913	438	2163	965
Arrive On Green	0.02	0.02	0.02	0.17	0.00	0.17	0.09	0.58	0.58	0.13	0.61	0.61
Sat Flow, veh/h	3456	1870	1585	3563	0	3170	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	5	29	2	448	0	439	145	1326	142	409	1137	2
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	0	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.2	2.3	0.2	17.9	0.0	20.1	12.0	37.9	6.3	17.6	27.6	0.1
Cycle Q Clear(g_c), s	0.2	2.3	0.2	17.9	0.0	20.1	12.0	37.9	6.3	17.6	27.6	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	42	36	599	0	533	167	2047	913	438	2163	965
V/C Ratio(X)	0.06	0.69	0.06	0.75	0.00	0.82	0.87	0.65	0.16	0.93	0.53	0.00
Avail Cap(c_a), veh/h	369	200	169	903	0	803	202	2047	913	438	2163	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.8	72.8	71.7	59.4	0.0	60.2	67.0	21.5	14.8	64.9	16.9	11.5
Incr Delay (d2), s/veh	0.3	17.8	0.6	1.9	0.0	4.3	26.8	1.6	0.4	27.3	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.3	0.1	8.2	0.0	8.3	6.6	15.4	2.3	9.3	10.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	90.6	72.4	61.3	0.0	64.6	93.9	23.1	15.2	92.2	17.8	11.5
LnGrp LOS	E	F	E	E	A	E	F	C	B	F	B	B
Approach Vol, veh/h		36			887			1613			1548	
Approach Delay, s/veh		87.0			62.9			28.8			37.5	
Approach LOS		F			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.0	90.4		7.4	18.1	95.3		29.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	19.0	61.0		16.0	17.0	63.0		38.0
Max Q Clear Time (g_c+I1), s	19.6	39.9		4.3	14.0	29.6		22.1
Green Ext Time (p_c), s	0.0	10.0		0.1	0.1	9.1		3.2

Intersection Summary	
HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	77	44	498	74	68	930
Future Volume (veh/h)	77	44	498	74	68	930
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	46	524	78	72	979
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	329	292	1134	506	155	1859
Arrive On Green	0.18	0.18	0.32	0.32	0.09	0.52
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	81	46	524	78	72	979
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	1.3	0.8	4.0	1.2	1.3	6.2
Cycle Q Clear(g_c), s	1.3	0.8	4.0	1.2	1.3	6.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	329	292	1134	506	155	1859
V/C Ratio(X)	0.25	0.16	0.46	0.15	0.47	0.53
Avail Cap(c_a), veh/h	1250	1113	2182	973	417	3222
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	11.7	9.3	8.3	14.9	5.4
Incr Delay (d2), s/veh	0.4	0.2	0.6	0.3	0.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	1.2	0.3	0.5	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.3	12.0	9.9	8.6	15.7	5.8
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	127		602			1051
Approach Delay, s/veh	12.2		9.7			6.5
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.0	16.9				23.9	10.3
Change Period (Y+Rc), s	4.0	6.0				6.0	4.0
Max Green Setting (Gmax), s	8.0	21.0				31.0	24.0
Max Q Clear Time (g_c+I1), s	3.3	6.0				8.2	3.3
Green Ext Time (p_c), s	0.0	4.5				9.7	0.4

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	406	269	783	1314	8
Future Volume (veh/h)	12	406	269	783	1314	8
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	142	283	824	1383	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	203	181	330	2643	1731	772
Arrive On Green	0.11	0.11	0.19	0.74	0.49	0.49
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	13	142	283	824	1383	4
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	0.5	6.1	10.8	5.4	23.0	0.1
Cycle Q Clear(g_c), s	0.5	6.1	10.8	5.4	23.0	0.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	203	181	330	2643	1731	772
V/C Ratio(X)	0.06	0.79	0.86	0.31	0.80	0.01
Avail Cap(c_a), veh/h	456	406	405	3133	2072	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	30.3	27.7	3.0	15.1	9.3
Incr Delay (d2), s/veh	0.1	7.3	14.1	0.1	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.4	5.7	1.2	8.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.9	37.6	41.8	3.1	17.1	9.3
LnGrp LOS	C	D	D	A	B	A
Approach Vol, veh/h	155			1107	1387	
Approach Delay, s/veh	36.8			13.0	17.0	
Approach LOS	D			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		57.3		13.0	18.0	39.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		62.0		18.0	16.0	41.0
Max Q Clear Time (g_c+I1), s		7.4		8.1	12.8	25.0
Green Ext Time (p_c), s		7.2		0.3	0.3	9.3

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	4	9	271	6	324	11	983	75	201	1466	29
Future Volume (veh/h)	5	4	9	271	6	324	11	983	75	201	1466	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	4	9	285	6	341	12	1035	79	212	1543	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	56	56	253	3	409	37	1410	108	251	1932	39
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.42	0.42	0.14	0.54	0.54
Sat Flow, veh/h	0	214	214	617	13	1576	1781	3344	255	1781	3562	71
Grp Volume(v), veh/h	18	0	0	291	0	341	12	550	564	212	769	805
Grp Sat Flow(s),veh/h/ln	429	0	0	630	0	1576	1781	1777	1823	1781	1777	1857
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	15.8	0.5	20.0	20.0	8.9	26.9	27.0
Cycle Q Clear(g_c), s	20.0	0.0	0.0	20.0	0.0	15.8	0.5	20.0	20.0	8.9	26.9	27.0
Prop In Lane	0.28		0.50	0.98		1.00	1.00		0.14	1.00		0.04
Lane Grp Cap(c), veh/h	171	0	0	256	0	409	37	749	769	251	963	1007
V/C Ratio(X)	0.11	0.00	0.00	1.14	0.00	0.83	0.33	0.73	0.73	0.84	0.80	0.80
Avail Cap(c_a), veh/h	171	0	0	256	0	409	185	791	811	277	963	1007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	0.0	32.2	0.0	27.0	37.2	18.7	18.7	32.3	14.2	14.3
Incr Delay (d2), s/veh	0.1	0.0	0.0	98.2	0.0	13.1	1.9	3.9	3.9	17.5	5.2	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	11.8	0.0	7.2	0.2	7.6	7.8	4.7	9.5	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.9	0.0	0.0	130.4	0.0	40.0	39.1	22.6	22.5	49.8	19.4	19.3
LnGrp LOS	C	A	A	F	A	D	D	C	C	D	B	B
Approach Vol, veh/h		18			632			1126			1786	
Approach Delay, s/veh		22.9			81.6			22.7			23.0	
Approach LOS		C			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.9	38.2		24.0	5.6	47.5		24.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	34.3		20.0	8.0	38.3		20.0
Max Q Clear Time (g_c+I1), s	10.9	22.0		22.0	2.5	29.0		22.0
Green Ext Time (p_c), s	0.0	10.5		0.0	0.0	9.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	0	37	51	5	38	54	988	23	16	1621	59
Future Volume (veh/h)	59	0	37	51	5	38	54	988	23	16	1621	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	0	1	54	5	1	57	1040	15	17	1706	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	0	73	70	7	66	442	2498	1113	21	1568	55
Arrive On Green	0.05	0.00	0.05	0.04	0.04	0.04	0.25	0.70	0.70	0.01	0.45	0.45
Sat Flow, veh/h	1781	0	1585	1637	152	1542	1781	3554	1583	1781	3502	123
Grp Volume(v), veh/h	62	0	1	59	0	1	57	1040	15	17	862	904
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1789	0	1542	1781	1777	1583	1781	1777	1848
Q Serve(g_s), s	3.1	0.0	0.1	2.9	0.0	0.1	2.2	11.1	0.3	0.9	40.3	40.3
Cycle Q Clear(g_c), s	3.1	0.0	0.1	2.9	0.0	0.1	2.2	11.1	0.3	0.9	40.3	40.3
Prop In Lane	1.00		1.00	0.92		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	82	0	73	77	0	66	442	2498	1113	21	796	827
V/C Ratio(X)	0.76	0.00	0.01	0.77	0.00	0.02	0.13	0.42	0.01	0.83	1.08	1.09
Avail Cap(c_a), veh/h	317	0	282	159	0	137	442	2498	1113	158	796	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	0.0	41.0	42.6	0.0	41.2	26.3	5.6	4.0	44.4	24.9	24.9
Incr Delay (d2), s/veh	5.3	0.0	0.0	5.9	0.0	0.0	0.0	0.3	0.0	25.3	57.0	59.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	1.4	0.0	0.0	0.9	2.6	0.1	0.5	26.7	28.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	0.0	41.0	48.6	0.0	41.3	26.3	5.9	4.0	69.7	81.8	84.4
LnGrp LOS	D	A	D	D	A	D	C	A	A	E	F	F
Approach Vol, veh/h		63			60			1112			1783	
Approach Delay, s/veh		47.7			48.4			6.9			83.0	
Approach LOS		D			D			A			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	28.0	46.0		7.9	5.0	69.0		8.1
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	* 40		8.0	8.0	40.3		16.0
Max Q Clear Time (g_c+I1), s	4.2	42.3		4.9	2.9	13.1		5.1
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	22.4		0.1

Intersection Summary	
HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	302	0	495	5	4	3	925	733	0	8	1047	626
Future Volume (veh/h)	302	0	495	5	4	3	925	733	0	8	1047	626
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	318	0	0	5	4	0	974	772	0	8	1102	233
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	398	0		36	38	0	922	2336	0	25	1478	659
Arrive On Green	0.11	0.00	0.00	0.02	0.02	0.00	0.27	0.66	0.00	0.01	0.42	0.42
Sat Flow, veh/h	3563	0	1585	1781	1870	0	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	318	0	0	5	4	0	974	772	0	8	1102	233
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	7.8	0.0	0.0	0.2	0.2	0.0	24.0	8.6	0.0	0.4	23.6	9.1
Cycle Q Clear(g_c), s	7.8	0.0	0.0	0.2	0.2	0.0	24.0	8.6	0.0	0.4	23.6	9.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	398	0		36	38	0	922	2336	0	25	1478	659
V/C Ratio(X)	0.80	0.00		0.14	0.11	0.00	1.06	0.33	0.00	0.32	0.75	0.35
Avail Cap(c_a), veh/h	475	0		238	249	0	922	2336	0	158	1478	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	0.0	43.3	43.3	0.0	33.0	6.7	0.0	43.9	22.2	18.0
Incr Delay (d2), s/veh	6.6	0.0	0.0	0.7	0.5	0.0	45.9	0.4	0.0	2.7	2.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.0	0.1	0.1	0.0	15.6	2.9	0.0	0.2	8.9	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.6	0.0	0.0	44.0	43.8	0.0	78.9	7.1	0.0	46.6	24.6	18.5
LnGrp LOS	D	A		D	D	A	F	A	A	D	C	B
Approach Vol, veh/h		318	A		9			1746			1343	
Approach Delay, s/veh		45.6			43.9			47.2			23.6	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	64.9		5.8	27.0	43.1		14.0
Change Period (Y+Rc), s	4.0	5.7		4.0	3.0	* 5.7		4.0
Max Green Setting (Gmax), s	8.0	40.3		12.0	24.0	* 26		12.0
Max Q Clear Time (g_c+I1), s	2.4	10.6		2.2	26.0	25.6		9.8
Green Ext Time (p_c), s	0.0	6.0		0.0	0.0	0.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	1	31	0	2	31	59	1260	0	34	1024	99
Future Volume (veh/h)	62	1	31	0	2	31	59	1260	0	34	1024	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	1	33	0	2	33	62	1326	0	36	1078	104
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	3	97	0	59	50	85	1526	681	57	1355	131
Arrive On Green	0.06	0.06	0.06	0.00	0.03	0.03	0.05	0.43	0.00	0.03	0.41	0.41
Sat Flow, veh/h	1781	47	1545	0	1870	1585	1781	3554	1585	1781	3275	316
Grp Volume(v), veh/h	65	0	34	0	2	33	62	1326	0	36	585	597
Grp Sat Flow(s),veh/h/ln	1781	0	1592	0	1870	1585	1781	1777	1585	1781	1777	1814
Q Serve(g_s), s	1.6	0.0	0.9	0.0	0.0	0.9	1.5	15.3	0.0	0.9	13.0	13.0
Cycle Q Clear(g_c), s	1.6	0.0	0.9	0.0	0.0	0.9	1.5	15.3	0.0	0.9	13.0	13.0
Prop In Lane	1.00		0.97	0.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	112	0	100	0	59	50	85	1526	681	57	735	750
V/C Ratio(X)	0.58	0.00	0.34	0.00	0.03	0.66	0.73	0.87	0.00	0.63	0.80	0.80
Avail Cap(c_a), veh/h	870	0	777	0	913	774	435	1577	704	435	789	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.5	0.0	20.2	0.0	21.2	21.6	21.2	11.7	0.0	21.5	11.5	11.6
Incr Delay (d2), s/veh	4.6	0.0	2.0	0.0	0.2	13.9	11.1	5.4	0.0	10.7	5.3	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.4	0.0	0.0	0.5	0.8	5.7	0.0	0.5	5.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	0.0	22.2	0.0	21.4	35.5	32.3	17.1	0.0	32.3	16.9	16.8
LnGrp LOS	C	A	C	A	C	D	C	B	A	C	B	B
Approach Vol, veh/h		99			35			1388			1218	
Approach Delay, s/veh		24.1			34.7			17.8			17.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	24.3		7.8	7.2	23.6		6.4
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.0	20.0		22.0	11.0	20.0		22.0
Max Q Clear Time (g_c+I1), s	2.9	17.3		3.6	3.5	15.0		2.9
Green Ext Time (p_c), s	0.0	2.0		0.3	0.1	3.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	1	111	30	1	30	97	1034	40	69	1168	106
Future Volume (veh/h)	203	1	111	30	1	30	97	1034	40	69	1168	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	0	117	32	1	32	102	1088	42	73	1229	112
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	458	0	204	164	4	143	154	1659	740	116	1583	706
Arrive On Green	0.13	0.00	0.13	0.09	0.09	0.09	0.09	0.47	0.47	0.07	0.45	0.45
Sat Flow, veh/h	3563	0	1585	1781	48	1544	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	215	0	117	32	0	33	102	1088	42	73	1229	112
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1592	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.9	0.0	4.9	1.2	0.0	1.3	3.9	16.5	1.0	2.8	20.5	2.9
Cycle Q Clear(g_c), s	3.9	0.0	4.9	1.2	0.0	1.3	3.9	16.5	1.0	2.8	20.5	2.9
Prop In Lane	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	458	0	204	164	0	147	154	1659	740	116	1583	706
V/C Ratio(X)	0.47	0.00	0.57	0.19	0.00	0.22	0.66	0.66	0.06	0.63	0.78	0.16
Avail Cap(c_a), veh/h	1019	0	453	510	0	456	306	1815	809	306	1815	809
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	28.7	29.3	0.0	29.4	31.0	14.3	10.2	31.9	16.4	11.6
Incr Delay (d2), s/veh	0.3	0.0	1.0	0.2	0.0	0.3	1.8	0.9	0.0	2.1	2.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.8	0.5	0.0	0.5	1.6	5.7	0.3	1.2	7.4	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	0.0	29.6	29.5	0.0	29.7	32.8	15.2	10.3	34.0	18.5	11.7
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		332			65			1232			1414	
Approach Delay, s/veh		28.9			29.6			16.5			18.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	37.9		10.5	10.0	36.4		13.0				
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0				
Max Green Setting (Gmax), s	12.0	35.7		20.0	12.0	35.7		20.0				
Max Q Clear Time (g_c+I1), s	4.8	18.5		3.3	5.9	22.5		6.9				
Green Ext Time (p_c), s	0.0	9.1		0.1	0.1	8.6		0.5				

Intersection Summary			
HCM 6th Ctrl Delay			19.2
HCM 6th LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	8	8	1	5	15
Future Volume (veh/h)	1	8	8	1	5	15
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	8	8	1	5	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	31	27	98	83	15	689
Arrive On Green	0.02	0.02	0.05	0.05	0.01	0.37
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	1	8	8	1	5	16
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	0.0	0.1	0.1	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.1	0.1	0.0	0.0	0.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	31	27	98	83	15	689
V/C Ratio(X)	0.03	0.29	0.08	0.01	0.34	0.02
Avail Cap(c_a), veh/h	2299	2046	2529	2144	766	3909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.9	7.9	7.3	7.3	8.0	3.3
Incr Delay (d2), s/veh	0.4	5.9	0.4	0.1	13.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.3	13.8	7.7	7.4	21.1	3.3
LnGrp LOS	A	B	A	A	C	A
Approach Vol, veh/h	9		9			21
Approach Delay, s/veh	13.1		7.6			7.5
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.1	5.9				11.0	5.3
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	7.0	22.0				34.0	21.0
Max Q Clear Time (g_c+I1), s	2.0	2.1				2.1	2.1
Green Ext Time (p_c), s	0.0	0.0				0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	1240	46	111	1079	41	117	29	25	4	29	2
Future Volume (veh/h)	55	1240	46	111	1079	41	117	29	25	4	29	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	1305	48	117	1136	43	77	95	26	4	31	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	1615	720	152	1774	791	156	164	139	6	49	3
Arrive On Green	0.04	0.45	0.45	0.09	0.50	0.50	0.09	0.09	0.09	0.03	0.03	0.03
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	199	1544	100
Grp Volume(v), veh/h	58	1305	48	117	1136	43	77	95	26	37	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1842	0	0
Q Serve(g_s), s	1.7	16.5	0.9	3.3	12.2	0.7	2.1	2.5	0.8	1.0	0.0	0.0
Cycle Q Clear(g_c), s	1.7	16.5	0.9	3.3	12.2	0.7	2.1	2.5	0.8	1.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.11		0.05
Lane Grp Cap(c), veh/h	72	1615	720	152	1774	791	156	164	139	59	0	0
V/C Ratio(X)	0.80	0.81	0.07	0.77	0.64	0.05	0.49	0.58	0.19	0.63	0.00	0.00
Avail Cap(c_a), veh/h	411	1799	802	411	1799	802	514	540	458	496	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.7	12.2	8.0	23.3	9.6	6.7	22.6	22.8	22.0	24.8	0.0	0.0
Incr Delay (d2), s/veh	7.5	2.8	0.1	3.1	0.9	0.0	0.9	1.2	0.2	4.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.1	0.2	1.3	3.3	0.2	0.9	1.1	0.3	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	15.0	8.0	26.4	10.5	6.7	23.5	24.0	22.2	28.9	0.0	0.0
LnGrp LOS	C	B	A	C	B	A	C	C	C	C	A	A
Approach Vol, veh/h		1411			1296			198			37	
Approach Delay, s/veh		15.5			11.8			23.6			28.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.7	8.4	29.3		8.6	6.1	31.6				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		14.0	12.0	26.3		15.0	12.0	26.3				
Max Q Clear Time (g_c+I1), s		3.0	5.3	18.5		4.5	3.7	14.2				
Green Ext Time (p_c), s		0.0	0.1	5.2		0.3	0.0	6.3				

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	924	206	121	1158	34	190	35	87	23	27	66
Future Volume (veh/h)	95	924	206	121	1158	34	190	35	87	23	27	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	973	217	127	1219	36	226	0	92	24	28	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	1293	577	163	1363	608	372	0	166	133	140	119
Arrive On Green	0.07	0.36	0.36	0.09	0.38	0.38	0.10	0.00	0.10	0.07	0.07	0.07
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	1781	1870	1585
Grp Volume(v), veh/h	100	973	217	127	1219	36	226	0	92	24	28	69
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	1585
Q Serve(g_s), s	2.8	12.0	5.1	3.5	16.1	0.7	3.0	0.0	2.8	0.6	0.7	2.1
Cycle Q Clear(g_c), s	2.8	12.0	5.1	3.5	16.1	0.7	3.0	0.0	2.8	0.6	0.7	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	1293	577	163	1363	608	372	0	166	133	140	119
V/C Ratio(X)	0.78	0.75	0.38	0.78	0.89	0.06	0.61	0.00	0.56	0.18	0.20	0.58
Avail Cap(c_a), veh/h	284	1347	601	284	1363	608	568	0	253	558	586	496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	14.0	11.7	22.3	14.5	9.7	21.5	0.0	21.3	21.7	21.8	22.4
Incr Delay (d2), s/veh	3.8	2.5	0.6	3.0	8.1	0.1	0.6	0.0	1.1	0.9	1.0	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.0	1.4	1.4	6.2	0.2	1.1	0.0	0.9	0.3	0.3	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	16.5	12.3	25.3	22.6	9.8	22.1	0.0	22.4	22.7	22.8	28.7
LnGrp LOS	C	B	B	C	C	A	C	A	C	C	C	C
Approach Vol, veh/h		1290			1382			318			121	
Approach Delay, s/veh		16.6			22.5			22.2			26.1	
Approach LOS		B			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		9.2	8.6	23.9		8.4	7.6	24.9				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.6	4.0	5.7				
Max Green Setting (Gmax), s		8.0	8.0	19.0		15.7	8.0	19.0				
Max Q Clear Time (g_c+I1), s		5.0	5.5	14.0		4.1	4.8	18.1				
Green Ext Time (p_c), s		0.3	0.0	4.2		0.5	0.0	0.8				

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	915	95	48	858	4	161	33	8	3	20	83
Future Volume (veh/h)	94	915	95	48	858	4	161	33	8	3	20	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	963	100	51	903	4	169	35	8	3	21	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	1335	595	62	1205	538	233	48	248	19	130	127
Arrive On Green	0.07	0.38	0.38	0.03	0.34	0.34	0.16	0.16	0.16	0.08	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1488	308	1585	232	1626	1585
Grp Volume(v), veh/h	99	963	100	51	903	4	204	0	8	24	0	87
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1796	0	1585	1859	0	1585
Q Serve(g_s), s	2.6	11.2	2.0	1.4	10.8	0.1	5.2	0.0	0.2	0.6	0.0	2.6
Cycle Q Clear(g_c), s	2.6	11.2	2.0	1.4	10.8	0.1	5.2	0.0	0.2	0.6	0.0	2.6
Prop In Lane	1.00		1.00	1.00		1.00	0.83		1.00	0.12		1.00
Lane Grp Cap(c), veh/h	127	1335	595	62	1205	538	281	0	248	149	0	127
V/C Ratio(X)	0.78	0.72	0.17	0.82	0.75	0.01	0.73	0.00	0.03	0.16	0.00	0.68
Avail Cap(c_a), veh/h	296	1402	625	296	1255	560	821	0	724	849	0	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.0	12.9	10.0	23.1	14.1	10.5	19.3	0.0	17.2	20.6	0.0	21.6
Incr Delay (d2), s/veh	3.9	2.0	0.2	9.6	2.8	0.0	4.3	0.0	0.1	0.6	0.0	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.7	0.6	0.7	3.8	0.0	2.3	0.0	0.1	0.3	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	14.9	10.2	32.7	16.8	10.5	23.6	0.0	17.3	21.2	0.0	29.2
LnGrp LOS	C	B	B	C	B	B	C	A	B	C	A	C
Approach Vol, veh/h		1162			958			212			111	
Approach Delay, s/veh		15.4			17.7			23.4			27.5	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.9	5.7	23.1		11.5	7.4	21.3				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	4.0	5.0				
Max Green Setting (Gmax), s		22.0	8.0	19.0		22.0	8.0	17.0				
Max Q Clear Time (g_c+I1), s		4.6	3.4	13.2		7.2	4.6	12.8				
Green Ext Time (p_c), s		0.4	0.0	4.9		0.8	0.0	3.4				

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	530	385	31	472	46	332	58	32	63	55	36
Future Volume (veh/h)	28	530	385	31	472	46	332	58	32	63	55	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	558	405	33	497	48	393	0	34	66	58	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	1096	798	40	808	361	694	0	309	95	83	155
Arrive On Green	0.08	0.31	0.31	0.02	0.23	0.23	0.19	0.00	0.19	0.10	0.10	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	970	852	1585
Grp Volume(v), veh/h	29	558	405	33	497	48	393	0	34	124	0	38
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1822	0	1585
Q Serve(g_s), s	0.7	5.8	7.7	0.8	5.7	1.1	4.5	0.0	0.8	3.0	0.0	1.0
Cycle Q Clear(g_c), s	0.7	5.8	7.7	0.8	5.7	1.1	4.5	0.0	0.8	3.0	0.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.53		1.00
Lane Grp Cap(c), veh/h	145	1096	798	40	808	361	694	0	309	178	0	155
V/C Ratio(X)	0.20	0.51	0.51	0.82	0.61	0.13	0.57	0.00	0.11	0.70	0.00	0.25
Avail Cap(c_a), veh/h	316	1417	941	316	1338	597	1894	0	843	323	0	281
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.4	12.8	7.5	22.0	15.7	13.9	16.4	0.0	15.0	19.7	0.0	18.8
Incr Delay (d2), s/veh	0.2	0.6	0.8	14.2	1.2	0.3	0.9	0.0	0.2	1.8	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	3.1	0.5	2.0	0.3	1.7	0.0	0.3	1.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	13.4	8.3	36.2	16.9	14.2	17.3	0.0	15.1	21.6	0.0	19.1
LnGrp LOS	B	B	A	D	B	B	B	A	B	C	A	B
Approach Vol, veh/h		992			578			427			162	
Approach Delay, s/veh		11.5			17.7			17.2			21.0	
Approach LOS		B			B			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.8	5.0	18.9		8.4	8.7	15.3				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	5.0	* 5				
Max Green Setting (Gmax), s		24.0	8.0	18.0		8.0	8.0	* 17				
Max Q Clear Time (g_c+I1), s		6.5	2.8	9.7		5.0	2.7	7.7				
Green Ext Time (p_c), s		2.3	0.0	4.2		0.1	0.0	2.6				

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	16	44	18	7	4	62	984	8	7	752	144
Future Volume (veh/h)	199	16	44	18	7	4	62	984	8	7	752	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1870	1870	1870	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	209	17	46	19	7	4	65	1036	8	7	792	152
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	66	177	175	40	23	98	2073	642	18	2096	649
Arrive On Green	0.16	0.15	0.15	0.05	0.04	0.04	0.06	0.43	0.43	0.01	0.38	0.38
Sat Flow, veh/h	1776	443	1200	3456	1116	638	1692	4849	1502	1931	5535	1714
Grp Volume(v), veh/h	209	0	63	19	0	11	65	1036	8	7	792	152
Grp Sat Flow(s),veh/h/ln	1776	0	1643	1728	0	1753	1692	1616	1502	1931	1845	1714
Q Serve(g_s), s	5.9	0.0	1.8	0.3	0.0	0.3	2.0	8.2	0.2	0.2	5.5	1.3
Cycle Q Clear(g_c), s	5.9	0.0	1.8	0.3	0.0	0.3	2.0	8.2	0.2	0.2	5.5	1.3
Prop In Lane	1.00		0.73	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	0	243	175	0	63	98	2073	642	18	2096	649
V/C Ratio(X)	0.73	0.00	0.26	0.11	0.00	0.17	0.66	0.50	0.01	0.39	0.38	0.23
Avail Cap(c_a), veh/h	336	0	621	718	0	739	256	2263	701	292	2583	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	20.0	24.0	0.0	24.7	24.4	11.0	8.7	26.1	11.9	1.8
Incr Delay (d2), s/veh	4.9	0.0	0.5	0.1	0.0	0.5	2.8	0.4	0.0	5.1	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.6	0.1	0.0	0.1	0.7	2.0	0.0	0.1	1.6	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	0.0	20.5	24.1	0.0	25.2	27.2	11.4	8.7	31.2	12.1	2.1
LnGrp LOS	C	A	C	C	A	C	C	B	A	C	B	A
Approach Vol, veh/h		272			30			1109			951	
Approach Delay, s/veh		24.7			24.5			12.3			10.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	28.6	6.7	13.1	7.1	26.0	13.9	5.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	5.3	* 4
Max Green Setting (Gmax), s	8.0	24.7	11.0	20.0	8.0	24.7	10.0	* 22
Max Q Clear Time (g_c+I1), s	2.2	10.2	2.3	3.8	4.0	7.5	7.9	2.3
Green Ext Time (p_c), s	0.0	12.1	0.0	0.3	0.0	12.5	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	98	254	308	86	134	542	1242	286	55	1065	114
Future Volume (veh/h)	144	98	254	308	86	134	542	1242	286	55	1065	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	195	193	340	68	141	571	1307	301	58	1121	120
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	246	208	510	78	161	346	2519	1009	351	2527	784
Arrive On Green	0.13	0.13	0.13	0.14	0.14	0.14	0.20	0.99	0.99	0.10	0.49	0.49
Sat Flow, veh/h	1781	1870	1585	3563	543	1125	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	136	195	193	340	0	209	571	1307	301	58	1121	120
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1668	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	10.8	15.2	18.1	13.6	0.0	18.4	15.0	1.0	0.4	2.3	21.3	6.2
Cycle Q Clear(g_c), s	10.8	15.2	18.1	13.6	0.0	18.4	15.0	1.0	0.4	2.3	21.3	6.2
Prop In Lane	1.00		1.00	1.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	246	208	510	0	239	346	2519	1009	351	2527	784
V/C Ratio(X)	0.58	0.79	0.93	0.67	0.00	0.88	1.65	0.52	0.30	0.17	0.44	0.15
Avail Cap(c_a), veh/h	234	246	208	587	0	275	346	2519	1009	351	2527	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.3	63.2	64.4	60.9	0.0	62.9	60.0	0.5	0.3	61.6	24.5	20.7
Incr Delay (d2), s/veh	3.6	16.2	42.5	2.4	0.0	23.3	306.2	0.8	0.8	0.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	8.4	9.8	6.3	0.0	9.4	20.5	0.4	0.4	1.0	8.5	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.9	79.4	106.9	63.2	0.0	86.3	366.2	1.3	1.0	61.8	24.7	20.9
LnGrp LOS	E	E	F	E	A	F	F	A	A	E	C	C
Approach Vol, veh/h		524			549			2179			1299	
Approach Delay, s/veh		85.8			72.0			96.9			26.0	
Approach LOS		F			E			F			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.2	79.0		25.0	20.0	78.2		26.8
Change Period (Y+Rc), s	4.0	5.0		5.3	5.0	4.0		5.3
Max Green Setting (Gmax), s	12.0	74.0		19.7	15.0	71.0		24.7
Max Q Clear Time (g_c+I1), s	4.3	3.0		20.1	17.0	23.3		20.4
Green Ext Time (p_c), s	0.1	15.0		0.0	0.0	17.3		1.1

Intersection Summary	
HCM 6th Ctrl Delay	72.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	357	8	302	18	16	24	219	1405	8	4	1269	487
Future Volume (veh/h)	357	8	302	18	16	24	219	1405	8	4	1269	487
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	382	0	318	19	17	25	231	1479	8	4	1336	513
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	834	0	371	32	29	53	269	2026	11	6	1721	768
Arrive On Green	0.23	0.00	0.23	0.03	0.03	0.03	0.08	0.56	0.56	0.00	0.48	0.48
Sat Flow, veh/h	3563	0	1585	962	861	1585	3456	3624	20	1781	3554	1585
Grp Volume(v), veh/h	382	0	318	36	0	25	231	725	762	4	1336	513
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1822	0	1585	1728	1777	1867	1781	1777	1585
Q Serve(g_s), s	9.5	0.0	19.8	2.0	0.0	1.6	6.8	31.2	31.3	0.2	31.9	25.4
Cycle Q Clear(g_c), s	9.5	0.0	19.8	2.0	0.0	1.6	6.8	31.2	31.3	0.2	31.9	25.4
Prop In Lane	1.00		1.00	0.53		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	834	0	371	61	0	53	269	993	1043	6	1721	768
V/C Ratio(X)	0.46	0.00	0.86	0.59	0.00	0.47	0.86	0.73	0.73	0.71	0.78	0.67
Avail Cap(c_a), veh/h	1040	0	463	532	0	463	269	993	1043	139	1850	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	37.7	49.0	0.0	48.8	46.8	16.9	16.9	51.2	21.9	20.2
Incr Delay (d2), s/veh	0.4	0.0	12.4	8.7	0.0	6.3	22.3	3.4	3.3	46.9	2.5	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	8.9	1.1	0.0	0.7	3.7	12.3	12.9	0.2	12.8	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	0.0	50.2	57.6	0.0	55.0	69.1	20.3	20.2	98.1	24.4	23.0
LnGrp LOS	C	A	D	E	A	E	E	C	C	F	C	C
Approach Vol, veh/h		700			61			1718			1853	
Approach Delay, s/veh		41.4			56.6			26.8			24.2	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	62.9		7.5	12.0	55.3		28.0
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		4.0
Max Green Setting (Gmax), s	8.0	54.5		30.0	8.0	53.5		30.0
Max Q Clear Time (g_c+I1), s	2.2	33.3		4.0	8.8	33.9		21.8
Green Ext Time (p_c), s	0.0	14.5		0.2	0.0	15.8		2.3

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	783	790	906	434	905	740
Future Volume (veh/h)	783	790	906	434	905	740
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1055	536	954	146	953	779
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1069	935	984	439	1002	2203
Arrive On Green	0.30	0.30	0.28	0.28	0.29	0.62
Sat Flow, veh/h	3563	1585	3647	1585	3456	3647
Grp Volume(v), veh/h	1055	536	954	146	953	779
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1728	1777
Q Serve(g_s), s	29.5	0.0	26.5	7.3	27.0	10.7
Cycle Q Clear(g_c), s	29.5	0.0	26.5	7.3	27.0	10.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1069	935	984	439	1002	2203
V/C Ratio(X)	0.99	0.57	0.97	0.33	0.95	0.35
Avail Cap(c_a), veh/h	1069	935	984	439	1002	2203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	12.7	35.7	28.8	34.8	9.2
Incr Delay (d2), s/veh	24.3	0.6	21.5	0.6	17.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.0	15.0	14.2	2.8	13.5	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	59.1	13.3	57.3	29.4	52.4	9.4
LnGrp LOS	E	B	E	C	D	A
Approach Vol, veh/h	1591		1100			1732
Approach Delay, s/veh	43.6		53.6			33.1
Approach LOS	D		D			C

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				66.0		34.0	33.0	33.0
Change Period (Y+Rc), s				4.0		4.0	4.0	5.3
Max Green Setting (Gmax), s				62.0		30.0	29.0	27.7
Max Q Clear Time (g_c+I1), s				12.7		31.5	29.0	28.5
Green Ext Time (p_c), s				5.4		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	14	24	20	15	20	68	1086	5	72	1179	221
Future Volume (veh/h)	270	14	24	20	15	20	68	1086	5	72	1179	221
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	318	0	0	21	16	21	72	1143	5	76	1241	233
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	451	237	0	43	33	66	92	1775	8	97	1472	274
Arrive On Green	0.13	0.00	0.00	0.04	0.04	0.04	0.05	0.49	0.49	0.05	0.49	0.49
Sat Flow, veh/h	3563	1870	0	1032	786	1585	1781	3628	16	1781	2990	557
Grp Volume(v), veh/h	318	0	0	37	0	21	72	560	588	76	733	741
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1819	0	1585	1781	1777	1868	1781	1777	1770
Q Serve(g_s), s	5.1	0.0	0.0	1.2	0.0	0.8	2.4	14.1	14.1	2.5	21.4	21.9
Cycle Q Clear(g_c), s	5.1	0.0	0.0	1.2	0.0	0.8	2.4	14.1	14.1	2.5	21.4	21.9
Prop In Lane	1.00		0.00	0.57		1.00	1.00		0.01	1.00		0.31
Lane Grp Cap(c), veh/h	451	237	0	75	0	66	92	869	913	97	874	871
V/C Ratio(X)	0.71	0.00	0.00	0.49	0.00	0.32	0.79	0.64	0.64	0.78	0.84	0.85
Avail Cap(c_a), veh/h	1129	593	0	577	0	502	238	952	1000	238	940	936
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	0.0	0.0	28.1	0.0	27.9	28.1	11.4	11.4	28.0	13.2	13.3
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.8	0.0	1.0	5.5	1.7	1.6	5.1	6.5	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	0.5	0.0	0.3	1.1	4.8	5.0	1.1	8.3	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	0.0	0.0	30.0	0.0	29.0	33.6	13.1	13.0	33.1	19.7	20.5
LnGrp LOS	C	A	A	C	A	C	C	B	B	C	B	C
Approach Vol, veh/h		318			58			1220			1550	
Approach Delay, s/veh		25.9			29.6			14.3			20.7	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	34.6		6.5	7.1	34.8		11.6
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	* 32		19.0	8.0	31.7		19.0
Max Q Clear Time (g_c+I1), s	4.5	16.1		3.2	4.4	23.9		7.1
Green Ext Time (p_c), s	0.0	9.3		0.0	0.0	5.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	19	102	158	8	37	125	969	8	30	1149	44
Future Volume (veh/h)	153	19	102	158	8	37	125	969	8	30	1149	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	161	20	107	166	8	39	132	1020	8	32	1209	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	28	226	228	11	212	188	1458	11	38	1058	40
Arrive On Green	0.14	0.14	0.14	0.13	0.13	0.13	0.11	0.40	0.40	0.02	0.30	0.30
Sat Flow, veh/h	1593	198	1585	1703	82	1585	1781	3614	28	1781	3491	133
Grp Volume(v), veh/h	181	0	107	174	0	39	132	502	526	32	615	640
Grp Sat Flow(s),veh/h/ln	1791	0	1585	1785	0	1585	1781	1777	1865	1781	1777	1846
Q Serve(g_s), s	5.4	0.0	3.5	5.3	0.0	1.2	4.0	13.2	13.2	1.0	17.1	17.1
Cycle Q Clear(g_c), s	5.4	0.0	3.5	5.3	0.0	1.2	4.0	13.2	13.2	1.0	17.1	17.1
Prop In Lane	0.89		1.00	0.95		1.00	1.00		0.02	1.00		0.07
Lane Grp Cap(c), veh/h	255	0	226	239	0	212	188	717	752	38	538	559
V/C Ratio(X)	0.71	0.00	0.47	0.73	0.00	0.18	0.70	0.70	0.70	0.85	1.14	1.14
Avail Cap(c_a), veh/h	635	0	562	633	0	562	505	916	962	253	538	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	0.0	22.3	23.5	0.0	21.7	24.4	14.0	14.0	27.5	19.7	19.7
Incr Delay (d2), s/veh	1.4	0.0	0.6	1.6	0.0	0.2	1.8	2.3	2.2	17.5	84.5	84.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	1.2	2.2	0.0	0.4	1.6	4.8	5.0	0.6	18.7	19.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	0.0	22.8	25.1	0.0	21.9	26.2	16.3	16.2	45.0	104.1	104.0
LnGrp LOS	C	A	C	C	A	C	C	B	B	D	F	F
Approach Vol, veh/h		288			213			1160			1287	
Approach Delay, s/veh		23.9			24.5			17.3			102.6	
Approach LOS		C			C			B			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	27.7		11.5	10.9	22.0		12.0
Change Period (Y+Rc), s	4.0	4.9		4.0	4.9	* 4.9		4.0
Max Green Setting (Gmax), s	8.0	29.1		20.0	16.0	* 17		20.0
Max Q Clear Time (g_c+I1), s	3.0	15.2		7.3	6.0	19.1		7.4
Green Ext Time (p_c), s	0.0	7.5		0.5	0.1	0.0		0.7

Intersection Summary	
HCM 6th Ctrl Delay	55.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	78	307	791	12	341	960
Future Volume (veh/h)	78	307	791	12	341	960
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	323	833	13	359	1011
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	799	367	1760	546	401	3206
Arrive On Green	0.23	0.23	0.34	0.34	0.23	0.63
Sat Flow, veh/h	3456	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	82	323	833	13	359	1011
Grp Sat Flow(s),veh/h/ln	1728	1585	1702	1585	1781	1702
Q Serve(g_s), s	1.3	13.6	8.8	0.4	13.5	6.3
Cycle Q Clear(g_c), s	1.3	13.6	8.8	0.4	13.5	6.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	799	367	1760	546	401	3206
V/C Ratio(X)	0.10	0.88	0.47	0.02	0.90	0.32
Avail Cap(c_a), veh/h	1003	460	2246	697	414	3728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	25.6	17.7	14.9	25.9	5.9
Incr Delay (d2), s/veh	0.0	13.2	0.3	0.0	20.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.9	3.0	0.1	7.2	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.9	38.7	18.0	14.9	46.2	6.0
LnGrp LOS	C	D	B	B	D	A
Approach Vol, veh/h	405		846			1370
Approach Delay, s/veh	35.1		18.0			16.6
Approach LOS	D		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	19.5	29.4				49.0	19.9
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0
Max Green Setting (Gmax), s	16.0	30.3				50.3	20.0
Max Q Clear Time (g_c+I1), s	15.5	10.8				8.3	15.6
Green Ext Time (p_c), s	0.1	12.9				26.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	19.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	666	44	179	800	146	170	21	94	207	6	77
Future Volume (veh/h)	127	666	44	179	800	146	170	21	94	207	6	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	701	46	188	842	154	179	22	99	222	0	81
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	209	1282	84	231	1400	435	259	32	258	580	0	258
Arrive On Green	0.12	0.26	0.26	0.13	0.27	0.27	0.16	0.16	0.16	0.16	0.00	0.16
Sat Flow, veh/h	1781	4897	320	1781	5106	1585	1595	196	1585	3563	0	1585
Grp Volume(v), veh/h	134	486	261	188	842	154	201	0	99	222	0	81
Grp Sat Flow(s),veh/h/ln	1781	1702	1813	1781	1702	1585	1791	0	1585	1781	0	1585
Q Serve(g_s), s	4.4	7.5	7.6	6.3	8.8	4.8	6.5	0.0	3.4	3.4	0.0	2.8
Cycle Q Clear(g_c), s	4.4	7.5	7.6	6.3	8.8	4.8	6.5	0.0	3.4	3.4	0.0	2.8
Prop In Lane	1.00		0.18	1.00		1.00	0.89		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	891	475	231	1400	435	291	0	258	580	0	258
V/C Ratio(X)	0.64	0.55	0.55	0.81	0.60	0.35	0.69	0.00	0.38	0.38	0.00	0.31
Avail Cap(c_a), veh/h	583	1710	911	233	1562	485	410	0	363	583	0	259
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.7	19.4	19.5	25.9	19.3	17.8	24.1	0.0	22.9	22.8	0.0	22.6
Incr Delay (d2), s/veh	1.2	1.1	2.0	17.9	0.9	1.0	1.1	0.0	0.3	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.7	3.1	3.5	3.1	1.6	2.7	0.0	1.2	1.4	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	20.5	21.5	43.8	20.2	18.8	25.2	0.0	23.2	23.0	0.0	22.8
LnGrp LOS	C	C	C	D	C	B	C	A	C	C	A	C
Approach Vol, veh/h		881			1184			300			303	
Approach Delay, s/veh		21.8			23.8			24.6			23.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	21.3		13.9	11.2	22.1		13.9
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	30.7		10.0	20.0	18.7		14.0
Max Q Clear Time (g_c+I1), s	8.3	9.6		5.4	6.4	10.8		8.5
Green Ext Time (p_c), s	0.0	6.4		0.4	0.2	4.7		0.4

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	607	484	202	680	207	448	766	55	116	673	297
Future Volume (veh/h)	225	607	484	202	680	207	448	766	55	116	673	297
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	2145	2145	2145
Adj Flow Rate, veh/h	237	639	137	213	716	90	472	806	20	122	708	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	812	362	239	764	341	499	2064	641	154	1167	362
Arrive On Green	0.15	0.23	0.23	0.13	0.22	0.22	0.28	0.40	0.40	0.08	0.20	0.20
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	2043	5857	1818
Grp Volume(v), veh/h	237	639	137	213	716	90	472	806	20	122	708	69
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	2043	1952	1818
Q Serve(g_s), s	15.4	20.0	8.6	13.9	23.4	5.6	30.6	13.2	0.9	6.9	13.0	3.7
Cycle Q Clear(g_c), s	15.4	20.0	8.6	13.9	23.4	5.6	30.6	13.2	0.9	6.9	13.0	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	812	362	239	764	341	499	2064	641	154	1167	362
V/C Ratio(X)	0.90	0.79	0.38	0.89	0.94	0.26	0.95	0.39	0.03	0.79	0.61	0.19
Avail Cap(c_a), veh/h	272	837	373	241	765	341	543	2292	712	260	1587	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.4	42.8	38.4	50.2	45.5	38.6	41.6	24.9	21.2	53.7	43.1	39.4
Incr Delay (d2), s/veh	28.6	5.7	1.3	29.7	19.1	0.6	24.0	0.2	0.0	3.5	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	9.4	3.4	8.1	12.3	2.2	16.3	5.2	0.3	3.6	6.2	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.1	48.5	39.8	79.9	64.7	39.2	65.6	25.1	21.2	57.2	43.9	39.8
LnGrp LOS	E	D	D	E	E	D	E	C	C	E	D	D
Approach Vol, veh/h		1013			1019			1298			899	
Approach Delay, s/veh		54.2			65.6			39.8			45.4	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.9	32.3	37.1	28.8	21.5	30.7	12.9	53.0
Change Period (Y+Rc), s	4.0	* 5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.0	* 28	36.0	32.0	18.0	25.4	15.0	53.0
Max Q Clear Time (g_c+I1), s	15.9	22.0	32.6	15.0	17.4	25.4	8.9	15.2
Green Ext Time (p_c), s	0.0	4.0	0.4	8.5	0.0	0.0	0.1	14.4

Intersection Summary	
HCM 6th Ctrl Delay	50.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	23	79	149	17	340	73	789	35	242	979	74
Future Volume (veh/h)	77	23	79	149	17	340	73	789	35	242	979	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1988	1988	1988	1870	1945	1870	2145	2231	2145
Adj Flow Rate, veh/h	81	24	83	157	18	358	77	831	37	255	1031	78
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	50	192	362	41	607	116	1009	45	304	2218	662
Arrive On Green	0.12	0.12	0.12	0.21	0.21	0.21	0.07	0.28	0.28	0.15	0.36	0.36
Sat Flow, veh/h	1389	412	1585	1707	196	1682	1781	3601	160	2043	6091	1818
Grp Volume(v), veh/h	105	0	83	175	0	358	77	426	442	255	1031	78
Grp Sat Flow(s),veh/h/ln	1801	0	1585	1903	0	1682	1781	1848	1914	2043	2030	1818
Q Serve(g_s), s	4.0	0.0	3.5	5.8	0.0	12.6	3.1	15.7	15.7	8.8	9.4	2.1
Cycle Q Clear(g_c), s	4.0	0.0	3.5	5.8	0.0	12.6	3.1	15.7	15.7	8.8	9.4	2.1
Prop In Lane	0.77		1.00	0.90		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	218	0	192	403	0	607	116	518	536	304	2218	662
V/C Ratio(X)	0.48	0.00	0.43	0.43	0.00	0.59	0.66	0.82	0.82	0.84	0.46	0.12
Avail Cap(c_a), veh/h	223	0	196	542	0	730	245	534	553	337	2218	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	0.0	29.6	24.9	0.0	18.9	33.2	24.5	24.5	30.1	17.7	15.4
Incr Delay (d2), s/veh	0.6	0.0	0.6	0.3	0.0	0.3	2.4	11.2	10.9	14.1	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	1.3	2.5	0.0	4.4	1.3	7.8	8.1	5.2	4.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	0.0	30.2	25.2	0.0	19.2	35.6	35.7	35.4	44.2	18.0	15.5
LnGrp LOS	C	A	C	C	A	B	D	D	D	D	B	B
Approach Vol, veh/h		188			533			945			1364	
Approach Delay, s/veh		30.3			21.2			35.6			22.8	
Approach LOS		C			C			D			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.8	8.7	31.8		19.4	14.8	25.7				
Change Period (Y+Rc), s		4.0	4.0	5.3		4.0	4.0	5.3				
Max Green Setting (Gmax), s		9.0	10.0	23.0		20.7	12.0	21.0				
Max Q Clear Time (g_c+I1), s		6.0	5.1	11.4		14.6	10.8	17.7				
Green Ext Time (p_c), s		0.1	0.0	9.3		0.8	0.1	2.6				

Intersection Summary	
HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	36	38	933	14	100	910
Future Volume (veh/h)	36	38	933	14	100	910
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	40	982	15	105	958
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	214	190	1428	22	224	2256
Arrive On Green	0.12	0.12	0.40	0.40	0.13	0.63
Sat Flow, veh/h	1781	1585	3676	55	1781	3647
Grp Volume(v), veh/h	38	40	487	510	105	958
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1861	1781	1777
Q Serve(g_s), s	0.7	0.8	8.2	8.2	2.0	4.9
Cycle Q Clear(g_c), s	0.7	0.8	8.2	8.2	2.0	4.9
Prop In Lane	1.00	1.00		0.03	1.00	
Lane Grp Cap(c), veh/h	214	190	708	742	224	2256
V/C Ratio(X)	0.18	0.21	0.69	0.69	0.47	0.42
Avail Cap(c_a), veh/h	991	882	979	1025	393	3025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	14.4	9.0	9.0	14.7	3.3
Incr Delay (d2), s/veh	0.1	0.2	1.6	1.6	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.1	2.2	0.6	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.5	14.6	10.7	10.6	15.3	3.4
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	78		997			1063
Approach Delay, s/veh	14.6		10.6			4.6
Approach LOS	B		B			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				27.9		8.4	8.6	19.4
Change Period (Y+Rc), s				4.9		4.0	4.0	* 4.9
Max Green Setting (Gmax), s				30.9		20.2	8.0	* 20
Max Q Clear Time (g_c+I1), s				6.9		2.8	4.0	10.2
Green Ext Time (p_c), s				4.5		0.1	0.1	4.2

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	18	0	25	0	1613	27	24	1816	0
Future Volume (veh/h)	0	0	0	18	0	25	0	1613	27	24	1816	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	19	0	26	0	1698	28	25	1912	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	3	3	64	0	57	3	2565	42	31	2863	1277
Arrive On Green	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.72	0.72	0.02	0.81	0.00
Sat Flow, veh/h	0	1870	1585	1781	0	1585	1781	3578	59	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	19	0	26	0	842	884	25	1912	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	0	1585	1781	1777	1860	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.9	0.0	14.3	14.4	0.8	12.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.6	0.0	0.9	0.0	14.3	14.4	0.8	12.7	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	0	3	3	64	0	57	3	1274	1334	31	2863	1277
V/C Ratio(X)	0.00	0.00	0.00	0.30	0.00	0.46	0.00	0.66	0.66	0.81	0.67	0.00
Avail Cap(c_a), veh/h	0	800	678	762	0	678	349	1491	1560	254	2863	1277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	26.4	0.0	26.5	0.0	4.3	4.3	27.5	2.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	2.1	0.0	1.8	1.7	17.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.4	0.0	2.3	2.4	0.4	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	27.3	0.0	28.6	0.0	6.0	6.0	44.5	3.1	0.0
LnGrp LOS	A	A	A	C	A	C	A	A	A	D	A	A
Approach Vol, veh/h		0			45			1726			1937	
Approach Delay, s/veh		0.0			28.1			6.0			3.7	
Approach LOS					C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	45.2		6.0	0.0	50.1		0.0
Change Period (Y+Rc), s	4.0	4.9		4.0	5.0	4.9		4.0
Max Green Setting (Gmax), s	8.0	47.1		24.0	11.0	38.1		24.0
Max Q Clear Time (g_c+I1), s	2.8	16.4		2.9	0.0	14.7		0.0
Green Ext Time (p_c), s	0.0	23.9		0.0	0.0	19.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	33	27	47	15	76	27	1543	38	109	1692	37
Future Volume (veh/h)	71	33	27	47	15	76	27	1543	38	109	1692	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	35	28	49	16	80	28	1624	40	115	1781	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	85	68	157	23	116	70	1934	48	144	2088	46
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.04	0.55	0.55	0.08	0.59	0.59
Sat Flow, veh/h	1781	962	770	1781	263	1317	1781	3543	87	1781	3555	78
Grp Volume(v), veh/h	75	0	63	49	0	96	28	813	851	115	888	932
Grp Sat Flow(s),veh/h/ln	1781	0	1732	1781	0	1580	1781	1777	1854	1781	1777	1856
Q Serve(g_s), s	3.5	0.0	3.0	2.3	0.0	5.2	1.3	33.6	33.9	5.6	36.2	36.6
Cycle Q Clear(g_c), s	3.5	0.0	3.0	2.3	0.0	5.2	1.3	33.6	33.9	5.6	36.2	36.6
Prop In Lane	1.00		0.44	1.00		0.83	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	157	0	152	157	0	140	70	970	1012	144	1044	1090
V/C Ratio(X)	0.48	0.00	0.41	0.31	0.00	0.69	0.40	0.84	0.84	0.80	0.85	0.86
Avail Cap(c_a), veh/h	324	0	315	324	0	288	162	1086	1133	162	1094	1142
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	0.0	37.9	37.6	0.0	38.9	41.2	16.7	16.8	39.7	14.9	15.0
Incr Delay (d2), s/veh	1.9	0.0	1.5	1.0	0.0	5.1	1.4	5.9	5.9	18.8	6.6	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.3	1.0	0.0	2.2	0.6	13.0	13.6	3.1	13.6	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.1	0.0	39.5	38.5	0.0	43.9	42.6	22.6	22.6	58.5	21.5	21.6
LnGrp LOS	D	A	D	D	A	D	D	C	C	E	C	C
Approach Vol, veh/h		138			145			1692			1935	
Approach Delay, s/veh		39.8			42.1			23.0			23.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	56.9		11.7	11.1	53.3		11.8
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	* 54		16.0	8.0	53.7		16.0
Max Q Clear Time (g_c+I1), s	3.3	38.6		5.5	7.6	35.9		7.2
Green Ext Time (p_c), s	0.0	10.9		0.3	0.0	12.1		0.3

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	21	11	101	29	49	3	1461	12	44	2057	58
Future Volume (veh/h)	45	21	11	101	29	49	3	1461	12	44	2057	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1945	1870	1870	1841	1841	1870	1841	1870
Adj Flow Rate, veh/h	47	22	12	106	31	52	3	1538	13	46	2165	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	2
Cap, veh/h	57	27	15	108	32	53	4	2448	21	59	2517	1139
Arrive On Green	0.05	0.05	0.05	0.11	0.11	0.11	0.00	1.00	1.00	0.03	0.72	0.72
Sat Flow, veh/h	1067	500	272	1011	296	496	1781	3554	30	1781	3497	1583
Grp Volume(v), veh/h	81	0	0	189	0	0	3	756	795	46	2165	61
Grp Sat Flow(s),veh/h/ln	1839	0	0	1802	0	0	1781	1749	1835	1781	1749	1583
Q Serve(g_s), s	6.5	0.0	0.0	15.7	0.0	0.0	0.3	0.0	0.0	3.8	68.3	1.7
Cycle Q Clear(g_c), s	6.5	0.0	0.0	15.7	0.0	0.0	0.3	0.0	0.0	3.8	68.3	1.7
Prop In Lane	0.58		0.15	0.56		0.28	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	98	0	0	192	0	0	4	1204	1264	59	2517	1139
V/C Ratio(X)	0.83	0.00	0.00	0.98	0.00	0.00	0.72	0.63	0.63	0.78	0.86	0.05
Avail Cap(c_a), veh/h	98	0	0	192	0	0	95	1204	1264	107	2517	1139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.72	0.72	0.72	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.3	0.0	0.0	66.9	0.0	0.0	74.6	0.0	0.0	71.9	15.5	6.1
Incr Delay (d2), s/veh	39.4	0.0	0.0	59.7	0.0	0.0	46.1	1.8	1.7	7.8	3.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	10.5	0.0	0.0	0.2	0.6	0.6	1.9	24.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.7	0.0	0.0	126.6	0.0	0.0	120.7	1.8	1.7	79.8	18.8	6.2
LnGrp LOS	F	A	A	F	A	A	F	A	A	E	B	A
Approach Vol, veh/h		81			189			1554			2272	
Approach Delay, s/veh		109.7			126.6			2.0			19.7	
Approach LOS		F			F			A			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.0	9.0	109.0		20.0	4.4	113.6				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		8.0	9.0	99.3		16.0	8.0	100.3				
Max Q Clear Time (g_c+I1), s		8.5	5.8	2.0		17.7	2.3	70.3				
Green Ext Time (p_c), s		0.0	0.0	67.0		0.0	0.0	29.3				

Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	0	72	44	0	14	19	1504	40	21	2066	98
Future Volume (vph)	38	0	72	44	0	14	19	1504	40	21	2066	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00		0.95	1.00		0.95	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Frt	1.00		0.85	1.00		0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1510	1770		1510	1770	3522		1770	3509	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770		1510	1770		1510	1770	3522		1770	3509	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	40	0	76	46	0	15	20	1583	42	22	2175	103
RTOR Reduction (vph)	0	0	72	0	0	14	0	1	0	0	2	0
Lane Group Flow (vph)	40	0	4	46	0	1	20	1624	0	22	2276	0
Confl. Peds. (#/hr)	4		4	4		4	4		4	4		4
Confl. Bikes (#/hr)			2			2			2			2
Turn Type	Prot		Perm	Prot		Perm	Prot	NA		Prot	NA	
Protected Phases	6			5			7	4		3	8	
Permitted Phases			6			5						
Actuated Green, G (s)	7.0		7.0	7.0		7.0	4.2	104.0		4.3	104.1	
Effective Green, g (s)	7.0		7.0	7.0		7.0	4.2	104.0		4.3	104.1	
Actuated g/C Ratio	0.05		0.05	0.05		0.05	0.03	0.69		0.03	0.69	
Clearance Time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Vehicle Extension (s)	2.0		2.0	2.0		2.0	2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	82		70	82		70	49	2441		50	2435	
v/s Ratio Prot	0.02			c0.03			0.01	0.46		c0.01	c0.65	
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.49		0.05	0.56		0.01	0.41	0.67		0.44	0.93	
Uniform Delay, d1	69.8		68.3	70.0		68.2	71.7	13.1		71.7	20.0	
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00		0.84	0.75	
Incremental Delay, d2	1.7		0.1	5.1		0.0	2.0	1.5		1.2	4.4	
Delay (s)	71.4		68.4	75.1		68.2	73.7	14.5		61.1	19.4	
Level of Service	E		E	E		E	E	B		E	B	
Approach Delay (s)		69.5			73.4			15.3			19.8	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	18	327	343	55	226	38
Future Volume (veh/h)	18	327	343	55	226	38
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	344	361	58	238	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	26	1517	953	425	341	303
Arrive On Green	0.01	0.43	0.27	0.27	0.19	0.19
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	19	344	361	58	238	40
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.3	1.7	2.3	0.8	3.5	0.6
Cycle Q Clear(g_c), s	0.3	1.7	2.3	0.8	3.5	0.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	26	1517	953	425	341	303
V/C Ratio(X)	0.72	0.23	0.38	0.14	0.70	0.13
Avail Cap(c_a), veh/h	1026	5798	3238	1444	1546	1376
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	5.0	8.3	7.7	10.5	9.3
Incr Delay (d2), s/veh	13.1	0.1	0.4	0.2	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.6	0.2	1.0	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.7	5.2	8.7	8.0	11.5	9.4
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		363	419		278	
Approach Delay, s/veh		6.3	8.6		11.2	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	17.6	10.2	4.4	13.1
Change Period (Y+Rc), s	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	45.3	24.1	16.0	25.3
Max Q Clear Time (g_c+I1), s	3.7	5.5	2.3	4.3
Green Ext Time (p_c), s	3.0	0.6	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	378	399	165	485	29	377	497	169	8	460	117
Future Volume (veh/h)	43	378	399	165	485	29	377	497	169	8	460	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	398	0	174	511	0	397	523	0	8	484	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	579		205	809		443	1547		26	714	
Arrive On Green	0.05	0.16	0.00	0.11	0.23	0.00	0.25	0.44	0.00	0.01	0.20	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	45	398	0	174	511	0	397	523	0	8	484	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.7	7.4	0.0	6.7	9.0	0.0	15.0	6.8	0.0	0.3	8.8	0.0
Cycle Q Clear(g_c), s	1.7	7.4	0.0	6.7	9.0	0.0	15.0	6.8	0.0	0.3	8.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	89	579		205	809		443	1547		26	714	
V/C Ratio(X)	0.50	0.69		0.85	0.63		0.90	0.34		0.31	0.68	
Avail Cap(c_a), veh/h	205	1020		205	1040		511	1785		205	1173	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.3	27.5	0.0	30.3	24.3	0.0	25.3	13.0	0.0	34.0	25.7	0.0
Incr Delay (d2), s/veh	1.6	2.3	0.0	26.2	1.7	0.0	15.5	0.3	0.0	2.5	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.1	0.0	4.1	3.7	0.0	7.8	2.5	0.0	0.1	3.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	29.8	0.0	56.4	25.9	0.0	40.8	13.3	0.0	36.5	28.0	0.0
LnGrp LOS	C	C		E	C		D	B		D	C	
Approach Vol, veh/h		443	A		685	A		920	A		492	A
Approach Delay, s/veh		30.2			33.7			25.2			28.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	17.0	21.3	19.3	7.5	21.6	5.0	35.6
Change Period (Y+Rc), s	4.0	5.7	4.0	5.3	4.0	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	8.0	20.0	20.0	23.0	8.0	* 20	8.0	35.0
Max Q Clear Time (g_c+I1), s	8.7	9.4	17.0	10.8	3.7	11.0	2.3	8.8
Green Ext Time (p_c), s	0.0	2.0	0.3	3.2	0.0	2.8	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	28.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	21	164	178	38	165	46	717	37	43	1303	21
Future Volume (veh/h)	8	21	164	178	38	165	46	717	37	43	1303	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	22	172	187	40	0	48	755	39	45	1372	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	136	160	211	45		167	1930	100	58	1726	
Arrive On Green	0.10	0.10	0.10	0.14	0.14	0.00	0.09	0.56	0.56	0.03	0.49	0.00
Sat Flow, veh/h	492	1354	1585	1480	317	1585	1781	3438	178	1781	3647	0
Grp Volume(v), veh/h	30	0	172	227	0	0	48	390	404	45	1372	0
Grp Sat Flow(s),veh/h/ln	1846	0	1585	1796	0	1585	1781	1777	1838	1781	1777	0
Q Serve(g_s), s	1.8	0.0	12.1	14.9	0.0	0.0	3.0	14.8	14.8	3.0	38.8	0.0
Cycle Q Clear(g_c), s	1.8	0.0	12.1	14.9	0.0	0.0	3.0	14.8	14.8	3.0	38.8	0.0
Prop In Lane	0.27		1.00	0.82		1.00	1.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h	186	0	160	256	0		167	998	1032	58	1726	
V/C Ratio(X)	0.16	0.00	1.08	0.89	0.00		0.29	0.39	0.39	0.78	0.79	
Avail Cap(c_a), veh/h	186	0	160	316	0		167	998	1032	119	1726	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.3	0.0	54.0	50.5	0.0	0.0	50.6	14.8	14.8	57.6	25.8	0.0
Incr Delay (d2), s/veh	0.3	0.0	93.0	20.5	0.0	0.0	0.3	0.3	0.3	8.1	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	8.8	8.1	0.0	0.0	1.3	5.6	5.8	1.5	16.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.6	0.0	146.9	71.0	0.0	0.0	51.0	15.1	15.1	65.7	29.7	0.0
LnGrp LOS	D	A	F	E	A		D	B	B	E	C	
Approach Vol, veh/h		202			227	A		842			1417	A
Approach Delay, s/veh		132.5			71.0			17.2			30.9	
Approach LOS		F			E			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.0	17.0	64.0		22.0	7.9	73.1				
Change Period (Y+Rc), s		4.9	5.7	* 5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		12.1	9.0	* 58		21.1	8.0	59.3				
Max Q Clear Time (g_c+I1), s		14.1	5.0	40.8		16.9	5.0	16.8				
Green Ext Time (p_c), s		0.0	0.0	8.8		0.3	0.0	5.0				

Intersection Summary	
HCM 6th Ctrl Delay	37.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	2	4	46	4	56	5	753	20	42	1566	14
Future Volume (veh/h)	9	2	4	46	4	56	5	753	20	42	1566	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	2	4	48	4	59	5	793	21	44	1648	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	55	7	291	58	3	291	94	2372	63	57	2294	21
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.67	0.67	0.03	0.64	0.64
Sat Flow, veh/h	0	38	1585	0	14	1585	1781	3537	94	1781	3608	33
Grp Volume(v), veh/h	11	0	4	52	0	59	5	398	416	44	811	852
Grp Sat Flow(s),veh/h/ln	38	0	1585	14	0	1585	1781	1777	1854	1781	1777	1864
Q Serve(g_s), s	0.0	0.0	0.2	0.0	0.0	3.8	0.3	11.4	11.4	2.9	36.7	36.8
Cycle Q Clear(g_c), s	22.0	0.0	0.2	22.0	0.0	3.8	0.3	11.4	11.4	2.9	36.7	36.8
Prop In Lane	0.82		1.00	0.92		1.00	1.00		0.05	1.00		0.02
Lane Grp Cap(c), veh/h	62	0	291	60	0	291	94	1192	1243	57	1130	1185
V/C Ratio(X)	0.18	0.00	0.01	0.86	0.00	0.20	0.05	0.33	0.33	0.78	0.72	0.72
Avail Cap(c_a), veh/h	62	0	291	60	0	291	119	1192	1243	119	1130	1185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	40.1	58.9	0.0	41.6	54.0	8.4	8.4	57.7	14.6	14.7
Incr Delay (d2), s/veh	0.5	0.0	0.0	66.9	0.0	0.1	0.1	0.2	0.2	8.3	3.9	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	2.7	0.0	1.5	0.1	4.1	4.3	1.4	14.4	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	0.0	40.1	125.8	0.0	41.7	54.1	8.6	8.6	65.9	18.6	18.4
LnGrp LOS	D	A	D	F	A	D	D	A	A	E	B	B
Approach Vol, veh/h		15			111			819			1707	
Approach Delay, s/veh		45.0			81.1			8.9			19.7	
Approach LOS		D			F			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	82.0		26.0	7.8	86.2		26.0
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	* 76		22.0	8.0	76.3		22.0
Max Q Clear Time (g_c+I1), s	2.3	38.8		24.0	4.9	13.4		24.0
Green Ext Time (p_c), s	0.0	19.5		0.0	0.0	7.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	77	716	86	141	1477
Future Volume (veh/h)	25	77	716	86	141	1477
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	81	754	91	148	1555
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	128	114	1904	230	184	2724
Arrive On Green	0.07	0.07	0.60	0.60	0.21	1.00
Sat Flow, veh/h	1781	1585	3286	385	1781	3647
Grp Volume(v), veh/h	26	81	420	425	148	1555
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1801	1781	1777
Q Serve(g_s), s	0.8	3.0	7.5	7.5	4.7	0.0
Cycle Q Clear(g_c), s	0.8	3.0	7.5	7.5	4.7	0.0
Prop In Lane	1.00	1.00		0.21	1.00	
Lane Grp Cap(c), veh/h	128	114	1060	1074	184	2724
V/C Ratio(X)	0.20	0.71	0.40	0.40	0.80	0.57
Avail Cap(c_a), veh/h	594	528	1060	1074	238	2724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.78	0.78
Uniform Delay (d), s/veh	26.2	27.2	6.4	6.4	23.2	0.0
Incr Delay (d2), s/veh	0.3	3.0	0.3	0.3	8.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.7	2.1	2.1	2.1	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.5	30.3	6.7	6.7	31.9	0.7
LnGrp LOS	C	C	A	A	C	A
Approach Vol, veh/h	107		845			1703
Approach Delay, s/veh	29.4		6.7			3.4
Approach LOS	C		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		51.7		8.3	10.2	41.5
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		30.3		20.0	8.0	18.3
Max Q Clear Time (g_c+I1), s		2.0		5.0	6.7	9.5
Green Ext Time (p_c), s		13.0		0.2	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	488	0	214	1	3	2	245	1405	1	1	1355	273
Future Volume (veh/h)	488	0	214	1	3	2	245	1405	1	1	1355	273
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1856	1870	1870	1870	1664	1708	1723	2067	2007	2052
Adj Flow Rate, veh/h	514	0	224	1	3	2	258	1479	1	1	1426	286
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	3	2	2	2	6	3	2	2	6	3
Cap, veh/h	661	0	289	4	11	7	253	1981	891	4	1726	787
Arrive On Green	0.19	0.00	0.19	0.01	0.01	0.01	0.16	0.61	0.61	0.00	0.45	0.45
Sat Flow, veh/h	3534	0	1544	292	875	584	1585	3246	1460	1968	3813	1739
Grp Volume(v), veh/h	514	0	224	6	0	0	258	1479	1	1	1426	286
Grp Sat Flow(s),veh/h/ln	1767	0	1544	1751	0	0	1585	1623	1460	1968	1906	1739
Q Serve(g_s), s	16.4	0.0	16.4	0.4	0.0	0.0	19.0	38.8	0.0	0.1	38.9	12.8
Cycle Q Clear(g_c), s	16.4	0.0	16.4	0.4	0.0	0.0	19.0	38.8	0.0	0.1	38.9	12.8
Prop In Lane	1.00		1.00	0.17		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	661	0	289	21	0	0	253	1981	891	4	1726	787
V/C Ratio(X)	0.78	0.00	0.78	0.28	0.00	0.00	1.02	0.75	0.00	0.23	0.83	0.36
Avail Cap(c_a), veh/h	863	0	377	295	0	0	253	1981	891	133	1752	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	0.0	45.9	58.2	0.0	0.0	49.9	16.6	9.0	59.2	28.4	21.3
Incr Delay (d2), s/veh	4.1	0.0	8.9	10.4	0.0	0.0	61.3	1.8	0.0	9.9	3.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	6.8	0.2	0.0	0.0	11.5	12.5	0.0	0.0	16.9	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	0.0	54.8	68.6	0.0	0.0	111.2	18.3	9.0	69.1	32.0	21.8
LnGrp LOS	D	A	D	E	A	A	F	B	A	E	C	C
Approach Vol, veh/h		738			6			1738			1713	
Approach Delay, s/veh		51.5			68.6			32.1			30.3	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	78.9		7.4	23.0	60.2		28.2
Change Period (Y+Rc), s	4.0	6.4		6.0	4.0	6.4		6.0
Max Green Setting (Gmax), s	8.0	65.6		20.0	19.0	54.6		29.0
Max Q Clear Time (g_c+I1), s	2.1	40.8		2.4	21.0	40.9		18.4
Green Ext Time (p_c), s	0.0	22.3		0.0	0.0	12.9		3.8

Intersection Summary	
HCM 6th Ctrl Delay	34.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	30	2	0	2	55	1622	2	5	1521	45
Future Volume (veh/h)	20	0	30	2	0	2	55	1622	2	5	1521	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	0	32	2	0	2	58	1707	2	5	1601	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	0	144	19	0	17	74	2259	1008	12	2135	952
Arrive On Green	0.09	0.00	0.09	0.01	0.00	0.01	0.04	0.64	0.64	0.01	0.60	0.60
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	21	0	32	2	0	2	58	1707	2	5	1601	47
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	0.0	1.3	0.1	0.0	0.1	2.3	24.2	0.0	0.2	23.5	0.9
Cycle Q Clear(g_c), s	0.8	0.0	1.3	0.1	0.0	0.1	2.3	24.2	0.0	0.2	23.5	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	0	144	19	0	17	74	2259	1008	12	2135	952
V/C Ratio(X)	0.13	0.00	0.22	0.11	0.00	0.12	0.78	0.76	0.00	0.42	0.75	0.05
Avail Cap(c_a), veh/h	298	0	265	496	0	441	298	2849	1271	298	2849	1271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	0.0	30.3	35.2	0.0	35.2	34.1	9.2	4.8	35.5	10.4	5.9
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.9	0.0	1.1	6.6	1.2	0.0	8.8	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.5	0.0	0.0	0.0	1.1	6.1	0.0	0.1	6.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	0.0	30.6	36.1	0.0	36.3	40.7	10.3	4.8	44.3	11.5	5.9
LnGrp LOS	C	A	C	D	A	D	D	B	A	D	B	A
Approach Vol, veh/h		53			4			1767			1653	
Approach Delay, s/veh		30.4			36.2			11.3			11.4	
Approach LOS		C			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.5	7.0	49.6		4.8	4.5	52.1				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		12.0	12.0	57.6		20.0	12.0	57.6				
Max Q Clear Time (g_c+I1), s		3.3	4.3	25.5		2.1	2.2	26.2				
Green Ext Time (p_c), s		0.1	0.0	17.6		0.0	0.0	18.5				

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	263	2	517	13	9	2	265	1422	19	6	1363	189
Future Volume (veh/h)	263	2	517	13	9	2	265	1422	19	6	1363	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	278	0	543	8	17	2	279	1497	19	6	1435	198
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	747	0	333	86	159	18	299	1791	799	16	1764	548
Arrive On Green	0.21	0.00	0.21	0.05	0.05	0.05	0.17	0.50	0.50	0.01	0.35	0.35
Sat Flow, veh/h	3563	0	1585	1781	3293	380	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	278	0	543	8	10	9	279	1497	19	6	1435	198
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	1802	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	6.4	0.0	20.0	0.4	0.5	0.5	14.7	34.4	0.6	0.3	24.4	8.9
Cycle Q Clear(g_c), s	6.4	0.0	20.0	0.4	0.5	0.5	14.7	34.4	0.6	0.3	24.4	8.9
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	747	0	333	86	90	87	299	1791	799	16	1764	548
V/C Ratio(X)	0.37	0.00	1.63	0.09	0.11	0.11	0.93	0.84	0.02	0.36	0.81	0.36
Avail Cap(c_a), veh/h	747	0	333	168	177	170	299	1791	799	149	1778	552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	0.0	37.7	43.4	43.4	43.4	39.1	20.3	11.9	46.9	28.4	23.3
Incr Delay (d2), s/veh	0.5	0.0	298.2	0.7	0.8	0.9	34.4	3.9	0.0	4.9	3.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	35.2	0.2	0.2	0.2	8.9	13.1	0.2	0.2	9.4	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	0.0	335.8	44.1	44.2	44.3	73.6	24.2	11.9	51.9	31.6	24.0
LnGrp LOS	C	A	F	D	D	D	E	C	B	D	C	C
Approach Vol, veh/h		821			27			1795			1639	
Approach Delay, s/veh		233.2			44.2			31.7			30.8	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	54.5		25.7	20.0	39.3		10.3
Change Period (Y+Rc), s	4.0	* 6.4		5.7	4.0	6.4		5.7
Max Green Setting (Gmax), s	8.0	* 42		20.0	16.0	33.2		9.0
Max Q Clear Time (g_c+I1), s	2.3	36.4		22.0	16.7	26.4		2.5
Green Ext Time (p_c), s	0.0	5.1		0.0	0.0	6.5		0.0

Intersection Summary	
HCM 6th Ctrl Delay	70.1
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	5	252	141	8	83	160	1492	67	90	1688	61
Future Volume (veh/h)	215	5	252	141	8	83	160	1492	67	90	1688	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	230	0	264	148	8	86	168	1571	70	95	1777	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	623	0	277	179	10	167	195	2013	625	292	2362	733
Arrive On Green	0.17	0.00	0.17	0.11	0.11	0.11	0.11	0.39	0.39	0.16	0.46	0.46
Sat Flow, veh/h	3563	0	1585	1694	92	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	230	0	264	156	0	86	168	1571	70	95	1777	63
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1786	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	6.8	0.0	19.8	10.3	0.0	6.2	11.1	32.3	3.4	5.7	34.4	2.7
Cycle Q Clear(g_c), s	6.8	0.0	19.8	10.3	0.0	6.2	11.1	32.3	3.4	5.7	34.4	2.7
Prop In Lane	1.00		1.00	0.95		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	623	0	277	188	0	167	195	2013	625	292	2362	733
V/C Ratio(X)	0.37	0.00	0.95	0.83	0.00	0.51	0.86	0.78	0.11	0.33	0.75	0.09
Avail Cap(c_a), veh/h	623	0	277	312	0	277	223	2013	625	292	2362	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	49.0	52.6	0.0	50.8	52.5	31.8	23.0	44.3	26.6	18.0
Incr Delay (d2), s/veh	0.1	0.0	40.6	3.5	0.0	0.9	23.0	3.1	0.4	0.2	1.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	11.0	4.8	0.0	2.5	6.1	13.1	1.3	2.4	13.3	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	0.0	89.6	56.2	0.0	51.7	75.6	34.9	23.4	44.6	28.3	18.2
LnGrp LOS	D	A	F	E	A	D	E	C	C	D	C	B
Approach Vol, veh/h		494			242			1809			1935	
Approach Delay, s/veh		68.3			54.6			38.2			28.8	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.3	53.0		16.7	17.1	61.2		25.0
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	13.0	* 47		21.0	15.0	45.3		21.0
Max Q Clear Time (g_c+I1), s	7.7	34.3		12.3	13.1	36.4		21.8
Green Ext Time (p_c), s	0.1	10.5		0.4	0.1	7.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	38.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	122	211	45	96	21	305	1516	67	22	2163	431
Future Volume (veh/h)	374	122	211	45	96	21	305	1516	67	22	2163	431
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	394	128	221	47	101	21	321	1596	70	23	2277	453
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	420	356	117	153	130	288	2581	801	72	2360	733
Arrive On Green	0.21	0.22	0.22	0.07	0.08	0.08	0.08	0.51	0.51	0.04	0.46	0.46
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	394	128	221	47	101	21	321	1596	70	23	2277	453
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	25.0	6.8	15.1	3.0	6.3	1.5	10.0	27.0	2.7	1.5	51.9	25.8
Cycle Q Clear(g_c), s	25.0	6.8	15.1	3.0	6.3	1.5	10.0	27.0	2.7	1.5	51.9	25.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	420	356	117	153	130	288	2581	801	72	2360	733
V/C Ratio(X)	1.06	0.31	0.62	0.40	0.66	0.16	1.11	0.62	0.09	0.32	0.96	0.62
Avail Cap(c_a), veh/h	371	457	387	148	223	189	288	2581	801	134	2360	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	38.8	42.0	53.8	53.5	51.3	55.0	21.3	15.4	56.0	31.3	24.3
Incr Delay (d2), s/veh	64.0	0.6	3.6	0.8	7.4	0.9	87.5	1.1	0.2	1.0	11.5	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.2	3.1	6.0	1.4	3.2	0.6	7.7	10.1	1.0	0.7	21.8	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	111.5	39.4	45.5	54.6	60.9	52.2	142.5	22.5	15.6	57.0	42.9	26.4
LnGrp LOS	F	D	D	D	E	D	F	C	B	E	D	C
Approach Vol, veh/h		743			169			1987			2753	
Approach Delay, s/veh		79.4			58.1			41.6			40.3	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	66.7	11.9	32.6	14.0	61.5	29.0	15.5
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	9.0	52.0	10.0	29.3	10.0	51.0	25.0	14.3
Max Q Clear Time (g_c+I1), s	3.5	29.0	5.0	17.1	12.0	53.9	27.0	8.3
Green Ext Time (p_c), s	0.0	14.8	0.0	1.7	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	46.4
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	740	20	1	384	11	0	2	0	6	0	5
Future Volume (veh/h)	6	740	20	1	384	11	0	2	0	6	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	779	21	1	404	12	0	2	0	6	0	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	1590	43	5	1545	46	0	8	0	21	0	18
Arrive On Green	0.01	0.45	0.45	0.00	0.44	0.44	0.00	0.00	0.00	0.02	0.00	0.02
Sat Flow, veh/h	1781	3535	95	1781	3524	104	0	1870	0	920	0	767
Grp Volume(v), veh/h	6	392	408	1	203	213	0	2	0	11	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1853	1781	1777	1852	0	1870	0	1686	0	0
Q Serve(g_s), s	0.1	5.3	5.3	0.0	2.5	2.5	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.1	5.3	5.3	0.0	2.5	2.5	0.0	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.06	0.00		0.00	0.55		0.45
Lane Grp Cap(c), veh/h	23	799	834	5	779	812	0	8	0	39	0	0
V/C Ratio(X)	0.26	0.49	0.49	0.19	0.26	0.26	0.00	0.24	0.00	0.28	0.00	0.00
Avail Cap(c_a), veh/h	629	957	998	629	957	997	0	1321	0	1142	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.6	6.6	6.6	16.9	6.0	6.1	0.0	16.9	0.0	16.3	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.8	0.8	6.4	0.3	0.3	0.0	5.5	0.0	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	1.0	0.0	0.5	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	7.4	7.4	23.3	6.4	6.3	0.0	22.4	0.0	17.8	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	A	C	A	B	A	A
Approach Vol, veh/h		806			417			2			11	
Approach Delay, s/veh		7.5			6.4			22.4			17.8	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.8	4.1	21.0		4.1	4.4	20.6
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		23.0	12.0	18.3		24.0	12.0	18.3
Max Q Clear Time (g_c+I1), s		2.2	2.0	7.3		2.0	2.1	4.5
Green Ext Time (p_c), s		0.0	0.0	8.0		0.0	0.0	5.5

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	426	18	21	368	29	5	5	12	25	0	120
Future Volume (veh/h)	369	426	18	21	368	29	5	5	12	25	0	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	388	448	19	22	387	31	5	5	13	26	0	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	429	1379	615	47	617	275	18	18	47	251	0	223
Arrive On Green	0.24	0.39	0.39	0.03	0.17	0.17	0.05	0.05	0.05	0.14	0.00	0.14
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	365	365	950	1781	0	1585
Grp Volume(v), veh/h	388	448	19	22	387	31	23	0	0	26	0	126
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1681	0	0	1781	0	1585
Q Serve(g_s), s	10.5	4.4	0.4	0.6	5.0	0.8	0.7	0.0	0.0	0.6	0.0	3.7
Cycle Q Clear(g_c), s	10.5	4.4	0.4	0.6	5.0	0.8	0.7	0.0	0.0	0.6	0.0	3.7
Prop In Lane	1.00		1.00	1.00		1.00	0.22		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	429	1379	615	47	617	275	83	0	0	251	0	223
V/C Ratio(X)	0.90	0.32	0.03	0.47	0.63	0.11	0.28	0.00	0.00	0.10	0.00	0.56
Avail Cap(c_a), veh/h	429	1379	615	429	1355	604	405	0	0	976	0	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	10.7	9.4	23.9	19.1	17.4	22.8	0.0	0.0	18.7	0.0	20.0
Incr Delay (d2), s/veh	21.8	0.2	0.0	2.7	1.2	0.2	0.7	0.0	0.0	0.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	1.3	0.1	0.3	1.8	0.3	0.3	0.0	0.0	0.2	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.1	10.8	9.5	26.6	20.3	17.6	23.5	0.0	0.0	18.7	0.0	20.8
LnGrp LOS	D	B	A	C	C	B	C	A	A	B	A	C
Approach Vol, veh/h		855			440			23			152	
Approach Delay, s/veh		24.1			20.4			23.5			20.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.5	5.3	25.3		12.7	16.0	14.7				
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0				
Max Green Setting (Gmax), s		12.0	12.0	19.0		27.3	12.0	19.0				
Max Q Clear Time (g_c+I1), s		2.7	2.6	6.4		5.7	12.5	7.0				
Green Ext Time (p_c), s		0.0	0.0	1.9		0.3	0.0	1.6				

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	275	2	81	271	2	303
Future Volume (veh/h)	275	2	81	271	2	303
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	2	85	285	2	319
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	584	261	120	1408	490	436
Arrive On Green	0.16	0.16	0.07	0.40	0.27	0.27
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	289	2	85	285	2	319
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	2.2	0.0	1.4	1.6	0.0	5.6
Cycle Q Clear(g_c), s	2.2	0.0	1.4	1.6	0.0	5.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	584	261	120	1408	490	436
V/C Ratio(X)	0.49	0.01	0.71	0.20	0.00	0.73
Avail Cap(c_a), veh/h	1870	834	644	3740	1054	938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.6	10.6	13.9	6.0	8.0	10.0
Incr Delay (d2), s/veh	0.7	0.0	7.4	0.1	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.6	0.2	0.0	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.2	10.6	21.3	6.1	8.0	12.4
LnGrp LOS	B	B	C	A	A	B
Approach Vol, veh/h	291			370	321	
Approach Delay, s/veh	12.2			9.6	12.4	
Approach LOS	B			A	B	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		13.4	7.0	10.0			17.0
Change Period (Y+Rc), s		5.0	5.0	5.0			5.0
Max Green Setting (Gmax), s		18.0	11.0	16.0			32.0
Max Q Clear Time (g_c+I1), s		7.6	3.4	4.2			3.6
Green Ext Time (p_c), s		0.8	0.1	1.2			1.7

Intersection Summary	
HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1172	492	262	605	102	326
Future Volume (veh/h)	1172	492	262	605	102	326
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1234	196	276	123	107	343
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1444	662	378	320	139	712
Arrive On Green	0.42	0.42	0.20	0.20	0.08	0.38
Sat Flow, veh/h	3456	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	1234	196	276	123	107	343
Grp Sat Flow(s),veh/h/ln	1728	1585	1870	1585	1781	1870
Q Serve(g_s), s	16.1	4.1	6.9	3.3	2.9	6.9
Cycle Q Clear(g_c), s	16.1	4.1	6.9	3.3	2.9	6.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1444	662	378	320	139	712
V/C Ratio(X)	0.85	0.30	0.73	0.38	0.77	0.48
Avail Cap(c_a), veh/h	1600	734	602	511	394	1205
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	9.6	18.6	17.1	22.5	11.7
Incr Delay (d2), s/veh	4.4	0.2	2.7	0.8	8.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	1.1	2.9	1.2	1.4	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.5	9.9	21.3	17.9	31.0	12.2
LnGrp LOS	B	A	C	B	C	B
Approach Vol, veh/h	1430		399			450
Approach Delay, s/veh	16.5		20.2			16.6
Approach LOS	B		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	8.9	15.0				23.9	25.8
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0				32.0	23.0
Max Q Clear Time (g_c+I1), s	4.9	8.9				8.9	18.1
Green Ext Time (p_c), s	0.1	1.2				2.1	2.7

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	743	11	10	876	450	2	8	8	200	9	52
Future Volume (veh/h)	97	743	11	10	876	450	2	8	8	200	9	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	782	12	11	922	474	2	8	8	211	9	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	1512	674	20	1290	576	16	65	70	314	13	291
Arrive On Green	0.07	0.43	0.43	0.01	0.36	0.36	0.04	0.04	0.04	0.18	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	370	1481	1585	1712	73	1585
Grp Volume(v), veh/h	102	782	12	11	922	474	10	0	8	220	0	55
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1852	0	1585	1785	0	1585
Q Serve(g_s), s	3.0	8.7	0.2	0.3	12.0	14.6	0.3	0.0	0.3	6.2	0.0	1.6
Cycle Q Clear(g_c), s	3.0	8.7	0.2	0.3	12.0	14.6	0.3	0.0	0.3	6.2	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	0.20		1.00	0.96		1.00
Lane Grp Cap(c), veh/h	131	1512	674	20	1290	576	81	0	70	327	0	291
V/C Ratio(X)	0.78	0.52	0.02	0.55	0.71	0.82	0.12	0.00	0.12	0.67	0.00	0.19
Avail Cap(c_a), veh/h	266	1512	674	266	1326	592	1244	0	1065	1199	0	1065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.4	11.3	8.9	26.4	14.7	15.5	24.6	0.0	24.6	20.4	0.0	18.5
Incr Delay (d2), s/veh	3.7	0.4	0.0	8.4	1.9	9.2	0.2	0.0	0.3	0.9	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.6	0.1	0.2	4.0	5.5	0.1	0.0	0.1	2.3	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	11.7	8.9	34.7	16.5	24.7	24.9	0.0	24.9	21.3	0.0	18.6
LnGrp LOS	C	B	A	C	B	C	C	A	C	C	A	B
Approach Vol, veh/h		896			1407			18			275	
Approach Delay, s/veh		13.5			19.4			24.9			20.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	28.8		6.4	7.9	25.5		13.8				
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0				
Max Green Setting (Gmax), s	8.0	21.0		36.0	8.0	20.0		36.0				
Max Q Clear Time (g_c+I1), s	2.3	10.7		2.3	5.0	16.6		8.2				
Green Ext Time (p_c), s	0.0	6.3		0.0	0.0	2.9		0.6				

Intersection Summary			
HCM 6th Ctrl Delay			17.6
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	808	0	0	1348	84	3	0	0	32	0	25
Future Volume (veh/h)	53	808	0	0	1348	84	3	0	0	32	0	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	851	0	0	1419	88	3	0	0	34	0	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	2282	1018	3	1800	803	6	90	77	53	140	118
Arrive On Green	0.04	0.64	0.00	0.00	0.51	0.51	0.00	0.00	0.00	0.03	0.00	0.07
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	56	851	0	0	1419	88	3	0	0	34	0	26
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	6.0	0.0	0.0	17.6	1.6	0.1	0.0	0.0	1.0	0.0	0.8
Cycle Q Clear(g_c), s	1.7	6.0	0.0	0.0	17.6	1.6	0.1	0.0	0.0	1.0	0.0	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	2282	1018	3	1800	803	6	90	77	53	140	118
V/C Ratio(X)	0.74	0.37	0.00	0.00	0.79	0.11	0.52	0.00	0.00	0.64	0.00	0.22
Avail Cap(c_a), veh/h	366	2282	1018	366	2123	947	366	559	473	366	559	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.4	4.5	0.0	0.0	10.9	6.9	26.7	0.0	0.0	25.7	0.0	23.3
Incr Delay (d2), s/veh	13.5	0.1	0.0	0.0	1.8	0.1	56.8	0.0	0.0	12.4	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.0	0.0	0.0	4.9	0.4	0.1	0.0	0.0	0.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.9	4.6	0.0	0.0	12.6	7.0	83.4	0.0	0.0	38.1	0.0	24.2
LnGrp LOS	D	A	A	A	B	A	F	A	A	D	A	C
Approach Vol, veh/h		907			1507			3			60	
Approach Delay, s/veh		6.7			12.3			83.4			32.1	
Approach LOS		A			B			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	7.6	0.0	39.4	5.2	9.0	7.3	32.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.0	0.0	0.0	8.0	2.1	2.8	3.7	19.6
Green Ext Time (p_c), s	0.0	0.0	0.0	5.7	0.0	0.0	0.0	7.6

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	748	296	31	57	827	130	46	475	36	90	785	725
Future Volume (veh/h)	748	296	31	57	827	130	46	475	36	90	785	725
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	787	312	0	60	871	0	48	500	0	95	826	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	783	463		1238	931		212	537		447	855	
Arrive On Green	0.23	0.13	0.00	0.36	0.26	0.00	0.06	0.15	0.00	0.13	0.24	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	787	312	0	60	871	0	48	500	0	95	826	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	21.0	7.8	0.0	1.1	22.2	0.0	1.2	12.9	0.0	2.3	21.3	0.0
Cycle Q Clear(g_c), s	21.0	7.8	0.0	1.1	22.2	0.0	1.2	12.9	0.0	2.3	21.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	783	463		1238	931		212	537		447	855	
V/C Ratio(X)	1.00	0.67		0.05	0.94		0.23	0.93		0.21	0.97	
Avail Cap(c_a), veh/h	783	1431		1238	932		298	537		597	855	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	38.4	0.0	19.4	33.4	0.0	41.4	38.8	0.0	36.1	34.8	0.0
Incr Delay (d2), s/veh	33.3	2.9	0.0	0.0	16.5	0.0	0.2	23.4	0.0	0.1	22.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	3.4	0.0	0.4	10.8	0.0	0.5	7.0	0.0	0.9	11.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.1	41.3	0.0	19.4	49.9	0.0	41.6	62.2	0.0	36.2	57.6	0.0
LnGrp LOS	F	D		B	D		D	E		D	E	
Approach Vol, veh/h		1099	A		931	A		548	A		921	A
Approach Delay, s/veh		61.2			47.9			60.4			55.4	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.2	17.8	9.7	28.0	25.0	30.0	17.7	20.0
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	5.7	* 6
Max Green Setting (Gmax), s	8.0	37.3	8.0	22.3	21.0	24.3	16.0	* 14
Max Q Clear Time (g_c+I1), s	3.1	9.8	3.2	23.3	23.0	24.2	4.3	14.9
Green Ext Time (p_c), s	0.0	2.3	0.0	0.0	0.0	0.1	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	56.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	325	30	149	1004	45	15	116	94	49	93	54
Future Volume (veh/h)	22	325	30	149	1004	45	15	116	94	49	93	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	342	32	157	1057	47	16	122	99	52	98	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	989	92	194	1308	58	56	164	133	142	244	142
Arrive On Green	0.03	0.30	0.30	0.11	0.38	0.38	0.03	0.17	0.17	0.08	0.22	0.22
Sat Flow, veh/h	1781	3287	306	1781	3465	154	1781	955	775	1781	1109	645
Grp Volume(v), veh/h	23	184	190	157	542	562	16	0	221	52	0	155
Grp Sat Flow(s),veh/h/ln	1781	1777	1815	1781	1777	1843	1781	0	1731	1781	0	1754
Q Serve(g_s), s	0.7	4.4	4.5	4.7	15.0	15.0	0.5	0.0	6.7	1.5	0.0	4.2
Cycle Q Clear(g_c), s	0.7	4.4	4.5	4.7	15.0	15.0	0.5	0.0	6.7	1.5	0.0	4.2
Prop In Lane	1.00		0.17	1.00		0.08	1.00		0.45	1.00		0.37
Lane Grp Cap(c), veh/h	58	534	546	194	671	696	56	0	298	142	0	386
V/C Ratio(X)	0.40	0.34	0.35	0.81	0.81	0.81	0.28	0.00	0.74	0.37	0.00	0.40
Avail Cap(c_a), veh/h	227	818	835	194	785	814	259	0	822	292	0	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.1	15.0	15.0	23.9	15.3	15.3	26.0	0.0	21.6	24.0	0.0	18.3
Incr Delay (d2), s/veh	1.7	0.5	0.5	20.4	5.9	5.7	1.0	0.0	5.0	0.6	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.6	1.6	2.9	5.9	6.1	0.2	0.0	2.9	0.6	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.7	15.5	15.5	44.3	21.2	21.0	27.0	0.0	26.6	24.6	0.0	19.3
LnGrp LOS	C	B	B	D	C	C	C	A	C	C	A	B
Approach Vol, veh/h		397			1261			237			207	
Approach Delay, s/veh		16.2			24.0			26.6			20.6	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	14.4	10.0	22.2	5.7	17.0	5.8	26.5
Change Period (Y+Rc), s	4.0	4.9	4.0	5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	9.0	26.1	6.0	25.3	8.0	27.1	7.0	24.3
Max Q Clear Time (g_c+I1), s	3.5	8.7	6.7	6.5	2.5	6.2	2.7	17.0
Green Ext Time (p_c), s	0.0	1.1	0.0	1.8	0.0	0.7	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	488	1320	33	39	0
Future Volume (veh/h)	10	488	1320	33	39	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	514	1389	35	41	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	31	2470	1864	47	132	117
Arrive On Green	0.02	0.69	0.53	0.53	0.07	0.00
Sat Flow, veh/h	1781	3647	3636	89	1781	1585
Grp Volume(v), veh/h	11	514	696	728	41	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1854	1781	1585
Q Serve(g_s), s	0.2	1.9	11.5	11.5	0.8	0.0
Cycle Q Clear(g_c), s	0.2	1.9	11.5	11.5	0.8	0.0
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	31	2470	935	976	132	117
V/C Ratio(X)	0.36	0.21	0.74	0.75	0.31	0.00
Avail Cap(c_a), veh/h	378	3236	1146	1196	1277	1136
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.3	2.0	6.9	7.0	16.5	0.0
Incr Delay (d2), s/veh	2.6	0.1	2.4	2.3	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.2	2.3	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.9	2.1	9.4	9.3	17.0	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		525	1424		41	
Approach Delay, s/veh		2.5	9.3		17.0	
Approach LOS		A	A		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		31.9		5.8	6.4	25.5
Change Period (Y+Rc), s		5.7		3.0	5.7	* 5.7
Max Green Setting (Gmax), s		34.3		27.0	8.0	* 24
Max Q Clear Time (g_c+I1), s		3.9		2.8	2.2	13.5
Green Ext Time (p_c), s		3.3		0.1	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	468	55	115	1342	0	61	0	53	0	0	0
Future Volume (veh/h)	0	468	55	115	1342	0	61	0	53	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	493	58	121	1413	0	64	0	56	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1140	134	175	2018	0	280	0	249	0	5	0
Arrive On Green	0.00	0.36	0.36	0.10	0.57	0.00	0.16	0.00	0.16	0.00	0.00	0.00
Sat Flow, veh/h	1781	3204	376	1781	3647	0	1781	0	1585	0	1870	0
Grp Volume(v), veh/h	0	273	278	121	1413	0	64	0	56	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1803	1781	1777	0	1781	0	1585	0	1870	0
Q Serve(g_s), s	0.0	4.1	4.1	2.3	10.1	0.0	1.1	0.0	1.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.1	4.1	2.3	10.1	0.0	1.1	0.0	1.1	0.0	0.0	0.0
Prop In Lane	1.00		0.21	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	5	632	641	175	2018	0	280	0	249	0	5	0
V/C Ratio(X)	0.00	0.43	0.43	0.69	0.70	0.00	0.23	0.00	0.23	0.00	0.00	0.00
Avail Cap(c_a), veh/h	405	1276	1295	405	2653	0	405	0	360	0	425	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.6	8.6	15.4	5.5	0.0	13.0	0.0	13.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.6	1.8	0.7	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	1.1	0.8	1.2	0.0	0.4	0.0	0.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.3	9.3	17.2	6.1	0.0	13.1	0.0	13.1	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	B	A	A	A
Approach Vol, veh/h		551			1534			120			0	
Approach Delay, s/veh		9.3			7.0			13.1			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	18.2		9.5	0.0	25.7		0.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	25.3		8.0	8.0	26.3		8.0
Max Q Clear Time (g_c+I1), s	4.3	6.1		3.1	0.0	12.1		0.0
Green Ext Time (p_c), s	0.1	2.9		0.1	0.0	7.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	709	39	88	1466	21	47	15	108	30	10	24
Future Volume (veh/h)	22	709	39	88	1466	21	47	15	108	30	10	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	746	41	93	1543	22	49	16	114	32	11	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	1249	69	182	1558	22	141	29	402	139	30	402
Arrive On Green	0.03	0.36	0.36	0.10	0.43	0.43	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	3425	188	1781	3587	51	49	114	1585	43	118	1585
Grp Volume(v), veh/h	23	387	400	93	764	801	65	0	114	43	0	25
Grp Sat Flow(s),veh/h/ln	1781	1777	1836	1781	1777	1861	163	0	1585	161	0	1585
Q Serve(g_s), s	0.6	8.7	8.7	2.4	20.9	21.0	0.6	0.0	2.8	0.5	0.0	0.6
Cycle Q Clear(g_c), s	0.6	8.7	8.7	2.4	20.9	21.0	12.4	0.0	2.8	12.4	0.0	0.6
Prop In Lane	1.00		0.10	1.00		0.03	0.75		1.00	0.74		1.00
Lane Grp Cap(c), veh/h	57	648	670	182	772	808	170	0	402	169	0	402
V/C Ratio(X)	0.40	0.60	0.60	0.51	0.99	0.99	0.38	0.00	0.28	0.25	0.00	0.06
Avail Cap(c_a), veh/h	291	808	835	291	772	809	516	0	776	493	0	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.3	12.6	12.7	20.9	13.8	13.8	19.8	0.0	14.7	17.0	0.0	13.9
Incr Delay (d2), s/veh	1.7	1.2	1.1	0.8	29.7	29.4	0.5	0.0	0.1	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.6	2.7	0.9	11.7	12.2	0.7	0.0	0.9	0.3	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	13.8	13.8	21.7	43.4	43.2	20.3	0.0	14.8	17.3	0.0	13.9
LnGrp LOS	C	B	B	C	D	D	C	A	B	B	A	B
Approach Vol, veh/h		810			1658			179			68	
Approach Delay, s/veh		14.1			42.1			16.8			16.1	
Approach LOS		B			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	23.6		16.9	5.6	27.0		16.9
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	22.3		24.0	8.0	21.3		24.0
Max Q Clear Time (g_c+I1), s	4.4	10.7		14.4	2.6	23.0		14.4
Green Ext Time (p_c), s	0.0	3.4		0.3	0.0	0.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	31.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	683	5	4	1126	80	5	0	12	155	0	209
Future Volume (veh/h)	89	683	5	4	1126	80	5	0	12	155	0	209
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	719	5	4	1185	84	5	0	13	163	0	220
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	1857	13	13	1419	100	17	0	45	309	0	275
Arrive On Green	0.10	0.51	0.51	0.01	0.42	0.42	0.04	0.00	0.04	0.17	0.00	0.17
Sat Flow, veh/h	1781	3618	25	1781	3366	238	454	0	1181	1781	0	1585
Grp Volume(v), veh/h	94	353	371	4	625	644	18	0	0	163	0	220
Grp Sat Flow(s),veh/h/ln	1781	1777	1866	1781	1777	1827	1635	0	0	1781	0	1585
Q Serve(g_s), s	3.3	8.0	8.0	0.1	20.8	20.9	0.7	0.0	0.0	5.5	0.0	8.8
Cycle Q Clear(g_c), s	3.3	8.0	8.0	0.1	20.8	20.9	0.7	0.0	0.0	5.5	0.0	8.8
Prop In Lane	1.00		0.01	1.00		0.13	0.28		0.72	1.00		1.00
Lane Grp Cap(c), veh/h	177	912	958	13	749	770	63	0	0	309	0	275
V/C Ratio(X)	0.53	0.39	0.39	0.30	0.83	0.84	0.29	0.00	0.00	0.53	0.00	0.80
Avail Cap(c_a), veh/h	323	912	958	323	866	891	469	0	0	511	0	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.4	9.8	9.8	32.7	17.1	17.1	31.0	0.0	0.0	24.9	0.0	26.3
Incr Delay (d2), s/veh	0.9	0.4	0.3	4.6	6.7	6.6	0.9	0.0	0.0	0.5	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.4	2.5	0.1	8.1	8.3	0.3	0.0	0.0	2.3	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.3	10.1	10.1	37.3	23.8	23.7	31.9	0.0	0.0	25.4	0.0	28.3
LnGrp LOS	C	B	B	D	C	C	C	A	A	C	A	C
Approach Vol, veh/h		818			1273			18			383	
Approach Delay, s/veh		12.3			23.8			31.9			27.1	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	39.7		6.5	10.6	33.6		15.5
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	32.3		19.0	12.0	32.3		19.0
Max Q Clear Time (g_c+I1), s	2.1	10.0		2.7	5.3	22.9		10.8
Green Ext Time (p_c), s	0.0	4.0		0.0	0.1	5.1		0.7

Intersection Summary		
HCM 6th Ctrl Delay		20.6
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	7	32	152	4	68	20	1109	201	66	1252	17
Future Volume (veh/h)	25	7	32	152	4	68	20	1109	201	66	1252	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	7	34	160	4	72	21	1167	212	69	1318	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	67	57	205	236	200	37	1749	543	92	1909	592
Arrive On Green	0.02	0.04	0.04	0.11	0.13	0.13	0.02	0.34	0.34	0.05	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	26	7	34	160	4	72	21	1167	212	69	1318	18
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.6	0.2	0.9	3.8	0.1	1.8	0.5	8.6	4.5	1.7	9.6	0.3
Cycle Q Clear(g_c), s	0.6	0.2	0.9	3.8	0.1	1.8	0.5	8.6	4.5	1.7	9.6	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	44	67	57	205	236	200	37	1749	543	92	1909	592
V/C Ratio(X)	0.59	0.10	0.60	0.78	0.02	0.36	0.57	0.67	0.39	0.75	0.69	0.03
Avail Cap(c_a), veh/h	284	1361	1154	284	1446	1226	284	2090	649	284	2090	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	20.5	20.9	18.9	16.8	17.6	21.3	12.3	11.0	20.6	11.6	8.7
Incr Delay (d2), s/veh	11.9	0.7	9.7	9.1	0.0	1.1	13.3	0.6	0.5	11.4	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.5	1.9	0.0	0.6	0.3	2.3	1.3	0.9	2.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	21.2	30.6	28.0	16.9	18.7	34.6	12.9	11.4	31.9	12.5	8.7
LnGrp LOS	C	C	C	C	B	B	C	B	B	C	B	A
Approach Vol, veh/h		67			236			1400			1405	
Approach Delay, s/veh		30.6			25.0			13.0			13.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	20.1	10.1	6.6	5.9	21.4	6.1	10.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	18.0	7.0	32.0	7.0	18.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	3.7	10.6	5.8	2.9	2.5	11.6	2.6	3.8
Green Ext Time (p_c), s	0.0	4.5	0.0	0.1	0.0	4.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	14	26	149	33	19	63	1303	269	39	1377	20
Future Volume (veh/h)	9	14	26	149	33	19	63	1303	269	39	1377	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	15	27	157	35	20	66	1372	283	41	1449	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	66	56	209	268	228	86	2066	641	62	1998	620
Arrive On Green	0.01	0.04	0.04	0.12	0.14	0.14	0.05	0.40	0.40	0.03	0.39	0.39
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	9	15	27	157	35	20	66	1372	283	41	1449	21
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.2	0.4	0.8	4.2	0.8	0.5	1.8	10.7	6.4	1.1	11.8	0.4
Cycle Q Clear(g_c), s	0.2	0.4	0.8	4.2	0.8	0.5	1.8	10.7	6.4	1.1	11.8	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	66	56	209	268	228	86	2066	641	62	1998	620
V/C Ratio(X)	0.54	0.23	0.48	0.75	0.13	0.09	0.77	0.66	0.44	0.66	0.73	0.03
Avail Cap(c_a), veh/h	254	1219	1033	798	1905	1615	254	2289	710	254	2289	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	23.0	23.2	21.0	18.3	18.2	23.1	11.9	10.6	23.4	12.7	9.2
Incr Delay (d2), s/veh	24.1	1.7	6.2	5.3	0.2	0.2	13.2	0.6	0.5	11.3	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.4	1.8	0.3	0.2	1.0	3.0	1.8	0.6	3.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	24.7	29.4	26.3	18.6	18.4	36.2	12.5	11.1	34.7	13.7	9.2
LnGrp LOS	D	C	C	C	B	B	D	B	B	C	B	A
Approach Vol, veh/h		51			212			1721			1511	
Approach Delay, s/veh		31.4			24.3			13.2			14.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	24.9	10.8	6.7	7.4	24.2	5.5	12.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	22.0	22.0	32.0	7.0	22.0	7.0	50.0
Max Q Clear Time (g_c+I1), s	3.1	12.7	6.2	2.8	3.8	13.8	2.2	2.8
Green Ext Time (p_c), s	0.0	6.1	0.3	0.1	0.0	5.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	7	39	42	15	104	99	1554	103	56	1426	53
Future Volume (veh/h)	23	7	39	42	15	104	99	1554	103	56	1426	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	7	41	44	16	109	104	1636	108	59	1501	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	151	128	65	177	150	134	2172	674	80	2019	627
Arrive On Green	0.02	0.08	0.08	0.04	0.09	0.09	0.07	0.43	0.43	0.04	0.40	0.40
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	24	7	41	44	16	109	104	1636	108	59	1501	56
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.7	0.2	1.2	1.2	0.4	3.3	2.8	13.3	2.1	1.6	12.4	1.1
Cycle Q Clear(g_c), s	0.7	0.2	1.2	1.2	0.4	3.3	2.8	13.3	2.1	1.6	12.4	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	151	128	65	177	150	134	2172	674	80	2019	627
V/C Ratio(X)	0.59	0.05	0.32	0.67	0.09	0.73	0.78	0.75	0.16	0.74	0.74	0.09
Avail Cap(c_a), veh/h	253	1215	1030	325	1291	1094	253	2249	698	253	2249	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	20.9	21.4	23.4	20.4	21.7	22.4	12.0	8.7	23.2	12.8	9.3
Incr Delay (d2), s/veh	13.1	0.1	1.4	11.3	0.2	6.5	9.4	1.4	0.1	12.3	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.5	0.7	0.2	1.4	1.3	3.7	0.6	0.9	3.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	21.0	22.8	34.8	20.6	28.2	31.7	13.4	8.8	35.5	14.0	9.4
LnGrp LOS	D	C	C	C	C	C	C	B	A	D	B	A
Approach Vol, veh/h		72			169			1848			1616	
Approach Delay, s/veh		27.3			29.2			14.2			14.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	26.3	6.8	9.0	8.7	24.8	6.1	9.7
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	7.0	21.7	9.0	32.0	7.0	21.7	7.0	34.0
Max Q Clear Time (g_c+I1), s	3.6	15.3	3.2	3.2	4.8	14.4	2.7	5.3
Green Ext Time (p_c), s	0.0	4.8	0.0	0.1	0.0	5.1	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	61	31	37	69	3	49	103	12	2	44	54
Future Volume (veh/h)	87	61	31	37	69	3	49	103	12	2	44	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	64	33	39	73	3	52	108	13	2	46	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	296	249	66	220	9	84	286	34	6	98	121
Arrive On Green	0.07	0.16	0.16	0.04	0.12	0.12	0.05	0.17	0.17	0.00	0.13	0.13
Sat Flow, veh/h	1781	1870	1575	1781	1783	73	1781	1637	197	1781	756	937
Grp Volume(v), veh/h	92	64	33	39	0	76	52	0	121	2	0	103
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	0	1857	1781	0	1834	1781	0	1694
Q Serve(g_s), s	1.4	0.9	0.5	0.6	0.0	1.1	0.8	0.0	1.7	0.0	0.0	1.6
Cycle Q Clear(g_c), s	1.4	0.9	0.5	0.6	0.0	1.1	0.8	0.0	1.7	0.0	0.0	1.6
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.11	1.00		0.55
Lane Grp Cap(c), veh/h	129	296	249	66	0	229	84	0	320	6	0	219
V/C Ratio(X)	0.71	0.22	0.13	0.59	0.00	0.33	0.62	0.00	0.38	0.32	0.00	0.47
Avail Cap(c_a), veh/h	776	1728	1455	466	0	1392	528	0	1950	466	0	1742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.0	10.5	10.4	13.6	0.0	11.5	13.4	0.0	10.5	14.3	0.0	11.6
Incr Delay (d2), s/veh	7.1	0.4	0.2	8.0	0.0	0.8	7.1	0.0	0.7	27.3	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.3	0.1	0.3	0.0	0.4	0.4	0.0	0.5	0.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	10.9	10.6	21.6	0.0	12.3	20.5	0.0	11.2	41.6	0.0	13.1
LnGrp LOS	C	B	B	C	A	B	C	A	B	D	A	B
Approach Vol, veh/h		189			115			173			105	
Approach Delay, s/veh		15.3			15.5			14.0			13.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	9.5	5.6	9.0	5.9	8.2	6.6	8.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	30.5	7.5	26.5	8.5	29.5	12.5	21.5
Max Q Clear Time (g_c+I1), s	2.0	3.7	2.6	2.9	2.8	3.6	3.4	3.1
Green Ext Time (p_c), s	0.0	0.6	0.0	0.4	0.0	0.5	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	44	382	463	11	564	574
Future Volume (veh/h)	44	382	463	11	564	574
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	49	487	7	594	604
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	96	85	592	502	667	1452
Arrive On Green	0.05	0.05	0.32	0.32	0.37	0.78
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	46	49	487	7	594	604
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	1.5	1.8	14.1	0.2	18.4	6.3
Cycle Q Clear(g_c), s	1.5	1.8	14.1	0.2	18.4	6.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	96	85	592	502	667	1452
V/C Ratio(X)	0.48	0.58	0.82	0.01	0.89	0.42
Avail Cap(c_a), veh/h	485	432	892	756	940	2038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	27.1	18.6	13.8	17.2	2.2
Incr Delay (d2), s/veh	3.7	6.0	3.9	0.0	8.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.8	6.1	0.1	8.0	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.7	33.2	22.4	13.8	25.2	2.4
LnGrp LOS	C	C	C	B	C	A
Approach Vol, veh/h	95		494			1198
Approach Delay, s/veh	32.0		22.3			13.7
Approach LOS	C		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	27.0	23.6				50.6	8.2
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	31.0	28.0				64.0	16.0
Max Q Clear Time (g_c+I1), s	20.4	16.1				8.3	3.8
Green Ext Time (p_c), s	1.6	2.5				4.8	0.2

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	16	145	329	29	188	431
Future Volume (veh/h)	16	145	329	29	188	431
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	153	346	31	198	454
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	231	206	916	776	680	916
Arrive On Green	0.13	0.13	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1781	1585	1870	1585	1006	1870
Grp Volume(v), veh/h	17	153	346	31	198	454
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1006	1870
Q Serve(g_s), s	0.2	2.2	2.7	0.2	3.6	3.9
Cycle Q Clear(g_c), s	0.2	2.2	2.7	0.2	6.4	3.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	231	206	916	776	680	916
V/C Ratio(X)	0.07	0.74	0.38	0.04	0.29	0.50
Avail Cap(c_a), veh/h	1205	1073	1978	1676	1251	1978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.0	9.9	3.8	3.1	5.8	4.1
Incr Delay (d2), s/veh	0.1	5.3	0.3	0.0	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.1	0.0	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.2	15.2	4.0	3.2	6.0	4.5
LnGrp LOS	A	B	A	A	A	A
Approach Vol, veh/h	170		377			652
Approach Delay, s/veh	14.6		4.0			4.9
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		16.6				16.6	7.1
Change Period (Y+Rc), s		5.0				5.0	4.0
Max Green Setting (Gmax), s		25.0				25.0	16.0
Max Q Clear Time (g_c+I1), s		4.7				8.4	4.2
Green Ext Time (p_c), s		1.9				3.2	0.4

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	375	11	50	537	0	87	0	23	0	0	0
Future Volume (veh/h)	0	375	11	50	537	0	87	0	23	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	395	12	53	565	0	92	0	24	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	1049	466	90	1875	836	139	0	172	8	9	0
Arrive On Green	0.00	0.30	0.30	0.05	0.53	0.00	0.08	0.00	0.11	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1580	1781	3554	1585	1781	0	1580	1781	1870	0
Grp Volume(v), veh/h	0	395	12	53	565	0	92	0	24	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1580	1781	1777	1585	1781	0	1580	1781	1870	0
Q Serve(g_s), s	0.0	1.9	0.1	0.6	2.0	0.0	1.1	0.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.9	0.1	0.6	2.0	0.0	1.1	0.0	0.3	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	8	1049	466	90	1875	836	139	0	172	8	9	0
V/C Ratio(X)	0.00	0.38	0.03	0.59	0.30	0.00	0.66	0.00	0.14	0.00	0.00	0.00
Avail Cap(c_a), veh/h	648	4202	1868	648	4202	1874	567	0	2299	648	2807	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.1	5.5	10.2	2.9	0.0	9.9	0.0	8.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	6.1	0.1	0.0	5.2	0.0	0.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	0.3	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.4	5.5	16.3	3.0	0.0	15.1	0.0	9.2	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		407			618			116			0	
Approach Delay, s/veh		6.3			4.1			13.9			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	6.4	5.1	10.5	5.7	0.7	0.0	15.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	32.0	8.0	26.0	7.0	33.0	8.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.3	2.6	3.9	3.1	0.0	0.0	4.0
Green Ext Time (p_c), s	0.0	0.1	0.0	2.4	0.1	0.0	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	1	4	212	3	86	10	439	120	60	555	1
Future Volume (veh/h)	3	1	4	212	3	86	10	439	120	60	555	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	1	4	223	3	91	11	462	126	63	584	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	11	133	113	394	340	288	40	1052	327	180	1258	391
Arrive On Green	0.00	0.07	0.07	0.11	0.18	0.18	0.01	0.21	0.21	0.05	0.25	0.25
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	3	1	4	223	3	91	11	462	126	63	584	1
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.0	0.0	0.1	2.2	0.0	1.8	0.1	2.8	2.5	0.6	3.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	2.2	0.0	1.8	0.1	2.8	2.5	0.6	3.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	11	133	113	394	340	288	40	1052	327	180	1258	391
V/C Ratio(X)	0.26	0.01	0.04	0.57	0.01	0.32	0.27	0.44	0.39	0.35	0.46	0.00
Avail Cap(c_a), veh/h	1059	833	706	1059	833	706	1059	2417	750	1059	2417	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	15.5	15.5	15.1	12.0	12.8	17.6	12.4	12.3	16.4	11.5	10.2
Incr Delay (d2), s/veh	11.9	0.0	0.1	1.3	0.0	0.6	3.6	0.3	0.7	1.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.8	0.0	0.5	0.1	0.8	0.7	0.2	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	15.5	15.7	16.4	12.1	13.4	21.2	12.7	13.0	17.6	11.8	10.2
LnGrp LOS	C	B	B	B	B	B	C	B	B	B	B	B
Approach Vol, veh/h		8			317			599			648	
Approach Delay, s/veh		20.9			15.5			13.0			12.3	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	12.4	9.1	7.6	5.4	13.8	5.1	11.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	2.6	4.8	4.2	2.1	2.1	5.5	2.0	3.8
Green Ext Time (p_c), s	0.1	2.6	0.4	0.0	0.0	2.8	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	183	21	32	507	69	10	22	8	31	24	73
Future Volume (veh/h)	52	183	21	32	507	69	10	22	8	31	24	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	193	22	34	534	73	11	23	8	33	25	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	1024	457	57	972	434	67	71	60	191	201	170
Arrive On Green	0.05	0.29	0.29	0.03	0.27	0.27	0.04	0.04	0.04	0.11	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	55	193	22	34	534	73	11	23	8	33	25	77
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.1	1.5	0.4	0.7	4.8	1.3	0.2	0.4	0.2	0.6	0.5	1.7
Cycle Q Clear(g_c), s	1.1	1.5	0.4	0.7	4.8	1.3	0.2	0.4	0.2	0.6	0.5	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	83	1024	457	57	972	434	67	71	60	191	201	170
V/C Ratio(X)	0.66	0.19	0.05	0.60	0.55	0.17	0.16	0.33	0.13	0.17	0.12	0.45
Avail Cap(c_a), veh/h	524	2280	1017	524	2280	1017	1143	1200	1017	762	800	678
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	10.0	9.6	17.9	11.6	10.3	17.4	17.5	17.4	15.2	15.1	15.7
Incr Delay (d2), s/veh	8.7	0.1	0.0	9.8	0.5	0.2	1.1	2.6	1.0	0.4	0.3	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.4	0.1	0.4	1.5	0.4	0.1	0.2	0.1	0.2	0.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	10.1	9.7	27.6	12.1	10.5	18.5	20.2	18.4	15.6	15.4	17.5
LnGrp LOS	C	B	A	C	B	B	B	C	B	B	B	B
Approach Vol, veh/h		270			641			42			135	
Approach Delay, s/veh		13.4			12.7			19.4			16.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.4	6.2	15.8		9.0	6.7	15.2				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		24.0	11.0	24.0		16.0	11.0	24.0				
Max Q Clear Time (g_c+I1), s		2.4	2.7	3.5		3.7	3.1	6.8				
Green Ext Time (p_c), s		0.1	0.0	1.1		0.3	0.0	3.4				

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	5	23	5	70	5	583	9	100	572	5
Future Volume (veh/h)	5	5	5	23	5	70	5	583	9	100	572	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	5	5	24	5	74	5	614	9	105	602	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	129	109	42	164	139	10	1262	392	135	1620	503
Arrive On Green	0.01	0.07	0.07	0.02	0.09	0.09	0.01	0.25	0.25	0.08	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	5	5	5	24	5	74	5	614	9	105	602	5
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.1	0.1	0.5	0.1	1.5	0.1	3.5	0.1	2.0	3.1	0.1
Cycle Q Clear(g_c), s	0.1	0.1	0.1	0.5	0.1	1.5	0.1	3.5	0.1	2.0	3.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	129	109	42	164	139	10	1262	392	135	1620	503
V/C Ratio(X)	0.52	0.04	0.05	0.57	0.03	0.53	0.52	0.49	0.02	0.78	0.37	0.01
Avail Cap(c_a), veh/h	573	875	741	573	875	741	573	2537	787	573	2537	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	14.9	14.9	16.5	14.3	14.9	17.0	11.0	9.8	15.5	9.0	8.0
Incr Delay (d2), s/veh	36.9	0.1	0.2	11.2	0.1	3.2	36.9	0.3	0.0	9.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.3	0.0	0.6	0.1	0.9	0.0	0.9	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	15.0	15.0	27.8	14.4	18.1	53.8	11.3	9.8	24.9	9.2	8.0
LnGrp LOS	D	B	B	C	B	B	D	B	A	C	A	A
Approach Vol, veh/h		15			103			628			712	
Approach Delay, s/veh		28.0			20.2			11.6			11.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	13.5	5.8	7.4	5.2	15.9	5.2	8.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	4.0	5.5	2.5	2.1	2.1	5.1	2.1	3.5
Green Ext Time (p_c), s	0.1	2.9	0.0	0.0	0.0	2.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	79	5	102	129	0	5	0	88	0	0	0
Future Volume (veh/h)	0	79	5	102	129	0	5	0	88	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	83	5	107	136	0	5	0	93	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	486	217	156	1619	722	10	154	130	8	9	7
Arrive On Green	0.00	0.14	0.14	0.09	0.46	0.00	0.01	0.00	0.08	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	0	83	5	107	136	0	5	0	93	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.4	0.1	1.3	0.5	0.0	0.1	0.0	1.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.4	0.1	1.3	0.5	0.0	0.1	0.0	1.2	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	8	486	217	156	1619	722	10	154	130	8	9	7
V/C Ratio(X)	0.00	0.17	0.02	0.69	0.08	0.00	0.51	0.00	0.71	0.00	0.00	0.00
Avail Cap(c_a), veh/h	906	3613	1612	1235	4270	1905	906	1902	1612	906	1902	1612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.3	8.1	9.6	3.3	0.0	10.7	0.0	9.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	5.2	0.0	0.0	36.1	0.0	7.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.5	0.0	0.0	0.1	0.0	0.5	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.4	8.1	14.8	3.4	0.0	46.8	0.0	16.7	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	D	A	B	A	A	A
Approach Vol, veh/h		88			243			98			0	
Approach Delay, s/veh		8.4			8.4			18.2			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	6.8	6.9	8.0	5.1	1.7	0.0	14.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	22.0	15.0	22.0	11.0	22.0	11.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	3.2	3.3	2.4	2.1	0.0	0.0	2.5
Green Ext Time (p_c), s	0.0	0.2	0.2	0.4	0.0	0.0	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	10.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	83	116	13	5	190	623	124	5	714	5
Future Volume (veh/h)	5	1	83	116	13	5	190	623	124	5	714	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	1	87	122	14	5	200	656	131	5	752	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	143	121	254	271	229	348	1805	560	19	1318	409
Arrive On Green	0.01	0.08	0.08	0.07	0.14	0.14	0.10	0.35	0.35	0.01	0.26	0.26
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	5	1	87	122	14	5	200	656	131	5	752	5
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.1	0.0	2.2	1.4	0.3	0.1	2.3	3.9	2.4	0.1	5.2	0.1
Cycle Q Clear(g_c), s	0.1	0.0	2.2	1.4	0.3	0.1	2.3	3.9	2.4	0.1	5.2	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	19	143	121	254	271	229	348	1805	560	19	1318	409
V/C Ratio(X)	0.27	0.01	0.72	0.48	0.05	0.02	0.57	0.36	0.23	0.27	0.57	0.01
Avail Cap(c_a), veh/h	933	735	623	933	735	623	933	2131	662	933	2131	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	17.4	18.4	18.1	15.0	14.9	17.5	9.8	9.3	20.2	13.1	11.2
Incr Delay (d2), s/veh	7.5	0.0	7.6	1.4	0.1	0.0	1.5	0.1	0.2	7.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.0	0.5	0.1	0.0	0.8	1.0	0.7	0.0	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	17.4	26.0	19.5	15.1	15.0	19.0	9.9	9.5	27.6	13.5	11.3
LnGrp LOS	C	B	C	B	B	B	B	A	A	C	B	B
Approach Vol, veh/h		93			141			987			762	
Approach Delay, s/veh		26.0			18.9			11.7			13.6	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	19.4	8.0	8.1	9.1	15.5	5.2	10.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	2.1	5.9	3.4	4.2	4.3	7.2	2.1	2.3
Green Ext Time (p_c), s	0.0	3.4	0.2	0.2	0.3	3.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	982	0	16	402	12	2	1	33	26	1	30
Future Volume (veh/h)	23	982	0	16	402	12	2	1	33	26	1	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	1034	0	17	423	13	2	1	35	27	1	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	1477	659	31	1440	44	3	2	60	100	3	86
Arrive On Green	0.02	0.42	0.00	0.02	0.41	0.41	0.04	0.04	0.04	0.06	0.06	0.06
Sat Flow, veh/h	1781	3554	1585	1781	3519	108	84	42	1467	1781	48	1536
Grp Volume(v), veh/h	24	1034	0	17	213	223	38	0	0	27	0	33
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1851	1593	0	0	1781	0	1584
Q Serve(g_s), s	0.5	8.2	0.0	0.3	2.7	2.8	0.8	0.0	0.0	0.5	0.0	0.7
Cycle Q Clear(g_c), s	0.5	8.2	0.0	0.3	2.7	2.8	0.8	0.0	0.0	0.5	0.0	0.7
Prop In Lane	1.00		1.00	1.00		0.06	0.05		0.92	1.00		0.97
Lane Grp Cap(c), veh/h	42	1477	659	31	727	757	65	0	0	100	0	89
V/C Ratio(X)	0.56	0.70	0.00	0.55	0.29	0.29	0.58	0.00	0.00	0.27	0.00	0.37
Avail Cap(c_a), veh/h	418	1877	837	418	939	978	982	0	0	1098	0	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	8.2	0.0	16.6	6.8	6.8	16.0	0.0	0.0	15.4	0.0	15.5
Incr Delay (d2), s/veh	11.2	0.8	0.0	14.1	0.2	0.2	7.9	0.0	0.0	1.4	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.6	0.0	0.2	0.5	0.6	0.4	0.0	0.0	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.7	9.0	0.0	30.7	7.0	7.0	24.0	0.0	0.0	16.8	0.0	18.0
LnGrp LOS	C	A	A	C	A	A	C	A	A	B	A	B
Approach Vol, veh/h		1058			453			38			60	
Approach Delay, s/veh		9.5			7.9			24.0			17.5	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.4	4.6	18.2		5.9	4.8	17.9				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		21.0	8.0	18.0		21.0	8.0	18.0				
Max Q Clear Time (g_c+I1), s		2.8	2.3	10.2		2.7	2.5	4.8				
Green Ext Time (p_c), s		0.1	0.0	3.9		0.2	0.0	1.9				

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	1	17	19	0	29	9	142	44	72	138	11
Future Volume (veh/h)	17	1	17	19	0	29	9	142	44	72	138	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	1	18	20	0	31	9	149	46	76	145	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	135	114	37	139	117	17	338	285	118	444	375
Arrive On Green	0.02	0.07	0.07	0.02	0.00	0.07	0.01	0.18	0.18	0.07	0.24	0.24
Sat Flow, veh/h	1781	1870	1575	1781	1870	1575	1781	1870	1576	1781	1870	1578
Grp Volume(v), veh/h	18	1	18	20	0	31	9	149	46	76	145	12
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1575	1781	1870	1576	1781	1870	1578
Q Serve(g_s), s	0.2	0.0	0.3	0.3	0.0	0.5	0.1	1.7	0.6	1.0	1.6	0.1
Cycle Q Clear(g_c), s	0.2	0.0	0.3	0.3	0.0	0.5	0.1	1.7	0.6	1.0	1.6	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	135	114	37	139	117	17	338	285	118	444	375
V/C Ratio(X)	0.54	0.01	0.16	0.54	0.00	0.27	0.52	0.44	0.16	0.65	0.33	0.03
Avail Cap(c_a), veh/h	588	1697	1430	588	1697	1430	588	1774	1495	588	1774	1497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	10.4	10.6	11.8	0.0	10.6	11.9	8.8	8.4	11.0	7.6	7.1
Incr Delay (d2), s/veh	12.6	0.0	0.6	11.7	0.0	1.2	22.2	0.9	0.3	5.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.2	0.0	0.1	0.1	0.5	0.1	0.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	10.5	11.2	23.4	0.0	11.8	34.1	9.7	8.6	16.8	8.1	7.1
LnGrp LOS	C	B	B	C	A	B	C	A	A	B	A	A
Approach Vol, veh/h		37			51			204			233	
Approach Delay, s/veh		17.6			16.4			10.6			10.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	8.4	4.5	5.7	4.2	9.8	4.5	5.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	23.0	8.0	22.0	8.0	23.0	8.0	22.0
Max Q Clear Time (g_c+I1), s	3.0	3.7	2.3	2.3	2.1	3.6	2.2	2.5
Green Ext Time (p_c), s	0.1	0.8	0.0	0.0	0.0	0.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	64	74	198	54	24	82	507	191	20	856	2
Future Volume (veh/h)	55	64	74	198	54	24	82	507	191	20	856	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	67	78	208	57	25	86	534	201	21	901	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	129	209	259	71	291	115	672	569	53	1180	3
Arrive On Green	0.13	0.13	0.13	0.18	0.18	0.18	0.06	0.36	0.36	0.03	0.32	0.32
Sat Flow, veh/h	848	980	1585	1413	387	1585	1781	1870	1585	1781	3638	8
Grp Volume(v), veh/h	125	0	78	265	0	25	86	534	201	21	440	463
Grp Sat Flow(s),veh/h/ln	1828	0	1585	1800	0	1585	1781	1870	1585	1781	1777	1869
Q Serve(g_s), s	3.7	0.0	2.6	8.2	0.0	0.8	2.8	15.0	5.4	0.7	13.0	13.0
Cycle Q Clear(g_c), s	3.7	0.0	2.6	8.2	0.0	0.8	2.8	15.0	5.4	0.7	13.0	13.0
Prop In Lane	0.46		1.00	0.78		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	241	0	209	330	0	291	115	672	569	53	576	606
V/C Ratio(X)	0.52	0.00	0.37	0.80	0.00	0.09	0.75	0.80	0.35	0.40	0.76	0.76
Avail Cap(c_a), veh/h	813	0	705	801	0	705	274	1591	1348	183	1453	1529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	23.2	22.8	0.0	19.8	26.9	16.8	13.7	27.8	17.7	17.7
Incr Delay (d2), s/veh	0.6	0.0	0.4	1.7	0.0	0.0	3.7	0.8	0.1	1.8	2.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.9	3.4	0.0	0.3	1.2	5.8	1.8	0.3	5.0	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	23.6	24.6	0.0	19.8	30.5	17.6	13.9	29.6	19.8	19.7
LnGrp LOS	C	A	C	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		203			290			821			924	
Approach Delay, s/veh		24.0			24.2			18.1			19.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	26.3		11.7	7.8	24.3		14.7
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	6.0	49.7		26.0	9.0	* 48		26.0
Max Q Clear Time (g_c+I1), s	2.7	17.0		5.7	4.8	15.0		10.2
Green Ext Time (p_c), s	0.0	1.8		0.4	0.0	4.0		0.6

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	215	0	379	444	4	0	329	333	0	418	324
Future Volume (veh/h)	206	215	0	379	444	4	0	329	333	0	418	324
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	217	226	0	399	467	4	0	346	351	0	440	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	324	340	0	590	613	5	0	553	469	0	553	
Arrive On Green	0.18	0.18	0.00	0.33	0.33	0.33	0.00	0.30	0.30	0.00	0.30	0.00
Sat Flow, veh/h	1781	1870	0	1781	1852	16	0	1870	1585	0	1870	0
Grp Volume(v), veh/h	217	226	0	399	0	471	0	346	351	0	440	0
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1868	0	1870	1585	0	1870	0
Q Serve(g_s), s	8.1	8.1	0.0	13.8	0.0	16.2	0.0	11.5	14.4	0.0	15.5	0.0
Cycle Q Clear(g_c), s	8.1	8.1	0.0	13.8	0.0	16.2	0.0	11.5	14.4	0.0	15.5	0.0
Prop In Lane	1.00		0.00	1.00		0.01	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	324	340	0	590	0	618	0	553	469	0	553	
V/C Ratio(X)	0.67	0.66	0.00	0.68	0.00	0.76	0.00	0.63	0.75	0.00	0.79	
Avail Cap(c_a), veh/h	566	595	0	740	0	776	0	751	637	0	1322	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	27.3	27.3	0.0	20.7	0.0	21.4	0.0	21.8	22.8	0.0	23.2	0.0
Incr Delay (d2), s/veh	5.0	4.7	0.0	3.1	0.0	5.1	0.0	2.5	5.6	0.0	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.9	0.0	5.7	0.0	7.3	0.0	5.1	5.8	0.0	6.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	32.0	0.0	23.8	0.0	26.6	0.0	24.3	28.5	0.0	25.2	0.0
LnGrp LOS	C	C	A	C	A	C	A	C	C	A	C	
Approach Vol, veh/h		443			870			697			440	A
Approach Delay, s/veh		32.2			25.3			26.4			25.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.9		26.5		17.2		26.5				
Change Period (Y+Rc), s		* 4.2		5.3		4.2		* 5.3				
Max Green Setting (Gmax), s		* 30		50.7		22.8		* 29				
Max Q Clear Time (g_c+I1), s		18.2		17.5		10.1		16.4				
Green Ext Time (p_c), s		5.6		1.4		2.9		4.9				

Intersection Summary												
HCM 6th Ctrl Delay			26.8									
HCM 6th LOS			C									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	525	174	41	476	26	241	29	74	7	36	17
Future Volume (veh/h)	19	525	174	41	476	26	241	29	74	7	36	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	553	183	43	501	27	254	31	78	7	38	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	815	709	176	684	35	606	42	369	172	250	107
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	23	1822	1585	57	1528	79	1462	178	1585	71	1075	458
Grp Volume(v), veh/h	573	0	183	571	0	0	285	0	78	63	0	0
Grp Sat Flow(s),veh/h/ln	1845	0	1585	1663	0	0	1641	0	1585	1605	0	0
Q Serve(g_s), s	0.0	0.0	1.9	1.1	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.3	0.0	1.9	7.4	0.0	0.0	3.7	0.0	1.0	3.7	0.0	0.0
Prop In Lane	0.03		1.00	0.08		0.05	0.89		1.00	0.11		0.29
Lane Grp Cap(c), veh/h	971	0	709	895	0	0	647	0	369	530	0	0
V/C Ratio(X)	0.59	0.00	0.26	0.64	0.00	0.00	0.44	0.00	0.21	0.12	0.00	0.00
Avail Cap(c_a), veh/h	1974	0	1594	1820	0	0	1461	0	1297	1523	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.6	0.0	4.4	5.7	0.0	0.0	9.0	0.0	7.9	7.8	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.2	0.6	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.2	1.0	0.0	0.0	0.8	0.0	0.2	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.1	0.0	4.6	6.3	0.0	0.0	9.2	0.0	8.0	7.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		756			571			363			63	
Approach Delay, s/veh		5.7			6.3			8.9			7.9	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.7	10.0	15.7	10.0
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 26	21.0	* 26	21.0
Max Q Clear Time (g_c+I1), s	8.3	5.7	9.4	5.7
Green Ext Time (p_c), s	2.7	0.7	2.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	485	13	51	671	65	18	39	28	122	80	80
Future Volume (veh/h)	46	485	13	51	671	65	18	39	28	122	80	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	511	14	54	706	68	19	41	29	128	84	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	900	24	138	845	79	492	240	170	276	127	104
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	75	1669	44	61	1568	146	1217	1019	721	570	540	440
Grp Volume(v), veh/h	573	0	0	828	0	0	19	0	70	296	0	0
Grp Sat Flow(s),veh/h/ln	1788	0	0	1775	0	0	1217	0	1741	1550	0	0
Q Serve(g_s), s	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	1.2	5.4	0.0	0.0
Cycle Q Clear(g_c), s	7.5	0.0	0.0	14.4	0.0	0.0	0.4	0.0	1.2	6.5	0.0	0.0
Prop In Lane	0.08		0.02	0.07		0.08	1.00		0.41	0.43		0.28
Lane Grp Cap(c), veh/h	1071	0	0	1062	0	0	492	0	410	507	0	0
V/C Ratio(X)	0.53	0.00	0.00	0.78	0.00	0.00	0.04	0.00	0.17	0.58	0.00	0.00
Avail Cap(c_a), veh/h	1706	0	0	1730	0	0	807	0	860	901	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.6	0.0	0.0	7.1	0.0	0.0	10.8	0.0	11.1	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	2.9	0.0	0.0	0.1	0.0	0.4	1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	0.0	0.0	8.0	0.0	0.0	10.8	0.0	11.2	13.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	A
Approach Vol, veh/h		573			828			89			296	
Approach Delay, s/veh		5.9			8.0			11.1			13.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	23.8	12.6	23.8	12.6
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 34	18.0	* 34	18.0
Max Q Clear Time (g_c+I1), s	9.5	3.2	16.4	8.5
Green Ext Time (p_c), s	2.2	0.1	3.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	457	25	479	460	12	46	39	318	69	107	53
Future Volume (veh/h)	64	457	25	479	460	12	46	39	318	69	107	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	481	24	504	484	12	48	41	42	73	113	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	548	27	562	1051	26	201	146	282	144	154	49
Arrive On Green	0.05	0.31	0.31	0.32	0.58	0.58	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1781	1766	88	1781	1817	45	629	822	1585	379	867	275
Grp Volume(v), veh/h	67	0	505	504	0	496	89	0	42	227	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1854	1781	0	1862	1451	0	1585	1521	0	0
Q Serve(g_s), s	2.3	0.0	16.0	16.8	0.0	9.5	0.0	0.0	1.4	6.2	0.0	0.0
Cycle Q Clear(g_c), s	2.3	0.0	16.0	16.8	0.0	9.5	2.9	0.0	1.4	9.1	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.02	0.54		1.00	0.32		0.18
Lane Grp Cap(c), veh/h	85	0	576	562	0	1077	347	0	282	347	0	0
V/C Ratio(X)	0.79	0.00	0.88	0.90	0.00	0.46	0.26	0.00	0.15	0.65	0.00	0.00
Avail Cap(c_a), veh/h	229	0	799	745	0	1342	440	0	382	449	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.3	0.0	20.3	20.3	0.0	7.5	22.1	0.0	21.6	24.8	0.0	0.0
Incr Delay (d2), s/veh	5.9	0.0	7.7	9.3	0.0	0.2	0.1	0.0	0.1	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	7.5	7.7	0.0	3.0	1.1	0.0	0.5	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.1	0.0	28.0	29.6	0.0	7.8	22.3	0.0	21.7	25.7	0.0	0.0
LnGrp LOS	D	A	C	C	A	A	C	A	C	C	A	A
Approach Vol, veh/h		572			1000			131			227	
Approach Delay, s/veh		28.8			18.8			22.1			25.7	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.6	23.5		15.0	7.0	40.1		15.0
Change Period (Y+Rc), s	4.0	* 4.2		4.0	4.0	* 4.2		4.0
Max Green Setting (Gmax), s	26.0	* 27		15.0	8.0	* 45		15.0
Max Q Clear Time (g_c+I1), s	18.8	18.0		4.9	4.3	11.5		11.1
Green Ext Time (p_c), s	0.8	1.3		0.1	0.0	1.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	110	214	200	110	28	548	1101	56	39	1127	0
Future Volume (veh/h)	70	110	214	200	110	28	548	1101	56	39	1127	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	116	78	211	116	4	577	1159	30	41	1186	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	112	158	200	110	272	547	1365	609	399	1119	
Arrive On Green	0.10	0.10	0.10	0.17	0.17	0.17	0.31	0.38	0.38	0.22	0.31	0.00
Sat Flow, veh/h	715	1120	1585	1169	643	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	190	0	78	327	0	4	577	1159	30	41	1186	0
Grp Sat Flow(s),veh/h/ln	1835	0	1585	1812	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	14.0	0.0	6.5	24.0	0.0	0.3	43.0	41.8	1.7	2.6	44.1	0.0
Cycle Q Clear(g_c), s	14.0	0.0	6.5	24.0	0.0	0.3	43.0	41.8	1.7	2.6	44.1	0.0
Prop In Lane	0.39		1.00	0.65		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	158	310	0	272	547	1365	609	399	1119	
V/C Ratio(X)	1.04	0.00	0.49	1.05	0.00	0.01	1.06	0.85	0.05	0.10	1.06	
Avail Cap(c_a), veh/h	183	0	158	310	0	272	547	1905	850	399	1119	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	63.1	0.0	59.7	58.1	0.0	48.2	48.6	39.4	27.1	43.2	48.0	0.0
Incr Delay (d2), s/veh	76.3	0.0	0.9	65.8	0.0	0.0	53.9	3.2	0.0	0.0	44.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	0.0	2.7	16.8	0.0	0.1	26.8	18.3	0.6	1.1	25.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	139.4	0.0	60.6	123.9	0.0	48.2	102.5	42.6	27.1	43.2	92.4	0.0
LnGrp LOS	F	A	E	F	A	D	F	D	C	D	F	
Approach Vol, veh/h		268			331			1766			1227	A
Approach Delay, s/veh		116.5			123.0			61.9			90.8	
Approach LOS		F			F			E			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	35.4	58.7		28.0	46.0	48.1		18.0
Change Period (Y+Rc), s	4.0	4.9		4.0	3.0	* 4		4.0
Max Green Setting (Gmax), s	10.0	75.1		24.0	43.0	* 44		14.0
Max Q Clear Time (g_c+I1), s	4.6	43.8		26.0	45.0	46.1		16.0
Green Ext Time (p_c), s	0.0	10.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	81.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	651	0	0	606	292	0	0	0	219	0	32
Future Volume (veh/h)	62	651	0	0	606	292	0	0	0	219	0	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	685	0	0	638	307	0	0	0	263	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	2218	0	0	853	720	0	5	0	523	274	0
Arrive On Green	0.05	0.62	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.15	0.00	0.00
Sat Flow, veh/h	1781	3647	0	0	1870	1578	0	1870	0	3563	1870	0
Grp Volume(v), veh/h	65	685	0	0	638	307	0	0	0	263	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1578	0	1870	0	1781	1870	0
Q Serve(g_s), s	1.3	3.1	0.0	0.0	9.8	4.6	0.0	0.0	0.0	2.4	0.0	0.0
Cycle Q Clear(g_c), s	1.3	3.1	0.0	0.0	9.8	4.6	0.0	0.0	0.0	2.4	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	95	2218	0	0	853	720	0	5	0	523	274	0
V/C Ratio(X)	0.68	0.31	0.00	0.00	0.75	0.43	0.00	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	408	3053	0	0	1178	994	0	429	0	2245	1178	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.2	3.1	0.0	0.0	7.8	6.4	0.0	0.0	0.0	13.7	0.0	0.0
Incr Delay (d2), s/veh	8.2	0.1	0.0	0.0	1.7	0.4	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.3	0.0	0.0	2.7	1.0	0.0	0.0	0.0	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	3.1	0.0	0.0	9.6	6.8	0.0	0.0	0.0	14.5	0.0	0.0
LnGrp LOS	C	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		750			945			0			263	
Approach Delay, s/veh		5.0			8.7			0.0			14.5	
Approach LOS		A			A						B	

Timer - Assigned Phs	2	4	6	7	8
Phs Duration (G+Y+Rc), s	0.0	25.8	9.1	5.9	19.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	30.0	22.0	8.0	22.0
Max Q Clear Time (g_c+I1), s	0.0	5.1	4.4	3.3	11.8
Green Ext Time (p_c), s	0.0	5.0	0.8	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	338	580	583	252	54	593
Future Volume (veh/h)	338	580	583	252	54	593
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	356	132	440	509	57	187
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	451	402	520	1047	326	275
Arrive On Green	0.25	0.25	0.29	0.56	0.17	0.17
Sat Flow, veh/h	1781	1585	1781	1870	1870	1576
Grp Volume(v), veh/h	356	132	440	509	57	187
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1576
Q Serve(g_s), s	8.0	2.9	9.9	7.0	1.1	4.8
Cycle Q Clear(g_c), s	8.0	2.9	9.9	7.0	1.1	4.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	451	402	520	1047	326	275
V/C Ratio(X)	0.79	0.33	0.85	0.49	0.17	0.68
Avail Cap(c_a), veh/h	666	593	666	1574	700	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	13.0	14.2	5.7	15.0	16.5
Incr Delay (d2), s/veh	3.9	0.5	8.0	0.4	0.3	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	2.8	4.4	1.7	0.4	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.8	13.5	22.3	6.1	15.3	19.5
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	488			949	244	
Approach Delay, s/veh	17.3			13.6	18.5	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		27.9		14.8	16.5	11.5
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		36.0		16.0	16.0	16.0
Max Q Clear Time (g_c+I1), s		9.0		10.0	11.9	6.8
Green Ext Time (p_c), s		3.5		0.9	0.6	0.6

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection 10 **Diamond Creek Blvd-Prarie Woods Wy/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	195	179	91.6%	140.4	58.7	F
	Through	66	60	90.4%	128.8	68.1	F
	Right Turn	47	49	105.1%	60.5	65.3	E
	Subtotal	308	288	93.4%	124.6	62.8	F
SB	Left Turn	245	247	101.0%	48.1	4.1	D
	Through	30	35	115.3%	57.9	9.3	E
	Right Turn	169	155	92.0%	48.6	6.1	D
	Subtotal	444	437	98.5%	49.0	3.5	D
EB	Left Turn	54	55	102.7%	64.5	9.9	E
	Through	1,445	1,434	99.2%	26.2	3.8	C
	Right Turn	30	37	124.1%	6.5	1.3	A
	Subtotal	1,529	1,526	99.8%	27.2	3.6	C
WB	Left Turn	52	41	78.2%	90.1	14.6	F
	Through	2,296	1,955	85.1%	34.1	8.8	C
	Right Turn	272	211	77.7%	16.3	6.5	B
	Subtotal	2,620	2,207	84.2%	33.5	8.2	C
Total		4,901	4,458	91.0%	38.7	5.5	D

Intersection 11 **Woodcreek Oaks Blvd/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	323	320	98.9%	76.4	15.2	E
	Through	413	400	96.9%	54.4	5.1	D
	Right Turn	201	191	95.1%	16.7	4.7	B
	Subtotal	937	911	97.2%	54.3	7.0	D
SB	Left Turn	386	372	96.5%	63.0	3.9	E
	Through	592	570	96.3%	72.8	10.8	E
	Right Turn	44	46	103.6%	26.4	9.5	C
	Subtotal	1,022	988	96.7%	67.0	7.0	E
EB	Left Turn	154	155	100.4%	76.5	7.9	E
	Through	1,380	1,344	97.4%	61.2	12.2	E
	Right Turn	151	160	105.9%	22.4	4.2	C
	Subtotal	1,685	1,659	98.4%	58.8	10.0	E
WB	Left Turn	522	416	79.8%	43.9	14.9	D
	Through	2,096	1,701	81.1%	26.3	11.9	C
	Right Turn	337	248	73.5%	16.8	5.9	B
	Subtotal	2,955	2,365	80.0%	28.5	12.1	C
Total		6,599	5,923	89.8%	47.5	3.8	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 12 **Walgreens Dwy-Roseville Pkwy/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	5	98.8%	24.2	20.9	C
	Through	5	7	136.8%	25.2	22.8	C
	Right Turn	5	4	76.0%	10.0	12.1	A
	Subtotal	15	16	103.9%	26.4	11.0	C
SB	Left Turn	72	65	89.7%	63.3	13.7	E
	Through	16	17	104.5%	27.3	16.3	C
	Right Turn						
	Subtotal	88	81	92.4%	56.3	13.0	E
EB	Left Turn	11	11	103.6%	72.5	29.4	E
	Through	1,912	1,840	96.2%	25.0	10.9	C
	Right Turn	5	5	91.2%	8.0	2.8	A
	Subtotal	1,928	1,856	96.2%	25.3	10.7	C
WB	Left Turn	5	4	76.0%	73.3	44.8	E
	Through	2,824	2,217	78.5%	15.7	3.5	B
	Right Turn	32	24	73.6%	2.1	1.1	A
	Subtotal	2,861	2,245	78.5%	15.7	3.4	B
Total		4,892	4,197	85.8%	20.8	4.6	C

Intersection 13 **New Meadow Dr/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	76.0%	51.5	45.4	D
	Through	5	4	83.6%	46.2	36.0	D
	Right Turn	5	5	91.2%	8.8	7.7	A
	Subtotal	15	13	83.6%	42.7	32.2	D
SB	Left Turn	123	131	106.6%	54.3	6.5	D
	Through	5	6	121.6%	54.7	44.1	D
	Right Turn	25	24	97.3%	18.9	18.7	B
	Subtotal	153	162	105.6%	49.3	7.5	D
EB	Left Turn	40	41	102.6%	59.6	17.8	E
	Through	1,944	1,875	96.4%	11.0	2.7	B
	Right Turn	5	7	136.8%	4.1	3.5	A
	Subtotal	1,989	1,922	96.7%	11.9	2.8	B
WB	Left Turn	5	5	91.2%	61.8	43.1	E
	Through	2,831	2,233	78.9%	10.4	2.2	B
	Right Turn	314	252	80.2%	7.7	1.1	A
	Subtotal	3,150	2,489	79.0%	10.2	2.1	B
Total		5,307	4,586	86.4%	12.4	2.0	B

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 14 **Collector C/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	10	95.0%	51.0	25.3	D
	Through	10	8	83.6%	47.0	40.5	D
	Right Turn	10	10	95.0%	7.9	6.2	A
	Subtotal	30	27	91.2%	44.7	12.1	D
SB	Left Turn	10	10	102.6%	80.7	35.8	F
	Through	10	9	87.4%	38.8	29.8	D
	Right Turn	10	16	155.8%	44.3	25.4	D
	Subtotal	30	35	115.3%	55.1	15.1	E
EB	Left Turn	10	11	114.0%	89.4	31.9	F
	Through	2,143	2,041	95.2%	15.5	3.9	B
	Right Turn	10	11	110.2%	9.0	7.3	A
	Subtotal	2,163	2,063	95.4%	15.8	3.9	B
WB	Left Turn	10	9	91.2%	83.0	11.3	F
	Through	3,205	2,523	78.7%	8.3	0.3	A
	Right Turn	10	9	91.2%	4.4	2.5	A
	Subtotal	3,225	2,541	78.8%	8.5	0.3	A
Total		5,448	4,667	85.7%	12.3	1.7	B

Intersection 15 **Foothills Blvd/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	347	257	74.1%	186.9	31.2	F
	Through	916	714	77.9%	213.5	31.4	F
	Right Turn	568	409	71.9%	175.3	34.1	F
	Subtotal	1,831	1,379	75.3%	197.3	32.1	F
SB	Left Turn	733	534	72.8%	223.0	56.3	F
	Through	678	692	102.1%	48.3	2.5	D
	Right Turn	301	295	97.8%	20.8	3.2	C
	Subtotal	1,712	1,521	88.8%	104.8	21.0	F
EB	Left Turn	113	90	80.0%	81.7	10.2	F
	Through	1,803	1,687	93.6%	50.7	10.0	D
	Right Turn	247	226	91.7%	21.9	4.6	C
	Subtotal	2,163	2,004	92.7%	48.9	8.8	D
WB	Left Turn	326	259	79.5%	62.3	6.5	E
	Through	2,577	1,998	77.5%	44.0	2.7	D
	Right Turn	470	372	79.2%	22.2	1.7	C
	Subtotal	3,373	2,630	78.0%	42.7	2.5	D
Total		9,079	7,534	83.0%	85.1	8.4	F

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 16 **SR 65 Ramps-Fidelity Wy/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	153	118	77.2%	184.2	59.2	F
	Through						
	Right Turn	130	101	78.0%	162.7	55.7	F
	Subtotal	283	220	77.6%	174.6	56.0	F
SB	Left Turn						
	Through						
	Right Turn	1,090	1,081	99.2%	4.3	1.7	A
	Subtotal	1,090	1,081	99.2%	4.3	1.7	A
EB	Left Turn						
	Through	3,271	2,479	75.8%	66.1	58.2	E
	Right Turn	23	16	71.0%	51.2	53.1	D
	Subtotal	3,294	2,495	75.8%	66.0	58.1	E
WB	Left Turn	35	16	45.6%	60.0	9.9	E
	Through	2,266	1,507	66.5%	5.7	0.3	A
	Right Turn						
	Subtotal	2,301	1,523	66.2%	6.2	0.3	A
Total		6,968	5,320	76.3%	40.6	25.8	D

Intersection 17 **SR 65 Ramps-Washington Blvd/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	810	269	33.2%	431.1	16.0	F
	Through						
	Right Turn	797	497	62.3%	206.6	32.9	F
	Subtotal	1,607	765	47.6%	285.6	27.8	F
SB	Left Turn	131	91	69.6%	227.9	32.9	F
	Through	496	344	69.3%	228.9	24.5	F
	Right Turn	249	173	69.6%	183.4	35.1	F
	Subtotal	876	608	69.4%	215.7	26.1	F
EB	Left Turn						
	Through	2,860	2,061	72.1%	84.9	12.4	F
	Right Turn	541	381	70.4%	72.7	9.2	E
	Subtotal	3,401	2,442	71.8%	83.1	12.0	F
WB	Left Turn	445	320	71.9%	250.8	42.4	F
	Through	1,242	1,075	86.5%	83.4	28.0	F
	Right Turn	378	328	86.8%	73.3	32.4	E
	Subtotal	2,065	1,723	83.4%	112.6	31.1	F
Total		7,949	5,537	69.7%	134.4	11.7	F

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 31 **Foothills Blvd/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	347	317	91.4%	115.5	32.7	F
	Through	598	607	101.5%	47.0	5.7	D
	Right Turn	563	485	86.1%	89.8	41.8	F
	Subtotal	1,508	1,409	93.4%	77.1	17.0	E
SB	Left Turn	240	206	85.7%	176.0	50.2	F
	Through	1,509	1,309	86.8%	120.3	20.2	F
	Right Turn	495	408	82.4%	143.4	38.6	F
	Subtotal	2,244	1,923	85.7%	131.9	20.3	F
EB	Left Turn	326	322	98.8%	112.4	28.3	F
	Through	1,486	1,466	98.7%	64.5	14.6	E
	Right Turn	160	159	99.3%	29.5	10.3	C
	Subtotal	1,972	1,948	98.8%	69.7	14.9	E
WB	Left Turn	764	634	83.0%	80.2	8.6	F
	Through	1,951	1,651	84.6%	50.7	9.8	D
	Right Turn	106	99	93.6%	28.4	8.1	C
	Subtotal	2,821	2,385	84.5%	57.7	7.2	E
Total		8,545	7,664	89.7%	82.8	6.3	F

Intersection 32 **Washington Blvd/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	380	312	82.1%	212.6	48.0	F
	Through	577	561	97.1%	46.9	2.8	D
	Right Turn	352	352	100.0%	8.2	1.3	A
	Subtotal	1,309	1,224	93.5%	78.3	13.7	E
SB	Left Turn	160	133	83.1%	210.0	42.0	F
	Through	1,081	867	80.2%	184.5	44.5	F
	Right Turn	212	166	78.2%	166.9	42.5	F
	Subtotal	1,453	1,165	80.2%	185.0	43.7	F
EB	Left Turn	193	152	78.6%	115.1	22.6	F
	Through	1,871	1,587	84.8%	93.6	10.0	F
	Right Turn	178	157	88.4%	73.7	9.4	E
	Subtotal	2,242	1,895	84.5%	93.8	10.4	F
WB	Left Turn	420	327	77.8%	257.8	46.1	F
	Through	2,161	1,799	83.2%	199.0	25.0	F
	Right Turn	85	78	92.1%	147.3	27.7	F
	Subtotal	2,666	2,204	82.7%	206.0	25.3	F
Total		7,670	6,489	84.6%	145.3	13.4	F

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 33 **Hallisy Dr-Gold Coast Dr/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	365	366	100.4%	88.6	31.1	F
	Through	81	80	99.0%	94.2	38.0	F
	Right Turn	35	35	99.9%	58.3	32.2	E
	Subtotal	481	481	100.1%	87.1	31.3	F
SB	Left Turn	83	81	98.0%	49.8	9.7	D
	Through	35	37	106.4%	28.0	11.9	C
	Right Turn						
	Subtotal	118	119	100.5%	42.3	6.1	D
EB	Left Turn	21	17	83.2%	92.5	12.6	F
	Through	2,256	1,960	86.9%	40.9	6.8	D
	Right Turn	29	25	85.2%	22.3	3.8	C
	Subtotal	2,306	2,002	86.8%	41.2	6.7	D
WB	Left Turn	78	88	113.0%	62.5	12.4	E
	Through	2,293	2,285	99.7%	28.5	5.0	C
	Right Turn	94	97	103.1%	12.7	2.0	B
	Subtotal	2,465	2,470	100.2%	29.1	5.0	C
Total		5,370	5,073	94.5%	39.7	5.4	D

Intersection 35 **Pleasant Grove Blvd/Highland Pointe Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	383	343	89.6%	135.5	26.8	F
	Through	2,557	1,770	69.2%	226.7	20.5	F
	Right Turn	36	19	53.8%	253.3	46.8	F
	Subtotal	2,976	2,132	71.6%	212.4	18.7	F
SB	Left Turn	185	168	91.0%	98.0	17.2	F
	Through	1,863	1,779	95.5%	52.5	21.2	D
	Right Turn	286	271	94.9%	16.2	10.2	B
	Subtotal	2,334	2,219	95.1%	51.7	19.7	D
EB	Left Turn	550	365	66.3%	252.6	30.2	F
	Through	5	6	114.0%	61.6	40.1	E
	Right Turn	443	395	89.1%	60.0	17.2	E
	Subtotal	998	765	76.7%	152.1	19.2	F
WB	Left Turn	273	264	96.9%	63.6	8.9	E
	Through	40	39	96.9%	64.6	18.8	E
	Right Turn	347	375	108.2%	43.2	15.1	D
	Subtotal	660	679	102.8%	52.3	11.5	D
Total		6,968	5,795	83.2%	124.1	10.2	F

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 36 **SR 65 SB Ramps/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	100	105	105.3%	25.9	5.9	C
	Through						
	Right Turn	460	458	99.5%	27.9	6.5	C
	Subtotal	560	563	100.5%	27.6	6.2	C
EB	Left Turn						
	Through	2,474	1,868	75.5%	17.4	2.6	B
	Right Turn	401	240	59.9%	16.2	3.0	B
	Subtotal	2,875	2,108	73.3%	17.3	2.4	B
WB	Left Turn						
	Through	2,216	2,070	93.4%	21.4	25.0	C
	Right Turn	315	285	90.4%	12.7	15.6	B
	Subtotal	2,531	2,354	93.0%	20.3	23.8	C
Total		5,966	5,025	84.2%	19.8	11.6	B

Intersection 37 **SR 65 NB Ramps/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	649	622	95.8%	54.6	12.5	D
	Through						
	Right Turn	665	639	96.1%	19.9	2.3	B
	Subtotal	1,314	1,260	95.9%	37.0	6.1	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	2,098	1,624	77.4%	19.0	5.4	B
	Right Turn	476	344	72.2%	10.7	1.6	B
	Subtotal	2,574	1,968	76.4%	17.6	4.7	B
WB	Left Turn	181	159	87.8%	46.6	14.9	D
	Through	1,882	1,767	93.9%	5.4	1.9	A
	Right Turn						
	Subtotal	2,063	1,925	93.3%	8.9	2.3	A
Total		5,951	5,154	86.6%	19.2	2.1	B

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 38 **Fairway Dr/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	653	580	88.7%	54.0	5.9	D
	Through	1,160	974	84.0%	34.3	3.1	C
	Right Turn	592	446	75.3%	15.7	2.6	B
	Subtotal	2,405	2,000	83.1%	36.0	2.8	D
SB	Left Turn	111	115	103.7%	70.9	7.8	E
	Through	665	676	101.7%	55.5	4.7	E
	Right Turn	152	150	99.0%	23.6	6.1	C
	Subtotal	928	942	101.5%	52.4	4.4	D
EB	Left Turn	287	298	103.7%	61.2	5.9	E
	Through	581	573	98.6%	54.1	4.7	D
	Right Turn	583	476	81.7%	149.9	49.4	F
	Subtotal	1,451	1,347	92.8%	89.2	18.5	F
WB	Left Turn	617	588	95.3%	88.6	24.8	F
	Through	676	682	101.0%	41.9	4.1	D
	Right Turn	144	146	101.6%	10.9	2.0	B
	Subtotal	1,437	1,417	98.6%	58.3	12.0	E
Total		6,221	5,705	91.7%	56.9	7.2	E

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 34 **Pleasant Grove Blvd/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1,100	678	61.6%	122.7	23.5	F
	Through	1,302	924	71.0%	65.2	9.5	E
	Right Turn	1,134	805	71.0%	22.1	3.9	C
	Subtotal	3,536	2,406	68.0%	67.1	11.2	E
SB	Left Turn	444	380	85.7%	135.7	49.8	F
	Through	956	780	81.6%	178.7	56.9	F
	Right Turn	21	17	81.4%	50.6	38.5	D
	Subtotal	1,421	1,178	82.9%	163.7	51.6	F
EB	Left Turn	47	38	80.9%	137.7	39.8	F
	Through	1,352	1,178	87.1%	129.8	39.5	F
	Right Turn	889	762	85.7%	92.4	49.4	F
	Subtotal	2,288	1,978	86.4%	115.4	44.3	F
WB	Left Turn	820	472	57.6%	322.8	39.7	F
	Through	1,586	1,532	96.6%	54.7	8.2	D
	Right Turn	284	267	94.1%	22.0	5.4	C
	Subtotal	2,690	2,271	84.4%	106.5	11.1	F
Total		9,935	7,833	78.8%	104.3	12.9	F

Intersection 63 **Gibson Dr (W)/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	40	29	71.3%	119.4	25.1	F
	Through						
	Right Turn	1,209	1,021	84.4%	78.4	29.1	E
	Subtotal	1,249	1,049	84.0%	79.4	28.6	E
EB	Left Turn	462	339	73.3%	92.7	20.4	F
	Through	2,195	1,660	75.6%	20.7	4.1	C
	Right Turn						
	Subtotal	2,657	1,999	75.2%	33.1	6.1	C
WB	Left Turn						
	Through	2,339	1,513	64.7%	92.7	14.7	F
	Right Turn	30	19	63.3%	93.2	35.0	F
	Subtotal	2,369	1,532	64.7%	92.6	14.7	F
Total		6,275	4,580	73.0%	63.4	6.4	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 64 **Chase Dr/Rosville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	37	74.5%	52.9	15.5	D
	Through						
	Right Turn	77	73	95.2%	1.5	0.3	A
	Subtotal	127	111	87.1%	18.1	3.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	2,157	1,606	74.5%	30.4	17.9	C
	Right Turn	78	63	80.4%	12.4	3.6	B
	Subtotal	2,235	1,669	74.7%	29.6	17.1	C
WB	Left Turn	464	354	76.3%	73.5	11.8	E
	Through	2,319	1,769	76.3%	24.5	3.8	C
	Right Turn						
	Subtotal	2,783	2,123	76.3%	32.7	5.1	C
Total		5,145	3,902	75.8%	30.9	7.1	C

Intersection 65 **Gibson Dr-Castaic Dr/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	1	57.0%	16.5	40.8	B
	Through	3	3	88.7%	44.0	62.2	D
	Right Turn	45	49	108.9%	33.5	10.2	C
	Subtotal	50	53	105.6%	37.9	15.2	D
SB	Left Turn	1,118	851	76.1%	191.4	43.5	F
	Through	7	4	54.3%	218.7	89.4	F
	Right Turn	345	256	74.2%	171.8	51.5	F
	Subtotal	1,470	1,111	75.6%	187.2	45.3	F
EB	Left Turn	200	135	67.3%	228.6	101.5	F
	Through	2,028	1,503	74.1%	24.8	21.0	C
	Right Turn	1	2	152.0%	12.5	14.3	B
	Subtotal	2,229	1,639	73.5%	40.6	25.2	D
WB	Left Turn	42	36	85.0%	99.1	26.4	F
	Through	2,436	1,909	78.4%	59.2	28.3	E
	Right Turn	603	457	75.8%	24.0	15.7	C
	Subtotal	3,081	2,402	77.9%	53.2	26.0	D
Total		6,830	5,204	76.2%	76.7	13.3	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 66 **West Dr/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	39	30	77.9%	67.0	20.1	E
	Through	2,690	2,131	79.2%	19.1	9.1	B
	Right Turn	114	101	89.0%	2.5	1.1	A
	Subtotal	2,843	2,263	79.6%	18.9	8.5	B
SB	Left Turn	282	201	71.3%	79.4	13.6	E
	Through	2,899	2,206	76.1%	16.8	5.2	B
	Right Turn	31	25	79.7%	7.5	6.4	A
	Subtotal	3,212	2,432	75.7%	21.8	6.0	C
EB	Left Turn	26	17	67.2%	61.7	20.4	E
	Through	3	2	76.0%	45.2	63.4	D
	Right Turn	24	26	109.3%	35.6	13.3	D
	Subtotal	53	46	86.8%	47.9	13.5	D
WB	Left Turn	133	132	99.4%	58.0	7.1	E
	Through	2	2	95.0%	24.9	33.7	C
	Right Turn	350	362	103.5%	23.3	5.7	C
	Subtotal	485	496	102.3%	32.8	5.3	C
Total		6,593	5,237	79.4%	21.9	6.3	C

Intersection 67 **Reserve Dr/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	421	325	77.2%	167.7	48.3	F
	Through	100	79	79.0%	175.7	31.9	F
	Right Turn	365	297	81.3%	118.7	52.8	F
	Subtotal	886	701	79.1%	147.9	47.8	F
SB	Left Turn	250	262	104.7%	42.4	4.8	D
	Through	174	170	97.6%	44.5	5.2	D
	Right Turn	83	90	108.5%	4.1	1.6	A
	Subtotal	507	522	102.9%	36.5	4.7	D
EB	Left Turn	34	25	73.8%	72.5	16.0	E
	Through	2,623	1,979	75.4%	51.3	10.6	D
	Right Turn	349	256	73.3%	29.5	9.2	C
	Subtotal	3,006	2,260	75.2%	49.1	10.5	D
WB	Left Turn	326	266	81.5%	100.3	25.0	F
	Through	2,328	1,852	79.5%	42.6	8.2	D
	Right Turn	197	152	77.2%	21.0	4.6	C
	Subtotal	2,851	2,269	79.6%	48.0	8.1	D
Total		7,250	5,752	79.3%	59.6	6.1	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 68 **Galleria Blvd/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	478	366	76.5%	203.5	58.2	F
	Through	877	875	99.7%	55.5	5.3	E
	Right Turn	64	65	102.1%	7.1	2.1	A
	Subtotal	1,419	1,306	92.0%	94.5	18.7	F
SB	Left Turn	619	459	74.2%	234.3	44.7	F
	Through	654	624	95.5%	67.4	7.4	E
	Right Turn	577	562	97.5%	19.5	6.9	B
	Subtotal	1,850	1,646	89.0%	97.6	15.3	F
EB	Left Turn	674	510	75.7%	85.4	14.2	F
	Through	1,782	1,421	79.7%	43.6	7.1	D
	Right Turn	809	640	79.1%	12.5	1.1	B
	Subtotal	3,265	2,571	78.7%	44.2	6.2	D
WB	Left Turn	247	212	86.0%	92.9	15.9	F
	Through	1,812	1,430	78.9%	73.1	12.2	E
	Right Turn	741	616	83.1%	12.6	3.6	B
	Subtotal	2,800	2,258	80.6%	58.5	8.9	E
Total		9,334	7,781	83.4%	68.1	5.6	E

Intersection 69 **Creekside Ridge Dr/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	29	27	94.3%	73.5	20.9	E
	Through	10	15	148.2%	71.6	31.6	E
	Right Turn	23	22	95.8%	5.3	2.5	A
	Subtotal	62	64	103.6%	52.1	12.3	D
SB	Left Turn	478	476	99.6%	89.8	23.1	F
	Through	4	3	66.5%	50.3	46.7	D
	Right Turn	137	138	100.7%	70.1	23.0	E
	Subtotal	619	617	99.6%	85.4	23.0	F
EB	Left Turn	87	74	85.2%	79.7	10.7	E
	Through	2,301	1,793	77.9%	27.9	2.6	C
	Right Turn	17	14	80.5%	7.5	1.0	A
	Subtotal	2,405	1,881	78.2%	29.7	2.7	C
WB	Left Turn	42	39	93.2%	96.9	18.1	F
	Through	2,521	2,086	82.7%	44.2	9.1	D
	Right Turn	274	206	75.0%	32.9	9.2	C
	Subtotal	2,837	2,331	82.1%	44.1	9.2	D
Total		5,923	4,892	82.6%	44.0	6.1	D

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 70 **Taylor Rd/E Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	523	494	94.5%	87.9	30.5	F
	Through	396	389	98.2%	49.9	6.6	D
	Right Turn	234	233	99.7%	24.4	3.9	C
	Subtotal	1,153	1,116	96.8%	61.8	14.9	E
SB	Left Turn	681	282	41.5%	394.1	21.7	F
	Through	416	365	87.7%	66.9	13.5	E
	Right Turn	230	211	91.9%	53.6	13.7	D
	Subtotal	1,327	858	64.7%	171.8	21.6	F
EB	Left Turn	360	184	51.0%	270.8	54.6	F
	Through	2,055	1,436	69.9%	104.5	23.8	F
	Right Turn	387	256	66.1%	78.4	17.9	E
	Subtotal	2,802	1,876	66.9%	117.3	23.4	F
WB	Left Turn	252	179	70.9%	190.5	53.9	F
	Through	2,081	1,641	78.8%	95.9	16.9	F
	Right Turn	942	635	67.4%	85.1	8.4	F
	Subtotal	3,275	2,455	75.0%	100.1	15.3	F
Total		8,557	6,305	73.7%	107.9	10.4	F

Intersection 71 **N Sunrise Ave/E Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	598	543	90.9%	139.5	41.9	F
	Through	129	140	108.4%	39.0	8.3	D
	Right Turn	436	440	101.0%	7.7	3.7	A
	Subtotal	1,163	1,124	96.6%	75.5	20.4	E
SB	Left Turn	97	70	72.1%	281.5	51.5	F
	Through	370	287	77.5%	243.6	39.4	F
	Right Turn	306	298	97.5%	38.6	11.9	D
	Subtotal	773	655	84.8%	153.9	25.2	F
EB	Left Turn	106	72	67.8%	67.5	6.9	E
	Through	2,103	1,385	65.9%	53.4	6.7	D
	Right Turn	495	305	61.6%	16.6	4.5	B
	Subtotal	2,704	1,762	65.2%	47.6	6.5	D
WB	Left Turn	396	334	84.4%	143.7	34.3	F
	Through	2,191	1,732	79.1%	87.0	19.1	F
	Right Turn	44	33	75.1%	53.6	14.2	D
	Subtotal	2,631	2,100	79.8%	95.7	19.7	F
Total		7,271	5,641	77.6%	83.2	9.3	F

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 72 **Secret Ravine Pkwy/E Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	76.0%	20.7	43.7	C
	Through						
	Right Turn						
	Subtotal	1	1	76.0%	20.7	43.7	C
SB	Left Turn	139	133	95.4%	56.3	12.6	E
	Through						
	Right Turn	574	529	92.2%	68.8	24.5	E
	Subtotal	713	662	92.8%	66.2	21.1	E
EB	Left Turn	741	508	68.6%	60.4	21.2	E
	Through	1,843	1,273	69.1%	38.4	22.9	D
	Right Turn	4	3	66.5%	14.2	11.4	B
	Subtotal	2,588	1,784	68.9%	44.6	22.5	D
WB	Left Turn	13	14	108.2%	68.6	24.7	E
	Through	2,024	1,726	85.3%	53.9	14.0	D
	Right Turn	151	149	98.4%	34.7	21.7	C
	Subtotal	2,188	1,888	86.3%	52.5	14.2	D
Total		5,490	4,335	79.0%	51.0	12.7	D

Intersection 73 **E Roseville Pkwy/Alexandra Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,054	2,032	98.9%	18.9	3.4	B
	Right Turn	381	372	97.6%	14.4	2.0	B
	Subtotal	2,435	2,404	98.7%	18.2	3.1	B
SB	Left Turn	120	86	71.6%	30.7	3.9	C
	Through	1,845	1,329	72.0%	12.2	3.9	B
	Right Turn						
	Subtotal	1,965	1,415	72.0%	13.3	3.9	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	76	71	93.5%	22.2	3.8	C
	Through						
	Right Turn	64	70	109.8%	12.2	2.1	B
	Subtotal	140	141	101.0%	17.2	2.1	B
Total		4,540	3,960	87.2%	16.5	2.6	B

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 74 **E Roseville Pkwy/Rocky Ridge Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	96	89	92.6%	68.4	5.4	E
	Through	2,146	2,128	99.1%	15.9	3.8	B
	Right Turn						
	Subtotal	2,242	2,217	98.9%	18.0	3.5	B
SB	Left Turn						
	Through	1,686	1,251	74.2%	16.8	3.4	B
	Right Turn	235	178	75.8%	9.4	1.6	A
	Subtotal	1,921	1,429	74.4%	15.9	3.2	B
EB	Left Turn	289	281	97.3%	56.5	6.6	E
	Through						
	Right Turn	280	262	93.5%	19.0	5.1	B
	Subtotal	569	543	95.4%	38.4	4.8	D
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		4,732	4,189	88.5%	19.9	1.8	B

Intersection 75 **E Roseville Pkwy/Lead Hill Blvd-Orvietto Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	210	189	89.9%	66.1	9.8	E
	Through	1,851	1,816	98.1%	19.0	1.8	B
	Right Turn	4	5	123.5%	3.0	2.5	A
	Subtotal	2,065	2,010	97.3%	23.4	2.2	C
SB	Left Turn	17	19	111.8%	70.6	30.5	E
	Through	1,890	1,420	75.2%	34.9	7.4	C
	Right Turn	76	56	74.0%	16.0	6.9	B
	Subtotal	1,983	1,496	75.4%	34.6	7.3	C
EB	Left Turn	397	411	103.6%	72.1	17.2	E
	Through	22	21	96.7%	74.3	31.0	E
	Right Turn	264	271	102.5%	20.9	4.7	C
	Subtotal	683	703	102.9%	52.5	13.0	D
WB	Left Turn	3	2	63.3%	36.4	43.8	D
	Through	20	21	104.5%	53.3	14.3	D
	Right Turn						
	Subtotal	23	23	99.1%	54.7	12.0	D
Total		4,754	4,232	89.0%	32.3	3.4	C

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 174 **Galleria Blvd/Antelope Creek Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	119	94	78.9%	75.2	13.3	E
	Through	1,797	1,651	91.9%	21.2	8.9	C
	Right Turn	176	150	85.3%	2.5	0.4	A
	Subtotal	2,092	1,895	90.6%	22.5	7.6	C
SB	Left Turn	306	284	92.9%	68.5	9.6	E
	Through	1,222	1,189	97.3%	28.1	5.6	C
	Right Turn	298	292	98.1%	9.9	2.0	A
	Subtotal	1,826	1,765	96.7%	31.7	5.0	C
EB	Left Turn	529	503	95.1%	89.4	23.7	F
	Through	72	69	96.1%	53.9	7.3	D
	Right Turn	124	124	100.2%	2.5	0.6	A
	Subtotal	725	697	96.1%	70.5	18.3	E
WB	Left Turn	417	363	86.9%	69.7	14.0	E
	Through	88	89	100.6%	49.0	5.5	D
	Right Turn	414	421	101.8%	5.8	0.7	A
	Subtotal	919	872	94.9%	36.5	5.8	D
Total		5,562	5,229	94.0%	34.5	4.4	C

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 76 **E Roseville Pkwy/Olympus Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	11	9	82.9%	57.4	15.6	E
	Through	1,676	1,496	89.3%	57.8	7.1	E
	Right Turn	173	158	91.6%	15.1	2.1	B
	Subtotal	1,860	1,664	89.4%	53.7	6.7	D
SB	Left Turn	420	337	80.3%	94.3	13.3	F
	Through	1,900	1,670	87.9%	42.1	6.1	D
	Right Turn	43	42	97.2%	40.9	8.3	D
	Subtotal	2,363	2,049	86.7%	50.7	7.4	D
EB	Left Turn	112	90	80.4%	153.5	64.0	F
	Through	231	220	95.1%	125.2	61.0	F
	Right Turn	102	105	102.5%	125.0	58.1	F
	Subtotal	445	414	93.1%	131.6	59.8	F
WB	Left Turn	68	54	78.8%	77.5	36.9	E
	Through	174	186	107.0%	47.4	5.9	D
	Right Turn	211	201	95.5%	2.7	0.3	A
	Subtotal	453	441	97.4%	30.4	4.4	C
Total		5,121	4,568	89.2%	57.0	4.5	E

Intersection 77 **E Roseville Pkwy/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	177	161	90.8%	73.5	11.8	E
	Through	640	657	102.6%	57.6	9.3	E
	Right Turn	50	61	122.4%	23.2	4.0	C
	Subtotal	867	879	101.3%	58.3	7.6	E
SB	Left Turn	867	727	83.8%	74.8	16.0	E
	Through	969	885	91.4%	46.8	14.5	D
	Right Turn	101	82	81.3%	25.2	10.5	C
	Subtotal	1,937	1,694	87.5%	57.8	13.9	E
EB	Left Turn	200	156	77.9%	81.7	12.0	F
	Through	1,757	1,483	84.4%	35.8	1.8	D
	Right Turn	455	378	83.1%	23.1	1.4	C
	Subtotal	2,412	2,017	83.6%	37.0	1.8	D
WB	Left Turn	104	105	101.2%	87.2	13.9	F
	Through	1,641	1,528	93.1%	74.3	11.1	E
	Right Turn	983	901	91.6%	100.8	28.1	F
	Subtotal	2,728	2,533	92.9%	84.3	16.2	F
Total		7,944	7,123	89.7%	61.5	6.7	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 85 **I-80 WB Ramps/Eureka Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	1,261	1,176	93.3%	48.4	19.4	D
	Subtotal	1,261	1,176	93.3%	48.4	19.4	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	906	899	99.2%	42.1	24.6	D
	Right Turn	487	429	88.0%	72.9	34.9	E
	Subtotal	1,393	1,327	95.3%	52.1	28.4	D
WB	Left Turn	852	573	67.3%	121.6	36.6	F
	Through	1,488	1,217	81.8%	5.6	1.2	A
	Right Turn						
	Subtotal	2,340	1,790	76.5%	42.9	12.6	D
Total		4,994	4,294	86.0%	46.9	11.3	D

Intersection 86 **Taylor Rd-I-80 EB Ramps/Eureka Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	180	175	97.3%	35.3	5.5	D
	Through	576	554	96.3%	51.5	8.2	D
	Right Turn	389	396	101.8%	5.5	0.9	A
	Subtotal	1,145	1,126	98.3%	32.7	4.2	C
SB	Left Turn	686	516	75.3%	203.9	27.8	F
	Through						
	Right Turn	533	353	66.2%	251.8	95.9	F
	Subtotal	1,219	869	71.3%	220.4	43.9	F
EB	Left Turn	191	153	80.0%	155.0	34.3	F
	Through	1,565	1,458	93.2%	61.7	6.6	E
	Right Turn	411	415	101.1%	13.5	1.0	B
	Subtotal	2,167	2,027	93.5%	59.0	5.8	E
WB	Left Turn						
	Through	1,734	1,491	86.0%	70.7	16.1	E
	Right Turn	1,670	1,453	87.0%	58.7	10.3	E
	Subtotal	3,404	2,943	86.5%	64.9	13.0	E
Total		7,935	6,965	87.8%	77.1	7.3	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 87 **N Sunrise Ave/Eureka Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	553	524	94.7%	118.6	44.5	F
	Through	571	564	98.8%	43.3	4.7	D
	Right Turn	250	264	105.6%	4.5	0.7	A
	Subtotal	1,374	1,352	98.4%	64.4	17.5	E
SB	Left Turn	157	149	94.9%	65.2	6.8	E
	Through	519	508	98.0%	47.8	2.7	D
	Right Turn	612	503	82.1%	144.4	41.0	F
	Subtotal	1,288	1,160	90.1%	91.8	17.7	F
EB	Left Turn	216	187	86.4%	69.3	16.4	E
	Through	1,852	1,650	89.1%	34.3	7.6	C
	Right Turn	439	379	86.3%	14.5	2.5	B
	Subtotal	2,507	2,215	88.4%	33.9	7.1	C
WB	Left Turn	121	111	91.7%	101.2	18.9	F
	Through	2,266	2,152	95.0%	69.2	25.9	E
	Right Turn	148	141	95.0%	45.3	32.3	D
	Subtotal	2,535	2,404	94.8%	69.2	26.0	E
Total		7,704	7,131	92.6%	60.5	10.3	E

Intersection 90 **Eureka Rd/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	533	514	96.4%	109.1	21.7	F
	Through	667	684	102.5%	72.9	19.7	E
	Right Turn	21	22	103.1%	56.0	21.4	E
	Subtotal	1,221	1,219	99.8%	88.2	16.0	F
SB	Left Turn	995	728	73.2%	248.0	25.1	F
	Through	938	857	91.4%	89.0	18.1	F
	Right Turn	131	117	89.6%	92.4	31.8	F
	Subtotal	2,064	1,702	82.5%	157.4	18.3	F
EB	Left Turn	201	172	85.6%	48.8	9.3	D
	Through	1,235	1,119	90.6%	26.4	4.4	C
	Right Turn	452	420	93.0%	25.2	4.6	C
	Subtotal	1,888	1,712	90.7%	28.5	3.9	C
WB	Left Turn	98	101	103.5%	88.4	9.5	F
	Through	1,631	1,485	91.1%	35.6	1.8	D
	Right Turn	586	547	93.3%	20.9	0.8	C
	Subtotal	2,315	2,134	92.2%	34.4	1.1	C
Total		7,488	6,767	90.4%	73.5	5.2	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 98 **Harding Blvd/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	36	35	97.1%	71.1	14.4	E
	Through	33	36	108.2%	74.2	16.8	E
	Right Turn	104	101	97.2%	54.9	15.9	D
	Subtotal	173	172	99.3%	61.5	11.2	E
SB	Left Turn	1,006	896	89.1%	64.5	2.8	E
	Through	15	15	98.8%	77.5	19.4	E
	Right Turn	388	325	83.6%	41.6	3.3	D
	Subtotal	1,409	1,236	87.7%	58.7	2.6	E
EB	Left Turn	341	260	76.2%	214.0	47.1	F
	Through	1,286	988	76.8%	149.9	33.7	F
	Right Turn	18	15	82.3%	159.1	59.8	F
	Subtotal	1,645	1,262	76.7%	163.5	35.9	F
WB	Left Turn	72	59	81.3%	82.1	10.6	F
	Through	1,142	858	75.1%	58.3	8.9	E
	Right Turn	728	504	69.3%	36.8	7.8	D
	Subtotal	1,942	1,420	73.1%	51.6	8.0	D
Total		5,169	4,090	79.1%	88.4	9.6	F

Intersection 99 **I-80 WB Ramps/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	365	386	105.8%	46.3	6.9	D
	Through	524	509	97.1%	45.5	6.4	D
	Right Turn	195	203	103.9%	42.3	8.8	D
	Subtotal	1,084	1,097	101.2%	45.1	6.6	D
EB	Left Turn						
	Through	1,338	1,116	83.4%	20.3	1.8	C
	Right Turn	237	192	81.0%	15.7	1.7	B
	Subtotal	1,575	1,308	83.0%	19.7	1.7	B
WB	Left Turn						
	Through	1,747	1,251	71.6%	75.7	22.0	E
	Right Turn	736	466	63.3%	54.2	16.7	D
	Subtotal	2,483	1,717	69.2%	70.1	20.0	E
Total		5,142	4,122	80.2%	47.4	8.8	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 100 **I-80 EB Ramps/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	1,038	870	83.8%	52.6	38.6	D
	Subtotal	1,038	870	83.8%	52.6	38.6	D
SB	Left Turn						
	Through						
	Right Turn	683	588	86.1%	81.0	32.9	F
	Subtotal	683	588	86.1%	81.0	32.9	F
EB	Left Turn	388	318	82.0%	43.8	12.3	D
	Through	1,315	1,129	85.8%	14.6	8.7	B
	Right Turn						
	Subtotal	1,703	1,447	84.9%	21.0	9.2	C
WB	Left Turn						
	Through	2,535	1,731	68.3%	41.3	10.2	D
	Right Turn	586	420	71.7%	7.9	0.7	A
	Subtotal	3,121	2,151	68.9%	34.8	8.2	C
Total		6,545	5,056	77.2%	38.6	9.4	D

Intersection 101 **N Sunrise Ave/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	431	225	52.3%	382.0	61.1	F
	Through	465	400	86.1%	61.6	8.4	E
	Right Turn	125	118	94.5%	24.7	6.9	C
	Subtotal	1,021	744	72.8%	151.8	20.5	F
SB	Left Turn	179	183	102.1%	138.4	13.7	F
	Through	878	919	104.7%	67.9	6.4	E
	Right Turn	495	500	100.9%	35.8	13.0	D
	Subtotal	1,552	1,601	103.2%	66.1	6.6	E
EB	Left Turn	602	472	78.5%	147.8	23.1	F
	Through	1,597	1,302	81.5%	59.8	9.0	E
	Right Turn	154	142	92.0%	22.9	6.3	C
	Subtotal	2,353	1,916	81.4%	78.9	12.3	E
WB	Left Turn	251	199	79.2%	83.6	11.4	F
	Through	2,195	1,490	67.9%	97.9	29.6	F
	Right Turn	111	78	69.8%	80.1	26.4	F
	Subtotal	2,557	1,766	69.1%	95.5	26.7	F
Total		7,483	6,027	80.5%	88.6	7.1	F

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 102 **Santa Clara Dr/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	61	43	70.4%	93.8	22.5	F
	Through	23	19	82.6%	65.2	26.0	E
	Right Turn	77	79	102.2%	20.7	5.1	C
	Subtotal	161	141	87.3%	50.0	9.0	D
SB	Left Turn	174	174	99.8%	61.9	8.0	E
	Through	109	111	101.4%	64.2	9.3	E
	Right Turn	171	155	90.9%	46.0	7.7	D
	Subtotal	454	440	96.8%	57.1	5.4	E
EB	Left Turn	141	120	85.4%	84.9	29.1	F
	Through	1,627	1,371	84.2%	18.5	2.8	B
	Right Turn	41	40	96.4%	16.4	2.1	B
	Subtotal	1,809	1,531	84.6%	24.2	2.8	C
WB	Left Turn	104	77	73.8%	54.6	13.3	D
	Through	2,218	1,725	77.8%	38.2	19.1	D
	Right Turn	37	34	91.4%	19.1	7.8	B
	Subtotal	2,359	1,836	77.8%	38.5	18.6	D
Total		4,783	3,947	82.5%	35.0	7.9	C

Intersection 103 **Sierra Gardens Dr/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	152	143	94.0%	105.9	33.0	F
	Through	32	31	97.4%	122.4	36.8	F
	Right Turn	27	25	92.9%	108.5	43.5	F
	Subtotal	211	199	94.4%	108.0	33.2	F
SB	Left Turn	216	201	93.2%	60.0	7.1	E
	Through	46	46	99.1%	61.6	14.9	E
	Right Turn	35	30	84.7%	56.9	21.3	E
	Subtotal	297	277	93.1%	59.7	8.0	E
EB	Left Turn	62	58	93.2%	77.1	20.6	E
	Through	1,705	1,474	86.5%	12.2	5.8	B
	Right Turn	42	43	101.3%	7.4	3.3	A
	Subtotal	1,809	1,575	87.0%	14.6	5.5	B
WB	Left Turn	39	31	78.9%	70.2	27.4	E
	Through	2,285	1,948	85.2%	33.0	11.5	C
	Right Turn	41	41	99.2%	21.8	8.1	C
	Subtotal	2,365	2,019	85.4%	33.3	11.5	C
Total		4,682	4,070	86.9%	31.5	6.8	C

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 104 **Target Dwy/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	130	122	93.5%	78.5	18.4	E
	Through	23	23	100.8%	63.8	24.1	E
	Right Turn	63	70	111.0%	35.6	8.8	D
	Subtotal	216	215	99.4%	62.7	12.9	E
SB	Left Turn	80	71	88.4%	75.0	22.9	E
	Through	10	10	102.6%	68.6	29.2	E
	Right Turn	126	112	89.0%	47.8	15.9	D
	Subtotal	216	193	89.4%	58.5	16.6	E
EB	Left Turn	152	134	88.0%	71.3	28.1	E
	Through	1,598	1,399	87.5%	14.9	4.1	B
	Right Turn	55	51	92.6%	16.6	5.9	B
	Subtotal	1,805	1,583	87.7%	19.8	4.9	B
WB	Left Turn	77	66	85.9%	99.0	20.7	F
	Through	2,172	1,951	89.8%	35.2	13.7	D
	Right Turn	13	14	105.2%	36.0	16.5	D
	Subtotal	2,262	2,031	89.8%	37.2	13.9	D
Total		4,499	4,022	89.4%	32.6	8.8	C

Intersection 105 **Rocky Ridge Dr/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	313	280	89.4%	126.4	57.7	F
	Through	396	416	105.1%	47.6	3.4	D
	Right Turn	281	268	95.3%	24.3	3.5	C
	Subtotal	990	964	97.3%	63.4	15.0	E
SB	Left Turn	228	211	92.5%	80.2	19.2	F
	Through	908	892	98.2%	86.6	16.5	F
	Right Turn	336	307	91.5%	68.0	22.6	E
	Subtotal	1,472	1,410	95.8%	81.7	17.9	F
EB	Left Turn	186	168	90.3%	86.4	22.2	F
	Through	1,380	1,232	89.3%	38.6	3.0	D
	Right Turn	136	114	83.8%	16.7	4.8	B
	Subtotal	1,702	1,514	88.9%	42.4	4.2	D
WB	Left Turn	353	309	87.4%	61.1	5.3	E
	Through	1,811	1,645	90.8%	50.6	5.0	D
	Right Turn	177	174	98.3%	20.6	5.0	C
	Subtotal	2,341	2,128	90.9%	49.7	4.5	D
Total		6,505	6,015	92.5%	57.6	6.3	E

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement **PM Peak Hour**

Intersection 178 **Harding Blvd/Estates Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	68	49	72.6%	41.0	5.8	D
	Through	1,086	856	78.8%	15.1	1.8	B
	Right Turn	5	4	83.6%	7.4	10.7	A
	Subtotal	1,159	910	78.5%	16.5	2.0	B
SB	Left Turn	72	63	87.6%	71.7	25.3	E
	Through	1,179	1,034	87.7%	74.5	26.2	E
	Right Turn	221	184	83.0%	94.0	30.6	F
	Subtotal	1,472	1,280	87.0%	77.2	26.6	E
EB	Left Turn	270	266	98.7%	30.2	5.1	C
	Through	14	12	86.9%	29.3	15.1	C
	Right Turn	24	24	99.8%	26.4	11.2	C
	Subtotal	308	302	98.2%	30.0	5.5	C
WB	Left Turn	20	25	125.4%	38.9	16.1	D
	Through	15	16	108.9%	38.6	17.3	D
	Right Turn	20	22	112.1%	12.6	7.8	B
	Subtotal	55	64	116.1%	29.8	10.2	C
Total		2,994	2,556	85.4%	48.7	13.8	D

Intersection 179 **Harding Blvd/Roseville Sq** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	125	90	71.7%	44.4	7.4	D
	Through	969	712	73.5%	14.4	2.5	B
	Right Turn	8	6	71.3%	5.8	5.5	A
	Subtotal	1,102	808	73.3%	17.6	2.4	B
SB	Left Turn	30	27	89.9%	80.2	22.9	F
	Through	1,149	987	85.9%	74.4	19.6	E
	Right Turn	44	31	70.0%	90.3	27.5	F
	Subtotal	1,223	1,045	85.4%	75.1	19.7	E
EB	Left Turn	153	155	101.1%	38.9	7.7	D
	Through	19	17	92.0%	44.2	13.4	D
	Right Turn	102	99	97.2%	23.0	5.4	C
	Subtotal	274	271	99.0%	33.4	6.0	C
WB	Left Turn	158	148	93.8%	49.2	10.1	D
	Through	8	5	66.5%	28.9	22.8	C
	Right Turn	37	40	106.8%	18.1	12.4	B
	Subtotal	203	193	95.1%	42.4	10.5	D
Total		2,802	2,316	82.7%	47.5	10.3	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 107 **Foothills Blvd/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	585	241	41.2%	411.3	50.0	F
	Right Turn	519	160	30.8%	470.8	33.7	F
	Subtotal	1,104	401	36.3%	435.2	40.8	F
SB	Left Turn	1,460	1,355	92.8%	47.1	6.4	D
	Through	730	763	104.5%	10.0	1.7	A
	Right Turn						
	Subtotal	2,190	2,118	96.7%	33.8	4.5	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	702	510	72.7%	60.9	8.0	E
	Through						
	Right Turn	1,561	578	37.0%	12.7	2.3	B
	Subtotal	2,263	1,088	48.1%	35.3	5.4	D
Total		5,557	3,607	64.9%	78.4	4.4	E

Intersection 108 **Vernon St/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	62	59	95.6%	64.3	11.5	E
	Through	66	65	97.9%	48.1	10.3	D
	Right Turn	126	111	88.4%	28.5	5.7	C
	Subtotal	254	235	92.6%	42.7	5.3	D
SB	Left Turn	94	74	78.4%	108.4	29.2	F
	Through	152	131	86.5%	95.5	33.5	F
	Right Turn	594	529	89.0%	80.7	25.1	F
	Subtotal	840	734	87.4%	86.2	26.0	F
EB	Left Turn	425	321	75.6%	73.4	18.9	E
	Through	1,653	1,257	76.0%	34.2	6.9	C
	Right Turn	29	24	81.2%	29.8	11.5	C
	Subtotal	2,107	1,602	76.0%	42.0	7.9	D
WB	Left Turn	82	49	59.3%	140.6	33.1	F
	Through	1,671	1,130	67.6%	105.3	28.9	F
	Right Turn	43	31	72.5%	89.1	36.5	F
	Subtotal	1,796	1,210	67.3%	106.2	28.9	F
Total		4,997	3,780	75.7%	71.0	10.6	E

Intersection 109 **Lindsay Dr-Northridge Dr/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	3	3	101.3%	15.1	23.5	B
	Through						
	Right Turn	17	13	76.0%	15.2	6.8	B
	Subtotal	20	16	79.8%	18.3	11.2	B
SB	Left Turn	34	29	84.9%	32.4	5.5	C
	Through						
	Right Turn	14	15	108.6%	15.1	11.0	B
	Subtotal	48	44	91.8%	26.6	6.2	C
EB	Left Turn	26	18	68.7%	34.5	14.3	C
	Through	1,811	1,366	75.5%	13.0	5.6	B
	Right Turn	5	4	83.6%	22.1	42.4	C
	Subtotal	1,842	1,389	75.4%	13.2	5.5	B
WB	Left Turn	15	11	70.9%	41.2	23.4	D
	Through	1,889	1,352	71.6%	36.9	16.1	D
	Right Turn	8	5	66.5%	23.9	11.6	C
	Subtotal	1,912	1,368	71.5%	36.9	16.0	D
Total		3,822	2,817	73.7%	24.7	7.4	C

Intersection 110 **Melody Ln/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	274	245	89.3%	42.6	26.9	D
	Subtotal	274	245	89.3%	42.6	26.9	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,846	1,318	71.4%	24.3	14.4	C
	Right Turn	8	5	66.5%	13.1	13.8	B
	Subtotal	1,854	1,323	71.4%	24.3	14.4	C
WB	Left Turn	298	215	72.0%	28.5	9.6	C
	Through	1,958	1,486	75.9%	9.4	3.9	A
	Right Turn						
	Subtotal	2,256	1,701	75.4%	11.8	3.6	B
Total		4,384	3,269	74.6%	18.9	7.2	B

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 111 **Riverside Ave/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1,029	648	63.0%	194.5	10.2	F
	Through	632	479	75.8%	61.5	7.0	E
	Right Turn	247	194	78.5%	39.2	3.5	D
	Subtotal	1,908	1,321	69.2%	123.7	8.6	F
SB	Left Turn	313	280	89.4%	89.0	14.6	F
	Through	873	586	67.1%	194.2	42.7	F
	Right Turn	201	105	52.4%	257.3	70.5	F
	Subtotal	1,387	971	70.0%	169.5	33.9	F
EB	Left Turn	164	76	46.3%	174.6	61.3	F
	Through	985	709	72.0%	53.2	14.4	D
	Right Turn	590	453	76.8%	31.0	11.9	C
	Subtotal	1,739	1,238	71.2%	52.3	15.3	D
WB	Left Turn	374	257	68.8%	188.2	56.9	F
	Through	1,101	1,032	93.8%	53.2	14.1	D
	Right Turn	153	139	90.9%	27.3	9.5	C
	Subtotal	1,628	1,429	87.8%	74.1	17.5	E
Total		6,662	4,959	74.4%	100.0	10.3	F

Intersection 203 **Riverside Ave/I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,471	1,096	74.5%	99.9	33.0	F
	Right Turn	343	285	83.1%	35.2	17.5	D
	Subtotal	1,814	1,381	76.1%	86.7	30.7	F
SB	Left Turn						
	Through	1,077	864	80.2%	11.2	2.9	B
	Right Turn						
	Subtotal	1,077	864	80.2%	11.2	2.9	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	674	613	90.9%	48.8	31.2	D
	Through						
	Right Turn	318	275	86.5%	56.7	32.6	E
	Subtotal	992	888	89.5%	51.1	31.0	D
Total		3,883	3,133	80.7%	55.3	18.6	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 204 **Riverside Ave/I-80 EB Ramps-Orlando Ave** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,229	1,041	84.7%	76.9	28.3	E
	Right Turn	82	62	75.1%	74.7	38.0	E
	Subtotal	1,311	1,102	84.1%	76.7	28.7	E
SB	Left Turn	90	66	73.0%	55.3	11.1	E
	Through	1,400	1,165	83.2%	23.3	2.1	C
	Right Turn						
	Subtotal	1,490	1,231	82.6%	25.1	2.0	C
EB	Left Turn						
	Through	467	469	100.4%	33.4	2.3	C
	Right Turn	196	204	103.9%	24.3	3.2	C
	Subtotal	663	673	101.4%	30.6	1.7	C
WB	Left Turn	284	280	98.5%	38.1	3.1	D
	Through						
	Right Turn	328	319	97.2%	2.3	1.3	A
	Subtotal	612	599	97.8%	19.1	1.9	B
Total		4,076	3,605	88.4%	40.4	7.7	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 169 **Stanford Ranch Rd/Fairway Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	237	247	104.1%	57.4	5.6	E
	Through	986	988	100.2%	27.7	5.5	C
	Right Turn	198	182	92.1%	13.2	3.7	B
	Subtotal	1,421	1,417	99.7%	31.0	4.4	C
SB	Left Turn	70	65	93.4%	54.8	7.8	D
	Through	748	741	99.1%	26.2	1.8	C
	Right Turn	53	55	104.0%	4.4	2.0	A
	Subtotal	871	861	98.9%	27.0	1.5	C
EB	Left Turn	87	75	86.5%	63.2	10.8	E
	Through	414	391	94.4%	39.2	3.6	D
	Right Turn	207	184	89.0%	7.8	1.7	A
	Subtotal	708	650	91.8%	33.1	3.7	C
WB	Left Turn	185	173	93.7%	51.6	7.7	D
	Through	239	251	105.1%	38.0	6.9	D
	Right Turn	21	17	83.2%	30.1	14.9	C
	Subtotal	445	442	99.3%	43.1	4.6	D
Total		3,445	3,370	97.8%	32.0	2.6	C

Intersection 170 **Stanford Ranch Rd/SR 65 NB** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	542	550	101.5%	64.3	14.9	E
	Through	1,242	1,211	97.5%	29.4	3.4	C
	Right Turn	286	275	96.2%	7.1	1.2	A
	Subtotal	2,070	2,036	98.4%	35.9	4.6	D
SB	Left Turn	55	56	101.6%	62.8	13.2	E
	Through	1,065	1,060	99.5%	45.2	5.7	D
	Right Turn	114	99	87.0%	16.1	3.1	B
	Subtotal	1,234	1,215	98.5%	43.7	5.4	D
EB	Left Turn	144	140	97.1%	102.3	38.4	F
	Through	98	90	92.3%	109.9	38.3	F
	Right Turn	254	243	95.6%	49.6	24.9	D
	Subtotal	496	473	95.4%	76.8	30.5	E
WB	Left Turn	308	307	99.6%	57.0	6.6	E
	Through	86	79	91.5%	56.3	11.3	E
	Right Turn	134	148	110.6%	28.7	7.8	C
	Subtotal	528	534	101.0%	49.0	6.6	D
Total		4,328	4,258	98.4%	44.4	4.1	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Constrained Conditions (V2)**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 171 **Stanford Ranch Rd/SR 65 NB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	679	671	98.8%	27.5	6.1	C
	Through	1,789	1,775	99.2%	8.6	0.6	A
	Right Turn						
	Subtotal	2,468	2,445	99.1%	13.8	2.0	B
SB	Left Turn						
	Through	1,925	1,897	98.6%	21.5	3.5	C
	Right Turn						
	Subtotal	1,925	1,897	98.6%	21.5	3.5	C
EB	Left Turn						
	Through						
	Right Turn	579	573	99.0%	4.9	2.9	A
	Subtotal	579	573	99.0%	4.9	2.9	A
WB	Left Turn						
	Through						
	Right Turn	701	707	100.8%	4.7	0.5	A
	Subtotal	701	707	100.8%	4.7	0.5	A
Total		5,673	5,622	99.1%	14.4	1.5	B

Intersection 172 **Stanford Ranch Rd/SR 65 NB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,246	2,236	99.6%	21.8	3.3	C
	Right Turn	782	720	92.1%	76.0	28.2	E
	Subtotal	3,028	2,957	97.6%	35.1	8.1	D
SB	Left Turn	961	908	94.5%	45.6	15.4	D
	Through	1,479	1,465	99.0%	29.2	3.7	C
	Right Turn						
	Subtotal	2,440	2,373	97.2%	35.5	7.4	D
EB	Left Turn						
	Through						
	Right Turn	1,070	1,113	104.1%	18.1	1.6	B
	Subtotal	1,070	1,113	104.1%	18.1	1.6	B
WB	Left Turn						
	Through						
	Right Turn	222	217	97.7%	3.8	1.2	A
	Subtotal	222	217	97.7%	3.8	1.2	A
Total		6,760	6,660	98.5%	31.4	3.9	C

Cumulative Plus General Plan Unconstrained Conditions

FEHR PEERS

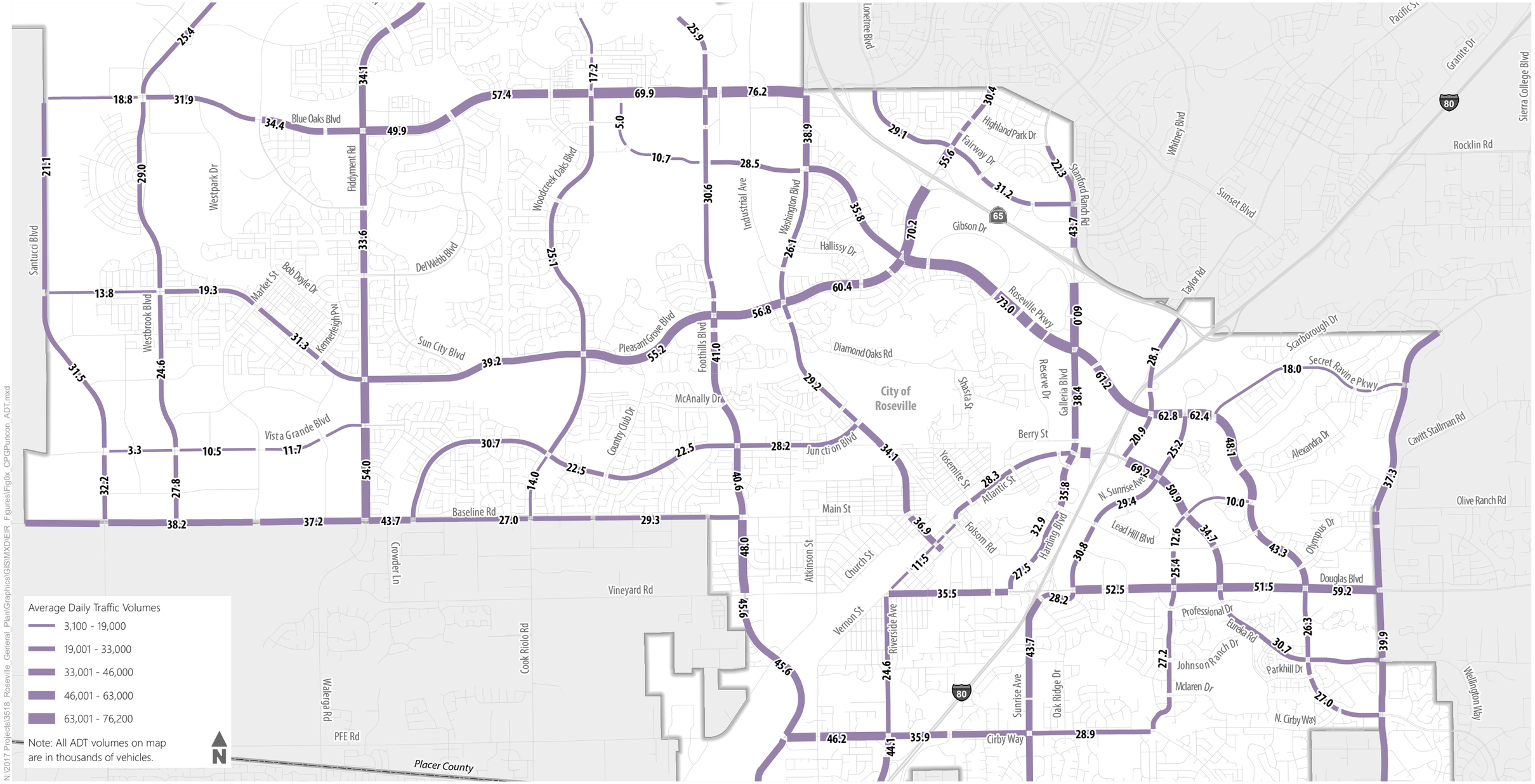


Figure 4.3-A8

Cumulative Plus General Plan Unconstrained Network Average Daily Traffic Volumes

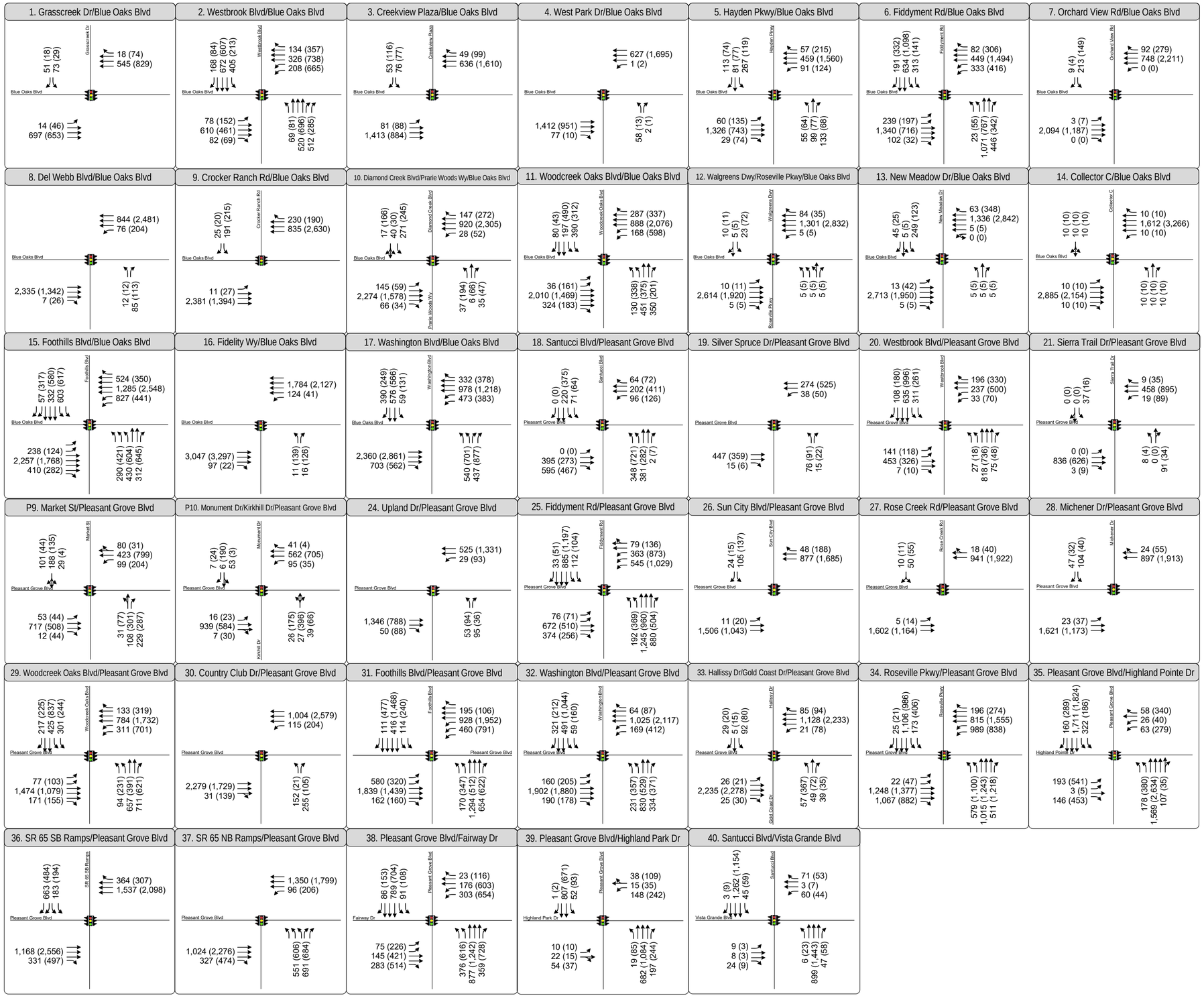


FIGURE 4.3-A8-a

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Unconstrained Conditions

FEHR PEERS

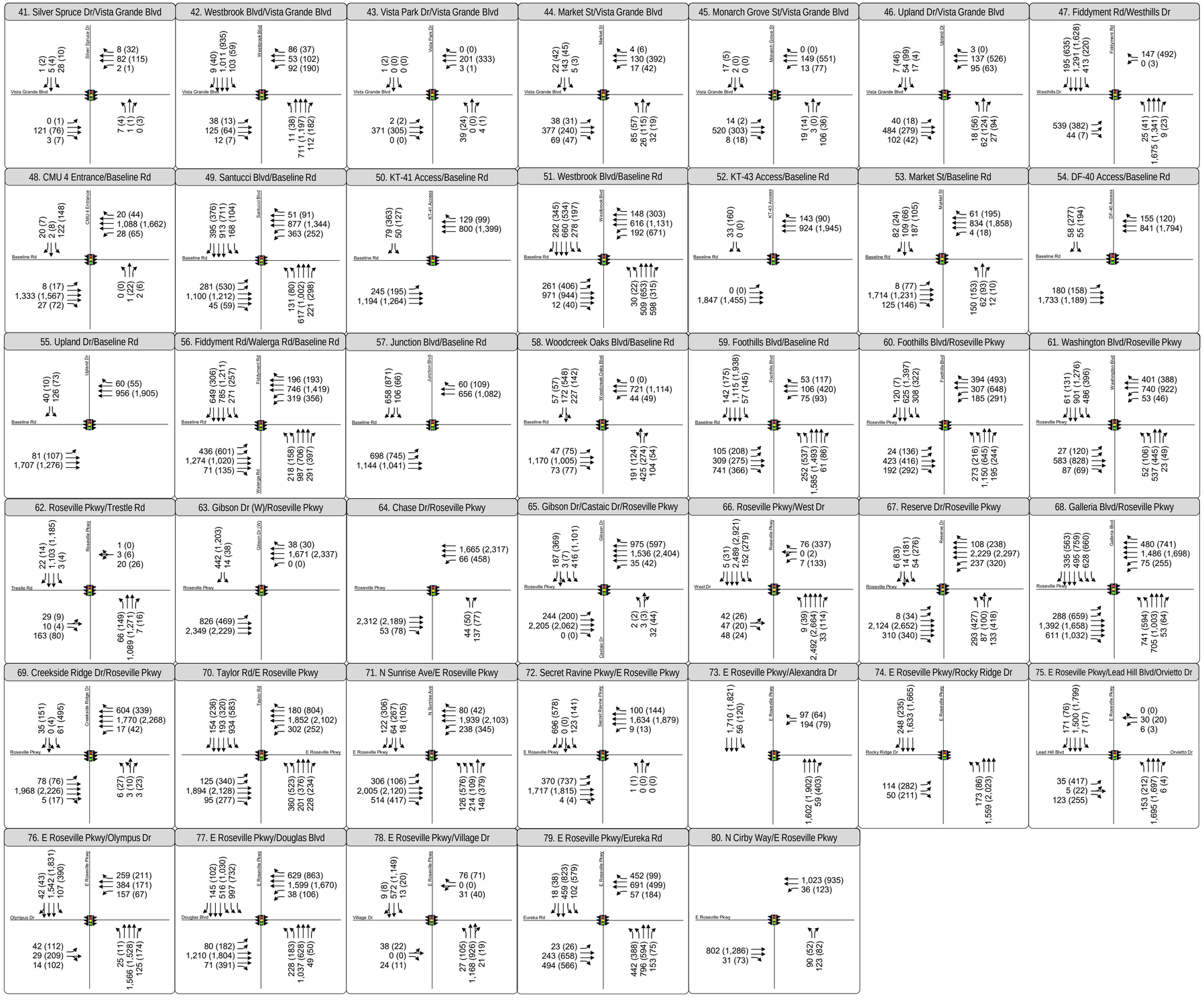


FIGURE 4.3-A8-b

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Unconstrained Conditions

FEHR PEERS

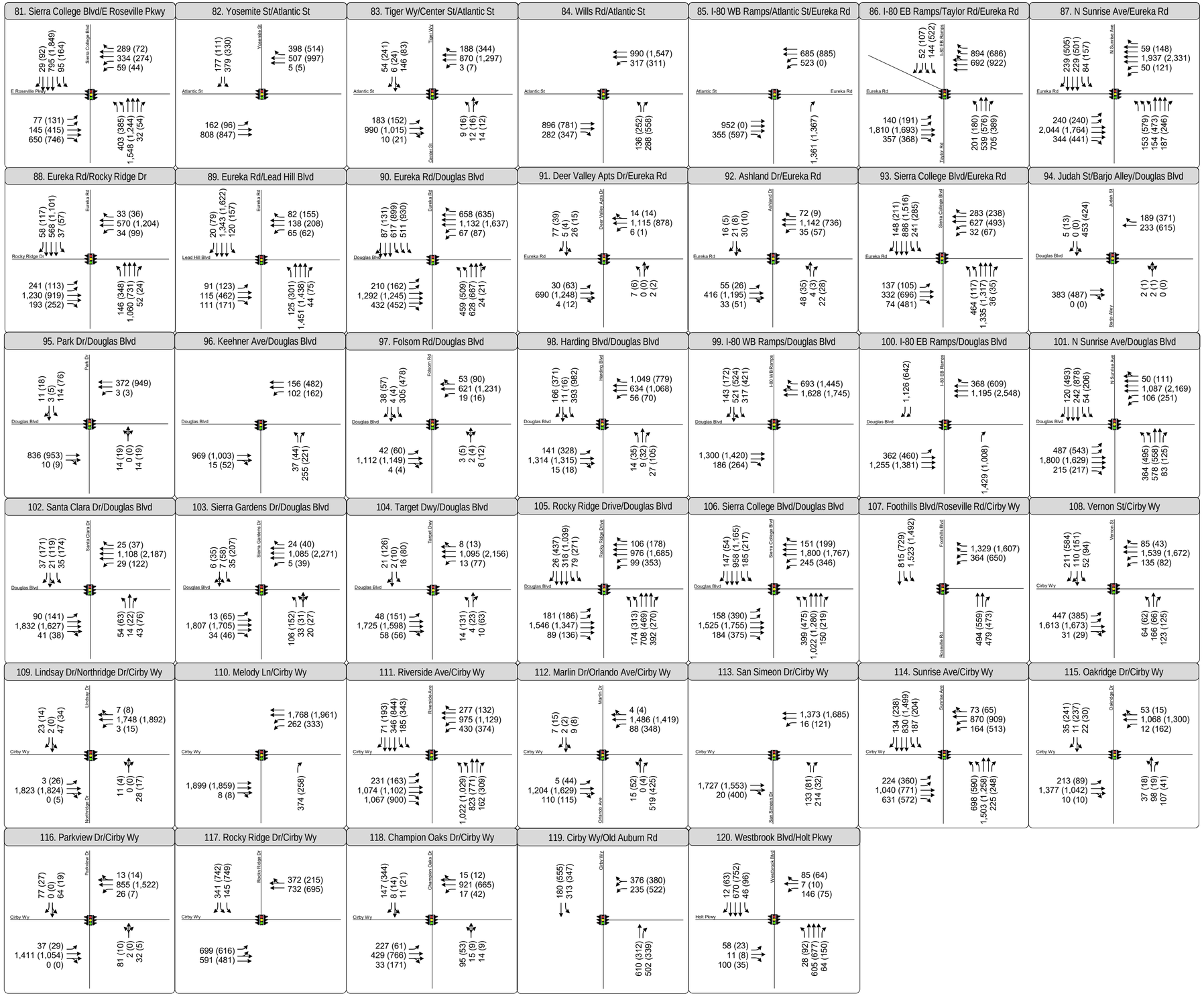


FIGURE 4.3-A8-c

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Unconstrained Conditions

FEHR PEERS

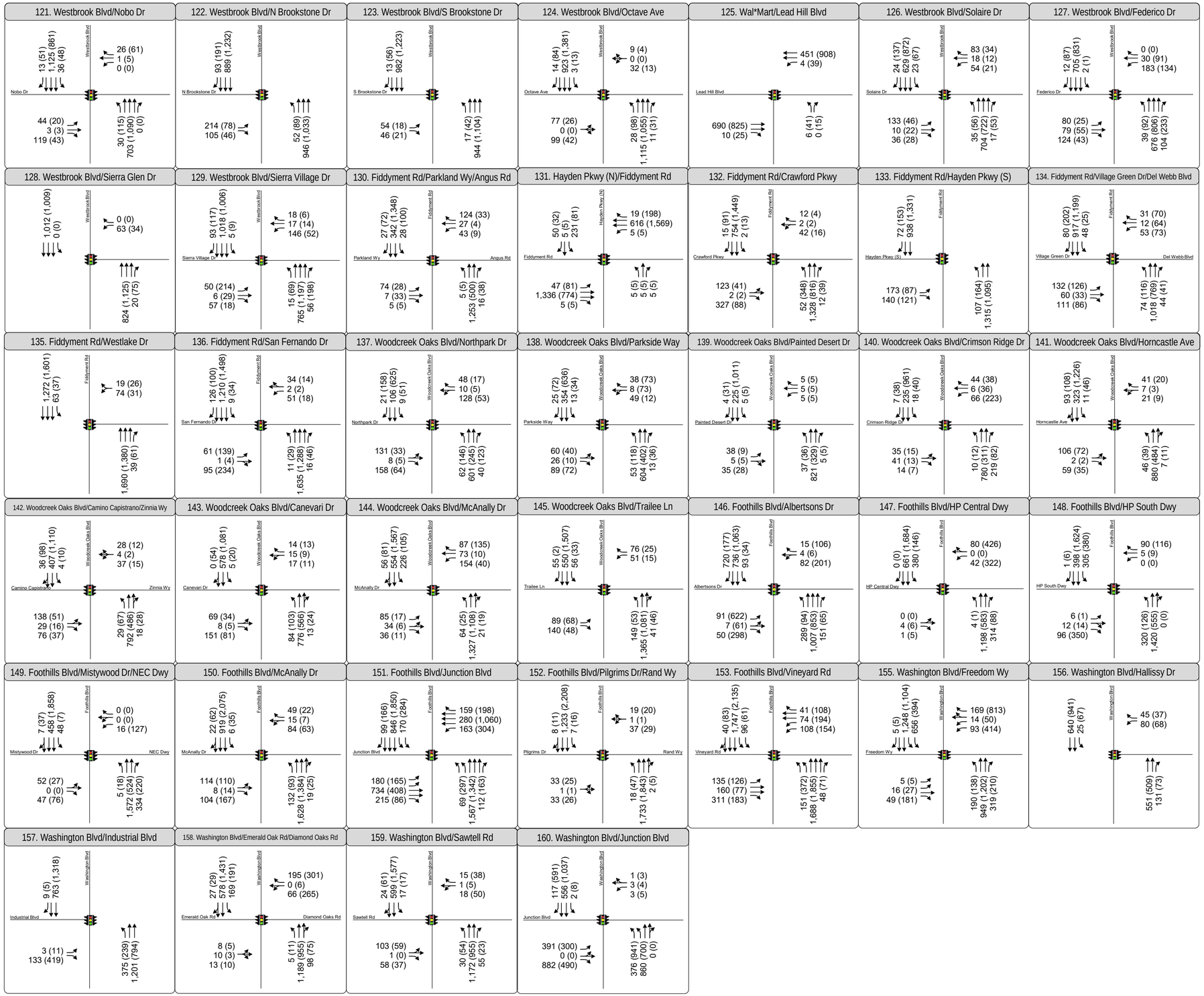


FIGURE 4.3-A8-d

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Unconstrained Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN

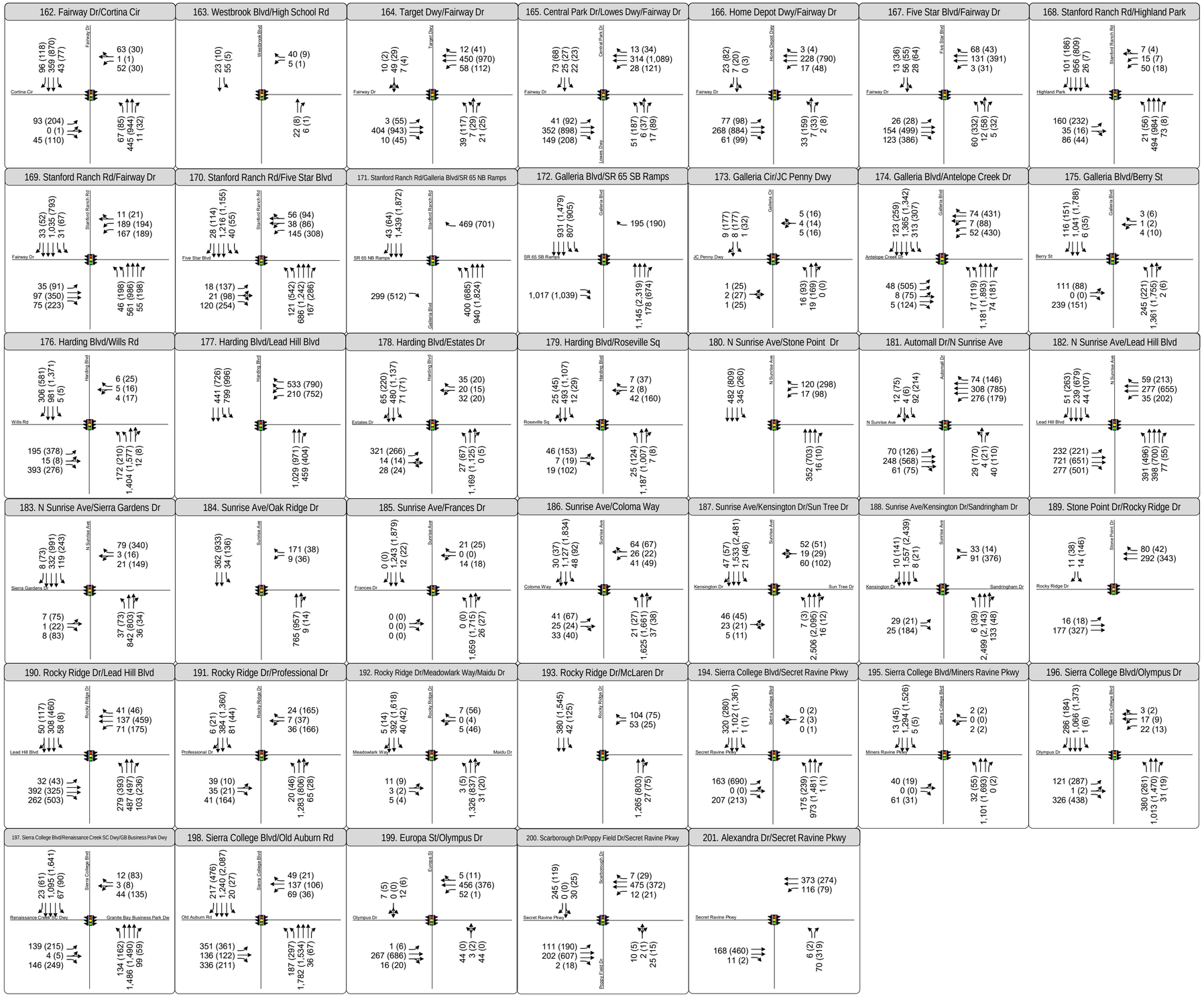
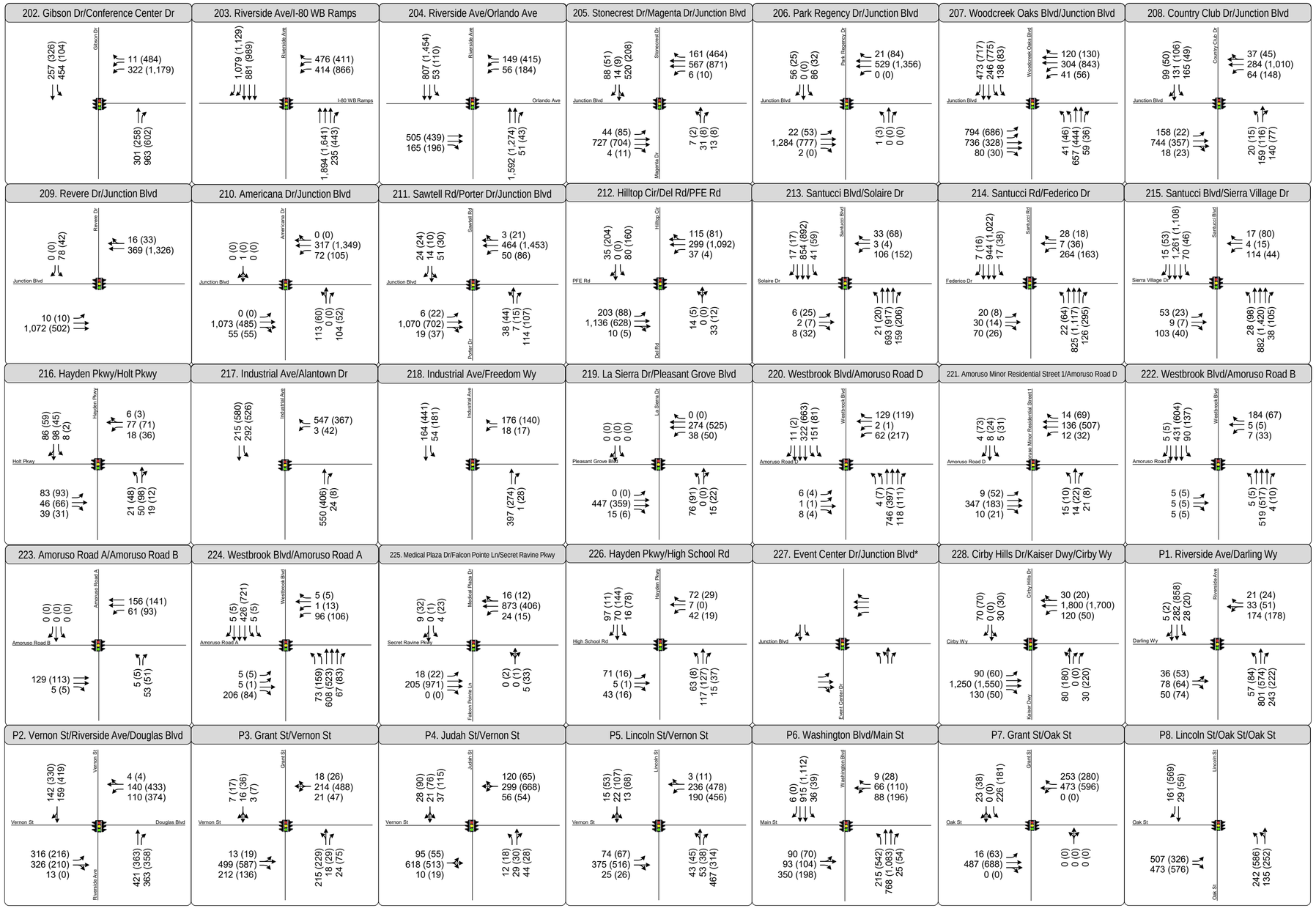


FIGURE 4.3-A8-e

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Unconstrained Conditions

FEHR PEERS

ROSEVILLE GENERAL PLAN



*Peak hour forecasts not available

FIGURE 4.3-A8-f

Peak Hour Traffic Volumes and Lane Configurations
Cumulative Unconstrained Conditions

FEHR PEERS

Table 4.3A-6 Roseville Signalized Intersection Operations – Cumulative Unconstrained Conditions

Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
1	Blue Oaks Blvd/Grasscreek Dr	6	A	6	A
2	Blue Oaks Blvd/Westbrook Blvd	30	C	29	C
3	Blue Oaks Blvd/Creekview Plz	5	A	8	A
4	Blue Oaks Blvd/Westpark Dr	5	A	4	A
5	Blue Oaks Blvd/Hayden Pkwy	26	C	21	C
6	Blue Oaks Blvd/Fiddyment Rd	***60***	***E***[3]	***46***	***D***[3]
7	Blue Oaks Blvd/Orchard View Rd	8	A	11	B
8	Blue Oaks Blvd/Del Webb Blvd	12	B	13	B
9	Blue Oaks Blvd/Crocker Ranch Rd	9	A	16	B
10	Blue Oaks Blvd/Diamond Creek Blvd/Prairie Woods Wy[4]	26	C	***40***	***D***[3]
11	Blue Oaks Blvd/Woodcreek Oaks Blvd[4]	***55***	***E***[3]	***48***	***D***[3]
12	Blue Oaks Blvd/Walgreens Dwy/Roseville Pkwy[4]	3	A	23	C
13	Blue Oaks Blvd/New Meadow Dr[4]	5	A	12	B
14	Blue Oaks Blvd/Collector C[4]	5	A	14	B
15	Blue Oaks Blvd/Foothills Blvd[4]	***84***	***F***[3]	***63***	***E***[3]
16	Blue Oaks Blvd/Fidelity Wy/SR 65 Ramps[4,5]	8	A	***85***	***F***[3]
17	Blue Oaks Blvd/Washington Blvd/SR 65 Ramps[4]	***84***	***F***[3]	***41***	***D***[3]
18	Pleasant Grove Blvd/Santucci Dr	19	B	23	C
19	Pleasant Grove Blvd/Silver Spruce Dr	6	A	6	A
20	Pleasant Grove Blvd/Westbrook Blvd	20	C	22	C
21	Pleasant Grove Blvd/Sierra Trail Dr	10	A	9	A
24	Pleasant Grove Blvd/Upland Dr	9	A	8	A
25	Pleasant Grove Blvd/Fiddyment Rd	***53***	***D***[3]	***54***	***D***[3]
26	Pleasant Grove Blvd/Sun City Blvd	8	A	26	C
27	Pleasant Grove Blvd/Rose Creek Rd	6	A	10	B
28	Pleasant Grove Blvd/Michener Dr	9	A	12	B
29	Pleasant Grove Blvd/Woodcreek Oaks Blvd	***55***	***D***[3]	***55***	***D***[3]
30	Pleasant Grove Blvd/Country Club Dr	26	C	20	C
31	Pleasant Grove Blvd/Foothills Blvd[4]	***62***	***E***[3]	***89***	***F***[3]
32	Pleasant Grove Blvd/Washington Blvd[4]	***46***	***D***[3]	***128***	***F***[3]
33	Pleasant Grove Blvd/Hallissy Dr/Gold Coast Dr[4]	22	C	34	C
34	Pleasant Grove Blvd/Roseville Pkwy[4]	***89***	***F***[3]	***104***	***F***[3]
35	Pleasant Grove Blvd/Highland Pointe Dr[4]	34	C	***130***	***F***[3]
36	Pleasant Grove Blvd/SR 65 SB Ramps[4]	15	B	19	B
37	Pleasant Grove Blvd/SR 65 NB Ramps[4]	13	B	22	C
38	Pleasant Grove Blvd/Fairway Dr[4]	***46***	***D***[3]	***51***	***D***[3]
39	Pleasant Grove Blvd/Highland Park Dr	22	C	31	C
40	Vista Grande Blvd/Santucci Blvd	12	B	12	B
41	Vista Grande Blvd/Silver Spruce Dr	13	B	15	B
42	Vista Grande Blvd/Westbrook Blvd	14	B	15	B
43	Vista Grande Blvd/Vista Park Dr	12	B	12	B
44	Vista Grande Blvd/Market St	15	B	14	B
45	Vista Grande Blvd/Monarch Grove St	12	B	12	B
46	Vista Grande Blvd/Upland Dr	14	B	14	B
47	Fiddyment Rd/Westhills Dr	28	C	15	B
48	Baseline Rd/Regional Park Access	13	B	17	B
49	Baseline Rd/Watt Ave	***40***	***D***[3]	***41***	***D***[3]
50	Baseline Rd/KT-41 Access	9	A	19	B
51	Baseline Rd/Westbrook Blvd	34	C	33	C

Table 4.3A-6 Roseville Signalized Intersection Operations – Cumulative Unconstrained Conditions

Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
52	Baseline Rd/KT-43 Access	4	A	6	A
53	Baseline Rd/Market St	17	B	19	B
54	Baseline Rd/DF-40 Access	7	A	33	C
55	Baseline Rd/Upland Dr	7	A	9	A
56	Baseline Rd/Fiddyment Rd/Walerga Rd	***92***	***F***[3]	***59***	***E***[3]
57	Baseline Rd/Junction Blvd	17	B	16	B
58	Baseline Rd/Woodcreek Oaks Blvd/Cook Riolo Rd	***98***	***F***[3]	***116***	***F***[3]
59	Baseline Rd/Foothills Blvd	***58***	***E***[3]	***43***	***D***[3]
60	Foothills Blvd/HP Central Dwy/Roseville Pkwy	31	C	***46***	***D***[3]
61	Roseville Pkwy/Washington Blvd	***37***	***D***[3]	60	E
62	Roseville Pkwy/Trestle Dr	14	B	13	B
63	Roseville Pkwy/Gibson Dr (W)[4]	***82***	***F***[3]	***65***	***E***[3]
64	Roseville Pkwy/Chase Dr[4]	5	A	28	C
65	Roseville Pkwy/Gibson Dr (E)[4]	30	C	***80***	***E***[4]
66	Roseville Pkwy/West Dr[4]	12	B	24	C
67	Roseville Pkwy/Reserve Dr[4]	29	C	***70***	***E***[4]
68	Roseville Pkwy/Galleria Blvd[4]	***48***	***D***[3]	***76***	***E***[4]
69	Roseville Pkwy/Creekside Ridge Dr[4]	19	B	***37***	***D***[4]
70	Roseville Pkwy/Taylor Rd[4]	***55***	***D***[3]	***93***	***F***[3]
71	E Roseville Pkwy/N Sunrise Ave[4]	16	B	***67***	***E***[3]
72	E Roseville Pkwy/Secret Ravine Pkwy[4]	29	C	***50***	***D***[3]
73	E Roseville Pkwy/Alexandra Dr[4]	8	A	16	B
74	E Roseville Pkwy/Rocky Ridge Dr[4]	7	A	18	B
75	E Roseville Pkwy/Orvietto Dr/Lead Hill Blvd[4]	28	C	32	C
76	E Roseville Pkwy/Olympus Dr[4]	26	C	***37***	***D***[3]
77	E Roseville Pkwy/Douglas Blvd[4]	***60***	***E***[3]	***52***	***D***[3]
78	E Roseville Pkwy/Village Dr	18	B	19	B
79	E Roseville Pkwy/Eureka Rd	33	C	***30***	***D***[3]
80	E Roseville Pkwy/N Cirby Way	10	A	13	B
81	E Roseville Pkwy/Sierra College Blvd	32	C	35	C
82	Atlantic St/Yosemite St	15	B	15	B
83	Atlantic St/Tiger Way/Center St	16	B	28	C
84	Atlantic St/Wills Rd	20	C	20	B
85	Atlantic St/I-80 WB Ramps[4,5]	8	A	***63***	***E***[3]
86	Eureka Rd/Taylor Rd/I-80 EB Ramps[4,5]	35	C	***70***	***E***[3]
87	Eureka Rd/N Sunrise Ave[4]	25	C	***55***	***D***[3]
88	Eureka Rd/Rocky Ridge Dr	***33***	***D***[3]	***61***	***E***[3]
89	Lead Hill Blvd/Eureka Rd	***38***	***D***[3]	***50***	***D***[3]
90	Douglas Blvd/Eureka Road[4]	***37***	***D***[3]	***68***	***E***[3]
91	Eureka Rd/Deer Valley Apts Dwy	13	B	12	B
92	Eureka Rd/Ashland Dr	18	B	16	B
93	Eureka Rd/Sierra College Blvd	***35***	***D***[3]	***30***	***D***[3]
94	Douglas Blvd/Judah St/Barjo Alley	10	A	12	B
95	Douglas Blvd/Park Dr	11	B	10	B
96	Douglas Blvd/Keehner Ave	13	B	13	B
97	Douglas Blvd/Folsom Rd	17	B	22	C
98	Douglas Blvd/Harding Blvd[4]	21	C	***88***	***F***[3]
99	Douglas Blvd/I-80 WB Ramps[4]	13	B	***36***	***D***[3]
100	Douglas Blvd/I-80 EB Ramps[4,5]	10	B	29	C

Table 4.3A-6 Roseville Signalized Intersection Operations – Cumulative Unconstrained Conditions

Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
101	Douglas Blvd/N Sunrise Ave[4]	33	C	***82***	***F***[3]
102	Douglas Blvd/Santa Clara Dr[4]	30	C	28	C
103	Douglas Blvd/Sierra Gardens Dr[4]	21	C	29	C
104	Douglas Blvd/Target Dwy[4]	16	B	31	C
105	Douglas Blvd/Rocky Ridge Dr[4]	***39***	***D***[3]	***50***	***D***[3]
106	Douglas Blvd/Sierra College Blvd	***37***	***D***[3]	***73***	***E***[3]
107	Cirby Wy/Foothills Blvd/Roseville Rd[4]	***33***	***D***[3]	***50***	***D***[3]
108	Cirby Wy/Vernon St[4]	***55***	***D***[3]	***57***	***E***[3]
109	Cirby Wy/Northridge Dr/Lindsay Dr[4]	15	B	22	C
110	Cirby Wy/Melody Ln[4,5]	12	A	33	C
111	Cirby Wy/Riverside Ave[4]	***62***	***E***[3]	***117***	***F***[3]
112	Cirby Wy/Orlando Ave/Marlin Dr	***68***	***E***[3]	33	C
113	Cirby Wy/San Simeon Dr	31	C	32	C
114	Cirby Wy/Sunrise Ave	***61***	***E***[3]	***82***	***F***[3]
115	Cirby Wy/Oakridge Dr	35	C	***52***	***D***[3]
116	Cirby Wy/Parkview Dr	10	B	8	A
117	Cirby Wy/Rocky Ridge Dr	***37***	***D***[3]	33	C
118	Cirby Wy/Champion Oaks Dr	15	B	16	B
119	Cirby Wy/Old Auburn Rd	19	B	26	C
120	Westbrook Blvd/Holt Pkwy	16	B	13	B
121	Westbrook Blvd/Nobo Dr	11	B	12	B
122	Westbrook Blvd/N Brookstone Dr	7	A	6	A
123	Westbrook Blvd/S Brookstone Dr	5	A	3	A
124	Westbrook Blvd/Octave Ave/Payson Ave	11	B	9	A
125	Lead Hill Blvd/Wal*Mart	3	A	7	A
126	Westbrook Blvd/Solaire Dr	15	B	12	B
127	Westbrook Blvd/Frederico Dr	15	B	12	B
128	Westbrook Blvd/Sierra Glen Dr	3	A	3	A
129	Westbrook Blvd/Sierra Village Dr	13	B	15	B
130	Fiddyment Rd/Angus Rd	13	B	10	B
131	Fiddyment Rd/Hayden Pkwy (N)	21	C	22	C
132	Fiddyment Rd/Crawford Pkwy	21	C	26	C
133	Fiddyment Rd/Hayden Pkwy (South)	10	B	13	B
134	Fiddyment Rd/Village Green Dr	22	C	23	C
135	Fiddyment Rd/Westlake Dr	7	A	6	A
136	Fiddyment Rd/San Fernando Dr	11	B	16	B
137	Woodcreek Oaks Blvd/Northpark Dr	18	B	15	B
138	Woodcreek Oaks Blvd/Parkside Wy	15	B	16	B
139	Woodcreek Oaks Blvd/Painted Desert Dr	9	A	9	A
140	Woodcreek Oaks Blvd/Crimson Ridge Dr	11	B	13	B
141	Woodcreek Oaks Blvd/Horncastle Ave	16	B	22	C
142	Woodcreek Oaks Blvd/Camino Capistrano/Zinnia Way	16	B	18	B
143	Woodcreek Oaks Blvd/Canevari Dr/Arsenault Dr	16	B	19	B
144	Woodcreek Oaks Blvd/McAnally Dr	***39***	***D***[3]	19	B
145	Woodcreek Oaks Blvd/Trailee Ln	15	B	13	B
146	Foothills Blvd/Albertsons Dr	22	C	33	C
147	Foothills Blvd/HP South Dwy	26	C	33	C
148	Foothills Blvd/NEC	23	C	18	B
149	Foothills Blvd/Mistywood Dr	12	B	16	B

Table 4.3A-6 Roseville Signalized Intersection Operations – Cumulative Unconstrained Conditions

Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
150	Foothills Blvd/McAnally Dr	18	B	23	C
151	Foothills Blvd/Junction Blvd	***36***	***D***[3]	***39***	***D***[3]
152	Foothills Blvd/Pilgrim Dr/Rand Wy	13	B	16	B
153	Foothills Blvd/Vineyard Rd	***32***	***D***[3]	32	C
155	Washington Blvd/Freedom Wy	30	C	***39***	***D***[3]
156	Washington Blvd/Hallisy Dr	8	A	8	A
157	Washington Blvd/Industrial Ave	12	B	17	B
158	Washington Blvd/Diamond Oaks Rd/Emerald Oak Rd	17	B	32	C
159	Washington Blvd/Sawtell Rd/Derek Pl	15	B	***38***	***D***[3]
160	Washington Blvd/Junction Blvd	21	C	***30***	***D***[3]
162	Fairway Dr/Cortina Cir	17	B	18	B
163	Westpark Dr/High School Rd	9	A	10	A
164	Fairway Dr/Target Dwy/Rosehall Dr	11	B	13	B
165	Fairway Dr/Central Park Dr/Lowes Dwy	12	B	19	B
166	Fairway Dr/Home Depot Dwy	11	B	17	B
167	Fairway Dr/Five Star Blvd	11	B	15	B
168	Stanford Ranch Rd/Highland Park Dr	15	B	13	B
169	Stanford Ranch Rd/Fairway Dr[4]	23	C	31	C
170	Stanford Ranch Rd/Five Star Blvd[4]	20	B	***32***	***D***[3]
171	Stanford Ranch Rd/SR 65 NB Ramps[4,5]	5	A	15	B
172	Galleria Blvd/SR 65 SB Ramps[4,5]	21	C	27	C
173	Galleria Cir/JC Penny Dwy	17	B	13	B
174	Galleria Blvd/Antelope Creek Dr[4]	19	B	***39***	***D***[3]
175	Galleria Blvd/Berry St	25	C	26	C
176	Harding Blvd/Wills Rd	28	C	29	C
177	Harding Blvd/Lead Hill Blvd	33	C	***51***	***D***[3]
178	Harding Blvd/Estates Dr[4]	17	B	35	C
179	Harding Blvd/Roseville Sq[4]	13	B	***31***	***D***[3]
180	N Sunrise Ave/Stone Point Dr	12	B	15	B
181	N Sunrise Ave/Automall Dr	28	C	23	C
182	N Sunrise Ave/Lead Hill Blvd	32	C	***55***	***E***[3]
183	N Sunrise Ave/Sierra Gardens Dr	13	B	27	C
184	Sunrise Ave/Oak Ridge Dr	9	A	8	A
185	Sunrise Ave/Frances Dr	5	A	5	A
186	Sunrise Ave/Coloma Wy	20	B	28	C
187	Sunrise Ave/Sun Tree Dr/Kensington Dr	7	A	13	B
188	Sunrise Ave/Sandringham Dr/Kensington Dr[5]	22	C	***55***	***D***[3]
189	Rocky Ridge Dr/Stone Point Dr	6	A	8	A
190	Rocky Ridge Dr/Lead Hill Blvd	21	C	27	C
191	Rocky Ridge Dr/Professional Dr	18	B	28	C
192	Rocky Ridge Dr/Meadowlark Wy/Maidu Dr	7	A	19	B
193	Rocky Ridge Dr/McLaren Dr	8	A	5	A
194	Sierra College Blvd/Secret Ravine Pkwy	25	C	***31***	***D***[3]
195	Sierra College Blvd/Miners Ravine Pkwy	25	C	12	B
196	Sierra College Blvd/Olympus Dr	26	C	23	C
197	Sierra College Blvd/Renaissance Creek SC Dwy/Granite Bay Business Park Dwy	30	C	32	C
198	Sierra College Blvd/Old Auburn Rd	35	C	***33***	***D***[3]
199	Olympus Dr/Europa St	12	B	7	A

Table 4.3A-6 Roseville Signalized Intersection Operations – Cumulative Unconstrained Conditions

Intersection		AM Peak Hour		PM Peak Hour	
		Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]
200	Secret Ravine Pkwy/Scarborough Dr/Poppy Field Dr	18	B	16	B
201	Secret Ravine Pkwy/Alexandra Dr	8	A	12	B
202	Gibson Dr/Convention Center Dr	***52***	***D***[3]	17	B
203	Riverside Ave/I-80 WB Ramps[4]	17	B	***39***	***D***[3]
204	Riverside Ave/I-80 EB Ramps/Orlando Dr[4]	29	C	28	C
205	Junction Blvd/Stonecrest Dr/Magenta Dr	25	C	18	B
206	Junction Blvd/Park Regency Dr	10	A	11	B
207	Junction Blvd/Woodcreek Oaks Blvd	33	C	***51***	***D***[3]
208	Junction Blvd/Country Club Dr	27	C	22	C
209	Junction Blvd/Revere Dr	6	A	8	A
210	Junction Blvd/Americana Dr	15	B	8	A
211	Junction Blvd/Sawtell Rd/Porter Dr	20	C	25	C
212	PFE Rd/Hilltop Cir/Del Rd	23	C	20	B
213	Santucci Blvd/Solaire Dr	12	B	13	B
214	Santucci Blvd/Federico Dr	17	B	13	B
215	Santucci Blvd/Sierra Village Dr	16	B	13	B
216	Hayden Pkwy/Holt Pkwy	15	B	15	B
217	Industrial Ave/Alantown Dr	19	B	13	B
218	Industrial Ave/Freedom Wy	7	A	6	A
219	Pleasant Grove Blvd/La Sierra Dr	6	A	6	A
220	Westbrook Blvd/Amoruso Road D	13	B	13	B
221	Amoruso Road D/Minor Residential Street 1	13	B	13	B
222	Westbrook Blvd/Amoruso Road B	15	B	13	B
223	Amoruso Road B/Amoruso Road A	8	A	9	A
224	Westbrook Blvd/Amoruso Road D	15	B	13	B
225	Secret Ravine Pkwy/Medical Plz/Falcon Pointe Dr	8	A	10	A
226	Hayden Pkwy/High School Rd/Bellanca Wy	13	B	12	B
227	Junction Blvd / Event Center Dr[6]	-	C	-	C
228	Cirby Way/Kaiser Dwy	***70***	***E***[3]	35	C
P1	Riverside Ave/Darling Way[7]	25	C	20	B
P2	Douglas Blvd/Riverside Ave/Vernon St[7]	21	C	28	C
P3	Vernon St/Grant St[7]	6	A	7	A
P4	Vernon St/Judah St[7]	5	A	8	A
P5	Vernon St/Lincoln St[7]	11	B	25	C
P6	Washington Blvd/Main St[7]	33	C	***77***	***E***[3]
P7	Oak St/Grant St[7]	7	A	7	A
P8	Oak St/Lincoln St[7]	15	B	13	B
P9	Pleasant Grove Blvd/Market St[7]	33	C	33	C
P10	Pleasant Grove Blvd/Monument Dr/Kirkhill Dr[7]	13	B	***31***	***D***[3]

Table 4.3A-6 Roseville Signalized Intersection Operations – Cumulative Unconstrained Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	Delay[1] (s)	LOS[2]	Delay[1] (s)	LOS[2]

Notes:

1. Delay is reported as seconds per vehicle and represent the average delay for the overall intersection.
2. "LOS" represents level of service, calculated based on methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).
3. Bold and italicized text signifies that the intersection operates unacceptably according to the City's LOS policy.
4. For the PM peak hour, this intersection was analyzed in a SimTraffic 10 microsimulation model to account for interaction between traffic signals, queue spillback, etc. SimTraffic results represent the average of 10 runs.
5. Because of restrictions in Synchro 10, *Highway Capacity Manual 2000* (Transportation Research Board, 2000) methodologies for calculating delay and level of service are applied at this intersection.
6. Forecasts are not available for this intersection. Results show as LOS C or better.
7. Intersection is located in City's Pedestrian Overlay District (POD), which is exempt from the City's LOS policies.

Source: Fehr & Peers, 2020

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	14	697	545	18	73	51
Future Volume (veh/h)	14	697	545	18	73	51
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	734	574	19	77	54
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	28	2516	1571	486	301	268
Arrive On Green	0.02	0.49	0.31	0.31	0.17	0.17
Sat Flow, veh/h	1781	5274	5274	1580	1781	1585
Grp Volume(v), veh/h	15	734	574	19	77	54
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1580	1781	1585
Q Serve(g_s), s	0.2	2.0	2.1	0.2	0.9	0.7
Cycle Q Clear(g_c), s	0.2	2.0	2.1	0.2	0.9	0.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	28	2516	1571	486	301	268
V/C Ratio(X)	0.53	0.29	0.37	0.04	0.26	0.20
Avail Cap(c_a), veh/h	602	6260	4317	1336	1732	1541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.6	3.6	6.4	5.7	8.5	8.5
Incr Delay (d2), s/veh	14.5	0.1	0.1	0.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.0	0.2	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.1	3.6	6.5	5.8	9.0	8.8
LnGrp LOS	C	A	A	A	A	A
Approach Vol, veh/h		749	593		131	
Approach Delay, s/veh		4.1	6.5		8.9	
Approach LOS		A	A		A	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			15.7		8.0	4.4	11.3
Change Period (Y+Rc), s			4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s			29.0		23.0	8.0	20.0
Max Q Clear Time (g_c+I1), s			4.0		2.9	2.2	4.1
Green Ext Time (p_c), s			4.7		0.3	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	610	82	208	326	134	69	520	512	405	672	168
Future Volume (veh/h)	78	610	82	208	326	134	69	520	512	405	672	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	642	86	219	343	141	73	547	539	426	707	177
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	993	308	306	1142	354	94	1359	742	425	2308	716
Arrive On Green	0.06	0.19	0.19	0.09	0.22	0.22	0.05	0.27	0.27	0.24	0.45	0.45
Sat Flow, veh/h	1781	5106	1585	3456	5106	1585	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	82	642	86	219	343	141	73	547	539	426	707	177
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1585	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	3.4	8.7	3.5	4.7	4.2	5.7	3.1	6.6	13.3	18.0	6.6	5.2
Cycle Q Clear(g_c), s	3.4	8.7	3.5	4.7	4.2	5.7	3.1	6.6	13.3	18.0	6.6	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	993	308	306	1142	354	94	1359	742	425	2308	716
V/C Ratio(X)	0.78	0.65	0.28	0.72	0.30	0.40	0.78	0.40	0.73	1.00	0.31	0.25
Avail Cap(c_a), veh/h	189	1964	610	367	1964	610	189	1964	1073	425	2641	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	28.0	25.9	33.4	24.4	24.9	35.3	22.7	25.2	28.7	13.1	12.7
Incr Delay (d2), s/veh	11.4	0.7	0.5	5.2	0.1	0.7	12.7	0.2	1.4	44.1	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.3	1.2	2.0	1.5	2.0	1.6	2.4	4.0	12.1	2.2	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	28.7	26.4	38.7	24.5	25.7	48.0	22.9	26.6	72.8	13.2	12.9
LnGrp LOS	D	C	C	D	C	C	D	C	C	F	B	B
Approach Vol, veh/h		810			703			1159			1310	
Approach Delay, s/veh		30.2			29.2			26.2			32.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	24.1	10.7	18.7	8.0	38.1	8.5	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	29.0	8.0	29.0	8.0	39.0	8.0	29.0
Max Q Clear Time (g_c+I1), s	20.0	15.3	6.7	10.7	5.1	8.6	5.4	7.7
Green Ext Time (p_c), s	0.0	4.8	0.1	3.9	0.0	5.5	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	81	1413	636	49	76	53
Future Volume (veh/h)	81	1413	636	49	76	53
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	1487	669	52	80	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	120	3083	2064	639	235	209
Arrive On Green	0.07	0.60	0.40	0.40	0.13	0.13
Sat Flow, veh/h	1781	5274	5274	1581	1781	1585
Grp Volume(v), veh/h	85	1487	669	52	80	56
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1581	1781	1585
Q Serve(g_s), s	1.4	4.9	2.7	0.6	1.2	1.0
Cycle Q Clear(g_c), s	1.4	4.9	2.7	0.6	1.2	1.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	120	3083	2064	639	235	209
V/C Ratio(X)	0.71	0.48	0.32	0.08	0.34	0.27
Avail Cap(c_a), veh/h	470	5395	3372	1044	1176	1047
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	3.4	6.2	5.6	11.9	11.8
Incr Delay (d2), s/veh	7.4	0.1	0.1	0.1	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	0.1	0.4	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.2	3.5	6.3	5.6	12.8	12.5
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1572	721		136	
Approach Delay, s/veh		4.4	6.2		12.7	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	22.3	8.0	6.0	16.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	32.0	20.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	6.9	3.2	3.4	4.7
Green Ext Time (p_c), s	11.4	0.3	0.1	3.8

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1412	77	1	627	58	2
Future Volume (veh/h)	1412	77	1	627	58	2
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1486	81	1	660	61	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2633	816	5	3256	215	191
Arrive On Green	0.52	0.52	0.00	0.64	0.12	0.12
Sat Flow, veh/h	5274	1582	1781	5274	1781	1585
Grp Volume(v), veh/h	1486	81	1	660	61	2
Grp Sat Flow(s),veh/h/ln	1702	1582	1781	1702	1781	1585
Q Serve(g_s), s	6.6	0.9	0.0	1.8	1.0	0.0
Cycle Q Clear(g_c), s	6.6	0.9	0.0	1.8	1.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2633	816	5	3256	215	191
V/C Ratio(X)	0.56	0.10	0.19	0.20	0.28	0.01
Avail Cap(c_a), veh/h	3546	1099	430	4780	1130	1005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.5	4.1	16.5	2.5	13.3	12.8
Incr Delay (d2), s/veh	0.2	0.1	15.8	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	0.0	0.0	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.7	4.1	32.3	2.5	14.0	12.8
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	1567			661	63	
Approach Delay, s/veh	5.6			2.6	13.9	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		8.0	4.0	21.1			25.1
Change Period (Y+Rc), s		4.0	4.0	4.0			4.0
Max Green Setting (Gmax), s		21.0	8.0	23.0			31.0
Max Q Clear Time (g_c+I1), s		3.0	2.0	8.6			3.8
Green Ext Time (p_c), s		0.1	0.0	8.5			4.4

Intersection Summary	
HCM 6th Ctrl Delay	4.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1326	29	91	459	57	55	99	133	267	81	113
Future Volume (veh/h)	60	1326	29	91	459	57	55	99	133	267	81	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	1396	31	96	483	60	58	104	140	281	85	119
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	1859	577	123	1980	615	74	231	196	330	500	423
Arrive On Green	0.05	0.36	0.36	0.07	0.39	0.39	0.04	0.12	0.12	0.19	0.27	0.27
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	63	1396	31	96	483	60	58	104	140	281	85	119
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.7	18.5	1.0	4.1	5.0	1.9	2.5	4.0	6.6	11.8	2.7	4.6
Cycle Q Clear(g_c), s	2.7	18.5	1.0	4.1	5.0	1.9	2.5	4.0	6.6	11.8	2.7	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	81	1859	577	123	1980	615	74	231	196	330	500	423
V/C Ratio(X)	0.78	0.75	0.05	0.78	0.24	0.10	0.78	0.45	0.72	0.85	0.17	0.28
Avail Cap(c_a), veh/h	184	2174	675	161	2108	654	207	772	654	528	1110	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	21.6	16.0	35.5	16.0	15.1	36.8	31.5	32.7	30.5	21.8	22.5
Incr Delay (d2), s/veh	14.7	1.3	0.0	16.4	0.1	0.1	16.0	1.4	4.8	7.5	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	7.1	0.3	2.3	1.8	0.7	1.4	1.8	2.7	5.6	1.2	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.4	22.8	16.0	51.9	16.1	15.2	52.8	32.9	37.5	38.0	22.0	22.9
LnGrp LOS	D	C	B	D	B	B	D	C	D	D	C	C
Approach Vol, veh/h		1490			639			302			485	
Approach Delay, s/veh		23.9			21.4			38.8			31.5	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	14.6	10.4	33.2	8.2	25.7	8.5	35.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	23.0	32.0	7.0	33.0	9.0	46.0	8.0	32.0
Max Q Clear Time (g_c+I1), s	13.8	8.6	6.1	20.5	4.5	6.6	4.7	7.0
Green Ext Time (p_c), s	0.6	1.0	0.0	7.7	0.0	0.9	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	1340	102	333	449	82	23	1071	446	313	634	191
Future Volume (veh/h)	239	1340	102	333	449	82	23	1071	446	313	634	191
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	252	1411	22	351	473	10	24	1127	285	329	667	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	646	1295	400	329	718	221	567	1226	544	329	905	401
Arrive On Green	0.19	0.25	0.25	0.10	0.14	0.14	0.16	0.34	0.34	0.10	0.25	0.25
Sat Flow, veh/h	3456	5106	1576	3456	5106	1568	3456	3554	1578	3456	3554	1576
Grp Volume(v), veh/h	252	1411	22	351	473	10	24	1127	285	329	667	77
Grp Sat Flow(s),veh/h/ln	1728	1702	1576	1728	1702	1568	1728	1777	1578	1728	1777	1576
Q Serve(g_s), s	6.1	24.0	0.6	9.0	8.3	0.4	0.6	28.8	13.7	9.0	16.3	3.6
Cycle Q Clear(g_c), s	6.1	24.0	0.6	9.0	8.3	0.4	0.6	28.8	13.7	9.0	16.3	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	646	1295	400	329	718	221	567	1226	544	329	905	401
V/C Ratio(X)	0.39	1.09	0.06	1.07	0.66	0.05	0.04	0.92	0.52	1.00	0.74	0.19
Avail Cap(c_a), veh/h	646	1295	400	329	1187	365	567	1239	550	329	1239	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	35.3	10.0	42.8	38.5	20.7	33.3	29.7	24.8	42.8	32.4	27.6
Incr Delay (d2), s/veh	0.1	53.2	0.1	68.9	1.5	0.1	0.0	11.4	1.6	49.9	2.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	15.4	0.4	6.7	3.3	0.2	0.2	12.8	4.9	5.9	6.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	88.5	10.0	111.7	40.0	20.8	33.3	41.2	26.4	92.7	34.9	28.1
LnGrp LOS	C	F	B	F	D	C	C	D	C	F	C	C
Approach Vol, veh/h		1685			834			1436			1073	
Approach Delay, s/veh		79.3			70.0			38.1			52.1	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	38.6	13.0	30.0	21.5	30.1	23.7	19.3
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	6.0	* 6
Max Green Setting (Gmax), s	9.0	33.0	9.0	24.0	9.0	* 33	11.0	* 22
Max Q Clear Time (g_c+I1), s	11.0	30.8	11.0	26.0	2.6	18.3	8.1	10.3
Green Ext Time (p_c), s	0.0	1.8	0.0	0.0	0.0	5.2	0.2	2.4

Intersection Summary	
HCM 6th Ctrl Delay	60.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	2094	0	0	748	92	0	0	0	213	0	9
Future Volume (veh/h)	3	2094	0	0	748	92	0	0	0	213	0	9
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	3	2204	0	0	787	97				224	0	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2				2	0	2
Cap, veh/h	9	3289	1021	124	2914	904				328	0	292
Arrive On Green	0.00	0.64	0.00	0.00	0.57	0.57				0.18	0.00	0.18
Sat Flow, veh/h	1781	5106	1585	176	5106	1585				1781	0	1585
Grp Volume(v), veh/h	3	2204	0	0	787	97				224	0	9
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	176	1702	1585				1781	0	1585
Q Serve(g_s), s	0.1	15.8	0.0	0.0	4.6	1.6				6.8	0.0	0.3
Cycle Q Clear(g_c), s	0.1	15.8	0.0	0.0	4.6	1.6				6.8	0.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	9	3289	1021	124	2914	904				328	0	292
V/C Ratio(X)	0.35	0.67	0.00	0.00	0.27	0.11				0.68	0.00	0.03
Avail Cap(c_a), veh/h	367	3766	1169	124	2914	904				825	0	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	28.9	6.5	0.0	0.0	6.4	5.7				22.2	0.0	19.5
Incr Delay (d2), s/veh	8.5	0.5	0.0	0.0	0.1	0.1				0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.9	0.0	0.0	1.3	0.4				2.7	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.4	7.0	0.0	0.0	6.4	5.8				23.1	0.0	19.5
LnGrp LOS	D	A	A	A	A	A				C	A	B
Approach Vol, veh/h		2207			884						233	
Approach Delay, s/veh		7.0			6.4						23.0	
Approach LOS		A			A						C	

Timer - Assigned Phs				4		6	7	8				
Phs Duration (G+Y+Rc), s				43.5		14.7	4.3	39.3				
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0				
Max Green Setting (Gmax), s				43.0		27.0	12.0	27.0				
Max Q Clear Time (g_c+I1), s				17.8		8.8	2.1	6.6				
Green Ext Time (p_c), s				19.8		0.5	0.0	6.5				

Intersection Summary												
HCM 6th Ctrl Delay			8.0									
HCM 6th LOS			A									

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2335	7	76	844	12	85
Future Volume (veh/h)	2335	7	76	844	12	85
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2458	7	80	888	13	89
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3103	963	167	3837	200	178
Arrive On Green	0.61	0.61	0.09	0.75	0.11	0.11
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	2458	7	80	888	13	89
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	29.1	0.1	3.4	4.2	0.5	4.2
Cycle Q Clear(g_c), s	29.1	0.1	3.4	4.2	0.5	4.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	3103	963	167	3837	200	178
V/C Ratio(X)	0.79	0.01	0.48	0.23	0.07	0.50
Avail Cap(c_a), veh/h	3260	1012	201	4091	671	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	6.2	34.4	3.0	31.7	33.4
Incr Delay (d2), s/veh	1.4	0.0	0.8	0.0	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	0.0	1.5	1.0	0.2	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.3	6.2	35.2	3.0	31.8	34.2
LnGrp LOS	B	A	D	A	C	C
Approach Vol, veh/h	2465			968	102	
Approach Delay, s/veh	13.3			5.7	33.9	
Approach LOS	B			A	C	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		13.9	11.5	54.5			66.0
Change Period (Y+Rc), s		4.9	4.0	6.0			6.0
Max Green Setting (Gmax), s		30.1	9.0	51.0			64.0
Max Q Clear Time (g_c+I1), s		6.2	5.4	31.1			6.2
Green Ext Time (p_c), s		0.2	0.0	17.5			8.4

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	2381	835	230	191	25
Future Volume (veh/h)	11	2381	835	230	191	25
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	2506	879	242	201	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	32	3421	3019	933	293	261
Arrive On Green	0.02	0.67	0.59	0.59	0.16	0.16
Sat Flow, veh/h	1781	5274	5274	1578	1781	1585
Grp Volume(v), veh/h	12	2506	879	242	201	26
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1578	1781	1585
Q Serve(g_s), s	0.4	20.9	5.6	4.9	7.0	0.9
Cycle Q Clear(g_c), s	0.4	20.9	5.6	4.9	7.0	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	32	3421	3019	933	293	261
V/C Ratio(X)	0.38	0.73	0.29	0.26	0.69	0.10
Avail Cap(c_a), veh/h	216	3731	3019	933	839	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	7.0	6.6	6.5	25.9	23.4
Incr Delay (d2), s/veh	2.7	0.8	0.1	0.2	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.3	1.4	1.2	2.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.6	7.8	6.7	6.7	27.0	23.4
LnGrp LOS	C	A	A	A	C	C
Approach Vol, veh/h		2518	1121		227	
Approach Delay, s/veh		8.0	6.7		26.6	
Approach LOS		A	A		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	50.1	15.7	5.2	44.9
Change Period (Y+Rc), s	6.0	4.9	4.0	6.0
Max Green Setting (Gmax), s	48.1	31.0	8.0	38.1
Max Q Clear Time (g_c+I1), s	22.9	9.0	2.4	7.6
Green Ext Time (p_c), s	21.2	0.5	0.0	9.2

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	2274	66	28	920	147	37	6	35	271	40	17
Future Volume (veh/h)	145	2274	66	28	920	147	37	6	35	271	40	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	153	2394	69	29	968	155	39	6	37	332	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	3292	1022	58	2954	917	138	145	123	410	215	0
Arrive On Green	0.10	0.64	0.64	0.03	0.58	0.58	0.08	0.08	0.08	0.12	0.00	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	3563	1870	0
Grp Volume(v), veh/h	153	2394	69	29	968	155	39	6	37	332	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	0
Q Serve(g_s), s	12.7	47.0	2.4	2.4	14.8	6.9	3.1	0.4	3.3	13.6	0.0	0.0
Cycle Q Clear(g_c), s	12.7	47.0	2.4	2.4	14.8	6.9	3.1	0.4	3.3	13.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	176	3292	1022	58	2954	917	138	145	123	410	215	0
V/C Ratio(X)	0.87	0.73	0.07	0.50	0.33	0.17	0.28	0.04	0.30	0.81	0.00	0.00
Avail Cap(c_a), veh/h	273	3292	1022	143	2954	917	143	150	127	998	524	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	66.6	17.8	9.9	71.3	16.4	14.8	65.3	64.0	65.4	64.8	0.0	0.0
Incr Delay (d2), s/veh	10.9	1.4	0.1	2.4	0.3	0.4	1.9	0.2	2.3	4.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	17.3	0.8	1.1	5.7	2.5	1.5	0.2	1.4	6.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.5	19.3	10.0	73.8	16.7	15.2	67.2	64.2	67.7	68.8	0.0	0.0
LnGrp LOS	E	B	B	E	B	B	E	E	E	E	A	A
Approach Vol, veh/h		2616			1152			82			332	
Approach Delay, s/veh		22.4			18.0			67.2			68.8	
Approach LOS		C			B			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.2	8.9	102.7		22.2	18.8	92.8				
Change Period (Y+Rc), s		4.6	4.0	6.0		4.9	4.0	6.0				
Max Green Setting (Gmax), s		12.0	12.0	64.5		42.0	23.0	53.5				
Max Q Clear Time (g_c+I1), s		5.3	4.4	49.0		15.6	14.7	16.8				
Green Ext Time (p_c), s		0.2	0.0	14.8		1.6	0.2	15.9				

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	2010	324	168	888	287	130	451	350	390	197	80
Future Volume (veh/h)	36	2010	324	168	888	287	130	451	350	390	197	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	2116	143	177	935	137	137	475	228	411	207	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	2531	623	529	2587	803	795	625	279	460	280	125
Arrive On Green	0.02	0.13	0.13	0.15	0.51	0.51	0.23	0.18	0.18	0.13	0.08	0.08
Sat Flow, veh/h	3456	6434	1585	3456	5106	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	38	2116	143	177	935	137	137	475	228	411	207	4
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1702	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.6	48.2	12.1	6.9	16.6	4.2	4.8	19.1	20.8	17.6	8.5	0.3
Cycle Q Clear(g_c), s	1.6	48.2	12.1	6.9	16.6	4.2	4.8	19.1	20.8	17.6	8.5	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	2531	623	529	2587	803	795	625	279	460	280	125
V/C Ratio(X)	0.21	0.84	0.23	0.33	0.36	0.17	0.17	0.76	0.82	0.89	0.74	0.03
Avail Cap(c_a), veh/h	276	2531	623	529	2587	803	795	860	384	530	1121	500
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.6	60.5	44.9	56.7	22.3	7.1	46.3	58.8	59.5	64.0	67.6	48.5
Incr Delay (d2), s/veh	0.2	3.5	0.9	0.1	0.4	0.5	0.0	3.2	10.8	14.7	5.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	21.4	5.3	3.0	6.6	2.5	2.1	8.8	9.0	8.6	4.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.8	64.0	45.7	56.8	22.7	7.5	46.3	62.0	70.3	78.7	72.6	48.7
LnGrp LOS	E	E	D	E	C	A	D	E	E	E	E	D
Approach Vol, veh/h		2297			1249			840			622	
Approach Delay, s/veh		63.0			25.9			61.7			76.5	
Approach LOS		E			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	32.1	29.0	65.0	38.5	17.5	11.9	82.0
Change Period (Y+Rc), s	4.0	5.7	6.0	* 6	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	23.0	36.3	12.0	* 59	12.0	47.3	12.0	59.0
Max Q Clear Time (g_c+I1), s	19.6	22.8	8.9	50.2	6.8	10.5	3.6	18.6
Green Ext Time (p_c), s	0.4	3.6	0.1	8.5	0.1	1.3	0.0	15.6

Intersection Summary	
HCM 6th Ctrl Delay	55.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	2614	5	5	1301	84	5	5	5	23	5	10
Future Volume (veh/h)	10	2614	5	5	1301	84	5	5	5	23	5	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	2752	5	5	1369	88	5	5	5	24	5	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	5200	1281	9	5169	1274	95	50	42	48	14	31
Arrive On Green	0.02	1.00	1.00	0.01	0.80	0.80	0.03	0.03	0.03	0.03	0.03	0.03
Sat Flow, veh/h	1781	6434	1585	1781	6434	1585	3563	1870	1585	1781	520	1144
Grp Volume(v), veh/h	11	2752	5	5	1369	88	5	5	5	24	0	16
Grp Sat Flow(s),veh/h/ln	1781	1609	1585	1781	1609	1585	1781	1870	1585	1781	0	1664
Q Serve(g_s), s	0.9	0.0	0.0	0.4	8.0	1.7	0.2	0.4	0.5	2.0	0.0	1.4
Cycle Q Clear(g_c), s	0.9	0.0	0.0	0.4	8.0	1.7	0.2	0.4	0.5	2.0	0.0	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	17	5200	1281	9	5169	1274	95	50	42	48	0	45
V/C Ratio(X)	0.63	0.53	0.00	0.56	0.26	0.07	0.05	0.10	0.12	0.50	0.00	0.36
Avail Cap(c_a), veh/h	83	5200	1281	83	5169	1274	926	486	412	83	0	78
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	73.3	0.0	0.0	74.5	3.7	3.1	71.2	71.2	71.3	72.0	0.0	71.7
Incr Delay (d2), s/veh	31.8	0.4	0.0	43.9	0.0	0.0	0.2	0.9	1.2	8.0	0.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.0	0.3	2.0	0.4	0.1	0.2	0.2	1.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.1	0.4	0.0	118.4	3.7	3.1	71.4	72.1	72.5	80.0	0.0	76.6
LnGrp LOS	F	A	A	F	A	A	E	E	E	F	A	E
Approach Vol, veh/h		2768			1462			15			40	
Approach Delay, s/veh		0.8			4.1			72.0			78.6	
Approach LOS		A			A			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		9.0	5.8	126.2		9.0	6.5	125.5				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		39.0	7.0	77.0		7.0	7.0	77.0				
Max Q Clear Time (g_c+I1), s		2.5	2.4	2.0		4.0	2.9	10.0				
Green Ext Time (p_c), s		0.0	0.0	51.3		0.0	0.0	13.6				

Intersection Summary	
HCM 6th Ctrl Delay	2.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	2713	5	5	1336	63	5	5	5	249	5	45
Future Volume (veh/h)	13	2713	5	5	1336	63	5	5	5	249	5	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	2856	5	5	1406	66	5	5	5	266	0	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	5088	1253	116	4803	1183	22	23	20	324	0	144
Arrive On Green	0.04	1.00	1.00	1.00	1.00	1.00	0.01	0.01	0.01	0.09	0.00	0.09
Sat Flow, veh/h	1781	6434	1585	91	6434	1585	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	14	2856	5	5	1406	66	5	5	5	266	0	47
Grp Sat Flow(s),veh/h/ln	1781	1609	1585	91	1609	1585	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.5	11.0	0.0	4.2
Cycle Q Clear(g_c), s	1.2	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.5	11.0	0.0	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	5088	1253	116	4803	1183	22	23	20	324	0	144
V/C Ratio(X)	0.44	0.56	0.00	0.04	0.29	0.06	0.23	0.22	0.25	0.82	0.00	0.33
Avail Cap(c_a), veh/h	143	5088	1253	116	4803	1183	297	312	264	525	0	234
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	71.6	0.0	0.0	0.0	0.0	0.0	73.4	73.3	73.4	67.0	0.0	63.9
Incr Delay (d2), s/veh	2.9	0.4	0.0	0.3	0.1	0.0	5.1	4.6	6.6	2.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.2	5.2	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.5	0.4	0.0	0.3	0.1	0.0	78.4	77.9	80.0	69.3	0.0	64.4
LnGrp LOS	E	A	A	A	A	A	E	E	F	E	A	E
Approach Vol, veh/h		2875			1477			15			313	
Approach Delay, s/veh		0.7			0.1			78.8			68.6	
Approach LOS		A			A			E			E	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		6.9		124.6		18.5	6.7	118.0				
Change Period (Y+Rc), s		5.0		6.0		4.9	4.0	6.0				
Max Green Setting (Gmax), s		25.0		87.0		22.1	12.0	71.0				
Max Q Clear Time (g_c+I1), s		2.5		2.0		13.0	3.2	2.0				
Green Ext Time (p_c), s		0.0		73.7		0.6	0.0	23.8				

Intersection Summary	
HCM 6th Ctrl Delay	5.3
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	2885	10	10	1612	10	10	10	10	10	10	10
Future Volume (veh/h)	10	2885	10	10	1612	10	10	10	10	10	10	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	3037	11	11	1697	11	11	11	11	11	11	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	4582	1129	44	4582	1129	119	125	145	39	39	39
Arrive On Green	0.05	1.00	1.00	0.02	0.71	0.71	0.07	0.07	0.07	0.07	0.07	0.07
Sat Flow, veh/h	1781	6434	1585	1781	6434	1585	1781	1870	1585	579	579	579
Grp Volume(v), veh/h	11	3037	11	11	1697	11	11	11	11	33	0	0
Grp Sat Flow(s),veh/h/ln	1781	1609	1585	1781	1609	1585	1781	1870	1585	1737	0	0
Q Serve(g_s), s	0.9	0.0	0.0	0.9	15.5	0.3	0.9	0.8	1.0	2.7	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	0.0	0.9	15.5	0.3	0.9	0.8	1.0	2.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.33		0.33
Lane Grp Cap(c), veh/h	44	4582	1129	44	4582	1129	119	125	145	116	0	0
V/C Ratio(X)	0.25	0.66	0.01	0.25	0.37	0.01	0.09	0.09	0.08	0.28	0.00	0.00
Avail Cap(c_a), veh/h	119	4582	1129	119	4582	1129	190	200	208	185	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	70.0	0.0	0.0	71.8	8.4	6.3	65.7	65.7	62.4	66.6	0.0	0.0
Incr Delay (d2), s/veh	3.0	0.8	0.0	2.7	0.2	0.0	0.3	0.3	0.2	1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.0	0.4	4.9	0.1	0.4	0.4	0.4	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.0	0.8	0.0	74.5	8.7	6.3	66.1	66.0	62.6	67.9	0.0	0.0
LnGrp LOS	E	A	A	E	A	A	E	E	E	E	A	A
Approach Vol, veh/h		3059			1719			33			33	
Approach Delay, s/veh		1.0			9.1			64.9			67.9	
Approach LOS		A			A			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	8.2	112.8		14.5	8.2	112.8				
Change Period (Y+Rc), s		4.5	4.5	6.0		4.5	4.5	6.0				
Max Green Setting (Gmax), s		16.0	10.0	88.5		16.0	10.0	88.5				
Max Q Clear Time (g_c+I1), s		4.7	2.9	2.0		3.0	2.9	17.5				
Green Ext Time (p_c), s		0.1	0.0	83.6		0.0	0.0	41.8				

Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	2257	410	827	1285	524	290	430	312	603	332	57
Future Volume (veh/h)	238	2257	410	827	1285	524	290	430	312	603	332	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	2376	277	871	1353	243	305	453	0	635	349	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	2188	539	806	2960	729	913	426		599	525	287
Arrive On Green	0.03	0.11	0.11	0.23	0.46	0.46	0.18	0.12	0.00	0.17	0.10	0.10
Sat Flow, veh/h	3456	6434	1585	3456	6434	1585	5023	3554	1585	3456	5106	2790
Grp Volume(v), veh/h	251	2376	277	871	1353	243	305	453	0	635	349	1
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1585	1674	1777	1585	1728	1702	1395
Q Serve(g_s), s	10.8	51.0	14.9	35.0	21.6	8.1	7.9	18.0	0.0	26.0	9.9	0.0
Cycle Q Clear(g_c), s	10.8	51.0	14.9	35.0	21.6	8.1	7.9	18.0	0.0	26.0	9.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	346	2188	539	806	2960	729	913	426		599	525	287
V/C Ratio(X)	0.73	1.09	0.51	1.08	0.46	0.33	0.33	1.06		1.06	0.66	0.00
Avail Cap(c_a), veh/h	392	2188	539	806	2960	729	913	426		599	1045	571
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	1.00	1.00	1.00	0.93	0.93	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.5	66.6	20.0	57.5	27.7	8.0	53.5	66.0	0.0	62.0	64.8	60.4
Incr Delay (d2), s/veh	3.2	44.9	2.4	55.6	0.5	1.2	0.1	59.5	0.0	53.7	5.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	28.9	6.6	21.1	8.2	5.2	3.3	11.4	0.0	15.5	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.6	111.5	22.4	113.1	28.2	9.2	53.5	125.5	0.0	115.7	69.9	60.4
LnGrp LOS	E	F	C	F	C	A	D	F		F	E	E
Approach Vol, veh/h		2904			2467			758	A		985	
Approach Delay, s/veh		99.7			56.3			96.6			99.5	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.3	20.7	21.0	75.0	30.0	24.0	39.0	57.0
Change Period (Y+Rc), s	6.0	* 5.3	6.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	14.0	* 31	17.0	* 69	26.0	18.0	35.0	51.0
Max Q Clear Time (g_c+I1), s	9.9	11.9	12.8	23.6	28.0	20.0	37.0	53.0
Green Ext Time (p_c), s	0.3	3.6	0.2	27.2	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	84.3
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	3047	97	124	1784	11	16
Future Volume (veh/h)	3047	97	124	1784	11	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3207	102	131	1878	12	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	4064	1262	152	5885	33	165
Arrive On Green	0.80	0.80	0.17	1.00	0.02	0.02
Sat Flow, veh/h	5274	1585	1781	6696	1781	1585
Grp Volume(v), veh/h	3207	102	131	1878	12	17
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1609	1781	1585
Q Serve(g_s), s	51.7	2.1	10.7	0.0	1.0	1.5
Cycle Q Clear(g_c), s	51.7	2.1	10.7	0.0	1.0	1.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	4064	1262	152	5885	33	165
V/C Ratio(X)	0.79	0.08	0.86	0.32	0.36	0.10
Avail Cap(c_a), veh/h	4064	1262	214	5885	190	304
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.81	0.81	1.00	1.00
Uniform Delay (d), s/veh	8.4	3.3	61.3	0.0	72.7	60.9
Incr Delay (d2), s/veh	1.6	0.1	18.2	0.0	6.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	0.6	5.1	0.0	0.5	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.0	3.5	79.6	0.0	79.1	61.1
LnGrp LOS	B	A	E	A	E	E
Approach Vol, veh/h	3309			2009	29	
Approach Delay, s/veh	9.8			5.2	68.6	
Approach LOS	A			A	E	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		7.8	17.8	124.4			142.2
Change Period (Y+Rc), s		5.0	5.0	5.0			5.0
Max Green Setting (Gmax), s		16.0	18.0	101.0			124.0
Max Q Clear Time (g_c+I1), s		3.5	12.7	53.7			2.0
Green Ext Time (p_c), s		0.0	0.1	42.7			23.9

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2360	703	473	978	332	540	0	437	59	576	390
Future Volume (veh/h)	0	2360	703	473	978	332	540	0	437	59	576	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	2484	531	498	1029	0	568	0	245	62	606	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	2	2	0	2	2	2	2
Cap, veh/h	0	2281	708	415	3030		0	0	0	261	521	
Arrive On Green	0.00	0.45	0.45	0.12	0.59	0.00	0.00	0.00	0.00	0.15	0.15	0.00
Sat Flow, veh/h	0	5274	1585	3456	5106	1585		0		1781	3554	1585
Grp Volume(v), veh/h	0	2484	531	498	1029	0		0.0		62	606	0
Grp Sat Flow(s),veh/h/ln	0	1702	1585	1728	1702	1585				1781	1777	1585
Q Serve(g_s), s	0.0	67.0	41.8	18.0	15.4	0.0				4.6	22.0	0.0
Cycle Q Clear(g_c), s	0.0	67.0	41.8	18.0	15.4	0.0				4.6	22.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2281	708	415	3030					261	521	
V/C Ratio(X)	0.00	1.09	0.75	1.20	0.34					0.24	1.16	
Avail Cap(c_a), veh/h	0	2281	708	415	3030					261	521	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.50	0.50	1.00	1.00	0.00				1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	41.5	34.5	66.0	15.5	0.0				56.6	64.0	0.0
Incr Delay (d2), s/veh	0.0	44.5	2.6	111.5	0.3	0.0				0.2	92.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	36.2	16.1	14.2	5.8	0.0				2.1	16.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	86.0	37.2	177.5	15.8	0.0				56.8	156.7	0.0
LnGrp LOS	A	F	D	F	B					E	F	
Approach Vol, veh/h		3015			1527	A					668	A
Approach Delay, s/veh		77.4			68.5						147.4	
Approach LOS		E			E						F	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		28.0	22.0	73.0				95.0				
Change Period (Y+Rc), s		6.0	4.0	6.0				6.0				
Max Green Setting (Gmax), s		22.0	18.0	67.0				89.0				
Max Q Clear Time (g_c+I1), s		24.0	20.0	69.0				17.4				
Green Ext Time (p_c), s		0.0	0.0	0.0				12.9				

Intersection Summary	
HCM 6th Ctrl Delay	83.8
HCM 6th LOS	F

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	395	595	96	202	64	348	381	2	71	220	0
Future Volume (veh/h)	0	395	595	96	202	64	348	381	2	71	220	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	416	253	101	213	27	366	401	1	75	232	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	886	395	130	1508	673	490	768	343	181	451	201
Arrive On Green	0.00	0.25	0.25	0.07	0.42	0.42	0.14	0.22	0.22	0.05	0.13	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	0	416	253	101	213	27	366	401	1	75	232	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.0	4.9	7.0	2.7	1.8	0.5	5.0	4.9	0.0	1.0	3.0	0.0
Cycle Q Clear(g_c), s	0.0	4.9	7.0	2.7	1.8	0.5	5.0	4.9	0.0	1.0	3.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	4	886	395	130	1508	673	490	768	343	181	451	201
V/C Ratio(X)	0.00	0.47	0.64	0.78	0.14	0.04	0.75	0.52	0.00	0.42	0.51	0.00
Avail Cap(c_a), veh/h	255	2110	941	255	2110	941	495	1964	876	495	1891	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	15.6	16.4	22.3	8.6	8.2	20.1	16.9	15.0	22.4	19.9	0.0
Incr Delay (d2), s/veh	0.0	0.4	1.7	9.7	0.0	0.0	6.1	0.6	0.0	1.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.6	2.2	1.3	0.5	0.1	2.1	1.7	0.0	0.4	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.0	18.1	31.9	8.6	8.3	26.2	17.5	15.0	23.9	20.8	0.0
LnGrp LOS	A	B	B	C	A	A	C	B	B	C	C	A
Approach Vol, veh/h		669			341			768			307	
Approach Delay, s/veh		16.8			15.5			21.6			21.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	15.6	8.6	17.2	11.9	11.2	0.0	25.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	27.0	7.0	29.0	7.0	26.0	7.0	29.0
Max Q Clear Time (g_c+I1), s	3.0	6.9	4.7	9.0	7.0	5.0	0.0	3.8
Green Ext Time (p_c), s	0.0	2.3	0.0	3.2	0.0	1.2	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	447	15	38	274	76	15
Future Volume (veh/h)	447	15	38	274	76	15
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	471	16	40	288	80	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1181	527	553	1181	340	302
Arrive On Green	0.33	0.33	0.33	0.33	0.19	0.19
Sat Flow, veh/h	3647	1585	909	3647	1781	1585
Grp Volume(v), veh/h	471	16	40	288	80	16
Grp Sat Flow(s),veh/h/ln	1777	1585	909	1777	1781	1585
Q Serve(g_s), s	2.1	0.1	0.7	1.2	0.8	0.2
Cycle Q Clear(g_c), s	2.1	0.1	2.9	1.2	0.8	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1181	527	553	1181	340	302
V/C Ratio(X)	0.40	0.03	0.07	0.24	0.24	0.05
Avail Cap(c_a), veh/h	7796	3477	2245	7796	2039	1814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.4	4.7	6.5	5.1	7.2	6.9
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.1	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.6	4.7	6.6	5.2	7.5	7.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	487			328	96	
Approach Delay, s/veh	5.6			5.4	7.5	
Approach LOS	A			A	A	

Timer - Assigned Phs		2		4			8
Phs Duration (G+Y+Rc), s		9.0		12.0			12.0
Change Period (Y+Rc), s		5.0		5.0			5.0
Max Green Setting (Gmax), s		24.0		46.0			46.0
Max Q Clear Time (g_c+I1), s		2.8		4.1			4.9
Green Ext Time (p_c), s		0.2		3.3			2.1

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	453	7	33	237	196	27	818	75	311	635	108
Future Volume (veh/h)	141	453	7	33	237	196	27	818	75	311	635	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	148	477	7	35	249	206	28	861	79	327	668	114
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	822	366	102	672	300	86	1407	437	463	1965	610
Arrive On Green	0.07	0.23	0.23	0.03	0.19	0.19	0.02	0.28	0.28	0.13	0.38	0.38
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	148	477	7	35	249	206	28	861	79	327	668	114
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.5	7.2	0.2	0.6	3.7	7.3	0.5	8.9	2.3	5.5	5.6	2.9
Cycle Q Clear(g_c), s	2.5	7.2	0.2	0.6	3.7	7.3	0.5	8.9	2.3	5.5	5.6	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	822	366	102	672	300	86	1407	437	463	1965	610
V/C Ratio(X)	0.60	0.58	0.02	0.34	0.37	0.69	0.33	0.61	0.18	0.71	0.34	0.19
Avail Cap(c_a), veh/h	627	1876	837	627	1876	837	627	2695	837	855	3032	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	20.7	18.0	28.9	21.4	22.9	29.1	19.1	16.7	25.1	13.2	12.4
Incr Delay (d2), s/veh	2.3	0.7	0.0	2.0	0.3	2.8	2.2	0.4	0.2	2.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.7	0.1	0.3	1.4	2.7	0.2	3.0	0.8	2.1	1.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	21.3	18.0	30.9	21.8	25.7	31.2	19.6	16.9	27.1	13.3	12.5
LnGrp LOS	C	C	B	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		632			490			968			1109	
Approach Delay, s/veh		23.2			24.1			19.7			17.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	21.7	6.8	19.0	6.5	28.3	9.3	16.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	32.0	11.0	32.0	11.0	36.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	7.5	10.9	2.6	9.2	2.5	7.6	4.5	9.3
Green Ext Time (p_c), s	0.7	5.8	0.0	3.0	0.0	4.9	0.2	2.1

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	836	3	19	458	9	8	0	91	37	0	0
Future Volume (veh/h)	0	836	3	19	458	9	8	0	91	37	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	880	3	20	482	9	8	0	96	39	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1331	594	36	1797	802	15	0	199	64	285	0
Arrive On Green	0.00	0.37	0.37	0.02	0.51	0.51	0.01	0.00	0.13	0.04	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	0	1585	1781	1870	0
Grp Volume(v), veh/h	0	880	3	20	482	9	8	0	96	39	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	0
Q Serve(g_s), s	0.0	7.4	0.0	0.4	2.8	0.1	0.2	0.0	2.0	0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.4	0.0	0.4	2.8	0.1	0.2	0.0	2.0	0.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	5	1331	594	36	1797	802	15	0	199	64	285	0
V/C Ratio(X)	0.00	0.66	0.01	0.56	0.27	0.01	0.53	0.00	0.48	0.61	0.00	0.00
Avail Cap(c_a), veh/h	396	1973	880	396	1973	880	396	0	1364	396	1609	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.4	7.1	17.5	5.1	4.4	17.8	0.0	14.7	17.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	12.8	0.1	0.0	25.3	0.0	1.8	9.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.7	0.0	0.3	0.4	0.0	0.2	0.0	0.7	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.9	7.1	30.3	5.2	4.4	43.1	0.0	16.5	26.2	0.0	0.0
LnGrp LOS	A	A	A	C	A	A	D	A	B	C	A	A
Approach Vol, veh/h		883			511			104			39	
Approach Delay, s/veh		9.9			6.1			18.5			26.2	
Approach LOS		A			A			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	8.5	4.7	17.5	4.3	9.5	0.0	22.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	31.0	8.0	20.0	8.0	31.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	2.8	4.0	2.4	9.4	2.2	0.0	0.0	4.8
Green Ext Time (p_c), s	0.0	0.5	0.0	4.1	0.0	0.0	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	717	12	99	423	80	31	108	229	29	188	101
Future Volume (veh/h)	53	717	12	99	423	80	31	108	229	29	188	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	755	13	104	445	84	33	114	241	31	198	106
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	960	428	142	857	161	75	258	285	35	222	119
Arrive On Green	0.06	0.27	0.27	0.08	0.29	0.29	0.18	0.18	0.18	0.21	0.21	0.21
Sat Flow, veh/h	1781	3554	1585	1781	2986	560	415	1434	1585	163	1041	557
Grp Volume(v), veh/h	56	755	13	104	264	265	147	0	241	335	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1770	1850	0	1585	1762	0	0
Q Serve(g_s), s	2.4	15.6	0.5	4.5	9.8	9.9	5.6	0.0	11.6	14.6	0.0	0.0
Cycle Q Clear(g_c), s	2.4	15.6	0.5	4.5	9.8	9.9	5.6	0.0	11.6	14.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.32	0.22		1.00	0.09		0.32
Lane Grp Cap(c), veh/h	112	960	428	142	510	508	333	0	285	376	0	0
V/C Ratio(X)	0.50	0.79	0.03	0.73	0.52	0.52	0.44	0.00	0.85	0.89	0.00	0.00
Avail Cap(c_a), veh/h	271	1192	532	271	596	594	489	0	419	453	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.8	26.7	21.2	35.5	23.6	23.6	28.9	0.0	31.3	30.2	0.0	0.0
Incr Delay (d2), s/veh	1.3	3.6	0.0	2.7	1.4	1.4	0.3	0.0	6.9	15.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	6.4	0.2	1.9	3.9	4.0	2.4	0.0	4.6	7.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.1	30.3	21.3	38.3	25.0	25.1	29.2	0.0	38.2	45.6	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	C	A	D	D	A	A
Approach Vol, veh/h		824			633			388			335	
Approach Delay, s/veh		30.6			27.2			34.8			45.6	
Approach LOS		C			C			C			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.2	10.3	27.0		19.5	9.0	28.4				
Change Period (Y+Rc), s		5.3	4.0	5.7		5.3	4.0	5.7				
Max Green Setting (Gmax), s		20.3	12.0	26.5		20.9	12.0	26.5				
Max Q Clear Time (g_c+I1), s		16.6	6.5	17.6		13.6	4.4	11.9				
Green Ext Time (p_c), s		0.3	0.1	3.8		0.6	0.0	3.1				

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	939	7	95	562	41	26	27	39	53	6	7
Future Volume (veh/h)	16	939	7	95	562	41	26	27	39	53	6	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	988	7	100	592	43	27	28	41	56	6	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	1513	11	129	1684	751	35	37	54	79	9	78
Arrive On Green	0.02	0.42	0.42	0.07	0.47	0.47	0.07	0.07	0.07	0.05	0.05	0.05
Sat Flow, veh/h	1781	3617	26	1781	3554	1585	482	500	732	1616	173	1585
Grp Volume(v), veh/h	17	485	510	100	592	43	96	0	0	62	0	7
Grp Sat Flow(s),veh/h/ln	1781	1777	1866	1781	1777	1585	1714	0	0	1790	0	1585
Q Serve(g_s), s	0.5	11.0	11.0	2.8	5.3	0.7	2.8	0.0	0.0	1.7	0.0	0.2
Cycle Q Clear(g_c), s	0.5	11.0	11.0	2.8	5.3	0.7	2.8	0.0	0.0	1.7	0.0	0.2
Prop In Lane	1.00		0.01	1.00		1.00	0.28		0.43	0.90		1.00
Lane Grp Cap(c), veh/h	30	743	781	129	1684	751	126	0	0	88	0	78
V/C Ratio(X)	0.57	0.65	0.65	0.78	0.35	0.06	0.76	0.00	0.00	0.70	0.00	0.09
Avail Cap(c_a), veh/h	424	1314	1380	424	2629	1172	717	0	0	713	0	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.6	11.7	11.7	23.0	8.4	7.2	22.9	0.0	0.0	23.6	0.0	22.9
Incr Delay (d2), s/veh	6.1	1.7	1.6	3.8	0.2	0.1	3.6	0.0	0.0	3.8	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.4	3.6	1.1	1.4	0.2	1.1	0.0	0.0	0.7	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	13.4	13.3	26.7	8.6	7.2	26.5	0.0	0.0	27.4	0.0	23.1
LnGrp LOS	C	B	B	C	A	A	C	A	A	C	A	C
Approach Vol, veh/h		1012			735			96			69	
Approach Delay, s/veh		13.7			11.0			26.5			27.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.4	7.6	26.8		8.6	4.8	29.6				
Change Period (Y+Rc), s		4.9	4.0	5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		20.1	12.0	37.3		21.1	12.0	37.3				
Max Q Clear Time (g_c+I1), s		3.7	4.8	13.0		4.8	2.5	7.3				
Green Ext Time (p_c), s		0.1	0.1	8.1		0.2	0.0	5.4				

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1346	50	29	525	53	95
Future Volume (veh/h)	1346	50	29	525	53	95
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1417	53	31	553	56	100
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1914	854	51	2398	196	174
Arrive On Green	0.54	0.54	0.03	0.67	0.11	0.11
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	1417	53	31	553	56	100
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	14.2	0.7	0.8	2.8	1.3	2.8
Cycle Q Clear(g_c), s	14.2	0.7	0.8	2.8	1.3	2.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1914	854	51	2398	196	174
V/C Ratio(X)	0.74	0.06	0.61	0.23	0.29	0.57
Avail Cap(c_a), veh/h	2451	1093	269	3370	614	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.2	5.1	22.3	2.9	19.0	19.6
Incr Delay (d2), s/veh	0.9	0.0	11.4	0.0	0.8	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.1	0.4	0.2	0.5	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.1	5.1	33.7	3.0	19.8	22.6
LnGrp LOS	A	A	C	A	B	C
Approach Vol, veh/h	1470			584	156	
Approach Delay, s/veh	9.0			4.6	21.6	
Approach LOS	A			A	C	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		10.1	6.3	30.0			36.3
Change Period (Y+Rc), s		5.0	5.0	5.0			5.0
Max Green Setting (Gmax), s		16.0	7.0	32.0			44.0
Max Q Clear Time (g_c+I1), s		4.8	2.8	16.2			4.8
Green Ext Time (p_c), s		0.3	0.0	8.8			3.7

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	672	374	545	363	79	192	1245	880	112	885	33
Future Volume (veh/h)	76	672	374	545	363	79	192	1245	880	112	885	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	707	249	574	382	68	202	1311	765	118	932	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	723	323	579	743	131	255	2385	740	209	2317	719
Arrive On Green	0.07	0.20	0.20	0.12	0.25	0.25	0.07	0.47	0.47	0.06	0.45	0.45
Sat Flow, veh/h	3456	3554	1585	5023	3019	533	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	80	707	249	574	223	227	202	1311	765	118	932	14
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1674	1777	1774	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.9	25.8	19.3	14.9	14.1	14.4	7.5	24.0	60.8	4.3	15.9	0.6
Cycle Q Clear(g_c), s	2.9	25.8	19.3	14.9	14.1	14.4	7.5	24.0	60.8	4.3	15.9	0.6
Prop In Lane	1.00		1.00	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	723	323	579	437	437	255	2385	740	209	2317	719
V/C Ratio(X)	0.32	0.98	0.77	0.99	0.51	0.52	0.79	0.55	1.03	0.56	0.40	0.02
Avail Cap(c_a), veh/h	265	723	323	579	437	437	345	2385	740	212	2317	719
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	51.5	49.0	57.5	42.3	42.4	59.3	24.9	34.7	59.5	23.8	19.6
Incr Delay (d2), s/veh	0.3	27.9	12.0	35.2	1.4	1.5	5.9	0.4	42.0	2.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	13.9	8.5	8.0	6.2	6.3	3.4	9.1	30.2	1.9	6.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.6	79.5	61.0	92.7	43.7	43.9	65.2	25.3	76.7	61.5	24.0	19.6
LnGrp LOS	E	E	E	F	D	D	E	C	F	E	C	B
Approach Vol, veh/h		1036			1024			2278			1064	
Approach Delay, s/veh		73.3			71.2			46.1			28.1	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	66.8	19.0	32.5	13.6	65.1	13.4	38.1
Change Period (Y+Rc), s	4.0	6.0	4.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	60.8	15.0	* 27	13.0	55.8	10.0	31.2
Max Q Clear Time (g_c+I1), s	6.3	62.8	16.9	27.8	9.5	17.9	4.9	16.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	10.0	0.1	2.3

Intersection Summary	
HCM 6th Ctrl Delay	52.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	1506	877	48	105	24
Future Volume (veh/h)	11	1506	877	48	105	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1585	923	0	111	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	44	2200	1786		271	
Arrive On Green	0.02	0.62	0.50	0.00	0.15	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	12	1585	923	0	111	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.3	13.4	7.6	0.0	2.5	0.0
Cycle Q Clear(g_c), s	0.3	13.4	7.6	0.0	2.5	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	44	2200	1786		271	
V/C Ratio(X)	0.27	0.72	0.52		0.41	
Avail Cap(c_a), veh/h	326	2763	1812		1059	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	20.9	5.7	7.3	0.0	16.8	0.0
Incr Delay (d2), s/veh	1.2	0.9	0.4	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.8	1.6	0.0	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.1	6.6	7.7	0.0	17.1	0.0
LnGrp LOS	C	A	A		B	
Approach Vol, veh/h		1597	923	A	111	A
Approach Delay, s/veh		6.7	7.7		17.1	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		33.1		10.7	5.1	28.0
Change Period (Y+Rc), s		6.0		4.0	4.0	* 6
Max Green Setting (Gmax), s		34.0		26.0	8.0	* 22
Max Q Clear Time (g_c+I1), s		15.4		4.5	2.3	9.6
Green Ext Time (p_c), s		11.7		0.2	0.0	5.7

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	1602	941	18	50	10
Future Volume (veh/h)	5	1602	941	18	50	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	5	1686	991	19	53	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	17	2374	2025	39	160	33
Arrive On Green	0.01	0.67	0.57	0.57	0.11	0.11
Sat Flow, veh/h	1781	3647	3660	68	1424	295
Grp Volume(v), veh/h	5	1686	494	516	65	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1858	1746	0
Q Serve(g_s), s	0.1	13.2	7.3	7.3	1.5	0.0
Cycle Q Clear(g_c), s	0.1	13.2	7.3	7.3	1.5	0.0
Prop In Lane	1.00			0.04	0.82	0.17
Lane Grp Cap(c), veh/h	17	2374	1009	1055	196	0
V/C Ratio(X)	0.30	0.71	0.49	0.49	0.33	0.00
Avail Cap(c_a), veh/h	485	2845	1009	1055	792	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.7	4.6	5.7	5.7	18.1	0.0
Incr Delay (d2), s/veh	3.6	0.9	0.6	0.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.1	1.4	1.4	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.3	5.5	6.3	6.3	18.4	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		1691	1010		65	
Approach Delay, s/veh		5.6	6.3		18.4	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	35.2	8.9	4.4	30.7
Change Period (Y+Rc), s	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	35.3	20.0	12.0	19.3
Max Q Clear Time (g_c+I1), s	15.2	3.5	2.1	9.3
Green Ext Time (p_c), s	14.2	0.1	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	23	1621	897	24	104	47
Future Volume (veh/h)	23	1621	897	24	104	47
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	1706	944	25	109	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	70	2268	1845	49	277	247
Arrive On Green	0.04	0.64	0.52	0.52	0.16	0.16
Sat Flow, veh/h	1781	3647	3629	94	1781	1585
Grp Volume(v), veh/h	24	1706	474	495	109	49
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1852	1781	1585
Q Serve(g_s), s	0.7	17.3	9.0	9.0	2.9	1.4
Cycle Q Clear(g_c), s	0.7	17.3	9.0	9.0	2.9	1.4
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	70	2268	927	966	277	247
V/C Ratio(X)	0.34	0.75	0.51	0.51	0.39	0.20
Avail Cap(c_a), veh/h	275	2691	935	974	686	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	6.5	8.1	8.1	19.7	19.1
Incr Delay (d2), s/veh	1.1	1.2	0.7	0.7	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.1	2.3	2.4	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.3	7.8	8.8	8.8	20.0	19.2
LnGrp LOS	C	A	A	A	C	B
Approach Vol, veh/h		1730	969		158	
Approach Delay, s/veh		8.0	8.8		19.8	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	39.8	12.1	6.0	33.8
Change Period (Y+Rc), s	6.7	4.0	4.0	6.7
Max Green Setting (Gmax), s	39.3	20.0	8.0	27.3
Max Q Clear Time (g_c+I1), s	19.3	4.9	2.7	11.0
Green Ext Time (p_c), s	13.8	0.3	0.0	6.1

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	1474	171	311	784	133	94	657	711	301	425	217
Future Volume (veh/h)	77	1474	171	311	784	133	94	657	711	301	425	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	81	1552	0	327	825	0	99	692	0	317	447	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	1725		382	2167		138	753		356	1014	
Arrive On Green	0.04	0.38	0.00	0.12	0.47	0.00	0.04	0.24	0.00	0.11	0.32	0.00
Sat Flow, veh/h	3110	4595	1427	3110	4595	1427	3110	3198	1427	3110	3198	1427
Grp Volume(v), veh/h	81	1552	0	327	825	0	99	692	0	317	447	0
Grp Sat Flow(s),veh/h/ln	1555	1532	1427	1555	1532	1427	1555	1599	1427	1555	1599	1427
Q Serve(g_s), s	3.9	47.8	0.0	15.5	17.3	0.0	4.7	31.7	0.0	15.1	16.6	0.0
Cycle Q Clear(g_c), s	3.9	47.8	0.0	15.5	17.3	0.0	4.7	31.7	0.0	15.1	16.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	1725		382	2167		138	753		356	1014	
V/C Ratio(X)	0.69	0.90		0.86	0.38		0.72	0.92		0.89	0.44	
Avail Cap(c_a), veh/h	166	1725		394	2167		187	795		373	1014	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.3	44.2	0.0	64.5	25.5	0.0	70.8	55.9	0.0	65.5	40.7	0.0
Incr Delay (d2), s/veh	2.6	8.0	0.0	15.6	0.2	0.0	4.4	15.7	0.0	20.9	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	18.6	0.0	6.8	6.1	0.0	1.9	14.1	0.0	6.9	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	52.2	0.0	80.2	25.7	0.0	75.2	71.7	0.0	86.4	41.2	0.0
LnGrp LOS	E	D		F	C		E	E		F	D	
Approach Vol, veh/h		1633	A		1152	A		791	A		764	A
Approach Delay, s/veh		53.2			41.2			72.1			59.9	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.9	41.0	24.1	62.0	10.6	53.3	9.7	76.4
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	18.0	* 37	19.0	* 56	9.0	46.3	8.0	67.3
Max Q Clear Time (g_c+I1), s	17.1	33.7	17.5	49.8	6.7	18.6	5.9	19.3
Green Ext Time (p_c), s	0.1	1.7	0.1	5.1	0.0	3.5	0.0	7.9

Intersection Summary	
HCM 6th Ctrl Delay	54.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2279	31	115	1004	152	255
Future Volume (veh/h)	2279	31	115	1004	152	255
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2399	33	121	1057	160	268
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3260	45	143	3755	324	289
Arrive On Green	0.63	0.63	0.08	0.74	0.18	0.18
Sat Flow, veh/h	5358	71	1781	5274	1781	1585
Grp Volume(v), veh/h	1572	860	121	1057	160	268
Grp Sat Flow(s),veh/h/ln	1702	1857	1781	1702	1781	1585
Q Serve(g_s), s	47.8	48.1	10.1	10.4	12.1	25.0
Cycle Q Clear(g_c), s	47.8	48.1	10.1	10.4	12.1	25.0
Prop In Lane		0.04	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2139	1167	143	3755	324	289
V/C Ratio(X)	0.73	0.74	0.84	0.28	0.49	0.93
Avail Cap(c_a), veh/h	2139	1167	214	3755	346	307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.3	19.3	68.0	6.6	55.1	60.4
Incr Delay (d2), s/veh	2.3	4.2	11.8	0.2	0.4	31.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.8	20.1	5.0	3.3	5.4	12.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.5	23.5	79.8	6.8	55.6	91.8
LnGrp LOS	C	C	E	A	E	F
Approach Vol, veh/h	2432			1178	428	
Approach Delay, s/veh	22.2			14.3	78.2	
Approach LOS	C			B	E	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		32.2	16.1	99.9			116.0
Change Period (Y+Rc), s		4.9	4.0	5.7			5.7
Max Green Setting (Gmax), s		29.1	18.0	88.3			110.3
Max Q Clear Time (g_c+I1), s		27.0	12.1	50.1			12.4
Green Ext Time (p_c), s		0.3	0.1	25.4			43.4

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	1839	162	460	928	195	170	1294	654	114	416	111
Future Volume (veh/h)	580	1839	162	460	928	195	170	1294	654	114	416	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	611	1936	90	484	977	111	179	1362	527	120	438	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	755	2035	632	502	1440	447	225	1566	486	164	1860	458
Arrive On Green	0.22	0.40	0.40	0.10	0.28	0.28	0.06	0.31	0.31	0.05	0.29	0.29
Sat Flow, veh/h	3456	5106	1585	5023	5106	1585	3456	5106	1585	3456	6434	1585
Grp Volume(v), veh/h	611	1936	90	484	977	111	179	1362	527	120	438	29
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1674	1702	1585	1728	1702	1585	1728	1609	1585
Q Serve(g_s), s	25.2	55.1	5.4	14.4	25.5	6.8	7.7	37.8	46.0	5.1	7.8	1.2
Cycle Q Clear(g_c), s	25.2	55.1	5.4	14.4	25.5	6.8	7.7	37.8	46.0	5.1	7.8	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	755	2035	632	502	1440	447	225	1566	486	164	1860	458
V/C Ratio(X)	0.81	0.95	0.14	0.96	0.68	0.25	0.80	0.87	1.08	0.73	0.24	0.06
Avail Cap(c_a), veh/h	755	2035	632	502	1440	447	299	1566	486	184	1860	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	43.7	28.8	67.2	47.8	29.6	69.2	49.2	52.0	70.5	40.7	12.9
Incr Delay (d2), s/veh	6.1	11.4	0.5	30.7	2.6	1.3	7.6	5.8	65.5	10.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	24.5	2.1	7.5	11.0	3.3	3.6	16.5	26.6	2.5	3.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	55.0	29.2	98.0	50.4	30.9	76.7	54.9	117.5	80.5	40.8	13.0
LnGrp LOS	E	E	C	F	D	C	E	D	F	F	D	B
Approach Vol, veh/h		2637			1572			2068			587	
Approach Delay, s/veh		55.7			63.7			72.7			47.5	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	52.4	21.0	65.5	13.7	49.8	38.5	48.0
Change Period (Y+Rc), s	4.0	* 6.4	6.0	5.7	4.0	6.4	5.7	5.7
Max Green Setting (Gmax), s	8.0	* 46	15.0	59.3	13.0	40.6	32.3	42.3
Max Q Clear Time (g_c+I1), s	7.1	48.0	16.4	57.1	9.7	9.8	27.2	27.5
Green Ext Time (p_c), s	0.0	0.0	0.0	2.1	0.1	3.8	0.7	8.4

Intersection Summary	
HCM 6th Ctrl Delay	62.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1902	190	169	1025	64	231	830	334	59	491	321
Future Volume (veh/h)	160	1902	190	169	1025	64	231	830	334	59	491	321
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	2002	119	178	1079	0	243	874	0	62	517	179
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	2179	676	396	2517		391	946		149	641	286
Arrive On Green	0.08	0.57	0.57	0.11	0.49	0.00	0.11	0.27	0.00	0.04	0.18	0.18
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	168	2002	119	178	1079	0	243	874	0	62	517	179
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	7.2	53.2	5.4	7.2	20.4	0.0	10.1	35.9	0.0	2.6	20.9	13.2
Cycle Q Clear(g_c), s	7.2	53.2	5.4	7.2	20.4	0.0	10.1	35.9	0.0	2.6	20.9	13.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	2179	676	396	2517		391	946		149	641	286
V/C Ratio(X)	0.79	0.92	0.18	0.45	0.43		0.62	0.92		0.42	0.81	0.63
Avail Cap(c_a), veh/h	276	2179	676	396	2517		392	986		276	867	387
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.9	30.1	19.8	62.0	24.4	0.0	63.5	53.6	0.0	69.9	59.0	40.1
Incr Delay (d2), s/veh	8.1	7.7	0.6	0.3	0.2	0.0	2.3	14.0	0.0	0.7	5.2	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	20.1	2.0	3.1	8.0	0.0	4.5	17.5	0.0	1.2	9.7	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	37.8	20.3	62.3	24.6	0.0	65.7	67.5	0.0	70.6	64.2	43.6
LnGrp LOS	E	D	C	E	C		E	E		E	E	D
Approach Vol, veh/h		2289			1257	A		1117	A		758	
Approach Delay, s/veh		39.7			30.0			67.1			59.8	
Approach LOS		D			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	46.3	23.2	70.0	23.4	33.4	13.2	79.9
Change Period (Y+Rc), s	4.0	6.4	6.0	6.0	6.4	* 6.4	4.0	6.0
Max Green Setting (Gmax), s	12.0	41.6	10.0	64.0	17.0	* 37	12.0	64.0
Max Q Clear Time (g_c+I1), s	4.6	37.9	9.2	55.2	12.1	22.9	9.2	22.4
Green Ext Time (p_c), s	0.0	2.0	0.0	7.6	0.3	4.1	0.1	9.7

Intersection Summary	
HCM 6th Ctrl Delay	45.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	2235	25	21	1128	85	57	49	39	92	5	29
Future Volume (veh/h)	26	2235	25	21	1128	85	57	49	39	92	5	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	2353	0	22	1187	0	60	52	0	97	5	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	2938		332	3849		77	69		118	112	
Arrive On Green	0.02	0.58	0.00	0.37	1.00	0.00	0.04	0.04	0.00	0.07	0.06	0.00
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	27	2353	0	22	1187	0	60	52	0	97	5	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.3	54.4	0.0	1.2	0.0	0.0	5.0	4.1	0.0	8.1	0.4	0.0
Cycle Q Clear(g_c), s	2.3	54.4	0.0	1.2	0.0	0.0	5.0	4.1	0.0	8.1	0.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	2938		332	3849		77	69		118	112	
V/C Ratio(X)	0.79	0.80		0.07	0.31		0.78	0.76		0.82	0.04	
Avail Cap(c_a), veh/h	143	2938		332	3849		143	237		178	263	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	73.3	25.1	0.0	38.7	0.0	0.0	71.1	71.6	0.0	69.2	66.4	0.0
Incr Delay (d2), s/veh	13.7	2.4	0.0	0.0	0.1	0.0	6.4	11.7	0.0	10.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	21.2	0.0	0.5	0.0	0.0	2.4	2.2	0.0	4.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.0	27.5	0.0	38.7	0.1	0.0	77.5	83.3	0.0	79.3	66.6	0.0
LnGrp LOS	F	C		D	A		E	F		E	E	
Approach Vol, veh/h		2380	A		1209	A		112	A		102	A
Approach Delay, s/veh		28.2			0.8			80.2			78.7	
Approach LOS		C			A			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	10.4	33.6	92.0	10.4	13.9	6.9	118.8
Change Period (Y+Rc), s	4.0	* 4.9	5.7	* 5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	15.0	* 19	12.0	* 86	12.0	21.1	12.0	86.3
Max Q Clear Time (g_c+I1), s	10.1	6.1	3.2	56.4	7.0	2.4	4.3	2.0
Green Ext Time (p_c), s	0.0	0.1	0.0	26.9	0.0	0.0	0.0	20.2

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1248	1067	989	815	196	579	1015	511	173	1106	25
Future Volume (veh/h)	22	1248	1067	989	815	196	579	1015	511	173	1106	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	1314	0	1041	858	0	609	1068	0	182	1164	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	1260		968	2393		553	1430		237	1055	
Arrive On Green	0.06	0.33	0.00	0.28	0.47	0.00	0.05	0.09	0.00	0.07	0.21	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	23	1314	0	1041	858	0	609	1068	0	182	1164	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.9	37.0	0.0	42.0	16.1	0.0	24.0	30.6	0.0	7.8	31.0	0.0
Cycle Q Clear(g_c), s	0.9	37.0	0.0	42.0	16.1	0.0	24.0	30.6	0.0	7.8	31.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	1260		968	2393		553	1430		237	1055	
V/C Ratio(X)	0.14	1.04		1.08	0.36		1.10	0.75		0.77	1.10	
Avail Cap(c_a), veh/h	207	1260		968	2393		553	1430		422	1055	
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.5	50.4	0.0	54.0	25.5	0.0	71.0	62.9	0.0	68.7	59.5	0.0
Incr Delay (d2), s/veh	0.1	37.4	0.0	51.6	0.4	0.0	69.0	2.4	0.0	7.5	60.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	18.9	0.0	24.7	6.5	0.0	16.5	14.3	0.0	3.6	19.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.7	87.8	0.0	105.6	25.9	0.0	140.1	65.3	0.0	76.1	119.9	0.0
LnGrp LOS	E	F		F	C		F	E		E	F	
Approach Vol, veh/h		1337	A		1899	A		1677	A		1346	A
Approach Delay, s/veh		87.5			69.6			92.4			114.0	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	50.0	46.0	43.0	27.0	39.0	13.0	76.0
Change Period (Y+Rc), s	5.7	8.0	4.0	6.0	3.0	* 8	6.0	* 5.7
Max Green Setting (Gmax), s	18.3	29.0	42.0	37.0	24.0	* 31	9.0	* 70
Max Q Clear Time (g_c+I1), s	9.8	32.6	44.0	39.0	26.0	33.0	2.9	18.1
Green Ext Time (p_c), s	0.5	0.0	0.0	0.0	0.0	0.0	0.0	11.6

Intersection Summary	
HCM 6th Ctrl Delay	89.1
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	3	146	63	26	58	178	1569	107	322	1711	160
Future Volume (veh/h)	193	3	146	63	26	58	178	1569	107	322	1711	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	3	154	66	27	61	187	1652	113	339	1801	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	209	177	186	100	85	237	2644	181	903	3230	1003
Arrive On Green	0.11	0.11	0.11	0.05	0.05	0.05	0.07	0.43	0.43	0.26	0.63	0.63
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	6196	424	3456	5106	1585
Grp Volume(v), veh/h	203	3	154	66	27	61	187	1287	478	339	1801	168
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1609	1794	1728	1702	1585
Q Serve(g_s), s	8.3	0.2	14.3	2.8	2.1	5.7	8.0	31.3	31.3	12.1	30.0	6.5
Cycle Q Clear(g_c), s	8.3	0.2	14.3	2.8	2.1	5.7	8.0	31.3	31.3	12.1	30.0	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	386	209	177	186	100	85	237	2059	765	903	3230	1003
V/C Ratio(X)	0.53	0.01	0.87	0.36	0.27	0.72	0.79	0.62	0.63	0.38	0.56	0.17
Avail Cap(c_a), veh/h	438	237	201	415	224	190	346	2059	765	903	3230	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	59.3	65.5	68.5	68.1	69.8	68.8	33.6	33.6	45.4	15.6	11.3
Incr Delay (d2), s/veh	1.1	0.0	28.8	1.2	1.4	10.7	7.4	1.4	3.8	0.3	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.1	7.2	1.3	1.0	0.3	3.7	12.2	14.1	5.1	11.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.0	59.3	94.4	69.6	69.6	80.5	76.2	35.1	37.5	45.6	15.8	11.4
LnGrp LOS	E	E	F	E	E	F	E	D	D	D	B	B
Approach Vol, veh/h		360			154			1952			2308	
Approach Delay, s/veh		76.9			73.9			39.6			19.9	
Approach LOS		E			E			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	46.2	70.0		20.8	14.3	101.9		13.1
Change Period (Y+Rc), s	7.0	6.0		4.0	4.0	* 7		5.0
Max Green Setting (Gmax), s	27.0	64.0		19.0	15.0	* 79		18.0
Max Q Clear Time (g_c+I1), s	14.1	33.3		16.3	10.0	32.0		7.7
Green Ext Time (p_c), s	1.2	28.1		0.4	0.3	42.8		0.4

Intersection Summary	
HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1168	331	0	1537	364	0	0	0	183	0	663
Future Volume (veh/h)	0	1168	331	0	1537	364	0	0	0	183	0	663
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	2067	2067	0	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	0	1229	348	0	1618	0				193	0	698
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	3209	996	0	2904					983	0	794
Arrive On Green	0.00	0.57	0.57	0.00	0.57	0.00				0.28	0.00	0.28
Sat Flow, veh/h	0	5828	1751	0	5274	1585				3456	0	2790
Grp Volume(v), veh/h	0	1229	348	0	1618	0				193	0	698
Grp Sat Flow(s),veh/h/ln	0	1881	1751	0	1702	1585				1728	0	1395
Q Serve(g_s), s	0.0	9.0	8.0	0.0	15.0	0.0				3.2	0.0	17.9
Cycle Q Clear(g_c), s	0.0	9.0	8.0	0.0	15.0	0.0				3.2	0.0	17.9
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3209	996	0	2904					983	0	794
V/C Ratio(X)	0.00	0.38	0.35	0.00	0.56					0.20	0.00	0.88
Avail Cap(c_a), veh/h	0	3209	996	0	2904					1138	0	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.9	8.7	0.0	10.2	0.0				20.3	0.0	25.6
Incr Delay (d2), s/veh	0.0	0.3	1.0	0.0	0.3	0.0				0.0	0.0	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	2.6	0.0	4.3	0.0				1.2	0.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.3	9.7	0.0	10.5	0.0				20.4	0.0	33.6
LnGrp LOS	A	A	A	A	B					C	A	C
Approach Vol, veh/h		1577			1618	A					891	
Approach Delay, s/veh		9.4			10.5						30.8	
Approach LOS		A			B						C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		48.4		26.6		48.4
Change Period (Y+Rc), s		5.7		5.3		5.7
Max Green Setting (Gmax), s		39.3		24.7		39.3
Max Q Clear Time (g_c+I1), s		11.0		19.9		17.0
Green Ext Time (p_c), s		14.1		1.4		12.1

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1024	327	96	1350	551	691
Future Volume (veh/h)	1024	327	96	1350	551	691
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	2067	2067	1870	1870	1870	1870
Adj Flow Rate, veh/h	1078	0	101	1421	580	727
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2325		128	2744	1431	795
Arrive On Green	0.82	0.00	0.14	1.00	0.28	0.28
Sat Flow, veh/h	5828	1751	1781	5274	5023	2790
Grp Volume(v), veh/h	1078	0	101	1421	580	727
Grp Sat Flow(s),veh/h/ln	1881	1751	1781	1702	1674	1395
Q Serve(g_s), s	4.1	0.0	4.1	0.0	7.0	18.9
Cycle Q Clear(g_c), s	4.1	0.0	4.1	0.0	7.0	18.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2325		128	2744	1431	795
V/C Ratio(X)	0.46		0.79	0.52	0.41	0.91
Avail Cap(c_a), veh/h	2325		285	2744	1453	807
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.93	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.2	0.0	31.6	0.0	21.7	25.9
Incr Delay (d2), s/veh	0.2	0.0	4.0	0.7	0.1	14.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.7	0.2	2.6	7.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.4	0.0	35.6	0.7	21.8	40.4
LnGrp LOS	A		D	A	C	D
Approach Vol, veh/h	1078	A		1522	1307	
Approach Delay, s/veh	4.4			3.0	32.1	
Approach LOS	A			A	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.4	36.6				46.0	28.7
Change Period (Y+Rc), s	4.0	5.7				5.7	7.3
Max Green Setting (Gmax), s	12.0	24.3				40.3	21.7
Max Q Clear Time (g_c+I1), s	6.1	6.1				2.0	20.9
Green Ext Time (p_c), s	0.0	6.7				15.2	0.5

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	145	283	303	176	23	376	877	359	91	789	86
Future Volume (veh/h)	75	145	283	303	176	23	376	877	359	91	789	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	2067	2067	2067	1870	1870	1870
Adj Flow Rate, veh/h	79	153	19	319	185	3	396	923	270	96	831	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	223	100	369	478	213	645	2494	961	140	1542	479
Arrive On Green	0.03	0.06	0.06	0.11	0.13	0.13	0.17	0.44	0.44	0.04	0.30	0.30
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3818	5642	1751	3456	5106	1585
Grp Volume(v), veh/h	79	153	19	319	185	3	396	923	270	96	831	35
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1909	1881	1751	1728	1702	1585
Q Serve(g_s), s	3.4	6.3	0.9	13.6	7.1	0.2	14.4	16.4	12.3	4.1	20.4	1.3
Cycle Q Clear(g_c), s	3.4	6.3	0.9	13.6	7.1	0.2	14.4	16.4	12.3	4.1	20.4	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	121	223	100	369	478	213	645	2494	961	140	1542	479
V/C Ratio(X)	0.66	0.69	0.19	0.87	0.39	0.01	0.61	0.37	0.28	0.69	0.54	0.07
Avail Cap(c_a), veh/h	276	694	310	530	964	430	840	2494	961	276	1542	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.5	68.8	17.0	65.9	59.3	56.3	57.8	27.9	18.1	71.0	43.6	11.1
Incr Delay (d2), s/veh	2.2	4.9	1.2	7.5	0.8	0.0	0.4	0.4	0.7	2.2	1.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.0	0.7	6.3	3.2	0.1	6.9	7.3	5.1	1.8	8.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.7	73.7	18.2	73.4	60.1	56.3	58.1	28.3	18.8	73.3	45.0	11.3
LnGrp LOS	E	E	B	E	E	E	E	C	B	E	D	B
Approach Vol, veh/h		251			507			1589			962	
Approach Delay, s/veh		69.5			68.5			34.1			46.6	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	72.0	20.0	15.1	31.1	51.0	9.2	25.9
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	* 5.7
Max Green Setting (Gmax), s	12.0	66.3	23.0	29.3	33.0	* 45	12.0	* 41
Max Q Clear Time (g_c+I1), s	6.1	18.4	15.6	8.3	16.4	22.4	5.4	9.1
Green Ext Time (p_c), s	0.1	15.8	0.4	1.1	0.6	8.8	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	45.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	22	54	148	15	38	19	682	197	52	807	1
Future Volume (veh/h)	10	22	54	148	15	38	19	682	197	52	807	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	11	23	57	156	16	40	20	718	207	55	849	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	28	69	177	72	179	23	3011	935	68	2185	975
Arrive On Green	0.01	0.06	0.06	0.11	0.17	0.17	0.01	0.66	0.66	0.04	0.68	0.68
Sat Flow, veh/h	1603	429	1063	1603	426	1065	1603	4595	1427	1603	3198	1427
Grp Volume(v), veh/h	11	0	80	156	0	56	20	718	207	55	849	1
Grp Sat Flow(s),veh/h/ln	1603	0	1492	1603	0	1492	1603	1532	1427	1603	1599	1427
Q Serve(g_s), s	1.0	0.0	7.9	14.4	0.0	4.9	1.9	9.6	8.8	5.1	17.2	0.0
Cycle Q Clear(g_c), s	1.0	0.0	7.9	14.4	0.0	4.9	1.9	9.6	8.8	5.1	17.2	0.0
Prop In Lane	1.00		0.71	1.00		0.71	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	0	97	177	0	251	23	3011	935	68	2185	975
V/C Ratio(X)	0.92	0.00	0.83	0.88	0.00	0.22	0.86	0.24	0.22	0.80	0.39	0.00
Avail Cap(c_a), veh/h	86	0	199	310	0	408	86	3011	935	139	2185	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.4	0.0	69.3	65.7	0.0	53.9	73.7	10.6	10.4	71.2	10.2	7.5
Incr Delay (d2), s/veh	55.9	0.0	14.0	5.8	0.0	0.4	26.0	0.2	0.5	7.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.4	6.2	0.0	1.9	0.9	3.1	2.9	2.2	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	130.3	0.0	83.3	71.5	0.0	54.3	99.8	10.8	11.0	79.1	10.4	7.5
LnGrp LOS	F	A	F	E	A	D	F	B	B	E	B	A
Approach Vol, veh/h		91			212			945			905	
Approach Delay, s/veh		89.0			67.0			12.7			14.6	
Approach LOS		F			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	104.3	20.6	14.7	6.2	108.5	5.1	30.2
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	13.0	69.0	29.0	20.0	8.0	74.0	8.0	41.0
Max Q Clear Time (g_c+I1), s	7.1	11.6	16.4	9.9	3.9	19.2	3.0	6.9
Green Ext Time (p_c), s	0.0	9.4	0.2	0.1	0.0	8.7	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	8	24	60	3	71	6	899	47	45	1262	3
Future Volume (veh/h)	9	8	24	60	3	71	6	899	47	45	1262	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	8	25	63	3	75	6	946	49	47	1328	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	110	49	92	259	116	12	1736	539	74	1914	594
Arrive On Green	0.01	0.03	0.03	0.05	0.07	0.07	0.01	0.34	0.34	0.04	0.37	0.37
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	9	8	25	63	3	75	6	946	49	47	1328	3
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.2	0.1	0.6	1.3	0.0	1.7	0.1	5.6	0.8	1.0	8.2	0.0
Cycle Q Clear(g_c), s	0.2	0.1	0.6	1.3	0.0	1.7	0.1	5.6	0.8	1.0	8.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	110	49	92	259	116	12	1736	539	74	1914	594
V/C Ratio(X)	0.53	0.07	0.51	0.69	0.01	0.65	0.52	0.54	0.09	0.64	0.69	0.01
Avail Cap(c_a), veh/h	525	3049	1360	525	3049	1360	525	2190	680	525	2190	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	17.5	17.8	17.4	16.0	16.8	18.5	10.0	8.4	17.6	9.8	7.3
Incr Delay (d2), s/veh	23.2	0.3	7.9	8.8	0.0	6.0	32.0	0.3	0.1	8.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.7	0.0	0.7	0.1	1.3	0.2	0.5	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.6	17.8	25.7	26.2	16.1	22.8	50.5	10.2	8.5	26.4	10.7	7.3
LnGrp LOS	D	B	C	C	B	C	D	B	A	C	B	A
Approach Vol, veh/h		42			141			1001			1378	
Approach Delay, s/veh		27.6			24.2			10.4			11.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	17.7	6.9	6.2	5.2	19.0	5.4	7.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.0	7.6	3.3	2.6	2.1	10.2	2.2	3.7
Green Ext Time (p_c), s	0.0	3.8	0.1	0.1	0.0	3.8	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	121	3	2	82	8	7	1	0	28	5	1
Future Volume (veh/h)	0	121	3	2	82	8	7	1	0	28	5	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	127	3	2	86	8	7	1	0	29	5	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	417	186	5	945	422	13	5	5	522	536	454
Arrive On Green	0.00	0.12	0.12	0.00	0.27	0.27	0.01	0.00	0.00	0.29	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	0	127	3	2	86	8	7	1	0	29	5	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	1.1	0.1	0.0	0.6	0.1	0.1	0.0	0.0	0.4	0.1	0.0
Cycle Q Clear(g_c), s	0.0	1.1	0.1	0.0	0.6	0.1	0.1	0.0	0.0	0.4	0.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	417	186	5	945	422	13	5	5	522	536	454
V/C Ratio(X)	0.00	0.30	0.02	0.38	0.09	0.02	0.52	0.18	0.00	0.06	0.01	0.00
Avail Cap(c_a), veh/h	366	1771	790	366	1823	813	366	1426	1208	574	1590	1347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	13.8	13.3	17.0	9.4	9.2	16.9	17.0	0.0	8.7	8.7	8.7
Incr Delay (d2), s/veh	0.0	0.4	0.0	40.4	0.0	0.0	28.0	15.2	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.0	0.1	0.2	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.2	13.4	57.4	9.5	9.3	44.9	32.2	0.0	8.7	8.7	8.7
LnGrp LOS	A	B	B	E	A	A	D	C	A	A	A	A
Approach Vol, veh/h		130			96			8			35	
Approach Delay, s/veh		14.2			10.4			43.3			8.7	
Approach LOS		B			B			D			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	5.0	5.1	9.0	5.3	14.8	0.0	14.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	* 5
Max Green Setting (Gmax), s	11.0	26.0	7.0	17.0	7.0	29.0	7.0	* 18
Max Q Clear Time (g_c+I1), s	2.4	2.0	2.0	3.1	2.1	2.1	0.0	2.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	125	12	92	53	86	11	711	112	103	1011	9
Future Volume (veh/h)	38	125	12	92	53	86	11	711	112	103	1011	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	132	13	97	56	91	12	748	118	108	1064	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	265	118	124	392	175	22	1881	584	138	2215	687
Arrive On Green	0.03	0.07	0.07	0.07	0.11	0.11	0.01	0.37	0.37	0.08	0.43	0.43
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	40	132	13	97	56	91	12	748	118	108	1064	9
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.1	1.8	0.4	2.7	0.7	2.7	0.3	5.4	2.5	3.0	7.4	0.2
Cycle Q Clear(g_c), s	1.1	1.8	0.4	2.7	0.7	2.7	0.3	5.4	2.5	3.0	7.4	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	61	265	118	124	392	175	22	1881	584	138	2215	687
V/C Ratio(X)	0.66	0.50	0.11	0.78	0.14	0.52	0.55	0.40	0.20	0.78	0.48	0.01
Avail Cap(c_a), veh/h	252	2294	1023	359	2581	1151	252	2853	886	252	2956	918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	22.0	21.4	22.7	19.9	20.8	24.3	11.6	10.7	22.4	10.0	8.0
Incr Delay (d2), s/veh	4.4	0.5	0.2	3.9	0.1	0.9	7.7	0.4	0.5	3.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.7	0.1	1.1	0.3	0.9	0.2	1.6	0.8	1.2	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	22.6	21.6	26.6	20.0	21.7	32.1	12.0	11.1	26.0	10.5	8.0
LnGrp LOS	C	C	C	C	B	C	C	B	B	C	B	A
Approach Vol, veh/h		185			244			878			1181	
Approach Delay, s/veh		23.7			23.3			12.1			11.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	23.6	8.5	8.7	5.6	26.8	6.7	10.5
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	7.0	27.7	10.0	32.0	7.0	28.7	7.0	36.0
Max Q Clear Time (g_c+I1), s	5.0	7.4	4.7	3.8	2.3	9.4	3.1	4.7
Green Ext Time (p_c), s	0.0	9.9	0.0	0.5	0.0	12.1	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	371	0	3	201	0	39	0	4	0	0	1
Future Volume (veh/h)	2	371	0	3	201	0	39	0	4	0	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	391	0	3	212	0	41	0	4	0	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	796	355	6	799	357	68	587	497	5	229	194
Arrive On Green	0.00	0.22	0.00	0.00	0.22	0.00	0.04	0.00	0.31	0.00	0.00	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	2	391	0	3	212	0	41	0	4	0	0	1
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	3.1	0.0	0.1	1.6	0.0	0.7	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.1	0.0	0.1	1.6	0.0	0.7	0.0	0.1	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	796	355	6	799	357	68	587	497	5	229	194
V/C Ratio(X)	0.37	0.49	0.00	0.51	0.27	0.00	0.61	0.00	0.01	0.00	0.00	0.01
Avail Cap(c_a), veh/h	382	2829	1262	382	2829	1262	382	1775	1504	382	1661	1407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	16.3	11.1	0.0	16.3	10.4	0.0	15.5	0.0	7.7	0.0	0.0	12.6
Incr Delay (d2), s/veh	36.6	0.5	0.0	55.6	0.2	0.0	8.4	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.9	0.0	0.1	0.5	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.9	11.5	0.0	71.9	10.6	0.0	23.9	0.0	7.7	0.0	0.0	12.6
LnGrp LOS	D	B	A	E	B	A	C	A	A	A	A	B
Approach Vol, veh/h		393			215			45			1	
Approach Delay, s/veh		11.7			11.5			22.4			12.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	15.2	5.1	12.3	6.2	9.0	5.1	12.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	26.0	7.0	29.0	7.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.1	5.1	2.7	2.0	2.0	3.6
Green Ext Time (p_c), s	0.0	0.0	0.0	2.4	0.0	0.0	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	377	69	17	130	4	85	26	32	5	143	22
Future Volume (veh/h)	38	377	69	17	130	4	85	26	32	5	143	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	397	73	18	137	4	89	27	34	5	151	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	773	345	33	747	333	120	411	348	10	295	250
Arrive On Green	0.03	0.22	0.22	0.02	0.21	0.21	0.07	0.22	0.22	0.01	0.16	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	40	397	73	18	137	4	89	27	34	5	151	23
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.7	3.3	1.3	0.3	1.1	0.1	1.6	0.4	0.6	0.1	2.5	0.4
Cycle Q Clear(g_c), s	0.7	3.3	1.3	0.3	1.1	0.1	1.6	0.4	0.6	0.1	2.5	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	46	773	345	33	747	333	120	411	348	10	295	250
V/C Ratio(X)	0.87	0.51	0.21	0.55	0.18	0.01	0.74	0.07	0.10	0.52	0.51	0.09
Avail Cap(c_a), veh/h	400	1756	783	400	1756	783	400	1485	1258	400	1485	1258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	11.5	10.7	16.2	10.8	10.4	15.3	10.3	10.4	16.6	12.9	12.0
Incr Delay (d2), s/veh	36.2	0.5	0.3	13.5	0.1	0.0	8.7	0.1	0.1	36.8	1.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.0	0.3	0.2	0.3	0.0	0.8	0.1	0.2	0.1	0.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.4	12.0	11.0	29.8	10.9	10.5	24.0	10.4	10.5	53.4	14.3	12.2
LnGrp LOS	D	B	B	C	B	B	C	B	B	D	B	B
Approach Vol, veh/h		510			159			150			179	
Approach Delay, s/veh		15.1			13.1			18.5			15.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	11.8	5.1	11.8	6.7	9.8	5.4	11.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	26.5	7.5	16.5	7.5	26.5	7.5	16.5
Max Q Clear Time (g_c+I1), s	2.1	2.6	2.3	5.3	3.6	4.5	2.7	3.1
Green Ext Time (p_c), s	0.0	0.2	0.0	2.1	0.1	0.8	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	520	8	13	149	0	19	3	106	0	2	17
Future Volume (veh/h)	14	520	8	13	149	0	19	3	106	0	2	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	547	8	14	157	0	20	3	112	0	2	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	1032	460	26	1028	459	36	511	433	5	210	178
Arrive On Green	0.02	0.29	0.29	0.01	0.29	0.00	0.02	0.27	0.27	0.00	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	15	547	8	14	157	0	20	3	112	0	2	18
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	4.6	0.1	0.3	1.2	0.0	0.4	0.0	2.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.3	4.6	0.1	0.3	1.2	0.0	0.4	0.0	2.0	0.0	0.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	28	1032	460	26	1028	459	36	511	433	5	210	178
V/C Ratio(X)	0.54	0.53	0.02	0.54	0.15	0.00	0.56	0.01	0.26	0.00	0.01	0.10
Avail Cap(c_a), veh/h	351	3298	1471	351	3298	1471	351	1526	1293	351	1473	1248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	10.6	9.0	17.4	9.4	0.0	17.3	9.4	10.1	0.0	14.0	14.2
Incr Delay (d2), s/veh	15.6	0.4	0.0	16.4	0.1	0.0	12.8	0.0	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.3	0.0	0.2	0.3	0.0	0.3	0.0	0.5	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	11.0	9.0	33.8	9.5	0.0	30.0	9.4	10.4	0.0	14.0	14.4
LnGrp LOS	C	B	A	C	A	A	C	A	B	A	B	B
Approach Vol, veh/h		570			171			135			20	
Approach Delay, s/veh		11.6			11.5			13.3			14.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	14.7	5.5	15.3	5.7	9.0	5.6	15.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	29.0	7.0	33.0	7.0	28.0	7.0	33.0
Max Q Clear Time (g_c+I1), s	0.0	4.0	2.3	6.6	2.4	2.4	2.3	3.2
Green Ext Time (p_c), s	0.0	0.3	0.0	3.8	0.0	0.0	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	484	102	95	137	3	18	62	27	17	54	7
Future Volume (veh/h)	40	484	102	95	137	3	18	62	27	17	54	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	509	107	100	144	3	19	65	28	18	57	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	1169	522	129	1293	577	34	193	163	32	191	162
Arrive On Green	0.04	0.33	0.33	0.07	0.36	0.36	0.02	0.10	0.10	0.02	0.10	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	42	509	107	100	144	3	19	65	28	18	57	7
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.9	4.4	1.9	2.2	1.1	0.0	0.4	1.3	0.6	0.4	1.1	0.2
Cycle Q Clear(g_c), s	0.9	4.4	1.9	2.2	1.1	0.0	0.4	1.3	0.6	0.4	1.1	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	1169	522	129	1293	577	34	193	163	32	191	162
V/C Ratio(X)	0.63	0.44	0.21	0.78	0.11	0.01	0.56	0.34	0.17	0.56	0.30	0.04
Avail Cap(c_a), veh/h	523	2431	1084	523	2431	1084	523	788	668	523	788	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	10.3	9.5	17.9	8.3	7.9	19.0	16.3	16.0	19.1	16.3	15.9
Incr Delay (d2), s/veh	9.4	0.5	0.4	9.5	0.1	0.0	13.6	1.0	0.5	14.1	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.3	0.5	1.1	0.3	0.0	0.3	0.5	0.2	0.3	0.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	10.8	9.9	27.4	8.3	7.9	32.6	17.3	16.5	33.2	17.1	16.0
LnGrp LOS	C	B	A	C	A	A	C	B	B	C	B	B
Approach Vol, veh/h		658			247			112			82	
Approach Delay, s/veh		11.8			16.0			19.7			20.6	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	8.5	7.3	18.1	5.2	8.5	6.0	19.5
Change Period (Y+Rc), s	4.5	4.5	4.5	5.2	4.5	4.5	4.5	5.2
Max Green Setting (Gmax), s	11.5	16.5	11.5	26.8	11.5	16.5	11.5	26.8
Max Q Clear Time (g_c+I1), s	2.4	3.3	4.2	6.4	2.4	3.1	2.9	3.1
Green Ext Time (p_c), s	0.0	0.2	0.1	6.5	0.0	0.2	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	539	0	44	0	0	147	25	1675	9	413	1291	195
Future Volume (veh/h)	539	0	44	0	0	147	25	1675	9	413	1291	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	567	0	46	0	0	155	26	1763	9	435	1359	205
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	691	0	0	2	0	0	37	1908	592	479	3175	986
Arrive On Green	0.20	0.00	0.00	0.00	0.00	0.00	0.02	0.37	0.37	0.27	0.62	0.62
Sat Flow, veh/h	3456	567		1781	0		1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	567	39.0		0	0.0		26	1763	9	435	1359	205
Grp Sat Flow(s),veh/h/ln	1728	D		1781			1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	15.0			0.0			1.4	31.5	0.3	22.5	13.1	5.4
Cycle Q Clear(g_c), s	15.0			0.0			1.4	31.5	0.3	22.5	13.1	5.4
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	691			2			37	1908	592	479	3175	986
V/C Ratio(X)	0.82			0.00			0.70	0.92	0.02	0.91	0.43	0.21
Avail Cap(c_a), veh/h	1487			131			131	1930	599	711	3645	1132
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			0.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5			0.0			46.3	28.5	18.8	33.7	9.3	7.8
Incr Delay (d2), s/veh	2.5			0.0			21.0	8.0	0.0	11.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4			0.0			0.8	13.1	0.1	10.6	4.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0			0.0			67.3	36.6	18.8	45.1	9.4	7.9
LnGrp LOS	D			A			E	D	B	D	A	A
Approach Vol, veh/h								1798			1999	
Approach Delay, s/veh								36.9			17.0	
Approach LOS								D			B	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	30.6	40.6	0.0	7.0	64.2	24.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	38.0	36.0	7.0	7.0	68.0	41.0
Max Q Clear Time (g_c+I1), s	24.5	33.5	0.0	3.4	15.1	17.0
Green Ext Time (p_c), s	1.1	2.1	0.0	0.0	13.9	2.1

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1333	27	28	1088	20	0	1	2	122	2	20
Future Volume (veh/h)	8	1333	27	28	1088	20	0	1	2	122	2	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	1403	28	29	1145	21	0	1	2	128	2	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	2030	630	47	2123	659	4	151	128	165	512	434
Arrive On Green	0.01	0.40	0.40	0.03	0.42	0.42	0.00	0.08	0.08	0.09	0.27	0.27
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	8	1403	28	29	1145	21	0	1	2	128	2	21
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.2	11.3	0.5	0.8	8.4	0.4	0.0	0.0	0.1	3.5	0.0	0.5
Cycle Q Clear(g_c), s	0.2	11.3	0.5	0.8	8.4	0.4	0.0	0.0	0.1	3.5	0.0	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	2030	630	47	2123	659	4	151	128	165	512	434
V/C Ratio(X)	0.53	0.69	0.04	0.61	0.54	0.03	0.00	0.01	0.02	0.77	0.00	0.05
Avail Cap(c_a), veh/h	143	2467	766	143	2467	766	143	1280	1085	287	1431	1212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	12.4	9.2	23.9	10.9	8.6	0.0	21.0	21.0	22.0	13.1	13.3
Incr Delay (d2), s/veh	26.4	0.6	0.0	12.2	0.2	0.0	0.0	0.0	0.0	7.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.2	0.1	0.5	2.3	0.1	0.0	0.0	0.0	1.7	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.9	13.1	9.2	36.1	11.1	8.6	0.0	21.0	21.1	29.6	13.1	13.3
LnGrp LOS	D	B	A	D	B	A	A	C	C	C	B	B
Approach Vol, veh/h		1439			1195			3			151	
Approach Delay, s/veh		13.2			11.7			21.1			27.1	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	9.0	6.3	24.8	0.0	18.6	5.4	25.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	34.0	4.0	24.0	4.0	38.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	5.5	2.1	2.8	13.3	0.0	2.5	2.2	10.4
Green Ext Time (p_c), s	0.1	0.0	0.0	6.4	0.0	0.0	0.0	6.2

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	281	1100	45	363	877	51	131	617	221	168	913	395
Future Volume (veh/h)	281	1100	45	363	877	51	131	617	221	168	913	395
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	296	1158	13	382	923	15	138	649	112	177	961	282
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	1617	502	303	1617	502	214	1382	429	256	1445	448
Arrive On Green	0.09	0.32	0.32	0.09	0.32	0.32	0.06	0.27	0.27	0.07	0.28	0.28
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	296	1158	13	382	923	15	138	649	112	177	961	282
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	6.8	16.0	0.5	7.0	12.0	0.5	3.1	8.5	4.4	4.0	13.3	12.4
Cycle Q Clear(g_c), s	6.8	16.0	0.5	7.0	12.0	0.5	3.1	8.5	4.4	4.0	13.3	12.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	303	1617	502	303	1617	502	214	1382	429	256	1445	448
V/C Ratio(X)	0.98	0.72	0.03	1.26	0.57	0.03	0.65	0.47	0.26	0.69	0.67	0.63
Avail Cap(c_a), veh/h	303	2304	715	303	2304	715	303	2304	715	303	2304	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	24.1	18.8	36.4	22.7	18.8	36.6	24.3	22.8	36.0	25.3	24.9
Incr Delay (d2), s/veh	45.0	0.6	0.0	140.8	0.3	0.0	3.2	0.2	0.3	5.2	0.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	5.9	0.2	8.7	4.4	0.2	1.3	3.2	1.6	1.8	4.9	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.3	24.7	18.8	177.2	23.0	18.8	39.8	24.6	23.2	41.3	25.8	26.4
LnGrp LOS	F	C	B	F	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1467			1320			899			1420	
Approach Delay, s/veh		36.1			67.6			26.7			27.8	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	26.6	12.0	30.3	9.9	27.6	12.0	30.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	36.0	7.0	36.0	7.0	36.0	7.0	36.0
Max Q Clear Time (g_c+I1), s	6.0	10.5	9.0	18.0	5.1	15.3	8.8	14.0
Green Ext Time (p_c), s	0.1	4.6	0.0	7.3	0.1	7.3	0.0	6.1

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	245	1194	800	129	50	79
Future Volume (veh/h)	245	1194	800	129	50	79
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	258	1257	842	136	53	83
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	340	3256	1635	508	195	173
Arrive On Green	0.19	0.64	0.32	0.32	0.11	0.11
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	258	1257	842	136	53	83
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	5.4	4.7	5.3	2.5	1.1	1.9
Cycle Q Clear(g_c), s	5.4	4.7	5.3	2.5	1.1	1.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	340	3256	1635	508	195	173
V/C Ratio(X)	0.76	0.39	0.51	0.27	0.27	0.48
Avail Cap(c_a), veh/h	991	6588	3100	962	1307	1163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	3.4	10.9	10.0	16.2	16.5
Incr Delay (d2), s/veh	3.5	0.1	0.3	0.3	0.7	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.3	1.3	0.6	0.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.6	3.5	11.2	10.3	16.9	18.6
LnGrp LOS	B	A	B	B	B	B
Approach Vol, veh/h		1515	978		136	
Approach Delay, s/veh		6.1	11.1		17.9	
Approach LOS		A	B		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		30.2		9.3	12.5	17.7
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		51.0		29.0	22.0	24.0
Max Q Clear Time (g_c+I1), s		6.7		3.9	7.4	7.3
Green Ext Time (p_c), s		10.8		0.4	0.6	5.4

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	261	971	12	192	616	148	30	509	598	278	660	282
Future Volume (veh/h)	261	971	12	192	616	148	30	509	598	278	660	282
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	275	1022	4	202	648	33	32	536	470	293	695	115
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	1418	440	277	1296	402	84	1721	534	301	2042	634
Arrive On Green	0.10	0.28	0.28	0.08	0.25	0.25	0.02	0.34	0.34	0.09	0.40	0.40
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	275	1022	4	202	648	33	32	536	470	293	695	115
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	7.1	16.6	0.2	5.2	10.0	1.5	0.8	7.1	25.6	7.8	8.7	4.3
Cycle Q Clear(g_c), s	7.1	16.6	0.2	5.2	10.0	1.5	0.8	7.1	25.6	7.8	8.7	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	1418	440	277	1296	402	84	1721	534	301	2042	634
V/C Ratio(X)	0.76	0.72	0.01	0.73	0.50	0.08	0.38	0.31	0.88	0.97	0.34	0.18
Avail Cap(c_a), veh/h	565	2281	708	377	2003	622	151	2003	622	301	2226	691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	29.9	24.0	41.2	29.3	26.1	44.1	22.5	28.7	41.8	19.1	17.8
Incr Delay (d2), s/veh	3.4	0.7	0.0	4.6	0.3	0.1	2.8	0.1	12.4	44.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.4	0.1	2.3	3.9	0.5	0.4	2.7	10.7	5.0	3.2	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	30.6	24.0	45.8	29.6	26.2	46.9	22.6	41.1	86.0	19.2	18.0
LnGrp LOS	D	C	C	D	C	C	D	C	D	F	B	B
Approach Vol, veh/h		1301			883			1038			1103	
Approach Delay, s/veh		33.3			33.2			31.7			36.8	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	35.9	12.4	30.5	7.2	41.7	14.6	28.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	36.0	10.0	41.0	4.0	40.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	9.8	27.6	7.2	18.6	2.8	10.7	9.1	12.0
Green Ext Time (p_c), s	0.0	3.3	0.2	6.9	0.0	5.1	0.5	4.3

Intersection Summary	
HCM 6th Ctrl Delay	33.8
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1847	924	143	0	33
Future Volume (veh/h)	0	1847	924	143	0	33
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1944	973	151	0	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	4	3514	3514	1091	159	141
Arrive On Green	0.00	0.69	0.69	0.69	0.00	0.09
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	0	1944	973	151	0	35
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.0	8.6	3.3	1.5	0.0	0.9
Cycle Q Clear(g_c), s	0.0	8.6	3.3	1.5	0.0	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	4	3514	3514	1091	159	141
V/C Ratio(X)	0.00	0.55	0.28	0.14	0.00	0.25
Avail Cap(c_a), veh/h	159	5686	4663	1447	1190	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	3.5	2.7	2.4	0.0	19.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.1	0.1	0.0	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	3.7	2.7	2.5	0.0	20.0
LnGrp LOS	A	A	A	A	A	B
Approach Vol, veh/h		1944	1124		35	
Approach Delay, s/veh		3.7	2.7		20.0	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	35.9	9.0	0.0	35.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	50.0	30.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	10.6	2.9	0.0	5.3
Green Ext Time (p_c), s	20.3	0.1	0.0	8.0

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1714	125	4	834	61	150	62	12	187	109	82
Future Volume (veh/h)	8	1714	125	4	834	61	150	62	12	187	109	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	1804	132	4	878	64	158	65	13	197	115	86
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	2192	681	8	2172	674	203	163	138	248	210	178
Arrive On Green	0.01	0.43	0.43	0.00	0.43	0.43	0.11	0.09	0.09	0.14	0.11	0.11
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	8	1804	132	4	878	64	158	65	13	197	115	86
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.2	16.5	2.7	0.1	6.3	1.3	4.6	1.7	0.4	5.7	3.1	2.7
Cycle Q Clear(g_c), s	0.2	16.5	2.7	0.1	6.3	1.3	4.6	1.7	0.4	5.7	3.1	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	2192	681	8	2172	674	203	163	138	248	210	178
V/C Ratio(X)	0.54	0.82	0.19	0.52	0.40	0.09	0.78	0.40	0.09	0.80	0.55	0.48
Avail Cap(c_a), veh/h	168	2218	689	168	2218	689	336	1201	1018	336	1201	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	13.3	9.4	26.3	10.6	9.1	22.8	22.8	22.2	22.1	22.2	22.1
Incr Delay (d2), s/veh	26.6	2.9	0.3	45.3	0.2	0.1	6.3	1.6	0.3	9.0	2.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.1	0.7	0.1	1.8	0.3	2.1	0.8	0.1	2.7	1.3	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	16.2	9.7	71.6	10.8	9.2	29.1	24.4	22.5	31.1	24.4	24.1
LnGrp LOS	D	B	A	E	B	A	C	C	C	C	C	C
Approach Vol, veh/h		1944			946			236			398	
Approach Delay, s/veh		15.9			10.9			27.5			27.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	8.6	4.2	28.7	10.0	9.9	4.4	28.5
Change Period (Y+Rc), s	4.0	4.0	4.0	6.0	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	10.0	34.0	5.0	23.0	10.0	34.0	5.0	23.0
Max Q Clear Time (g_c+I1), s	7.7	3.7	2.1	18.5	6.6	5.1	2.2	8.3
Green Ext Time (p_c), s	0.1	0.3	0.0	4.2	0.1	0.9	0.0	7.8

Intersection Summary	
HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	180	1733	841	155	55	58
Future Volume (veh/h)	180	1733	841	155	55	58
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	189	1824	885	163	58	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	248	3244	1868	580	186	165
Arrive On Green	0.14	0.64	0.37	0.37	0.10	0.10
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	189	1824	885	163	58	61
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	3.9	7.8	5.1	2.8	1.2	1.4
Cycle Q Clear(g_c), s	3.9	7.8	5.1	2.8	1.2	1.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	248	3244	1868	580	186	165
V/C Ratio(X)	0.76	0.56	0.47	0.28	0.31	0.37
Avail Cap(c_a), veh/h	557	4656	2394	743	1392	1239
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	4.0	9.3	8.6	15.9	16.0
Incr Delay (d2), s/veh	4.8	0.2	0.2	0.3	0.9	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.3	1.2	0.6	0.4	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.7	4.1	9.5	8.9	16.9	17.4
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		2013	1048		119	
Approach Delay, s/veh		5.7	9.4		17.1	
Approach LOS		A	A		B	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			29.4		9.0	10.3	19.0
Change Period (Y+Rc), s			5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s			35.0		30.0	12.0	18.0
Max Q Clear Time (g_c+I1), s			9.8		3.4	5.9	7.1
Green Ext Time (p_c), s			14.6		0.3	0.2	4.6

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	81	1707	956	60	126	40
Future Volume (veh/h)	81	1707	956	60	126	40
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	1797	1006	63	133	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	110	3121	2219	689	237	211
Arrive On Green	0.06	0.61	0.43	0.43	0.13	0.13
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	85	1797	1006	63	133	42
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	1.8	8.3	5.4	0.9	2.7	0.9
Cycle Q Clear(g_c), s	1.8	8.3	5.4	0.9	2.7	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	110	3121	2219	689	237	211
V/C Ratio(X)	0.77	0.58	0.45	0.09	0.56	0.20
Avail Cap(c_a), veh/h	341	4371	2805	871	1434	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	4.6	7.8	6.5	15.9	15.1
Incr Delay (d2), s/veh	11.0	0.2	0.1	0.1	2.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.7	1.1	0.2	1.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.1	4.7	7.9	6.6	18.0	15.6
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1882	1069		175	
Approach Delay, s/veh		5.8	7.9		17.4	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	29.4	9.7	6.9	22.5
Change Period (Y+Rc), s	5.5	4.5	4.5	5.5
Max Green Setting (Gmax), s	33.5	31.5	7.5	21.5
Max Q Clear Time (g_c+I1), s	10.3	4.7	3.8	7.4
Green Ext Time (p_c), s	13.7	0.5	0.0	5.7

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	436	1274	71	319	746	196	218	987	291	271	785	649
Future Volume (veh/h)	436	1274	71	319	746	196	218	987	291	271	785	649
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	459	1341	21	336	785	88	229	1039	194	285	826	549
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	244	1746	551	244	1746	542	244	1478	459	244	1478	459
Arrive On Green	0.07	0.35	0.35	0.07	0.35	0.35	0.07	0.29	0.29	0.07	0.29	0.29
Sat Flow, veh/h	3456	5025	1585	3456	5025	1560	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	459	1341	21	336	785	88	229	1039	194	285	826	549
Grp Sat Flow(s),veh/h/ln	1728	1675	1585	1728	1675	1560	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	7.0	23.6	0.9	7.0	12.0	3.9	6.5	18.0	9.8	7.0	13.6	28.7
Cycle Q Clear(g_c), s	7.0	23.6	0.9	7.0	12.0	3.9	6.5	18.0	9.8	7.0	13.6	28.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	244	1746	551	244	1746	542	244	1478	459	244	1478	459
V/C Ratio(X)	1.88	0.77	0.04	1.38	0.45	0.16	0.94	0.70	0.42	1.17	0.56	1.20
Avail Cap(c_a), veh/h	244	1774	559	244	1774	551	244	1802	559	244	1802	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	28.8	21.4	46.1	25.0	22.4	45.9	31.4	28.5	46.1	29.9	35.2
Incr Delay (d2), s/veh	411.9	2.4	0.1	193.4	0.2	0.1	41.1	1.5	1.2	110.7	0.6	107.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.8	8.9	0.3	9.4	4.5	1.4	4.2	7.5	3.7	6.6	5.2	24.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	457.9	31.2	21.5	239.5	25.2	22.5	86.9	32.9	29.7	156.8	30.5	142.7
LnGrp LOS	F	C	C	F	C	C	F	C	C	F	C	F
Approach Vol, veh/h		1821			1209			1462			1660	
Approach Delay, s/veh		138.6			84.6			40.9			89.3	
Approach LOS		F			F			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	34.7	12.0	40.4	12.0	34.7	12.0	40.4
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	* 6
Max Green Setting (Gmax), s	7.0	35.0	7.0	35.0	7.0	35.0	7.0	* 35
Max Q Clear Time (g_c+I1), s	9.0	20.0	9.0	25.6	8.5	15.6	9.0	14.0
Green Ext Time (p_c), s	0.0	8.7	0.0	8.9	0.0	5.1	0.0	11.9

Intersection Summary	
HCM 6th Ctrl Delay	91.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	698	1144	0	0	656	60	5	0	0	106	0	658
Future Volume (veh/h)	698	1144	0	0	656	60	5	0	0	106	0	658
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	0	1870	0	1870
Adj Flow Rate, veh/h	735	1204	0	0	691	63	5	0	0	112	0	693
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	0	2	0	2
Cap, veh/h	778	2401	0	0	1333	595	83	0	0	244	0	0
Arrive On Green	0.23	0.68	0.00	0.00	0.38	0.38	0.05	0.00	0.00	0.14	0.00	0.00
Sat Flow, veh/h	3456	3647	0	0	3647	1585	1781	5		1781	112	
Grp Volume(v), veh/h	735	1204	0	0	691	63	5	24.4		112	21.7	
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1585	1781	C		1781	C	
Q Serve(g_s), s	11.1	8.9	0.0	0.0	8.0	1.4	0.1			3.1		
Cycle Q Clear(g_c), s	11.1	8.9	0.0	0.0	8.0	1.4	0.1			3.1		
Prop In Lane	1.00		0.00	0.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	778	2401	0	0	1333	595	83			244		
V/C Ratio(X)	0.94	0.50	0.00	0.00	0.52	0.11	0.06			0.46		
Avail Cap(c_a), veh/h	778	2869	0	0	1801	803	803			301		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00			1.00		
Uniform Delay (d), s/veh	20.3	4.2	0.0	0.0	12.9	10.8	24.3			21.2		
Incr Delay (d2), s/veh	19.7	0.2	0.0	0.0	0.5	0.1	0.1			0.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	5.7	1.0	0.0	0.0	2.4	0.4	0.1			1.1		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	4.5	0.0	0.0	13.4	10.9	24.4			21.7		
LnGrp LOS	D	A	A	A	B	B	C			C		
Approach Vol, veh/h		1939			754							
Approach Delay, s/veh		17.9			13.2							
Approach LOS		B			B							

Timer - Assigned Phs	1			4	5		7	8
Phs Duration (G+Y+Rc), s	11.3			42.0	6.5		16.0	26.0
Change Period (Y+Rc), s	4.0			6.0	4.0		4.0	6.0
Max Green Setting (Gmax), s	9.0			43.0	24.0		12.0	27.0
Max Q Clear Time (g_c+I1), s	5.1			10.9	2.1		13.1	10.0
Green Ext Time (p_c), s	0.1			24.7	0.0		0.0	10.0

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	1170	73	44	721	0	191	425	104	227	172	57
Future Volume (veh/h)	47	1170	73	44	721	0	191	425	104	227	172	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	1232	22	46	759	0	201	447	43	239	181	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	1153	510	59	1145		174	387	483	214	162	
Arrive On Green	0.04	0.32	0.32	0.03	0.32	0.00	0.30	0.30	0.30	0.21	0.21	0.00
Sat Flow, veh/h	1781	3554	1573	1781	3554	1585	571	1270	1585	1035	784	1585
Grp Volume(v), veh/h	49	1232	22	46	759	0	648	0	43	420	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1573	1781	1777	1585	1842	0	1585	1819	0	1585
Q Serve(g_s), s	4.1	49.0	1.4	3.9	27.8	0.0	46.0	0.0	2.9	31.3	0.0	0.0
Cycle Q Clear(g_c), s	4.1	49.0	1.4	3.9	27.8	0.0	46.0	0.0	2.9	31.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.31		1.00	0.57		1.00
Lane Grp Cap(c), veh/h	63	1153	510	59	1145		561	0	483	377	0	
V/C Ratio(X)	0.78	1.07	0.04	0.78	0.66		1.16	0.00	0.09	1.11	0.00	
Avail Cap(c_a), veh/h	94	1153	510	94	1145		561	0	483	377	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	72.3	51.0	35.0	72.4	44.1	0.0	52.5	0.0	37.5	59.9	0.0	0.0
Incr Delay (d2), s/veh	10.5	46.9	0.1	7.8	1.9	0.0	88.6	0.0	0.0	81.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	28.6	0.6	1.9	12.3	0.0	34.6	0.0	1.1	22.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.7	97.9	35.0	80.3	46.0	0.0	141.1	0.0	37.6	140.9	0.0	0.0
LnGrp LOS	F	F	D	F	D		F	A	D	F	A	
Approach Vol, veh/h		1303			805	A		691			420	A
Approach Delay, s/veh		96.2			47.9			134.7			140.9	
Approach LOS		F			D			F			F	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		50.0	9.0	55.0		37.0	9.3	54.7				
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0				
Max Green Setting (Gmax), s		46.0	8.0	49.0		31.3	8.0	46.0				
Max Q Clear Time (g_c+I1), s		48.0	5.9	51.0		33.3	6.1	29.8				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0	0.0	5.8				

Intersection Summary	
HCM 6th Ctrl Delay	98.2
HCM 6th LOS	F

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	309	741	75	106	53	252	1585	61	57	1115	142
Future Volume (veh/h)	105	309	741	75	106	53	252	1585	61	57	1115	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	325	660	79	112	21	265	1668	21	60	1174	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	1469	655	95	1499	669	309	1823	566	76	1586	
Arrive On Green	0.04	0.41	0.41	0.05	0.42	0.42	0.09	0.36	0.36	0.04	0.31	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	111	325	660	79	112	21	265	1668	21	60	1174	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	4.8	8.9	62.0	6.6	2.8	1.2	11.3	46.8	1.3	5.0	30.9	0.0
Cycle Q Clear(g_c), s	4.8	8.9	62.0	6.6	2.8	1.2	11.3	46.8	1.3	5.0	30.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	1469	655	95	1499	669	309	1823	566	76	1586	
V/C Ratio(X)	0.72	0.22	1.01	0.83	0.07	0.03	0.86	0.91	0.04	0.79	0.74	
Avail Cap(c_a), veh/h	207	1469	655	95	1499	669	323	1823	566	95	1586	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.7	28.4	44.0	70.3	25.9	25.4	67.3	46.0	31.4	71.1	46.3	0.0
Incr Delay (d2), s/veh	4.1	0.1	37.0	41.7	0.0	0.0	19.4	8.6	0.1	22.5	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	3.7	29.9	4.0	1.2	0.4	5.7	20.4	0.5	2.7	12.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.8	28.5	81.0	112.0	25.9	25.5	86.7	54.7	31.5	93.6	48.4	0.0
LnGrp LOS	E	C	F	F	C	C	F	D	C	F	D	
Approach Vol, veh/h		1096			212			1954			1234	A
Approach Delay, s/veh		64.8			58.0			58.8			50.6	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	59.6	12.0	68.0	17.4	52.6	10.7	69.3
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	8.0	52.0	8.0	62.0	14.0	46.0	9.0	* 62
Max Q Clear Time (g_c+I1), s	7.0	48.8	8.6	64.0	13.3	32.9	6.8	4.8
Green Ext Time (p_c), s	0.0	2.5	0.0	0.0	0.1	6.5	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	58.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	423	192	185	307	394	273	1150	195	308	625	120
Future Volume (veh/h)	24	423	192	185	307	394	273	1150	195	308	625	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	445	0	195	323	415	287	1211	205	324	658	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	541		282	706	500	376	1376	741	409	1454	
Arrive On Green	0.05	0.15	0.00	0.08	0.20	0.20	0.11	0.39	0.39	0.12	0.41	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1573	3456	3554	1579	3456	3554	1585
Grp Volume(v), veh/h	25	445	0	195	323	415	287	1211	205	324	658	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1573	1728	1777	1579	1728	1777	1585
Q Serve(g_s), s	0.6	9.8	0.0	4.4	6.5	16.0	6.5	25.5	6.4	7.4	10.8	0.0
Cycle Q Clear(g_c), s	0.6	9.8	0.0	4.4	6.5	16.0	6.5	25.5	6.4	7.4	10.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	541		282	706	500	376	1376	741	409	1454	
V/C Ratio(X)	0.15	0.82		0.69	0.46	0.83	0.76	0.88	0.28	0.79	0.45	
Avail Cap(c_a), veh/h	386	617		471	706	500	557	1498	795	471	1454	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.8	33.1	0.0	36.0	28.5	25.6	34.9	23.0	13.1	34.6	17.3	0.0
Incr Delay (d2), s/veh	0.2	6.9	0.0	3.0	0.5	11.2	1.6	6.3	0.3	7.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.7	0.0	1.9	2.7	8.6	2.6	10.1	2.2	3.3	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.0	40.0	0.0	39.0	28.9	36.8	36.5	29.2	13.3	42.5	17.6	0.0
LnGrp LOS	D	D		D	C	D	D	C	B	D	B	
Approach Vol, veh/h		470	A		933			1703			982	A
Approach Delay, s/veh		39.9			34.6			28.6			25.8	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	37.2	11.6	17.3	12.8	39.0	7.9	21.0
Change Period (Y+Rc), s	5.0	6.0	5.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	34.0	11.0	* 14	13.0	33.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	9.4	27.5	6.4	11.8	8.5	12.8	2.6	8.5
Green Ext Time (p_c), s	0.2	3.7	0.2	0.5	0.3	4.0	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	583	87	53	740	401	52	537	23	486	901	61
Future Volume (veh/h)	27	583	87	53	740	401	52	537	23	486	901	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	614	18	56	779	0	55	565	0	512	948	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	725	321	325	847		258	1043		487	1278	568
Arrive On Green	0.06	0.20	0.20	0.09	0.24	0.00	0.07	0.29	0.00	0.14	0.36	0.36
Sat Flow, veh/h	3456	3554	1573	3456	3554	1585	3456	3554	1585	3456	3554	1578
Grp Volume(v), veh/h	28	614	18	56	779	0	55	565	0	512	948	24
Grp Sat Flow(s),veh/h/ln	1728	1777	1573	1728	1777	1585	1728	1777	1585	1728	1777	1578
Q Serve(g_s), s	0.5	11.8	0.7	1.1	15.2	0.0	1.1	9.5	0.0	10.0	16.5	0.7
Cycle Q Clear(g_c), s	0.5	11.8	0.7	1.1	15.2	0.0	1.1	9.5	0.0	10.0	16.5	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	725	321	325	847		258	1043		487	1278	568
V/C Ratio(X)	0.14	0.85	0.06	0.17	0.92		0.21	0.54		1.05	0.74	0.04
Avail Cap(c_a), veh/h	487	851	377	487	847		389	1501		487	1601	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	27.2	22.8	29.6	26.4	0.0	30.9	21.1	0.0	30.5	19.9	14.8
Incr Delay (d2), s/veh	0.1	6.1	0.0	0.1	15.0	0.0	0.2	0.9	0.0	55.2	2.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.4	0.2	0.4	7.8	0.0	0.4	3.8	0.0	7.7	6.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.8	33.3	22.8	29.7	41.3	0.0	31.0	21.9	0.0	85.7	22.0	14.8
LnGrp LOS	C	C	C	C	D		C	C		F	C	B
Approach Vol, veh/h		660			835	A		620	A		1484	
Approach Delay, s/veh		33.0			40.5			22.7			43.8	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	26.8	10.7	19.5	9.3	31.5	8.2	21.9
Change Period (Y+Rc), s	4.0	6.0	4.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	10.0	30.0	10.0	* 17	8.0	32.0	10.0	16.0
Max Q Clear Time (g_c+I1), s	12.0	11.5	3.1	13.8	3.1	18.5	2.5	17.2
Green Ext Time (p_c), s	0.0	4.7	0.0	0.7	0.0	7.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	37.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	10	163	20	3	1	66	1089	7	3	1103	22
Future Volume (veh/h)	29	10	163	20	3	1	66	1089	7	3	1103	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	11	172	21	3	1	69	1146	7	3	1161	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	66	222	35	5	2	87	1731	772	4	1566	699
Arrive On Green	0.14	0.14	0.14	0.02	0.02	0.02	0.05	0.49	0.49	0.00	0.44	0.44
Sat Flow, veh/h	1331	472	1585	1497	214	71	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	42	0	172	25	0	0	69	1146	7	3	1161	23
Grp Sat Flow(s),veh/h/ln	1804	0	1585	1783	0	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.1	0.0	5.5	0.7	0.0	0.0	2.0	12.8	0.1	0.1	14.2	0.4
Cycle Q Clear(g_c), s	1.1	0.0	5.5	0.7	0.0	0.0	2.0	12.8	0.1	0.1	14.2	0.4
Prop In Lane	0.74		1.00	0.84		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	0	222	42	0	0	87	1731	772	4	1566	699
V/C Ratio(X)	0.17	0.00	0.77	0.60	0.00	0.00	0.79	0.66	0.01	0.69	0.74	0.03
Avail Cap(c_a), veh/h	543	0	478	272	0	0	272	1731	772	272	1626	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	0.0	21.7	25.4	0.0	0.0	24.7	10.2	6.9	26.1	12.2	8.3
Incr Delay (d2), s/veh	0.1	0.0	2.2	5.1	0.0	0.0	6.0	1.1	0.0	53.1	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.9	0.4	0.0	0.0	0.9	3.4	0.0	0.1	4.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.0	0.0	23.9	30.5	0.0	0.0	30.7	11.3	6.9	79.3	14.2	8.3
LnGrp LOS	B	A	C	C	A	A	C	B	A	E	B	A
Approach Vol, veh/h		214			25			1222			1187	
Approach Delay, s/veh		23.2			30.5			12.3			14.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	31.5		5.2	6.6	29.1		11.5
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.2
Max Green Setting (Gmax), s	8.0	24.0		8.0	8.0	24.0		15.8
Max Q Clear Time (g_c+I1), s	2.1	14.8		2.7	4.0	16.2		7.5
Green Ext Time (p_c), s	0.0	8.0		0.0	0.0	6.9		0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	826	2349	0	0	1671	38	0	0	0	14	0	442
Future Volume (veh/h)	826	2349	0	0	1671	38	0	0	0	14	0	442
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	869	2473	0	0	1759	0				15	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2				2	0	2
Cap, veh/h	701	3676	0	1	1498					380	0	
Arrive On Green	0.39	0.72	0.00	0.00	0.29	0.00				0.21	0.00	0.00
Sat Flow, veh/h	1781	5274	0	1781	5106	1585				1781	0	1585
Grp Volume(v), veh/h	869	2473	0	0	1759	0				15	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1702	1585				1781	0	1585
Q Serve(g_s), s	59.0	39.4	0.0	0.0	44.0	0.0				1.0	0.0	0.0
Cycle Q Clear(g_c), s	59.0	39.4	0.0	0.0	44.0	0.0				1.0	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	701	3676	0	1	1498					380	0	
V/C Ratio(X)	1.24	0.67	0.00	0.00	1.17					0.04	0.00	
Avail Cap(c_a), veh/h	701	3676	0	83	1498					380	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.92	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	45.5	11.4	0.0	0.0	53.0	0.0				46.8	0.0	0.0
Incr Delay (d2), s/veh	120.1	1.0	0.0	0.0	85.3	0.0				0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	48.5	13.3	0.0	0.0	30.1	0.0				0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	165.6	12.4	0.0	0.0	138.3	0.0				47.0	0.0	0.0
LnGrp LOS	F	B	A	A	F					D	A	
Approach Vol, veh/h		3342			1759	A					15	A
Approach Delay, s/veh		52.2			138.3						47.0	
Approach LOS		D			F						D	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	113.0		37.0	64.0	49.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	96.0		32.0	59.0	44.0
Max Q Clear Time (g_c+I1), s	0.0	41.4		3.0	61.0	46.0
Green Ext Time (p_c), s	0.0	35.2		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	81.8
HCM 6th LOS	F

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2312	53	66	1665	44	137
Future Volume (veh/h)	2312	53	66	1665	44	137
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2434	0	69	1753	46	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	3494		87	3881	101	
Arrive On Green	1.00	0.00	0.05	0.76	0.06	0.00
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	2434	0	69	1753	46	0
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	0.0	0.0	5.7	18.8	3.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	5.7	18.8	3.8	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	3494		87	3881	101	
V/C Ratio(X)	0.70		0.79	0.45	0.45	
Avail Cap(c_a), veh/h	3494		166	3881	302	
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	70.6	6.6	68.5	0.0
Incr Delay (d2), s/veh	0.8	0.0	5.9	0.4	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.7	5.9	1.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.8	0.0	76.4	7.0	69.7	0.0
LnGrp LOS	A		E	A	E	
Approach Vol, veh/h	2434	A		1822	46	A
Approach Delay, s/veh	0.8			9.6	69.7	
Approach LOS	A			A	E	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		13.1	11.3	108.7		120.0
Change Period (Y+Rc), s		4.6	4.0	6.0		6.0
Max Green Setting (Gmax), s		25.4	14.0	96.0		114.0
Max Q Clear Time (g_c+I1), s		5.8	7.7	2.0		20.8
Green Ext Time (p_c), s		0.1	0.0	51.8		25.0

Intersection Summary	
HCM 6th Ctrl Delay	5.3
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	2205	0	35	1536	975	2	3	32	416	3	187
Future Volume (veh/h)	244	2205	0	35	1536	975	2	3	32	416	3	187
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	257	2321	0	37	1617	0	2	3	34	440	0	197
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	3329	1033	48	3344		54	4	42	807	0	239
Arrive On Green	0.16	0.65	0.00	0.03	0.52	0.00	0.03	0.03	0.03	0.15	0.00	0.15
Sat Flow, veh/h	1781	5106	1585	1781	6434	1585	1781	124	1406	5344	0	1585
Grp Volume(v), veh/h	257	2321	0	37	1617	0	2	0	37	440	0	197
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1609	1585	1781	0	1530	1781	0	1585
Q Serve(g_s), s	21.3	43.5	0.0	3.1	24.2	0.0	0.2	0.0	3.6	11.4	0.0	18.1
Cycle Q Clear(g_c), s	21.3	43.5	0.0	3.1	24.2	0.0	0.2	0.0	3.6	11.4	0.0	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.92	1.00		1.00
Lane Grp Cap(c), veh/h	283	3329	1033	48	3344		54	0	46	807	0	239
V/C Ratio(X)	0.91	0.70	0.00	0.77	0.48		0.04	0.00	0.80	0.55	0.00	0.82
Avail Cap(c_a), veh/h	380	3329	1033	143	3344		143	0	122	1176	0	349
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.0	16.7	0.0	72.5	23.1	0.0	70.6	0.0	72.3	58.9	0.0	61.7
Incr Delay (d2), s/veh	20.4	1.2	0.0	22.7	0.1	0.0	0.3	0.0	26.1	0.6	0.0	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	15.9	0.0	1.7	8.9	0.0	0.1	0.0	1.8	5.2	0.0	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.4	17.9	0.0	95.2	23.2	0.0	70.9	0.0	98.4	59.5	0.0	72.1
LnGrp LOS	F	B	A	F	C		E	A	F	E	A	E
Approach Vol, veh/h		2578			1654	A		39			637	
Approach Delay, s/veh		24.3			24.8			97.0			63.4	
Approach LOS		C			C			F			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		8.5	8.0	103.5		30.0	27.9	83.6				
Change Period (Y+Rc), s		4.0	4.0	5.7		7.3	4.0	5.7				
Max Green Setting (Gmax), s		12.0	12.0	72.0		33.0	32.0	52.0				
Max Q Clear Time (g_c+I1), s		5.6	5.1	45.5		20.1	23.3	26.2				
Green Ext Time (p_c), s		0.0	0.0	25.8		2.6	0.6	22.4				

Intersection Summary	
HCM 6th Ctrl Delay	30.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	47	48	7	0	76	9	2492	33	152	2489	5
Future Volume (veh/h)	42	47	48	7	0	76	9	2492	33	152	2489	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	49	51	7	0	80	9	2623	35	160	2620	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	66	107	226	0	101	15	4414	1085	204	3761	1165
Arrive On Green	0.07	0.07	0.07	0.06	0.00	0.06	0.01	0.69	0.69	0.12	1.00	1.00
Sat Flow, veh/h	864	963	1551	3563	0	1585	1781	6434	1582	3456	5106	1582
Grp Volume(v), veh/h	93	0	51	7	0	80	9	2623	35	160	2620	5
Grp Sat Flow(s),veh/h/ln	1827	0	1551	1781	0	1585	1781	1609	1582	1728	1702	1582
Q Serve(g_s), s	7.5	0.0	4.8	0.3	0.0	7.5	0.8	32.4	1.1	6.8	0.0	0.0
Cycle Q Clear(g_c), s	7.5	0.0	4.8	0.3	0.0	7.5	0.8	32.4	1.1	6.8	0.0	0.0
Prop In Lane	0.47		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	0	107	226	0	101	15	4414	1085	204	3761	1165
V/C Ratio(X)	0.74	0.00	0.48	0.03	0.00	0.79	0.61	0.59	0.03	0.79	0.70	0.00
Avail Cap(c_a), veh/h	195	0	165	1021	0	454	143	4414	1085	276	3761	1165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.5	0.0	67.2	65.9	0.0	69.3	74.1	12.5	7.6	65.2	0.0	0.0
Incr Delay (d2), s/veh	7.5	0.0	3.0	0.0	0.0	12.0	13.9	0.2	0.0	6.8	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	1.9	0.1	0.0	3.3	0.4	10.6	0.3	3.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	0.0	70.2	66.0	0.0	81.2	88.0	12.7	7.6	72.0	1.1	0.0
LnGrp LOS	E	A	E	E	A	F	F	B	A	E	A	A
Approach Vol, veh/h		144			87			2667			2785	
Approach Delay, s/veh		73.9			80.0			12.9			5.2	
Approach LOS		E			F			B			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.3	5.3	116.9		13.5	12.8	109.3				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		16.0	12.0	60.6		43.0	12.0	60.6				
Max Q Clear Time (g_c+I1), s		9.5	2.8	2.0		9.5	8.8	34.4				
Green Ext Time (p_c), s		0.2	0.0	38.9		0.3	0.1	21.5				

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	2124	310	237	2229	108	293	87	133	54	14	6
Future Volume (veh/h)	8	2124	310	237	2229	108	293	87	133	54	14	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	2236	326	249	2346	0	200	243	140	36	44	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	885	3028	741	721	2723		265	278	236	88	92	
Arrive On Green	0.26	0.47	0.47	0.42	0.85	0.00	0.15	0.15	0.15	0.05	0.05	0.00
Sat Flow, veh/h	3456	6434	1575	3456	6434	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	8	2236	326	249	2346	0	200	243	140	36	44	0
Grp Sat Flow(s),veh/h/ln	1728	1609	1575	1728	1609	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.3	42.3	20.7	7.4	31.0	0.0	16.2	19.1	12.4	2.9	3.4	0.0
Cycle Q Clear(g_c), s	0.3	42.3	20.7	7.4	31.0	0.0	16.2	19.1	12.4	2.9	3.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	885	3028	741	721	2723		265	278	236	88	92	
V/C Ratio(X)	0.01	0.74	0.44	0.35	0.86		0.76	0.87	0.59	0.41	0.48	
Avail Cap(c_a), veh/h	885	3028	741	721	3071		333	349	296	190	200	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.6	32.2	26.5	36.7	9.0	0.0	61.2	62.5	59.6	69.2	69.4	0.0
Incr Delay (d2), s/veh	0.0	1.7	1.9	0.1	2.6	0.0	6.6	16.9	1.8	3.0	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	16.2	8.0	2.9	4.0	0.0	7.9	10.5	5.0	1.4	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.6	33.9	28.4	36.8	11.6	0.0	67.8	79.4	61.4	72.2	73.2	0.0
LnGrp LOS	D	C	C	D	B		E	E	E	E	E	
Approach Vol, veh/h		2570			2595	A		583			80	A
Approach Delay, s/veh		33.2			14.1			71.1			72.7	
Approach LOS		C			B			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		26.3	35.3	77.0		11.4	42.4	69.9				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		28.0	17.0	70.6		16.0	16.0	71.6				
Max Q Clear Time (g_c+I1), s		21.1	9.4	44.3		5.4	2.3	33.0				
Green Ext Time (p_c), s		1.2	0.3	22.6		0.1	0.0	30.4				

Intersection Summary	
HCM 6th Ctrl Delay	29.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	1392	611	75	1486	480	741	705	53	628	495	335
Future Volume (veh/h)	288	1392	611	75	1486	480	741	705	53	628	495	335
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	303	1465	0	79	1564	0	780	742	0	661	521	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	343	2318		119	1797		829	964		889	711	
Arrive On Green	0.20	0.72	0.00	0.07	0.56	0.00	0.24	0.19	0.00	0.06	0.05	0.00
Sat Flow, veh/h	3456	6434	1585	3456	6434	1585	3456	5106	1585	5023	5106	1585
Grp Volume(v), veh/h	303	1465	0	79	1564	0	780	742	0	661	521	0
Grp Sat Flow(s),veh/h/ln	1728	1609	1585	1728	1609	1585	1728	1702	1585	1674	1702	1585
Q Serve(g_s), s	12.8	17.5	0.0	3.3	31.3	0.0	33.2	20.7	0.0	19.4	15.1	0.0
Cycle Q Clear(g_c), s	12.8	17.5	0.0	3.3	31.3	0.0	33.2	20.7	0.0	19.4	15.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	343	2318		119	1797		829	964		889	711	
V/C Ratio(X)	0.88	0.63		0.66	0.87		0.94	0.77		0.74	0.73	
Avail Cap(c_a), veh/h	382	2318		161	1797		898	1294		904	987	
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.3	15.9	0.0	69.0	30.8	0.0	56.0	57.7	0.0	67.3	68.8	0.0
Incr Delay (d2), s/veh	18.2	0.6	0.0	2.4	6.1	0.0	16.3	2.6	0.0	3.3	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	4.2	0.0	1.5	9.3	0.0	16.0	9.0	0.0	9.1	7.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.4	16.5	0.0	71.4	36.8	0.0	72.2	60.3	0.0	70.6	71.6	0.0
LnGrp LOS	E	B		E	D		E	E		E	E	
Approach Vol, veh/h		1768	A		1643	A		1522	A		1182	A
Approach Delay, s/veh		26.9			38.5			66.4			71.0	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.2	34.3	9.2	60.4	40.0	28.6	21.3	48.3
Change Period (Y+Rc), s	7.7	6.0	4.0	6.4	4.0	* 7.7	6.4	6.4
Max Green Setting (Gmax), s	27.0	38.0	7.0	53.9	39.0	* 29	16.6	41.9
Max Q Clear Time (g_c+I1), s	21.4	22.7	5.3	19.5	35.2	17.1	14.8	33.3
Green Ext Time (p_c), s	1.3	5.6	0.0	16.2	0.7	3.8	0.1	6.9

Intersection Summary	
HCM 6th Ctrl Delay	48.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	1968	5	17	1770	604	6	3	3	61	0	35
Future Volume (veh/h)	78	1968	5	17	1770	604	6	3	3	61	0	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.94	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	2072	5	18	1863	635	4	5	3	64	0	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	4305	10	22	3860	947	19	20	16	133	0	59
Arrive On Green	0.06	0.64	0.64	0.01	0.60	0.60	0.01	0.01	0.01	0.04	0.00	0.04
Sat Flow, veh/h	1781	6677	16	1781	6434	1578	1781	1870	1496	3563	0	1585
Grp Volume(v), veh/h	82	1497	580	18	1863	635	4	5	3	64	0	37
Grp Sat Flow(s),veh/h/ln	1781	1609	1867	1781	1609	1578	1781	1870	1496	1781	0	1585
Q Serve(g_s), s	6.8	24.0	24.0	1.5	24.5	40.4	0.3	0.4	0.3	2.6	0.0	3.5
Cycle Q Clear(g_c), s	6.8	24.0	24.0	1.5	24.5	40.4	0.3	0.4	0.3	2.6	0.0	3.5
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	102	3112	1204	22	3860	947	19	20	16	133	0	59
V/C Ratio(X)	0.81	0.48	0.48	0.82	0.48	0.67	0.21	0.25	0.19	0.48	0.00	0.62
Avail Cap(c_a), veh/h	202	3185	1232	95	3860	947	95	100	80	390	0	173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	69.9	13.7	13.7	73.9	16.9	20.1	73.6	73.6	73.6	70.8	0.0	71.2
Incr Delay (d2), s/veh	5.5	0.2	0.4	23.0	0.4	3.8	2.1	2.5	2.2	3.3	0.0	12.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	8.2	9.6	0.8	8.7	14.9	0.2	0.2	0.1	1.3	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	13.9	14.2	96.9	17.3	23.8	75.7	76.1	75.7	74.1	0.0	83.8
LnGrp LOS	E	B	B	F	B	C	E	E	E	E	A	F
Approach Vol, veh/h		2159			2516			12			101	
Approach Delay, s/veh		16.3			19.5			75.9			77.7	
Approach LOS		B			B			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.6	5.9	102.7		10.2	12.6	96.0				
Change Period (Y+Rc), s		4.0	4.0	6.0		4.6	4.0	6.0				
Max Green Setting (Gmax), s		8.0	8.0	99.0		16.4	17.0	90.0				
Max Q Clear Time (g_c+I1), s		2.4	3.5	26.0		5.5	8.8	42.4				
Green Ext Time (p_c), s		0.0	0.0	41.0		0.2	0.0	36.8				

Intersection Summary	
HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	1894	95	302	1852	180	360	201	228	934	193	154
Future Volume (veh/h)	125	1894	95	302	1852	180	360	201	228	934	193	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1988	1988	1988	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	1994	67	318	1949	115	379	212	79	983	203	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	2099	1146	356	2320	718	1021	359	109	1014	348	106
Arrive On Green	0.05	0.39	0.39	0.10	0.45	0.45	0.30	0.07	0.07	0.29	0.07	0.07
Sat Flow, veh/h	3673	5427	1678	3456	5106	1580	3456	5106	1551	3456	5106	1550
Grp Volume(v), veh/h	132	1994	67	318	1949	115	379	212	79	983	203	43
Grp Sat Flow(s),veh/h/ln	1837	1809	1678	1728	1702	1580	1728	1702	1551	1728	1702	1550
Q Serve(g_s), s	5.3	53.4	0.0	13.6	50.5	2.2	13.0	6.0	7.5	42.1	5.8	3.5
Cycle Q Clear(g_c), s	5.3	53.4	0.0	13.6	50.5	2.2	13.0	6.0	7.5	42.1	5.8	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	2099	1146	356	2320	718	1021	359	109	1014	348	106
V/C Ratio(X)	0.74	0.95	0.06	0.89	0.84	0.16	0.37	0.59	0.72	0.97	0.58	0.41
Avail Cap(c_a), veh/h	196	2099	1146	356	2320	718	1021	477	145	1014	1157	351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.4	44.6	7.9	66.4	36.1	2.8	41.8	67.6	68.3	52.3	67.8	51.4
Incr Delay (d2), s/veh	12.2	11.0	0.1	23.3	3.2	0.2	0.2	1.8	12.7	21.2	1.8	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	25.2	0.7	7.1	20.8	2.3	5.6	2.7	3.3	20.9	2.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.6	55.6	8.0	89.7	39.3	3.0	42.0	69.5	81.0	73.5	69.6	54.3
LnGrp LOS	F	E	A	F	D	A	D	E	F	E	E	D
Approach Vol, veh/h		2193			2382			670			1229	
Approach Delay, s/veh		55.8			44.3			55.3			72.2	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	48.0	16.5	21.5	64.0	48.3	16.2	11.3	74.2
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	44.0	14.0	14.0	* 58	24.0	34.0	8.0	64.0
Max Q Clear Time (g_c+I1), s	44.1	9.5	15.6	55.4	15.0	7.8	7.3	52.5
Green Ext Time (p_c), s	0.0	0.7	0.0	2.5	0.7	1.6	0.0	10.6

Intersection Summary	
HCM 6th Ctrl Delay	54.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	2005	514	238	1939	80	126	214	149	18	64	122
Future Volume (veh/h)	306	2005	514	238	1939	80	126	214	149	18	64	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	322	2111	0	251	2041	84	133	225	0	19	67	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	3193		295	3089	957	475	258		23	99	147
Arrive On Green	0.21	1.00	0.00	0.17	1.00	1.00	0.09	0.14	0.00	0.01	0.05	0.05
Sat Flow, veh/h	3456	5106	1585	3456	5106	1581	5023	1870	1585	1781	1870	2790
Grp Volume(v), veh/h	322	2111	0	251	2041	84	133	225	0	19	67	128
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1581	1674	1870	1585	1781	1870	1395
Q Serve(g_s), s	13.5	0.0	0.0	10.6	0.0	0.0	3.7	17.7	0.0	1.6	5.3	5.7
Cycle Q Clear(g_c), s	13.5	0.0	0.0	10.6	0.0	0.0	3.7	17.7	0.0	1.6	5.3	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	3193		295	3089	957	475	258		23	99	147
V/C Ratio(X)	0.88	0.66		0.85	0.66	0.09	0.28	0.87		0.81	0.68	0.87
Avail Cap(c_a), veh/h	484	3193		415	3089	957	546	303		95	180	268
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	0.0	0.0	61.3	0.0	0.0	63.2	63.3	0.0	73.8	69.8	48.4
Incr Delay (d2), s/veh	11.6	1.1	0.0	8.5	0.6	0.1	0.1	22.4	0.0	21.4	3.0	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.3	0.0	4.6	0.2	0.0	1.6	10.0	0.0	0.9	2.6	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	1.1	0.0	69.8	0.6	0.1	63.3	85.7	0.0	95.2	72.8	54.3
LnGrp LOS	E	A		E	A	A	E	F		F	E	D
Approach Vol, veh/h		2433	A		2376			358	A		214	
Approach Delay, s/veh		10.2			7.9			77.4			63.8	
Approach LOS		B			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	27.4	16.8	99.8	20.9	12.5	19.9	96.7
Change Period (Y+Rc), s	4.0	* 6.7	4.0	6.0	6.7	4.6	4.0	6.0
Max Green Setting (Gmax), s	8.0	* 24	18.0	80.0	16.3	14.4	21.0	77.0
Max Q Clear Time (g_c+I1), s	3.6	19.7	12.6	2.0	5.7	7.7	15.5	2.0
Green Ext Time (p_c), s	0.0	0.7	0.2	48.0	0.2	0.3	0.3	45.8

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	1717	4	9	1634	100	1	0	0	123	0	696
Future Volume (veh/h)	370	1717	4	9	1634	100	1	0	0	123	0	696
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	0.97		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	389	1807	4	9	1720	64	1	0	-5	129	0	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	2860	6	11	2097	649	1	1	1	176	0	161
Arrive On Green	0.25	1.00	1.00	0.01	0.41	0.41	0.00	0.00	0.00	0.05	0.00	0.05
Sat Flow, veh/h	3456	5261	12	1781	5106	1579	1781	1870	1585	3457	0	3170
Grp Volume(v), veh/h	389	1169	642	9	1720	64	1	0	-5	129	0	7
Grp Sat Flow(s),veh/h/ln	1728	1702	1868	1781	1702	1579	1781	1870	1585	1729	0	1585
Q Serve(g_s), s	16.4	0.0	0.0	0.8	44.9	3.7	0.1	0.0	0.0	5.5	0.0	0.3
Cycle Q Clear(g_c), s	16.4	0.0	0.0	0.8	44.9	3.7	0.1	0.0	0.0	5.5	0.0	0.3
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	426	1850	1016	11	2097	649	1	1	1	176	0	161
V/C Ratio(X)	0.91	0.63	0.63	0.81	0.82	0.10	0.84	0.00	-4.73	0.73	0.00	0.04
Avail Cap(c_a), veh/h	438	1850	1016	95	2097	649	392	411	349	369	0	338
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.7	0.0	0.0	74.4	39.3	27.1	75.0	0.0	0.0	70.2	0.0	67.7
Incr Delay (d2), s/veh	22.5	0.8	1.4	37.9	3.7	0.3	182.0	0.0	0.0	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.2	0.4	0.5	18.9	1.5	0.1	0.0	0.0	2.5	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.3	0.8	1.4	112.3	43.0	27.5	257.0	0.0	0.0	72.4	0.0	67.8
LnGrp LOS	E	A	A	F	D	C	F	A	A	E	A	E
Approach Vol, veh/h		2200			1793			-4			136	
Approach Delay, s/veh		14.7			42.8			0.0			72.2	
Approach LOS		B			D			A			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		3.3	4.9	87.9		13.6	24.9	68.0				
Change Period (Y+Rc), s		4.0	4.0	6.4		6.0	6.4	* 6.4				
Max Green Setting (Gmax), s		33.0	8.0	72.6		16.0	19.0	* 62				
Max Q Clear Time (g_c+I1), s		2.1	2.8	2.0		7.5	18.4	46.9				
Green Ext Time (p_c), s		0.0	0.0	28.3		0.1	0.1	11.1				

Intersection Summary	
HCM 6th Ctrl Delay	28.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	194	97	1602	59	56	1710
Future Volume (veh/h)	194	97	1602	59	56	1710
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	204	102	1686	62	59	1800
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	258	229	3056	949	75	3544
Arrive On Green	0.14	0.14	0.80	0.80	0.04	0.69
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	204	102	1686	62	59	1800
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	8.3	4.4	9.0	0.6	2.5	12.5
Cycle Q Clear(g_c), s	8.3	4.4	9.0	0.6	2.5	12.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	258	229	3056	949	75	3544
V/C Ratio(X)	0.79	0.44	0.55	0.07	0.78	0.51
Avail Cap(c_a), veh/h	577	514	3056	949	190	3544
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	1.00	1.00
Uniform Delay (d), s/veh	31.0	29.3	4.0	3.1	35.6	5.4
Incr Delay (d2), s/veh	4.1	1.0	0.7	0.1	6.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	4.0	1.8	0.2	1.1	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.1	30.3	4.7	3.3	42.1	5.9
LnGrp LOS	D	C	A	A	D	A
Approach Vol, veh/h	306		1748			1859
Approach Delay, s/veh	33.5		4.6			7.1
Approach LOS	C		A			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				58.5		16.5	7.2	51.3
Change Period (Y+Rc), s				6.4		5.7	4.0	6.4
Max Green Setting (Gmax), s				38.6		24.3	8.0	26.6
Max Q Clear Time (g_c+I1), s				14.5		10.3	4.5	11.0
Green Ext Time (p_c), s				16.6		0.6	0.0	11.1

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	114	50	173	1559	1633	248
Future Volume (veh/h)	114	50	173	1559	1633	248
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	53	182	1641	1719	261
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	170	78	229	3823	3349	1040
Arrive On Green	0.05	0.05	0.13	1.00	1.00	1.00
Sat Flow, veh/h	3456	1585	3456	5274	5274	1585
Grp Volume(v), veh/h	120	53	182	1641	1719	261
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1702	1585
Q Serve(g_s), s	5.1	4.9	7.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.1	4.9	7.7	0.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	170	78	229	3823	3349	1040
V/C Ratio(X)	0.71	0.68	0.80	0.43	0.51	0.25
Avail Cap(c_a), veh/h	606	278	645	3823	3349	1040
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.88	0.88	0.81	0.81
Uniform Delay (d), s/veh	70.2	70.1	64.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.0	3.8	2.1	0.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.1	3.2	0.1	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	72.2	74.0	66.2	0.3	0.5	0.5
LnGrp LOS	E	E	E	A	A	A
Approach Vol, veh/h	173			1823	1980	
Approach Delay, s/veh	72.8			6.9	0.5	
Approach LOS	E			A	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		13.1	13.9	104.4		118.3
Change Period (Y+Rc), s		5.7	4.0	6.0		* 6
Max Green Setting (Gmax), s		26.3	28.0	80.0		* 1.1E2
Max Q Clear Time (g_c+I1), s		7.1	9.7	2.0		2.0
Green Ext Time (p_c), s		0.3	0.3	38.5		33.2

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	5	123	6	30	0	153	1695	6	7	1500	171
Future Volume (veh/h)	35	5	123	6	30	0	153	1695	6	7	1500	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	0	129	6	32	0	161	1784	6	7	1579	180
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	0	151	11	148	0	184	3074	954	12	2581	801
Arrive On Green	0.02	0.00	0.10	0.01	0.08	0.00	0.10	0.60	0.60	0.01	0.51	0.51
Sat Flow, veh/h	3563	0	1585	1781	1870	0	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	41	0	129	6	32	0	161	1784	6	7	1579	180
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.7	0.0	12.0	0.5	2.4	0.0	13.4	32.1	0.2	0.6	33.2	9.5
Cycle Q Clear(g_c), s	1.7	0.0	12.0	0.5	2.4	0.0	13.4	32.1	0.2	0.6	33.2	9.5
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	0	151	11	148	0	184	3074	954	12	2581	801
V/C Ratio(X)	0.53	0.00	0.85	0.57	0.22	0.00	0.87	0.58	0.01	0.58	0.61	0.22
Avail Cap(c_a), veh/h	190	0	254	95	324	0	333	3074	954	95	2581	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	72.6	0.0	66.8	74.4	64.7	0.0	66.3	18.3	11.9	74.3	26.6	20.7
Incr Delay (d2), s/veh	2.0	0.0	16.8	16.8	0.5	0.0	5.0	0.8	0.0	13.8	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	5.5	0.3	1.2	0.0	6.2	12.1	0.1	0.3	13.1	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.6	0.0	83.6	91.2	65.2	0.0	71.3	19.1	11.9	88.0	27.1	20.9
LnGrp LOS	E	A	F	F	E	A	E	B	B	F	C	C
Approach Vol, veh/h		170			38			1951			1766	
Approach Delay, s/veh		81.4			69.3			23.4			26.7	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	20.3	19.5	81.5	7.3	17.9	5.0	96.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	8.0	24.0	28.0	70.3	8.0	* 26	8.0	90.3
Max Q Clear Time (g_c+I1), s	2.5	14.0	15.4	35.2	3.7	4.4	2.6	34.1
Green Ext Time (p_c), s	0.0	0.3	0.2	23.6	0.0	0.1	0.0	34.4

Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	29	14	157	384	259	25	1566	125	107	1542	42
Future Volume (veh/h)	42	29	14	157	384	259	25	1566	125	107	1542	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	31	15	165	404	0	26	1648	0	113	1623	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	86	41	188	517		33	3155		134	3449	93
Arrive On Green	0.03	0.07	0.07	0.11	0.15	0.00	0.02	0.62	0.00	0.08	0.67	0.67
Sat Flow, veh/h	1781	1191	576	1781	3554	1585	1781	5106	1585	1781	5111	139
Grp Volume(v), veh/h	44	0	46	165	404	0	26	1648	0	113	1081	586
Grp Sat Flow(s),veh/h/ln	1781	0	1767	1781	1777	1585	1781	1702	1585	1781	1702	1845
Q Serve(g_s), s	3.7	0.0	3.7	13.7	16.4	0.0	2.2	27.3	0.0	9.4	22.7	22.7
Cycle Q Clear(g_c), s	3.7	0.0	3.7	13.7	16.4	0.0	2.2	27.3	0.0	9.4	22.7	22.7
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	57	0	127	188	517		33	3155		134	2297	1245
V/C Ratio(X)	0.77	0.00	0.36	0.88	0.78		0.79	0.52		0.84	0.47	0.47
Avail Cap(c_a), veh/h	143	0	249	333	860		143	3155		143	2297	1245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.1	0.0	66.3	66.1	61.8	0.0	73.3	16.2	0.0	68.5	11.6	11.6
Incr Delay (d2), s/veh	8.1	0.0	5.0	5.0	4.1	0.0	14.4	0.2	0.0	30.9	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.9	6.4	7.6	0.0	1.1	10.1	0.0	5.4	8.1	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.2	0.0	71.3	71.2	65.9	0.0	87.7	16.4	0.0	99.4	12.3	12.9
LnGrp LOS	F	A	E	E	E		F	B		F	B	B
Approach Vol, veh/h		90			569	A		1674	A		1780	
Approach Delay, s/veh		75.7			67.4			17.5			18.0	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.8	16.5	6.8	106.9	8.8	27.5	15.3	98.4
Change Period (Y+Rc), s	4.0	* 5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	28.0	* 21	12.0	70.3	12.0	36.3	12.0	70.3
Max Q Clear Time (g_c+I1), s	15.7	5.7	4.2	24.7	5.7	18.4	11.4	29.3
Green Ext Time (p_c), s	0.2	0.3	0.0	25.4	0.0	3.4	0.0	24.4

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1210	71	38	1599	629	228	1037	49	997	516	145
Future Volume (veh/h)	80	1210	71	38	1599	629	228	1037	49	997	516	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	1274	24	40	1683	0	240	1092	10	1049	543	70
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	1818	562	70	1735		286	1207	372	1229	2092	647
Arrive On Green	0.04	0.36	0.36	0.02	0.34	0.00	0.08	0.24	0.24	0.08	0.14	0.14
Sat Flow, veh/h	3456	5106	1578	3456	5106	1585	3456	5106	1575	5023	5106	1579
Grp Volume(v), veh/h	84	1274	24	40	1683	0	240	1092	10	1049	543	70
Grp Sat Flow(s),veh/h/ln	1728	1702	1578	1728	1702	1585	1728	1702	1575	1674	1702	1579
Q Serve(g_s), s	3.6	32.1	1.5	1.7	48.7	0.0	10.3	31.2	0.7	30.9	14.3	5.8
Cycle Q Clear(g_c), s	3.6	32.1	1.5	1.7	48.7	0.0	10.3	31.2	0.7	30.9	14.3	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	1818	562	70	1735		286	1207	372	1229	2092	647
V/C Ratio(X)	0.67	0.70	0.04	0.57	0.97		0.84	0.90	0.03	0.85	0.26	0.11
Avail Cap(c_a), veh/h	184	1818	562	184	1736		369	1236	381	1229	2092	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.4	41.4	31.6	72.8	48.8	0.0	67.8	55.6	34.8	66.3	44.5	40.8
Incr Delay (d2), s/veh	2.3	2.3	0.1	2.7	15.1	0.0	10.3	9.7	0.0	5.7	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	13.5	0.6	0.8	22.5	0.0	4.9	14.2	0.3	14.6	6.6	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.7	43.7	31.7	75.6	63.9	0.0	78.1	65.4	34.8	72.0	44.8	41.1
LnGrp LOS	E	D	C	E	E		E	E	C	E	D	D
Approach Vol, veh/h		1382			1723	A		1342			1662	
Approach Delay, s/veh		45.3			64.2			67.4			61.8	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	59.4	16.4	67.2	9.5	57.0	42.4	41.2
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	5.7	* 5.7
Max Green Setting (Gmax), s	8.0	51.0	16.0	55.3	8.0	51.0	35.0	* 36
Max Q Clear Time (g_c+I1), s	3.7	34.1	12.3	16.3	5.6	50.7	32.9	33.2
Green Ext Time (p_c), s	0.0	9.8	0.2	6.4	0.0	0.3	0.7	2.3

Intersection Summary	
HCM 6th Ctrl Delay	60.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	0	24	31	0	76	27	1168	21	13	572	9
Future Volume (veh/h)	38	0	24	31	0	76	27	1168	21	13	572	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	0	25	33	0	80	28	1229	22	14	602	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	0	170	266	0	237	76	1576	28	43	1514	23
Arrive On Green	0.11	0.00	0.11	0.15	0.00	0.15	0.04	0.44	0.44	0.02	0.42	0.42
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3572	64	1781	3584	54
Grp Volume(v), veh/h	40	0	25	33	0	80	28	611	640	14	298	313
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1859	1781	1777	1861
Q Serve(g_s), s	1.3	0.0	0.9	1.0	0.0	2.9	1.0	18.7	18.7	0.5	7.4	7.4
Cycle Q Clear(g_c), s	1.3	0.0	0.9	1.0	0.0	2.9	1.0	18.7	18.7	0.5	7.4	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.03
Lane Grp Cap(c), veh/h	191	0	170	266	0	237	76	784	820	43	751	786
V/C Ratio(X)	0.21	0.00	0.15	0.12	0.00	0.34	0.37	0.78	0.78	0.33	0.40	0.40
Avail Cap(c_a), veh/h	280	0	249	1147	0	1021	224	929	972	224	929	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	25.8	23.5	0.0	24.3	29.6	15.2	15.2	30.6	12.8	12.8
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.1	0.0	0.3	1.1	4.4	4.2	1.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3	0.4	0.0	1.0	0.4	7.1	7.3	0.2	2.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	25.9	23.6	0.0	24.6	30.7	19.6	19.4	32.2	13.3	13.3
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		65			113			1279			625	
Approach Delay, s/veh		26.1			24.3			19.7			13.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.8	6.7	32.6		13.5	5.5	33.8				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		10.0	8.0	33.3		41.0	8.0	33.3				
Max Q Clear Time (g_c+I1), s		3.3	3.0	9.4		4.9	2.5	20.7				
Green Ext Time (p_c), s		0.0	0.0	4.5		0.3	0.0	7.4				

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	243	494	57	691	452	442	796	153	102	459	18
Future Volume (veh/h)	23	243	494	57	691	452	442	796	153	102	459	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2001	1924	1924	2001	1924	1924	2001	1924	1924	1954	1879	1879
Adj Flow Rate, veh/h	24	256	520	60	727	476	465	838	161	107	483	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	95	966	680	164	1097	487	570	1215	540	372	1004	446
Arrive On Green	0.05	0.26	0.26	0.09	0.30	0.30	0.15	0.33	0.33	0.10	0.28	0.28
Sat Flow, veh/h	1906	3656	1622	1906	3656	1623	3698	3656	1623	3611	3571	1584
Grp Volume(v), veh/h	24	256	520	60	727	476	465	838	161	107	483	19
Grp Sat Flow(s),veh/h/ln	1906	1828	1622	1906	1828	1623	1849	1828	1623	1806	1785	1584
Q Serve(g_s), s	1.1	5.0	23.9	2.7	15.7	26.3	11.0	18.0	6.7	2.5	10.2	0.8
Cycle Q Clear(g_c), s	1.1	5.0	23.9	2.7	15.7	26.3	11.0	18.0	6.7	2.5	10.2	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	95	966	680	164	1097	487	570	1215	540	372	1004	446
V/C Ratio(X)	0.25	0.27	0.76	0.37	0.66	0.98	0.82	0.69	0.30	0.29	0.48	0.04
Avail Cap(c_a), veh/h	211	1466	902	211	1466	651	735	1386	615	399	1038	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	26.3	22.5	39.0	27.7	31.4	37.0	26.2	22.4	37.5	27.0	23.7
Incr Delay (d2), s/veh	0.5	0.2	3.9	0.5	1.2	28.1	4.3	1.6	0.5	0.2	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.1	9.0	1.2	6.4	13.1	5.0	7.3	2.4	1.0	4.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	26.6	26.4	39.5	28.8	59.5	41.3	27.8	22.9	37.7	27.6	23.7
LnGrp LOS	D	C	C	D	C	E	D	C	C	D	C	C
Approach Vol, veh/h		800			1263			1464			609	
Approach Delay, s/veh		26.9			40.9			31.6			29.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	29.6	18.0	31.2	8.5	32.9	13.3	35.8
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	10.0	36.3	18.0	26.3	10.0	36.3	10.0	34.3
Max Q Clear Time (g_c+I1), s	4.7	7.0	13.0	12.2	3.1	17.7	4.5	20.0
Green Ext Time (p_c), s	0.0	1.5	0.9	6.4	0.0	9.0	0.1	9.8

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	802	31	36	1023	90	123
Future Volume (veh/h)	802	31	36	1023	90	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	844	33	38	1077	95	129
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1342	599	121	1912	423	376
Arrive On Green	0.38	0.38	0.07	0.54	0.24	0.24
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	844	33	38	1077	95	129
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	8.4	0.6	0.9	8.7	1.9	2.9
Cycle Q Clear(g_c), s	8.4	0.6	0.9	8.7	1.9	2.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1342	599	121	1912	423	376
V/C Ratio(X)	0.63	0.06	0.31	0.56	0.22	0.34
Avail Cap(c_a), veh/h	2246	1002	330	3373	1072	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.0	8.5	19.2	6.6	13.3	13.7
Incr Delay (d2), s/veh	0.8	0.1	0.5	0.4	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.1	0.3	1.5	0.7	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.8	8.6	19.7	7.1	13.4	13.9
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h	877			1115	224	
Approach Delay, s/veh	11.7			7.5	13.7	
Approach LOS	B			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.3	6.9	22.0		28.9
Change Period (Y+Rc), s		4.0	4.0	5.7		* 5.7
Max Green Setting (Gmax), s		26.0	8.0	27.3		* 41
Max Q Clear Time (g_c+I1), s		4.9	2.9	10.4		10.7
Green Ext Time (p_c), s		0.5	0.0	5.9		10.5

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	145	650	59	334	289	403	1548	32	95	795	29
Future Volume (veh/h)	77	145	650	59	334	289	403	1548	32	95	795	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	153	0	62	352	0	424	1629	0	100	837	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	452		252	462		498	2510		441	2510	
Arrive On Green	0.07	0.13	0.00	0.07	0.13	0.00	0.14	0.49	0.00	0.13	0.49	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	81	153	0	62	352	0	424	1629	0	100	837	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.7	4.7	0.0	2.0	11.5	0.0	14.4	28.6	0.0	3.1	12.0	0.0
Cycle Q Clear(g_c), s	2.7	4.7	0.0	2.0	11.5	0.0	14.4	28.6	0.0	3.1	12.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	452		252	462		498	2510		441	2510	
V/C Ratio(X)	0.34	0.34		0.25	0.76		0.85	0.65		0.23	0.33	
Avail Cap(c_a), veh/h	288	690		288	702		1008	2510		441	2510	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.1	47.8	0.0	52.5	50.4	0.0	50.1	22.8	0.0	47.0	18.5	0.0
Incr Delay (d2), s/veh	0.3	0.8	0.0	0.2	4.5	0.0	1.6	1.3	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.1	0.0	0.9	5.3	0.0	6.0	10.6	0.0	1.3	4.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	48.5	0.0	52.7	54.9	0.0	51.7	24.1	0.0	47.1	18.7	0.0
LnGrp LOS	D	D		D	D		D	C		D	B	
Approach Vol, veh/h		234	A		414	A		2053	A		937	A
Approach Delay, s/veh		50.2			54.5			29.8			21.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.3	65.0	12.7	21.0	21.3	65.0	12.4	21.3
Change Period (Y+Rc), s	6.0	* 6	4.0	5.7	4.0	6.0	4.0	* 5.7
Max Green Setting (Gmax), s	8.0	* 59	10.0	23.3	35.0	32.0	10.0	* 24
Max Q Clear Time (g_c+I1), s	5.1	30.6	4.0	6.7	16.4	14.0	4.7	13.5
Green Ext Time (p_c), s	0.0	14.4	0.0	0.8	0.9	5.4	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	31.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	808	0	5	507	398	0	0	0	379	0	177
Future Volume (veh/h)	162	808	0	5	507	398	0	0	0	379	0	177
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1841	1841	0	1841	1841	1841				1841	0	1841
Adj Flow Rate, veh/h	171	851	0	5	534	419				399	0	186
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	4	4	0	4	4	4				4	0	4
Cap, veh/h	214	1869	0	0	1184	524				484	0	621
Arrive On Green	0.12	0.53	0.00	0.00	0.34	0.34				0.28	0.00	0.28
Sat Flow, veh/h	1753	3589	0	0	3497	1548				1753	0	1560
Grp Volume(v), veh/h	171	851	0	0	534	419				399	0	186
Grp Sat Flow(s),veh/h/ln	1753	1749	0	0	1749	1548				1753	0	1560
Q Serve(g_s), s	5.2	8.1	0.0	0.0	6.5	13.3				11.6	0.0	4.4
Cycle Q Clear(g_c), s	5.2	8.1	0.0	0.0	6.5	13.3				11.6	0.0	4.4
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	214	1869	0	0	1184	524				484	0	621
V/C Ratio(X)	0.80	0.46	0.00	0.00	0.45	0.80				0.82	0.00	0.30
Avail Cap(c_a), veh/h	258	1869	0	0	1526	675				903	0	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	23.2	7.8	0.0	0.0	14.0	16.3				18.4	0.0	11.2
Incr Delay (d2), s/veh	11.2	0.2	0.0	0.0	0.3	5.2				1.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.0	0.0	0.0	2.1	4.5				4.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	8.0	0.0	0.0	14.3	21.5				19.8	0.0	11.3
LnGrp LOS	C	A	A	A	B	C				B	A	B
Approach Vol, veh/h		1022			953						585	
Approach Delay, s/veh		12.4			17.5						17.1	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	34.7		19.6	10.6	24.1
Change Period (Y+Rc), s	4.0	5.7		4.6	4.0	5.7
Max Green Setting (Gmax), s	28.0	24.7		28.0	8.0	23.7
Max Q Clear Time (g_c+I1), s	0.0	10.1		13.6	7.2	15.3
Green Ext Time (p_c), s	0.0	3.5		1.4	0.0	2.9

Intersection Summary			
HCM 6th Ctrl Delay			15.4
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	183	990	10	3	870	188	9	12	14	146	6	54
Future Volume (veh/h)	183	990	10	3	870	188	9	12	14	146	6	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1885	1826	1826	1885	1885	1885	1791	1791	1732
Adj Flow Rate, veh/h	193	1042	11	3	916	198	9	13	15	154	6	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	1	5	5	1	1	1	1	1	5
Cap, veh/h	240	1779	19	4	1285	566	57	25	29	207	8	180
Arrive On Green	0.14	0.51	0.51	0.00	0.37	0.37	0.03	0.03	0.03	0.13	0.13	0.13
Sat Flow, veh/h	1739	3517	37	1795	3469	1526	1795	798	921	1645	64	1433
Grp Volume(v), veh/h	193	514	539	3	916	198	9	0	28	160	0	57
Grp Sat Flow(s),veh/h/ln	1739	1735	1819	1795	1735	1526	1795	0	1719	1709	0	1433
Q Serve(g_s), s	5.7	11.0	11.0	0.1	12.0	5.0	0.3	0.0	0.8	4.8	0.0	1.9
Cycle Q Clear(g_c), s	5.7	11.0	11.0	0.1	12.0	5.0	0.3	0.0	0.8	4.8	0.0	1.9
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.54	0.96		1.00
Lane Grp Cap(c), veh/h	240	878	920	4	1285	566	57	0	55	215	0	180
V/C Ratio(X)	0.81	0.59	0.59	0.68	0.71	0.35	0.16	0.00	0.51	0.74	0.00	0.32
Avail Cap(c_a), veh/h	295	878	920	271	1460	642	271	0	260	258	0	216
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.2	9.2	9.2	26.4	14.3	12.1	25.0	0.0	25.3	22.3	0.0	21.1
Incr Delay (d2), s/veh	10.1	1.0	1.0	52.0	1.4	0.4	1.3	0.0	7.3	9.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.0	3.1	0.1	3.8	1.4	0.1	0.0	0.4	2.3	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	10.2	10.2	78.4	15.7	12.4	26.2	0.0	32.6	31.4	0.0	22.1
LnGrp LOS	C	B	B	E	B	B	C	A	C	C	A	C
Approach Vol, veh/h		1246			1117			37			217	
Approach Delay, s/veh		13.6			15.3			31.0			29.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	32.5		5.7	11.3	25.3		10.7
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	25.3		8.0	9.0	22.3		8.0
Max Q Clear Time (g_c+I1), s	2.1	13.0		2.8	7.7	14.0		6.8
Green Ext Time (p_c), s	0.0	7.5		0.0	0.1	5.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	896	282	317	990	136	288
Future Volume (veh/h)	896	282	317	990	136	288
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	943	297	334	1042	143	303
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1089	667	421	2234	208	560
Arrive On Green	0.31	0.31	0.24	0.63	0.12	0.12
Sat Flow, veh/h	3647	1572	1781	3647	1781	1585
Grp Volume(v), veh/h	943	297	334	1042	143	303
Grp Sat Flow(s),veh/h/ln	1777	1572	1781	1777	1781	1585
Q Serve(g_s), s	17.5	9.4	12.3	10.8	5.4	0.0
Cycle Q Clear(g_c), s	17.5	9.4	12.3	10.8	5.4	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1089	667	421	2234	208	560
V/C Ratio(X)	0.87	0.45	0.79	0.47	0.69	0.54
Avail Cap(c_a), veh/h	1168	702	433	2234	407	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	14.3	25.1	6.8	29.7	18.1
Incr Delay (d2), s/veh	6.7	0.5	8.7	0.7	1.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	3.7	5.6	2.8	2.3	5.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.6	14.8	33.8	7.5	31.2	18.4
LnGrp LOS	C	B	C	A	C	B
Approach Vol, veh/h	1240			1376	446	
Approach Delay, s/veh	26.1			13.9	22.5	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.5	27.5		12.2		50.0
Change Period (Y+Rc), s	6.0	* 6		4.0		6.0
Max Green Setting (Gmax), s	17.0	* 23		16.0		44.0
Max Q Clear Time (g_c+I1), s	14.3	19.5		7.4		12.8
Green Ext Time (p_c), s	0.2	1.9		0.8		4.5

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	952	355	523	685	0	1361
Future Volume (vph)	952	355	523	685	0	1361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7	5.7	4.0	4.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frpb, ped/bikes	1.00	0.98	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1553	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1553	3433	3539		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1002	374	551	721	0	1433
RTOR Reduction (vph)	0	47	0	0	0	0
Lane Group Flow (vph)	1002	327	551	721	0	1433
Confl. Peds. (#/hr)		5				
Turn Type	NA	Perm	Prot	NA		Free
Protected Phases	2		1	1 2		
Permitted Phases		2				Free
Actuated Green, G (s)	42.5	42.5	17.8	70.0		70.0
Effective Green, g (s)	42.5	42.5	17.8	64.3		70.0
Actuated g/C Ratio	0.61	0.61	0.25	0.92		1.00
Clearance Time (s)	5.7	5.7	4.0			
Vehicle Extension (s)	3.4	3.4	2.0			
Lane Grp Cap (vph)	3087	942	872	3250		1611
v/s Ratio Prot	0.20		0.16	0.20		
v/s Ratio Perm		0.21				c0.89
v/c Ratio	0.32	0.35	0.63	0.22		0.89
Uniform Delay, d1	6.7	6.8	23.2	0.3		0.0
Progression Factor	0.35	0.17	1.23	1.00		1.00
Incremental Delay, d2	0.2	0.8	0.8	0.0		7.8
Delay (s)	2.6	2.0	29.3	0.3		7.8
Level of Service	A	A	C	A		A
Approach Delay (s)	2.4			12.9	7.8	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBT	WBR	WBR2	NBL2	NBT	NBR	SBL	SBR	SBR2
Lane Configurations												
Traffic Volume (vph)	146	1810	357	707	692	894	201	539	705	144	300	53
Future Volume (vph)	146	1810	357	707	692	894	201	539	705	144	300	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.7	4.0	5.7	5.7	5.7	4.0	5.3	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.86	0.86	1.00	1.00	0.95	1.00	0.97	0.88	
Frpb, ped/bikes	1.00	1.00	0.98	0.99	1.00	1.00	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	0.95	0.85	0.85	1.00	1.00	0.85	1.00	0.85	
Flt Protected	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1548	4542	1362	1583	1770	3539	1562	3433	2787	
Flt Permitted	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1548	4542	1362	1583	1770	3539	1562	3433	2787	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	154	1905	376	744	728	941	212	567	742	152	316	56
RTOR Reduction (vph)	0	0	0	0	0	129	0	0	0	0	86	0
Lane Group Flow (vph)	154	1905	376	1108	364	812	212	567	742	152	286	0
Confl. Peds. (#/hr)			5		5				5		5	
Turn Type	Prot	NA	Free	NA	Prot	Perm	Prot	NA	Free	Prot	pm+ov	
Protected Phases	5	2		6	6		3	8		7	5	
Permitted Phases			Free			6			Free		4	
Actuated Green, G (s)	12.0	85.8	140.0	69.8	69.8	69.8	44.5	29.2	140.0	10.0	12.0	
Effective Green, g (s)	12.0	85.8	140.0	69.8	69.8	69.8	44.5	29.2	140.0	10.0	12.0	
Actuated g/C Ratio	0.09	0.61	1.00	0.50	0.50	0.50	0.32	0.21	1.00	0.07	0.09	
Clearance Time (s)	4.0	5.7		5.7	5.7	5.7	4.0	5.3		4.0	4.0	
Vehicle Extension (s)	2.0	3.4		3.4	3.4	3.4	4.0	4.0		2.0	2.0	
Lane Grp Cap (vph)	294	2168	1548	2264	679	789	562	738	1562	245	238	
v/s Ratio Prot	0.04	0.54		0.24	0.27		0.12	c0.16		0.04	c0.10	
v/s Ratio Perm			0.24			c0.51			c0.48			
v/c Ratio	0.52	0.88	0.24	0.49	0.54	1.03	0.38	0.77	0.48	0.62	1.20	
Uniform Delay, d1	61.3	22.7	0.0	23.3	24.0	35.1	37.0	52.2	0.0	63.2	64.0	
Progression Factor	0.94	0.88	1.00	0.40	0.39	0.40	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	3.8	0.4	0.2	0.8	37.0	0.6	5.1	1.0	3.5	123.9	
Delay (s)	58.2	23.9	0.4	9.5	10.2	51.1	37.6	57.3	1.0	66.6	187.9	
Level of Service	E	C	A	A	B	D	D	E	A	E	F	
Approach Delay (s)		22.4		25.8				27.1				
Approach LOS		C		C				C				

Intersection Summary			
HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	2044	344	50	1937	59	153	154	187	84	229	239
Future Volume (veh/h)	240	2044	344	50	1937	59	153	154	187	84	229	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	253	2152	0	53	2039	0	161	162	0	88	241	251
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	2818		194	3277		358	923		239	850	261
Arrive On Green	0.17	1.00	0.00	0.06	0.51	0.00	0.07	0.18	0.00	0.07	0.17	0.17
Sat Flow, veh/h	3456	5106	1585	3456	6434	1585	5023	5106	1585	3456	5106	1571
Grp Volume(v), veh/h	253	2152	0	53	2039	0	161	162	0	88	241	251
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1609	1585	1674	1702	1585	1728	1702	1571
Q Serve(g_s), s	9.9	0.0	0.0	2.1	31.9	0.0	4.3	3.8	0.0	3.4	5.8	22.2
Cycle Q Clear(g_c), s	9.9	0.0	0.0	2.1	31.9	0.0	4.3	3.8	0.0	3.4	5.8	22.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	2818		194	3277		358	923		239	850	261
V/C Ratio(X)	0.85	0.76		0.27	0.62		0.45	0.18		0.37	0.28	0.96
Avail Cap(c_a), veh/h	395	2856		222	3277		359	923		247	850	261
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	0.0	0.0	63.3	24.7	0.0	62.4	48.5	0.0	62.2	51.0	57.9
Incr Delay (d2), s/veh	9.8	1.3	0.0	0.3	0.9	0.0	0.3	0.1	0.0	0.4	0.2	44.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.3	0.0	0.9	12.0	0.0	1.8	1.6	0.0	1.5	2.5	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.8	1.3	0.0	63.6	25.6	0.0	62.7	48.6	0.0	62.6	51.3	102.6
LnGrp LOS	E	A		E	C		E	D		E	D	F
Approach Vol, veh/h		2405	A		2092	A		323	A		580	
Approach Delay, s/veh		8.2			26.5			55.7			75.2	
Approach LOS		A			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	30.6	11.9	83.0	15.3	29.0	17.8	77.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.7	5.3	* 5.7	5.7	* 5.7
Max Green Setting (Gmax), s	10.0	23.7	9.0	78.3	10.0	* 23	16.0	* 71
Max Q Clear Time (g_c+I1), s	5.4	5.8	4.1	2.0	6.3	24.2	11.9	33.9
Green Ext Time (p_c), s	0.0	1.1	0.0	41.5	0.1	0.0	0.2	25.2

Intersection Summary	
HCM 6th Ctrl Delay	25.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	1230	193	34	570	33	146	1060	52	37	568	58
Future Volume (veh/h)	241	1230	193	34	570	33	146	1060	52	37	568	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	254	1295	0	36	600	0	154	1116	0	39	598	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	1460		46	1238		371	2014		50	1032	
Arrive On Green	0.09	0.41	0.00	0.03	0.35	0.00	0.21	0.39	0.00	0.03	0.20	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	254	1295	0	36	600	0	154	1116	0	39	598	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	10.1	47.3	0.0	2.8	18.5	0.0	10.5	23.7	0.0	3.0	14.8	0.0
Cycle Q Clear(g_c), s	10.1	47.3	0.0	2.8	18.5	0.0	10.5	23.7	0.0	3.0	14.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	1460		46	1238		371	2014		50	1032	
V/C Ratio(X)	0.83	0.89		0.78	0.48		0.42	0.55		0.78	0.58	
Avail Cap(c_a), veh/h	395	1607		102	1396		371	2014		102	1032	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	62.8	38.2	0.0	67.8	35.8	0.0	48.0	32.9	0.0	67.6	50.5	0.0
Incr Delay (d2), s/veh	9.0	6.4	0.0	10.0	0.4	0.0	0.3	0.5	0.0	9.2	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	21.0	0.0	1.4	7.9	0.0	4.6	9.6	0.0	1.5	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.8	44.7	0.0	77.8	36.2	0.0	48.3	33.3	0.0	76.8	52.8	0.0
LnGrp LOS	E	D		E	D		D	C		E	D	
Approach Vol, veh/h		1549	A		636	A		1270	A		637	A
Approach Delay, s/veh		49.1			38.5			35.1			54.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	63.5	34.9	34.0	16.4	54.8	7.9	60.9
Change Period (Y+Rc), s	4.0	* 6	5.7	* 5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	8.0	* 63	21.0	* 28	16.0	55.0	8.0	41.3
Max Q Clear Time (g_c+I1), s	4.8	49.3	12.5	16.8	12.1	20.5	5.0	25.7
Green Ext Time (p_c), s	0.0	8.2	0.2	3.3	0.2	4.2	0.0	7.4

Intersection Summary	
HCM 6th Ctrl Delay	43.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	115	111	65	138	82	125	1451	44	120	1343	20
Future Volume (veh/h)	91	115	111	65	138	82	125	1451	44	120	1343	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	121	0	68	145	0	132	1527	0	126	1414	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	270		87	206		156	2272		150	2317	
Arrive On Green	0.07	0.08	0.00	0.05	0.06	0.00	0.09	0.44	0.00	0.08	0.45	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	96	121	0	68	145	0	132	1527	0	126	1414	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	7.4	4.6	0.0	5.3	5.6	0.0	10.2	33.2	0.0	9.8	29.3	0.0
Cycle Q Clear(g_c), s	7.4	4.6	0.0	5.3	5.6	0.0	10.2	33.2	0.0	9.8	29.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	270		87	206		156	2272		150	2317	
V/C Ratio(X)	0.81	0.45		0.79	0.70		0.85	0.67		0.84	0.61	
Avail Cap(c_a), veh/h	216	624		165	523		254	2272		254	2317	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	64.5	61.9	0.0	65.9	64.7	0.0	62.9	30.8	0.0	63.2	28.9	0.0
Incr Delay (d2), s/veh	5.0	1.4	0.0	5.8	5.9	0.0	6.6	1.6	0.0	4.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	2.1	0.0	2.5	2.7	0.0	4.8	13.5	0.0	4.6	11.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	63.3	0.0	71.7	70.6	0.0	69.5	32.4	0.0	67.9	29.5	0.0
LnGrp LOS	E	E		E	E		E	C		E	C	
Approach Vol, veh/h		217	A		213	A		1659	A		1540	A
Approach Delay, s/veh		66.0			70.9			35.3			32.6	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	17.0	16.3	69.2	13.3	14.5	17.5	68.0
Change Period (Y+Rc), s	4.0	6.4	4.0	5.7	4.0	6.4	5.7	* 5.7
Max Green Setting (Gmax), s	13.0	24.6	20.0	62.3	17.0	20.6	20.0	* 62
Max Q Clear Time (g_c+I1), s	7.3	6.6	12.2	31.3	9.4	7.6	11.8	35.2
Green Ext Time (p_c), s	0.0	0.5	0.1	13.9	0.1	0.6	0.1	14.3

Intersection Summary	
HCM 6th Ctrl Delay	38.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1292	432	67	1132	658	459	628	24	511	617	87
Future Volume (veh/h)	210	1292	432	67	1132	658	459	628	24	511	617	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	1360	270	71	1192	0	483	661	22	538	649	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	2021	627	116	1702		546	1120	37	630	795	92
Arrive On Green	0.16	0.79	0.79	0.03	0.33	0.00	0.16	0.22	0.22	0.13	0.17	0.17
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5076	168	5023	4639	538
Grp Volume(v), veh/h	221	1360	270	71	1192	0	483	443	240	538	475	250
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1840	1674	1702	1774
Q Serve(g_s), s	7.4	14.3	3.1	2.4	24.4	0.0	16.4	14.0	14.1	12.6	16.1	16.4
Cycle Q Clear(g_c), s	7.4	14.3	3.1	2.4	24.4	0.0	16.4	14.0	14.1	12.6	16.1	16.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		0.30
Lane Grp Cap(c), veh/h	274	2021	627	116	1702		546	751	406	630	584	304
V/C Ratio(X)	0.81	0.67	0.43	0.61	0.70		0.88	0.59	0.59	0.85	0.81	0.82
Avail Cap(c_a), veh/h	374	2021	627	230	1702		691	823	445	753	652	340
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	9.0	1.9	57.2	34.8	0.0	49.5	41.9	41.9	51.4	47.9	48.0
Incr Delay (d2), s/veh	6.2	1.0	0.7	1.9	2.4	0.0	9.5	1.2	2.3	7.1	7.6	14.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.0	1.7	1.1	10.0	0.0	7.7	5.9	6.5	5.6	7.3	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	10.1	2.6	59.1	37.2	0.0	59.0	43.1	44.2	58.5	55.5	62.7
LnGrp LOS	E	B	A	E	D		E	D	D	E	E	E
Approach Vol, veh/h		1851			1263	A		1166			1263	
Approach Delay, s/veh		14.5			38.4			49.9			58.2	
Approach LOS		B			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	53.5	25.0	26.6	15.5	46.0	19.1	32.5
Change Period (Y+Rc), s	4.0	6.0	6.0	* 6	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	8.0	45.0	24.0	* 23	13.0	* 40	18.0	29.0
Max Q Clear Time (g_c+I1), s	4.4	16.3	18.4	18.4	9.4	26.4	14.6	16.1
Green Ext Time (p_c), s	0.0	17.9	0.5	2.2	0.1	8.5	0.5	4.4

Intersection Summary	
HCM 6th Ctrl Delay	37.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	690	4	6	1115	14	7	0	2	26	5	77
Future Volume (veh/h)	30	690	4	6	1115	14	7	0	2	26	5	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	726	4	6	1174	13	7	0	2	27	5	72
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	1783	10	20	1633	18	42	0	37	221	41	232
Arrive On Green	0.05	0.49	0.49	0.01	0.45	0.45	0.02	0.00	0.02	0.15	0.15	0.15
Sat Flow, veh/h	1781	3624	20	1781	3600	40	1781	0	1585	1514	280	1585
Grp Volume(v), veh/h	32	356	374	6	579	608	7	0	2	32	0	72
Grp Sat Flow(s),veh/h/ln	1781	1777	1867	1781	1777	1863	1781	0	1585	1795	0	1585
Q Serve(g_s), s	0.9	6.9	6.9	0.2	14.3	14.3	0.2	0.0	0.1	0.8	0.0	2.2
Cycle Q Clear(g_c), s	0.9	6.9	6.9	0.2	14.3	14.3	0.2	0.0	0.1	0.8	0.0	2.2
Prop In Lane	1.00		0.01	1.00		0.02	1.00		1.00	0.84		1.00
Lane Grp Cap(c), veh/h	88	874	918	20	806	845	42	0	37	262	0	232
V/C Ratio(X)	0.36	0.41	0.41	0.30	0.72	0.72	0.17	0.00	0.05	0.12	0.00	0.31
Avail Cap(c_a), veh/h	264	1061	1115	264	1061	1113	1285	0	1143	1792	0	1583
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.9	8.7	8.7	26.5	12.0	12.0	25.9	0.0	25.8	20.1	0.0	20.6
Incr Delay (d2), s/veh	0.9	0.5	0.5	3.1	2.4	2.3	0.7	0.0	0.2	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.0	2.1	0.1	4.7	4.9	0.1	0.0	0.0	0.3	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	9.3	9.2	29.6	14.4	14.3	26.6	0.0	26.0	20.1	0.0	20.9
LnGrp LOS	C	A	A	C	B	B	C	A	C	C	A	C
Approach Vol, veh/h		762			1193			9			104	
Approach Delay, s/veh		9.9			14.4			26.5			20.7	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	32.3		5.3	6.7	30.2		11.9
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	32.3		39.0	8.0	32.3		54.0
Max Q Clear Time (g_c+I1), s	2.2	8.9		2.2	2.9	16.3		4.2
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	8.2		0.3

Intersection Summary			
HCM 6th Ctrl Delay			13.1
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	416	33	35	1142	72	48	4	22	30	21	16
Future Volume (veh/h)	55	416	33	35	1142	72	48	4	22	30	21	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	438	35	37	1202	76	51	4	23	32	22	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	1592	127	65	1621	723	204	16	195	116	79	170
Arrive On Green	0.06	0.48	0.48	0.04	0.46	0.46	0.12	0.12	0.12	0.11	0.11	0.11
Sat Flow, veh/h	1781	3334	265	1781	3554	1585	1657	130	1585	1076	740	1585
Grp Volume(v), veh/h	58	233	240	37	1202	76	55	0	23	54	0	17
Grp Sat Flow(s),veh/h/ln	1781	1777	1823	1781	1777	1585	1787	0	1585	1817	0	1585
Q Serve(g_s), s	2.2	5.5	5.5	1.4	19.3	1.9	1.9	0.0	0.9	1.9	0.0	0.7
Cycle Q Clear(g_c), s	2.2	5.5	5.5	1.4	19.3	1.9	1.9	0.0	0.9	1.9	0.0	0.7
Prop In Lane	1.00		0.15	1.00		1.00	0.93		1.00	0.59		1.00
Lane Grp Cap(c), veh/h	104	849	870	65	1621	723	220	0	195	195	0	170
V/C Ratio(X)	0.56	0.27	0.28	0.57	0.74	0.11	0.25	0.00	0.12	0.28	0.00	0.10
Avail Cap(c_a), veh/h	205	878	901	205	1756	783	283	0	251	550	0	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.8	10.9	10.9	32.9	15.5	10.8	27.5	0.0	27.1	28.5	0.0	28.0
Incr Delay (d2), s/veh	1.8	0.8	0.8	2.8	3.1	0.3	0.2	0.0	0.1	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.0	2.0	0.6	7.2	0.6	0.8	0.0	0.3	0.8	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	11.7	11.7	35.7	18.6	11.1	27.7	0.0	27.2	28.8	0.0	28.0
LnGrp LOS	C	B	B	D	B	B	C	A	C	C	A	C
Approach Vol, veh/h		531			1315			78			71	
Approach Delay, s/veh		14.1			18.6			27.6			28.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.6	6.6	38.9		11.5	8.0	37.4				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		11.0	8.0	34.3		21.0	8.0	34.3				
Max Q Clear Time (g_c+I1), s		3.9	3.4	7.5		3.9	4.2	21.3				
Green Ext Time (p_c), s		0.0	0.0	6.1		0.1	0.0	10.4				

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	332	74	32	627	283	464	1335	36	241	886	148
Future Volume (veh/h)	137	332	74	32	627	283	464	1335	36	241	886	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	144	349	0	34	660	0	488	1405	0	254	933	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	898		195	757		549	1886		310	1459	
Arrive On Green	0.10	0.25	0.00	0.06	0.21	0.00	0.16	0.37	0.00	0.09	0.29	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	144	349	0	34	660	0	488	1405	0	254	933	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	9.5	9.8	0.0	1.1	21.5	0.0	16.6	28.7	0.0	8.7	19.2	0.0
Cycle Q Clear(g_c), s	9.5	9.8	0.0	1.1	21.5	0.0	16.6	28.7	0.0	8.7	19.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	898		195	757		549	1886		310	1459	
V/C Ratio(X)	0.84	0.39		0.17	0.87		0.89	0.75		0.82	0.64	
Avail Cap(c_a), veh/h	238	1016		288	838		634	1886		346	1459	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	37.2	0.0	53.9	45.6	0.0	49.4	32.9	0.0	53.7	37.4	0.0
Incr Delay (d2), s/veh	13.0	0.5	0.0	0.2	10.1	0.0	12.1	1.9	0.0	11.9	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	4.2	0.0	0.5	10.3	0.0	7.8	11.3	0.0	4.1	7.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.3	37.6	0.0	54.1	55.7	0.0	61.6	34.8	0.0	65.5	39.6	0.0
LnGrp LOS	E	D		D	E		E	C		E	D	
Approach Vol, veh/h		493	A		694	A		1893	A		1187	A
Approach Delay, s/veh		46.0			55.7			41.7			45.2	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	50.0	10.8	36.0	24.8	40.0	15.5	31.3
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	5.7
Max Green Setting (Gmax), s	12.0	44.3	10.0	34.3	22.0	* 34	16.0	28.3
Max Q Clear Time (g_c+I1), s	10.7	30.7	3.1	11.8	18.6	21.2	11.5	23.5
Green Ext Time (p_c), s	0.1	8.6	0.0	2.5	0.5	5.7	0.1	2.0

Intersection Summary	
HCM 6th Ctrl Delay	45.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	383	0	0	233	189	2	2	0	453	0	5
Future Volume (veh/h)	5	383	0	0	233	189	2	2	0	453	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	403	0	0	245	199	2	2	0	477	0	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	829	0	0	436	903	4	4	0	599	0	533
Arrive On Green	0.00	0.23	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.34	0.00	0.34
Sat Flow, veh/h	0	3647	0	0	1870	1585	912	912	0	1781	0	1585
Grp Volume(v), veh/h	0	403	0	0	245	199	4	0	0	477	0	5
Grp Sat Flow(s),veh/h/ln	0	1777	0	0	1870	1585	1825	0	0	1781	0	1585
Q Serve(g_s), s	0.0	3.0	0.0	0.0	3.5	1.9	0.1	0.0	0.0	7.4	0.0	0.1
Cycle Q Clear(g_c), s	0.0	3.0	0.0	0.0	3.5	1.9	0.1	0.0	0.0	7.4	0.0	0.1
Prop In Lane	0.00		0.00	0.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	829	0	0	436	903	8	0	0	599	0	533
V/C Ratio(X)	0.00	0.49	0.00	0.00	0.56	0.22	0.50	0.00	0.00	0.80	0.00	0.01
Avail Cap(c_a), veh/h	0	4469	0	0	500	957	1325	0	0	1294	0	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.0	0.0	0.0	10.2	3.2	15.0	0.0	0.0	9.1	0.0	6.7
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	1.2	0.1	16.9	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.0	0.0	1.0	0.8	0.1	0.0	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.5	0.0	0.0	11.4	3.3	32.0	0.0	0.0	10.0	0.0	6.7
LnGrp LOS	A	B	A	A	B	A	C	A	A	B	A	A
Approach Vol, veh/h		403			444			4			482	
Approach Delay, s/veh		10.5			7.8			32.0			10.0	
Approach LOS		B			A			C			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		12.0		4.1	0.0	12.0		14.2				
Change Period (Y+Rc), s		4.9		4.0	4.0	4.9		4.0				
Max Green Setting (Gmax), s		38.1		22.0	26.0	8.1		22.0				
Max Q Clear Time (g_c+I1), s		5.0		2.1	0.0	5.5		9.4				
Green Ext Time (p_c), s		2.1		0.0	0.0	0.7		1.0				

Intersection Summary												
HCM 6th Ctrl Delay			9.5									
HCM 6th LOS			A									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	836	10	3	372	0	14	0	14	114	3	11
Future Volume (veh/h)	0	836	10	3	372	0	14	0	14	114	3	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	880	0	3	392	0	15	0	15	120	3	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1383		12	1741	0	47	0	47	267	49	196
Arrive On Green	0.00	0.39	0.00	0.01	0.49	0.00	0.06	0.00	0.06	0.15	0.15	0.15
Sat Flow, veh/h	0	3741	0	1781	3647	0	839	0	839	1781	327	1308
Grp Volume(v), veh/h	0	880	0	3	392	0	30	0	0	120	0	15
Grp Sat Flow(s),veh/h/ln	0	1777	0	1781	1777	0	1677	0	0	1781	0	1635
Q Serve(g_s), s	0.0	8.5	0.0	0.1	2.7	0.0	0.7	0.0	0.0	2.6	0.0	0.3
Cycle Q Clear(g_c), s	0.0	8.5	0.0	0.1	2.7	0.0	0.7	0.0	0.0	2.6	0.0	0.3
Prop In Lane	0.00		0.00	1.00		0.00	0.50		0.50	1.00		0.80
Lane Grp Cap(c), veh/h	0	1383		12	1741	0	94	0	0	267	0	245
V/C Ratio(X)	0.00	0.64		0.26	0.23	0.00	0.32	0.00	0.00	0.45	0.00	0.06
Avail Cap(c_a), veh/h	0	1849		336	2853	0	790	0	0	839	0	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.5	0.0	21.0	6.2	0.0	19.3	0.0	0.0	16.4	0.0	15.5
Incr Delay (d2), s/veh	0.0	0.5	0.0	4.2	0.1	0.0	0.7	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	0.0	0.0	0.6	0.0	0.3	0.0	0.0	1.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.0	0.0	25.2	6.3	0.0	20.0	0.0	0.0	16.9	0.0	15.5
LnGrp LOS	A	B		C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		880	A		395			30			135	
Approach Delay, s/veh		11.0			6.4			20.0			16.7	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	4.3	21.4		6.4		25.7		10.4
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s	8.0	22.1		20.0		34.1		20.0
Max Q Clear Time (g_c+I1), s	2.1	10.5		2.7		4.7		4.6
Green Ext Time (p_c), s	0.0	6.0		0.0		3.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	969	15	102	156	37	255
Future Volume (veh/h)	969	15	102	156	37	255
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1020	16	107	164	39	268
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1506	24	137	2092	372	331
Arrive On Green	0.42	0.42	0.08	0.59	0.21	0.21
Sat Flow, veh/h	3674	56	1781	3647	1781	1585
Grp Volume(v), veh/h	506	530	107	164	39	268
Grp Sat Flow(s),veh/h/ln	1777	1860	1781	1777	1781	1585
Q Serve(g_s), s	10.1	10.1	2.6	0.9	0.8	7.1
Cycle Q Clear(g_c), s	10.1	10.1	2.6	0.9	0.8	7.1
Prop In Lane		0.03	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	747	783	137	2092	372	331
V/C Ratio(X)	0.68	0.68	0.78	0.08	0.10	0.81
Avail Cap(c_a), veh/h	934	978	324	2514	608	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.3	10.3	19.9	3.9	14.1	16.6
Incr Delay (d2), s/veh	1.5	1.4	3.6	0.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.0	1.0	0.2	0.3	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.8	11.7	23.5	3.9	14.1	18.4
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	1036			271	307	
Approach Delay, s/veh	11.7			11.7	17.8	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.4	23.4		13.2		30.8
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9
Max Green Setting (Gmax), s	8.0	23.1		15.0		31.1
Max Q Clear Time (g_c+I1), s	4.6	12.1		9.1		2.9
Green Ext Time (p_c), s	0.0	6.3		0.3		1.7

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	1112	4	19	621	53	3	2	8	305	4	38
Future Volume (veh/h)	42	1112	4	19	621	53	3	2	8	305	4	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	1171	4	20	654	56	3	2	8	324	0	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	2579	9	24	2292	196	5	3	12	406	0	180
Arrive On Green	0.03	0.71	0.71	0.01	0.69	0.69	0.01	0.01	0.01	0.11	0.00	0.11
Sat Flow, veh/h	1781	3633	12	1781	3313	283	385	256	1026	3563	0	1585
Grp Volume(v), veh/h	44	573	602	20	350	360	13	0	0	324	0	40
Grp Sat Flow(s),veh/h/ln	1781	1777	1868	1781	1777	1819	1667	0	0	1781	0	1585
Q Serve(g_s), s	2.9	16.6	16.6	1.3	9.1	9.1	0.9	0.0	0.0	10.6	0.0	2.8
Cycle Q Clear(g_c), s	2.9	16.6	16.6	1.3	9.1	9.1	0.9	0.0	0.0	10.6	0.0	2.8
Prop In Lane	1.00		0.01	1.00		0.16	0.23		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	57	1262	1326	24	1229	1259	20	0	0	406	0	180
V/C Ratio(X)	0.78	0.45	0.45	0.83	0.29	0.29	0.67	0.00	0.00	0.80	0.00	0.22
Avail Cap(c_a), veh/h	134	1262	1326	119	1229	1259	269	0	0	754	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.7	7.4	7.4	59.0	7.1	7.1	59.1	0.0	0.0	51.8	0.0	48.3
Incr Delay (d2), s/veh	8.2	1.2	1.1	21.1	0.1	0.1	25.2	0.0	0.0	2.7	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	5.9	6.2	0.7	3.2	3.3	0.5	0.0	0.0	4.9	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.8	8.6	8.6	80.2	7.2	7.2	84.2	0.0	0.0	54.6	0.0	48.8
LnGrp LOS	E	A	A	F	A	A	F	A	A	D	A	D
Approach Vol, veh/h		1219			730			13			364	
Approach Delay, s/veh		10.7			9.2			84.2			53.9	
Approach LOS		B			A			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	90.1		6.0	7.8	87.9		18.3
Change Period (Y+Rc), s	4.0	4.9		4.6	4.0	4.9		4.6
Max Green Setting (Gmax), s	8.0	49.1		19.4	9.0	48.1		25.4
Max Q Clear Time (g_c+I1), s	3.3	18.6		2.9	4.9	11.1		12.6
Green Ext Time (p_c), s	0.0	22.4		0.0	0.0	15.4		1.0

Intersection Summary	
HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1314	15	56	634	1049	14	9	27	393	11	166
Future Volume (veh/h)	141	1314	15	56	634	1049	14	9	27	393	11	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	148	1383	16	59	667	685	15	9	0	423	0	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	1691	20	316	2124	947	33	34	29	496	0	221
Arrive On Green	0.19	1.00	1.00	0.18	0.60	0.60	0.02	0.02	0.00	0.14	0.00	0.14
Sat Flow, veh/h	1781	3321	38	1781	3554	1585	1781	1870	1585	3563	0	1585
Grp Volume(v), veh/h	148	623	776	59	667	685	15	9	0	423	0	29
Grp Sat Flow(s),veh/h/ln	1781	1496	1863	1781	1777	1585	1781	1870	1585	1781	0	1585
Q Serve(g_s), s	9.7	0.0	0.0	3.4	11.2	36.7	1.0	0.6	0.0	13.9	0.0	1.9
Cycle Q Clear(g_c), s	9.7	0.0	0.0	3.4	11.2	36.7	1.0	0.6	0.0	13.9	0.0	1.9
Prop In Lane	1.00		0.02	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	762	949	316	2124	947	33	34	29	496	0	221
V/C Ratio(X)	0.86	0.82	0.82	0.19	0.31	0.72	0.46	0.26	0.00	0.85	0.00	0.13
Avail Cap(c_a), veh/h	178	762	949	316	2124	947	119	125	106	745	0	332
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	0.00	0.98	0.00	0.98
Uniform Delay (d), s/veh	47.7	0.0	0.0	42.0	12.0	17.1	58.3	58.1	0.0	50.4	0.0	45.3
Incr Delay (d2), s/veh	26.5	8.1	6.6	0.1	0.1	2.9	6.0	2.4	0.0	4.8	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	1.7	1.7	1.5	4.1	12.6	0.5	0.3	0.0	6.5	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.1	8.1	6.6	42.1	12.1	20.0	64.3	60.5	0.0	55.2	0.0	45.4
LnGrp LOS	E	A	A	D	B	B	E	E	A	E	A	D
Approach Vol, veh/h		1547			1411			24			452	
Approach Delay, s/veh		13.7			17.2			62.9			54.6	
Approach LOS		B			B			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.2	66.0		6.2	15.6	76.6		21.6				
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.9				
Max Green Setting (Gmax), s	8.0	* 61		8.0	12.0	57.1		25.1				
Max Q Clear Time (g_c+I1), s	5.4	2.0		3.0	11.7	38.7		15.9				
Green Ext Time (p_c), s	0.0	14.8		0.0	0.0	8.2		0.8				

Intersection Summary			
HCM 6th Ctrl Delay			20.8
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1300	186	0	1628	693	0	0	0	317	521	143
Future Volume (veh/h)	0	1300	186	0	1628	693	0	0	0	317	521	143
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870				1870	1870	1870
Adj Flow Rate, veh/h	0	1368	196	0	1714	0				334	548	151
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2				2	2	2
Cap, veh/h	0	1811	808	0	1907					571	599	508
Arrive On Green	0.00	0.51	0.51	0.00	1.00	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	3647	1585	0	3741	1585				1781	1870	1585
Grp Volume(v), veh/h	0	1368	196	0	1714	0				334	548	151
Grp Sat Flow(s),veh/h/ln	0	1777	1585	0	1870	1585				1781	1870	1585
Q Serve(g_s), s	0.0	18.4	4.2	0.0	0.0	0.0				9.4	16.9	4.3
Cycle Q Clear(g_c), s	0.0	18.4	4.2	0.0	0.0	0.0				9.4	16.9	4.3
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1811	808	0	1907					571	599	508
V/C Ratio(X)	0.00	0.76	0.24	0.00	0.90					0.59	0.91	0.30
Avail Cap(c_a), veh/h	0	1811	808	0	1907					585	614	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.55	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.7	8.2	0.0	0.0	0.0				17.1	19.6	15.3
Incr Delay (d2), s/veh	0.0	3.0	0.7	0.0	4.2	0.0				0.9	17.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	1.3	0.0	1.1	0.0				3.6	9.5	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.7	8.9	0.0	4.2	0.0				18.0	37.3	15.4
LnGrp LOS	A	B	A	A	A					B	D	B
Approach Vol, veh/h		1564			1714	A					1033	
Approach Delay, s/veh		14.0			4.2						27.9	
Approach LOS		B			A						C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		35.5		24.5		35.5
Change Period (Y+Rc), s		4.9		5.3		4.9
Max Green Setting (Gmax), s		30.1		19.7		30.1
Max Q Clear Time (g_c+I1), s		20.4		18.9		2.0
Green Ext Time (p_c), s		6.5		0.3		15.6

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	362	1255	0	0	1195	368	0	0	1429	0	0	1126
Future Volume (vph)	362	1255	0	0	1195	368	0	0	1429	0	0	1126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.9			4.9	4.0			4.0			4.0
Lane Util. Factor	1.00	0.91			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	5085			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	5085			5085	1583			1611			2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	381	1321	0	0	1258	387	0	0	1504	0	0	1185
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	18
Lane Group Flow (vph)	381	1321	0	0	1258	387	0	0	1504	0	0	1167
Turn Type	Prot	NA			NA	Free			Free			Over
Protected Phases	5	2			6							5
Permitted Phases						Free			Free			
Actuated Green, G (s)	28.6	60.0			22.5	60.0			60.0			28.6
Effective Green, g (s)	28.6	60.0			22.5	60.0			60.0			28.6
Actuated g/C Ratio	0.48	1.00			0.38	1.00			1.00			0.48
Clearance Time (s)	4.0	4.9			4.9							4.0
Vehicle Extension (s)	2.0	3.9			3.8							2.0
Lane Grp Cap (vph)	843	5085			1906	1583			1611			1328
v/s Ratio Prot	0.22	0.26			0.25							0.42
v/s Ratio Perm						0.24			c0.93			
v/c Ratio	0.45	0.26			0.66	0.24			0.93			0.88
Uniform Delay, d1	10.5	0.0			15.6	0.0			0.0			14.1
Progression Factor	1.71	1.00			0.59	1.00			1.00			1.00
Incremental Delay, d2	0.1	0.0			1.5	0.3			11.4			6.7
Delay (s)	18.0	0.0			10.8	0.3			11.4			20.8
Level of Service	B	A			B	A			B			C
Approach Delay (s)		4.0			8.3			11.4			20.8	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.9
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	487	1800	215	106	1087	50	364	578	83	54	242	120
Future Volume (veh/h)	487	1800	215	106	1087	50	364	578	83	54	242	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	513	1895	226	112	1144	53	383	608	87	57	255	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1120	2809	1071	165	1690	78	439	791	350	97	631	707
Arrive On Green	0.32	0.55	0.55	0.05	0.27	0.27	0.13	0.22	0.22	0.03	0.12	0.12
Sat Flow, veh/h	3456	5106	1581	3456	6348	293	3456	3554	1574	3456	5106	1566
Grp Volume(v), veh/h	513	1895	226	112	869	328	383	608	87	57	255	126
Grp Sat Flow(s),veh/h/ln	1728	1702	1581	1728	1609	1816	1728	1777	1574	1728	1702	1566
Q Serve(g_s), s	14.1	31.9	6.5	3.8	19.3	19.4	13.1	19.3	5.5	2.0	5.5	1.7
Cycle Q Clear(g_c), s	14.1	31.9	6.5	3.8	19.3	19.4	13.1	19.3	5.5	2.0	5.5	1.7
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1120	2809	1071	165	1285	483	439	791	350	97	631	707
V/C Ratio(X)	0.46	0.67	0.21	0.68	0.68	0.68	0.87	0.77	0.25	0.59	0.40	0.18
Avail Cap(c_a), veh/h	1120	2809	1071	230	1532	576	490	1039	461	230	1094	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	19.3	7.3	56.2	39.4	39.4	51.4	43.8	38.4	57.6	48.5	7.8
Incr Delay (d2), s/veh	0.1	1.0	0.3	1.8	1.3	3.5	13.6	3.5	0.6	2.1	0.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	12.2	2.1	1.7	7.8	9.1	6.4	8.8	2.2	0.9	2.4	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	20.3	7.6	58.1	40.7	43.0	65.0	47.3	39.0	59.7	49.4	8.1
LnGrp LOS	C	C	A	E	D	D	E	D	D	E	D	A
Approach Vol, veh/h		2634			1309			1078			438	
Approach Delay, s/veh		21.6			42.8			52.9			38.9	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	70.9	19.2	20.1	43.8	36.8	7.4	32.0
Change Period (Y+Rc), s	4.0	4.9	4.0	5.3	4.9	* 4.9	4.0	* 5.3
Max Green Setting (Gmax), s	8.0	51.1	17.0	25.7	21.0	* 38	8.0	* 35
Max Q Clear Time (g_c+I1), s	5.8	33.9	15.1	7.5	16.1	21.4	4.0	21.3
Green Ext Time (p_c), s	0.0	15.4	0.2	3.6	0.5	10.5	0.0	5.4

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1832	41	29	1108	25	54	14	43	35	21	37
Future Volume (veh/h)	90	1832	41	29	1108	25	54	14	43	35	21	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	1928	43	31	1166	26	57	15	45	30	32	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	2359	53	510	3503	1083	85	89	75	105	110	91
Arrive On Green	0.04	0.31	0.31	0.57	1.00	1.00	0.05	0.05	0.05	0.06	0.06	0.06
Sat Flow, veh/h	1781	5139	114	1781	5106	1579	1781	1870	1585	1781	1870	1545
Grp Volume(v), veh/h	95	1277	694	31	1166	26	57	15	45	30	32	39
Grp Sat Flow(s),veh/h/ln	1781	1702	1849	1781	1702	1579	1781	1870	1585	1781	1870	1545
Q Serve(g_s), s	6.3	41.6	41.7	0.9	0.0	0.0	3.8	0.9	3.3	1.9	2.0	2.9
Cycle Q Clear(g_c), s	6.3	41.6	41.7	0.9	0.0	0.0	3.8	0.9	3.3	1.9	2.0	2.9
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	1563	849	510	3503	1083	85	89	75	105	110	91
V/C Ratio(X)	0.80	0.82	0.82	0.06	0.33	0.02	0.67	0.17	0.60	0.29	0.29	0.43
Avail Cap(c_a), veh/h	178	1563	849	510	3503	1083	134	140	119	460	483	399
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	36.9	36.9	18.5	0.0	0.0	56.2	54.9	56.0	54.1	54.1	54.5
Incr Delay (d2), s/veh	7.8	4.8	8.6	0.0	0.2	0.0	3.4	0.3	2.8	0.6	0.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	18.9	21.5	0.4	0.1	0.0	1.8	0.4	1.4	0.9	0.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.3	41.7	45.5	18.5	0.2	0.0	59.7	55.2	58.8	54.6	54.6	55.7
LnGrp LOS	E	D	D	B	A	A	E	E	E	D	D	E
Approach Vol, veh/h		2066			1223			117			101	
Approach Delay, s/veh		44.0			0.6			58.8			55.0	
Approach LOS		D			A			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	39.2	60.0		9.7	12.0	87.2		11.1
Change Period (Y+Rc), s	4.9	* 4.9		4.0	4.0	4.9		4.0
Max Green Setting (Gmax), s	8.0	* 55		9.0	12.0	51.1		31.0
Max Q Clear Time (g_c+I1), s	2.9	43.7		5.8	8.3	2.0		4.9
Green Ext Time (p_c), s	0.0	10.5		0.0	0.0	25.3		0.2

Intersection Summary	
HCM 6th Ctrl Delay	29.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	1807	34	5	1085	24	106	33	20	35	7	6
Future Volume (veh/h)	13	1807	34	5	1085	24	106	33	20	35	7	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	1902	36	5	1142	25	84	74	21	25	24	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	2142	649	43	2217	672	124	98	28	166	132	33
Arrive On Green	0.02	0.84	0.84	0.02	0.43	0.43	0.07	0.07	0.07	0.09	0.09	0.09
Sat Flow, veh/h	1781	5106	1547	1781	5106	1549	1781	1401	398	1781	1422	355
Grp Volume(v), veh/h	14	1902	36	5	1142	25	84	0	95	25	0	30
Grp Sat Flow(s),veh/h/ln	1781	1702	1547	1781	1702	1549	1781	0	1799	1781	0	1777
Q Serve(g_s), s	0.9	28.3	0.5	0.3	19.6	1.1	5.5	0.0	6.2	1.5	0.0	1.9
Cycle Q Clear(g_c), s	0.9	28.3	0.5	0.3	19.6	1.1	5.5	0.0	6.2	1.5	0.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.20
Lane Grp Cap(c), veh/h	17	2142	649	43	2217	672	124	0	126	166	0	165
V/C Ratio(X)	0.84	0.89	0.06	0.12	0.52	0.04	0.67	0.00	0.76	0.15	0.00	0.18
Avail Cap(c_a), veh/h	119	2217	672	119	2217	672	178	0	180	451	0	450
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.8	7.9	5.7	57.3	24.7	19.5	54.5	0.0	54.8	50.1	0.0	50.2
Incr Delay (d2), s/veh	32.1	5.4	0.1	0.4	0.9	0.1	4.7	0.0	8.5	0.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	4.3	0.2	0.2	7.9	0.4	2.6	0.0	3.1	0.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.9	13.3	5.8	57.7	25.6	19.6	59.1	0.0	63.3	50.2	0.0	50.4
LnGrp LOS	F	B	A	E	C	B	E	A	E	D	A	D
Approach Vol, veh/h		1952			1172			179			55	
Approach Delay, s/veh		13.7			25.6			61.4			50.3	
Approach LOS		B			C			E			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	55.2		15.8	5.1	57.0		12.4
Change Period (Y+Rc), s	4.0	4.9		4.6	4.0	4.9		4.0
Max Green Setting (Gmax), s	8.0	52.1		30.4	8.0	52.1		12.0
Max Q Clear Time (g_c+I1), s	2.3	30.3		3.9	2.9	21.6		8.2
Green Ext Time (p_c), s	0.0	20.1		0.1	0.0	18.7		0.2

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	1725	58	13	1095	8	14	4	10	16	2	21
Future Volume (veh/h)	48	1725	58	13	1095	8	14	4	10	16	2	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	1816	61	14	1153	8	15	4	11	17	2	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	756	4121	138	17	2039	14	18	11	31	20	4	39
Arrive On Green	0.42	0.81	0.81	0.01	0.39	0.39	0.01	0.03	0.03	0.01	0.03	0.03
Sat Flow, veh/h	1781	5073	170	1781	5231	36	1781	425	1170	1781	128	1410
Grp Volume(v), veh/h	51	1218	659	14	750	411	15	0	15	17	0	24
Grp Sat Flow(s),veh/h/ln	1781	1702	1839	1781	1702	1864	1781	0	1595	1781	0	1538
Q Serve(g_s), s	2.0	12.6	12.6	0.9	20.7	20.7	1.0	0.0	1.1	1.1	0.0	1.8
Cycle Q Clear(g_c), s	2.0	12.6	12.6	0.9	20.7	20.7	1.0	0.0	1.1	1.1	0.0	1.8
Prop In Lane	1.00		0.09	1.00		0.02	1.00		0.73	1.00		0.92
Lane Grp Cap(c), veh/h	756	2765	1494	17	1327	726	18	0	42	20	0	43
V/C Ratio(X)	0.07	0.44	0.44	0.84	0.57	0.57	0.85	0.00	0.36	0.84	0.00	0.56
Avail Cap(c_a), veh/h	756	2765	1494	119	1932	1058	119	0	213	119	0	205
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.5	3.3	3.3	59.4	28.7	28.7	59.3	0.0	57.4	59.2	0.0	57.6
Incr Delay (d2), s/veh	0.0	0.5	0.9	32.1	1.2	2.2	64.7	0.0	5.1	56.8	0.0	11.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	3.2	3.6	0.6	8.5	9.5	0.8	0.0	0.5	0.8	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	3.8	4.2	91.5	29.9	30.9	124.0	0.0	62.5	116.0	0.0	68.7
LnGrp LOS	C	A	A	F	C	C	F	A	E	F	A	E
Approach Vol, veh/h		1928			1175			30			41	
Approach Delay, s/veh		4.4			31.0			93.3			88.3	
Approach LOS		A			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	102.4	5.2	7.3	55.8	51.7	5.4	7.2
Change Period (Y+Rc), s	4.0	4.9	4.0	4.0	4.9	* 4.9	4.0	4.0
Max Green Setting (Gmax), s	8.0	71.1	8.0	16.0	11.0	* 68	8.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	14.6	3.0	3.8	4.0	22.7	3.1	3.1
Green Ext Time (p_c), s	0.0	46.5	0.0	0.0	0.0	24.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	1546	89	99	976	106	174	708	392	79	318	26
Future Volume (veh/h)	181	1546	89	99	976	106	174	708	392	79	318	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	1627	0	104	1027	0	183	745	288	83	335	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	2004		521	2444		239	1168	360	131	1081	333
Arrive On Green	0.02	0.13	0.00	0.30	0.96	0.00	0.07	0.23	0.23	0.04	0.21	0.21
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1575	3456	5106	1574
Grp Volume(v), veh/h	191	1627	0	104	1027	0	183	745	288	83	335	5
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1575	1728	1702	1574
Q Serve(g_s), s	6.6	37.2	0.0	2.7	1.7	0.0	6.2	15.8	20.7	2.8	6.6	0.3
Cycle Q Clear(g_c), s	6.6	37.2	0.0	2.7	1.7	0.0	6.2	15.8	20.7	2.8	6.6	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	2004		521	2444		239	1168	360	131	1081	333
V/C Ratio(X)	0.77	0.81		0.20	0.42		0.77	0.64	0.80	0.63	0.31	0.02
Avail Cap(c_a), veh/h	317	2004		521	2444		288	1587	489	202	1477	455
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	47.9	0.0	36.5	1.4	0.0	54.9	41.8	43.7	56.9	39.9	37.4
Incr Delay (d2), s/veh	6.0	3.7	0.0	0.1	0.3	0.0	7.6	0.5	6.1	1.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	17.6	0.0	1.1	0.5	0.0	2.9	6.6	8.5	1.3	2.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.6	51.6	0.0	36.6	1.7	0.0	62.5	42.3	49.8	58.8	40.1	37.4
LnGrp LOS	E	D		D	A		E	D	D	E	D	D
Approach Vol, veh/h		1818	A		1131	A		1216			423	
Approach Delay, s/veh		52.9			4.9			47.1			43.7	
Approach LOS		D			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	52.0	13.3	31.7	12.7	62.3	10.9	34.1
Change Period (Y+Rc), s	4.9	* 4.9	5.0	6.3	4.0	4.9	6.3	* 6.7
Max Green Setting (Gmax), s	8.0	* 47	10.0	34.7	11.0	44.1	7.0	* 37
Max Q Clear Time (g_c+I1), s	4.7	39.2	8.2	8.6	8.6	3.7	4.8	22.7
Green Ext Time (p_c), s	0.0	7.3	0.1	2.2	0.1	18.4	0.0	4.6

Intersection Summary	
HCM 6th Ctrl Delay	38.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	1525	184	245	1800	151	399	1022	150	185	958	147
Future Volume (veh/h)	158	1525	184	245	1800	151	399	1022	150	185	958	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	166	1605	70	258	1895	0	420	1076	0	195	1008	27
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1915	590	346	2129		461	1332		288	1077	329
Arrive On Green	0.07	0.38	0.38	0.10	0.42	0.00	0.13	0.26	0.00	0.08	0.21	0.21
Sat Flow, veh/h	3456	5106	1572	3456	5106	1585	3456	5106	1585	3456	5106	1562
Grp Volume(v), veh/h	166	1605	70	258	1895	0	420	1076	0	195	1008	27
Grp Sat Flow(s),veh/h/ln	1728	1702	1572	1728	1702	1585	1728	1702	1585	1728	1702	1562
Q Serve(g_s), s	5.6	34.4	2.3	8.7	41.3	0.0	14.4	23.7	0.0	6.6	23.3	1.7
Cycle Q Clear(g_c), s	5.6	34.4	2.3	8.7	41.3	0.0	14.4	23.7	0.0	6.6	23.3	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	1915	590	346	2129		461	1332		288	1077	329
V/C Ratio(X)	0.64	0.84	0.12	0.75	0.89		0.91	0.81		0.68	0.94	0.08
Avail Cap(c_a), veh/h	259	1915	590	346	2129		461	1332		288	1077	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	34.2	10.5	52.5	32.4	0.0	51.3	41.5	0.0	53.4	46.6	38.0
Incr Delay (d2), s/veh	4.1	4.6	0.4	7.7	5.2	0.0	21.8	4.0	0.0	5.2	14.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	14.3	1.3	4.1	17.0	0.0	7.3	9.9	0.0	3.0	10.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.1	38.8	10.9	60.2	37.6	0.0	73.1	45.5	0.0	58.6	61.4	38.2
LnGrp LOS	E	D	B	E	D		E	D		E	E	D
Approach Vol, veh/h		1841			2153	A		1496	A		1230	
Approach Delay, s/veh		39.4			40.3			53.3			60.5	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	51.0	20.0	31.0	13.0	56.0	14.0	37.0
Change Period (Y+Rc), s	6.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	12.0	45.0	16.0	25.3	9.0	50.0	10.0	31.3
Max Q Clear Time (g_c+I1), s	10.7	36.4	16.4	25.3	7.6	43.3	8.6	25.7
Green Ext Time (p_c), s	0.1	8.3	0.0	0.0	0.1	6.5	0.1	4.8

Intersection Summary	
HCM 6th Ctrl Delay	46.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	364	1329	494	479	1523	815
Future Volume (veh/h)	364	1329	494	479	1523	815
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	383	0	520	318	1603	858
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	426		995	444	1680	1499
Arrive On Green	0.12	0.00	0.28	0.28	0.49	0.80
Sat Flow, veh/h	3456	2790	3647	1585	3456	1870
Grp Volume(v), veh/h	383	0	520	318	1603	858
Grp Sat Flow(s),veh/h/ln	1728	1395	1777	1585	1728	1870
Q Serve(g_s), s	16.4	0.0	18.5	27.1	66.7	25.3
Cycle Q Clear(g_c), s	16.4	0.0	18.5	27.1	66.7	25.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	426		995	444	1680	1499
V/C Ratio(X)	0.90		0.52	0.72	0.95	0.57
Avail Cap(c_a), veh/h	440		995	444	1756	1499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.8	0.0	45.6	48.6	37.0	5.5
Incr Delay (d2), s/veh	20.5	0.0	0.5	5.5	12.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	0.0	8.2	11.3	29.9	8.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	85.4	0.0	46.1	54.1	49.1	6.0
LnGrp LOS	F		D	D	D	A
Approach Vol, veh/h	383	A	838			2461
Approach Delay, s/veh	85.4		49.1			34.1
Approach LOS	F		D			C

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	78.9	47.3				126.2	23.8
Change Period (Y+Rc), s	6.0	5.3				6.0	5.3
Max Green Setting (Gmax), s	76.2	38.1				119.6	19.1
Max Q Clear Time (g_c+I1), s	68.7	29.1				27.3	18.4
Green Ext Time (p_c), s	4.2	3.0				7.6	0.1

Intersection Summary	
HCM 6th Ctrl Delay	42.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	447	1613	31	135	1539	85	64	166	123	52	110	211
Future Volume (veh/h)	447	1613	31	135	1539	85	64	166	123	52	110	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	471	1698	32	142	1620	47	67	175	13	55	116	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	461	1736	33	808	2117	944	108	209	178	71	149	126
Arrive On Green	0.13	0.49	0.49	0.23	0.60	0.60	0.06	0.11	0.11	0.04	0.08	0.08
Sat Flow, veh/h	3456	3568	67	3456	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	471	844	886	142	1620	47	67	175	13	55	116	63
Grp Sat Flow(s),veh/h/ln	1728	1777	1858	1728	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	20.0	69.7	70.2	4.9	50.8	1.9	5.5	13.7	0.7	4.6	9.1	4.5
Cycle Q Clear(g_c), s	20.0	69.7	70.2	4.9	50.8	1.9	5.5	13.7	0.7	4.6	9.1	4.5
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	461	865	904	808	2117	944	108	209	178	71	149	126
V/C Ratio(X)	1.02	0.98	0.98	0.18	0.77	0.05	0.62	0.84	0.07	0.78	0.78	0.50
Avail Cap(c_a), veh/h	461	865	904	808	2117	944	190	338	286	190	324	275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	37.6	37.8	45.9	22.5	12.6	68.7	65.2	26.2	71.4	67.7	40.8
Incr Delay (d2), s/veh	47.7	25.3	25.4	0.0	1.8	0.0	2.1	13.9	0.3	6.7	10.4	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	35.1	36.9	2.1	20.6	0.7	2.6	7.4	0.5	2.2	4.8	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	112.7	62.9	63.2	46.0	24.4	12.7	70.9	79.2	26.5	78.1	78.2	44.5
LnGrp LOS	F	E	E	D	C	B	E	E	C	E	E	D
Approach Vol, veh/h		2201			1809			255			234	
Approach Delay, s/veh		73.7			25.8			74.3			69.1	
Approach LOS		E			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	21.4	40.4	78.3	13.7	17.6	24.0	94.7
Change Period (Y+Rc), s	4.0	4.6	5.3	* 5.3	4.6	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	16.0	27.1	16.0	* 73	16.0	* 26	20.0	69.0
Max Q Clear Time (g_c+I1), s	6.6	15.7	6.9	72.2	7.5	11.1	22.0	52.8
Green Ext Time (p_c), s	0.0	1.1	0.1	0.8	0.0	0.8	0.0	12.4

Intersection Summary	
HCM 6th Ctrl Delay	54.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	1823	0	3	1748	7	11	0	28	47	2	23
Future Volume (veh/h)	3	1823	0	3	1748	7	11	0	28	47	2	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	1919	0	3	1840	7	12	0	29	49	2	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	2950	0	4	2249	9	36	10	36	108	3	93
Arrive On Green	0.41	1.00	0.00	0.00	0.62	0.62	0.06	0.00	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1781	3647	0	1781	3631	14	83	168	607	1044	48	1585
Grp Volume(v), veh/h	3	1919	0	3	900	947	41	0	0	51	0	24
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1868	858	0	0	1092	0	1585
Q Serve(g_s), s	0.1	0.0	0.0	0.3	58.6	58.7	0.7	0.0	0.0	0.0	0.0	2.2
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.3	58.6	58.7	7.9	0.0	0.0	7.2	0.0	2.2
Prop In Lane	1.00		0.00	1.00		0.01	0.29		0.71	0.96		1.00
Lane Grp Cap(c), veh/h	364	2950	0	4	1101	1157	81	0	0	111	0	93
V/C Ratio(X)	0.01	0.65	0.00	0.72	0.82	0.82	0.50	0.00	0.00	0.46	0.00	0.26
Avail Cap(c_a), veh/h	364	2950	0	95	1335	1403	124	0	0	150	0	137
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	0.0	74.8	22.0	22.0	68.8	0.0	0.0	69.8	0.0	67.5
Incr Delay (d2), s/veh	0.0	1.1	0.0	59.5	3.8	3.7	1.8	0.0	0.0	1.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.0	0.2	24.0	25.2	1.6	0.0	0.0	2.0	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	1.1	0.0	134.3	25.8	25.7	70.6	0.0	0.0	70.9	0.0	68.0
LnGrp LOS	D	A	A	F	C	C	E	A	A	E	A	E
Approach Vol, veh/h		1922			1850			41			75	
Approach Delay, s/veh		1.2			25.9			70.6			70.0	
Approach LOS		A			C			E			E	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.8	4.4	129.8		15.8	36.0	98.2
Change Period (Y+Rc), s		7.0	4.0	5.3		7.0	5.3	* 5.3
Max Green Setting (Gmax), s		13.0	8.0	112.7		13.0	8.0	* 1.1E2
Max Q Clear Time (g_c+I1), s		9.9	2.3	2.0		9.2	2.1	60.7
Green Ext Time (p_c), s		0.0	0.0	32.3		0.0	0.0	32.2

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1899	8	262	1768	0	374
Future Volume (vph)	1899	8	262	1768	0	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		6.0	5.3		6.0
Lane Util. Factor	0.91		0.97	0.95		1.00
Frt	1.00		1.00	1.00		0.86
Flt Protected	1.00		0.95	1.00		1.00
Satd. Flow (prot)	5082		3433	3539		1611
Flt Permitted	1.00		0.95	1.00		1.00
Satd. Flow (perm)	5082		3433	3539		1611
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1999	8	276	1861	0	394
RTOR Reduction (vph)	0	0	0	0	0	6
Lane Group Flow (vph)	2007	0	276	1861	0	388
Turn Type	NA		Prot	NA		Over
Protected Phases	4		3	8		3
Permitted Phases						
Actuated Green, G (s)	41.7		20.0	75.0		20.0
Effective Green, g (s)	41.7		20.0	75.0		20.0
Actuated g/C Ratio	0.56		0.27	1.00		0.27
Clearance Time (s)	7.3		6.0	5.3		6.0
Vehicle Extension (s)	3.5		2.0	3.5		2.0
Lane Grp Cap (vph)	2825		915	3539		429
v/s Ratio Prot	c0.39		0.08	0.53		c0.24
v/s Ratio Perm						
v/c Ratio	0.71		0.30	0.53		0.90
Uniform Delay, d1	12.2		21.9	0.0		26.6
Progression Factor	1.06		1.23	1.00		1.00
Incremental Delay, d2	1.2		0.0	0.3		21.7
Delay (s)	14.2		27.0	0.3		48.3
Level of Service	B		C	A		D
Approach Delay (s)	14.2			3.7	48.3	
Approach LOS	B			A	D	

Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	1074	1067	430	975	277	1022	823	162	185	346	71
Future Volume (veh/h)	231	1074	1067	430	975	277	1022	823	162	185	346	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	243	1131	0	453	1026	170	1076	866	50	195	364	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	1216		438	1334	595	1060	1189	530	241	454	141
Arrive On Green	0.14	0.57	0.00	0.13	0.38	0.38	0.31	0.33	0.33	0.07	0.09	0.09
Sat Flow, veh/h	3456	3554	2790	3456	3554	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	243	1131	0	453	1026	170	1076	866	50	195	364	4
Grp Sat Flow(s),veh/h/ln	1728	1777	1395	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	10.3	43.6	0.0	19.0	38.0	8.8	46.0	32.2	3.3	8.3	10.5	0.3
Cycle Q Clear(g_c), s	10.3	43.6	0.0	19.0	38.0	8.8	46.0	32.2	3.3	8.3	10.5	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	1216		438	1334	595	1060	1189	530	241	454	141
V/C Ratio(X)	0.85	0.93		1.03	0.77	0.29	1.02	0.73	0.09	0.81	0.80	0.03
Avail Cap(c_a), veh/h	299	1216		438	1334	595	1060	1189	530	323	534	166
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	30.5	0.0	65.5	41.1	20.0	52.0	43.9	34.3	68.8	67.0	62.4
Incr Delay (d2), s/veh	18.8	12.6	0.0	52.3	4.3	1.2	31.5	2.5	0.1	7.9	8.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	16.9	0.0	11.5	17.1	3.4	24.2	14.4	1.3	3.9	4.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.7	43.1	0.0	117.8	45.5	21.2	83.5	46.4	34.4	76.7	75.1	62.5
LnGrp LOS	F	D		F	D	C	F	D	C	E	E	E
Approach Vol, veh/h		1374	A		1649			1992			563	
Approach Delay, s/veh		50.1			62.8			66.1			75.6	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	55.5	23.0	56.6	51.3	18.6	17.6	62.0
Change Period (Y+Rc), s	4.0	5.3	4.0	5.3	5.3	* 5.3	5.3	* 5.7
Max Green Setting (Gmax), s	14.0	47.7	19.0	50.7	46.0	* 16	13.0	* 56
Max Q Clear Time (g_c+I1), s	10.3	34.2	21.0	45.6	48.0	12.5	12.3	40.0
Green Ext Time (p_c), s	0.1	6.2	0.0	3.5	0.0	0.9	0.0	8.0

Intersection Summary	
HCM 6th Ctrl Delay	62.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1204	110	88	1486	4	15	0	519	9	2	7
Future Volume (veh/h)	5	1204	110	88	1486	4	15	0	519	9	2	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2106	2106	2106	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	1267	112	93	1564	4	16	0	477	9	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	2267	200	120	2448	6	179	0	267	14	3	16
Arrive On Green	0.00	0.61	0.61	0.14	1.00	1.00	0.10	0.00	0.10	0.01	0.01	0.00
Sat Flow, veh/h	2006	3720	328	1781	3636	9	1781	0	1585	1470	327	1585
Grp Volume(v), veh/h	5	680	699	93	764	804	16	0	477	11	0	0
Grp Sat Flow(s),veh/h/ln	2006	2001	2047	1781	1777	1869	1781	0	1585	1797	0	1585
Q Serve(g_s), s	0.4	30.2	30.4	7.6	0.0	0.0	1.2	0.0	15.1	0.9	0.0	0.0
Cycle Q Clear(g_c), s	0.4	30.2	30.4	7.6	0.0	0.0	1.2	0.0	15.1	0.9	0.0	0.0
Prop In Lane	1.00		0.16	1.00		0.00	1.00		1.00	0.82		1.00
Lane Grp Cap(c), veh/h	8	1219	1248	120	1196	1258	179	0	267	18	0	16
V/C Ratio(X)	0.66	0.56	0.56	0.77	0.64	0.64	0.09	0.00	1.79	0.62	0.00	0.00
Avail Cap(c_a), veh/h	107	1219	1248	511	1196	1258	179	0	267	78	0	69
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.73	0.73	0.73	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	74.6	17.3	17.4	63.7	0.0	0.0	61.2	0.0	62.4	74.0	0.0	0.0
Incr Delay (d2), s/veh	31.2	0.7	0.7	2.9	1.9	1.8	0.1	0.0	369.5	12.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	13.5	14.0	3.3	0.6	0.6	0.6	0.0	37.4	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.8	18.0	18.0	66.6	1.9	1.8	61.3	0.0	431.8	86.7	0.0	0.0
LnGrp LOS	F	B	B	E	A	A	E	A	F	F	A	A
Approach Vol, veh/h		1384			1661			493			11	
Approach Delay, s/veh		18.3			5.5			419.8			86.7	
Approach LOS		B			A			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.1	97.1		7.2	4.6	106.7		20.8
Change Period (Y+Rc), s	4.0	5.7		5.7	4.0	* 5.7		5.7
Max Green Setting (Gmax), s	43.0	64.3		6.5	8.0	* 1E2		15.1
Max Q Clear Time (g_c+I1), s	9.6	32.4		2.9	2.4	2.0		17.1
Green Ext Time (p_c), s	0.8	29.7		0.0	0.0	98.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	68.3
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1727	20	16	1373	0	133	0	214	0	5	0
Future Volume (veh/h)	0	1727	20	16	1373	0	133	0	214	0	5	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	0	1870	0
Adj Flow Rate, veh/h	0	1818	21	17	1445	0	140	0	225	0	5	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	0	2	0
Cap, veh/h	0	2052	24	21	2163	0	163	0	0	0	9	0
Arrive On Green	0.00	0.57	0.57	0.01	0.61	0.00	0.09	0.00	0.00	0.00	0.01	0.00
Sat Flow, veh/h	0	3692	41	1781	3647	0	1781	140		0	1870	0
Grp Volume(v), veh/h	0	896	943	17	1445	0	140	73.4		0	5	0
Grp Sat Flow(s),veh/h/ln	0	1777	1863	1781	1777	0	1781	E		0	1870	0
Q Serve(g_s), s	0.0	65.6	66.0	1.4	40.2	0.0	11.6			0.0	0.4	0.0
Cycle Q Clear(g_c), s	0.0	65.6	66.0	1.4	40.2	0.0	11.6			0.0	0.4	0.0
Prop In Lane	0.00		0.02	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1013	1063	21	2163	0	163			0	9	0
V/C Ratio(X)	0.00	0.88	0.89	0.82	0.67	0.00	0.86			0.00	0.53	0.00
Avail Cap(c_a), veh/h	0	1013	1063	95	2163	0	273			0	287	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.57	0.57	1.00	1.00	0.00	1.00			0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	27.9	28.0	74.0	19.4	0.0	67.2			0.0	74.4	0.0
Incr Delay (d2), s/veh	0.0	5.9	5.8	24.7	1.7	0.0	6.2			0.0	30.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	28.0	29.5	0.8	16.3	0.0	5.6			0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	33.8	33.8	98.6	21.0	0.0	73.4			0.0	105.1	0.0
LnGrp LOS	A	C	C	F	C	A	E			A	F	A
Approach Vol, veh/h		1839			1462						5	
Approach Delay, s/veh		33.8			21.9						105.1	
Approach LOS		C			C						F	

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	5.7	91.3	17.8	3.8		97.0
Change Period (Y+Rc), s	4.0	5.7	4.0	3.0		5.7
Max Green Setting (Gmax), s	8.0	79.3	23.0	23.0		91.3
Max Q Clear Time (g_c+I1), s	3.4	68.0	13.6	2.4		42.2
Green Ext Time (p_c), s	0.0	9.2	0.2	0.0		18.4

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	1040	631	164	870	73	698	1503	225	187	830	134
Future Volume (veh/h)	224	1040	631	164	870	73	698	1503	225	187	830	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	236	1095	0	173	916	72	735	1582	143	197	874	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	986		227	969	76	749	1549	679	202	1489	453
Arrive On Green	0.07	0.28	0.00	0.07	0.29	0.29	0.43	0.87	0.87	0.06	0.29	0.29
Sat Flow, veh/h	3456	3554	1585	3456	3332	262	3456	3554	1558	3456	5106	1554
Grp Volume(v), veh/h	236	1095	0	173	488	500	735	1582	143	197	874	35
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1817	1728	1777	1558	1728	1702	1554
Q Serve(g_s), s	8.0	33.3	0.0	5.9	32.3	32.3	25.2	52.3	1.7	6.8	17.6	2.0
Cycle Q Clear(g_c), s	8.0	33.3	0.0	5.9	32.3	32.3	25.2	52.3	1.7	6.8	17.6	2.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	986		227	517	528	749	1549	679	202	1489	453
V/C Ratio(X)	1.02	1.11		0.76	0.95	0.95	0.98	1.02	0.21	0.98	0.59	0.08
Avail Cap(c_a), veh/h	230	986		230	517	528	749	1549	679	202	1489	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.54	0.54	0.54	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.0	43.4	0.0	55.1	41.6	41.6	33.8	7.7	4.5	56.4	36.3	30.8
Incr Delay (d2), s/veh	65.8	63.9	0.0	12.3	26.7	26.3	19.8	22.5	0.4	56.4	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	22.9	0.0	2.9	17.5	17.9	9.8	7.9	0.6	4.5	7.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	121.8	107.3	0.0	67.4	68.4	68.0	53.5	30.2	4.8	112.9	37.1	30.9
LnGrp LOS	F	F		E	E	E	D	F	A	F	D	C
Approach Vol, veh/h		1331	A		1161			2460			1106	
Approach Delay, s/veh		109.9			68.1			35.7			50.4	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	39.0	30.0	40.3	12.0	40.2	12.3	58.0
Change Period (Y+Rc), s	5.3	* 5.7	4.0	5.3	4.0	5.3	5.3	* 5.7
Max Green Setting (Gmax), s	8.0	* 33	26.0	33.7	8.0	33.7	7.0	* 52
Max Q Clear Time (g_c+I1), s	7.9	35.3	27.2	19.6	10.0	34.3	8.8	54.3
Green Ext Time (p_c), s	0.0	0.0	0.0	8.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	60.9
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	1377	10	12	1068	53	37	98	107	22	11	35
Future Volume (veh/h)	213	1377	10	12	1068	53	37	98	107	22	11	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	1449	11	13	1124	56	39	103	113	23	12	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	2255	17	15	1669	83	48	128	149	41	22	55
Arrive On Green	0.14	0.62	0.62	0.01	0.48	0.48	0.10	0.10	0.10	0.03	0.03	0.03
Sat Flow, veh/h	1781	3615	27	1781	3444	172	507	1338	1560	1190	621	1585
Grp Volume(v), veh/h	224	712	748	13	580	600	142	0	113	35	0	37
Grp Sat Flow(s),veh/h/ln	1781	1777	1865	1781	1777	1838	1845	0	1560	1811	0	1585
Q Serve(g_s), s	18.6	37.7	37.8	1.1	37.4	37.5	11.3	0.0	10.6	2.9	0.0	3.5
Cycle Q Clear(g_c), s	18.6	37.7	37.8	1.1	37.4	37.5	11.3	0.0	10.6	2.9	0.0	3.5
Prop In Lane	1.00		0.01	1.00		0.09	0.27		1.00	0.66		1.00
Lane Grp Cap(c), veh/h	248	1109	1164	15	861	891	177	0	149	63	0	55
V/C Ratio(X)	0.90	0.64	0.64	0.85	0.67	0.67	0.80	0.00	0.76	0.56	0.00	0.67
Avail Cap(c_a), veh/h	356	1122	1178	95	861	891	271	0	229	97	0	85
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.6	17.7	17.7	74.3	29.6	29.6	66.4	0.0	66.1	71.3	0.0	71.5
Incr Delay (d2), s/veh	15.8	1.7	1.6	34.4	4.2	4.1	5.0	0.0	2.9	2.8	0.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	15.2	15.9	0.6	16.6	17.1	5.6	0.0	4.4	1.4	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.4	19.4	19.3	108.7	33.7	33.6	71.4	0.0	69.1	74.1	0.0	76.7
LnGrp LOS	E	B	B	F	C	C	E	A	E	E	A	E
Approach Vol, veh/h		1684			1193			255			72	
Approach Delay, s/veh		27.3			34.5			70.4			75.5	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	98.9		9.2	26.2	78.0		18.4
Change Period (Y+Rc), s	4.0	5.3		4.0	5.3	* 5.3		4.0
Max Green Setting (Gmax), s	8.0	94.7		8.0	30.0	* 73		22.0
Max Q Clear Time (g_c+I1), s	3.1	39.8		5.5	20.6	39.5		13.3
Green Ext Time (p_c), s	0.0	22.1		0.0	0.3	13.5		0.4

Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1411	0	26	855	13	81	2	32	64	0	77
Future Volume (veh/h)	37	1411	0	26	855	13	81	2	32	64	0	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	1485	0	27	900	14	85	2	34	67	0	81
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	47	1888	0	34	1879	29	237	10	39	381	0	202
Arrive On Green	0.03	0.53	0.00	0.02	0.52	0.52	0.13	0.13	0.13	0.13	0.00	0.13
Sat Flow, veh/h	1781	3647	0	1781	3581	56	693	80	302	1619	0	1585
Grp Volume(v), veh/h	39	1485	0	27	447	467	121	0	0	67	0	81
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1860	1075	0	0	1619	0	1585
Q Serve(g_s), s	0.9	13.9	0.0	0.6	6.6	6.6	3.2	0.0	0.0	0.0	0.0	1.9
Cycle Q Clear(g_c), s	0.9	13.9	0.0	0.6	6.6	6.6	4.7	0.0	0.0	1.5	0.0	1.9
Prop In Lane	1.00		0.00	1.00		0.03	0.70		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	47	1888	0	34	932	976	285	0	0	381	0	202
V/C Ratio(X)	0.84	0.79	0.00	0.78	0.48	0.48	0.42	0.00	0.00	0.18	0.00	0.40
Avail Cap(c_a), veh/h	345	1951	0	345	976	1022	814	0	0	903	0	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.0	7.8	0.0	20.2	6.2	6.2	18.3	0.0	0.0	16.4	0.0	16.6
Incr Delay (d2), s/veh	13.3	2.2	0.0	13.3	0.4	0.4	0.7	0.0	0.0	0.2	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.2	0.0	0.3	1.4	1.4	1.1	0.0	0.0	0.5	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	10.0	0.0	33.5	6.7	6.7	19.0	0.0	0.0	16.6	0.0	17.5
LnGrp LOS	C	B	A	C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		1524			941			121			148	
Approach Delay, s/veh		10.6			7.4			19.0			17.1	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	27.0		9.3	4.8	27.3		9.3
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	22.7		21.0	8.0	22.7		21.0
Max Q Clear Time (g_c+I1), s	2.9	8.6		6.7	2.6	15.9		3.9
Green Ext Time (p_c), s	0.0	8.0		0.3	0.0	6.1		0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	699	591	732	372	145	341
Future Volume (veh/h)	699	591	732	372	145	341
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	756	594	771	319	153	341
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1207	634	809	334	598	811
Arrive On Green	0.34	0.34	0.33	0.33	0.17	0.17
Sat Flow, veh/h	3563	1870	2545	1013	3456	1585
Grp Volume(v), veh/h	756	594	559	531	153	341
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1688	1728	1585
Q Serve(g_s), s	13.5	23.3	23.3	23.3	2.9	10.1
Cycle Q Clear(g_c), s	13.5	23.3	23.3	23.3	2.9	10.1
Prop In Lane	1.00			0.60	1.00	1.00
Lane Grp Cap(c), veh/h	1207	634	586	557	598	811
V/C Ratio(X)	0.63	0.94	0.95	0.95	0.26	0.42
Avail Cap(c_a), veh/h	1222	642	586	557	1003	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	24.3	24.8	24.8	27.1	11.5
Incr Delay (d2), s/veh	0.7	21.0	25.7	26.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	12.9	13.0	12.5	1.1	6.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.8	45.3	50.6	51.7	27.2	11.6
LnGrp LOS	C	D	D	D	C	B
Approach Vol, veh/h		1350	1090		494	
Approach Delay, s/veh		32.1	51.1		16.5	
Approach LOS		C	D		B	

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	29.0				29.7	17.1
Change Period (Y+Rc), s	4.0				4.0	4.0
Max Green Setting (Gmax), s	25.0				26.0	22.0
Max Q Clear Time (g_c+I1), s	25.3				25.3	12.1
Green Ext Time (p_c), s	0.0				0.4	1.0

Intersection Summary	
HCM 6th Ctrl Delay	36.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	429	33	17	921	15	95	15	14	11	8	147
Future Volume (veh/h)	227	429	33	17	921	15	95	15	14	11	8	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	239	452	35	18	969	16	100	16	15	12	8	155
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	1678	130	48	1299	21	296	47	25	266	144	258
Arrive On Green	0.17	0.50	0.50	0.03	0.36	0.36	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	3343	258	1781	3577	59	914	289	156	814	883	1585
Grp Volume(v), veh/h	239	240	247	18	481	504	131	0	0	20	0	155
Grp Sat Flow(s),veh/h/ln	1781	1777	1824	1781	1777	1860	1358	0	0	1697	0	1585
Q Serve(g_s), s	5.6	3.3	3.4	0.4	10.2	10.2	3.1	0.0	0.0	0.0	0.0	3.9
Cycle Q Clear(g_c), s	5.6	3.3	3.4	0.4	10.2	10.2	3.7	0.0	0.0	0.4	0.0	3.9
Prop In Lane	1.00		0.14	1.00		0.03	0.76		0.11	0.60		1.00
Lane Grp Cap(c), veh/h	296	892	916	48	645	675	368	0	0	410	0	258
V/C Ratio(X)	0.81	0.27	0.27	0.37	0.75	0.75	0.36	0.00	0.00	0.05	0.00	0.60
Avail Cap(c_a), veh/h	330	892	916	330	770	806	763	0	0	873	0	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.3	6.2	6.2	20.6	12.0	12.0	16.6	0.0	0.0	15.3	0.0	16.8
Incr Delay (d2), s/veh	11.1	0.3	0.2	1.8	4.0	3.8	0.2	0.0	0.0	0.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.8	0.8	0.2	3.5	3.7	1.1	0.0	0.0	0.2	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	6.4	6.4	22.4	16.0	15.9	16.8	0.0	0.0	15.3	0.0	17.6
LnGrp LOS	C	A	A	C	B	B	B	A	A	B	A	B
Approach Vol, veh/h		726			1003			131			175	
Approach Delay, s/veh		13.7			16.1			16.8			17.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	27.0		11.0	11.2	21.0		11.0
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	18.7		20.0	8.0	18.7		20.0
Max Q Clear Time (g_c+I1), s	2.4	5.4		5.7	7.6	12.2		5.9
Green Ext Time (p_c), s	0.0	2.6		0.2	0.0	3.5		0.4

Intersection Summary			
HCM 6th Ctrl Delay			15.4
HCM 6th LOS			B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	235	376	610	502	313	180
Future Volume (veh/h)	235	376	610	502	313	180
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	298	0	642	475	329	189
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	2	2
Cap, veh/h	500	226	817	915	381	1335
Arrive On Green	0.14	0.00	0.44	0.44	0.21	0.71
Sat Flow, veh/h	3563	1610	1870	1585	1781	1870
Grp Volume(v), veh/h	298	0	642	475	329	189
Grp Sat Flow(s),veh/h/ln	1781	1610	1870	1585	1781	1870
Q Serve(g_s), s	5.0	0.0	18.8	11.5	11.4	2.1
Cycle Q Clear(g_c), s	5.0	0.0	18.8	11.5	11.4	2.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	500	226	817	915	381	1335
V/C Ratio(X)	0.60	0.00	0.79	0.52	0.86	0.14
Avail Cap(c_a), veh/h	1341	606	1018	1085	503	1663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	0.0	15.4	8.1	24.2	2.9
Incr Delay (d2), s/veh	0.4	0.0	4.0	0.7	9.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	7.6	4.8	5.3	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.1	0.0	19.4	8.9	33.6	3.0
LnGrp LOS	C	A	B	A	C	A
Approach Vol, veh/h	298		1117			518
Approach Delay, s/veh	26.1		14.9			22.4
Approach LOS	C		B			C

Timer - Assigned Phs		2			5	6	8
Phs Duration (G+Y+Rc), s		50.8			17.6	33.2	13.0
Change Period (Y+Rc), s		5.3			4.0	5.3	4.0
Max Green Setting (Gmax), s		56.7			18.0	34.7	24.0
Max Q Clear Time (g_c+I1), s		4.1			13.4	20.8	7.0
Green Ext Time (p_c), s		1.3			0.3	7.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	11	100	146	7	85	28	605	64	46	670	12
Future Volume (veh/h)	58	11	100	146	7	85	28	605	64	46	670	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	12	105	154	7	89	29	637	67	48	705	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	168	143	205	291	247	49	1254	389	74	1325	411
Arrive On Green	0.05	0.09	0.09	0.11	0.16	0.16	0.03	0.25	0.25	0.04	0.26	0.26
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	61	12	105	154	7	89	29	637	67	48	705	13
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.3	0.2	2.5	3.3	0.1	2.0	0.6	4.2	1.3	1.0	4.7	0.2
Cycle Q Clear(g_c), s	1.3	0.2	2.5	3.3	0.1	2.0	0.6	4.2	1.3	1.0	4.7	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	168	143	205	291	247	49	1254	389	74	1325	411
V/C Ratio(X)	0.69	0.07	0.74	0.75	0.02	0.36	0.59	0.51	0.17	0.65	0.53	0.03
Avail Cap(c_a), veh/h	362	1520	1288	679	1853	1570	317	2464	765	317	2464	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	16.4	17.5	16.9	14.1	14.9	18.9	12.8	11.7	18.6	12.5	10.9
Incr Delay (d2), s/veh	9.3	0.2	7.2	5.5	0.0	0.9	10.7	0.3	0.2	9.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	1.1	1.5	0.0	0.7	0.4	1.2	0.4	0.5	1.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.7	16.6	24.6	22.4	14.1	15.8	29.7	13.1	11.9	27.8	12.9	10.9
LnGrp LOS	C	B	C	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		178			250			733			766	
Approach Delay, s/veh		25.1			19.8			13.7			13.8	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	14.7	9.5	8.5	6.1	15.2	6.9	11.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	19.0	15.0	32.0	7.0	19.0	8.0	39.0
Max Q Clear Time (g_c+I1), s	3.0	6.2	5.3	4.5	2.6	6.7	3.3	4.0
Green Ext Time (p_c), s	0.0	3.4	0.3	0.4	0.0	3.5	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	3	119	0	1	26	30	703	0	36	1125	13
Future Volume (veh/h)	44	3	119	0	1	26	30	703	0	36	1125	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	3	125	0	1	27	32	740	0	38	1184	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	357	302	4	50	42	53	2056	638	61	2079	645
Arrive On Green	0.04	0.19	0.19	0.00	0.03	0.03	0.03	0.40	0.00	0.03	0.41	0.41
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	46	3	125	0	1	27	32	740	0	38	1184	14
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.0	0.1	2.8	0.0	0.0	0.7	0.7	4.1	0.0	0.8	7.2	0.2
Cycle Q Clear(g_c), s	1.0	0.1	2.8	0.0	0.0	0.7	0.7	4.1	0.0	0.8	7.2	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	71	357	302	4	50	42	53	2056	638	61	2079	645
V/C Ratio(X)	0.65	0.01	0.41	0.00	0.02	0.64	0.60	0.36	0.00	0.62	0.57	0.02
Avail Cap(c_a), veh/h	486	1485	1259	486	1485	1259	486	3294	1023	486	3294	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	13.2	14.3	0.0	19.1	19.4	19.3	8.4	0.0	19.2	9.2	7.1
Incr Delay (d2), s/veh	9.4	0.0	0.9	0.0	0.2	14.8	10.4	0.1	0.0	9.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.9	0.0	0.0	0.4	0.4	0.9	0.0	0.4	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	13.2	15.2	0.0	19.3	34.2	29.7	8.5	0.0	29.0	9.5	7.2
LnGrp LOS	C	B	B	A	B	C	C	A	A	C	A	A
Approach Vol, veh/h		174			28			772			1236	
Approach Delay, s/veh		18.7			33.7			9.4			10.0	
Approach LOS		B			C			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	21.2	0.0	12.7	6.2	21.4	6.6	6.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	26.0	11.0	32.0	11.0	26.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	2.8	6.1	0.0	4.8	2.7	9.2	3.0	2.7
Green Ext Time (p_c), s	0.0	4.6	0.0	0.4	0.0	7.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	214	105	52	946	889	93
Future Volume (veh/h)	214	105	52	946	889	93
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	225	111	55	996	936	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	350	311	86	2805	1908	591
Arrive On Green	0.20	0.20	0.05	0.55	0.37	0.37
Sat Flow, veh/h	1781	1585	1781	5274	5274	1581
Grp Volume(v), veh/h	225	111	55	996	936	98
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1581
Q Serve(g_s), s	3.7	1.9	1.0	3.4	4.4	1.3
Cycle Q Clear(g_c), s	3.7	1.9	1.0	3.4	4.4	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	350	311	86	2805	1908	591
V/C Ratio(X)	0.64	0.36	0.64	0.36	0.49	0.17
Avail Cap(c_a), veh/h	1133	1008	453	5194	3246	1005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.6	10.9	14.7	4.0	7.6	6.6
Incr Delay (d2), s/veh	2.0	0.7	7.5	0.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.8	0.4	0.2	0.8	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.6	11.6	22.2	4.0	7.8	6.7
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	336			1051	1034	
Approach Delay, s/veh	13.0			5.0	7.7	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		21.3		10.2	5.5	15.8
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	8.0	20.0
Max Q Clear Time (g_c+I1), s		5.4		5.7	3.0	6.4
Green Ext Time (p_c), s		7.1		0.9	0.0	5.3

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	54	46	17	944	982	13
Future Volume (veh/h)	54	46	17	944	982	13
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	48	18	994	1034	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	144	128	33	3177	2323	720
Arrive On Green	0.08	0.08	0.02	0.62	0.45	0.45
Sat Flow, veh/h	1781	1585	1781	5274	5274	1582
Grp Volume(v), veh/h	57	48	18	994	1034	14
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1582
Q Serve(g_s), s	0.8	0.8	0.3	2.5	3.7	0.1
Cycle Q Clear(g_c), s	0.8	0.8	0.3	2.5	3.7	0.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	144	128	33	3177	2323	720
V/C Ratio(X)	0.40	0.37	0.54	0.31	0.45	0.02
Avail Cap(c_a), veh/h	1323	1177	529	6066	4549	1409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	11.7	13.1	2.4	5.0	4.0
Incr Delay (d2), s/veh	1.8	1.8	12.9	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.2	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.5	13.5	26.0	2.4	5.2	4.0
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	105			1012	1048	
Approach Delay, s/veh	13.5			2.9	5.1	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		20.8		6.2	4.5	16.3
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	8.0	24.0
Max Q Clear Time (g_c+I1), s		4.5		2.8	2.3	5.7
Green Ext Time (p_c), s		7.1		0.2	0.0	6.5

Intersection Summary	
HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	0	99	32	0	9	28	1115	11	3	923	14
Future Volume (veh/h)	77	0	99	32	0	9	28	1115	11	3	923	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	0	104	34	0	9	29	1174	12	3	972	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	0	158	65	0	17	49	2067	640	6	1944	602
Arrive On Green	0.17	0.00	0.17	0.05	0.00	0.05	0.03	0.40	0.40	0.00	0.38	0.38
Sat Flow, veh/h	728	0	934	1371	0	363	1781	5106	1581	1781	5106	1581
Grp Volume(v), veh/h	185	0	0	43	0	0	29	1174	12	3	972	15
Grp Sat Flow(s),veh/h/ln	1662	0	0	1734	0	0	1781	1702	1581	1781	1702	1581
Q Serve(g_s), s	4.4	0.0	0.0	1.0	0.0	0.0	0.7	7.6	0.2	0.1	6.2	0.3
Cycle Q Clear(g_c), s	4.4	0.0	0.0	1.0	0.0	0.0	0.7	7.6	0.2	0.1	6.2	0.3
Prop In Lane	0.44		0.56	0.79		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	0	0	83	0	0	49	2067	640	6	1944	602
V/C Ratio(X)	0.66	0.00	0.00	0.52	0.00	0.00	0.60	0.57	0.02	0.51	0.50	0.02
Avail Cap(c_a), veh/h	1481	0	0	1546	0	0	334	3474	1076	334	3474	1075
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	0.0	19.8	0.0	0.0	20.5	9.8	7.6	21.2	10.1	8.3
Incr Delay (d2), s/veh	2.6	0.0	0.0	5.0	0.0	0.0	11.2	0.2	0.0	56.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.5	0.0	0.0	0.4	1.8	0.0	0.1	1.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	0.0	0.0	24.8	0.0	0.0	31.7	10.1	7.6	77.4	10.3	8.3
LnGrp LOS	B	A	A	C	A	A	C	B	A	E	B	A
Approach Vol, veh/h		185			43			1215			990	
Approach Delay, s/veh		19.2			24.8			10.5			10.5	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	21.3		11.2	5.2	20.2		6.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	29.0		38.0	8.0	29.0		38.0
Max Q Clear Time (g_c+I1), s	2.1	9.6		6.4	2.7	8.2		3.0
Green Ext Time (p_c), s	0.0	7.7		1.2	0.0	6.4		0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	690	10	4	451	6	0
Future Volume (veh/h)	690	10	4	451	6	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	726	11	4	475	6	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1880	839	10	2316	26	23
Arrive On Green	0.53	0.53	0.01	0.65	0.01	0.00
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	726	11	4	475	6	0
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	4.1	0.1	0.1	1.8	0.1	0.0
Cycle Q Clear(g_c), s	4.1	0.1	0.1	1.8	0.1	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1880	839	10	2316	26	23
V/C Ratio(X)	0.39	0.01	0.41	0.21	0.23	0.00
Avail Cap(c_a), veh/h	2559	1141	417	3672	1043	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.8	3.8	16.9	2.4	16.6	0.0
Incr Delay (d2), s/veh	0.2	0.0	10.0	0.1	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.0	3.8	27.0	2.5	18.3	0.0
LnGrp LOS	A	A	C	A	B	A
Approach Vol, veh/h	737			479	6	
Approach Delay, s/veh	5.0			2.7	18.3	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	4.2	23.8				28.0	6.2
Change Period (Y+Rc), s	4.0	5.7				* 5.7	5.7
Max Green Setting (Gmax), s	8.0	24.6				* 35	20.0
Max Q Clear Time (g_c+I1), s	2.1	6.1				3.8	2.1
Green Ext Time (p_c), s	0.0	11.9				11.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.1
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	10	36	54	18	83	35	704	17	23	629	24
Future Volume (veh/h)	133	10	36	54	18	83	35	704	17	23	629	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	140	11	38	57	19	87	37	741	18	24	662	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	247	209	85	145	123	61	1381	429	42	1328	412
Arrive On Green	0.10	0.13	0.13	0.05	0.08	0.08	0.03	0.27	0.27	0.02	0.26	0.26
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	140	11	38	57	19	87	37	741	18	24	662	25
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	2.9	0.2	0.8	1.2	0.4	2.0	0.8	4.7	0.3	0.5	4.2	0.5
Cycle Q Clear(g_c), s	2.9	0.2	0.8	1.2	0.4	2.0	0.8	4.7	0.3	0.5	4.2	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	247	209	85	145	123	61	1381	429	42	1328	412
V/C Ratio(X)	0.77	0.04	0.18	0.67	0.13	0.71	0.61	0.54	0.04	0.57	0.50	0.06
Avail Cap(c_a), veh/h	422	1575	1335	328	1428	1210	328	2419	751	328	2151	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	14.4	14.7	17.8	16.3	17.1	18.1	11.8	10.2	18.4	12.0	10.6
Incr Delay (d2), s/veh	6.7	0.1	0.4	8.9	0.4	7.3	9.5	0.3	0.0	11.7	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.1	0.3	0.6	0.1	0.9	0.4	1.2	0.1	0.3	1.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	14.5	15.1	26.7	16.7	24.5	27.6	12.2	10.3	30.0	12.2	10.6
LnGrp LOS	C	B	B	C	B	C	C	B	B	C	B	B
Approach Vol, veh/h		189			163			796			711	
Approach Delay, s/veh		21.1			24.3			12.8			12.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	15.3	6.8	10.0	6.3	14.9	8.9	7.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	18.0	7.0	32.0	7.0	16.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	2.5	6.7	3.2	2.8	2.8	6.2	4.9	4.0
Green Ext Time (p_c), s	0.0	3.6	0.0	0.1	0.0	2.9	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	79	124	183	30	0	39	676	104	2	705	12
Future Volume (veh/h)	80	79	124	183	30	0	39	676	104	2	705	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	83	131	193	32	0	41	712	109	2	742	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	249	211	256	405	343	64	1670	518	4	1497	465
Arrive On Green	0.06	0.13	0.13	0.14	0.22	0.00	0.04	0.33	0.33	0.00	0.29	0.29
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	84	83	131	193	32	0	41	712	109	2	742	13
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	2.0	1.7	3.4	4.5	0.6	0.0	1.0	4.7	2.1	0.0	5.2	0.3
Cycle Q Clear(g_c), s	2.0	1.7	3.4	4.5	0.6	0.0	1.0	4.7	2.1	0.0	5.2	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	107	249	211	256	405	343	64	1670	518	4	1497	465
V/C Ratio(X)	0.78	0.33	0.62	0.75	0.08	0.00	0.64	0.43	0.21	0.48	0.50	0.03
Avail Cap(c_a), veh/h	454	1432	1213	744	1735	1471	331	2013	625	331	2013	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	17.0	17.7	17.7	13.5	0.0	20.5	11.3	10.5	21.5	12.6	10.9
Incr Delay (d2), s/veh	11.7	0.8	3.0	4.5	0.1	0.0	10.1	0.5	0.6	68.3	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.7	1.2	1.9	0.2	0.0	0.5	1.3	0.7	0.1	1.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.7	17.7	20.7	22.2	13.6	0.0	30.6	11.8	11.0	89.7	13.3	10.9
LnGrp LOS	C	B	C	C	B	A	C	B	B	F	B	B
Approach Vol, veh/h		298			225			862			757	
Approach Delay, s/veh		23.0			21.0			12.6			13.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	19.1	10.2	9.7	5.6	17.6	6.6	13.3
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	17.0	18.0	33.0	8.0	17.0	11.0	40.0
Max Q Clear Time (g_c+I1), s	2.0	6.7	6.5	5.4	3.0	7.2	4.0	2.6
Green Ext Time (p_c), s	0.0	5.9	0.4	0.8	0.0	5.5	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	63	0	824	20	0	1012
Future Volume (veh/h)	63	0	824	20	0	1012
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	0	867	21	0	1065
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105	94	2716	843	7	2716
Arrive On Green	0.06	0.00	0.53	0.53	0.00	0.53
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	66	0	867	21	0	1065
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	0.9	0.0	2.3	0.2	0.0	3.0
Cycle Q Clear(g_c), s	0.9	0.0	2.3	0.2	0.0	3.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	105	94	2716	843	7	2716
V/C Ratio(X)	0.63	0.00	0.32	0.02	0.00	0.39
Avail Cap(c_a), veh/h	2113	1880	4177	1297	801	7518
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.2	0.0	3.2	2.7	0.0	3.4
Incr Delay (d2), s/veh	6.0	0.0	0.1	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.2	0.0	3.3	2.7	0.0	3.5
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	66		888			1065
Approach Delay, s/veh	17.2		3.3			3.5
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	0.0	18.0				18.0	6.4
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	0.0	4.3				5.0	2.9
Green Ext Time (p_c), s	0.0	5.0				8.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	3.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	6	57	146	17	18	15	765	56	5	1018	93
Future Volume (veh/h)	50	6	57	146	17	18	15	765	56	5	1018	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	6	60	154	18	19	16	805	59	5	1072	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	97	82	205	229	194	29	1698	527	10	1642	510
Arrive On Green	0.04	0.05	0.05	0.12	0.12	0.12	0.02	0.33	0.33	0.01	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	53	6	60	154	18	19	16	805	59	5	1072	98
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.2	0.1	1.5	3.4	0.3	0.4	0.4	5.0	1.0	0.1	7.3	1.8
Cycle Q Clear(g_c), s	1.2	0.1	1.5	3.4	0.3	0.4	0.4	5.0	1.0	0.1	7.3	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	79	97	82	205	229	194	29	1698	527	10	1642	510
V/C Ratio(X)	0.67	0.06	0.73	0.75	0.08	0.10	0.55	0.47	0.11	0.52	0.65	0.19
Avail Cap(c_a), veh/h	485	1482	1256	706	1713	1452	485	2023	628	485	2023	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	18.2	18.9	17.3	15.7	15.7	19.7	10.7	9.3	20.0	11.8	9.9
Incr Delay (d2), s/veh	9.4	0.3	11.7	5.4	0.1	0.2	15.4	0.2	0.1	37.3	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.7	1.5	0.1	0.1	0.2	1.3	0.3	0.1	1.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	18.5	30.6	22.7	15.8	16.0	35.1	10.9	9.4	57.3	12.3	10.1
LnGrp LOS	C	B	C	C	B	B	D	B	A	E	B	B
Approach Vol, veh/h		119			191			880			1175	
Approach Delay, s/veh		29.0			21.4			11.2			12.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	18.4	9.7	7.1	5.7	18.0	6.8	10.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	16.0	32.0	11.0	16.0	11.0	37.0
Max Q Clear Time (g_c+I1), s	2.1	7.0	5.4	3.5	2.4	9.3	3.2	2.4
Green Ext Time (p_c), s	0.0	3.5	0.3	0.1	0.0	3.7	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	7	5	43	27	124	5	1253	16	28	342	27
Future Volume (veh/h)	74	7	5	43	27	124	5	1253	16	28	342	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	7	5	45	28	131	5	1319	17	29	360	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	274	231	80	241	203	21	1766	786	57	1838	818
Arrive On Green	0.06	0.15	0.15	0.04	0.13	0.13	0.01	0.50	0.50	0.03	0.52	0.52
Sat Flow, veh/h	1781	1870	1579	1781	1870	1578	1781	3554	1582	1781	3554	1582
Grp Volume(v), veh/h	78	7	5	45	28	131	5	1319	17	29	360	28
Grp Sat Flow(s),veh/h/ln	1781	1870	1579	1781	1870	1578	1781	1777	1582	1781	1777	1582
Q Serve(g_s), s	2.5	0.2	0.2	1.4	0.8	4.5	0.2	17.0	0.3	0.9	3.1	0.5
Cycle Q Clear(g_c), s	2.5	0.2	0.2	1.4	0.8	4.5	0.2	17.0	0.3	0.9	3.1	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	274	231	80	241	203	21	1766	786	57	1838	818
V/C Ratio(X)	0.70	0.03	0.02	0.57	0.12	0.64	0.23	0.75	0.02	0.50	0.20	0.03
Avail Cap(c_a), veh/h	249	851	718	249	851	718	280	2487	1107	249	2363	1052
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	20.9	20.9	26.8	22.0	23.7	28.0	11.5	7.3	27.2	7.4	6.8
Incr Delay (d2), s/veh	7.9	0.0	0.0	6.2	0.2	3.4	5.5	0.8	0.0	6.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.1	0.1	0.7	0.3	1.7	0.1	4.8	0.1	0.5	0.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	20.9	20.9	32.9	22.2	27.0	33.4	12.3	7.3	33.9	7.5	6.8
LnGrp LOS	C	C	C	C	C	C	C	B	A	C	A	A
Approach Vol, veh/h		90			204			1341			417	
Approach Delay, s/veh		32.4			27.7			12.3			9.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	32.4	6.6	12.4	4.7	33.6	7.6	11.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	40.0	8.0	26.0	9.0	38.0	8.0	26.0
Max Q Clear Time (g_c+I1), s	2.9	19.0	3.4	2.2	2.2	5.1	4.5	6.5
Green Ext Time (p_c), s	0.0	9.4	0.0	0.0	0.0	2.3	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	1336	5	5	616	19	5	5	5	231	5	50
Future Volume (veh/h)	47	1336	5	5	616	19	5	5	5	231	5	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	49	1406	5	5	648	20	5	5	5	243	5	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	1688	753	161	1355	604	228	168	142	263	544	461
Arrive On Green	0.04	0.53	0.53	0.42	0.42	0.42	0.10	0.10	0.10	0.16	0.32	0.32
Sat Flow, veh/h	1603	3198	1427	343	3198	1427	1211	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	49	1406	5	5	648	20	5	5	5	243	5	53
Grp Sat Flow(s),veh/h/ln	1603	1599	1427	343	1599	1427	1211	1683	1427	1603	1683	1427
Q Serve(g_s), s	2.0	24.9	0.1	0.8	9.8	0.6	0.3	0.2	0.2	10.0	0.1	1.8
Cycle Q Clear(g_c), s	2.0	24.9	0.1	18.7	9.8	0.6	0.3	0.2	0.2	10.0	0.1	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	72	1688	753	161	1355	604	228	168	142	263	544	461
V/C Ratio(X)	0.69	0.83	0.01	0.03	0.48	0.03	0.02	0.03	0.04	0.92	0.01	0.11
Avail Cap(c_a), veh/h	143	1858	829	164	1382	616	1658	2157	1828	263	2533	2147
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	13.4	7.5	24.2	14.0	11.3	27.3	27.3	27.3	27.7	15.4	16.0
Incr Delay (d2), s/veh	4.3	3.6	0.0	0.1	0.5	0.0	0.0	0.0	0.0	35.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.4	0.0	0.1	3.0	0.2	0.1	0.1	0.1	6.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	16.9	7.5	24.3	14.5	11.3	27.3	27.3	27.3	63.1	15.4	16.0
LnGrp LOS	D	B	A	C	B	B	C	C	C	E	B	B
Approach Vol, veh/h		1460			673			15			301	
Approach Delay, s/veh		17.6			14.5			27.3			54.0	
Approach LOS		B			B			C			D	

Timer - Assigned Phs		2		4	5	6	7	8
Phs Duration (G+Y+Rc), s		41.4		25.7	7.0	34.4	15.0	10.7
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0	4.0	4.0
Max Green Setting (Gmax), s		39.0		101.0	6.0	29.0	11.0	86.0
Max Q Clear Time (g_c+I1), s		26.9		3.8	4.0	20.7	12.0	2.3
Green Ext Time (p_c), s		8.6		0.2	0.0	3.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	2	327	42	2	12	52	1328	12	2	754	15
Future Volume (veh/h)	123	2	327	42	2	12	52	1328	12	2	754	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	129	2	344	44	2	13	55	1398	13	2	794	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	439	7	397	69	3	64	70	1691	754	164	1276	569
Arrive On Green	0.25	0.25	0.25	0.04	0.04	0.04	0.04	0.48	0.48	0.36	0.36	0.36
Sat Flow, veh/h	1755	27	1585	1707	78	1585	1781	3554	1585	381	3554	1585
Grp Volume(v), veh/h	131	0	344	46	0	13	55	1398	13	2	794	16
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1785	0	1585	1781	1777	1585	381	1777	1585
Q Serve(g_s), s	3.8	0.0	13.4	1.6	0.0	0.5	2.0	21.8	0.3	0.3	11.9	0.4
Cycle Q Clear(g_c), s	3.8	0.0	13.4	1.6	0.0	0.5	2.0	21.8	0.3	14.6	11.9	0.4
Prop In Lane	0.98		1.00	0.96		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	446	0	397	72	0	64	70	1691	754	164	1276	569
V/C Ratio(X)	0.29	0.00	0.87	0.64	0.00	0.20	0.79	0.83	0.02	0.01	0.62	0.03
Avail Cap(c_a), veh/h	527	0	468	444	0	394	305	1935	863	164	1276	569
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	0.0	23.1	30.4	0.0	29.8	30.6	14.6	8.9	24.1	17.0	13.3
Incr Delay (d2), s/veh	0.4	0.0	14.0	8.9	0.0	1.5	17.8	2.8	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	6.3	0.9	0.0	0.2	1.1	7.3	0.1	0.0	4.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	37.1	39.3	0.0	31.4	48.5	17.3	8.9	24.1	17.9	13.4
LnGrp LOS	B	A	D	D	A	C	D	B	A	C	B	B
Approach Vol, veh/h		475			59			1466			812	
Approach Delay, s/veh		32.4			37.5			18.4			17.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		35.6		21.1	7.5	28.1		7.6				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		35.0		19.0	11.0	19.0		16.0				
Max Q Clear Time (g_c+I1), s		23.8		15.4	4.0	16.6		3.6				
Green Ext Time (p_c), s		6.8		0.7	0.0	1.2		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			21.0									
HCM 6th LOS			C									

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	173	140	107	1315	938	72
Future Volume (veh/h)	173	140	107	1315	938	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	147	113	1384	987	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	322	286	147	2191	1610	718
Arrive On Green	0.18	0.18	0.08	0.62	0.45	0.45
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	182	147	113	1384	987	76
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	4.6	4.1	3.1	12.1	10.4	1.4
Cycle Q Clear(g_c), s	4.6	4.1	3.1	12.1	10.4	1.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	322	286	147	2191	1610	718
V/C Ratio(X)	0.57	0.51	0.77	0.63	0.61	0.11
Avail Cap(c_a), veh/h	723	643	434	3244	2091	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	18.2	22.2	5.9	10.2	7.7
Incr Delay (d2), s/veh	0.6	0.5	3.2	0.6	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.7	1.2	2.1	2.9	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.0	18.8	25.4	6.5	11.0	7.9
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	329			1497	1063	
Approach Delay, s/veh	18.9			7.9	10.7	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.4		12.9	8.1	28.3
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		45.0		20.0	12.0	29.0
Max Q Clear Time (g_c+I1), s		14.1		6.6	5.1	12.4
Green Ext Time (p_c), s		16.3		0.6	0.1	8.3

Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	60	111	53	12	31	74	1018	44	48	917	80
Future Volume (veh/h)	132	60	111	53	12	31	74	1018	44	48	917	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	63	117	56	13	33	78	1072	46	51	965	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	244	207	200	210	178	160	1412	630	129	1349	602
Arrive On Green	0.13	0.13	0.13	0.11	0.11	0.11	0.09	0.40	0.40	0.07	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	139	63	117	56	13	33	78	1072	46	51	965	84
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	5.1	2.1	4.8	2.0	0.4	1.3	2.9	17.9	1.2	1.9	15.9	2.4
Cycle Q Clear(g_c), s	5.1	2.1	4.8	2.0	0.4	1.3	2.9	17.9	1.2	1.9	15.9	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	244	207	200	210	178	160	1412	630	129	1349	602
V/C Ratio(X)	0.60	0.26	0.57	0.28	0.06	0.19	0.49	0.76	0.07	0.40	0.72	0.14
Avail Cap(c_a), veh/h	518	543	461	518	543	461	311	1714	765	311	1714	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	26.9	28.1	28.0	27.3	27.7	29.8	17.9	12.9	30.5	18.2	14.0
Incr Delay (d2), s/veh	2.6	0.6	2.5	0.8	0.1	0.5	0.8	2.2	0.1	0.7	1.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.9	1.9	0.8	0.2	0.5	1.1	6.2	0.4	0.7	5.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.8	27.5	30.6	28.8	27.4	28.2	30.6	20.1	13.0	31.2	19.8	14.2
LnGrp LOS	C	C	C	C	C	C	C	C	B	C	B	B
Approach Vol, veh/h		319			102			1196			1100	
Approach Delay, s/veh		30.1			28.4			20.5			19.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	33.3		12.6	10.2	32.1		13.9
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.9
Max Green Setting (Gmax), s	12.0	33.2		20.0	12.0	33.2		20.0
Max Q Clear Time (g_c+I1), s	3.9	19.9		4.0	4.9	17.9		7.1
Green Ext Time (p_c), s	0.0	7.4		0.3	0.0	7.6		1.1

Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	74	19	1690	39	63	1272
Future Volume (veh/h)	74	19	1690	39	63	1272
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	20	1779	41	66	1339
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	102	26	2451	761	94	3389
Arrive On Green	0.07	0.07	0.48	0.48	0.05	0.66
Sat Flow, veh/h	1370	351	5274	1585	1781	5274
Grp Volume(v), veh/h	99	0	1779	41	66	1339
Grp Sat Flow(s),veh/h/ln	1739	0	1702	1585	1781	1702
Q Serve(g_s), s	2.1	0.0	10.6	0.5	1.4	4.6
Cycle Q Clear(g_c), s	2.1	0.0	10.6	0.5	1.4	4.6
Prop In Lane	0.79	0.20		1.00	1.00	
Lane Grp Cap(c), veh/h	130	0	2451	761	94	3389
V/C Ratio(X)	0.76	0.00	0.73	0.05	0.70	0.40
Avail Cap(c_a), veh/h	1320	0	2673	830	513	4812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	7.9	5.3	17.8	2.9
Incr Delay (d2), s/veh	9.0	0.0	0.9	0.0	9.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	2.0	0.1	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.3	0.0	8.8	5.3	27.0	3.0
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	99		1820			1405
Approach Delay, s/veh	26.3		8.8			4.1
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	7.0	23.3				30.4	7.8
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	3.4	12.6				6.6	4.1
Green Ext Time (p_c), s	0.1	5.7				10.6	0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1	95	51	2	34	11	1635	16	9	1210	126
Future Volume (veh/h)	61	1	95	51	2	34	11	1635	16	9	1210	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	1	100	54	2	36	12	1721	17	9	1274	133
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	2	186	76	10	172	22	2545	788	17	2530	784
Arrive On Green	0.05	0.12	0.12	0.04	0.11	0.11	0.01	0.50	0.50	0.01	0.50	0.50
Sat Flow, veh/h	1781	16	1564	1781	84	1506	1781	5106	1582	1781	5106	1582
Grp Volume(v), veh/h	64	0	101	54	0	38	12	1721	17	9	1274	133
Grp Sat Flow(s),veh/h/ln	1781	0	1580	1781	0	1590	1781	1702	1582	1781	1702	1582
Q Serve(g_s), s	1.7	0.0	2.9	1.4	0.0	1.1	0.3	12.4	0.3	0.2	8.1	2.2
Cycle Q Clear(g_c), s	1.7	0.0	2.9	1.4	0.0	1.1	0.3	12.4	0.3	0.2	8.1	2.2
Prop In Lane	1.00		0.99	1.00		0.95	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	85	0	188	76	0	181	22	2545	788	17	2530	784
V/C Ratio(X)	0.75	0.00	0.54	0.71	0.00	0.21	0.55	0.68	0.02	0.54	0.50	0.17
Avail Cap(c_a), veh/h	294	0	1011	294	0	1018	294	2545	788	294	2530	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	20.1	22.9	0.0	19.5	23.8	9.2	6.2	23.9	8.2	6.7
Incr Delay (d2), s/veh	12.6	0.0	2.4	11.6	0.0	0.6	19.5	1.5	0.1	24.1	0.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.0	0.8	0.0	0.4	0.2	3.1	0.1	0.2	2.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	0.0	22.4	34.4	0.0	20.0	43.3	10.7	6.2	47.9	8.9	7.2
LnGrp LOS	D	A	C	C	A	C	D	B	A	D	A	A
Approach Vol, veh/h		165			92			1750			1416	
Approach Delay, s/veh		27.5			28.5			10.8			9.0	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	28.1	6.1	9.8	4.6	28.0	6.3	9.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	24.0	8.0	31.0	8.0	24.0	8.0	31.0
Max Q Clear Time (g_c+I1), s	2.2	14.4	3.4	4.9	2.3	10.1	3.7	3.1
Green Ext Time (p_c), s	0.0	7.0	0.0	0.5	0.0	7.3	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	8	158	128	10	48	62	601	40	9	106	21
Future Volume (veh/h)	131	8	158	128	10	48	62	601	40	9	106	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	8	166	135	11	51	65	633	42	9	112	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	16	263	213	17	204	88	920	410	17	779	347
Arrive On Green	0.17	0.17	0.17	0.13	0.13	0.13	0.05	0.26	0.26	0.01	0.22	0.22
Sat Flow, veh/h	1688	98	1585	1653	135	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	146	0	166	146	0	51	65	633	42	9	112	22
Grp Sat Flow(s),veh/h/ln	1786	0	1585	1788	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.4	0.0	4.5	3.5	0.0	1.3	1.6	7.3	0.9	0.2	1.2	0.5
Cycle Q Clear(g_c), s	3.4	0.0	4.5	3.5	0.0	1.3	1.6	7.3	0.9	0.2	1.2	0.5
Prop In Lane	0.95		1.00	0.92		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	296	0	263	230	0	204	88	920	410	17	779	347
V/C Ratio(X)	0.49	0.00	0.63	0.63	0.00	0.25	0.74	0.69	0.10	0.53	0.14	0.06
Avail Cap(c_a), veh/h	1016	0	901	1017	0	901	429	1321	589	429	1321	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	17.8	18.9	0.0	17.9	21.5	15.3	12.9	22.5	14.4	14.1
Incr Delay (d2), s/veh	1.3	0.0	2.5	2.9	0.0	0.6	11.6	0.9	0.1	23.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.6	1.4	0.0	0.5	0.9	2.4	0.3	0.2	0.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	20.3	21.8	0.0	18.6	33.1	16.2	13.0	46.4	14.5	14.2
LnGrp LOS	B	A	C	C	A	B	C	B	B	D	B	B
Approach Vol, veh/h		312			197			740			143	
Approach Delay, s/veh		19.5			21.0			17.5			16.4	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	16.8		12.6	7.2	15.0		10.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	11.0	17.0		26.0	11.0	17.0		26.0				
Max Q Clear Time (g_c+I1), s	2.2	9.3		6.5	3.6	3.2		5.5				
Green Ext Time (p_c), s	0.0	2.5		1.3	0.1	0.5		0.9				

Intersection Summary			
HCM 6th Ctrl Delay			18.3
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	26	89	49	8	38	53	604	13	13	354	25
Future Volume (veh/h)	60	26	89	49	8	38	53	604	13	13	354	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	27	94	52	8	40	56	636	14	14	373	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	59	173	107	16	109	84	986	440	26	870	388
Arrive On Green	0.11	0.11	0.11	0.07	0.07	0.07	0.05	0.28	0.28	0.01	0.24	0.24
Sat Flow, veh/h	1265	542	1585	1554	239	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	90	0	94	60	0	40	56	636	14	14	373	26
Grp Sat Flow(s),veh/h/ln	1807	0	1585	1793	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.8	0.0	2.1	1.2	0.0	0.9	1.2	5.9	0.2	0.3	3.3	0.5
Cycle Q Clear(g_c), s	1.8	0.0	2.1	1.2	0.0	0.9	1.2	5.9	0.2	0.3	3.3	0.5
Prop In Lane	0.70		1.00	0.87		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	0	173	123	0	109	84	986	440	26	870	388
V/C Ratio(X)	0.46	0.00	0.54	0.49	0.00	0.37	0.67	0.65	0.03	0.54	0.43	0.07
Avail Cap(c_a), veh/h	1245	0	1092	1235	0	1092	425	1507	672	802	2260	1008
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	15.9	16.9	0.0	16.8	17.7	12.0	9.9	18.5	12.0	10.9
Incr Delay (d2), s/veh	1.6	0.0	2.6	2.9	0.0	2.0	8.8	0.7	0.0	16.6	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.7	0.5	0.0	0.3	0.6	1.7	0.1	0.2	1.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.4	0.0	18.5	19.9	0.0	18.8	26.5	12.7	10.0	35.1	12.4	11.0
LnGrp LOS	B	A	B	B	A	B	C	B	A	D	B	B
Approach Vol, veh/h		184			100			706			413	
Approach Delay, s/veh		18.0			19.5			13.8			13.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	15.5		9.1	6.8	14.2		7.6
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	16.0		26.0	9.0	24.0		26.0
Max Q Clear Time (g_c+I1), s	2.3	7.9		4.1	3.2	5.3		3.2
Green Ext Time (p_c), s	0.0	2.5		0.7	0.0	2.2		0.4

Intersection Summary			
HCM 6th Ctrl Delay			14.5
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	5	35	5	5	5	37	821	5	5	225	4
Future Volume (veh/h)	38	5	35	5	5	5	37	821	5	5	225	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	5	37	5	5	5	39	864	5	5	237	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	16	117	10	94	79	66	1375	613	10	1264	564
Arrive On Green	0.04	0.08	0.08	0.01	0.05	0.05	0.04	0.39	0.39	0.01	0.36	0.36
Sat Flow, veh/h	1781	192	1422	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	40	0	42	5	5	5	39	864	5	5	237	4
Grp Sat Flow(s),veh/h/ln	1781	0	1614	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	0.0	0.8	0.1	0.1	0.1	0.7	6.1	0.1	0.1	1.4	0.1
Cycle Q Clear(g_c), s	0.7	0.0	0.8	0.1	0.1	0.1	0.7	6.1	0.1	0.1	1.4	0.1
Prop In Lane	1.00		0.88	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	0	133	10	94	79	66	1375	613	10	1264	564
V/C Ratio(X)	0.60	0.00	0.32	0.52	0.05	0.06	0.59	0.63	0.01	0.52	0.19	0.01
Avail Cap(c_a), veh/h	463	0	1206	463	1397	1184	463	2078	927	463	2078	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.6	0.0	13.3	15.3	13.9	13.9	14.6	7.6	5.8	15.3	6.8	6.4
Incr Delay (d2), s/veh	8.2	0.0	1.3	36.7	0.2	0.3	8.3	0.5	0.0	36.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.2	0.1	0.0	0.0	0.3	1.0	0.0	0.1	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	0.0	14.7	51.9	14.2	14.3	22.9	8.1	5.8	51.9	6.9	6.4
LnGrp LOS	C	A	B	D	B	B	C	A	A	D	A	A
Approach Vol, veh/h		82			15			908			246	
Approach Delay, s/veh		18.6			26.8			8.7			7.8	
Approach LOS		B			C			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.2	15.9	4.2	6.5	5.1	14.9	5.2	5.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	18.0	8.0	23.0	8.0	18.0	8.0	23.0
Max Q Clear Time (g_c+I1), s	2.1	8.1	2.1	2.8	2.7	3.4	2.7	2.1
Green Ext Time (p_c), s	0.0	3.9	0.0	0.1	0.0	1.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	41	14	66	6	44	10	780	219	18	235	7
Future Volume (veh/h)	35	41	14	66	6	44	10	780	219	18	235	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	43	15	69	6	46	11	821	231	19	247	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	74	119	151	159	134	21	1372	610	34	1399	622
Arrive On Green	0.08	0.08	0.08	0.09	0.09	0.09	0.01	0.39	0.39	0.02	0.39	0.39
Sat Flow, veh/h	845	983	1576	1781	1870	1576	1781	3554	1581	1781	3554	1581
Grp Volume(v), veh/h	80	0	15	69	6	46	11	821	231	19	247	7
Grp Sat Flow(s),veh/h/ln	1828	0	1576	1781	1870	1576	1781	1777	1581	1781	1777	1581
Q Serve(g_s), s	1.6	0.0	0.3	1.4	0.1	1.0	0.2	6.8	3.9	0.4	1.7	0.1
Cycle Q Clear(g_c), s	1.6	0.0	0.3	1.4	0.1	1.0	0.2	6.8	3.9	0.4	1.7	0.1
Prop In Lane	0.46		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	119	151	159	134	21	1372	610	34	1399	622
V/C Ratio(X)	0.58	0.00	0.13	0.46	0.04	0.34	0.53	0.60	0.38	0.56	0.18	0.01
Avail Cap(c_a), veh/h	1538	0	1326	1498	1573	1326	387	2218	987	387	2218	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	15.9	16.0	15.5	15.9	18.1	9.0	8.1	17.9	7.3	6.8
Incr Delay (d2), s/veh	3.8	0.0	0.5	2.1	0.1	1.5	19.8	0.4	0.4	13.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.1	0.6	0.0	0.4	0.2	1.7	0.9	0.3	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	16.4	18.2	15.6	17.4	37.9	9.5	8.5	31.3	7.3	6.8
LnGrp LOS	C	A	B	B	B	B	D	A	A	C	A	A
Approach Vol, veh/h		95			121			1063			273	
Approach Delay, s/veh		19.7			17.8			9.5			9.0	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	18.2		6.8	4.4	18.5		7.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	23.0		31.0	8.0	23.0		31.0
Max Q Clear Time (g_c+I1), s	2.4	8.8		3.6	2.2	3.7		3.4
Green Ext Time (p_c), s	0.0	5.3		0.4	0.0	1.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	2	59	21	7	41	46	880	7	11	323	93
Future Volume (veh/h)	106	2	59	21	7	41	46	880	7	11	323	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	112	2	62	22	7	43	48	926	7	12	340	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	5	244	150	48	174	85	1438	11	22	990	281
Arrive On Green	0.15	0.15	0.15	0.11	0.11	0.11	0.05	0.40	0.40	0.01	0.36	0.36
Sat Flow, veh/h	1752	31	1585	1367	435	1585	1781	3615	27	1781	2732	776
Grp Volume(v), veh/h	114	0	62	29	0	43	48	455	478	12	219	219
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1802	0	1585	1781	1777	1865	1781	1777	1731
Q Serve(g_s), s	3.1	0.0	1.9	0.8	0.0	1.3	1.4	11.3	11.3	0.4	4.9	5.0
Cycle Q Clear(g_c), s	3.1	0.0	1.9	0.8	0.0	1.3	1.4	11.3	11.3	0.4	4.9	5.0
Prop In Lane	0.98		1.00	0.76		1.00	1.00		0.01	1.00		0.45
Lane Grp Cap(c), veh/h	275	0	244	198	0	174	85	707	742	22	644	627
V/C Ratio(X)	0.41	0.00	0.25	0.15	0.00	0.25	0.57	0.64	0.64	0.55	0.34	0.35
Avail Cap(c_a), veh/h	657	0	584	664	0	584	394	828	870	394	828	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	0.0	20.2	21.9	0.0	22.1	25.3	13.2	13.2	26.7	12.6	12.6
Incr Delay (d2), s/veh	0.4	0.0	0.2	0.1	0.0	0.3	2.2	1.6	1.6	7.9	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.7	0.3	0.0	0.5	0.6	3.7	3.9	0.2	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	20.4	22.0	0.0	22.4	27.5	14.9	14.8	34.5	13.0	13.1
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		176			72			981			450	
Approach Delay, s/veh		20.9			22.2			15.5			13.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	27.3		10.0	6.6	25.4		12.4
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	25.3		20.0	12.0	25.3		20.0
Max Q Clear Time (g_c+I1), s	2.4	13.3		3.3	3.4	7.0		5.1
Green Ext Time (p_c), s	0.0	8.3		0.1	0.0	5.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	29	76	37	4	28	29	792	18	4	407	36
Future Volume (veh/h)	138	29	76	37	4	28	29	792	18	4	407	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	145	31	80	39	4	29	31	834	19	4	428	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	51	257	107	11	79	63	1222	28	12	1041	92
Arrive On Green	0.16	0.16	0.16	0.12	0.12	0.12	0.04	0.34	0.34	0.01	0.32	0.32
Sat Flow, veh/h	1480	316	1585	921	95	685	1781	3552	81	1781	3303	292
Grp Volume(v), veh/h	176	0	80	72	0	0	31	417	436	4	229	237
Grp Sat Flow(s),veh/h/ln	1796	0	1585	1701	0	0	1781	1777	1856	1781	1777	1818
Q Serve(g_s), s	4.3	0.0	2.1	1.9	0.0	0.0	0.8	9.6	9.6	0.1	4.8	4.9
Cycle Q Clear(g_c), s	4.3	0.0	2.1	1.9	0.0	0.0	0.8	9.6	9.6	0.1	4.8	4.9
Prop In Lane	0.82		1.00	0.54		0.40	1.00		0.04	1.00		0.16
Lane Grp Cap(c), veh/h	291	0	257	197	0	0	63	611	638	12	560	573
V/C Ratio(X)	0.60	0.00	0.31	0.36	0.00	0.00	0.49	0.68	0.68	0.35	0.41	0.41
Avail Cap(c_a), veh/h	528	0	466	428	0	0	448	906	946	448	906	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	0.0	17.6	19.4	0.0	0.0	22.6	13.4	13.4	23.6	12.8	12.9
Incr Delay (d2), s/veh	0.8	0.0	0.3	0.4	0.0	0.0	2.2	1.6	1.6	6.5	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.7	0.7	0.0	0.0	0.3	3.2	3.3	0.1	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.3	0.0	17.9	19.9	0.0	0.0	24.8	15.0	15.0	30.0	13.4	13.4
LnGrp LOS	B	A	B	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		256			72			884			470	
Approach Delay, s/veh		18.9			19.9			15.3			13.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	22.1		11.7	5.7	20.7		9.5
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	24.3		14.0	12.0	24.3		12.0
Max Q Clear Time (g_c+I1), s	2.1	11.6		6.3	2.8	6.9		3.9
Green Ext Time (p_c), s	0.0	4.8		0.5	0.0	2.8		0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	8	151	17	15	14	84	776	13	5	578	0
Future Volume (veh/h)	69	8	151	17	15	14	84	776	13	5	578	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	8	159	18	16	15	88	817	14	5	608	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	32	289	87	77	143	155	1237	21	12	945	0
Arrive On Green	0.18	0.18	0.18	0.09	0.09	0.09	0.09	0.35	0.35	0.01	0.27	0.00
Sat Flow, veh/h	1613	177	1585	965	857	1585	1781	3575	61	1781	3647	0
Grp Volume(v), veh/h	81	0	159	34	0	15	88	406	425	5	608	0
Grp Sat Flow(s),veh/h/ln	1790	0	1585	1822	0	1585	1781	1777	1859	1781	1777	0
Q Serve(g_s), s	1.8	0.0	4.3	0.8	0.0	0.4	2.2	9.2	9.2	0.1	7.2	0.0
Cycle Q Clear(g_c), s	1.8	0.0	4.3	0.8	0.0	0.4	2.2	9.2	9.2	0.1	7.2	0.0
Prop In Lane	0.90		1.00	0.53		1.00	1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h	326	0	289	165	0	143	155	615	644	12	945	0
V/C Ratio(X)	0.25	0.00	0.55	0.21	0.00	0.10	0.57	0.66	0.66	0.42	0.64	0.00
Avail Cap(c_a), veh/h	757	0	671	771	0	671	302	1026	1074	302	1902	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.6	0.0	17.6	19.9	0.0	19.7	20.7	13.1	13.1	23.4	15.4	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.6	0.6	0.0	0.3	1.2	1.6	1.5	8.4	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.6	0.3	0.0	0.2	0.9	3.0	3.2	0.1	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.9	0.0	19.2	20.5	0.0	20.1	21.9	14.7	14.6	31.8	16.3	0.0
LnGrp LOS	B	A	B	C	A	C	C	B	B	C	B	A
Approach Vol, veh/h		240			49			919			613	
Approach Delay, s/veh		18.4			20.4			15.4			16.5	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	18.3		12.6	4.3	22.1		8.3
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	25.3		20.0	8.0	27.3		20.0
Max Q Clear Time (g_c+I1), s	4.2	9.2		6.3	2.1	11.2		2.8
Green Ext Time (p_c), s	0.0	3.4		0.8	0.0	4.4		0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	34	36	154	73	87	64	1327	21	226	554	56
Future Volume (veh/h)	85	34	36	154	73	87	64	1327	21	226	554	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	73	2	162	77	6	67	1397	21	238	583	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	229	184	195	205	174	91	1517	23	269	1721	156
Arrive On Green	0.12	0.12	0.12	0.11	0.11	0.11	0.05	0.42	0.42	0.15	0.52	0.52
Sat Flow, veh/h	1781	1870	1507	1781	1870	1585	1781	3582	54	1781	3288	298
Grp Volume(v), veh/h	62	73	2	162	77	6	67	693	725	238	314	322
Grp Sat Flow(s),veh/h/ln	1781	1870	1507	1781	1870	1585	1781	1777	1859	1781	1777	1810
Q Serve(g_s), s	3.1	3.5	0.1	8.7	3.8	0.3	3.6	36.1	36.2	12.8	10.1	10.1
Cycle Q Clear(g_c), s	3.1	3.5	0.1	8.7	3.8	0.3	3.6	36.1	36.2	12.8	10.1	10.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.16
Lane Grp Cap(c), veh/h	218	229	184	195	205	174	91	752	787	269	930	947
V/C Ratio(X)	0.28	0.32	0.01	0.83	0.38	0.03	0.73	0.92	0.92	0.88	0.34	0.34
Avail Cap(c_a), veh/h	399	419	338	198	208	176	163	781	817	272	930	947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	39.3	37.8	42.8	40.6	39.0	45.9	26.7	26.7	40.8	13.5	13.6
Incr Delay (d2), s/veh	0.5	0.6	0.0	24.0	0.8	0.1	4.2	16.0	15.6	26.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.7	0.0	5.1	1.8	0.1	1.7	17.0	17.7	7.3	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.7	39.9	37.9	66.8	41.4	39.1	50.1	42.7	42.4	66.9	13.8	13.8
LnGrp LOS	D	D	D	E	D	D	D	D	D	E	B	B
Approach Vol, veh/h		137			245			1485			874	
Approach Delay, s/veh		39.8			58.1			42.9			28.3	
Approach LOS		D			E			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.8	47.2		16.0	9.0	57.0		16.0
Change Period (Y+Rc), s	4.0	5.7		5.3	4.0	5.7		4.0
Max Green Setting (Gmax), s	15.0	43.1		10.9	9.0	49.1		22.0
Max Q Clear Time (g_c+I1), s	14.8	38.2		10.7	5.6	12.1		5.5
Green Ext Time (p_c), s	0.0	3.3		0.0	0.0	3.7		0.3

Intersection Summary	
HCM 6th Ctrl Delay	39.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	0	140	51	0	76	149	1365	41	56	550	55
Future Volume (veh/h)	89	0	140	51	0	76	149	1365	41	56	550	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	0	147	54	0	80	157	1437	43	59	579	58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	250	0	0	176	0	0	208	1718	51	104	1526	680
Arrive On Green	0.14	0.00	0.00	0.10	0.00	0.00	0.12	0.49	0.49	0.06	0.43	0.43
Sat Flow, veh/h	1781	94		1781	54		1781	3523	105	1781	3554	1585
Grp Volume(v), veh/h	94	17.4		54	18.6		157	724	756	59	579	58
Grp Sat Flow(s),veh/h/ln	1781	B		1781	B		1781	1777	1851	1781	1777	1585
Q Serve(g_s), s	2.1			1.2			3.7	15.4	15.5	1.4	4.9	0.9
Cycle Q Clear(g_c), s	2.1			1.2			3.7	15.4	15.5	1.4	4.9	0.9
Prop In Lane	1.00			1.00			1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	250			176			208	867	903	104	1526	680
V/C Ratio(X)	0.38			0.31			0.75	0.84	0.84	0.57	0.38	0.09
Avail Cap(c_a), veh/h	489			489			489	907	945	489	1814	809
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0			18.3			18.7	9.7	9.7	20.0	8.5	7.4
Incr Delay (d2), s/veh	0.3			0.4			2.1	7.2	7.0	1.8	0.3	0.1
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8			0.5			1.4	5.2	5.4	0.5	1.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.4			18.6			20.8	16.8	16.7	21.8	8.8	7.5
LnGrp LOS	B			B			C	B	B	C	A	A
Approach Vol, veh/h								1637			696	
Approach Delay, s/veh								17.2			9.8	
Approach LOS								B			A	

Timer - Assigned Phs	1	2	3	5	6	7
Phs Duration (G+Y+Rc), s	6.6	27.0	10.1	9.1	24.5	8.3
Change Period (Y+Rc), s	4.0	5.7	4.0	4.0	5.7	4.0
Max Green Setting (Gmax), s	12.0	22.3	12.0	12.0	22.3	12.0
Max Q Clear Time (g_c+I1), s	3.4	17.5	4.1	5.7	6.9	3.2
Green Ext Time (p_c), s	0.0	3.9	0.1	0.1	4.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	7	50	82	4	15	289	1007	151	93	736	720
Future Volume (veh/h)	91	7	50	82	4	15	289	1007	151	93	736	720
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	0	0	86	4	0	304	1060	0	98	775	249
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	405	0		186	9		351	2150		156	1107	494
Arrive On Green	0.11	0.00	0.00	0.11	0.11	0.00	0.20	0.42	0.00	0.09	0.31	0.31
Sat Flow, veh/h	3563	0	1585	1706	79	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	101	0	0	90	0	0	304	1060	0	98	775	249
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1785	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	1.7	0.0	0.0	3.2	0.0	0.0	11.1	10.2	0.0	3.6	12.9	8.6
Cycle Q Clear(g_c), s	1.7	0.0	0.0	3.2	0.0	0.0	11.1	10.2	0.0	3.6	12.9	8.6
Prop In Lane	1.00		1.00	0.96		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	405	0		195	0		351	2150		156	1107	494
V/C Ratio(X)	0.25	0.00		0.46	0.00		0.87	0.49		0.63	0.70	0.50
Avail Cap(c_a), veh/h	1063	0		240	0		425	2513		266	1431	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	0.0	0.0	28.0	0.0	0.0	26.1	14.2	0.0	29.5	20.3	18.9
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.7	0.0	0.0	12.9	0.3	0.0	4.1	1.6	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	1.4	0.0	0.0	5.3	3.1	0.0	1.5	4.6	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	0.0	0.0	29.7	0.0	0.0	39.0	14.5	0.0	33.6	22.0	20.3
LnGrp LOS	C	A		C	A		D	B		C	C	C
Approach Vol, veh/h		101	A		90	A		1364	A		1122	
Approach Delay, s/veh		27.3			29.7			20.0			22.6	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	34.2		11.6	17.2	26.9		11.3
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	10.0	33.0		20.0	16.0	27.0		9.0
Max Q Clear Time (g_c+I1), s	5.6	12.2		3.7	13.1	14.9		5.2
Green Ext Time (p_c), s	0.1	8.7		0.3	0.2	6.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	4	1	42	0	80	4	1198	314	380	661	0
Future Volume (veh/h)	0	4	1	42	0	80	4	1198	314	380	661	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	4	0	44	0	2	4	1261	260	400	696	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	8	7	58	0	52	7	3005	1340	326	2862	1276
Arrive On Green	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.85	0.85	0.81	0.81	0.00
Sat Flow, veh/h	0	1870	1585	1781	0	1585	1781	3554	1585	343	3554	1585
Grp Volume(v), veh/h	0	4	0	44	0	2	4	1261	260	400	696	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	0	1585	1781	1777	1585	343	1777	1585
Q Serve(g_s), s	0.0	0.2	0.0	2.7	0.0	0.1	0.2	9.4	3.3	84.1	5.2	0.0
Cycle Q Clear(g_c), s	0.0	0.2	0.0	2.7	0.0	0.1	0.2	9.4	3.3	89.0	5.2	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	8	7	58	0	52	7	3005	1340	326	2862	1276
V/C Ratio(X)	0.00	0.51	0.00	0.76	0.00	0.04	0.54	0.42	0.19	1.23	0.24	0.00
Avail Cap(c_a), veh/h	0	271	229	258	0	229	193	3376	1506	326	2862	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	54.9	0.0	53.0	0.0	51.8	54.9	2.0	1.6	21.6	2.6	0.0
Incr Delay (d2), s/veh	0.0	43.4	0.0	18.2	0.0	0.3	49.0	0.1	0.1	126.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	1.5	0.0	0.1	0.2	0.7	0.2	20.1	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	98.4	0.0	71.2	0.0	52.1	103.9	2.1	1.6	147.9	2.6	0.0
LnGrp LOS	A	F	A	E	A	D	F	A	A	F	A	A
Approach Vol, veh/h		4			46			1525			1096	
Approach Delay, s/veh		98.4			70.4			2.3			55.6	
Approach LOS		F			E			A			E	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		97.5		4.5	4.5	93.0		8.6				
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		5.0				
Max Green Setting (Gmax), s		105.0		16.0	12.0	89.0		16.0				
Max Q Clear Time (g_c+I1), s		11.4		2.2	2.2	91.0		4.7				
Green Ext Time (p_c), s		8.4		0.0	0.0	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			25.5									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	12	96	0	5	90	320	1420	0	305	398	1
Future Volume (veh/h)	6	12	96	0	5	90	320	1420	0	305	398	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	13	5	0	5	2	337	1495	0	321	419	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	39	33	13	13	11	390	1841	0	364	1789	798
Arrive On Green	0.02	0.02	0.02	0.00	0.01	0.01	0.22	0.52	0.00	0.20	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3647	0	1781	3554	1585
Grp Volume(v), veh/h	6	13	5	0	5	2	337	1495	0	321	419	1
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	0	1781	1777	1585
Q Serve(g_s), s	0.3	0.5	0.2	0.0	0.2	0.1	14.6	28.0	0.0	14.0	5.3	0.0
Cycle Q Clear(g_c), s	0.3	0.5	0.2	0.0	0.2	0.1	14.6	28.0	0.0	14.0	5.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	39	33	13	13	11	390	1841	0	364	1789	798
V/C Ratio(X)	0.16	0.34	0.15	0.00	0.37	0.18	0.86	0.81	0.00	0.88	0.23	0.00
Avail Cap(c_a), veh/h	578	607	515	578	607	515	890	2352	0	445	1789	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	38.7	38.5	0.0	39.6	39.5	30.1	16.1	0.0	30.9	11.2	9.9
Incr Delay (d2), s/veh	2.0	5.0	2.1	0.0	16.1	7.1	5.8	1.8	0.0	16.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.1	0.0	0.2	0.1	6.4	9.7	0.0	7.2	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	43.7	40.6	0.0	55.7	46.6	35.9	17.8	0.0	46.9	11.3	9.9
LnGrp LOS	D	D	D	A	E	D	D	B	A	D	B	A
Approach Vol, veh/h		24			7			1832			741	
Approach Delay, s/veh		42.3			53.1			21.2			26.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.4	46.5		6.7	22.5	45.3		5.6
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	20.0	53.0		26.0	40.0	33.0		26.0
Max Q Clear Time (g_c+I1), s	16.0	30.0		2.5	16.6	7.3		2.2
Green Ext Time (p_c), s	0.4	11.5		0.0	0.9	2.5		0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	0	47	16	0	0	5	1572	334	48	458	7
Future Volume (veh/h)	52	0	47	16	0	0	5	1572	334	48	458	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	0	49	17	0	0	5	1655	352	51	482	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	0	151	124	0	55	14	2228	994	65	3400	49
Arrive On Green	0.09	0.00	0.09	0.03	0.00	0.00	0.01	0.63	0.63	0.04	0.66	0.66
Sat Flow, veh/h	1781	0	1585	3563	0	1585	1781	3554	1585	1781	5186	75
Grp Volume(v), veh/h	55	0	49	17	0	0	5	1655	352	51	316	173
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1702	1857
Q Serve(g_s), s	2.5	0.0	2.5	0.4	0.0	0.0	0.2	28.3	9.3	2.5	3.1	3.1
Cycle Q Clear(g_c), s	2.5	0.0	2.5	0.4	0.0	0.0	0.2	28.3	9.3	2.5	3.1	3.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	169	0	151	124	0	55	14	2228	994	65	2232	1218
V/C Ratio(X)	0.33	0.00	0.33	0.14	0.00	0.00	0.36	0.74	0.35	0.78	0.14	0.14
Avail Cap(c_a), veh/h	409	0	364	818	0	364	164	3426	1528	164	3282	1790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	36.8	40.8	0.0	0.0	43.0	11.3	7.8	41.6	5.7	5.7
Incr Delay (d2), s/veh	0.4	0.0	0.5	0.2	0.0	0.0	5.6	0.7	0.3	7.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.0	0.2	0.0	0.0	0.1	8.0	2.3	1.1	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	0.0	37.3	41.0	0.0	0.0	48.6	12.0	8.1	49.1	5.7	5.8
LnGrp LOS	D	A	D	D	A	A	D	B	A	D	A	A
Approach Vol, veh/h		104			17			2012			540	
Approach Delay, s/veh		37.3			41.0			11.4			9.8	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	60.6		12.3	4.7	63.1		7.0
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	8.0	84.0		20.0	8.0	84.0		20.0
Max Q Clear Time (g_c+I1), s	4.5	30.3		4.5	2.2	5.1		2.4
Green Ext Time (p_c), s	0.0	24.3		0.0	0.0	3.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	8	104	84	15	49	132	1628	19	6	919	22
Future Volume (veh/h)	114	8	104	84	15	49	132	1628	19	6	919	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	8	109	88	16	52	139	1714	20	6	967	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	12	166	132	24	138	177	2422	28	8	1902	45
Arrive On Green	0.11	0.11	0.11	0.09	0.09	0.09	0.10	0.47	0.47	0.00	0.37	0.37
Sat Flow, veh/h	1675	112	1541	1518	276	1585	1781	5202	61	1781	5129	122
Grp Volume(v), veh/h	128	0	109	104	0	52	139	1122	612	6	642	348
Grp Sat Flow(s),veh/h/ln	1787	0	1541	1794	0	1585	1781	1702	1859	1781	1702	1846
Q Serve(g_s), s	4.2	0.0	4.2	3.4	0.0	1.9	4.7	16.1	16.1	0.2	9.0	9.0
Cycle Q Clear(g_c), s	4.2	0.0	4.2	3.4	0.0	1.9	4.7	16.1	16.1	0.2	9.0	9.0
Prop In Lane	0.94		1.00	0.85		1.00	1.00		0.03	1.00		0.07
Lane Grp Cap(c), veh/h	192	0	166	156	0	138	177	1585	865	8	1263	685
V/C Ratio(X)	0.67	0.00	0.66	0.67	0.00	0.38	0.79	0.71	0.71	0.71	0.51	0.51
Avail Cap(c_a), veh/h	585	0	504	587	0	519	261	1730	944	232	1397	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	26.3	27.2	0.0	26.5	27.0	13.1	13.1	30.5	15.0	15.0
Incr Delay (d2), s/veh	1.5	0.0	1.7	1.8	0.0	0.6	5.0	1.7	3.1	33.1	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.5	1.5	0.0	0.7	2.0	4.6	5.4	0.2	2.8	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	0.0	28.0	29.0	0.0	27.1	32.0	14.8	16.2	63.6	15.7	16.3
LnGrp LOS	C	A	C	C	A	C	C	B	B	E	B	B
Approach Vol, veh/h		237			156			1873			996	
Approach Delay, s/veh		27.9			28.4			16.5			16.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.1	28.8		10.6	4.3	34.6		11.9
Change Period (Y+Rc), s	4.0	6.0		5.3	4.0	6.0		5.3
Max Green Setting (Gmax), s	9.0	25.2		20.1	8.0	31.2		20.1
Max Q Clear Time (g_c+I1), s	6.7	11.0		5.4	2.2	18.1		6.2
Green Ext Time (p_c), s	0.0	7.0		0.3	0.0	10.5		0.5

Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	734	215	163	280	159	69	1567	112	170	846	99
Future Volume (veh/h)	180	734	215	163	280	159	69	1567	112	170	846	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	189	773	118	172	295	75	73	1649	0	179	891	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	855	377	195	1439	442	154	2318		224	2422	
Arrive On Green	0.07	0.24	0.24	0.11	0.28	0.28	0.04	0.45	0.00	0.06	0.47	0.00
Sat Flow, veh/h	3456	3554	1565	1781	5106	1568	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	189	773	118	172	295	75	73	1649	0	179	891	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1565	1781	1702	1568	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	8.1	31.7	9.3	14.3	6.6	5.4	3.1	39.1	0.0	7.7	16.7	0.0
Cycle Q Clear(g_c), s	8.1	31.7	9.3	14.3	6.6	5.4	3.1	39.1	0.0	7.7	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	855	377	195	1439	442	154	2318		224	2422	
V/C Ratio(X)	0.80	0.90	0.31	0.88	0.21	0.17	0.48	0.71		0.80	0.37	
Avail Cap(c_a), veh/h	323	931	410	249	1576	484	184	2318		253	2422	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	68.9	55.3	46.8	65.9	41.1	40.6	70.0	33.0	0.0	69.2	25.1	0.0
Incr Delay (d2), s/veh	6.8	11.7	0.6	21.4	0.1	0.2	0.8	1.2	0.0	12.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	15.1	3.6	7.5	2.7	2.1	1.4	15.7	0.0	3.7	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.7	67.0	47.4	87.3	41.1	40.9	70.8	34.2	0.0	82.1	25.5	0.0
LnGrp LOS	E	E	D	F	D	D	E	C		F	C	
Approach Vol, veh/h		1080			542			1722	A		1070	A
Approach Delay, s/veh		66.4			55.7			35.8			35.0	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	77.1	14.2	48.0	13.7	74.1	20.4	41.8
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	8.0	62.0	14.0	46.3	11.0	* 59	21.0	39.3
Max Q Clear Time (g_c+I1), s	5.1	18.7	10.1	8.6	9.7	41.1	16.3	33.7
Green Ext Time (p_c), s	0.0	7.5	0.1	2.1	0.1	12.4	0.1	2.4

Intersection Summary	
HCM 6th Ctrl Delay	45.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1	33	37	1	19	18	1733	2	7	1233	8
Future Volume (veh/h)	33	1	33	37	1	19	18	1733	2	7	1233	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	1	35	39	1	20	19	1824	2	7	1298	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1	44	138	2	30	725	3998	4	10	1752	11
Arrive On Green	0.05	0.05	0.05	0.05	0.05	0.05	0.41	0.76	0.76	0.01	0.33	0.33
Sat Flow, veh/h	835	24	835	1117	29	573	1781	5268	6	1781	5236	32
Grp Volume(v), veh/h	71	0	0	60	0	0	19	1179	647	7	844	462
Grp Sat Flow(s),veh/h/ln	1694	0	0	1719	0	0	1781	1702	1869	1781	1702	1865
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	0.0	0.5	9.6	9.6	0.3	16.4	16.4
Cycle Q Clear(g_c), s	3.0	0.0	0.0	2.4	0.0	0.0	0.5	9.6	9.6	0.3	16.4	16.4
Prop In Lane	0.49		0.49	0.65		0.33	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	161	0	0	170	0	0	725	2583	1419	10	1139	624
V/C Ratio(X)	0.44	0.00	0.00	0.35	0.00	0.00	0.03	0.46	0.46	0.72	0.74	0.74
Avail Cap(c_a), veh/h	499	0	0	498	0	0	725	2583	1419	190	1466	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	0.0	0.0	34.8	0.0	0.0	13.3	3.3	3.3	37.2	22.1	22.1
Incr Delay (d2), s/veh	1.9	0.0	0.0	1.2	0.0	0.0	0.0	0.6	1.1	31.3	1.8	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	1.1	0.0	0.0	0.2	1.4	1.7	0.2	6.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	0.0	0.0	36.0	0.0	0.0	13.3	3.9	4.4	68.5	23.8	25.3
LnGrp LOS	D	A	A	D	A	A	B	A	A	E	C	C
Approach Vol, veh/h		71			60			1845			1313	
Approach Delay, s/veh		36.9			36.0			4.2			24.6	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	62.6		8.0	36.2	30.8		8.0
Change Period (Y+Rc), s	4.0	5.7		4.0	5.7	* 5.7		4.0
Max Green Setting (Gmax), s	8.0	32.3		21.0	8.0	* 32		21.0
Max Q Clear Time (g_c+I1), s	2.3	11.6		5.0	2.5	18.4		4.4
Green Ext Time (p_c), s	0.0	12.1		0.2	0.0	6.6		0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	160	311	108	74	41	151	1688	48	96	1747	40
Future Volume (veh/h)	135	160	311	108	74	41	151	1688	48	96	1747	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	142	168	231	114	78	0	159	1777	0	101	1839	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	606	268	158	440		205	2507		144	2432	54
Arrive On Green	0.09	0.17	0.17	0.05	0.12	0.00	0.06	0.49	0.00	0.04	0.47	0.47
Sat Flow, veh/h	1781	3554	1571	3456	3554	1585	3456	5106	1585	3456	5139	114
Grp Volume(v), veh/h	142	168	231	114	78	0	159	1777	0	101	1218	662
Grp Sat Flow(s),veh/h/ln	1781	1777	1571	1728	1777	1585	1728	1702	1585	1728	1702	1849
Q Serve(g_s), s	11.8	6.2	21.4	4.9	2.9	0.0	6.8	40.8	0.0	4.3	44.0	44.1
Cycle Q Clear(g_c), s	11.8	6.2	21.4	4.9	2.9	0.0	6.8	40.8	0.0	4.3	44.0	44.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	165	606	268	158	440		205	2507		144	1611	875
V/C Ratio(X)	0.86	0.28	0.86	0.72	0.18		0.78	0.71		0.70	0.76	0.76
Avail Cap(c_a), veh/h	238	907	401	207	647		276	2553		184	1611	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.1	54.2	60.5	70.6	58.9	0.0	69.6	29.8	0.0	70.9	32.4	32.4
Incr Delay (d2), s/veh	14.3	0.3	13.7	4.9	0.3	0.0	6.3	0.9	0.0	4.7	3.4	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	2.8	9.5	2.3	1.4	0.0	3.2	16.4	0.0	2.0	18.4	20.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.4	54.5	74.2	75.5	59.1	0.0	75.8	30.8	0.0	75.7	35.7	38.5
LnGrp LOS	F	D	E	E	E		E	C		E	D	D
Approach Vol, veh/h		541			192	A		1936	A		1981	
Approach Delay, s/veh		70.0			68.8			34.5			38.7	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	24.3	10.3	79.6	10.9	31.3	12.9	77.0
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	20.0	27.3	8.0	75.0	9.0	38.3	12.0	71.0
Max Q Clear Time (g_c+I1), s	13.8	4.9	6.3	42.8	6.9	23.4	8.8	46.1
Green Ext Time (p_c), s	0.1	0.3	0.0	14.1	0.0	2.1	0.1	12.6

Intersection Summary	
HCM 6th Ctrl Delay	41.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	16	49	93	14	169	190	949	319	656	1248	5
Future Volume (veh/h)	5	16	49	93	14	169	190	949	319	656	1248	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	17	0	98	15	2	200	999	203	691	1314	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	55	30	25	148	78	66	224	2184	974	765	2522	1125
Arrive On Green	0.02	0.02	0.00	0.04	0.04	0.04	0.13	0.61	0.61	0.22	0.71	0.71
Sat Flow, veh/h	3456	1870	1585	3563	1870	1585	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	5	17	0	98	15	2	200	999	203	691	1314	3
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.2	1.4	0.0	4.1	1.2	0.2	16.6	22.6	8.5	29.2	25.5	0.1
Cycle Q Clear(g_c), s	0.2	1.4	0.0	4.1	1.2	0.2	16.6	22.6	8.5	29.2	25.5	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	55	30	25	148	78	66	224	2184	974	765	2522	1125
V/C Ratio(X)	0.09	0.57	0.00	0.66	0.19	0.03	0.89	0.46	0.21	0.90	0.52	0.00
Avail Cap(c_a), veh/h	369	200	169	380	200	169	321	2184	974	968	2522	1125
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.7	73.3	0.0	70.9	69.5	69.0	64.5	15.5	12.8	56.8	10.0	6.3
Incr Delay (d2), s/veh	0.7	15.8	0.0	5.0	1.2	0.2	19.3	0.7	0.5	9.9	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.8	0.0	1.9	0.6	0.1	8.6	8.9	3.0	13.5	9.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	89.1	0.0	75.9	70.7	69.2	83.8	16.2	13.3	66.8	10.8	6.3
LnGrp LOS	E	F	A	E	E	E	F	B	B	E	B	A
Approach Vol, veh/h		22			115			1402			2008	
Approach Delay, s/veh		85.5			75.1			25.4			30.0	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	37.2	96.2		6.4	22.9	110.5		10.2				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	42.0	60.0		16.0	27.0	75.0		16.0				
Max Q Clear Time (g_c+I1), s	31.2	24.6		3.4	18.6	27.5		6.1				
Green Ext Time (p_c), s	2.0	8.6		0.0	0.3	12.3		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	30.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	80	45	551	131	25	640
Future Volume (veh/h)	80	45	551	131	25	640
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	47	580	138	26	674
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	339	302	1240	553	69	1806
Arrive On Green	0.19	0.19	0.35	0.35	0.04	0.51
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	84	47	580	138	26	674
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	1.3	0.8	4.2	2.1	0.5	3.8
Cycle Q Clear(g_c), s	1.3	0.8	4.2	2.1	0.5	3.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	339	302	1240	553	69	1806
V/C Ratio(X)	0.25	0.16	0.47	0.25	0.38	0.37
Avail Cap(c_a), veh/h	1290	1147	2251	1004	430	3323
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	11.2	8.4	7.7	15.6	4.9
Incr Delay (d2), s/veh	0.4	0.2	0.5	0.5	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	1.2	0.5	0.2	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.8	11.4	8.9	8.2	16.8	5.2
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	131		718			700
Approach Delay, s/veh	11.7		8.8			5.6
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.3	17.6				22.8	10.3
Change Period (Y+Rc), s	4.0	6.0				6.0	4.0
Max Green Setting (Gmax), s	8.0	21.0				31.0	24.0
Max Q Clear Time (g_c+I1), s	2.5	6.2				5.8	3.3
Green Ext Time (p_c), s	0.0	5.4				6.5	0.4

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	133	375	1201	763	9
Future Volume (veh/h)	3	133	375	1201	763	9
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	140	395	1264	803	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	202	180	471	2390	1071	477
Arrive On Green	0.11	0.11	0.26	0.67	0.30	0.30
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	3	140	395	1264	803	9
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	0.1	4.0	9.8	8.4	9.5	0.2
Cycle Q Clear(g_c), s	0.1	4.0	9.8	8.4	9.5	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	202	180	471	2390	1071	477
V/C Ratio(X)	0.01	0.78	0.84	0.53	0.75	0.02
Avail Cap(c_a), veh/h	610	543	648	2966	1293	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	20.1	16.3	3.9	14.7	11.5
Incr Delay (d2), s/veh	0.0	7.1	7.1	0.2	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	4.3	1.4	3.5	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	27.2	23.3	4.1	16.7	11.5
LnGrp LOS	B	C	C	A	B	B
Approach Vol, veh/h	143			1659	812	
Approach Delay, s/veh	27.0			8.7	16.7	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.4		10.3	17.3	19.1
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		39.0		16.0	17.0	17.0
Max Q Clear Time (g_c+I1), s		10.4		6.0	11.8	11.5
Green Ext Time (p_c), s		11.4		0.3	0.6	2.5

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	10	13	66	0	195	5	1189	98	169	578	27
Future Volume (veh/h)	8	10	13	66	0	195	5	1189	98	169	578	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	11	14	69	0	205	5	1252	103	178	608	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	120	112	348	0	256	17	1639	135	220	2100	97
Arrive On Green	0.16	0.16	0.16	0.16	0.00	0.16	0.01	0.49	0.49	0.12	0.61	0.61
Sat Flow, veh/h	198	739	690	1425	0	1570	1781	3324	273	1781	3459	159
Grp Volume(v), veh/h	33	0	0	69	0	205	5	668	687	178	312	324
Grp Sat Flow(s),veh/h/ln	1627	0	0	1425	0	1570	1781	1777	1820	1781	1777	1841
Q Serve(g_s), s	0.0	0.0	0.0	1.4	0.0	7.8	0.2	19.0	19.1	6.0	5.2	5.2
Cycle Q Clear(g_c), s	1.0	0.0	0.0	2.4	0.0	7.8	0.2	19.0	19.1	6.0	5.2	5.2
Prop In Lane	0.24		0.42	1.00		1.00	1.00		0.15	1.00		0.09
Lane Grp Cap(c), veh/h	337	0	0	348	0	256	17	876	897	220	1079	1118
V/C Ratio(X)	0.10	0.00	0.00	0.20	0.00	0.80	0.30	0.76	0.77	0.81	0.29	0.29
Avail Cap(c_a), veh/h	581	0	0	569	0	506	230	896	917	230	1079	1118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	0.0	0.0	22.7	0.0	25.0	30.5	12.8	12.8	26.5	5.8	5.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	2.2	3.7	4.3	4.3	17.0	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.9	0.0	2.9	0.1	6.3	6.5	3.3	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.2	0.0	0.0	22.8	0.0	27.3	34.3	17.1	17.1	43.5	6.1	6.1
LnGrp LOS	C	A	A	C	A	C	C	B	B	D	A	A
Approach Vol, veh/h		33			274			1360			814	
Approach Delay, s/veh		22.2			26.1			17.2			14.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.7	36.3		14.1	4.6	43.4		14.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	31.3		20.0	8.0	29.3		20.0
Max Q Clear Time (g_c+I1), s	8.0	21.1		3.0	2.2	7.2		9.8
Green Ext Time (p_c), s	0.0	9.5		0.0	0.0	11.0		0.4

Intersection Summary	
HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	1	58	18	1	15	30	1172	55	17	599	24
Future Volume (veh/h)	103	1	58	18	1	15	30	1172	55	17	599	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	1	61	19	1	16	32	1234	58	18	631	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	1	133	45	2	41	403	2419	1077	22	1560	62
Arrive On Green	0.08	0.08	0.08	0.03	0.03	0.03	0.23	0.68	0.68	0.01	0.45	0.45
Sat Flow, veh/h	1766	16	1585	1696	89	1542	1781	3554	1583	1781	3484	138
Grp Volume(v), veh/h	109	0	61	20	0	16	32	1234	58	18	322	334
Grp Sat Flow(s),veh/h/ln	1782	0	1585	1786	0	1542	1781	1777	1583	1781	1777	1845
Q Serve(g_s), s	5.4	0.0	3.3	1.0	0.0	0.9	1.3	15.3	1.1	0.9	11.0	11.0
Cycle Q Clear(g_c), s	5.4	0.0	3.3	1.0	0.0	0.9	1.3	15.3	1.1	0.9	11.0	11.0
Prop In Lane	0.99		1.00	0.95		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	150	0	133	47	0	41	403	2419	1077	22	796	826
V/C Ratio(X)	0.73	0.00	0.46	0.42	0.00	0.39	0.08	0.51	0.05	0.84	0.40	0.40
Avail Cap(c_a), veh/h	317	0	282	159	0	137	403	2419	1077	158	796	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	39.3	43.1	0.0	43.1	27.4	7.0	4.8	44.4	16.8	16.8
Incr Delay (d2), s/veh	2.5	0.0	0.9	2.2	0.0	2.3	0.0	0.4	0.1	25.5	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.3	0.5	0.0	0.4	0.5	3.9	0.3	0.5	4.2	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	0.0	40.2	45.4	0.0	45.4	27.5	7.4	4.8	69.9	18.3	18.2
LnGrp LOS	D	A	D	D	A	D	C	A	A	E	B	B
Approach Vol, veh/h		170			36			1324			674	
Approach Delay, s/veh		41.8			45.4			7.8			19.6	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.1	46.0		6.4	5.1	67.0		11.6
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	* 40		8.0	8.0	40.3		16.0
Max Q Clear Time (g_c+I1), s	3.3	13.0		3.0	2.9	17.3		7.4
Green Ext Time (p_c), s	0.0	15.4		0.0	0.0	21.0		0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	391	0	882	3	3	1	376	860	0	2	556	117
Future Volume (veh/h)	391	0	882	3	3	1	376	860	0	2	556	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	412	0	0	3	3	1	396	905	0	2	585	123
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	514	0		29	22	7	469	2271	0	7	1842	822
Arrive On Green	0.14	0.00	0.00	0.02	0.02	0.02	0.14	0.64	0.00	0.00	0.52	0.52
Sat Flow, veh/h	3563	0	1585	1781	1342	447	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	412	0	0	3	0	4	396	905	0	2	585	123
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1790	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	10.1	0.0	0.0	0.1	0.0	0.2	10.1	11.1	0.0	0.1	8.5	3.6
Cycle Q Clear(g_c), s	10.1	0.0	0.0	0.1	0.0	0.2	10.1	11.1	0.0	0.1	8.5	3.6
Prop In Lane	1.00		1.00	1.00		0.25	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	514	0		29	0	29	469	2271	0	7	1842	822
V/C Ratio(X)	0.80	0.00		0.10	0.00	0.14	0.85	0.40	0.00	0.30	0.32	0.15
Avail Cap(c_a), veh/h	910	0		238	0	239	499	2271	0	158	1842	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	0.0	0.0	43.6	0.0	43.7	38.0	7.9	0.0	44.7	12.5	11.3
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.6	0.0	0.8	11.2	0.5	0.0	8.7	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	0.0	0.1	0.0	0.1	4.9	3.9	0.0	0.1	2.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.0	0.0	44.2	0.0	44.5	49.2	8.4	0.0	53.5	12.6	11.4
LnGrp LOS	D	A		D	A	D	D	A	A	D	B	B
Approach Vol, veh/h		412	A		7			1301			710	
Approach Delay, s/veh		38.4			44.4			20.8			12.6	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	63.2		5.4	15.2	52.4		17.0
Change Period (Y+Rc), s	4.0	5.7		4.0	3.0	* 5.7		4.0
Max Green Setting (Gmax), s	8.0	29.3		12.0	13.0	* 26		23.0
Max Q Clear Time (g_c+I1), s	2.1	13.1		2.2	12.1	10.5		12.1
Green Ext Time (p_c), s	0.0	5.8		0.0	0.1	4.4		0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	0	45	52	1	63	67	445	11	43	359	96
Future Volume (veh/h)	93	0	45	52	1	63	67	445	11	43	359	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	0	47	55	1	66	71	468	12	45	378	101
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	584	0	260	274	4	240	161	899	401	101	780	348
Arrive On Green	0.16	0.00	0.16	0.15	0.15	0.15	0.09	0.25	0.25	0.06	0.22	0.22
Sat Flow, veh/h	3563	0	1585	1781	24	1565	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	98	0	47	55	0	67	71	468	12	45	378	101
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1589	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.1	0.0	1.2	1.3	0.0	1.7	1.8	5.3	0.3	1.1	4.3	2.5
Cycle Q Clear(g_c), s	1.1	0.0	1.2	1.3	0.0	1.7	1.8	5.3	0.3	1.1	4.3	2.5
Prop In Lane	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	584	0	260	274	0	244	161	899	401	101	780	348
V/C Ratio(X)	0.17	0.00	0.18	0.20	0.00	0.27	0.44	0.52	0.03	0.44	0.48	0.29
Avail Cap(c_a), veh/h	1534	0	683	767	0	684	460	2732	1218	460	2732	1218
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	16.7	17.2	0.0	17.4	20.0	14.9	13.1	21.2	15.8	15.1
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.1	0.0	0.2	0.7	0.6	0.0	1.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.4	0.5	0.0	0.6	0.7	1.8	0.1	0.4	1.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.7	0.0	16.8	17.3	0.0	17.6	20.7	15.6	13.1	22.3	16.5	15.7
LnGrp LOS	B	A	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		145			122			551			524	
Approach Delay, s/veh		16.8			17.5			16.2			16.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	17.0		11.1	8.2	15.5		11.6				
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0				
Max Green Setting (Gmax), s	12.0	35.7		20.0	12.0	35.7		20.0				
Max Q Clear Time (g_c+I1), s	3.1	7.3		3.7	3.8	6.3		3.2				
Green Ext Time (p_c), s	0.0	4.3		0.2	0.0	3.9		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	40	22	6	55	23
Future Volume (veh/h)	5	40	22	6	55	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	42	23	6	58	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	143	127	190	161	147	803
Arrive On Green	0.08	0.08	0.10	0.10	0.08	0.43
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	5	42	23	6	58	24
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	0.1	0.5	0.2	0.1	0.6	0.2
Cycle Q Clear(g_c), s	0.1	0.5	0.2	0.1	0.6	0.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	143	127	190	161	147	803
V/C Ratio(X)	0.03	0.33	0.12	0.04	0.40	0.03
Avail Cap(c_a), veh/h	1835	1632	2018	1710	612	3119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.6	8.9	8.3	8.3	8.9	3.4
Incr Delay (d2), s/veh	0.1	1.5	0.3	0.1	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.7	10.4	8.6	8.4	10.6	3.4
LnGrp LOS	A	B	A	A	B	A
Approach Vol, veh/h	47		29			82
Approach Delay, s/veh	10.2		8.6			8.5
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.7	7.1				13.8	6.6
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	7.0	22.0				34.0	21.0
Max Q Clear Time (g_c+I1), s	2.6	2.2				2.2	2.5
Green Ext Time (p_c), s	0.0	0.1				0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	404	10	58	450	12	39	7	21	7	49	10
Future Volume (veh/h)	3	404	10	58	450	12	39	7	21	7	49	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	425	11	61	474	13	46	0	22	7	52	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	904	403	94	1083	483	204	0	91	11	79	17
Arrive On Green	0.00	0.25	0.25	0.05	0.30	0.30	0.06	0.00	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	181	1345	284
Grp Volume(v), veh/h	3	425	11	61	474	13	46	0	22	70	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1810	0	0
Q Serve(g_s), s	0.1	3.1	0.2	1.0	3.3	0.2	0.4	0.0	0.4	1.2	0.0	0.0
Cycle Q Clear(g_c), s	0.1	3.1	0.2	1.0	3.3	0.2	0.4	0.0	0.4	1.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.10		0.16
Lane Grp Cap(c), veh/h	6	904	403	94	1083	483	204	0	91	106	0	0
V/C Ratio(X)	0.52	0.47	0.03	0.65	0.44	0.03	0.23	0.00	0.24	0.66	0.00	0.00
Avail Cap(c_a), veh/h	697	3046	1359	697	3046	1359	1742	0	775	826	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.3	9.7	8.6	14.2	8.6	7.5	13.8	0.0	13.8	14.1	0.0	0.0
Incr Delay (d2), s/veh	24.0	0.5	0.0	2.8	0.4	0.0	0.2	0.0	0.5	2.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.7	0.0	0.4	0.7	0.0	0.1	0.0	0.1	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	10.2	8.6	17.0	9.0	7.5	14.0	0.0	14.3	16.7	0.0	0.0
LnGrp LOS	D	B	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		439			548			68			70	
Approach Delay, s/veh		10.4			9.8			14.1			16.7	
Approach LOS		B			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.8	5.6	13.5		5.8	4.1	15.0				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		14.0	12.0	26.3		15.0	12.0	26.3				
Max Q Clear Time (g_c+I1), s		3.2	3.0	5.1		2.4	2.1	5.3				
Green Ext Time (p_c), s		0.1	0.0	2.7		0.1	0.0	3.0				

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	352	149	28	314	13	51	6	17	22	25	73
Future Volume (veh/h)	41	352	149	28	314	13	51	6	17	22	25	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	371	157	29	331	14	58	0	18	23	26	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	1038	463	38	1008	450	215	0	96	150	158	134
Arrive On Green	0.03	0.29	0.29	0.02	0.28	0.28	0.06	0.00	0.06	0.08	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	1781	1870	1585
Grp Volume(v), veh/h	43	371	157	29	331	14	58	0	18	23	26	77
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	1585
Q Serve(g_s), s	0.8	2.8	2.6	0.5	2.5	0.2	0.5	0.0	0.4	0.4	0.4	1.6
Cycle Q Clear(g_c), s	0.8	2.8	2.6	0.5	2.5	0.2	0.5	0.0	0.4	0.4	0.4	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	53	1038	463	38	1008	450	215	0	96	150	158	134
V/C Ratio(X)	0.82	0.36	0.34	0.77	0.33	0.03	0.27	0.00	0.19	0.15	0.16	0.58
Avail Cap(c_a), veh/h	422	2000	892	422	2000	892	844	0	376	828	870	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	9.4	9.4	16.4	9.6	8.7	15.2	0.0	15.1	14.3	14.4	14.9
Incr Delay (d2), s/veh	10.9	0.3	0.6	11.5	0.3	0.0	0.2	0.0	0.3	0.7	0.7	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.6	0.3	0.6	0.0	0.2	0.0	0.1	0.2	0.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	9.7	10.0	28.0	9.8	8.8	15.4	0.0	15.4	15.0	15.0	20.3
LnGrp LOS	C	A	B	C	A	A	B	A	B	B	B	C
Approach Vol, veh/h		571			374			76			126	
Approach Delay, s/veh		11.1			11.2			15.4			18.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.0	4.7	15.6		7.5	5.0	15.3				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.6	4.0	5.7				
Max Green Setting (Gmax), s		8.0	8.0	19.0		15.7	8.0	19.0				
Max Q Clear Time (g_c+I1), s		2.5	2.5	4.8		3.6	2.8	4.5				
Green Ext Time (p_c), s		0.1	0.0	5.1		0.5	0.0	3.9				

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	268	61	17	228	3	33	7	2	0	7	23
Future Volume (veh/h)	77	268	61	17	228	3	33	7	2	0	7	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	282	64	18	240	3	35	7	2	0	7	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	1012	451	25	866	386	62	12	66	0	57	49
Arrive On Green	0.05	0.28	0.28	0.01	0.24	0.24	0.04	0.04	0.04	0.00	0.03	0.03
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1496	299	1585	0	1870	1585
Grp Volume(v), veh/h	81	282	64	18	240	3	42	0	2	0	7	24
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1796	0	1585	0	1870	1585
Q Serve(g_s), s	1.2	1.7	0.8	0.3	1.5	0.0	0.6	0.0	0.0	0.0	0.1	0.4
Cycle Q Clear(g_c), s	1.2	1.7	0.8	0.3	1.5	0.0	0.6	0.0	0.0	0.0	0.1	0.4
Prop In Lane	1.00		1.00	1.00		1.00	0.83		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	98	1012	451	25	866	386	75	0	66	0	57	49
V/C Ratio(X)	0.83	0.28	0.14	0.72	0.28	0.01	0.56	0.00	0.03	0.00	0.12	0.49
Avail Cap(c_a), veh/h	527	2498	1114	527	2235	997	1461	0	1290	0	1522	1290
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	7.5	7.2	13.3	8.3	7.7	12.7	0.0	12.4	0.0	12.7	12.9
Incr Delay (d2), s/veh	6.5	0.2	0.2	13.4	0.3	0.0	7.7	0.0	0.2	0.0	1.1	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.3	0.2	0.2	0.3	0.0	0.4	0.0	0.0	0.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	7.7	7.4	26.7	8.6	7.8	20.5	0.0	12.7	0.0	13.9	21.9
LnGrp LOS	B	A	A	C	A	A	C	A	B	A	B	C
Approach Vol, veh/h		427			261			44			31	
Approach Delay, s/veh		9.9			9.8			20.1			20.1	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.8	4.4	12.7		5.1	5.5	11.6
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	4.0	5.0
Max Green Setting (Gmax), s		22.0	8.0	19.0		22.0	8.0	17.0
Max Q Clear Time (g_c+I1), s		2.4	2.3	3.7		2.6	3.2	3.5
Green Ext Time (p_c), s		0.1	0.0	4.0		0.1	0.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	154	123	3	131	68	60	12	5	28	56	13
Future Volume (veh/h)	26	154	123	3	131	68	60	12	5	28	56	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	162	129	3	138	72	72	0	5	29	59	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	752	439	7	554	247	233	0	103	48	98	126
Arrive On Green	0.02	0.21	0.21	0.00	0.16	0.16	0.07	0.00	0.07	0.08	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	606	1234	1585
Grp Volume(v), veh/h	27	162	129	3	138	72	72	0	5	88	0	14
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1840	0	1585
Q Serve(g_s), s	0.4	1.0	1.7	0.0	0.9	1.1	0.5	0.0	0.1	1.2	0.0	0.2
Cycle Q Clear(g_c), s	0.4	1.0	1.7	0.0	0.9	1.1	0.5	0.0	0.1	1.2	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.33		1.00
Lane Grp Cap(c), veh/h	36	752	439	7	554	247	233	0	103	147	0	126
V/C Ratio(X)	0.74	0.22	0.29	0.45	0.25	0.29	0.31	0.00	0.05	0.60	0.00	0.11
Avail Cap(c_a), veh/h	537	2412	1179	537	2278	1016	3224	0	1434	555	0	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.9	8.6	7.5	13.2	9.8	9.9	11.8	0.0	11.6	11.8	0.0	11.3
Incr Delay (d2), s/veh	10.5	0.2	0.6	16.3	0.4	1.0	0.9	0.0	0.2	1.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.4	0.0	0.2	0.3	0.2	0.0	0.0	0.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	8.9	8.1	29.5	10.2	10.9	12.7	0.0	11.9	13.3	0.0	11.5
LnGrp LOS	C	A	A	C	B	B	B	A	B	B	A	B
Approach Vol, veh/h		318			213			77			102	
Approach Delay, s/veh		9.8			10.7			12.7			13.0	
Approach LOS		A			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.7	4.1	10.6		6.1	5.5	9.1				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	5.0	* 5				
Max Green Setting (Gmax), s		24.0	8.0	18.0		8.0	8.0	* 17				
Max Q Clear Time (g_c+I1), s		2.5	2.0	3.7		3.2	2.4	3.1				
Green Ext Time (p_c), s		0.3	0.0	1.6		0.1	0.0	1.1				

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	35	86	50	15	7	21	494	73	26	956	101
Future Volume (veh/h)	160	35	86	50	15	7	21	494	73	26	956	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1870	1870	1870	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	168	37	91	53	16	7	22	520	77	27	1006	106
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	67	164	378	78	34	44	1861	576	59	2150	666
Arrive On Green	0.19	0.14	0.14	0.11	0.06	0.06	0.03	0.38	0.38	0.03	0.39	0.39
Sat Flow, veh/h	1776	476	1172	3456	1232	539	1692	4849	1501	1931	5535	1714
Grp Volume(v), veh/h	168	0	128	53	0	23	22	520	77	27	1006	106
Grp Sat Flow(s),veh/h/ln	1776	0	1648	1728	0	1771	1692	1616	1501	1931	1845	1714
Q Serve(g_s), s	4.9	0.0	4.2	0.8	0.0	0.7	0.7	4.2	1.9	0.8	7.8	0.9
Cycle Q Clear(g_c), s	4.9	0.0	4.2	0.8	0.0	0.7	0.7	4.2	1.9	0.8	7.8	0.9
Prop In Lane	1.00		0.71	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	0	231	378	0	113	44	1861	576	59	2150	666
V/C Ratio(X)	0.51	0.00	0.56	0.14	0.00	0.20	0.50	0.28	0.13	0.46	0.47	0.16
Avail Cap(c_a), veh/h	330	0	575	663	0	689	236	2088	647	269	2384	738
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	23.0	23.1	0.0	25.5	27.6	12.2	11.5	27.3	13.1	1.6
Incr Delay (d2), s/veh	0.5	0.0	1.8	0.1	0.0	0.3	3.3	0.2	0.2	2.1	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.6	0.3	0.0	0.3	0.3	1.2	0.6	0.3	2.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	0.0	24.8	23.2	0.0	25.8	30.9	12.4	11.7	29.4	13.4	1.8
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	A
Approach Vol, veh/h		296			76			619			1139	
Approach Delay, s/veh		22.9			24.0			12.9			12.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	28.0	10.3	13.3	5.5	28.3	16.0	7.6
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	5.3	* 4
Max Green Setting (Gmax), s	8.0	24.7	11.0	20.0	8.0	24.7	10.0	* 22
Max Q Clear Time (g_c+I1), s	2.8	6.2	2.8	6.2	2.7	9.8	6.9	2.7
Green Ext Time (p_c), s	0.0	9.4	0.0	0.6	0.0	12.5	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	97	75	167	189	11	46	561	55	31	1035	33
Future Volume (veh/h)	35	97	75	167	189	11	46	561	55	31	1035	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	102	79	176	199	12	48	591	58	33	1089	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	346	154	223	236	14	81	3521	1093	59	3489	1083
Arrive On Green	0.03	0.10	0.10	0.06	0.14	0.14	0.05	1.00	1.00	0.02	0.68	0.68
Sat Flow, veh/h	1781	3554	1585	3456	1746	105	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	37	102	79	176	0	211	48	591	58	33	1089	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	0	1851	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	3.1	4.0	7.1	7.5	0.0	16.7	2.0	0.0	0.0	1.4	12.9	1.1
Cycle Q Clear(g_c), s	3.1	4.0	7.1	7.5	0.0	16.7	2.0	0.0	0.0	1.4	12.9	1.1
Prop In Lane	1.00		1.00	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	48	346	154	223	0	250	81	3521	1093	59	3489	1083
V/C Ratio(X)	0.78	0.29	0.51	0.79	0.00	0.84	0.59	0.17	0.05	0.56	0.31	0.03
Avail Cap(c_a), veh/h	166	988	441	369	0	539	276	3521	1093	276	3489	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.5	62.9	64.3	69.2	0.0	63.3	70.8	0.0	0.0	73.2	9.6	7.7
Incr Delay (d2), s/veh	9.6	0.6	3.5	2.4	0.0	9.8	2.6	0.1	0.1	3.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.8	3.0	3.4	0.0	8.6	0.9	0.0	0.0	0.7	4.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.1	63.5	67.8	71.5	0.0	73.1	73.3	0.1	0.1	76.2	9.6	7.7
LnGrp LOS	F	E	E	E	A	E	E	A	A	E	A	A
Approach Vol, veh/h		218			387			697			1157	
Approach Delay, s/veh		68.2			72.4			5.1			11.5	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	109.8	13.7	19.9	7.5	108.9	8.0	25.6
Change Period (Y+Rc), s	4.0	* 6.4	4.0	5.3	4.0	6.4	4.0	5.3
Max Green Setting (Gmax), s	12.0	* 62	16.0	41.7	12.0	60.6	14.0	43.7
Max Q Clear Time (g_c+I1), s	3.4	2.0	9.5	9.1	4.0	14.9	5.1	18.7
Green Ext Time (p_c), s	0.0	11.3	0.2	1.2	0.0	15.5	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	21	120	145	38	56	121	686	167	40	1216	28
Future Volume (veh/h)	18	21	120	145	38	56	121	686	167	40	1216	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	0	141	153	40	59	127	722	176	42	1280	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	0	188	273	52	77	173	2757	977	668	3489	1083
Arrive On Green	0.06	0.00	0.06	0.08	0.08	0.08	0.10	1.00	1.00	0.19	0.68	0.68
Sat Flow, veh/h	1781	0	3170	3563	682	1007	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	19	0	141	153	0	99	127	722	176	42	1280	29
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1689	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	1.5	0.0	6.6	6.2	0.0	8.6	5.4	0.0	0.0	1.5	15.9	0.9
Cycle Q Clear(g_c), s	1.5	0.0	6.6	6.2	0.0	8.6	5.4	0.0	0.0	1.5	15.9	0.9
Prop In Lane	1.00		1.00	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	0	188	273	0	129	173	2757	977	668	3489	1083
V/C Ratio(X)	0.18	0.00	0.75	0.56	0.00	0.77	0.73	0.26	0.18	0.06	0.37	0.03
Avail Cap(c_a), veh/h	222	0	395	563	0	267	346	2757	977	668	3489	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.1	0.0	69.4	66.8	0.0	67.9	66.5	0.0	0.0	49.4	10.0	7.7
Incr Delay (d2), s/veh	0.8	0.0	5.8	1.8	0.0	9.1	5.9	0.2	0.4	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	2.8	2.9	0.0	4.1	2.4	0.1	0.1	0.6	5.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	0.0	75.3	68.6	0.0	77.0	72.4	0.2	0.4	49.4	10.1	7.7
LnGrp LOS	E	A	E	E	A	E	E	A	A	D	B	A
Approach Vol, veh/h		160			252			1025			1351	
Approach Delay, s/veh		74.4			71.9			9.2			11.3	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.0	86.0		14.2	12.5	106.5		16.8				
Change Period (Y+Rc), s	4.0	5.0		5.3	5.0	4.0		5.3				
Max Green Setting (Gmax), s	7.0	81.0		18.7	15.0	73.0		23.7				
Max Q Clear Time (g_c+I1), s	3.5	2.0		8.6	7.4	17.9		10.6				
Green Ext Time (p_c), s	0.0	6.2		0.4	0.2	20.6		0.9				

Intersection Summary			
HCM 6th Ctrl Delay			19.6
HCM 6th LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	299	0	0	469	400	940	0	0	1439	43
Future Volume (vph)	0	0	299	0	0	469	400	940	0	0	1439	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			4.0	4.0	5.0			5.0	5.0
Lane Util. Factor			1.00			1.00	0.97	0.91			0.91	1.00
Frt			0.86			0.86	1.00	1.00			1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1611			1611	3433	5085			5085	1583
Flt Permitted			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)			1611			1611	3433	5085			5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	315	0	0	494	421	989	0	0	1515	45
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	14
Lane Group Flow (vph)	0	0	315	0	0	494	421	989	0	0	1515	31
Turn Type			Free			Free	Prot	NA			NA	Perm
Protected Phases							5	2			6	
Permitted Phases			Free			Free						6
Actuated Green, G (s)			75.0			75.0	14.3	75.0			51.7	51.7
Effective Green, g (s)			75.0			75.0	14.3	75.0			51.7	51.7
Actuated g/C Ratio			1.00			1.00	0.19	1.00			0.69	0.69
Clearance Time (s)							4.0	5.0			5.0	5.0
Vehicle Extension (s)							3.0	3.0			3.0	3.0
Lane Grp Cap (vph)			1611			1611	654	5085			3505	1091
v/s Ratio Prot							c0.12	0.19			c0.30	
v/s Ratio Perm			0.20			0.31						0.02
v/c Ratio			0.20			0.31	0.64	0.19			0.43	0.03
Uniform Delay, d1			0.0			0.0	28.0	0.0			5.2	3.7
Progression Factor			1.00			1.00	1.05	1.00			0.78	0.28
Incremental Delay, d2			0.3			0.5	2.0	0.1			0.4	0.0
Delay (s)			0.3			0.5	31.2	0.1			4.4	1.1
Level of Service			A			A	C	A			A	A
Approach Delay (s)		0.3			0.5			9.4			4.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1017	0	0	195	0	1145	178	807	931	0
Future Volume (vph)	0	0	1017	0	0	195	0	1145	178	807	931	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.3			4.0		5.7	5.7	5.7	5.7	
Lane Util. Factor			0.88			1.00		0.91	1.00	0.97	0.91	
Frt			0.85			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			2787			1611		5085	1583	3433	5085	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			2787			1611		5085	1583	3433	5085	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	1071	0	0	205	0	1205	187	849	980	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	29	0	0	0
Lane Group Flow (vph)	0	0	1071	0	0	205	0	1205	158	849	980	0
Turn Type			Perm			Free		NA	Perm	Prot	NA	
Protected Phases								2		1	6	
Permitted Phases			5			Free			2			
Actuated Green, G (s)			69.5			150.0		79.3	79.3	59.3	69.5	
Effective Green, g (s)			69.5			150.0		79.3	79.3	59.3	69.5	
Actuated g/C Ratio			0.46			1.00		0.53	0.53	0.40	0.46	
Clearance Time (s)			5.3					5.7	5.7	5.7	5.7	
Vehicle Extension (s)			3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)			1291			1611		2688	836	1357	2356	
v/s Ratio Prot								0.24		c0.25	c0.19	
v/s Ratio Perm			c0.38			0.13			0.10			
v/c Ratio			0.83			0.13		0.45	0.19	0.63	0.42	
Uniform Delay, d1			35.1			0.0		21.8	18.5	36.4	26.8	
Progression Factor			1.00			1.00		0.49	0.26	0.58	0.71	
Incremental Delay, d2			4.6			0.2		0.5	0.5	0.8	0.5	
Delay (s)			39.6			0.2		11.2	5.2	22.1	19.5	
Level of Service			D			A		B	A	C	B	
Approach Delay (s)		39.6			0.2			10.4			20.7	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	11.4
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	2	1	5	4	5	16	19	0	1	8	9
Future Volume (veh/h)	1	2	1	5	4	5	16	19	0	1	8	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	2	1	5	4	5	17	20	0	1	8	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	4	2	7	6	7	24	702	0	8	149	167
Arrive On Green	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.20	0.00	0.00	0.18	0.18
Sat Flow, veh/h	442	884	442	617	494	617	1781	3647	0	1781	804	904
Grp Volume(v), veh/h	4	0	0	14	0	0	17	20	0	1	0	17
Grp Sat Flow(s),veh/h/ln	1769	0	0	1728	0	0	1781	1777	0	1781	0	1708
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2
Prop In Lane	0.25		0.25	0.36		0.36	1.00		0.00	1.00		0.53
Lane Grp Cap(c), veh/h	8	0	0	19	0	0	24	702	0	8	0	316
V/C Ratio(X)	0.49	0.00	0.00	0.72	0.00	0.00	0.71	0.03	0.00	0.12	0.00	0.05
Avail Cap(c_a), veh/h	1308	0	0	639	0	0	659	1314	0	659	0	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.7	0.0	0.0	10.7	0.0	0.0	10.6	7.0	0.0	10.8	0.0	7.3
Incr Delay (d2), s/veh	38.9	0.0	0.0	17.2	0.0	0.0	13.3	0.0	0.0	2.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.7	0.0	0.0	27.9	0.0	0.0	23.9	7.0	0.0	13.2	0.0	7.3
LnGrp LOS	D	A	A	C	A	A	C	A	A	B	A	A
Approach Vol, veh/h		4			14			37			18	
Approach Delay, s/veh		49.7			27.9			14.8			7.6	
Approach LOS		D			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.0	8.3		4.2	4.3	8.0		5.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		5.0
Max Green Setting (Gmax), s	8.0	8.0		8.0	8.0	8.0		16.0
Max Q Clear Time (g_c+I1), s	2.0	2.1		2.2	2.2	2.2		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	8	5	52	7	74	17	1181	74	313	1365	123
Future Volume (veh/h)	48	8	5	52	7	74	17	1181	74	313	1365	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	51	8	0	55	7	0	18	1243	0	329	1437	129
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	5	5	5
Cap, veh/h	130	46		132	46		47	2526		391	3034	937
Arrive On Green	0.02	0.02	0.00	0.02	0.02	0.00	0.01	0.51	0.00	0.23	1.00	1.00
Sat Flow, veh/h	5344	1870	1585	5344	1870	1585	3374	4985	1547	3374	4985	1540
Grp Volume(v), veh/h	51	8	0	55	7	0	18	1243	0	329	1437	129
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1687	1662	1547	1687	1662	1540
Q Serve(g_s), s	1.4	0.6	0.0	1.5	0.5	0.0	0.8	24.6	0.0	14.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.6	0.0	1.5	0.5	0.0	0.8	24.6	0.0	14.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	130	46		132	46		47	2526		391	3034	937
V/C Ratio(X)	0.39	0.18		0.42	0.15		0.38	0.49		0.84	0.47	0.14
Avail Cap(c_a), veh/h	499	175		467	163		292	2526		720	3034	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.1	71.7	0.0	72.1	71.6	0.0	73.3	24.3	0.0	56.3	0.0	0.0
Incr Delay (d2), s/veh	1.9	1.8	0.0	2.9	2.1	0.0	1.8	0.3	0.0	1.9	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.3	0.0	0.7	0.3	0.0	0.4	9.5	0.0	5.3	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.0	73.5	0.0	75.0	73.7	0.0	75.1	24.6	0.0	58.2	0.5	0.3
LnGrp LOS	E	E		E	E		E	C		E	A	A
Approach Vol, veh/h		59	A		62	A		1261	A		1895	
Approach Delay, s/veh		73.9			74.8			25.3			10.5	
Approach LOS		E			E			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.4	81.7		8.6	6.1	97.0		7.7
Change Period (Y+Rc), s	4.0	5.7		4.9	4.0	5.7		4.0
Max Green Setting (Gmax), s	32.0	72.3		13.1	13.0	91.3		14.0
Max Q Clear Time (g_c+I1), s	16.0	26.6		3.5	2.8	2.0		3.4
Green Ext Time (p_c), s	1.4	35.5		0.2	0.0	69.8		0.1

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	0	239	4	1	3	245	1361	2	6	1041	116
Future Volume (veh/h)	111	0	239	4	1	3	245	1361	2	6	1041	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	0	252	4	1	3	258	1433	2	6	1096	122
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	333	0	296	29	7	32	298	1920	3	14	1308	583
Arrive On Green	0.19	0.00	0.19	0.02	0.02	0.02	0.17	0.53	0.53	0.01	0.37	0.37
Sat Flow, veh/h	1781	0	1585	1439	360	1585	1781	3641	5	1781	3554	1585
Grp Volume(v), veh/h	117	0	252	5	0	3	258	699	736	6	1096	122
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1798	0	1585	1781	1777	1869	1781	1777	1585
Q Serve(g_s), s	4.4	0.0	11.8	0.2	0.0	0.1	10.8	23.6	23.6	0.3	21.7	4.1
Cycle Q Clear(g_c), s	4.4	0.0	11.8	0.2	0.0	0.1	10.8	23.6	23.6	0.3	21.7	4.1
Prop In Lane	1.00		1.00	0.80		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	333	0	296	37	0	32	298	937	986	14	1308	583
V/C Ratio(X)	0.35	0.00	0.85	0.14	0.00	0.09	0.87	0.75	0.75	0.43	0.84	0.21
Avail Cap(c_a), veh/h	464	0	412	468	0	412	324	937	986	185	1443	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	30.2	37.0	0.0	36.9	31.2	14.2	14.2	38.0	22.2	16.6
Incr Delay (d2), s/veh	0.2	0.0	8.8	0.6	0.0	0.5	18.6	3.6	3.4	7.6	4.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	5.1	0.1	0.0	0.1	5.8	8.5	8.9	0.1	8.7	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.0	39.0	37.6	0.0	37.4	49.7	17.7	17.6	45.6	26.7	16.9
LnGrp LOS	C	A	D	D	A	D	D	B	B	D	C	B
Approach Vol, veh/h		369			8			1693			1224	
Approach Delay, s/veh		35.3			37.5			22.5			25.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	46.5		6.5	16.9	34.3		19.2
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.9
Max Green Setting (Gmax), s	8.0	40.2		20.0	14.0	31.2		20.0
Max Q Clear Time (g_c+I1), s	2.3	25.6		2.2	12.8	23.7		13.8
Green Ext Time (p_c), s	0.0	8.5		0.0	0.1	4.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	15	393	4	5	6	172	1404	12	5	981	306
Future Volume (veh/h)	195	15	393	4	5	6	172	1404	12	5	981	306
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	216	0	414	4	5	6	181	1478	13	5	1033	322
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1022	0	455	11	14	22	250	1842	16	7	1570	700
Arrive On Green	0.29	0.00	0.29	0.01	0.01	0.01	0.07	0.51	0.51	0.00	0.44	0.44
Sat Flow, veh/h	3563	0	1585	813	1017	1585	3456	3610	32	1781	3554	1585
Grp Volume(v), veh/h	216	0	414	9	0	6	181	727	764	5	1033	322
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1830	0	1585	1728	1777	1865	1781	1777	1585
Q Serve(g_s), s	4.4	0.0	23.8	0.5	0.0	0.4	4.8	32.1	32.1	0.3	21.6	13.4
Cycle Q Clear(g_c), s	4.4	0.0	23.8	0.5	0.0	0.4	4.8	32.1	32.1	0.3	21.6	13.4
Prop In Lane	1.00		1.00	0.44		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	1022	0	455	25	0	22	250	907	952	7	1570	700
V/C Ratio(X)	0.21	0.00	0.91	0.36	0.00	0.27	0.72	0.80	0.80	0.72	0.66	0.46
Avail Cap(c_a), veh/h	1131	0	503	581	0	503	293	1025	1075	151	2012	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	32.5	46.2	0.0	46.1	42.9	19.2	19.2	47.0	20.8	18.5
Incr Delay (d2), s/veh	0.1	0.0	19.6	8.3	0.0	6.6	5.4	5.3	5.1	40.3	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	11.5	0.3	0.0	0.2	2.2	13.0	13.6	0.2	8.5	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	52.1	54.5	0.0	52.7	48.3	24.5	24.3	87.3	21.8	19.5
LnGrp LOS	C	A	D	D	A	D	D	C	C	F	C	B
Approach Vol, veh/h		630			15			1672			1360	
Approach Delay, s/veh		43.0			53.8			27.0			21.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	53.7		5.3	10.8	47.3		31.1
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		4.0
Max Green Setting (Gmax), s	8.0	54.5		30.0	8.0	53.5		30.0
Max Q Clear Time (g_c+I1), s	2.3	34.1		2.5	6.8	23.6		25.8
Green Ext Time (p_c), s	0.0	14.1		0.0	0.0	16.2		1.3

Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	210	533	1029	459	799	441
Future Volume (veh/h)	210	533	1029	459	799	441
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	561	1083	483	841	464
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	318	1272	1356	605	770	2428
Arrive On Green	0.18	0.18	0.38	0.38	0.22	0.68
Sat Flow, veh/h	1781	3170	3647	1585	3456	3647
Grp Volume(v), veh/h	221	561	1083	483	841	464
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1728	1777
Q Serve(g_s), s	7.8	0.0	18.2	18.2	15.0	3.2
Cycle Q Clear(g_c), s	7.8	0.0	18.2	18.2	15.0	3.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	318	1272	1356	605	770	2428
V/C Ratio(X)	0.69	0.44	0.80	0.80	1.09	0.19
Avail Cap(c_a), veh/h	635	1837	1462	652	770	2466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	14.7	18.5	18.5	26.2	3.9
Incr Delay (d2), s/veh	1.0	0.1	3.2	7.0	60.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	7.4	7.2	12.2	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.0	14.7	21.7	25.5	86.6	3.9
LnGrp LOS	C	B	C	C	F	A
Approach Vol, veh/h	782		1566			1305
Approach Delay, s/veh	18.2		22.9			57.2
Approach LOS	B		C			E

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	51.3	16.0	20.3	31.0
Change Period (Y+Rc), s	5.3	4.0	5.3	* 5.3
Max Green Setting (Gmax), s	46.7	24.0	15.0	* 28
Max Q Clear Time (g_c+I1), s	5.2	9.8	17.0	20.2
Green Ext Time (p_c), s	2.9	2.2	0.0	5.4

Intersection Summary	
HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	321	14	28	32	20	35	27	1169	0	71	480	65
Future Volume (veh/h)	321	14	28	32	20	35	27	1169	0	71	480	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	376	0	0	34	21	37	28	1231	0	75	505	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	512	269	0	58	36	83	33	1647	0	96	1570	211
Arrive On Green	0.14	0.00	0.00	0.05	0.05	0.05	0.02	0.46	0.00	0.05	0.50	0.50
Sat Flow, veh/h	3563	1870	0	1122	693	1585	1781	3647	0	1781	3149	422
Grp Volume(v), veh/h	376	0	0	55	0	37	28	1231	0	75	284	289
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1814	0	1585	1781	1777	0	1781	1777	1794
Q Serve(g_s), s	6.1	0.0	0.0	1.8	0.0	1.4	0.9	17.1	0.0	2.5	5.8	5.8
Cycle Q Clear(g_c), s	6.1	0.0	0.0	1.8	0.0	1.4	0.9	17.1	0.0	2.5	5.8	5.8
Prop In Lane	1.00		0.00	0.62		1.00	1.00		0.00	1.00		0.24
Lane Grp Cap(c), veh/h	512	269	0	95	0	83	33	1647	0	96	886	894
V/C Ratio(X)	0.73	0.00	0.00	0.58	0.00	0.45	0.84	0.75	0.00	0.78	0.32	0.32
Avail Cap(c_a), veh/h	1123	590	0	572	0	500	237	1893	0	237	935	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	0.0	27.9	0.0	27.7	29.5	13.3	0.0	28.2	9.0	9.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	2.1	0.0	1.4	18.6	1.7	0.0	5.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	0.8	0.0	0.5	0.6	5.9	0.0	1.1	1.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.5	0.0	0.0	30.0	0.0	29.1	48.1	15.0	0.0	33.4	9.2	9.3
LnGrp LOS	C	A	A	C	A	C	D	B	A	C	A	A
Approach Vol, veh/h		376			92			1259			648	
Approach Delay, s/veh		25.5			29.7			15.7			12.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	33.2		7.1	5.1	35.3		12.7
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	* 32		19.0	8.0	31.7		19.0
Max Q Clear Time (g_c+I1), s	4.5	19.1		3.8	2.9	7.8		8.1
Green Ext Time (p_c), s	0.0	8.8		0.1	0.0	3.7		0.6

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	7	19	42	2	7	25	1187	7	12	493	25
Future Volume (veh/h)	46	7	19	42	2	7	25	1187	7	12	493	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	7	20	44	2	7	26	1249	7	13	519	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	12	86	73	3	68	471	1879	11	18	841	42
Arrive On Green	0.05	0.05	0.05	0.04	0.04	0.04	0.26	0.52	0.52	0.01	0.24	0.24
Sat Flow, veh/h	1564	228	1585	1707	78	1585	1781	3623	20	1781	3444	172
Grp Volume(v), veh/h	55	0	20	46	0	7	26	612	644	13	267	278
Grp Sat Flow(s),veh/h/ln	1792	0	1585	1785	0	1585	1781	1777	1867	1781	1777	1839
Q Serve(g_s), s	1.4	0.0	0.5	1.1	0.0	0.2	0.5	11.4	11.4	0.3	6.0	6.1
Cycle Q Clear(g_c), s	1.4	0.0	0.5	1.1	0.0	0.2	0.5	11.4	11.4	0.3	6.0	6.1
Prop In Lane	0.87		1.00	0.96		1.00	1.00		0.01	1.00		0.09
Lane Grp Cap(c), veh/h	97	0	86	77	0	68	471	921	968	18	434	449
V/C Ratio(X)	0.57	0.00	0.23	0.60	0.00	0.10	0.06	0.66	0.66	0.73	0.62	0.62
Avail Cap(c_a), veh/h	794	0	702	791	0	702	631	1146	1204	316	673	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	20.5	21.2	0.0	20.8	12.4	8.0	8.0	22.3	15.2	15.2
Incr Delay (d2), s/veh	1.9	0.0	0.5	2.8	0.0	0.2	0.0	1.4	1.4	19.0	2.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.2	0.5	0.0	0.1	0.2	3.1	3.2	0.2	2.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	0.0	21.0	24.0	0.0	21.0	12.4	9.4	9.4	41.3	17.4	17.3
LnGrp LOS	C	A	C	C	A	C	B	A	A	D	B	B
Approach Vol, veh/h		75			53			1282			558	
Approach Delay, s/veh		22.3			23.6			9.5			17.9	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	28.3		5.9	16.8	15.9		6.4
Change Period (Y+Rc), s	4.0	4.9		4.0	4.9	* 4.9		4.0
Max Green Setting (Gmax), s	8.0	29.1		20.0	16.0	* 17		20.0
Max Q Clear Time (g_c+I1), s	2.3	13.4		3.1	2.5	8.1		3.4
Green Ext Time (p_c), s	0.0	10.0		0.1	0.0	2.9		0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	17	120	352	16	345	482
Future Volume (veh/h)	17	120	352	16	345	482
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	126	371	17	363	507
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	643	295	1350	419	435	3052
Arrive On Green	0.19	0.19	0.26	0.26	0.24	0.60
Sat Flow, veh/h	3456	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	18	126	371	17	363	507
Grp Sat Flow(s),veh/h/ln	1728	1585	1702	1585	1781	1702
Q Serve(g_s), s	0.2	3.2	2.6	0.4	8.7	2.0
Cycle Q Clear(g_c), s	0.2	3.2	2.6	0.4	8.7	2.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	643	295	1350	419	435	3052
V/C Ratio(X)	0.03	0.43	0.27	0.04	0.83	0.17
Avail Cap(c_a), veh/h	1541	707	3451	1071	636	5728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	16.1	13.1	12.3	16.1	4.0
Incr Delay (d2), s/veh	0.0	0.4	0.2	0.1	4.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.0	0.7	0.1	3.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.9	16.5	13.3	12.3	20.3	4.1
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	144		388			870
Approach Delay, s/veh	16.3		13.2			10.8
Approach LOS	B		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.9	17.6				32.5	12.3
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0
Max Green Setting (Gmax), s	16.0	30.3				50.3	20.0
Max Q Clear Time (g_c+I1), s	10.7	4.6				4.0	5.2
Green Ext Time (p_c), s	0.4	7.3				12.8	0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	248	61	276	308	74	29	4	40	92	4	12
Future Volume (veh/h)	70	248	61	276	308	74	29	4	40	92	4	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	261	64	291	324	78	31	4	42	100	0	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	697	163	301	1187	368	213	28	213	582	0	259
Arrive On Green	0.11	0.17	0.17	0.17	0.23	0.23	0.13	0.13	0.13	0.16	0.00	0.16
Sat Flow, veh/h	1781	4134	967	1781	5106	1585	1586	205	1585	3563	0	1585
Grp Volume(v), veh/h	74	213	112	291	324	78	35	0	42	100	0	13
Grp Sat Flow(s),veh/h/ln	1781	1702	1696	1781	1702	1585	1791	0	1585	1781	0	1585
Q Serve(g_s), s	1.8	2.6	2.8	7.7	2.5	1.9	0.8	0.0	1.1	1.1	0.0	0.3
Cycle Q Clear(g_c), s	1.8	2.6	2.8	7.7	2.5	1.9	0.8	0.0	1.1	1.1	0.0	0.3
Prop In Lane	1.00		0.57	1.00		1.00	0.89		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	574	286	301	1187	368	241	0	213	582	0	259
V/C Ratio(X)	0.40	0.37	0.39	0.97	0.27	0.21	0.15	0.00	0.20	0.17	0.00	0.05
Avail Cap(c_a), veh/h	751	2204	1098	301	1906	592	378	0	334	751	0	334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.8	17.5	17.5	19.6	14.9	14.7	18.1	0.0	18.2	17.1	0.0	16.7
Incr Delay (d2), s/veh	0.5	0.8	1.8	42.9	0.3	0.6	0.1	0.0	0.2	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.9	1.1	6.2	0.8	0.6	0.3	0.0	0.4	0.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	18.3	19.3	62.5	15.2	15.3	18.2	0.0	18.4	17.1	0.0	16.8
LnGrp LOS	C	B	B	E	B	B	B	A	B	B	A	B
Approach Vol, veh/h		399			693			77			113	
Approach Delay, s/veh		19.0			35.1			18.3			17.1	
Approach LOS		B			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	13.3		11.7	9.0	16.3		10.4
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	30.7		10.0	20.0	17.7		10.0
Max Q Clear Time (g_c+I1), s	9.7	4.8		3.1	3.8	4.5		3.1
Green Ext Time (p_c), s	0.0	2.8		0.1	0.1	2.7		0.1

Intersection Summary	
HCM 6th Ctrl Delay	27.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	232	721	277	35	277	59	391	398	77	44	239	51
Future Volume (veh/h)	232	721	277	35	277	59	391	398	77	44	239	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	2145	2145	2145
Adj Flow Rate, veh/h	244	759	292	37	292	62	412	419	81	46	252	54
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	1091	487	104	800	357	449	1567	487	137	714	221
Arrive On Green	0.14	0.31	0.31	0.06	0.23	0.23	0.25	0.31	0.31	0.07	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	2043	5857	1818
Grp Volume(v), veh/h	244	759	292	37	292	62	412	419	81	46	252	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	2043	1952	1818
Q Serve(g_s), s	9.7	13.4	11.2	1.4	5.0	2.3	16.1	4.4	2.7	1.5	2.8	1.9
Cycle Q Clear(g_c), s	9.7	13.4	11.2	1.4	5.0	2.3	16.1	4.4	2.7	1.5	2.8	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	1091	487	104	800	357	449	1567	487	137	714	221
V/C Ratio(X)	0.98	0.70	0.60	0.36	0.36	0.17	0.92	0.27	0.17	0.34	0.35	0.24
Avail Cap(c_a), veh/h	250	1185	529	200	1066	475	449	2862	888	286	2626	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	21.8	21.0	32.3	23.3	22.3	26.0	18.7	18.1	31.8	28.8	28.4
Incr Delay (d2), s/veh	50.4	2.2	2.7	0.8	0.4	0.4	23.2	0.1	0.3	0.5	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	5.6	4.1	0.6	2.0	0.8	9.0	1.6	0.9	0.7	1.3	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.9	24.0	23.7	33.1	23.8	22.7	49.1	18.8	18.3	32.3	29.2	29.3
LnGrp LOS	F	C	C	C	C	C	D	B	B	C	C	C
Approach Vol, veh/h		1295			391			912			352	
Approach Delay, s/veh		34.7			24.5			32.5			29.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	27.2	22.0	14.0	14.0	21.4	8.8	27.2
Change Period (Y+Rc), s	4.0	* 5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	8.0	* 24	18.0	32.0	10.0	21.4	10.0	40.0
Max Q Clear Time (g_c+I1), s	3.4	15.4	18.1	4.8	11.7	7.0	3.5	6.4
Green Ext Time (p_c), s	0.0	6.5	0.0	3.9	0.0	3.6	0.0	5.6

Intersection Summary	
HCM 6th Ctrl Delay	32.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1	8	21	3	79	37	842	36	119	332	8
Future Volume (veh/h)	7	1	8	21	3	79	37	842	36	119	332	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1988	1988	1988	1870	1945	1870	2145	2231	2145
Adj Flow Rate, veh/h	7	1	8	22	3	83	39	886	38	125	349	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	8	57	216	29	359	90	1413	61	172	2589	773
Arrive On Green	0.04	0.04	0.04	0.13	0.13	0.13	0.05	0.39	0.39	0.08	0.43	0.43
Sat Flow, veh/h	1568	224	1585	1676	229	1682	1781	3609	155	2043	6091	1818
Grp Volume(v), veh/h	8	0	8	25	0	83	39	454	470	125	349	8
Grp Sat Flow(s),veh/h/ln	1792	0	1585	1904	0	1682	1781	1848	1915	2043	2030	1818
Q Serve(g_s), s	0.2	0.0	0.2	0.6	0.0	2.0	1.0	9.5	9.5	2.9	1.7	0.1
Cycle Q Clear(g_c), s	0.2	0.0	0.2	0.6	0.0	2.0	1.0	9.5	9.5	2.9	1.7	0.1
Prop In Lane	0.87		1.00	0.88		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	65	0	57	245	0	359	90	723	750	172	2589	773
V/C Ratio(X)	0.12	0.00	0.14	0.10	0.00	0.23	0.43	0.63	0.63	0.73	0.13	0.01
Avail Cap(c_a), veh/h	335	0	296	819	0	865	296	806	835	339	2783	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	0.0	22.5	18.5	0.0	15.7	22.2	11.8	11.8	21.5	8.4	8.0
Incr Delay (d2), s/veh	0.3	0.0	0.4	0.1	0.0	0.1	1.2	2.3	2.2	2.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.2	0.0	0.6	0.4	3.3	3.4	1.3	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	0.0	22.9	18.6	0.0	15.8	23.4	14.1	14.0	23.7	8.5	8.0
LnGrp LOS	C	A	C	B	A	B	C	B	B	C	A	A
Approach Vol, veh/h		16			108			963			482	
Approach Delay, s/veh		22.8			16.4			14.4			12.4	
Approach LOS		C			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.7	6.4	25.8		10.2	8.1	24.1				
Change Period (Y+Rc), s		4.0	4.0	5.3		4.0	4.0	5.3				
Max Green Setting (Gmax), s		9.0	8.0	22.0		20.7	8.0	21.0				
Max Q Clear Time (g_c+I1), s		2.2	3.0	3.7		4.0	4.9	11.5				
Green Ext Time (p_c), s		0.0	0.0	5.1		0.2	0.1	7.2				

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	171	765	9	34	362
Future Volume (veh/h)	9	171	765	9	34	362
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	180	805	9	36	381
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	352	313	1288	14	106	1907
Arrive On Green	0.20	0.20	0.36	0.36	0.06	0.54
Sat Flow, veh/h	1781	1585	3693	40	1781	3647
Grp Volume(v), veh/h	9	180	397	417	36	381
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1863	1781	1777
Q Serve(g_s), s	0.1	3.4	6.2	6.2	0.6	1.9
Cycle Q Clear(g_c), s	0.1	3.4	6.2	6.2	0.6	1.9
Prop In Lane	1.00	1.00		0.02	1.00	
Lane Grp Cap(c), veh/h	352	313	636	667	106	1907
V/C Ratio(X)	0.03	0.57	0.62	0.63	0.34	0.20
Avail Cap(c_a), veh/h	1074	956	1061	1112	425	3278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	12.2	8.9	8.9	15.1	4.0
Incr Delay (d2), s/veh	0.0	0.6	1.4	1.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	1.6	1.7	0.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.8	12.8	10.3	10.2	15.8	4.1
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	189		814			417
Approach Delay, s/veh	12.7		10.3			5.1
Approach LOS	B		B			A

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			22.9		10.6	6.0	16.9
Change Period (Y+Rc), s			4.9		4.0	4.0	* 4.9
Max Green Setting (Gmax), s			30.9		20.2	8.0	* 20
Max Q Clear Time (g_c+I1), s			3.9		5.4	2.6	8.2
Green Ext Time (p_c), s			1.6		0.4	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	14	0	21	0	1659	26	12	1243	0
Future Volume (veh/h)	0	0	0	14	0	21	0	1659	26	12	1243	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	15	0	22	0	1746	27	13	1308	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	3	3	56	0	50	3	2611	40	17	2879	1284
Arrive On Green	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.73	0.73	0.01	0.81	0.00
Sat Flow, veh/h	0	1870	1585	1781	0	1585	1781	3582	55	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	15	0	22	0	865	908	13	1308	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	0	1585	1781	1777	1860	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.5	0.0	0.8	0.0	14.4	14.5	0.4	6.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.5	0.0	0.8	0.0	14.4	14.5	0.4	6.2	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	0	3	3	56	0	50	3	1295	1356	17	2879	1284
V/C Ratio(X)	0.00	0.00	0.00	0.27	0.00	0.44	0.00	0.67	0.67	0.74	0.45	0.00
Avail Cap(c_a), veh/h	0	800	678	762	0	678	349	1492	1562	254	2879	1284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	26.5	0.0	26.7	0.0	4.0	4.0	27.7	1.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	2.3	0.0	1.8	1.8	20.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.0	0.3	0.0	2.2	2.3	0.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	27.5	0.0	29.0	0.0	5.8	5.8	48.1	1.9	0.0
LnGrp LOS	A	A	A	C	A	C	A	A	A	D	A	A
Approach Vol, veh/h		0			37			1773			1321	
Approach Delay, s/veh		0.0			28.4			5.8			2.3	
Approach LOS					C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	45.8		5.8	0.0	50.3		0.0
Change Period (Y+Rc), s	4.0	4.9		4.0	5.0	4.9		4.0
Max Green Setting (Gmax), s	8.0	47.1		24.0	11.0	38.1		24.0
Max Q Clear Time (g_c+I1), s	2.4	16.5		2.8	0.0	8.2		0.0
Green Ext Time (p_c), s	0.0	24.4		0.0	0.0	16.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	25	33	41	26	64	21	1625	37	48	1127	30
Future Volume (veh/h)	41	25	33	41	26	64	21	1625	37	48	1127	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	26	35	43	27	67	22	1711	39	51	1186	32
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	61	83	159	41	103	59	2017	46	102	2092	56
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.57	0.57	0.06	0.59	0.59
Sat Flow, veh/h	1781	723	973	1781	465	1153	1781	3551	81	1781	3534	95
Grp Volume(v), veh/h	43	0	61	43	0	94	22	854	896	51	596	622
Grp Sat Flow(s),veh/h/ln	1781	0	1695	1781	0	1617	1781	1777	1855	1781	1777	1852
Q Serve(g_s), s	2.0	0.0	2.9	1.9	0.0	4.9	1.0	34.5	34.8	2.4	17.8	17.8
Cycle Q Clear(g_c), s	2.0	0.0	2.9	1.9	0.0	4.9	1.0	34.5	34.8	2.4	17.8	17.8
Prop In Lane	1.00		0.57	1.00		0.71	1.00		0.04	1.00		0.05
Lane Grp Cap(c), veh/h	151	0	144	159	0	144	59	1009	1054	102	1052	1097
V/C Ratio(X)	0.28	0.00	0.42	0.27	0.00	0.65	0.37	0.85	0.85	0.50	0.57	0.57
Avail Cap(c_a), veh/h	330	0	314	330	0	300	165	1105	1154	165	1114	1161
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	37.5	36.7	0.0	38.0	40.8	15.5	15.6	39.5	10.8	10.8
Incr Delay (d2), s/veh	0.9	0.0	1.7	0.8	0.0	4.2	1.4	6.3	6.3	1.4	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.3	0.9	0.0	2.1	0.5	13.0	13.7	1.0	5.9	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.9	0.0	39.2	37.5	0.0	42.2	42.3	21.8	21.8	40.9	11.6	11.6
LnGrp LOS	D	A	D	D	A	D	D	C	C	D	B	B
Approach Vol, veh/h		104			137			1772			1269	
Approach Delay, s/veh		38.6			40.7			22.1			12.7	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	56.4		11.3	8.9	54.3		11.7
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	* 54		16.0	8.0	53.7		16.0
Max Q Clear Time (g_c+I1), s	3.0	19.8		4.9	4.4	36.8		6.9
Green Ext Time (p_c), s	0.0	9.5		0.2	0.0	12.2		0.3

Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	23	5	60	19	52	7	2506	16	21	1533	47
Future Volume (veh/h)	46	23	5	60	19	52	7	2506	16	21	1533	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1945	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	48	24	5	63	20	55	7	2638	17	22	1614	49
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	62	31	7	75	24	66	9	3558	23	27	3511	107
Arrive On Green	0.05	0.05	0.05	0.09	0.09	0.09	0.01	1.00	1.00	0.02	0.70	0.70
Sat Flow, veh/h	1162	581	121	809	257	706	1781	5152	33	1781	5011	152
Grp Volume(v), veh/h	77	0	0	138	0	0	7	1714	941	22	1079	584
Grp Sat Flow(s),veh/h/ln	1864	0	0	1772	0	0	1781	1675	1835	1781	1675	1813
Q Serve(g_s), s	4.9	0.0	0.0	9.2	0.0	0.0	0.5	0.0	0.0	1.5	17.1	17.1
Cycle Q Clear(g_c), s	4.9	0.0	0.0	9.2	0.0	0.0	0.5	0.0	0.0	1.5	17.1	17.1
Prop In Lane	0.62		0.06	0.46		0.40	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	100	0	0	165	0	0	9	2314	1267	27	2347	1270
V/C Ratio(X)	0.77	0.00	0.00	0.84	0.00	0.00	0.76	0.74	0.74	0.82	0.46	0.46
Avail Cap(c_a), veh/h	155	0	0	207	0	0	119	2314	1267	119	2347	1270
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.42	0.42	0.42	0.81	0.81	0.81
Uniform Delay (d), s/veh	56.0	0.0	0.0	53.5	0.0	0.0	59.3	0.0	0.0	58.9	7.9	7.9
Incr Delay (d2), s/veh	4.6	0.0	0.0	17.6	0.0	0.0	17.4	0.9	1.7	16.4	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	4.9	0.0	0.0	0.3	0.3	0.6	0.8	5.3	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	0.0	0.0	71.1	0.0	0.0	76.7	0.9	1.7	75.3	8.1	8.2
LnGrp LOS	E	A	A	E	A	A	E	A	A	E	A	A
Approach Vol, veh/h		77			138			2662			1685	
Approach Delay, s/veh		60.6			71.1			1.4			9.0	
Approach LOS		E			E			A			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.4	5.8	88.6		15.2	4.6	89.8				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		10.0	8.0	70.3		14.0	8.0	70.3				
Max Q Clear Time (g_c+I1), s		6.9	3.5	2.0		11.2	2.5	19.1				
Green Ext Time (p_c), s		0.0	0.0	66.9		0.1	0.0	41.5				

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	0	25	91	0	33	6	2499	133	8	1557	10
Future Volume (vph)	29	0	25	91	0	33	6	2499	133	8	1557	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00		0.97	1.00		0.97	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Frt	1.00		0.85	1.00		0.85	1.00	0.99		1.00	1.00	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1536	1770		1536	1770	5037		1770	5079	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770		1536	1770		1536	1770	5037		1770	5079	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	31	0	26	96	0	35	6	2631	140	8	1639	11
RTOR Reduction (vph)	0	0	24	0	0	32	0	4	0	0	0	0
Lane Group Flow (vph)	31	0	2	96	0	3	6	2767	0	8	1650	0
Confl. Peds. (#/hr)	4		4	4		4	4		4	4		4
Confl. Bikes (#/hr)			2			2			2			2
Turn Type	Prot		Perm	Prot		Perm	Prot	NA		Prot	NA	
Protected Phases	6			5			7	4		3	8	
Permitted Phases			6			5						
Actuated Green, G (s)	10.8		10.8	10.8		10.8	1.2	73.3		1.2	73.3	
Effective Green, g (s)	10.8		10.8	10.8		10.8	1.2	73.3		1.2	73.3	
Actuated g/C Ratio	0.09		0.09	0.09		0.09	0.01	0.61		0.01	0.61	
Clearance Time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Vehicle Extension (s)	2.0		2.0	2.0		2.0	2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	159		138	159		138	17	3076		17	3102	
v/s Ratio Prot	0.02			c0.05			0.00	c0.55		c0.00	0.32	
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.19		0.02	0.60		0.02	0.35	0.90		0.47	0.53	
Uniform Delay, d1	50.6		49.8	52.5		49.8	59.0	20.2		59.1	13.5	
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00		0.90	0.93	
Incremental Delay, d2	0.2		0.0	4.4		0.0	4.5	4.7		6.6	0.2	
Delay (s)	50.8		49.8	56.9		49.8	63.6	24.9		59.7	12.7	
Level of Service	D		D	E		D	E	C		E	B	
Approach Delay (s)		50.3			55.0			25.0			13.0	
Approach LOS		D			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	177	292	80	14	11
Future Volume (veh/h)	16	177	292	80	14	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	186	307	84	15	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	24	1747	1045	466	37	33
Arrive On Green	0.01	0.49	0.29	0.29	0.02	0.02
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	17	186	307	84	15	12
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.2	0.6	1.5	0.9	0.2	0.2
Cycle Q Clear(g_c), s	0.2	0.6	1.5	0.9	0.2	0.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	24	1747	1045	466	37	33
V/C Ratio(X)	0.71	0.11	0.29	0.18	0.41	0.36
Avail Cap(c_a), veh/h	1311	7407	4137	1845	1975	1758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	3.0	5.9	5.7	10.5	10.5
Incr Delay (d2), s/veh	13.3	0.0	0.3	0.3	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	0.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.0	3.0	6.2	6.0	13.1	13.0
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		203	391		27	
Approach Delay, s/veh		4.8	6.2		13.1	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	16.4	5.4	4.3	12.1
Change Period (Y+Rc), s	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	45.3	24.1	16.0	25.3
Max Q Clear Time (g_c+I1), s	2.6	2.2	2.2	3.5
Green Ext Time (p_c), s	1.5	0.0	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	392	262	71	137	41	279	487	103	58	308	50
Future Volume (veh/h)	32	392	262	71	137	41	279	487	103	58	308	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	413	0	75	144	0	294	513	0	61	324	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	677		160	837		350	941		142	755	
Arrive On Green	0.05	0.19	0.00	0.09	0.24	0.00	0.20	0.26	0.00	0.08	0.15	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	5274	0
Grp Volume(v), veh/h	34	413	0	75	144	0	294	513	0	61	324	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1702	0
Q Serve(g_s), s	0.9	5.4	0.0	2.0	1.6	0.0	8.0	6.3	0.0	1.7	2.9	0.0
Cycle Q Clear(g_c), s	0.9	5.4	0.0	2.0	1.6	0.0	8.0	6.3	0.0	1.7	2.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	80	677		160	837		350	941		142	755	
V/C Ratio(X)	0.42	0.61		0.47	0.17		0.84	0.55		0.43	0.43	
Avail Cap(c_a), veh/h	281	1402		281	1501		387	1893		281	2317	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.6	18.8	0.0	21.9	15.4	0.0	19.6	16.0	0.0	22.2	19.6	0.0
Incr Delay (d2), s/veh	1.3	1.4	0.0	0.8	0.2	0.0	12.8	1.0	0.0	0.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.0	0.0	0.8	0.6	0.0	4.1	2.3	0.0	0.7	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	20.2	0.0	22.7	15.6	0.0	32.4	17.0	0.0	23.0	20.4	0.0
LnGrp LOS	C	C		C	B		C	B		C	C	
Approach Vol, veh/h		447	A		219	A		807	A		385	A
Approach Delay, s/veh		20.6			18.0			22.6			20.8	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	15.4	14.0	12.8	6.3	17.6	8.0	18.7
Change Period (Y+Rc), s	4.0	5.7	4.0	5.3	4.0	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	8.0	20.0	11.0	23.0	8.0	* 21	8.0	27.0
Max Q Clear Time (g_c+I1), s	4.0	7.4	10.0	4.9	2.9	3.6	3.7	8.3
Green Ext Time (p_c), s	0.0	2.3	0.1	2.6	0.0	0.9	0.0	4.3

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	35	41	36	7	24	20	1283	65	81	384	6
Future Volume (veh/h)	39	35	41	36	7	24	20	1283	65	81	384	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	37	43	38	7	0	21	1351	68	85	404	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	51	93	49	9		261	2363	119	107	2082	
Arrive On Green	0.06	0.06	0.06	0.03	0.03	0.00	0.15	0.69	0.69	0.06	0.59	0.00
Sat Flow, veh/h	958	865	1585	1515	279	1585	1781	3443	173	1781	3647	0
Grp Volume(v), veh/h	78	0	43	45	0	0	21	696	723	85	404	0
Grp Sat Flow(s),veh/h/ln	1822	0	1585	1795	0	1585	1781	1777	1839	1781	1777	0
Q Serve(g_s), s	5.1	0.0	3.2	3.0	0.0	0.0	1.2	24.2	24.4	5.7	6.4	0.0
Cycle Q Clear(g_c), s	5.1	0.0	3.2	3.0	0.0	0.0	1.2	24.2	24.4	5.7	6.4	0.0
Prop In Lane	0.53		1.00	0.84		1.00	1.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	107	0	93	58	0		261	1220	1262	107	2082	
V/C Ratio(X)	0.73	0.00	0.46	0.77	0.00		0.08	0.57	0.57	0.79	0.19	
Avail Cap(c_a), veh/h	169	0	147	166	0		261	1220	1262	134	2082	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.6	0.0	54.7	57.6	0.0	0.0	44.2	9.7	9.7	55.7	11.6	0.0
Incr Delay (d2), s/veh	7.0	0.0	2.7	14.7	0.0	0.0	0.0	0.8	0.7	17.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.3	1.6	0.0	0.0	0.5	8.1	8.5	3.0	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	0.0	57.3	72.3	0.0	0.0	44.3	10.5	10.5	73.6	11.8	0.0
LnGrp LOS	E	A	E	E	A		D	B	B	E	B	
Approach Vol, veh/h		121			45	A		1440			489	A
Approach Delay, s/veh		60.7			72.3			11.0			22.6	
Approach LOS		E			E			B			C	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		11.9	23.3	76.0		8.8	11.2	88.1
Change Period (Y+Rc), s		4.9	5.7	* 5.7		4.9	4.0	5.7
Max Green Setting (Gmax), s		11.1	8.0	* 70		11.1	9.0	69.3
Max Q Clear Time (g_c+I1), s		7.1	3.2	8.4		5.0	7.7	26.4
Green Ext Time (p_c), s		0.1	0.0	2.6		0.0	0.0	12.2

Intersection Summary	
HCM 6th Ctrl Delay	17.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	3	5	5	0	7	3	1326	31	40	392	5
Future Volume (veh/h)	11	3	5	5	0	7	3	1326	31	40	392	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	3	5	5	0	7	3	1396	33	42	413	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	0	26	60	0	26	391	2978	70	54	2286	28
Arrive On Green	0.02	0.02	0.02	0.02	0.00	0.02	0.22	0.84	0.84	0.03	0.64	0.64
Sat Flow, veh/h	0	0	1585	0	0	1585	1781	3548	84	1781	3596	44
Grp Volume(v), veh/h	15	0	5	5	0	7	3	698	731	42	204	214
Grp Sat Flow(s),veh/h/ln	0	0	1585	0	0	1585	1781	1777	1855	1781	1777	1863
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	0.5	0.2	12.5	12.5	2.8	5.7	5.7
Cycle Q Clear(g_c), s	1.9	0.0	0.4	1.9	0.0	0.5	0.2	12.5	12.5	2.8	5.7	5.7
Prop In Lane	0.80		1.00	1.00		1.00	1.00		0.05	1.00		0.02
Lane Grp Cap(c), veh/h	54	0	26	60	0	26	391	1491	1557	54	1130	1184
V/C Ratio(X)	0.28	0.00	0.19	0.08	0.00	0.27	0.01	0.47	0.47	0.78	0.18	0.18
Avail Cap(c_a), veh/h	302	0	291	295	0	291	391	1491	1557	119	1130	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	58.3	60.0	0.0	58.3	36.6	2.6	2.6	57.8	9.0	9.0
Incr Delay (d2), s/veh	1.0	0.0	1.4	0.2	0.0	2.1	0.0	0.3	0.3	8.7	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.2	0.0	0.2	0.1	2.7	2.8	1.4	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.0	0.0	59.6	60.2	0.0	60.4	36.6	2.8	2.8	66.5	9.3	9.3
LnGrp LOS	E	A	E	E	A	E	D	A	A	E	A	A
Approach Vol, veh/h		20			12			1432			460	
Approach Delay, s/veh		60.7			60.3			2.9			14.5	
Approach LOS		E			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	32.1	82.0		5.9	7.6	106.4		5.9
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	* 76		22.0	8.0	76.3		22.0
Max Q Clear Time (g_c+I1), s	2.2	7.7		3.9	4.8	14.5		3.9
Green Ext Time (p_c), s	0.0	3.0		0.0	0.0	18.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	53	104	1265	27	42	380
Future Volume (veh/h)	53	104	1265	27	42	380
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	109	1332	28	44	400
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	175	156	2289	48	54	2629
Arrive On Green	0.10	0.10	0.64	0.64	0.06	1.00
Sat Flow, veh/h	1781	1585	3652	75	1781	3647
Grp Volume(v), veh/h	56	109	665	695	44	400
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1857	1781	1777
Q Serve(g_s), s	1.8	4.0	12.8	12.8	1.5	0.0
Cycle Q Clear(g_c), s	1.8	4.0	12.8	12.8	1.5	0.0
Prop In Lane	1.00	1.00		0.04	1.00	
Lane Grp Cap(c), veh/h	175	156	1143	1194	54	2629
V/C Ratio(X)	0.32	0.70	0.58	0.58	0.82	0.15
Avail Cap(c_a), veh/h	594	528	1143	1194	238	2629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	26.2	6.1	6.1	28.0	0.0
Incr Delay (d2), s/veh	0.4	2.1	0.8	0.8	10.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.5	3.3	3.4	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.6	28.3	7.0	6.9	38.8	0.1
LnGrp LOS	C	C	A	A	D	A
Approach Vol, veh/h	165		1360			444
Approach Delay, s/veh	27.4		6.9			4.0
Approach LOS	C		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		50.1		9.9	5.8	44.3
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		30.3		20.0	8.0	18.3
Max Q Clear Time (g_c+I1), s		2.0		6.0	3.5	14.8
Green Ext Time (p_c), s		2.4		0.3	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	0	207	0	2	0	175	973	1	1	1102	320
Future Volume (veh/h)	163	0	207	0	2	0	175	973	1	1	1102	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1856	1870	1870	1870	1664	1708	1723	2067	2007	2052
Adj Flow Rate, veh/h	172	0	218	0	2	0	184	1024	1	1	1160	337
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	3	2	2	2	6	3	2	2	6	3
Cap, veh/h	654	0	286	0	8	0	179	1600	720	4	1457	665
Arrive On Green	0.18	0.00	0.18	0.00	0.00	0.00	0.11	0.49	0.49	0.00	0.38	0.38
Sat Flow, veh/h	3534	0	1544	0	1870	0	1585	3246	1460	1968	3813	1739
Grp Volume(v), veh/h	172	0	218	0	2	0	184	1024	1	1	1160	337
Grp Sat Flow(s),veh/h/ln	1767	0	1544	0	1870	0	1585	1623	1460	1968	1906	1739
Q Serve(g_s), s	3.0	0.0	9.5	0.0	0.1	0.0	8.0	16.6	0.0	0.0	19.2	10.5
Cycle Q Clear(g_c), s	3.0	0.0	9.5	0.0	0.1	0.0	8.0	16.6	0.0	0.0	19.2	10.5
Prop In Lane	1.00		1.00	0.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	654	0	286	0	8	0	179	1600	720	4	1457	665
V/C Ratio(X)	0.26	0.00	0.76	0.00	0.25	0.00	1.03	0.64	0.00	0.23	0.80	0.51
Avail Cap(c_a), veh/h	996	0	435	0	527	0	179	1600	720	222	1483	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	27.4	0.0	35.2	0.0	31.5	13.3	9.1	35.3	19.5	16.8
Incr Delay (d2), s/veh	0.3	0.0	6.2	0.0	21.5	0.0	75.4	1.0	0.0	9.7	3.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	3.7	0.0	0.1	0.0	6.5	4.7	0.0	0.0	7.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.1	0.0	33.6	0.0	56.7	0.0	106.9	14.4	9.1	45.1	22.8	17.7
LnGrp LOS	C	A	C	A	E	A	F	B	A	D	C	B
Approach Vol, veh/h		390			2			1209			1498	
Approach Delay, s/veh		29.8			56.7			28.5			21.7	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	41.4		6.3	12.0	33.5		19.1
Change Period (Y+Rc), s	4.0	6.4		6.0	4.0	6.4		6.0
Max Green Setting (Gmax), s	8.0	24.6		20.0	8.0	27.6		20.0
Max Q Clear Time (g_c+I1), s	2.0	18.6		2.1	10.0	21.2		11.5
Green Ext Time (p_c), s	0.0	5.1		0.0	0.0	6.0		1.6

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	61	2	0	2	32	1101	0	5	1294	13
Future Volume (veh/h)	40	0	61	2	0	2	32	1101	0	5	1294	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	0	64	2	0	2	34	1159	0	5	1362	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	0	258	19	0	17	55	1468	655	12	1382	617
Arrive On Green	0.16	0.00	0.16	0.01	0.00	0.01	0.03	0.41	0.00	0.01	0.39	0.39
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	42	0	64	2	0	2	34	1159	0	5	1362	14
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.9	0.0	1.6	0.1	0.0	0.1	0.9	12.9	0.0	0.1	17.2	0.2
Cycle Q Clear(g_c), s	0.9	0.0	1.6	0.1	0.0	0.1	0.9	12.9	0.0	0.1	17.2	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	0	258	19	0	17	55	1468	655	12	1382	617
V/C Ratio(X)	0.14	0.00	0.25	0.10	0.00	0.12	0.62	0.79	0.00	0.42	0.99	0.02
Avail Cap(c_a), veh/h	472	0	420	787	0	701	472	1468	655	472	1382	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	0.0	16.5	22.2	0.0	22.2	21.7	11.6	0.0	22.4	13.7	8.5
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.9	0.0	1.1	4.2	3.2	0.0	8.4	20.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.5	0.0	0.0	0.0	0.4	3.7	0.0	0.1	8.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	0.0	16.7	23.0	0.0	23.3	25.9	14.8	0.0	30.7	34.4	8.5
LnGrp LOS	B	A	B	C	A	C	C	B	A	C	C	A
Approach Vol, veh/h		106			4			1193			1381	
Approach Delay, s/veh		16.6			23.1			15.1			34.1	
Approach LOS		B			C			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.4	5.4	24.0		4.5	4.3	25.1				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		12.0	12.0	17.6		20.0	12.0	17.6				
Max Q Clear Time (g_c+I1), s		3.6	2.9	19.2		2.1	2.1	14.9				
Green Ext Time (p_c), s		0.2	0.0	0.0		0.0	0.0	1.9				

Intersection Summary	
HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	1	326	22	17	3	380	1013	31	1	1066	286
Future Volume (veh/h)	121	1	326	22	17	3	380	1013	31	1	1066	286
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	0	28	14	31	0	400	1066	17	1	1122	85
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	0	165	124	260	0	423	2011	897	3	1685	523
Arrive On Green	0.10	0.00	0.10	0.07	0.07	0.00	0.24	0.57	0.57	0.00	0.33	0.33
Sat Flow, veh/h	3563	0	1585	1781	3741	0	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	128	0	28	14	31	0	400	1066	17	1	1122	85
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	2.8	0.0	1.4	0.6	0.7	0.0	18.6	15.7	0.4	0.0	15.9	3.2
Cycle Q Clear(g_c), s	2.8	0.0	1.4	0.6	0.7	0.0	18.6	15.7	0.4	0.0	15.9	3.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	0	165	124	260	0	423	2011	897	3	1685	523
V/C Ratio(X)	0.35	0.00	0.17	0.11	0.12	0.00	0.95	0.53	0.02	0.34	0.67	0.16
Avail Cap(c_a), veh/h	846	0	376	190	400	0	423	2011	897	169	1770	550
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	0.0	34.4	36.7	36.8	0.0	31.6	11.3	8.0	42.0	24.2	20.0
Incr Delay (d2), s/veh	0.9	0.0	0.8	0.6	0.3	0.0	30.0	0.5	0.0	23.6	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.6	0.3	0.3	0.0	10.8	5.0	0.1	0.0	5.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	0.0	35.2	37.4	37.1	0.0	61.5	11.8	8.0	65.6	25.3	20.2
LnGrp LOS	D	A	D	D	D	A	E	B	A	E	C	C
Approach Vol, veh/h		156			45			1483			1208	
Approach Delay, s/veh		35.8			37.2			25.2			25.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	54.1		14.5	24.0	34.2		11.6
Change Period (Y+Rc), s	4.0	* 6.4		5.7	4.0	6.4		5.7
Max Green Setting (Gmax), s	8.0	* 44		20.0	20.0	29.2		9.0
Max Q Clear Time (g_c+I1), s	2.0	17.7		4.8	20.6	17.9		2.7
Green Ext Time (p_c), s	0.0	21.4		0.8	0.0	9.9		0.1

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	4	146	44	3	12	134	1486	99	67	1095	23
Future Volume (veh/h)	139	4	146	44	3	12	134	1486	99	67	1095	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	149	0	154	46	3	13	141	1564	104	71	1153	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	414	0	184	134	9	127	169	2098	651	412	2867	890
Arrive On Green	0.12	0.00	0.12	0.08	0.08	0.08	0.09	0.41	0.41	0.23	0.56	0.56
Sat Flow, veh/h	3563	0	1585	1677	109	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	149	0	154	49	0	13	141	1564	104	71	1153	24
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1787	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	4.6	0.0	11.4	3.1	0.0	0.9	9.3	31.2	5.0	3.8	15.3	0.8
Cycle Q Clear(g_c), s	4.6	0.0	11.4	3.1	0.0	0.9	9.3	31.2	5.0	3.8	15.3	0.8
Prop In Lane	1.00		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	414	0	184	143	0	127	169	2098	651	412	2867	890
V/C Ratio(X)	0.36	0.00	0.84	0.34	0.00	0.10	0.84	0.75	0.16	0.17	0.40	0.03
Avail Cap(c_a), veh/h	623	0	277	313	0	277	282	2098	651	412	2867	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	0.0	51.9	52.2	0.0	51.2	53.4	30.0	22.3	36.9	14.9	11.7
Incr Delay (d2), s/veh	0.2	0.0	8.2	0.5	0.0	0.1	4.1	2.5	0.5	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	5.0	1.4	0.0	0.4	4.3	12.5	1.9	1.6	5.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	0.0	60.1	52.7	0.0	51.3	57.5	32.5	22.8	37.0	15.1	11.7
LnGrp LOS	D	A	E	D	A	D	E	C	C	D	B	B
Approach Vol, veh/h		303			62			1809			1248	
Approach Delay, s/veh		54.7			52.4			33.9			16.3	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	33.5	55.0		13.6	15.4	73.1		17.9
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	11.0	* 49		21.0	19.0	41.3		21.0
Max Q Clear Time (g_c+I1), s	5.8	33.2		5.1	11.3	17.3		13.4
Green Ext Time (p_c), s	0.0	12.7		0.1	0.1	12.6		0.5

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	136	336	69	137	49	187	1782	36	20	1240	217
Future Volume (veh/h)	351	136	336	69	137	49	187	1782	36	20	1240	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	369	143	192	73	144	4	197	1876	17	21	1305	87
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	395	447	379	135	174	148	255	2466	765	67	2282	708
Arrive On Green	0.22	0.24	0.24	0.08	0.09	0.09	0.07	0.48	0.48	0.04	0.45	0.45
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	369	143	192	73	144	4	197	1876	17	21	1305	87
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	24.4	7.6	12.6	4.7	9.1	0.3	6.7	36.0	0.7	1.4	22.8	3.9
Cycle Q Clear(g_c), s	24.4	7.6	12.6	4.7	9.1	0.3	6.7	36.0	0.7	1.4	22.8	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	395	447	379	135	174	148	255	2466	765	67	2282	708
V/C Ratio(X)	0.93	0.32	0.51	0.54	0.83	0.03	0.77	0.76	0.02	0.31	0.57	0.12
Avail Cap(c_a), veh/h	430	519	440	148	223	189	346	2466	765	134	2282	708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	37.6	39.5	53.4	53.4	49.5	54.6	25.4	16.2	56.2	24.7	19.4
Incr Delay (d2), s/veh	25.4	0.6	1.7	1.2	20.7	0.1	4.8	2.3	0.1	1.0	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	3.4	4.9	2.1	5.1	0.1	3.0	13.8	0.2	0.6	8.6	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.3	38.3	41.2	54.7	74.1	49.6	59.4	27.6	16.3	57.2	25.2	19.6
LnGrp LOS	E	D	D	D	E	D	E	C	B	E	C	B
Approach Vol, veh/h		704			221			2090			1413	
Approach Delay, s/veh		56.4			67.2			30.5			25.3	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	63.9	13.1	34.4	12.8	59.6	30.6	16.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	9.0	48.0	10.0	33.3	12.0	45.0	29.0	14.3
Max Q Clear Time (g_c+I1), s	3.4	38.0	6.7	14.6	8.7	24.8	26.4	11.1
Green Ext Time (p_c), s	0.0	8.4	0.0	2.0	0.1	11.4	0.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	267	16	52	456	5	44	3	44	12	0	7
Future Volume (veh/h)	1	267	16	52	456	5	44	3	44	12	0	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	281	17	55	480	5	46	3	46	13	0	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	876	53	126	1173	12	111	7	111	45	0	24
Arrive On Green	0.00	0.26	0.26	0.07	0.33	0.33	0.14	0.14	0.14	0.04	0.00	0.04
Sat Flow, veh/h	1781	3405	205	1781	3603	38	815	53	815	1110	0	598
Grp Volume(v), veh/h	1	146	152	55	237	248	95	0	0	20	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1833	1781	1777	1864	1683	0	0	1707	0	0
Q Serve(g_s), s	0.0	2.4	2.4	1.1	3.7	3.7	1.8	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.4	2.4	1.1	3.7	3.7	1.8	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.02	0.48		0.48	0.65		0.35
Lane Grp Cap(c), veh/h	5	457	471	126	579	607	230	0	0	69	0	0
V/C Ratio(X)	0.20	0.32	0.32	0.44	0.41	0.41	0.41	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	598	910	939	598	910	954	1130	0	0	1099	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	10.7	10.8	15.9	9.4	9.4	14.1	0.0	0.0	16.7	0.0	0.0
Incr Delay (d2), s/veh	7.1	0.7	0.7	0.9	0.8	0.8	0.4	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.7	0.4	1.0	1.0	0.6	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	11.4	11.4	16.8	10.2	10.1	14.6	0.0	0.0	17.5	0.0	0.0
LnGrp LOS	C	B	B	B	B	B	B	A	A	B	A	A
Approach Vol, veh/h		299			540			95			20	
Approach Delay, s/veh		11.5			10.8			14.6			17.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		5.4	6.5	14.9		8.9	4.1	17.3
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		23.0	12.0	18.3		24.0	12.0	18.3
Max Q Clear Time (g_c+I1), s		2.4	3.1	4.4		3.8	2.0	5.7
Green Ext Time (p_c), s		0.0	0.0	3.9		0.1	0.0	5.9

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	202	2	12	475	7	10	2	25	30	0	245
Future Volume (veh/h)	111	202	2	12	475	7	10	2	25	30	0	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	213	2	13	500	7	11	2	26	32	0	258
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	1040	464	30	749	334	35	6	83	368	0	327
Arrive On Green	0.10	0.29	0.29	0.02	0.21	0.21	0.08	0.08	0.08	0.21	0.00	0.21
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	465	85	1099	1781	0	1585
Grp Volume(v), veh/h	117	213	2	13	500	7	39	0	0	32	0	258
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1649	0	0	1781	0	1585
Q Serve(g_s), s	3.1	2.2	0.0	0.3	6.2	0.2	1.1	0.0	0.0	0.7	0.0	7.4
Cycle Q Clear(g_c), s	3.1	2.2	0.0	0.3	6.2	0.2	1.1	0.0	0.0	0.7	0.0	7.4
Prop In Lane	1.00		1.00	1.00		1.00	0.28		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	175	1040	464	30	749	334	125	0	0	368	0	327
V/C Ratio(X)	0.67	0.20	0.00	0.44	0.67	0.02	0.31	0.00	0.00	0.09	0.00	0.79
Avail Cap(c_a), veh/h	443	1400	624	443	1400	624	410	0	0	1008	0	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.0	12.8	12.1	23.5	17.5	15.1	21.1	0.0	0.0	15.5	0.0	18.1
Incr Delay (d2), s/veh	1.6	0.1	0.0	3.8	1.2	0.0	0.5	0.0	0.0	0.0	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.7	0.0	0.2	2.2	0.1	0.4	0.0	0.0	0.3	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	12.9	12.1	27.3	18.7	15.1	21.6	0.0	0.0	15.5	0.0	19.8
LnGrp LOS	C	B	B	C	B	B	C	A	A	B	A	B
Approach Vol, veh/h		332			520			39			290	
Approach Delay, s/veh		16.3			18.9			21.6			19.3	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.7	4.8	20.1		15.7	8.7	16.2				
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0				
Max Green Setting (Gmax), s		12.0	12.0	19.0		27.3	12.0	19.0				
Max Q Clear Time (g_c+I1), s		3.1	2.3	4.2		9.4	5.1	8.2				
Green Ext Time (p_c), s		0.0	0.0	0.8		0.7	0.1	1.9				

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	168	11	116	373	6	70
Future Volume (veh/h)	168	11	116	373	6	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	177	12	122	393	6	74
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	423	189	165	1490	296	263
Arrive On Green	0.12	0.12	0.09	0.42	0.17	0.17
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	177	12	122	393	6	74
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	1.1	0.2	1.6	1.7	0.1	1.0
Cycle Q Clear(g_c), s	1.1	0.2	1.6	1.7	0.1	1.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	423	189	165	1490	296	263
V/C Ratio(X)	0.42	0.06	0.74	0.26	0.02	0.28
Avail Cap(c_a), veh/h	2359	1052	813	4718	1330	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.8	9.4	10.7	4.6	8.4	8.8
Incr Delay (d2), s/veh	0.7	0.1	6.3	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.6	0.1	0.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.5	9.6	17.0	4.7	8.4	9.4
LnGrp LOS	B	A	B	A	A	A
Approach Vol, veh/h	189			515	80	
Approach Delay, s/veh	10.4			7.6	9.3	
Approach LOS	B			A	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		9.0	7.2	7.9		15.1
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		18.0	11.0	16.0		32.0
Max Q Clear Time (g_c+I1), s		3.0	3.6	3.1		3.7
Green Ext Time (p_c), s		0.2	0.1	0.7		2.4

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	322	11	301	963	454	257
Future Volume (veh/h)	322	11	301	963	454	257
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	339	1	317	762	478	271
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	410	188	894	758	468	1473
Arrive On Green	0.12	0.12	0.48	0.48	0.26	0.79
Sat Flow, veh/h	3456	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	339	1	317	762	478	271
Grp Sat Flow(s),veh/h/ln	1728	1585	1870	1585	1781	1870
Q Serve(g_s), s	10.2	0.1	11.4	51.0	28.0	3.8
Cycle Q Clear(g_c), s	10.2	0.1	11.4	51.0	28.0	3.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	410	188	894	758	468	1473
V/C Ratio(X)	0.83	0.01	0.35	1.01	1.02	0.18
Avail Cap(c_a), veh/h	518	238	894	758	468	1473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	41.4	17.5	27.8	39.3	2.8
Incr Delay (d2), s/veh	8.6	0.0	0.2	34.0	47.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	4.9	25.4	18.2	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	54.5	41.5	17.7	61.9	86.7	2.9
LnGrp LOS	D	D	B	F	F	A
Approach Vol, veh/h	340		1079			749
Approach Delay, s/veh	54.5		48.9			56.4
Approach LOS	D		D			E

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	33.0	56.0				89.0	17.7
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	28.0	51.0				84.0	16.0
Max Q Clear Time (g_c+I1), s	30.0	53.0				5.8	12.2
Green Ext Time (p_c), s	0.0	0.0				1.8	0.4

Intersection Summary	
HCM 6th Ctrl Delay	52.4
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	414	0	476	0	1894	235	0	881	1079
Future Volume (veh/h)	0	0	0	414	0	476	0	1894	235	0	881	1079
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				436	0	501	0	1994	0	0	927	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				1181	0	542	0	2368		0	2368	
Arrive On Green				0.34	0.00	0.34	0.00	0.46	0.00	0.00	0.46	0.00
Sat Flow, veh/h				3456	0	1585	0	5274	1585	0	5274	2790
Grp Volume(v), veh/h				436	0	501	0	1994	0	0	927	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1702	1585	0	1702	1395
Q Serve(g_s), s				5.2	0.0	16.6	0.0	18.7	0.0	0.0	6.5	0.0
Cycle Q Clear(g_c), s				5.2	0.0	16.6	0.0	18.7	0.0	0.0	6.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1181	0	542	0	2368		0	2368	
V/C Ratio(X)				0.37	0.00	0.93	0.00	0.84		0.00	0.39	
Avail Cap(c_a), veh/h				1186	0	544	0	2408		0	2408	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				13.5	0.0	17.3	0.0	12.9	0.0	0.0	9.6	0.0
Incr Delay (d2), s/veh				0.1	0.0	21.4	0.0	2.9	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	8.2	0.0	5.9	0.0	0.0	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				13.6	0.0	38.7	0.0	15.8	0.0	0.0	9.7	0.0
LnGrp LOS				B	A	D	A	B		A	A	
Approach Vol, veh/h					937			1994	A		927	A
Approach Delay, s/veh					27.0			15.8			9.7	
Approach LOS					C			B			A	

Timer - Assigned Phs	2		6		8						
Phs Duration (G+Y+Rc), s	30.6		30.6		23.9						
Change Period (Y+Rc), s	5.3		5.3		5.3						
Max Green Setting (Gmax), s	25.7		25.7		18.7						
Max Q Clear Time (g_c+I1), s	20.7		8.5		18.6						
Green Ext Time (p_c), s	4.5		7.4		0.0						

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	505	165	56	0	149	0	1592	51	53	807	0
Future Volume (veh/h)	0	505	165	56	0	149	0	1592	51	53	807	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	0	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	532	174	59	0	157	0	1676	54	56	849	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	0	2	0	2	2	2	2	0
Cap, veh/h	0	630	281	202	0	0	0	1942	866	90	2243	0
Arrive On Green	0.00	0.18	0.18	0.06	0.00	0.00	0.00	0.55	0.55	0.05	0.63	0.00
Sat Flow, veh/h	0	3647	1585	3456	59		0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	0	532	174	59	53.3		0	1676	54	56	849	0
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1728	D		0	1777	1585	1781	1777	0
Q Serve(g_s), s	0.0	16.9	11.8	1.9			0.0	47.2	1.9	3.6	13.5	0.0
Cycle Q Clear(g_c), s	0.0	16.9	11.8	1.9			0.0	47.2	1.9	3.6	13.5	0.0
Prop In Lane	0.00		1.00	1.00			0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	630	281	202			0	1942	866	90	2243	0
V/C Ratio(X)	0.00	0.84	0.62	0.29			0.00	0.86	0.06	0.63	0.38	0.00
Avail Cap(c_a), veh/h	0	732	326	712			0	2120	945	122	2486	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00			0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	46.4	44.3	52.5			0.0	22.7	12.4	54.3	10.4	0.0
Incr Delay (d2), s/veh	0.0	7.8	2.5	0.7			0.0	3.8	0.0	2.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.1	4.8	0.8			0.0	19.0	0.6	1.6	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	54.2	46.8	53.3			0.0	26.5	12.4	56.9	10.5	0.0
LnGrp LOS	A	D	D	D			A	C	B	E	B	A
Approach Vol, veh/h		706						1730			905	
Approach Delay, s/veh		52.3						26.1			13.4	
Approach LOS		D						C			B	

Timer - Assigned Phs	1	2				6	7	8				
Phs Duration (G+Y+Rc), s	9.9	68.6				78.4	12.1	26.0				
Change Period (Y+Rc), s	4.0	4.9				4.9	5.3	5.3				
Max Green Setting (Gmax), s	8.0	69.5				81.5	24.0	24.0				
Max Q Clear Time (g_c+I1), s	5.6	49.2				15.5	3.9	18.9				
Green Ext Time (p_c), s	0.0	14.5				8.8	0.1	1.8				

Intersection Summary												
HCM 6th Ctrl Delay			28.6									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	727	4	6	567	161	7	31	13	520	14	88
Future Volume (veh/h)	44	727	4	6	567	161	7	31	13	520	14	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	765	4	6	597	169	7	33	14	547	15	93
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	1003	447	11	903	403	31	144	150	608	17	555
Arrive On Green	0.03	0.28	0.28	0.01	0.25	0.25	0.09	0.09	0.09	0.35	0.35	0.35
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	324	1530	1585	1736	48	1585
Grp Volume(v), veh/h	46	765	4	6	597	169	40	0	14	562	0	93
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1854	0	1585	1784	0	1585
Q Serve(g_s), s	1.7	13.3	0.1	0.2	10.2	6.0	1.3	0.0	0.5	20.2	0.0	2.7
Cycle Q Clear(g_c), s	1.7	13.3	0.1	0.2	10.2	6.0	1.3	0.0	0.5	20.2	0.0	2.7
Prop In Lane	1.00		1.00	1.00		1.00	0.17		1.00	0.97		1.00
Lane Grp Cap(c), veh/h	61	1003	447	11	903	403	175	0	150	625	0	555
V/C Ratio(X)	0.75	0.76	0.01	0.53	0.66	0.42	0.23	0.00	0.09	0.90	0.00	0.17
Avail Cap(c_a), veh/h	211	1106	493	211	1053	470	989	0	846	952	0	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.3	22.2	17.4	33.4	22.6	21.0	28.3	0.0	27.9	20.8	0.0	15.1
Incr Delay (d2), s/veh	6.8	3.0	0.0	13.8	1.4	0.8	0.2	0.0	0.1	5.6	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	5.2	0.0	0.1	3.9	2.1	0.6	0.0	0.2	8.4	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	25.2	17.4	47.3	23.9	21.8	28.5	0.0	28.0	26.4	0.0	15.2
LnGrp LOS	D	C	B	D	C	C	C	A	C	C	A	B
Approach Vol, veh/h		815			772			54			655	
Approach Delay, s/veh		25.9			23.6			28.4			24.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	25.0		10.4	6.3	23.2		27.6
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	8.0	21.0		36.0	8.0	20.0		36.0
Max Q Clear Time (g_c+I1), s	2.2	15.3		3.3	3.7	12.2		22.2
Green Ext Time (p_c), s	0.0	3.8		0.1	0.0	4.3		1.5

Intersection Summary			
HCM 6th Ctrl Delay			24.9
HCM 6th LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1284	2	0	529	21	1	0	0	86	0	56
Future Volume (veh/h)	22	1284	2	0	529	21	1	0	0	86	0	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	1352	2	0	557	22	1	0	0	91	0	59
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	1931	861	4	1425	636	4	59	50	117	179	152
Arrive On Green	0.02	0.54	0.54	0.00	0.40	0.40	0.00	0.00	0.00	0.07	0.00	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	23	1352	2	0	557	22	1	0	0	91	0	59
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.5	11.7	0.0	0.0	4.6	0.4	0.0	0.0	0.0	2.1	0.0	1.5
Cycle Q Clear(g_c), s	0.5	11.7	0.0	0.0	4.6	0.4	0.0	0.0	0.0	2.1	0.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	1931	861	4	1425	636	4	59	50	117	179	152
V/C Ratio(X)	0.58	0.70	0.00	0.00	0.39	0.03	0.23	0.00	0.00	0.78	0.00	0.39
Avail Cap(c_a), veh/h	470	2727	1216	470	2727	1216	470	718	608	470	718	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.2	7.0	4.4	0.0	8.9	7.6	20.8	0.0	0.0	19.2	0.0	17.7
Incr Delay (d2), s/veh	12.4	0.5	0.0	0.0	0.2	0.0	25.9	0.0	0.0	10.7	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.0	0.0	0.0	1.1	0.1	0.0	0.0	0.0	1.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	7.5	4.4	0.0	9.0	7.6	46.7	0.0	0.0	29.8	0.0	19.3
LnGrp LOS	C	A	A	A	A	A	D	A	A	C	A	B
Approach Vol, veh/h		1377			579			1			150	
Approach Delay, s/veh		7.9			9.0			46.7			25.7	
Approach LOS		A			A			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	6.3	0.0	27.7	5.0	9.0	5.9	21.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	4.1	0.0	0.0	13.7	2.0	3.5	2.5	6.6
Green Ext Time (p_c), s	0.1	0.0	0.0	9.0	0.0	0.1	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	794	736	80	41	304	120	41	657	59	138	246	473
Future Volume (veh/h)	794	736	80	41	304	120	41	657	59	138	246	473
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	836	775	0	43	320	0	43	692	0	145	259	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	939	1066		369	480		213	813		333	1025	
Arrive On Green	0.27	0.30	0.00	0.11	0.13	0.00	0.06	0.23	0.00	0.10	0.29	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	836	775	0	43	320	0	43	692	0	145	259	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	18.5	15.6	0.0	0.9	6.8	0.0	0.9	14.9	0.0	3.2	4.5	0.0
Cycle Q Clear(g_c), s	18.5	15.6	0.0	0.9	6.8	0.0	0.9	14.9	0.0	3.2	4.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	939	1066		369	480		213	813		333	1025	
V/C Ratio(X)	0.89	0.73		0.12	0.67		0.20	0.85		0.44	0.25	
Avail Cap(c_a), veh/h	1084	1841		369	1083		347	891		693	1261	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.9	25.0	0.0	32.2	32.8	0.0	35.5	29.5	0.0	34.0	21.8	0.0
Incr Delay (d2), s/veh	7.8	1.6	0.0	0.1	2.7	0.0	0.2	7.9	0.0	0.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	6.0	0.0	0.3	2.9	0.0	0.4	6.7	0.0	1.3	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	26.6	0.0	32.3	35.5	0.0	35.7	37.4	0.0	34.3	22.0	0.0
LnGrp LOS	D	C		C	D		D	D		C	C	
Approach Vol, veh/h		1611	A		363	A		735	A		404	A
Approach Delay, s/veh		31.3			35.1			37.3			26.4	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	29.6	8.9	28.7	25.7	16.5	13.4	24.2
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	5.7	* 6
Max Green Setting (Gmax), s	8.0	41.3	8.0	28.3	25.0	24.3	16.0	* 20
Max Q Clear Time (g_c+I1), s	2.9	17.6	2.9	6.5	20.5	8.8	5.2	16.9
Green Ext Time (p_c), s	0.0	6.3	0.0	1.8	1.1	1.9	0.2	1.4

Intersection Summary	
HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	744	18	64	284	37	20	159	140	165	131	99
Future Volume (veh/h)	158	744	18	64	284	37	20	159	140	165	131	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	166	783	19	67	299	39	21	167	147	174	138	104
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	1022	25	117	767	99	70	209	184	216	307	231
Arrive On Green	0.11	0.29	0.29	0.07	0.24	0.24	0.04	0.23	0.23	0.12	0.31	0.31
Sat Flow, veh/h	1781	3546	86	1781	3165	409	1781	917	808	1781	990	746
Grp Volume(v), veh/h	166	392	410	67	167	171	21	0	314	174	0	242
Grp Sat Flow(s),veh/h/ln	1781	1777	1855	1781	1777	1797	1781	0	1725	1781	0	1736
Q Serve(g_s), s	5.7	12.6	12.6	2.3	4.9	5.0	0.7	0.0	10.8	6.0	0.0	7.0
Cycle Q Clear(g_c), s	5.7	12.6	12.6	2.3	4.9	5.0	0.7	0.0	10.8	6.0	0.0	7.0
Prop In Lane	1.00		0.05	1.00		0.23	1.00		0.47	1.00		0.43
Lane Grp Cap(c), veh/h	199	512	534	117	431	435	70	0	393	216	0	538
V/C Ratio(X)	0.83	0.77	0.77	0.57	0.39	0.39	0.30	0.00	0.80	0.80	0.00	0.45
Avail Cap(c_a), veh/h	199	717	749	171	689	697	227	0	719	256	0	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.3	20.4	20.4	28.4	19.8	19.9	29.3	0.0	22.9	26.8	0.0	17.3
Incr Delay (d2), s/veh	23.9	3.9	3.8	1.6	0.8	0.8	0.9	0.0	5.2	12.3	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	5.1	5.3	1.0	1.9	2.0	0.3	0.0	4.6	3.0	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.2	24.3	24.2	30.0	20.6	20.7	30.2	0.0	28.0	39.1	0.0	18.1
LnGrp LOS	D	C	C	C	C	C	C	A	C	D	A	B
Approach Vol, veh/h		968			405			335			416	
Approach Delay, s/veh		28.9			22.2			28.1			26.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	19.2	8.1	23.8	6.4	24.3	11.0	20.9
Change Period (Y+Rc), s	4.0	4.9	4.0	5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	9.0	26.1	6.0	25.3	8.0	27.1	7.0	24.3
Max Q Clear Time (g_c+I1), s	8.0	12.8	4.3	14.6	2.7	9.0	7.7	7.0
Green Ext Time (p_c), s	0.0	1.5	0.0	3.4	0.0	1.2	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	1072	369	16	78	0
Future Volume (veh/h)	10	1072	369	16	78	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	1128	388	17	82	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	234	2004	814	36	238	212
Arrive On Green	0.13	0.56	0.23	0.23	0.13	0.00
Sat Flow, veh/h	1781	3647	3562	152	1781	1585
Grp Volume(v), veh/h	11	1128	198	207	82	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1843	1781	1585
Q Serve(g_s), s	0.2	5.8	2.8	2.8	1.2	0.0
Cycle Q Clear(g_c), s	0.2	5.8	2.8	2.8	1.2	0.0
Prop In Lane	1.00			0.08	1.00	1.00
Lane Grp Cap(c), veh/h	234	2004	417	432	238	212
V/C Ratio(X)	0.05	0.56	0.48	0.48	0.34	0.00
Avail Cap(c_a), veh/h	495	4236	1500	1556	1671	1487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.9	4.0	9.5	9.5	11.3	0.0
Incr Delay (d2), s/veh	0.0	0.3	1.1	1.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.7	0.7	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	4.3	10.6	10.6	11.6	0.0
LnGrp LOS	B	A	B	B	B	A
Approach Vol, veh/h		1139	405		82	
Approach Delay, s/veh		4.4	10.6		11.6	
Approach LOS		A	B		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		21.9		6.8	9.5	12.5
Change Period (Y+Rc), s		5.7		3.0	5.7	* 5.7
Max Green Setting (Gmax), s		34.3		27.0	8.0	* 24
Max Q Clear Time (g_c+I1), s		7.8		3.2	2.2	4.8
Green Ext Time (p_c), s		8.4		0.1	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1073	55	72	317	0	113	0	104	0	1	0
Future Volume (veh/h)	0	1073	55	72	317	0	113	0	104	0	1	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1129	58	76	334	0	119	0	109	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	1446	74	117	2014	0	275	0	245	0	4	0
Arrive On Green	0.00	0.42	0.42	0.07	0.57	0.00	0.15	0.00	0.15	0.00	0.00	0.00
Sat Flow, veh/h	1781	3439	177	1781	3647	0	1781	0	1585	0	1870	0
Grp Volume(v), veh/h	0	583	604	76	334	0	119	0	109	0	1	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1839	1781	1777	0	1781	0	1585	0	1870	0
Q Serve(g_s), s	0.0	14.0	14.0	2.1	2.2	0.0	3.0	0.0	3.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.0	14.0	2.1	2.2	0.0	3.0	0.0	3.1	0.0	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	4	747	773	117	2014	0	275	0	245	0	4	0
V/C Ratio(X)	0.00	0.78	0.78	0.65	0.17	0.00	0.43	0.00	0.45	0.00	0.24	0.00
Avail Cap(c_a), veh/h	288	908	939	288	2014	0	288	0	256	0	302	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	12.4	12.4	22.6	5.1	0.0	19.0	0.0	19.0	0.0	24.7	0.0
Incr Delay (d2), s/veh	0.0	4.0	3.9	2.3	0.0	0.0	0.4	0.0	0.5	0.0	10.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.9	5.0	0.8	0.5	0.0	1.2	0.0	1.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.4	16.3	24.9	5.2	0.0	19.4	0.0	19.5	0.0	35.5	0.0
LnGrp LOS	A	B	B	C	A	A	B	A	B	A	D	A
Approach Vol, veh/h		1187			410			228			1	
Approach Delay, s/veh		16.4			8.8			19.4			35.5	
Approach LOS		B			A			B			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	26.5		11.7	0.0	33.8		4.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	25.3		8.0	8.0	26.3		8.0
Max Q Clear Time (g_c+I1), s	4.1	16.0		5.1	0.0	4.2		2.0
Green Ext Time (p_c), s	0.0	4.8		0.2	0.0	1.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1070	19	50	464	3	38	7	114	51	14	24
Future Volume (veh/h)	6	1070	19	50	464	3	38	7	114	51	14	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	1126	20	53	488	3	40	7	120	54	15	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	1323	23	163	1638	10	131	14	455	125	21	455
Arrive On Green	0.01	0.37	0.37	0.09	0.45	0.45	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1781	3572	63	1781	3621	22	31	47	1585	27	74	1585
Grp Volume(v), veh/h	6	560	586	53	239	252	47	0	120	69	0	25
Grp Sat Flow(s),veh/h/ln	1781	1777	1859	1781	1777	1866	78	0	1585	101	0	1585
Q Serve(g_s), s	0.2	15.8	15.8	1.5	4.7	4.7	0.4	0.0	3.2	0.4	0.0	0.6
Cycle Q Clear(g_c), s	0.2	15.8	15.8	1.5	4.7	4.7	15.7	0.0	3.2	15.7	0.0	0.6
Prop In Lane	1.00		0.03	1.00		0.01	0.85		1.00	0.78		1.00
Lane Grp Cap(c), veh/h	17	658	688	163	804	845	144	0	455	147	0	455
V/C Ratio(X)	0.36	0.85	0.85	0.32	0.30	0.30	0.33	0.00	0.26	0.47	0.00	0.05
Avail Cap(c_a), veh/h	261	726	760	261	804	845	362	0	697	355	0	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.9	15.8	15.8	23.2	9.4	9.4	23.3	0.0	15.0	23.0	0.0	14.1
Incr Delay (d2), s/veh	4.7	9.3	8.9	0.4	0.3	0.3	0.5	0.0	0.1	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.4	6.7	0.6	1.3	1.4	0.6	0.0	1.1	0.9	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	25.1	24.7	23.6	9.7	9.7	23.8	0.0	15.1	23.9	0.0	14.1
LnGrp LOS	C	C	C	C	A	A	C	A	B	C	A	B
Approach Vol, veh/h		1152			544			167			94	
Approach Delay, s/veh		24.9			11.1			17.5			21.3	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	26.0		20.0	4.5	30.5		20.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	22.3		24.0	8.0	21.3		24.0
Max Q Clear Time (g_c+I1), s	3.5	17.8		17.7	2.2	6.7		17.7
Green Ext Time (p_c), s	0.0	2.6		0.2	0.0	2.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	1136	10	37	299	115	14	0	33	80	0	35
Future Volume (veh/h)	203	1136	10	37	299	115	14	0	33	80	0	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	214	1196	11	39	315	121	15	0	35	84	0	37
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	1393	13	102	737	278	43	0	101	249	0	222
Arrive On Green	0.15	0.39	0.39	0.06	0.29	0.29	0.09	0.00	0.09	0.14	0.00	0.14
Sat Flow, veh/h	1781	3608	33	1781	2525	951	492	0	1147	1781	0	1585
Grp Volume(v), veh/h	214	589	618	39	220	216	50	0	0	84	0	37
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1699	1639	0	0	1781	0	1585
Q Serve(g_s), s	6.2	16.4	16.4	1.1	5.4	5.6	1.5	0.0	0.0	2.3	0.0	1.1
Cycle Q Clear(g_c), s	6.2	16.4	16.4	1.1	5.4	5.6	1.5	0.0	0.0	2.3	0.0	1.1
Prop In Lane	1.00		0.02	1.00		0.56	0.30		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	270	686	720	102	519	496	144	0	0	249	0	222
V/C Ratio(X)	0.79	0.86	0.86	0.38	0.42	0.44	0.35	0.00	0.00	0.34	0.00	0.17
Avail Cap(c_a), veh/h	595	736	772	397	538	514	578	0	0	628	0	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.0	15.2	15.2	24.5	15.4	15.5	23.1	0.0	0.0	20.9	0.0	20.4
Incr Delay (d2), s/veh	2.0	9.9	9.5	0.9	0.7	0.8	0.5	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.7	6.9	0.4	1.8	1.8	0.6	0.0	0.0	0.9	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	25.0	24.6	25.3	16.1	16.3	23.6	0.0	0.0	21.2	0.0	20.5
LnGrp LOS	C	C	C	C	B	B	C	A	A	C	A	C
Approach Vol, veh/h		1421			475			50			121	
Approach Delay, s/veh		24.7			17.0			23.6			21.0	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	26.5		8.7	12.2	21.4		11.5
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	22.3		19.0	18.0	16.3		19.0
Max Q Clear Time (g_c+I1), s	3.1	18.4		3.5	8.2	7.6		4.3
Green Ext Time (p_c), s	0.0	2.4		0.1	0.3	1.5		0.2

Intersection Summary	
HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	2	8	106	3	33	21	693	159	41	854	17
Future Volume (veh/h)	6	2	8	106	3	33	21	693	159	41	854	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	2	8	112	3	35	22	729	167	43	899	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	20	17	143	157	133	39	1556	483	69	1643	510
Arrive On Green	0.01	0.01	0.01	0.08	0.08	0.08	0.02	0.30	0.30	0.04	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	6	2	8	112	3	35	22	729	167	43	899	18
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.0	0.2	2.2	0.1	0.7	0.4	4.1	2.9	0.8	5.1	0.3
Cycle Q Clear(g_c), s	0.1	0.0	0.2	2.2	0.1	0.7	0.4	4.1	2.9	0.8	5.1	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	20	17	143	157	133	39	1556	483	69	1643	510
V/C Ratio(X)	0.52	0.10	0.48	0.79	0.02	0.26	0.56	0.47	0.35	0.62	0.55	0.04
Avail Cap(c_a), veh/h	353	1693	1434	353	1798	1524	353	2599	807	353	2599	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	17.3	17.4	16.0	14.9	15.2	17.1	10.0	9.6	16.7	9.9	8.2
Incr Delay (d2), s/veh	31.9	2.2	19.5	9.1	0.0	1.0	12.0	0.2	0.4	8.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.1	0.0	0.3	0.3	0.9	0.8	0.4	1.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.4	19.5	36.9	25.1	14.9	16.2	29.1	10.2	10.0	25.4	10.2	8.3
LnGrp LOS	D	B	D	C	B	B	C	B	A	C	B	A
Approach Vol, veh/h		16			150			918			960	
Approach Delay, s/veh		39.4			22.8			10.6			10.8	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	15.8	7.8	5.4	5.8	16.4	5.2	8.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	18.0	7.0	32.0	7.0	18.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	2.8	6.1	4.2	2.2	2.4	7.1	2.1	2.7
Green Ext Time (p_c), s	0.0	4.0	0.1	0.0	0.0	4.3	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	30	70	264	7	28	22	825	126	17	944	7
Future Volume (veh/h)	20	30	70	264	7	28	22	825	126	17	944	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	32	74	278	7	29	23	868	133	18	994	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	133	113	352	465	394	39	1586	492	32	1564	486
Arrive On Green	0.02	0.07	0.07	0.20	0.25	0.25	0.02	0.31	0.31	0.02	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	21	32	74	278	7	29	23	868	133	18	994	7
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.6	0.8	2.3	7.4	0.1	0.7	0.6	7.0	3.1	0.5	8.3	0.2
Cycle Q Clear(g_c), s	0.6	0.8	2.3	7.4	0.1	0.7	0.6	7.0	3.1	0.5	8.3	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	36	133	113	352	465	394	39	1586	492	32	1564	486
V/C Ratio(X)	0.58	0.24	0.65	0.79	0.02	0.07	0.59	0.55	0.27	0.57	0.64	0.01
Avail Cap(c_a), veh/h	251	1206	1022	790	1884	1597	251	2264	703	251	2264	703
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	21.8	22.4	18.9	14.1	14.3	24.0	14.2	12.9	24.2	14.8	12.0
Incr Delay (d2), s/veh	14.0	0.9	6.3	4.0	0.0	0.1	13.4	0.3	0.3	15.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.3	0.9	3.0	0.1	0.2	0.4	2.1	1.0	0.3	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	22.7	28.7	22.9	14.1	14.4	37.4	14.5	13.2	39.4	15.3	12.0
LnGrp LOS	D	C	C	C	B	B	D	B	B	D	B	B
Approach Vol, veh/h		127			314			1024			1019	
Approach Delay, s/veh		28.7			22.0			14.8			15.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	20.4	14.8	8.5	6.1	20.2	6.0	17.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	22.0	22.0	32.0	7.0	22.0	7.0	50.0
Max Q Clear Time (g_c+I1), s	2.5	9.0	9.4	4.3	2.6	10.3	2.6	2.7
Green Ext Time (p_c), s	0.0	4.9	0.6	0.4	0.0	4.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	9	103	114	4	17	28	882	38	70	1261	15
Future Volume (veh/h)	53	9	103	114	4	17	28	882	38	70	1261	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	9	108	120	4	18	29	928	40	74	1327	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	171	145	156	252	214	48	1777	552	93	1908	592
Arrive On Green	0.04	0.09	0.09	0.09	0.13	0.13	0.03	0.35	0.35	0.05	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	56	9	108	120	4	18	29	928	40	74	1327	16
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.5	0.2	3.2	3.2	0.1	0.5	0.8	7.0	0.8	2.0	10.6	0.3
Cycle Q Clear(g_c), s	1.5	0.2	3.2	3.2	0.1	0.5	0.8	7.0	0.8	2.0	10.6	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	171	145	156	252	214	48	1777	552	93	1908	592
V/C Ratio(X)	0.72	0.05	0.75	0.77	0.02	0.08	0.61	0.52	0.07	0.79	0.70	0.03
Avail Cap(c_a), veh/h	259	1241	1052	332	1319	1117	259	2297	713	259	2297	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	20.0	21.4	21.5	18.1	18.3	23.2	12.5	10.5	22.6	12.8	9.6
Incr Delay (d2), s/veh	11.6	0.1	7.4	7.8	0.0	0.2	12.0	0.2	0.1	14.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1	1.4	1.5	0.0	0.2	0.4	2.0	0.2	1.1	3.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	20.1	28.8	29.4	18.1	18.4	35.2	12.8	10.6	36.6	13.5	9.6
LnGrp LOS	C	C	C	C	B	B	D	B	B	D	B	A
Approach Vol, veh/h		173			142			997			1417	
Approach Delay, s/veh		30.2			27.7			13.3			14.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	22.1	9.2	9.4	6.3	23.3	7.1	11.5
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	7.0	21.7	9.0	32.0	7.0	21.7	7.0	34.0
Max Q Clear Time (g_c+I1), s	4.0	9.0	5.2	5.2	2.8	12.6	3.5	2.5
Green Ext Time (p_c), s	0.0	4.9	0.1	0.4	0.0	5.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	46	39	18	77	6	21	50	19	8	98	86
Future Volume (veh/h)	83	46	39	18	77	6	21	50	19	8	98	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	48	41	19	81	6	22	53	20	8	103	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	310	261	35	200	15	40	267	101	15	176	155
Arrive On Green	0.07	0.17	0.17	0.02	0.12	0.12	0.02	0.21	0.21	0.01	0.19	0.19
Sat Flow, veh/h	1781	1870	1575	1781	1719	127	1781	1292	488	1781	913	807
Grp Volume(v), veh/h	87	48	41	19	0	87	22	0	73	8	0	194
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	0	1846	1781	0	1780	1781	0	1720
Q Serve(g_s), s	1.4	0.7	0.7	0.3	0.0	1.3	0.4	0.0	1.0	0.1	0.0	3.1
Cycle Q Clear(g_c), s	1.4	0.7	0.7	0.3	0.0	1.3	0.4	0.0	1.0	0.1	0.0	3.1
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.27	1.00		0.47
Lane Grp Cap(c), veh/h	122	310	261	35	0	215	40	0	367	15	0	331
V/C Ratio(X)	0.71	0.15	0.16	0.55	0.00	0.40	0.55	0.00	0.20	0.52	0.00	0.59
Avail Cap(c_a), veh/h	742	1652	1391	445	0	1323	505	0	1809	445	0	1691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	10.7	10.7	14.6	0.0	12.3	14.5	0.0	9.9	14.8	0.0	11.0
Incr Delay (d2), s/veh	7.4	0.2	0.3	12.7	0.0	1.2	11.4	0.0	0.3	24.9	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.2	0.2	0.2	0.0	0.5	0.2	0.0	0.3	0.1	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	10.9	11.0	27.3	0.0	13.5	26.0	0.0	10.1	39.7	0.0	12.7
LnGrp LOS	C	B	B	C	A	B	C	A	B	D	A	B
Approach Vol, veh/h		176			106			95			202	
Approach Delay, s/veh		16.0			16.0			13.8			13.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	10.7	5.1	9.5	5.2	10.3	6.6	8.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	30.5	7.5	26.5	8.5	29.5	12.5	21.5
Max Q Clear Time (g_c+I1), s	2.1	3.0	2.3	2.7	2.4	5.1	3.4	3.3
Green Ext Time (p_c), s	0.0	0.3	0.0	0.3	0.0	1.1	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	547	550	24	292	215
Future Volume (veh/h)	3	547	550	24	292	215
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	157	579	10	307	226
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	225	200	703	596	373	1274
Arrive On Green	0.13	0.13	0.38	0.38	0.21	0.68
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	3	157	579	10	307	226
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	0.1	5.0	14.6	0.2	8.6	2.3
Cycle Q Clear(g_c), s	0.1	5.0	14.6	0.2	8.6	2.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	225	200	703	596	373	1274
V/C Ratio(X)	0.01	0.78	0.82	0.02	0.82	0.18
Avail Cap(c_a), veh/h	548	488	1007	854	548	1763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	22.0	14.7	10.2	19.6	3.0
Incr Delay (d2), s/veh	0.0	6.6	3.8	0.0	6.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.1	5.9	0.1	3.8	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.9	28.6	18.5	10.2	26.1	3.1
LnGrp LOS	B	C	B	B	C	A
Approach Vol, veh/h	160		589			533
Approach Delay, s/veh	28.5		18.3			16.3
Approach LOS	C		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.9	24.5				40.4	11.6
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	16.0	28.0				49.0	16.0
Max Q Clear Time (g_c+I1), s	10.6	16.6				4.3	7.0
Green Ext Time (p_c), s	0.5	3.0				1.4	0.3

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	18	176	397	1	54	164
Future Volume (veh/h)	18	176	397	1	54	164
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	185	418	1	57	173
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	283	252	712	604	564	712
Arrive On Green	0.16	0.16	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1781	1585	1870	1585	968	1870
Grp Volume(v), veh/h	19	185	418	1	57	173
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	968	1870
Q Serve(g_s), s	0.2	2.2	3.5	0.0	1.0	1.2
Cycle Q Clear(g_c), s	0.2	2.2	3.5	0.0	4.5	1.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	283	252	712	604	564	712
V/C Ratio(X)	0.07	0.74	0.59	0.00	0.10	0.24
Avail Cap(c_a), veh/h	1458	1297	2392	2027	1433	2392
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.0	7.8	4.8	3.7	6.6	4.1
Incr Delay (d2), s/veh	0.1	4.1	0.8	0.0	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.2	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.1	12.0	5.6	3.8	6.7	4.3
LnGrp LOS	A	B	A	A	A	A
Approach Vol, veh/h	204		419			230
Approach Delay, s/veh	11.5		5.6			4.9
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		12.4				12.4	7.1
Change Period (Y+Rc), s		5.0				5.0	4.0
Max Green Setting (Gmax), s		25.0				25.0	16.0
Max Q Clear Time (g_c+I1), s		5.5				6.5	4.2
Green Ext Time (p_c), s		2.2				1.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	447	15	38	274	0	76	0	15	0	0	0
Future Volume (veh/h)	0	447	15	38	274	0	76	0	15	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	471	16	40	288	0	80	0	16	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	1164	518	70	1939	865	125	0	153	8	8	0
Arrive On Green	0.00	0.33	0.33	0.04	0.55	0.00	0.07	0.00	0.10	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1580	1781	3554	1585	1781	0	1580	1781	1870	0
Grp Volume(v), veh/h	0	471	16	40	288	0	80	0	16	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1580	1781	1777	1585	1781	0	1580	1781	1870	0
Q Serve(g_s), s	0.0	2.3	0.2	0.5	0.9	0.0	1.0	0.0	0.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.3	0.2	0.5	0.9	0.0	1.0	0.0	0.2	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	8	1164	518	70	1939	865	125	0	153	8	8	0
V/C Ratio(X)	0.00	0.40	0.03	0.57	0.15	0.00	0.64	0.00	0.10	0.00	0.00	0.00
Avail Cap(c_a), veh/h	637	4129	1836	637	4129	1842	557	0	2259	637	2759	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.8	5.1	10.6	2.5	0.0	10.1	0.0	9.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	7.1	0.0	0.0	5.4	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.0	0.2	0.0	0.0	0.4	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.1	5.1	17.7	2.5	0.0	15.5	0.0	9.5	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		487			328			96			0	
Approach Delay, s/veh		6.0			4.4			14.5			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	6.2	4.9	11.3	5.6	0.6	0.0	16.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	32.0	8.0	26.0	7.0	33.0	8.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.2	2.5	4.3	3.0	0.0	0.0	2.9
Green Ext Time (p_c), s	0.0	0.0	0.0	2.9	0.0	0.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1	8	62	2	129	4	746	118	151	322	11
Future Volume (veh/h)	6	1	8	62	2	129	4	746	118	151	322	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	1	8	65	2	136	4	785	124	159	339	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	154	130	178	238	202	15	1413	439	289	1817	564
Arrive On Green	0.01	0.08	0.08	0.05	0.13	0.13	0.00	0.28	0.28	0.08	0.36	0.36
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	6	1	8	65	2	136	4	785	124	159	339	12
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.1	0.0	0.2	0.7	0.0	3.2	0.0	5.2	2.4	1.7	1.8	0.2
Cycle Q Clear(g_c), s	0.1	0.0	0.2	0.7	0.0	3.2	0.0	5.2	2.4	1.7	1.8	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	22	154	130	178	238	202	15	1413	439	289	1817	564
V/C Ratio(X)	0.27	0.01	0.06	0.36	0.01	0.67	0.27	0.56	0.28	0.55	0.19	0.02
Avail Cap(c_a), veh/h	961	757	641	961	757	641	961	2196	682	961	2196	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	16.7	16.7	18.1	15.1	16.5	19.6	12.2	11.2	17.4	8.8	8.3
Incr Delay (d2), s/veh	6.3	0.0	0.2	1.2	0.0	3.9	9.1	0.3	0.3	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	0.3	0.0	1.2	0.0	1.4	0.7	0.6	0.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	16.7	16.9	19.4	15.1	20.3	28.8	12.6	11.6	19.0	8.8	8.3
LnGrp LOS	C	B	B	B	B	C	C	B	B	B	A	A
Approach Vol, veh/h		15			203			913			510	
Approach Delay, s/veh		20.5			20.0			12.5			12.0	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	15.9	7.0	8.3	5.2	19.1	5.3	10.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	3.7	7.2	2.7	2.2	2.0	3.8	2.1	5.2
Green Ext Time (p_c), s	0.2	3.7	0.1	0.0	0.0	1.6	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	347	10	12	136	14	15	14	21	5	8	4
Future Volume (veh/h)	9	347	10	12	136	14	15	14	21	5	8	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	365	11	13	143	15	16	15	22	5	8	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	763	340	24	777	347	83	87	74	215	226	192
Arrive On Green	0.01	0.21	0.21	0.01	0.22	0.22	0.05	0.05	0.05	0.12	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	9	365	11	13	143	15	16	15	22	5	8	4
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.2	3.0	0.2	0.2	1.1	0.2	0.3	0.3	0.4	0.1	0.1	0.1
Cycle Q Clear(g_c), s	0.2	3.0	0.2	0.2	1.1	0.2	0.3	0.3	0.4	0.1	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	763	340	24	777	347	83	87	74	215	226	192
V/C Ratio(X)	0.53	0.48	0.03	0.54	0.18	0.04	0.19	0.17	0.30	0.02	0.04	0.02
Avail Cap(c_a), veh/h	592	2577	1149	592	2577	1149	1292	1356	1149	861	904	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	11.4	10.3	16.2	10.5	10.2	15.2	15.2	15.3	12.8	12.8	12.8
Incr Delay (d2), s/veh	22.8	0.5	0.0	17.1	0.1	0.1	1.1	0.9	2.2	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.9	0.0	0.2	0.3	0.1	0.1	0.1	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	11.8	10.3	33.3	10.6	10.2	16.3	16.1	17.5	12.9	12.9	12.9
LnGrp LOS	D	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		385			171			53			17	
Approach Delay, s/veh		12.4			12.3			16.7			12.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		6.5	5.5	12.1		9.0	5.3	12.2
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		24.0	11.0	24.0		16.0	11.0	24.0
Max Q Clear Time (g_c+I1), s		2.4	2.2	5.0		2.1	2.2	3.1
Green Ext Time (p_c), s		0.1	0.0	2.2		0.0	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	5	7	5	184	5	519	4	90	431	5
Future Volume (veh/h)	5	5	5	7	5	184	5	519	4	90	431	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	5	5	7	5	194	5	546	4	95	454	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	300	254	13	304	258	10	1116	346	121	1436	446
Arrive On Green	0.01	0.16	0.16	0.01	0.16	0.16	0.01	0.22	0.22	0.07	0.28	0.28
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	5	5	5	7	5	194	5	546	4	95	454	5
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.1	0.1	0.1	0.1	4.3	0.1	3.4	0.1	1.9	2.6	0.1
Cycle Q Clear(g_c), s	0.1	0.1	0.1	0.1	0.1	4.3	0.1	3.4	0.1	1.9	2.6	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	300	254	13	304	258	10	1116	346	121	1436	446
V/C Ratio(X)	0.52	0.02	0.02	0.52	0.02	0.75	0.52	0.49	0.01	0.78	0.32	0.01
Avail Cap(c_a), veh/h	534	816	692	534	816	692	534	2368	735	534	2368	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	13.0	13.0	18.1	12.9	14.7	18.2	12.5	11.2	16.8	10.4	9.5
Incr Delay (d2), s/veh	37.0	0.0	0.0	28.2	0.0	4.4	37.0	0.3	0.0	10.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.2	0.0	1.5	0.1	0.9	0.0	0.9	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.2	13.0	13.0	46.4	12.9	19.1	55.2	12.9	11.2	27.3	10.5	9.5
LnGrp LOS	E	B	B	D	B	B	E	B	B	C	B	A
Approach Vol, veh/h		15			206			555			554	
Approach Delay, s/veh		27.1			19.9			13.2			13.4	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	13.0	5.3	10.9	5.2	15.3	5.2	11.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	3.9	5.4	2.1	2.1	2.1	4.6	2.1	6.3
Green Ext Time (p_c), s	0.1	2.6	0.0	0.0	0.0	2.2	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	129	5	61	156	5	53
Future Volume (veh/h)	129	5	61	156	5	53
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	5	64	164	5	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	567	253	106	1636	102	91
Arrive On Green	0.16	0.16	0.06	0.46	0.06	0.06
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	136	5	64	164	5	56
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	0.7	0.1	0.7	0.5	0.1	0.7
Cycle Q Clear(g_c), s	0.7	0.1	0.7	0.5	0.1	0.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	567	253	106	1636	102	91
V/C Ratio(X)	0.24	0.02	0.60	0.10	0.05	0.62
Avail Cap(c_a), veh/h	3772	1682	1289	4458	945	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.6	7.3	9.5	3.2	9.2	9.5
Incr Delay (d2), s/veh	0.2	0.0	5.4	0.0	0.2	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.3	0.0	0.0	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.8	7.4	14.9	3.2	9.4	16.2
LnGrp LOS	A	A	B	A	A	B
Approach Vol, veh/h	141			228	61	
Approach Delay, s/veh	7.8			6.5	15.7	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		6.2	6.2	8.3		14.5
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		11.0	15.0	22.0		26.0
Max Q Clear Time (g_c+I1), s		2.7	2.7	2.7		2.5
Green Ext Time (p_c), s		0.1	0.1	0.7		0.9

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	206	96	1	5	73	608	67	5	426	5
Future Volume (veh/h)	5	5	206	96	1	5	73	608	67	5	426	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	5	217	101	1	5	77	640	71	5	448	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	333	282	235	450	382	200	1222	379	19	954	296
Arrive On Green	0.01	0.18	0.18	0.07	0.24	0.24	0.06	0.24	0.24	0.01	0.19	0.19
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	5	5	217	101	1	5	77	640	71	5	448	5
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.1	0.1	5.1	1.1	0.0	0.1	0.8	4.3	1.4	0.1	3.1	0.1
Cycle Q Clear(g_c), s	0.1	0.1	5.1	1.1	0.0	0.1	0.8	4.3	1.4	0.1	3.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	19	333	282	235	450	382	200	1222	379	19	954	296
V/C Ratio(X)	0.27	0.01	0.77	0.43	0.00	0.01	0.38	0.52	0.19	0.27	0.47	0.02
Avail Cap(c_a), veh/h	968	762	646	968	762	646	968	2210	686	968	2210	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	13.3	15.4	17.6	11.3	11.4	17.8	13.0	11.9	19.5	14.2	13.0
Incr Delay (d2), s/veh	7.4	0.0	4.4	1.2	0.0	0.0	1.2	0.3	0.2	7.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.9	0.4	0.0	0.0	0.3	1.2	0.4	0.0	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	13.3	19.7	18.8	11.3	11.4	19.0	13.3	12.1	26.9	14.6	13.1
LnGrp LOS	C	B	B	B	B	B	B	B	B	C	B	B
Approach Vol, veh/h		227			107			788			458	
Approach Delay, s/veh		19.8			18.4			13.8			14.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	14.4	7.7	12.0	7.3	12.3	5.2	14.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	2.1	6.3	3.1	7.1	2.8	5.1	2.1	2.1
Green Ext Time (p_c), s	0.0	3.1	0.1	0.5	0.1	2.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	205	0	24	873	16	0	0	5	4	0	9
Future Volume (veh/h)	18	205	0	24	873	16	0	0	5	4	0	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	216	0	25	919	17	0	0	5	4	0	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	1426	636	45	1452	27	0	0	18	35	0	31
Arrive On Green	0.02	0.40	0.00	0.03	0.41	0.41	0.00	0.00	0.01	0.02	0.00	0.02
Sat Flow, veh/h	1781	3554	1585	1781	3569	66	0	0	1578	1781	0	1578
Grp Volume(v), veh/h	19	216	0	25	458	478	0	0	5	4	0	9
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1858	0	0	1578	1781	0	1578
Q Serve(g_s), s	0.3	1.1	0.0	0.4	6.1	6.1	0.0	0.0	0.1	0.1	0.0	0.2
Cycle Q Clear(g_c), s	0.3	1.1	0.0	0.4	6.1	6.1	0.0	0.0	0.1	0.1	0.0	0.2
Prop In Lane	1.00		1.00	1.00		0.04	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	35	1426	636	45	723	756	0	0	18	35	0	31
V/C Ratio(X)	0.55	0.15	0.00	0.56	0.63	0.63	0.00	0.00	0.28	0.12	0.00	0.29
Avail Cap(c_a), veh/h	484	2170	968	484	1085	1135	0	0	1124	1269	0	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	5.6	0.0	14.2	7.0	7.0	0.0	0.0	14.4	14.2	0.0	14.2
Incr Delay (d2), s/veh	12.6	0.0	0.0	10.5	0.9	0.9	0.0	0.0	8.2	1.4	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.0	0.2	1.0	1.0	0.0	0.0	0.1	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	5.7	0.0	24.7	7.9	7.9	0.0	0.0	22.7	15.6	0.0	19.4
LnGrp LOS	C	A	A	C	A	A	A	A	C	B	A	B
Approach Vol, veh/h		235			961			5			13	
Approach Delay, s/veh		7.4			8.3			22.7			18.2	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.3	4.7	15.8		4.6	4.6	16.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	8.0	18.0		21.0	8.0	18.0
Max Q Clear Time (g_c+I1), s		2.1	2.4	3.1		2.2	2.3	8.1
Green Ext Time (p_c), s		0.0	0.0	1.0		0.0	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	8.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	5	43	42	7	72	63	117	15	16	70	97
Future Volume (veh/h)	71	5	43	42	7	72	63	117	15	16	70	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	5	45	44	7	76	66	123	16	17	74	102
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	267	225	74	226	190	103	363	306	32	288	242
Arrive On Green	0.06	0.14	0.14	0.04	0.12	0.12	0.06	0.19	0.19	0.02	0.15	0.15
Sat Flow, veh/h	1781	1870	1575	1781	1870	1575	1781	1870	1577	1781	1870	1575
Grp Volume(v), veh/h	75	5	45	44	7	76	66	123	16	17	74	102
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1575	1781	1870	1577	1781	1870	1575
Q Serve(g_s), s	1.1	0.1	0.7	0.6	0.1	1.2	1.0	1.5	0.2	0.3	0.9	1.6
Cycle Q Clear(g_c), s	1.1	0.1	0.7	0.6	0.1	1.2	1.0	1.5	0.2	0.3	0.9	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	267	225	74	226	190	103	363	306	32	288	242
V/C Ratio(X)	0.66	0.02	0.20	0.59	0.03	0.40	0.64	0.34	0.05	0.54	0.26	0.42
Avail Cap(c_a), veh/h	537	1552	1307	537	1552	1307	537	1623	1368	537	1623	1366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	9.8	10.0	12.5	10.3	10.8	12.2	9.2	8.7	12.9	9.9	10.2
Incr Delay (d2), s/veh	6.3	0.0	0.4	7.3	0.1	1.4	6.4	0.5	0.1	13.4	0.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.3	0.0	0.4	0.4	0.4	0.1	0.2	0.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	9.8	10.5	19.8	10.3	12.1	18.6	9.8	8.8	26.3	10.4	11.3
LnGrp LOS	B	A	B	B	B	B	B	A	A	C	B	B
Approach Vol, veh/h		125			127			205			193	
Approach Delay, s/veh		15.2			14.7			12.5			12.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	9.1	5.1	7.8	5.5	8.1	5.7	7.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	23.0	8.0	22.0	8.0	23.0	8.0	22.0
Max Q Clear Time (g_c+I1), s	2.3	3.5	2.6	2.7	3.0	3.6	3.1	3.2
Green Ext Time (p_c), s	0.0	0.6	0.0	0.1	0.0	0.6	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

SimTraffic Post-Processor | **Kaiser Roseville Campus Expansion TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions**
Volume and Delay by Movement | **AM Peak Hour**

Intersection 5 **Cirby Way/Cirby Hills Dr-Kaiser North Driveway** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	80	84	105.5%	40.0	8.5	D
	Through						
	Right Turn	50	61	121.6%	12.6	2.8	B
	Subtotal	130	145	111.7%	28.6	5.3	C
SB	Left Turn	30	30	100.1%	64.5	17.0	E
	Through						
	Right Turn	70	78	111.3%	30.2	8.4	C
	Subtotal	100	108	107.9%	39.9	9.5	D
EB	Left Turn	90	76	84.9%	46.7	6.8	D
	Through	1,230	1,073	87.2%	11.8	1.7	B
	Right Turn	180	146	81.3%	11.2	2.2	B
	Subtotal	1,500	1,296	86.4%	13.8	2.0	B
WB	Left Turn	120	82	68.4%	146.0	47.1	F
	Through	1,800	1,177	65.4%	134.9	33.9	F
	Right Turn	30	19	62.1%	108.3	59.9	F
	Subtotal	1,950	1,278	65.5%	135.4	34.2	F
Total		3,680	2,827	76.8%	70.2	14.2	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	78	50	174	33	21	57	801	243	28	282	5
Future Volume (veh/h)	36	78	50	174	33	21	57	801	243	28	282	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	82	53	183	35	22	60	843	256	29	297	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	129	162	224	43	236	84	908	769	64	1696	29
Arrive On Green	0.10	0.10	0.10	0.15	0.15	0.15	0.05	0.49	0.49	0.04	0.47	0.47
Sat Flow, veh/h	583	1258	1585	1507	288	1585	1781	1870	1585	1781	3576	60
Grp Volume(v), veh/h	120	0	53	218	0	22	60	843	256	29	147	155
Grp Sat Flow(s),veh/h/ln	1841	0	1585	1795	0	1585	1781	1870	1585	1781	1777	1860
Q Serve(g_s), s	4.8	0.0	2.4	9.0	0.0	0.9	2.5	32.2	7.5	1.2	3.6	3.6
Cycle Q Clear(g_c), s	4.8	0.0	2.4	9.0	0.0	0.9	2.5	32.2	7.5	1.2	3.6	3.6
Prop In Lane	0.32		1.00	0.84		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	189	0	162	267	0	236	84	908	769	64	843	882
V/C Ratio(X)	0.64	0.00	0.33	0.82	0.00	0.09	0.71	0.93	0.33	0.45	0.17	0.18
Avail Cap(c_a), veh/h	629	0	541	613	0	541	211	1172	993	187	1116	1168
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	31.7	31.4	0.0	28.0	35.8	18.4	12.0	35.9	11.5	11.5
Incr Delay (d2), s/veh	1.3	0.0	0.4	2.3	0.0	0.1	4.1	9.6	0.1	1.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.9	3.9	0.0	0.3	1.2	14.7	2.5	0.5	1.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	0.0	32.2	33.7	0.0	28.0	39.9	28.0	12.1	37.8	11.6	11.6
LnGrp LOS	C	A	C	C	A	C	D	C	B	D	B	B
Approach Vol, veh/h		173			240			1159			331	
Approach Delay, s/veh		33.5			33.2			25.1			13.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	42.2		11.8	7.6	41.4		15.3
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	8.0	47.7		26.0	9.0	* 48		26.0
Max Q Clear Time (g_c+I1), s	3.2	34.2		6.8	4.5	5.6		11.0
Green Ext Time (p_c), s	0.0	2.8		0.3	0.0	1.1		0.5

Intersection Summary	
HCM 6th Ctrl Delay	24.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	326	13	110	140	4	0	421	363	0	159	142
Future Volume (veh/h)	316	326	13	110	140	4	0	421	363	0	159	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	333	343	14	116	147	4	0	443	382	0	167	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	507	508	21	259	264	7	0	592	502	0	592	
Arrive On Green	0.28	0.28	0.28	0.15	0.15	0.15	0.00	0.32	0.32	0.00	0.32	0.00
Sat Flow, veh/h	1781	1784	73	1781	1812	49	0	1870	1585	0	1870	0
Grp Volume(v), veh/h	333	0	357	116	0	151	0	443	382	0	167	0
Grp Sat Flow(s),veh/h/ln	1781	0	1857	1781	0	1861	0	1870	1585	0	1870	0
Q Serve(g_s), s	8.9	0.0	9.2	3.2	0.0	4.1	0.0	11.5	11.7	0.0	3.6	0.0
Cycle Q Clear(g_c), s	8.9	0.0	9.2	3.2	0.0	4.1	0.0	11.5	11.7	0.0	3.6	0.0
Prop In Lane	1.00		0.04	1.00		0.03	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	507	0	528	259	0	271	0	592	502	0	592	
V/C Ratio(X)	0.66	0.00	0.68	0.45	0.00	0.56	0.00	0.75	0.76	0.00	0.28	
Avail Cap(c_a), veh/h	712	0	743	264	0	276	0	686	581	0	786	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	17.0	0.0	17.1	21.1	0.0	21.5	0.0	16.5	16.6	0.0	13.9	0.0
Incr Delay (d2), s/veh	3.1	0.0	3.2	2.6	0.0	4.2	0.0	5.4	6.8	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.9	1.4	0.0	1.9	0.0	5.2	4.7	0.0	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	0.0	20.3	23.7	0.0	25.7	0.0	21.9	23.4	0.0	14.0	0.0
LnGrp LOS	C	A	C	C	A	C	A	C	C	A	B	
Approach Vol, veh/h		690			267			825			167	A
Approach Delay, s/veh		20.2			24.8			22.6			14.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.1		22.4		19.6		22.4				
Change Period (Y+Rc), s		* 4.2		5.3		4.2		* 5.3				
Max Green Setting (Gmax), s		* 8		22.7		21.6		* 20				
Max Q Clear Time (g_c+I1), s		6.1		5.6		11.2		13.7				
Green Ext Time (p_c), s		0.4		0.4		4.2		3.4				

Intersection Summary	
HCM 6th Ctrl Delay	21.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	499	212	21	214	18	215	18	24	3	16	7
Future Volume (veh/h)	13	499	212	21	214	18	215	18	24	3	16	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	525	223	22	225	19	226	19	25	3	17	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	807	694	199	689	55	608	25	309	192	195	73
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	17	1843	1585	57	1573	125	1532	129	1585	66	998	372
Grp Volume(v), veh/h	539	0	223	266	0	0	245	0	25	27	0	0
Grp Sat Flow(s),veh/h/ln	1860	0	1585	1755	0	0	1661	0	1585	1437	0	0
Q Serve(g_s), s	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.1	0.0	2.1	2.1	0.0	0.0	2.9	0.0	0.3	2.9	0.0	0.0
Prop In Lane	0.03		1.00	0.08		0.07	0.92		1.00	0.11		0.26
Lane Grp Cap(c), veh/h	980	0	694	943	0	0	633	0	309	459	0	0
V/C Ratio(X)	0.55	0.00	0.32	0.28	0.00	0.00	0.39	0.00	0.08	0.06	0.00	0.00
Avail Cap(c_a), veh/h	2298	0	1830	2112	0	0	1688	0	1490	1740	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.0	0.0	4.1	4.1	0.0	0.0	8.4	0.0	7.4	7.4	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.2	0.2	0.0	0.0	0.6	0.0	0.1	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.3	0.0	4.3	4.3	0.0	0.0	8.5	0.0	7.4	7.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		762			266			270			27	
Approach Delay, s/veh		5.0			4.3			8.4			7.4	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	14.0	8.4	14.0	8.4
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 26	21.0	* 26	21.0
Max Q Clear Time (g_c+I1), s	7.1	4.9	4.1	4.9
Green Ext Time (p_c), s	2.7	0.5	0.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	618	10	56	299	120	12	29	44	37	21	28
Future Volume (veh/h)	95	618	10	56	299	120	12	29	44	37	21	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	651	11	59	315	126	13	31	46	39	22	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	877	14	235	652	239	457	52	77	251	12	16
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	137	1570	25	100	1168	427	1354	680	1009	277	156	206
Grp Volume(v), veh/h	762	0	0	500	0	0	13	0	77	90	0	0
Grp Sat Flow(s),veh/h/ln	1732	0	0	1695	0	0	1354	0	1689	640	0	0
Q Serve(g_s), s	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	7.4	0.0	0.0	3.8	0.0	0.0	0.2	0.0	1.0	1.7	0.0	0.0
Prop In Lane	0.13		0.01	0.12		0.25	1.00		0.60	0.43		0.32
Lane Grp Cap(c), veh/h	1149	0	0	1126	0	0	457	0	129	278	0	0
V/C Ratio(X)	0.66	0.00	0.00	0.44	0.00	0.00	0.03	0.00	0.60	0.32	0.00	0.00
Avail Cap(c_a), veh/h	2713	0	0	2583	0	0	1437	0	1352	1373	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.7	0.0	0.0	3.0	0.0	0.0	9.7	0.0	10.0	11.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.6	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.2	0.0	0.0	3.2	0.0	0.0	9.7	0.0	11.7	11.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	B	B	A	A
Approach Vol, veh/h		762			500			90			90	
Approach Delay, s/veh		4.2			3.2			11.4			11.3	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.8	5.7	16.8	5.7
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 34	18.0	* 34	18.0
Max Q Clear Time (g_c+I1), s	9.4	3.0	5.8	3.7
Green Ext Time (p_c), s	3.2	0.1	2.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	375	25	190	236	3	43	53	467	13	22	15
Future Volume (veh/h)	74	375	25	190	236	3	43	53	467	13	22	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	395	22	200	248	2	45	56	74	14	23	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	546	30	260	749	6	268	102	169	206	76	6
Arrive On Green	0.05	0.31	0.31	0.15	0.40	0.40	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	1781	1755	98	1781	1853	15	773	962	1585	289	712	54
Grp Volume(v), veh/h	78	0	417	200	0	250	101	0	74	39	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1853	1781	0	1868	1735	0	1585	1055	0	0
Q Serve(g_s), s	1.2	0.0	5.6	3.0	0.0	2.6	0.0	0.0	1.2	0.2	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	5.6	3.0	0.0	2.6	1.5	0.0	1.2	1.6	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.01	0.45		1.00	0.36		0.05
Lane Grp Cap(c), veh/h	94	0	576	260	0	755	371	0	169	287	0	0
V/C Ratio(X)	0.83	0.00	0.72	0.77	0.00	0.33	0.27	0.00	0.44	0.14	0.00	0.00
Avail Cap(c_a), veh/h	510	0	1246	574	0	1323	1067	0	851	968	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.1	0.0	8.6	11.5	0.0	5.7	11.8	0.0	11.7	11.7	0.0	0.0
Incr Delay (d2), s/veh	6.8	0.0	1.4	1.8	0.0	0.2	0.1	0.0	0.7	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.5	1.0	0.0	0.5	0.4	0.0	0.3	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	0.0	10.0	13.3	0.0	5.9	12.0	0.0	12.4	11.7	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		495			450			175			39	
Approach Delay, s/veh		11.5			9.2			12.1			11.7	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	12.9		7.0	5.5	15.5		7.0
Change Period (Y+Rc), s	4.0	* 4.2		4.0	4.0	* 4.2		4.0
Max Green Setting (Gmax), s	9.0	* 19		15.0	8.0	* 20		15.0
Max Q Clear Time (g_c+I1), s	5.0	7.6		3.5	3.2	4.6		3.6
Green Ext Time (p_c), s	0.2	1.1		0.1	0.0	0.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	93	350	88	66	9	215	768	25	36	915	6
Future Volume (veh/h)	90	93	350	88	66	9	215	768	25	36	915	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	98	48	93	69	2	226	808	9	38	963	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	166	284	183	135	277	252	978	436	273	1107	
Arrive On Green	0.18	0.18	0.18	0.17	0.17	0.17	0.14	0.28	0.28	0.15	0.31	0.00
Sat Flow, veh/h	899	927	1585	1044	774	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	193	0	48	162	0	2	226	808	9	38	963	0
Grp Sat Flow(s),veh/h/ln	1825	0	1585	1818	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.5	0.0	2.0	6.3	0.0	0.1	9.7	16.6	0.3	1.4	19.9	0.0
Cycle Q Clear(g_c), s	7.5	0.0	2.0	6.3	0.0	0.1	9.7	16.6	0.3	1.4	19.9	0.0
Prop In Lane	0.49		1.00	0.57		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	327	0	284	318	0	277	252	978	436	273	1107	
V/C Ratio(X)	0.59	0.00	0.17	0.51	0.00	0.01	0.90	0.83	0.02	0.14	0.87	
Avail Cap(c_a), veh/h	329	0	285	327	0	285	252	1148	512	273	1193	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.3	0.0	27.0	29.0	0.0	26.5	32.8	26.4	20.5	28.5	25.3	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.1	0.5	0.0	0.0	30.3	4.8	0.0	0.1	7.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.8	2.7	0.0	0.0	6.1	7.1	0.1	0.6	8.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	0.0	27.1	29.5	0.0	26.5	63.1	31.2	20.6	28.6	32.3	0.0
LnGrp LOS	C	A	C	C	A	C	E	C	C	C	C	
Approach Vol, veh/h		241			164			1043			1001	A
Approach Delay, s/veh		30.4			29.5			38.1			32.2	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.9	26.3		17.6	14.0	28.2		17.9
Change Period (Y+Rc), s	4.0	4.9		4.0	3.0	* 4		4.0
Max Green Setting (Gmax), s	10.0	25.1		14.0	11.0	* 26		14.0
Max Q Clear Time (g_c+I1), s	3.4	18.6		8.3	11.7	21.9		9.5
Green Ext Time (p_c), s	0.0	2.8		0.2	0.0	2.3		0.2

Intersection Summary	
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	487	0	0	473	253	0	0	0	226	0	23
Future Volume (veh/h)	16	487	0	0	473	253	0	0	0	226	0	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	513	0	0	498	266	0	0	0	260	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	2022	0	0	772	651	0	6	0	548	287	0
Arrive On Green	0.02	0.57	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.15	0.00	0.00
Sat Flow, veh/h	1781	3647	0	0	1870	1577	0	1870	0	3563	1870	0
Grp Volume(v), veh/h	17	513	0	0	498	266	0	0	0	260	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1577	0	1870	0	1781	1870	0
Q Serve(g_s), s	0.3	2.1	0.0	0.0	6.1	3.4	0.0	0.0	0.0	1.9	0.0	0.0
Cycle Q Clear(g_c), s	0.3	2.1	0.0	0.0	6.1	3.4	0.0	0.0	0.0	1.9	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	31	2022	0	0	772	651	0	6	0	548	287	0
V/C Ratio(X)	0.54	0.25	0.00	0.00	0.65	0.41	0.00	0.00	0.00	0.47	0.00	0.00
Avail Cap(c_a), veh/h	494	3695	0	0	1426	1203	0	519	0	2716	1426	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.1	3.1	0.0	0.0	6.8	6.0	0.0	0.0	0.0	11.1	0.0	0.0
Incr Delay (d2), s/veh	13.6	0.1	0.0	0.0	0.9	0.4	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.0	0.0	1.4	0.7	0.0	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.7	3.2	0.0	0.0	7.7	6.4	0.0	0.0	0.0	11.8	0.0	0.0
LnGrp LOS	C	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		530			764			0			260	
Approach Delay, s/veh		4.0			7.2			0.0			11.8	
Approach LOS		A			A						B	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		0.0		20.4		8.4	4.5	15.9				
Change Period (Y+Rc), s		4.0		4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		8.0		30.0		22.0	8.0	22.0				
Max Q Clear Time (g_c+I1), s		0.0		4.1		3.9	2.3	8.1				
Green Ext Time (p_c), s		0.0		3.6		0.8	0.0	3.6				

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	507	473	242	135	29	161
Future Volume (veh/h)	507	473	242	135	29	161
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	534	498	198	221	31	169
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	699	622	256	762	307	258
Arrive On Green	0.39	0.39	0.14	0.41	0.16	0.16
Sat Flow, veh/h	1781	1585	1781	1870	1870	1575
Grp Volume(v), veh/h	534	498	198	221	31	169
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1575
Q Serve(g_s), s	10.4	11.1	4.3	3.2	0.6	4.0
Cycle Q Clear(g_c), s	10.4	11.1	4.3	3.2	0.6	4.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	699	622	256	762	307	258
V/C Ratio(X)	0.76	0.80	0.77	0.29	0.10	0.65
Avail Cap(c_a), veh/h	935	832	445	1448	794	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.5	10.8	16.5	8.0	14.2	15.7
Incr Delay (d2), s/veh	2.7	4.1	4.9	0.2	0.1	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.7	1.8	1.0	0.2	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	14.9	21.4	8.2	14.4	18.5
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	1032			419	200	
Approach Delay, s/veh	14.0			14.4	17.8	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		20.3		19.7	9.8	10.6
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0		21.0	10.0	17.0
Max Q Clear Time (g_c+I1), s		5.2		13.1	6.3	6.0
Green Ext Time (p_c), s		1.3		2.6	0.2	0.5

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	46	653	829	74	29	18
Future Volume (veh/h)	46	653	829	74	29	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	687	873	78	31	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	79	2897	1933	598	257	229
Arrive On Green	0.04	0.57	0.38	0.38	0.14	0.14
Sat Flow, veh/h	1781	5274	5274	1581	1781	1585
Grp Volume(v), veh/h	48	687	873	78	31	19
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1581	1781	1585
Q Serve(g_s), s	0.7	1.9	3.6	0.9	0.4	0.3
Cycle Q Clear(g_c), s	0.7	1.9	3.6	0.9	0.4	0.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	79	2897	1933	598	257	229
V/C Ratio(X)	0.60	0.24	0.45	0.13	0.12	0.08
Avail Cap(c_a), veh/h	514	5339	3682	1140	1477	1314
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	3.0	6.5	5.6	10.3	10.3
Incr Delay (d2), s/veh	7.2	0.0	0.2	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.4	0.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.2	3.0	6.6	5.7	10.5	10.4
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		735	951		50	
Approach Delay, s/veh		4.2	6.6		10.5	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	19.7	8.0	5.2	14.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	23.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	3.9	2.4	2.7	5.6
Green Ext Time (p_c), s	4.3	0.1	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	461	69	665	738	357	81	696	285	213	607	84
Future Volume (veh/h)	152	461	69	665	738	357	81	696	285	213	607	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	485	73	700	777	376	85	733	300	224	639	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	965	299	830	1629	506	109	1136	621	265	1583	491
Arrive On Green	0.11	0.19	0.19	0.24	0.32	0.32	0.06	0.22	0.22	0.15	0.31	0.31
Sat Flow, veh/h	1781	5106	1585	3456	5106	1585	1781	5106	2790	1781	5106	1585
Grp Volume(v), veh/h	160	485	73	700	777	376	85	733	300	224	639	88
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1728	1702	1585	1781	1702	1395	1781	1702	1585
Q Serve(g_s), s	7.0	6.8	3.1	15.5	9.8	17.0	3.8	10.4	7.5	9.8	7.9	3.2
Cycle Q Clear(g_c), s	7.0	6.8	3.1	15.5	9.8	17.0	3.8	10.4	7.5	9.8	7.9	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	196	965	299	830	1629	506	109	1136	621	265	1583	491
V/C Ratio(X)	0.82	0.50	0.24	0.84	0.48	0.74	0.78	0.65	0.48	0.85	0.40	0.18
Avail Cap(c_a), veh/h	222	1849	574	1122	2868	890	133	1849	1010	334	2422	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	29.1	27.6	29.0	21.9	24.3	37.1	28.3	27.1	33.2	21.8	20.2
Incr Delay (d2), s/veh	18.7	0.4	0.4	4.5	0.2	2.2	20.8	0.6	0.6	14.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	2.6	1.1	6.3	3.5	5.9	2.2	4.0	2.3	5.0	2.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	29.5	28.0	33.5	22.1	26.5	57.9	28.9	27.7	48.1	22.0	20.4
LnGrp LOS	D	C	C	C	C	C	E	C	C	D	C	C
Approach Vol, veh/h		718			1853			1118			951	
Approach Delay, s/veh		34.7			27.3			30.8			28.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	21.8	23.2	19.1	8.9	28.8	12.8	29.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	29.0	26.0	29.0	6.0	38.0	10.0	45.0
Max Q Clear Time (g_c+I1), s	11.8	12.4	17.5	8.8	5.8	9.9	9.0	19.0
Green Ext Time (p_c), s	0.2	5.4	1.8	3.0	0.0	4.5	0.0	6.6

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	88	884	1610	99	77	116
Future Volume (veh/h)	88	884	1610	99	77	116
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	931	1695	104	81	122
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	118	3314	2435	754	247	219
Arrive On Green	0.07	0.65	0.48	0.48	0.14	0.14
Sat Flow, veh/h	1781	5274	5274	1582	1781	1585
Grp Volume(v), veh/h	93	931	1695	104	81	122
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1582	1781	1585
Q Serve(g_s), s	1.9	2.9	9.8	1.4	1.5	2.7
Cycle Q Clear(g_c), s	1.9	2.9	9.8	1.4	1.5	2.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	118	3314	2435	754	247	219
V/C Ratio(X)	0.79	0.28	0.70	0.14	0.33	0.56
Avail Cap(c_a), veh/h	378	4339	2712	840	946	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	2.8	7.7	5.5	14.6	15.1
Incr Delay (d2), s/veh	11.1	0.0	0.7	0.1	0.8	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.1	1.8	0.2	0.6	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.5	2.9	8.4	5.6	15.4	17.3
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1024	1799		203	
Approach Delay, s/veh		5.2	8.2		16.6	
Approach LOS		A	A		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	28.4	9.2	6.5	22.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	32.0	20.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	4.9	4.7	3.9	11.8
Green Ext Time (p_c), s	6.5	0.5	0.1	6.1

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	951	10	2	1695	13	1
Future Volume (veh/h)	951	10	2	1695	13	1
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1001	11	2	1784	14	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2674	828	5	3290	211	188
Arrive On Green	0.52	0.52	0.00	0.64	0.12	0.12
Sat Flow, veh/h	5274	1582	1781	5274	1781	1585
Grp Volume(v), veh/h	1001	11	2	1784	14	1
Grp Sat Flow(s),veh/h/ln	1702	1582	1781	1702	1781	1585
Q Serve(g_s), s	3.9	0.1	0.0	6.4	0.2	0.0
Cycle Q Clear(g_c), s	3.9	0.1	0.0	6.4	0.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2674	828	5	3290	211	188
V/C Ratio(X)	0.37	0.01	0.38	0.54	0.07	0.01
Avail Cap(c_a), veh/h	3480	1078	422	4691	1109	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.8	3.9	16.8	3.3	13.2	13.1
Incr Delay (d2), s/veh	0.1	0.0	39.4	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.8	3.9	56.2	3.4	13.3	13.1
LnGrp LOS	A	A	E	A	B	B
Approach Vol, veh/h	1012			1786	15	
Approach Delay, s/veh	4.8			3.5	13.3	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		8.0	4.1	21.7			25.7
Change Period (Y+Rc), s		4.0	4.0	4.0			4.0
Max Green Setting (Gmax), s		21.0	8.0	23.0			31.0
Max Q Clear Time (g_c+I1), s		2.2	2.0	5.9			8.4
Green Ext Time (p_c), s		0.0	0.0	6.0			13.3

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	743	74	124	1560	215	64	77	68	119	77	74
Future Volume (veh/h)	135	743	74	124	1560	215	64	77	68	119	77	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	142	782	78	131	1642	226	67	81	72	125	81	78
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	2228	692	166	2190	680	86	155	131	164	237	201
Arrive On Green	0.10	0.44	0.44	0.09	0.43	0.43	0.05	0.08	0.08	0.09	0.13	0.13
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	142	782	78	131	1642	226	67	81	72	125	81	78
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.3	6.9	2.0	4.9	18.3	6.4	2.5	2.8	3.0	4.6	2.7	3.1
Cycle Q Clear(g_c), s	5.3	6.9	2.0	4.9	18.3	6.4	2.5	2.8	3.0	4.6	2.7	3.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	2228	692	166	2190	680	86	155	131	164	237	201
V/C Ratio(X)	0.79	0.35	0.11	0.79	0.75	0.33	0.78	0.52	0.55	0.76	0.34	0.39
Avail Cap(c_a), veh/h	211	2492	774	184	2416	750	237	885	750	606	1272	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	12.7	11.3	30.0	16.3	12.9	31.8	29.7	29.8	30.0	27.0	27.1
Incr Delay (d2), s/veh	16.2	0.1	0.1	18.7	1.2	0.3	14.0	2.7	3.6	7.1	0.9	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	2.4	0.6	2.9	6.6	2.1	1.4	1.3	1.2	2.2	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.9	12.8	11.4	48.8	17.5	13.1	45.9	32.5	33.4	37.0	27.8	28.3
LnGrp LOS	D	B	B	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h		1002			1999			220			284	
Approach Delay, s/veh		17.4			19.0			36.8			32.0	
Approach LOS		B			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	10.6	11.3	34.5	8.3	13.6	11.8	34.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	23.0	32.0	7.0	33.0	9.0	46.0	8.0	32.0
Max Q Clear Time (g_c+I1), s	6.6	5.0	6.9	8.9	4.5	5.1	7.3	20.3
Green Ext Time (p_c), s	0.3	0.6	0.0	6.1	0.0	0.7	0.0	8.7

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	197	716	32	416	1494	306	55	767	342	141	1098	332
Future Volume (veh/h)	197	716	32	416	1494	306	55	767	342	141	1098	332
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	207	754	6	438	1573	156	58	807	112	148	1156	167
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	923	284	722	1620	501	234	1237	549	279	1218	541
Arrive On Green	0.07	0.18	0.18	0.21	0.32	0.32	0.07	0.35	0.35	0.08	0.34	0.34
Sat Flow, veh/h	3456	5106	1572	3456	5106	1578	3456	3554	1578	3456	3554	1578
Grp Volume(v), veh/h	207	754	6	438	1573	156	58	807	112	148	1156	167
Grp Sat Flow(s),veh/h/ln	1728	1702	1572	1728	1702	1578	1728	1777	1578	1728	1777	1578
Q Serve(g_s), s	6.5	15.7	0.3	12.7	33.5	6.2	1.8	21.1	3.0	4.5	34.9	8.6
Cycle Q Clear(g_c), s	6.5	15.7	0.3	12.7	33.5	6.2	1.8	21.1	3.0	4.5	34.9	8.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	923	284	722	1620	501	234	1237	549	279	1218	541
V/C Ratio(X)	0.83	0.82	0.02	0.61	0.97	0.31	0.25	0.65	0.20	0.53	0.95	0.31
Avail Cap(c_a), veh/h	251	1065	328	722	1620	501	282	1237	549	282	1224	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	43.4	37.1	39.5	37.1	16.0	48.7	30.3	7.4	48.7	35.3	26.6
Incr Delay (d2), s/veh	18.7	4.9	0.0	1.1	16.0	0.5	0.2	1.6	0.4	0.9	15.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	6.7	0.1	5.2	15.3	2.9	0.7	8.6	1.9	1.9	16.4	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.1	48.4	37.2	40.6	53.1	16.5	48.9	31.9	7.7	49.6	50.7	27.3
LnGrp LOS	E	D	D	D	D	B	D	C	A	D	D	C
Approach Vol, veh/h		967			2167			977			1471	
Approach Delay, s/veh		52.7			47.9			30.2			47.9	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	44.4	27.1	25.9	13.5	43.8	12.0	41.0
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	6.0	* 6	4.0	6.0
Max Green Setting (Gmax), s	9.0	38.0	20.0	23.0	9.0	* 38	8.0	35.0
Max Q Clear Time (g_c+I1), s	6.5	23.1	14.7	17.7	3.8	36.9	8.5	35.5
Green Ext Time (p_c), s	0.1	6.5	0.6	2.3	0.0	0.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	45.7
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1187	0	0	2211	279	0	0	0	149	0	4
Future Volume (veh/h)	7	1187	0	0	2211	279	0	0	0	149	0	4
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870				1870	0	1870
Adj Flow Rate, veh/h	7	1249	0	0	2327	294				157	0	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2				2	0	2
Cap, veh/h	20	3125	970	140	2670	829				344	0	306
Arrive On Green	0.01	0.61	0.00	0.00	0.52	0.52				0.19	0.00	0.19
Sat Flow, veh/h	1781	5106	1585	445	5106	1585				1781	0	1585
Grp Volume(v), veh/h	7	1249	0	0	2327	294				157	0	4
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	445	1702	1585				1781	0	1585
Q Serve(g_s), s	0.2	6.4	0.0	0.0	20.5	5.6				4.0	0.0	0.1
Cycle Q Clear(g_c), s	0.2	6.4	0.0	0.0	20.5	5.6				4.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	20	3125	970	140	2670	829				344	0	306
V/C Ratio(X)	0.35	0.40	0.00	0.00	0.87	0.35				0.46	0.00	0.01
Avail Cap(c_a), veh/h	417	4283	1329	142	2689	835				938	0	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	25.2	5.1	0.0	0.0	10.7	7.2				18.3	0.0	16.7
Incr Delay (d2), s/veh	3.9	0.1	0.0	0.0	3.5	0.4				0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.5	0.0	0.0	6.5	1.5				1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.1	5.2	0.0	0.0	14.2	7.5				18.7	0.0	16.7
LnGrp LOS	C	A	A	A	B	A				B	A	B
Approach Vol, veh/h		1256			2621						161	
Approach Delay, s/veh		5.4			13.5						18.6	
Approach LOS		A			B						B	

Timer - Assigned Phs				4		6	7	8				
Phs Duration (G+Y+Rc), s				37.4		13.9	4.6	32.8				
Change Period (Y+Rc), s				6.0		4.0	4.0	6.0				
Max Green Setting (Gmax), s				43.0		27.0	12.0	27.0				
Max Q Clear Time (g_c+I1), s				8.4		6.0	2.2	22.5				
Green Ext Time (p_c), s				12.2		0.3	0.0	4.3				

Intersection Summary												
HCM 6th Ctrl Delay			11.2									
HCM 6th LOS			B									

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1342	26	204	2481	12	113
Future Volume (veh/h)	1342	26	204	2481	12	113
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1413	27	215	2612	13	119
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2909	903	207	3766	217	193
Arrive On Green	0.57	0.57	0.12	0.74	0.12	0.12
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	1413	27	215	2612	13	119
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	12.7	0.6	9.0	21.3	0.5	5.5
Cycle Q Clear(g_c), s	12.7	0.6	9.0	21.3	0.5	5.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2909	903	207	3766	217	193
V/C Ratio(X)	0.49	0.03	1.04	0.69	0.06	0.62
Avail Cap(c_a), veh/h	3364	1044	207	4221	693	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	7.3	34.2	5.5	30.1	32.3
Incr Delay (d2), s/veh	0.2	0.0	72.9	0.5	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.2	8.0	5.1	0.2	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.1	7.3	107.1	6.0	30.1	33.5
LnGrp LOS	B	A	F	A	C	C
Approach Vol, veh/h	1440			2827	132	
Approach Delay, s/veh	10.0			13.7	33.2	
Approach LOS	B			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.3	13.0	50.1		63.1
Change Period (Y+Rc), s		4.9	4.0	6.0		6.0
Max Green Setting (Gmax), s		30.1	9.0	51.0		64.0
Max Q Clear Time (g_c+I1), s		7.5	11.0	14.7		23.3
Green Ext Time (p_c), s		0.3	0.0	15.0		33.8

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	1394	2630	190	215	20
Future Volume (veh/h)	27	1394	2630	190	215	20
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	1467	2768	200	226	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	65	3427	2933	906	293	260
Arrive On Green	0.04	0.67	0.57	0.57	0.16	0.16
Sat Flow, veh/h	1781	5274	5274	1578	1781	1585
Grp Volume(v), veh/h	28	1467	2768	200	226	21
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1578	1781	1585
Q Serve(g_s), s	1.0	8.8	33.4	4.1	8.0	0.7
Cycle Q Clear(g_c), s	1.0	8.8	33.4	4.1	8.0	0.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	65	3427	2933	906	293	260
V/C Ratio(X)	0.43	0.43	0.94	0.22	0.77	0.08
Avail Cap(c_a), veh/h	215	3707	2937	908	834	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.2	5.0	13.1	6.9	26.5	23.4
Incr Delay (d2), s/veh	1.7	0.1	7.4	0.2	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.7	10.6	1.0	3.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.9	5.2	20.5	7.1	28.1	23.5
LnGrp LOS	C	A	C	A	C	C
Approach Vol, veh/h		1495	2968		247	
Approach Delay, s/veh		5.7	19.6		27.7	
Approach LOS		A	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		50.5		15.8	6.4	44.0
Change Period (Y+Rc), s		6.0		4.9	4.0	6.0
Max Green Setting (Gmax), s		48.1		31.0	8.0	38.1
Max Q Clear Time (g_c+I1), s		10.8		10.0	3.0	35.4
Green Ext Time (p_c), s		14.6		0.5	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	273	467	126	411	72	721	282	7	64	375	0
Future Volume (veh/h)	0	273	467	126	411	72	721	282	7	64	375	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	287	100	133	433	23	759	297	3	67	395	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	495	221	170	1123	501	927	1403	626	153	607	271
Arrive On Green	0.00	0.14	0.14	0.10	0.32	0.32	0.27	0.39	0.39	0.04	0.17	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	0	287	100	133	433	23	759	297	3	67	395	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.0	4.6	3.6	4.5	5.8	0.6	12.6	3.4	0.1	1.2	6.4	0.0
Cycle Q Clear(g_c), s	0.0	4.6	3.6	4.5	5.8	0.6	12.6	3.4	0.1	1.2	6.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	3	495	221	170	1123	501	927	1403	626	153	607	271
V/C Ratio(X)	0.00	0.58	0.45	0.78	0.39	0.05	0.82	0.21	0.00	0.44	0.65	0.00
Avail Cap(c_a), veh/h	203	1681	750	232	1739	776	1240	2377	1060	395	1507	672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	24.7	24.2	27.1	16.3	14.5	21.0	12.3	11.2	28.5	23.7	0.0
Incr Delay (d2), s/veh	0.0	1.1	1.5	11.3	0.2	0.0	3.3	0.1	0.0	1.9	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.8	1.3	2.3	2.1	0.2	4.8	1.1	0.0	0.5	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.8	25.7	38.4	16.5	14.6	24.3	12.3	11.3	30.5	24.9	0.0
LnGrp LOS	A	C	C	D	B	B	C	B	B	C	C	A
Approach Vol, veh/h		387			589			1059			462	
Approach Delay, s/veh		25.8			21.4			20.9			25.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	29.2	10.8	13.5	21.4	15.5	0.0	24.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	41.0	8.0	29.0	22.0	26.0	7.0	30.0
Max Q Clear Time (g_c+I1), s	3.2	5.4	6.5	6.6	14.6	8.4	0.0	7.8
Green Ext Time (p_c), s	0.0	1.8	0.0	1.9	1.8	2.1	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	359	6	50	525	91	22
Future Volume (veh/h)	359	6	50	525	91	22
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	378	6	53	553	96	23
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1347	601	624	1347	316	281
Arrive On Green	0.38	0.38	0.38	0.38	0.18	0.18
Sat Flow, veh/h	3647	1585	999	3647	1781	1585
Grp Volume(v), veh/h	378	6	53	553	96	23
Grp Sat Flow(s),veh/h/ln	1777	1585	999	1777	1781	1585
Q Serve(g_s), s	1.7	0.1	0.9	2.6	1.1	0.3
Cycle Q Clear(g_c), s	1.7	0.1	2.5	2.6	1.1	0.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1347	601	624	1347	316	281
V/C Ratio(X)	0.28	0.01	0.08	0.41	0.30	0.08
Avail Cap(c_a), veh/h	7252	3235	2285	7252	1897	1688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.9	4.4	5.7	5.1	8.1	7.7
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.2	0.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.0	4.4	5.8	5.3	8.6	7.9
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	384			606	119	
Approach Delay, s/veh	5.0			5.4	8.5	
Approach LOS	A			A	A	

Timer - Assigned Phs		2		4			8
Phs Duration (G+Y+Rc), s		9.0		13.5			13.5
Change Period (Y+Rc), s		5.0		5.0			5.0
Max Green Setting (Gmax), s		24.0		46.0			46.0
Max Q Clear Time (g_c+I1), s		3.1		3.7			4.6
Green Ext Time (p_c), s		0.3		2.5			4.2

Intersection Summary	
HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	326	10	70	500	330	18	736	48	261	996	180
Future Volume (veh/h)	118	326	10	70	500	330	18	736	48	261	996	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	343	11	74	526	347	19	775	51	275	1048	189
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	209	1087	485	153	1030	459	61	1255	389	382	1728	536
Arrive On Green	0.06	0.31	0.31	0.04	0.29	0.29	0.02	0.25	0.25	0.11	0.34	0.34
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	124	343	11	74	526	347	19	775	51	275	1048	189
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.4	5.0	0.3	1.4	8.4	13.6	0.4	9.2	1.7	5.2	11.6	6.1
Cycle Q Clear(g_c), s	2.4	5.0	0.3	1.4	8.4	13.6	0.4	9.2	1.7	5.2	11.6	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	1087	485	153	1030	459	61	1255	389	382	1728	536
V/C Ratio(X)	0.59	0.32	0.02	0.48	0.51	0.76	0.31	0.62	0.13	0.72	0.61	0.35
Avail Cap(c_a), veh/h	558	1670	745	558	1670	745	558	3074	954	558	3074	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.2	18.2	16.5	31.8	20.2	22.0	33.0	22.8	20.0	29.3	18.8	16.9
Incr Delay (d2), s/veh	2.7	0.2	0.0	2.4	0.4	2.6	2.8	0.5	0.2	2.6	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.9	0.1	0.6	3.2	4.8	0.2	3.3	0.6	2.1	4.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	18.3	16.5	34.1	20.6	24.5	35.9	23.3	20.2	31.9	19.1	17.3
LnGrp LOS	C	B	B	C	C	C	D	C	C	C	B	B
Approach Vol, veh/h		478			947			845			1512	
Approach Delay, s/veh		22.3			23.1			23.4			21.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	21.7	8.0	25.8	6.2	28.0	9.1	24.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	41.0	11.0	32.0	11.0	41.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	7.2	11.2	3.4	7.0	2.4	13.6	4.4	15.6
Green Ext Time (p_c), s	0.3	5.5	0.1	2.1	0.0	8.4	0.2	4.2

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	626	9	89	895	35	4	0	34	16	0	0
Future Volume (veh/h)	0	626	9	89	895	35	4	0	34	16	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	659	9	94	942	37	4	0	36	17	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1120	499	124	1792	799	8	0	190	31	248	0
Arrive On Green	0.00	0.32	0.32	0.07	0.50	0.50	0.00	0.00	0.12	0.02	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	0	1585	1781	1870	0
Grp Volume(v), veh/h	0	659	9	94	942	37	4	0	36	17	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	0
Q Serve(g_s), s	0.0	5.2	0.1	1.7	6.0	0.4	0.1	0.0	0.7	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.2	0.1	1.7	6.0	0.4	0.1	0.0	0.7	0.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	5	1120	499	124	1792	799	8	0	190	31	248	0
V/C Ratio(X)	0.00	0.59	0.02	0.76	0.53	0.05	0.51	0.00	0.19	0.55	0.00	0.00
Avail Cap(c_a), veh/h	426	2125	948	426	2125	948	426	0	1469	426	1733	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.6	7.9	15.3	5.6	4.2	16.6	0.0	13.3	16.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	9.0	0.2	0.0	44.1	0.0	0.5	14.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	0.0	0.8	0.7	0.0	0.1	0.0	0.2	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.1	7.9	24.3	5.8	4.2	60.8	0.0	13.7	30.4	0.0	0.0
LnGrp LOS	A	B	A	C	A	A	E	A	B	C	A	A
Approach Vol, veh/h		668			1073			40			17	
Approach Delay, s/veh		10.1			7.4			18.5			30.4	
Approach LOS		B			A			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	8.0	6.3	14.5	4.1	8.4	0.0	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	31.0	8.0	20.0	8.0	31.0	8.0	20.0
Max Q Clear Time (g_c+I1), s	2.3	2.7	3.7	7.2	2.1	0.0	0.0	8.0
Green Ext Time (p_c), s	0.0	0.1	0.1	3.3	0.0	0.0	0.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	508	44	204	799	31	77	301	287	4	135	44
Future Volume (veh/h)	44	508	44	204	799	31	77	301	287	4	135	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	535	46	215	841	33	81	317	302	4	142	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	815	363	257	1107	43	90	352	378	5	179	58
Arrive On Green	0.06	0.23	0.23	0.14	0.32	0.32	0.24	0.24	0.24	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1585	1781	3486	137	377	1475	1585	37	1325	429
Grp Volume(v), veh/h	46	535	46	215	429	445	398	0	302	192	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1846	1852	0	1585	1791	0	0
Q Serve(g_s), s	2.0	11.0	1.8	9.4	17.4	17.4	16.7	0.0	14.4	8.3	0.0	0.0
Cycle Q Clear(g_c), s	2.0	11.0	1.8	9.4	17.4	17.4	16.7	0.0	14.4	8.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.07	0.20		1.00	0.02		0.24
Lane Grp Cap(c), veh/h	100	815	363	257	564	586	441	0	378	242	0	0
V/C Ratio(X)	0.46	0.66	0.13	0.84	0.76	0.76	0.90	0.00	0.80	0.79	0.00	0.00
Avail Cap(c_a), veh/h	266	1342	598	422	826	858	471	0	403	446	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.7	28.1	24.6	33.4	24.6	24.6	29.6	0.0	28.8	33.6	0.0	0.0
Incr Delay (d2), s/veh	1.2	1.6	0.3	3.4	3.8	3.7	18.8	0.0	9.3	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.5	0.7	4.0	7.2	7.4	9.3	0.0	6.0	3.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.0	29.6	24.8	36.8	28.5	28.3	48.4	0.0	38.0	35.9	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	D	A	D	D	A	A
Approach Vol, veh/h		627			1089			700			192	
Approach Delay, s/veh		29.9			30.1			43.9			35.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.1	15.6	24.1		24.4	8.5	31.2				
Change Period (Y+Rc), s		5.3	4.0	5.7		5.3	4.0	5.7				
Max Green Setting (Gmax), s		20.0	19.0	30.3		20.4	12.0	37.3				
Max Q Clear Time (g_c+I1), s		10.3	11.4	13.0		18.7	4.0	19.4				
Green Ext Time (p_c), s		0.3	0.2	4.1		0.4	0.0	6.1				

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	584	30	35	705	4	175	396	66	3	190	24
Future Volume (veh/h)	23	584	30	35	705	4	175	396	66	3	190	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	615	29	37	742	1	184	417	66	3	200	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	35	813	38	47	859	383	198	449	71	4	242	208
Arrive On Green	0.02	0.24	0.24	0.03	0.24	0.24	0.40	0.40	0.40	0.13	0.13	0.13
Sat Flow, veh/h	1781	3455	163	1781	3554	1585	500	1134	179	28	1841	1585
Grp Volume(v), veh/h	24	316	328	37	742	1	667	0	0	203	0	3
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1781	1777	1585	1813	0	0	1869	0	1585
Q Serve(g_s), s	1.2	15.3	15.3	1.9	18.5	0.0	32.5	0.0	0.0	9.8	0.0	0.2
Cycle Q Clear(g_c), s	1.2	15.3	15.3	1.9	18.5	0.0	32.5	0.0	0.0	9.8	0.0	0.2
Prop In Lane	1.00		0.09	1.00		1.00	0.28		0.10	0.01		1.00
Lane Grp Cap(c), veh/h	35	418	433	47	859	383	718	0	0	245	0	208
V/C Ratio(X)	0.68	0.76	0.76	0.78	0.86	0.00	0.93	0.00	0.00	0.83	0.00	0.01
Avail Cap(c_a), veh/h	231	467	484	231	933	416	864	0	0	406	0	344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.0	32.9	32.9	44.8	33.6	26.6	26.7	0.0	0.0	39.2	0.0	35.0
Incr Delay (d2), s/veh	8.1	7.4	7.2	10.0	8.6	0.0	13.3	0.0	0.0	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.0	7.3	0.9	8.5	0.0	15.8	0.0	0.0	4.6	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.1	40.3	40.2	54.8	42.2	26.6	40.0	0.0	0.0	41.9	0.0	35.0
LnGrp LOS	D	D	D	D	D	C	D	A	A	D	A	C
Approach Vol, veh/h		668			780			667			206	
Approach Delay, s/veh		40.7			42.8			40.0			41.8	
Approach LOS		D			D			D			D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.0	6.5	27.5		41.6	5.8	28.1				
Change Period (Y+Rc), s		4.9	4.0	5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		20.1	12.0	24.3		44.1	12.0	24.3				
Max Q Clear Time (g_c+I1), s		11.8	3.9	17.3		34.5	3.2	20.5				
Green Ext Time (p_c), s		0.4	0.0	2.5		2.1	0.0	1.9				

Intersection Summary	
HCM 6th Ctrl Delay	41.3
HCM 6th LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	788	88	93	1331	94	36
Future Volume (veh/h)	788	88	93	1331	94	36
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	829	93	98	1401	99	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1497	668	124	2215	200	178
Arrive On Green	0.42	0.42	0.07	0.62	0.11	0.11
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	829	93	98	1401	99	38
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	6.7	1.4	2.0	9.3	2.0	0.8
Cycle Q Clear(g_c), s	6.7	1.4	2.0	9.3	2.0	0.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1497	668	124	2215	200	178
V/C Ratio(X)	0.55	0.14	0.79	0.63	0.50	0.21
Avail Cap(c_a), veh/h	3010	1343	330	4139	754	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.3	6.7	17.3	4.4	15.8	15.3
Incr Delay (d2), s/veh	0.3	0.1	10.6	0.3	1.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.3	1.0	0.6	0.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.6	6.8	27.9	4.7	17.7	15.9
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	922			1499	137	
Approach Delay, s/veh	8.4			6.2	17.2	
Approach LOS	A			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		9.2	7.6	20.9		28.5
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		16.0	7.0	32.0		44.0
Max Q Clear Time (g_c+I1), s		4.0	4.0	8.7		11.3
Green Ext Time (p_c), s		0.3	0.0	5.8		12.3

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	510	256	1029	873	136	369	960	504	104	1197	51
Future Volume (veh/h)	71	510	256	1029	873	136	369	960	504	104	1197	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	537	131	1083	919	130	388	1011	212	109	1260	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	673	300	1035	957	135	356	1636	508	270	1508	468
Arrive On Green	0.09	0.19	0.19	0.21	0.31	0.31	0.10	0.32	0.32	0.08	0.30	0.30
Sat Flow, veh/h	3456	3554	1585	5023	3126	442	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	75	537	131	1083	522	527	388	1011	212	109	1260	14
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1674	1777	1791	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	2.0	14.0	7.1	20.0	28.0	28.1	10.0	16.3	10.2	2.9	22.4	0.6
Cycle Q Clear(g_c), s	2.0	14.0	7.1	20.0	28.0	28.1	10.0	16.3	10.2	2.9	22.4	0.6
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	309	673	300	1035	544	548	356	1636	508	270	1508	468
V/C Ratio(X)	0.24	0.80	0.44	1.05	0.96	0.96	1.09	0.62	0.42	0.40	0.84	0.03
Avail Cap(c_a), veh/h	356	732	327	1035	544	548	356	1700	528	285	1594	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	37.6	34.8	38.5	33.1	33.1	43.5	27.9	25.9	42.6	32.0	24.3
Incr Delay (d2), s/veh	0.1	6.5	1.7	40.8	29.0	28.9	73.8	0.9	1.1	0.4	4.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	6.3	2.7	11.6	15.4	15.6	7.7	6.2	3.7	1.2	8.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.3	44.1	36.5	79.3	62.1	62.0	117.4	28.9	26.9	42.9	36.3	24.4
LnGrp LOS	D	D	D	F	E	E	F	C	C	D	D	C
Approach Vol, veh/h		743			2132			1611			1383	
Approach Delay, s/veh		42.5			70.8			49.9			36.7	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	37.1	24.0	24.4	14.0	34.7	12.7	35.7
Change Period (Y+Rc), s	4.0	6.0	4.0	* 6	4.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	32.3	20.0	* 20	10.0	30.3	10.0	29.7
Max Q Clear Time (g_c+I1), s	4.9	18.3	22.0	16.0	12.0	24.4	4.0	30.1
Green Ext Time (p_c), s	0.1	8.1	0.0	1.7	0.0	4.3	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	1043	1685	188	137	15
Future Volume (veh/h)	20	1043	1685	188	137	15
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	1098	1774	0	144	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	73	2189	1733		294	
Arrive On Green	0.04	0.62	0.49	0.00	0.17	0.00
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	21	1098	1774	0	144	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.5	7.8	22.3	0.0	3.4	0.0
Cycle Q Clear(g_c), s	0.5	7.8	22.3	0.0	3.4	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	73	2189	1733		294	
V/C Ratio(X)	0.29	0.50	1.02		0.49	
Avail Cap(c_a), veh/h	312	2642	1733		1013	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	21.3	4.9	11.7	0.0	17.3	0.0
Incr Delay (d2), s/veh	0.8	0.3	27.8	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.1	11.7	0.0	1.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.1	5.1	39.5	0.0	17.8	0.0
LnGrp LOS	C	A	F		B	
Approach Vol, veh/h		1119	1774	A	144	A
Approach Delay, s/veh		5.5	39.5		17.8	
Approach LOS		A	D		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		34.2		11.6	5.9	28.3
Change Period (Y+Rc), s		6.0		4.0	4.0	* 6
Max Green Setting (Gmax), s		34.0		26.0	8.0	* 22
Max Q Clear Time (g_c+I1), s		9.8		5.4	2.5	24.3
Green Ext Time (p_c), s		8.7		0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	14	1164	1922	40	55	11
Future Volume (veh/h)	14	1164	1922	40	55	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1900	1900
Adj Flow Rate, veh/h	15	1225	2023	42	58	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	45	2707	2414	50	139	29
Arrive On Green	0.03	0.76	0.68	0.68	0.10	0.10
Sat Flow, veh/h	1781	3647	3654	74	1426	295
Grp Volume(v), veh/h	15	1225	1006	1059	71	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1857	1746	0
Q Serve(g_s), s	0.6	8.6	28.9	29.4	2.6	0.0
Cycle Q Clear(g_c), s	0.6	8.6	28.9	29.4	2.6	0.0
Prop In Lane	1.00			0.04	0.82	0.17
Lane Grp Cap(c), veh/h	45	2707	1205	1259	170	0
V/C Ratio(X)	0.33	0.45	0.83	0.84	0.42	0.00
Avail Cap(c_a), veh/h	207	3118	1275	1332	508	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9	3.0	8.2	8.3	29.2	0.0
Incr Delay (d2), s/veh	1.6	0.2	5.2	5.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.0	7.7	8.2	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.5	3.2	13.4	13.5	29.8	0.0
LnGrp LOS	C	A	B	B	C	A
Approach Vol, veh/h		1240	2065		71	
Approach Delay, s/veh		3.6	13.5		29.8	
Approach LOS		A	B		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	58.0	10.7	5.7	52.3
Change Period (Y+Rc), s	5.7	4.0	4.0	5.7
Max Green Setting (Gmax), s	60.3	20.0	8.0	49.3
Max Q Clear Time (g_c+I1), s	10.6	4.6	2.6	31.4
Green Ext Time (p_c), s	14.9	0.1	0.0	15.3

Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	1173	1913	55	40	32
Future Volume (veh/h)	37	1173	1913	55	40	32
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	1235	2014	56	42	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	95	2737	2326	64	132	118
Arrive On Green	0.05	0.77	0.66	0.66	0.07	0.07
Sat Flow, veh/h	1781	3647	3625	98	1781	1585
Grp Volume(v), veh/h	39	1235	1008	1062	42	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1852	1781	1585
Q Serve(g_s), s	1.5	8.4	30.8	31.6	1.5	0.1
Cycle Q Clear(g_c), s	1.5	8.4	30.8	31.6	1.5	0.1
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	95	2737	1170	1220	132	118
V/C Ratio(X)	0.41	0.45	0.86	0.87	0.32	0.02
Avail Cap(c_a), veh/h	207	3061	1221	1273	518	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.5	2.8	9.3	9.4	30.2	29.5
Incr Delay (d2), s/veh	1.0	0.2	6.7	6.9	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.9	9.1	9.7	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.6	3.0	16.0	16.3	30.7	29.5
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		1274	2070		44	
Approach Delay, s/veh		3.9	16.1		30.7	
Approach LOS		A	B		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	59.7	9.1	7.7	52.0
Change Period (Y+Rc), s	6.7	4.0	4.0	6.7
Max Green Setting (Gmax), s	59.3	20.0	8.0	47.3
Max Q Clear Time (g_c+I1), s	10.4	3.5	3.5	33.6
Green Ext Time (p_c), s	13.8	0.1	0.0	11.8

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	1079	155	701	1732	319	231	391	621	244	837	225
Future Volume (veh/h)	103	1079	155	701	1732	319	231	391	621	244	837	225
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	108	1136	0	738	1823	0	243	412	0	257	881	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	1235		997	2542		249	497		608	902	
Arrive On Green	0.05	0.27	0.00	0.32	0.55	0.00	0.08	0.16	0.00	0.20	0.28	0.00
Sat Flow, veh/h	3110	4595	1427	3110	4595	1427	3110	3198	1427	3110	3198	1427
Grp Volume(v), veh/h	108	1136	0	738	1823	0	243	412	0	257	881	0
Grp Sat Flow(s),veh/h/ln	1555	1532	1427	1555	1532	1427	1555	1599	1427	1555	1599	1427
Q Serve(g_s), s	5.1	36.0	0.0	31.7	44.1	0.0	11.7	18.7	0.0	10.9	40.9	0.0
Cycle Q Clear(g_c), s	5.1	36.0	0.0	31.7	44.1	0.0	11.7	18.7	0.0	10.9	40.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	147	1235		997	2542		249	497		608	902	
V/C Ratio(X)	0.74	0.92		0.74	0.72		0.98	0.83		0.42	0.98	
Avail Cap(c_a), veh/h	166	1235		997	2542		249	753		608	902	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.5	53.3	0.0	45.4	24.8	0.0	68.9	61.4	0.0	52.9	53.4	0.0
Incr Delay (d2), s/veh	11.2	12.5	0.0	2.6	1.1	0.0	50.2	7.0	0.0	0.2	24.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	14.8	0.0	12.2	15.1	0.0	6.3	7.9	0.0	4.2	19.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.7	65.8	0.0	48.1	26.0	0.0	119.0	68.4	0.0	53.1	77.8	0.0
LnGrp LOS	F	E		D	C		F	E		D	E	
Approach Vol, veh/h		1244	A		2561	A		655	A		1138	A
Approach Delay, s/veh		67.1			32.3			87.2			72.2	
Approach LOS		E			C			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.0	29.0	53.8	46.0	16.0	48.0	11.1	88.7
Change Period (Y+Rc), s	5.7	* 5.7	5.7	* 5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	19.0	* 35	36.0	* 40	12.0	42.3	8.0	68.3
Max Q Clear Time (g_c+I1), s	12.9	20.7	33.7	38.0	13.7	42.9	7.1	46.1
Green Ext Time (p_c), s	0.3	2.6	0.6	1.6	0.0	0.0	0.0	15.6

Intersection Summary	
HCM 6th Ctrl Delay	54.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1729	139	204	2579	21	105
Future Volume (veh/h)	1729	139	204	2579	21	105
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1820	146	215	2715	22	111
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2831	226	239	3823	148	132
Arrive On Green	0.59	0.59	0.13	0.75	0.08	0.08
Sat Flow, veh/h	4984	385	1781	5274	1781	1585
Grp Volume(v), veh/h	1285	681	215	2715	22	111
Grp Sat Flow(s),veh/h/ln	1702	1797	1781	1702	1781	1585
Q Serve(g_s), s	37.5	37.8	17.8	42.8	1.7	10.4
Cycle Q Clear(g_c), s	37.5	37.8	17.8	42.8	1.7	10.4
Prop In Lane		0.21	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2001	1056	239	3823	148	132
V/C Ratio(X)	0.64	0.65	0.90	0.71	0.15	0.84
Avail Cap(c_a), veh/h	2001	1056	368	3823	322	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.5	20.5	63.9	10.1	63.8	67.8
Incr Delay (d2), s/veh	1.6	3.0	12.4	1.1	0.2	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.3	15.6	8.7	13.3	0.8	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.1	23.6	76.4	11.3	64.0	73.1
LnGrp LOS	C	C	E	B	E	E
Approach Vol, veh/h	1966			2930	133	
Approach Delay, s/veh	22.6			16.0	71.6	
Approach LOS	C			B	E	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		17.4	24.1	93.9		118.0
Change Period (Y+Rc), s		4.9	4.0	5.7		5.7
Max Green Setting (Gmax), s		27.1	31.0	77.3		112.3
Max Q Clear Time (g_c+I1), s		12.4	19.8	39.8		44.8
Green Ext Time (p_c), s		0.2	0.3	18.7		67.1

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	15	37	242	35	109	85	1084	244	93	671	2
Future Volume (veh/h)	10	15	37	242	35	109	85	1084	244	93	671	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	11	16	39	255	37	115	89	1141	257	98	706	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	20	48	277	76	236	107	2676	831	117	1882	839
Arrive On Green	0.01	0.05	0.05	0.17	0.21	0.21	0.07	0.58	0.58	0.07	0.59	0.59
Sat Flow, veh/h	1603	434	1059	1603	361	1121	1603	4595	1427	1603	3198	1427
Grp Volume(v), veh/h	11	0	55	255	0	152	89	1141	257	98	706	2
Grp Sat Flow(s),veh/h/ln	1603	0	1493	1603	0	1482	1603	1532	1427	1603	1599	1427
Q Serve(g_s), s	1.0	0.0	5.5	23.5	0.0	13.5	8.2	20.7	13.8	9.1	17.5	0.1
Cycle Q Clear(g_c), s	1.0	0.0	5.5	23.5	0.0	13.5	8.2	20.7	13.8	9.1	17.5	0.1
Prop In Lane	1.00		0.71	1.00		0.76	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	12	0	68	277	0	312	107	2676	831	117	1882	839
V/C Ratio(X)	0.92	0.00	0.81	0.92	0.00	0.49	0.83	0.43	0.31	0.84	0.38	0.00
Avail Cap(c_a), veh/h	32	0	179	417	0	533	160	2676	831	160	1882	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.4	0.0	71.0	61.0	0.0	52.1	69.2	17.4	16.0	68.7	16.3	12.7
Incr Delay (d2), s/veh	56.0	0.0	17.8	15.0	0.0	1.0	12.8	0.5	1.0	18.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.4	10.7	0.0	5.2	3.7	7.1	4.8	4.3	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	130.4	0.0	88.7	76.0	0.0	53.1	82.0	17.9	16.9	87.1	16.5	12.7
LnGrp LOS	F	A	F	E	A	D	F	B	B	F	B	B
Approach Vol, veh/h		66			407			1487			806	
Approach Delay, s/veh		95.7			67.5			21.6			25.1	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	93.4	29.9	11.8	14.0	94.2	5.1	36.6
Change Period (Y+Rc), s	4.0	6.0	4.0	5.0	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	15.0	59.0	39.0	18.0	15.0	59.0	3.0	54.0
Max Q Clear Time (g_c+I1), s	11.1	22.7	25.5	7.5	10.2	19.5	3.0	15.5
Green Ext Time (p_c), s	0.0	15.0	0.5	0.1	0.0	6.6	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	3	9	44	7	53	23	1443	58	59	1154	9
Future Volume (veh/h)	3	3	9	44	7	53	23	1443	58	59	1154	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	3	9	46	7	56	24	1519	61	62	1215	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	49	22	72	180	80	42	1968	611	89	2104	653
Arrive On Green	0.00	0.01	0.01	0.04	0.05	0.05	0.02	0.39	0.39	0.05	0.41	0.41
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	3	3	9	46	7	56	24	1519	61	62	1215	9
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.0	0.2	1.0	0.1	1.4	0.5	10.2	1.0	1.3	7.2	0.1
Cycle Q Clear(g_c), s	0.1	0.0	0.2	1.0	0.1	1.4	0.5	10.2	1.0	1.3	7.2	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	6	49	22	72	180	80	42	1968	611	89	2104	653
V/C Ratio(X)	0.51	0.06	0.41	0.64	0.04	0.70	0.57	0.77	0.10	0.69	0.58	0.01
Avail Cap(c_a), veh/h	500	2903	1295	500	2903	1295	500	2085	647	500	2104	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	19.1	19.2	18.5	17.7	18.3	18.9	10.5	7.7	18.3	8.9	6.8
Incr Delay (d2), s/veh	56.0	0.5	12.0	9.2	0.1	10.4	11.8	1.7	0.1	9.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.5	0.0	0.6	0.3	2.6	0.2	0.7	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.5	19.6	31.2	27.7	17.8	28.7	30.7	12.3	7.8	27.6	9.3	6.8
LnGrp LOS	E	B	C	C	B	C	C	B	A	C	A	A
Approach Vol, veh/h		15			109			1604			1286	
Approach Delay, s/veh		37.7			27.6			12.4			10.1	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	20.1	6.6	5.5	5.9	21.1	5.1	7.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.3	12.2	3.0	2.2	2.5	9.2	2.1	3.4
Green Ext Time (p_c), s	0.1	2.9	0.0	0.0	0.0	4.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	76	7	1	115	32	4	1	3	10	4	2
Future Volume (veh/h)	1	76	7	1	115	32	4	1	3	10	4	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	80	7	1	121	34	4	1	3	11	4	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	416	185	5	416	185	8	8	7	521	547	464
Arrive On Green	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.00	0.00	0.29	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	1	80	7	1	121	34	4	1	3	11	4	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.7	0.1	0.0	1.1	0.7	0.1	0.0	0.1	0.2	0.1	0.0
Cycle Q Clear(g_c), s	0.0	0.7	0.1	0.0	1.1	0.7	0.1	0.0	0.1	0.2	0.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	416	185	5	416	185	8	8	7	521	547	464
V/C Ratio(X)	0.19	0.19	0.04	0.19	0.29	0.18	0.51	0.12	0.43	0.02	0.01	0.00
Avail Cap(c_a), veh/h	365	1767	788	365	1819	811	365	1422	1205	573	1587	1345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	13.6	13.4	17.0	13.8	13.6	17.0	17.0	17.0	8.6	8.6	8.6
Incr Delay (d2), s/veh	16.9	0.2	0.1	16.9	0.4	0.5	44.2	6.6	37.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	0.0	0.4	0.2	0.1	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	13.9	13.5	34.0	14.2	14.1	61.2	23.5	54.6	8.6	8.6	8.6
LnGrp LOS	C	B	B	C	B	B	E	C	D	A	A	A
Approach Vol, veh/h		88			156			8			17	
Approach Delay, s/veh		14.1			14.3			54.0			8.6	
Approach LOS		B			B			D			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	5.1	5.0	9.0	5.1	15.0	5.0	9.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	* 5
Max Green Setting (Gmax), s	11.0	26.0	7.0	17.0	7.0	29.0	7.0	* 18
Max Q Clear Time (g_c+I1), s	2.2	2.1	2.0	2.7	2.1	2.1	2.0	3.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	64	7	190	102	37	38	1197	182	59	935	40
Future Volume (veh/h)	13	64	7	190	102	37	38	1197	182	59	935	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	67	7	200	107	39	40	1260	192	62	984	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	24	160	71	248	607	271	56	2370	736	79	2434	756
Arrive On Green	0.01	0.04	0.04	0.14	0.17	0.17	0.03	0.46	0.46	0.04	0.48	0.48
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	14	67	7	200	107	39	40	1260	192	62	984	42
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.5	1.2	0.3	7.2	1.7	1.4	1.5	11.6	4.9	2.3	8.3	0.9
Cycle Q Clear(g_c), s	0.5	1.2	0.3	7.2	1.7	1.4	1.5	11.6	4.9	2.3	8.3	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	24	160	71	248	607	271	56	2370	736	79	2434	756
V/C Ratio(X)	0.57	0.42	0.10	0.81	0.18	0.14	0.71	0.53	0.26	0.79	0.40	0.06
Avail Cap(c_a), veh/h	189	1722	768	944	3336	1488	189	2837	881	189	2837	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	30.7	30.3	27.6	23.4	23.3	31.7	12.6	10.8	31.3	11.2	9.3
Incr Delay (d2), s/veh	7.6	0.7	0.2	2.3	0.1	0.1	6.1	0.5	0.5	6.4	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.5	0.1	3.0	0.7	0.5	0.7	3.6	1.6	1.0	2.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	31.4	30.5	29.9	23.5	23.4	37.8	13.1	11.3	37.7	11.5	9.4
LnGrp LOS	D	C	C	C	C	C	D	B	B	D	B	A
Approach Vol, veh/h		88			346			1492			1088	
Approach Delay, s/veh		32.7			27.2			13.5			12.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	36.0	14.2	8.0	7.1	36.8	5.9	16.3
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	7.0	36.7	35.0	32.0	7.0	36.7	7.0	62.0
Max Q Clear Time (g_c+I1), s	4.3	13.6	9.2	3.2	3.5	10.3	2.5	3.7
Green Ext Time (p_c), s	0.0	17.1	0.3	0.2	0.0	14.2	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	305	0	1	333	0	24	0	1	0	0	2
Future Volume (veh/h)	2	305	0	1	333	0	24	0	1	0	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	321	0	1	351	0	25	0	1	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	744	332	6	740	330	44	583	494	6	238	202
Arrive On Green	0.00	0.21	0.00	0.00	0.21	0.00	0.02	0.00	0.31	0.00	0.00	0.13
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	2	321	0	1	351	0	25	0	1	0	0	2
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	2.5	0.0	0.0	2.7	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.5	0.0	0.0	2.7	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	6	744	332	6	740	330	44	583	494	6	238	202
V/C Ratio(X)	0.35	0.43	0.00	0.18	0.47	0.00	0.56	0.00	0.00	0.00	0.00	0.01
Avail Cap(c_a), veh/h	397	2944	1313	397	2944	1313	397	1847	1566	397	1728	1465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	15.6	10.8	0.0	15.6	10.9	0.0	15.1	0.0	7.4	0.0	0.0	12.0
Incr Delay (d2), s/veh	33.4	0.4	0.0	14.1	0.5	0.0	10.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.7	0.0	0.0	0.8	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	11.2	0.0	29.8	11.4	0.0	25.8	0.0	7.4	0.0	0.0	12.0
LnGrp LOS	D	B	A	C	B	A	C	A	A	A	A	B
Approach Vol, veh/h		323			352			26			2	
Approach Delay, s/veh		11.4			11.4			25.1			12.0	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	14.8	5.0	11.6	5.8	9.0	5.1	11.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	31.0	7.0	26.0	7.0	29.0	7.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.0	2.0	4.5	2.4	2.0	2.0	4.7
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	0.0	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	240	47	42	392	6	57	115	19	3	45	42
Future Volume (veh/h)	31	240	47	42	392	6	57	115	19	3	45	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	253	49	44	413	6	60	121	20	3	47	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	722	322	72	793	354	93	331	280	6	240	203
Arrive On Green	0.02	0.20	0.20	0.04	0.22	0.22	0.05	0.18	0.18	0.00	0.13	0.13
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	33	253	49	44	413	6	60	121	20	3	47	44
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.6	1.9	0.8	0.8	3.2	0.1	1.0	1.8	0.3	0.1	0.7	0.8
Cycle Q Clear(g_c), s	0.6	1.9	0.8	0.8	3.2	0.1	1.0	1.8	0.3	0.1	0.7	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	722	322	72	793	354	93	331	280	6	240	203
V/C Ratio(X)	0.90	0.35	0.15	0.61	0.52	0.02	0.65	0.37	0.07	0.51	0.20	0.22
Avail Cap(c_a), veh/h	428	1877	837	428	1877	837	428	1587	1345	428	1587	1345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	10.7	10.2	14.7	10.7	9.5	14.5	11.3	10.7	15.5	12.2	12.2
Incr Delay (d2), s/veh	46.1	0.3	0.2	8.0	0.5	0.0	7.4	0.7	0.1	55.5	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.5	0.2	0.4	0.9	0.0	0.5	0.6	0.1	0.1	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.4	11.0	10.5	22.7	11.2	9.5	21.9	12.0	10.8	71.1	12.6	12.7
LnGrp LOS	E	B	B	C	B	A	C	B	B	E	B	B
Approach Vol, veh/h		335			463			201			94	
Approach Delay, s/veh		15.9			12.3			14.8			14.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	10.0	5.8	10.8	6.1	8.5	5.1	11.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	26.5	7.5	16.5	7.5	26.5	7.5	16.5
Max Q Clear Time (g_c+I1), s	2.1	3.8	2.8	3.9	3.0	2.8	2.6	5.2
Green Ext Time (p_c), s	0.0	0.6	0.0	1.3	0.0	0.3	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	303	18	77	551	0	14	0	36	0	0	5
Future Volume (veh/h)	2	303	18	77	551	0	14	0	36	0	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2	319	19	81	580	0	15	0	38	0	0	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	869	387	111	1081	482	28	505	428	5	211	179
Arrive On Green	0.00	0.24	0.24	0.06	0.30	0.00	0.02	0.00	0.27	0.00	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	2	319	19	81	580	0	15	0	38	0	0	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	2.6	0.3	1.6	4.8	0.0	0.3	0.0	0.6	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	2.6	0.3	1.6	4.8	0.0	0.3	0.0	0.6	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	869	387	111	1081	482	28	505	428	5	211	179
V/C Ratio(X)	0.40	0.37	0.05	0.73	0.54	0.00	0.54	0.00	0.09	0.00	0.00	0.03
Avail Cap(c_a), veh/h	352	3313	1478	352	3313	1478	352	1532	1299	352	1479	1254
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	11.1	10.2	16.3	10.2	0.0	17.3	0.0	9.7	0.0	0.0	14.0
Incr Delay (d2), s/veh	43.9	0.3	0.1	9.0	0.4	0.0	15.6	0.0	0.1	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.8	0.1	0.8	1.4	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.5	11.4	10.3	25.3	10.7	0.0	32.9	0.0	9.8	0.0	0.0	14.0
LnGrp LOS	E	B	B	C	B	A	C	A	A	A	A	B
Approach Vol, veh/h		340			661			53			5	
Approach Delay, s/veh		11.6			12.4			16.3			14.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	14.5	7.2	13.7	5.5	9.0	5.1	15.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	29.0	7.0	33.0	7.0	28.0	7.0	33.0
Max Q Clear Time (g_c+I1), s	0.0	2.6	3.6	4.6	2.3	2.1	2.0	6.8
Green Ext Time (p_c), s	0.0	0.1	0.0	2.1	0.0	0.0	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	279	42	63	526	0	56	124	94	4	99	46
Future Volume (veh/h)	18	279	42	63	526	0	56	124	94	4	99	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	294	44	66	554	0	59	131	99	4	104	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	1067	476	94	1186	529	86	299	253	8	216	183
Arrive On Green	0.02	0.30	0.30	0.05	0.33	0.00	0.05	0.16	0.16	0.00	0.12	0.12
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	19	294	44	66	554	0	59	131	99	4	104	48
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.4	2.4	0.8	1.4	4.8	0.0	1.3	2.5	2.2	0.1	2.0	1.1
Cycle Q Clear(g_c), s	0.4	2.4	0.8	1.4	4.8	0.0	1.3	2.5	2.2	0.1	2.0	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	1067	476	94	1186	529	86	299	253	8	216	183
V/C Ratio(X)	0.56	0.28	0.09	0.71	0.47	0.00	0.68	0.44	0.39	0.52	0.48	0.26
Avail Cap(c_a), veh/h	529	2460	1097	529	2460	1097	529	797	675	529	797	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	10.3	9.7	18.0	10.2	0.0	18.1	14.7	14.6	19.2	16.0	15.6
Incr Delay (d2), s/veh	13.5	0.3	0.2	9.3	0.6	0.0	9.1	1.0	1.0	44.5	1.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	0.2	0.7	1.4	0.0	0.7	0.9	0.7	0.1	0.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	10.6	9.9	27.4	10.8	0.0	27.2	15.7	15.6	63.7	17.7	16.4
LnGrp LOS	C	B	A	C	B	A	C	B	B	E	B	B
Approach Vol, veh/h		357			620			289			156	
Approach Delay, s/veh		11.7			12.6			18.0			18.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	10.7	6.5	16.8	6.4	9.0	5.2	18.1
Change Period (Y+Rc), s	4.5	4.5	4.5	5.2	4.5	4.5	4.5	5.2
Max Green Setting (Gmax), s	11.5	16.5	11.5	26.8	11.5	16.5	11.5	26.8
Max Q Clear Time (g_c+I1), s	2.1	4.5	3.4	4.4	3.3	4.0	2.4	6.8
Green Ext Time (p_c), s	0.0	0.7	0.1	3.6	0.1	0.5	0.0	6.2

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	0	7	3	0	492	41	1341	23	220	1628	635
Future Volume (veh/h)	382	0	7	3	0	492	41	1341	23	220	1628	635
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	402	0	7	3	0	518	43	1412	24	232	1714	668
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	540	0	0	6	0	0	56	2492	774	283	3145	976
Arrive On Green	0.16	0.00	0.00	0.00	0.00	0.00	0.03	0.49	0.49	0.16	0.62	0.62
Sat Flow, veh/h	3456	402		1781	3		1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	402	32.8		3	96.0		43	1412	24	232	1714	668
Grp Sat Flow(s),veh/h/ln	1728	C		1781	F		1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	8.5			0.1			1.8	14.9	0.6	9.6	14.8	21.4
Cycle Q Clear(g_c), s	8.5			0.1			1.8	14.9	0.6	9.6	14.8	21.4
Prop In Lane	1.00			1.00			1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	540			6			56	2492	774	283	3145	976
V/C Ratio(X)	0.74			0.52			0.77	0.57	0.03	0.82	0.55	0.68
Avail Cap(c_a), veh/h	1857			163			163	2492	774	887	4550	1413
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.7			38.0			36.7	13.8	10.2	31.0	8.5	9.7
Incr Delay (d2), s/veh	2.1			58.0			19.6	0.3	0.0	5.8	0.1	0.9
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5			0.1			1.1	4.8	0.2	4.3	4.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8			96.0			56.3	14.1	10.2	36.8	8.6	10.6
LnGrp LOS	C			F			E	B	B	D	A	B
Approach Vol, veh/h								1479			2614	
Approach Delay, s/veh								15.3			11.6	
Approach LOS								B			B	

Timer - Assigned Phs	1	2	3		5	6	7
Phs Duration (G+Y+Rc), s	17.1	42.2	5.2		7.4	52.0	16.9
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	38.0	36.0	7.0		7.0	68.0	41.0
Max Q Clear Time (g_c+I1), s	11.6	16.9	2.1		3.8	23.4	10.5
Green Ext Time (p_c), s	0.6	9.4	0.0		0.0	23.6	1.4

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	1567	72	65	1662	44	0	22	6	148	8	7
Future Volume (veh/h)	17	1567	72	65	1662	44	0	22	6	148	8	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	1649	76	68	1749	46	0	23	6	156	8	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	31	2076	644	85	2232	693	3	135	115	198	513	434
Arrive On Green	0.02	0.41	0.41	0.05	0.44	0.44	0.00	0.07	0.07	0.11	0.27	0.27
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	18	1649	76	68	1749	46	0	23	6	156	8	7
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.6	15.6	1.7	2.1	16.2	0.9	0.0	0.6	0.2	4.7	0.2	0.2
Cycle Q Clear(g_c), s	0.6	15.6	1.7	2.1	16.2	0.9	0.0	0.6	0.2	4.7	0.2	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	31	2076	644	85	2232	693	3	135	115	198	513	434
V/C Ratio(X)	0.58	0.79	0.12	0.80	0.78	0.07	0.00	0.17	0.05	0.79	0.02	0.02
Avail Cap(c_a), veh/h	129	2217	688	129	2232	693	129	1151	975	258	1286	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	14.4	10.2	26.0	13.3	9.0	0.0	24.1	23.9	23.9	14.6	14.6
Incr Delay (d2), s/veh	15.8	2.0	0.1	17.9	1.9	0.0	0.0	0.6	0.2	11.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.9	0.5	1.2	4.9	0.2	0.0	0.3	0.1	2.5	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.8	16.3	10.3	43.9	15.2	9.1	0.0	24.7	24.1	35.4	14.6	14.6
LnGrp LOS	D	B	B	D	B	A	A	C	C	D	B	B
Approach Vol, veh/h		1743			1863			29			171	
Approach Delay, s/veh		16.3			16.1			24.5			33.5	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	9.0	7.6	27.5	0.0	20.1	6.0	29.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	8.0	34.0	4.0	24.0	4.0	38.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	6.7	2.6	4.1	17.6	0.0	2.2	2.6	18.2
Green Ext Time (p_c), s	0.0	0.1	0.0	4.8	0.0	0.0	0.0	4.6

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	1212	59	252	1344	91	80	1002	298	104	711	376
Future Volume (veh/h)	530	1212	59	252	1344	91	80	1002	298	104	711	376
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	558	1276	19	265	1415	28	84	1055	105	109	748	184
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	490	1919	596	341	1698	527	139	1398	434	170	1443	448
Arrive On Green	0.14	0.38	0.38	0.10	0.33	0.33	0.04	0.27	0.27	0.05	0.28	0.28
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	558	1276	19	265	1415	28	84	1055	105	109	748	184
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	14.0	20.5	0.7	7.4	25.2	1.2	2.4	18.7	5.1	3.1	12.1	9.3
Cycle Q Clear(g_c), s	14.0	20.5	0.7	7.4	25.2	1.2	2.4	18.7	5.1	3.1	12.1	9.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	490	1919	596	341	1698	527	139	1398	434	170	1443	448
V/C Ratio(X)	1.14	0.67	0.03	0.78	0.83	0.05	0.61	0.75	0.24	0.64	0.52	0.41
Avail Cap(c_a), veh/h	490	1919	596	490	1863	578	245	1863	578	245	1863	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	25.6	19.5	43.4	30.4	22.4	46.6	32.8	27.9	46.1	29.7	28.7
Incr Delay (d2), s/veh	84.4	0.9	0.0	4.9	3.2	0.0	4.2	1.3	0.3	4.0	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	7.8	0.3	3.3	10.1	0.4	1.1	7.4	1.9	1.4	4.7	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	126.7	26.5	19.5	48.3	33.6	22.4	50.8	34.1	28.2	50.1	30.0	29.3
LnGrp LOS	F	C	B	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1853			1708			1244			1041	
Approach Delay, s/veh		56.6			35.7			34.7			32.0	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	32.0	14.7	42.1	9.0	32.9	19.0	37.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	36.0	14.0	36.0	7.0	36.0	14.0	36.0
Max Q Clear Time (g_c+I1), s	5.1	20.7	9.4	22.5	4.4	14.1	16.0	27.2
Green Ext Time (p_c), s	0.0	6.3	0.4	6.9	0.0	5.4	0.0	5.6

Intersection Summary	
HCM 6th Ctrl Delay	41.4
HCM 6th LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	195	1264	1399	99	127	363
Future Volume (veh/h)	195	1264	1399	99	127	363
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	205	1331	1473	104	134	382
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	257	2896	1770	550	501	445
Arrive On Green	0.14	0.57	0.35	0.35	0.28	0.28
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	205	1331	1473	104	134	382
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	7.3	10.1	17.4	3.0	3.9	15.0
Cycle Q Clear(g_c), s	7.3	10.1	17.4	3.0	3.9	15.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	257	2896	1770	550	501	445
V/C Ratio(X)	0.80	0.46	0.83	0.19	0.27	0.86
Avail Cap(c_a), veh/h	595	3954	1861	578	784	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	8.3	19.8	15.0	18.4	22.4
Incr Delay (d2), s/veh	5.6	0.1	3.3	0.2	0.3	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	2.6	6.3	1.0	1.5	12.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.8	8.5	23.0	15.2	18.7	28.8
LnGrp LOS	C	A	C	B	B	C
Approach Vol, veh/h		1536	1577		516	
Approach Delay, s/veh		11.7	22.5		26.2	
Approach LOS		B	C		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		42.3		23.5	14.5	27.8
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		51.0		29.0	22.0	24.0
Max Q Clear Time (g_c+I1), s		12.1		17.0	9.3	19.4
Green Ext Time (p_c), s		11.4		1.5	0.4	3.4

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	406	944	40	671	1131	303	22	653	315	197	534	345
Future Volume (veh/h)	406	944	40	671	1131	303	22	653	315	197	534	345
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	427	994	10	706	1191	205	23	687	70	207	562	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	529	1372	426	790	1759	546	67	1016	315	272	1318	409
Arrive On Green	0.15	0.27	0.27	0.23	0.34	0.34	0.02	0.20	0.20	0.08	0.26	0.26
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	427	994	10	706	1191	205	23	687	70	207	562	94
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	10.6	15.7	0.4	17.6	17.7	8.7	0.6	11.1	3.3	5.2	8.2	4.2
Cycle Q Clear(g_c), s	10.6	15.7	0.4	17.6	17.7	8.7	0.6	11.1	3.3	5.2	8.2	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	529	1372	426	790	1759	546	67	1016	315	272	1318	409
V/C Ratio(X)	0.81	0.72	0.02	0.89	0.68	0.38	0.34	0.68	0.22	0.76	0.43	0.23
Avail Cap(c_a), veh/h	816	2067	642	855	2124	659	272	2067	642	272	2182	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	29.5	23.9	33.2	24.9	22.0	43.0	33.0	29.9	40.1	27.5	26.0
Incr Delay (d2), s/veh	3.5	0.7	0.0	11.2	0.7	0.4	3.0	0.8	0.4	11.9	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	6.1	0.1	8.1	6.6	3.0	0.3	4.4	1.2	2.6	3.1	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.9	30.3	24.0	44.5	25.6	22.4	46.0	33.8	30.2	52.0	27.7	26.3
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1431			2102			780			863	
Approach Delay, s/veh		33.1			31.6			33.8			33.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	22.7	25.3	28.9	6.7	28.0	18.6	35.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	36.0	22.0	36.0	7.0	38.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	7.2	13.1	19.6	17.7	2.6	10.2	12.6	19.7
Green Ext Time (p_c), s	0.0	4.6	0.7	6.2	0.0	4.0	1.0	8.0

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1455	1945	90	0	160
Future Volume (veh/h)	0	1455	1945	90	0	160
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1532	2047	95	0	168
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	4	3291	3291	1022	270	240
Arrive On Green	0.00	0.64	0.64	0.64	0.00	0.15
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	0	1532	2047	95	0	168
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	0.0	7.5	11.7	1.1	0.0	4.9
Cycle Q Clear(g_c), s	0.0	7.5	11.7	1.1	0.0	4.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	4	3291	3291	1022	270	240
V/C Ratio(X)	0.00	0.47	0.62	0.09	0.00	0.70
Avail Cap(c_a), veh/h	145	5202	4265	1324	1089	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	4.4	5.2	3.3	0.0	19.8
Incr Delay (d2), s/veh	0.0	0.1	0.2	0.0	0.0	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	1.5	0.1	0.0	4.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	4.5	5.4	3.3	0.0	23.4
LnGrp LOS	A	A	A	A	A	C
Approach Vol, veh/h		1532	2142		168	
Approach Delay, s/veh		4.5	5.3		23.4	
Approach LOS		A	A		C	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	36.6	12.4	0.0	36.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	50.0	30.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	9.5	6.9	0.0	13.7
Green Ext Time (p_c), s	14.3	0.5	0.0	18.0

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	1231	146	18	1858	195	153	93	10	105	66	24
Future Volume (veh/h)	77	1231	146	18	1858	195	153	93	10	105	66	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	81	1296	154	19	1956	205	161	98	11	111	69	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	2342	727	33	2140	664	206	213	180	144	148	125
Arrive On Green	0.06	0.46	0.46	0.02	0.42	0.42	0.12	0.11	0.11	0.08	0.08	0.08
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	81	1296	154	19	1956	205	161	98	11	111	69	25
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.5	10.1	3.2	0.6	19.8	4.7	4.8	2.7	0.3	3.3	1.9	0.8
Cycle Q Clear(g_c), s	2.5	10.1	3.2	0.6	19.8	4.7	4.8	2.7	0.3	3.3	1.9	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	103	2342	727	33	2140	664	206	213	180	144	148	125
V/C Ratio(X)	0.79	0.55	0.21	0.58	0.91	0.31	0.78	0.46	0.06	0.77	0.47	0.20
Avail Cap(c_a), veh/h	163	2342	727	163	2143	665	325	1161	984	325	1161	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	10.8	8.9	26.7	15.0	10.6	23.6	22.7	21.7	24.7	24.1	23.6
Incr Delay (d2), s/veh	12.4	0.5	0.3	15.3	6.8	0.5	6.4	1.6	0.1	8.4	2.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.8	0.9	0.4	6.9	1.3	2.2	1.2	0.1	1.6	0.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.9	11.2	9.2	42.0	21.8	11.1	29.9	24.3	21.8	33.0	26.4	24.4
LnGrp LOS	D	B	A	D	C	B	C	C	C	C	C	C
Approach Vol, veh/h		1531			2180			270			205	
Approach Delay, s/veh		12.4			21.0			27.5			29.8	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	10.2	5.0	31.1	10.3	8.3	7.2	29.0
Change Period (Y+Rc), s	4.0	4.0	4.0	6.0	4.0	4.0	4.0	6.0
Max Green Setting (Gmax), s	10.0	34.0	5.0	23.0	10.0	34.0	5.0	23.0
Max Q Clear Time (g_c+I1), s	5.3	4.7	2.6	12.1	6.8	3.9	4.5	21.8
Green Ext Time (p_c), s	0.1	0.5	0.0	8.5	0.1	0.4	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	158	1189	1794	120	194	277
Future Volume (veh/h)	158	1189	1794	120	194	277
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	166	1252	1888	126	204	292
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	214	2889	1780	553	428	381
Arrive On Green	0.12	0.57	0.35	0.35	0.24	0.24
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	166	1252	1888	126	204	292
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	4.7	7.3	18.0	2.9	5.1	8.9
Cycle Q Clear(g_c), s	4.7	7.3	18.0	2.9	5.1	8.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	214	2889	1780	553	428	381
V/C Ratio(X)	0.77	0.43	1.06	0.23	0.48	0.77
Avail Cap(c_a), veh/h	414	3461	1780	553	1035	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	6.4	16.8	11.9	16.8	18.3
Incr Delay (d2), s/veh	5.9	0.1	39.5	0.2	0.8	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.5	11.8	0.8	1.9	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.9	6.6	56.3	12.1	17.6	21.5
LnGrp LOS	C	A	F	B	B	C
Approach Vol, veh/h		1418	2014		496	
Approach Delay, s/veh		9.1	53.6		19.9	
Approach LOS		A	D		B	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	34.2	17.4	11.2	23.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	35.0	30.0	12.0	18.0
Max Q Clear Time (g_c+I1), s	9.3	10.9	6.7	20.0
Green Ext Time (p_c), s	9.3	1.6	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	107	1276	1905	55	73	10
Future Volume (veh/h)	107	1276	1905	55	73	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	1343	2005	58	77	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	145	3433	2479	770	167	148
Arrive On Green	0.08	0.67	0.49	0.49	0.09	0.09
Sat Flow, veh/h	1781	5274	5274	1585	1781	1585
Grp Volume(v), veh/h	113	1343	2005	58	77	11
Grp Sat Flow(s),veh/h/ln	1781	1702	1702	1585	1781	1585
Q Serve(g_s), s	2.7	5.0	14.2	0.8	1.7	0.3
Cycle Q Clear(g_c), s	2.7	5.0	14.2	0.8	1.7	0.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	145	3433	2479	770	167	148
V/C Ratio(X)	0.78	0.39	0.81	0.08	0.46	0.07
Avail Cap(c_a), veh/h	313	4003	2569	798	1313	1168
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	3.1	9.3	5.9	18.3	17.7
Incr Delay (d2), s/veh	8.6	0.1	2.0	0.0	2.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.2	3.2	0.2	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.9	3.2	11.3	5.9	20.3	17.9
LnGrp LOS	C	A	B	A	C	B
Approach Vol, veh/h		1456	2063		88	
Approach Delay, s/veh		5.1	11.1		20.0	
Approach LOS		A	B		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		34.2		8.5	8.0	26.2
Change Period (Y+Rc), s		5.5		4.5	4.5	5.5
Max Green Setting (Gmax), s		33.5		31.5	7.5	21.5
Max Q Clear Time (g_c+I1), s		7.0		3.7	4.7	16.2
Green Ext Time (p_c), s		10.2		0.2	0.1	4.5

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	601	1020	135	356	1419	193	158	706	397	257	1211	306
Future Volume (veh/h)	601	1020	135	356	1419	193	158	706	397	257	1211	306
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1841	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	633	1074	39	375	1494	114	166	743	157	271	1275	153
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	4	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	609	1673	528	444	1433	445	221	1423	442	261	1482	460
Arrive On Green	0.18	0.33	0.33	0.13	0.29	0.29	0.06	0.28	0.28	0.08	0.29	0.29
Sat Flow, veh/h	3456	5025	1585	3456	5025	1560	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	633	1074	39	375	1494	114	166	743	157	271	1275	153
Grp Sat Flow(s),veh/h/ln	1728	1675	1585	1728	1675	1560	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	21.0	21.6	2.0	12.7	34.0	6.7	5.6	14.6	9.5	9.0	28.2	9.0
Cycle Q Clear(g_c), s	21.0	21.6	2.0	12.7	34.0	6.7	5.6	14.6	9.5	9.0	28.2	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	609	1673	528	444	1433	445	221	1423	442	261	1482	460
V/C Ratio(X)	1.04	0.64	0.07	0.85	1.04	0.26	0.75	0.52	0.36	1.04	0.86	0.33
Avail Cap(c_a), veh/h	609	1673	528	551	1433	445	232	1499	465	261	1542	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	33.8	27.2	50.8	42.6	32.9	54.9	36.3	34.4	55.1	40.0	33.2
Incr Delay (d2), s/veh	47.3	1.1	0.1	9.7	35.7	0.3	12.3	0.6	0.9	66.3	5.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	8.4	0.8	5.9	18.2	2.5	2.8	6.2	3.7	6.2	11.8	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.4	34.9	27.3	60.5	78.3	33.2	67.2	36.9	35.4	121.4	45.5	34.0
LnGrp LOS	F	C	C	E	F	C	E	D	D	F	D	C
Approach Vol, veh/h		1746			1983			1066			1699	
Approach Delay, s/veh		57.0			72.4			41.4			56.5	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	39.2	20.3	45.7	12.6	40.6	26.0	40.0
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	* 6
Max Green Setting (Gmax), s	9.0	35.0	19.0	35.0	8.0	36.0	21.0	* 34
Max Q Clear Time (g_c+I1), s	11.0	16.6	14.7	23.6	7.6	30.2	23.0	36.0
Green Ext Time (p_c), s	0.0	7.0	0.7	9.9	0.0	4.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	59.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	745	1041	0	0	1082	109	0	0	0	66	0	871
Future Volume (veh/h)	745	1041	0	0	1082	109	0	0	0	66	0	871
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	0	0	1870	0	1870
Adj Flow Rate, veh/h	784	1096	0	0	1139	53	0	0	0	69	0	377
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	0	0	2	0	2
Cap, veh/h	910	2723	0	0	1589	709	2	0	0	167	0	0
Arrive On Green	0.26	0.77	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.09	0.00	0.00
Sat Flow, veh/h	3456	3647	0	0	3647	1585	1781	0		1781	69	
Grp Volume(v), veh/h	784	1096	0	0	1139	53	0	0.0		69	31.2	
Grp Sat Flow(s),veh/h/ln	1728	1777	0	0	1777	1585	1781			1781	C	
Q Serve(g_s), s	15.5	7.5	0.0	0.0	18.7	1.4	0.0			2.6		
Cycle Q Clear(g_c), s	15.5	7.5	0.0	0.0	18.7	1.4	0.0			2.6		
Prop In Lane	1.00		0.00	0.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	910	2723	0	0	1589	709	2			167		
V/C Ratio(X)	0.86	0.40	0.00	0.00	0.72	0.07	0.00			0.41		
Avail Cap(c_a), veh/h	1159	3080	0	0	1689	753	598			249		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00			1.00		
Uniform Delay (d), s/veh	25.1	2.8	0.0	0.0	16.1	11.3	0.0			30.6		
Incr Delay (d2), s/veh	4.6	0.1	0.0	0.0	1.6	0.1	0.0			0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	6.1	0.7	0.0	0.0	6.4	0.4	0.0			1.1		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	3.0	0.0	0.0	17.7	11.4	0.0			31.2		
LnGrp LOS	C	A	A	A	B	B	A			C		
Approach Vol, veh/h		1880			1192							
Approach Delay, s/veh		14.1			17.4							
Approach LOS		B			B							

Timer - Assigned Phs	1			4	5		7	8				
Phs Duration (G+Y+Rc), s	10.7			60.8	0.0		22.8	38.0				
Change Period (Y+Rc), s	4.0			6.0	4.0		4.0	6.0				
Max Green Setting (Gmax), s	10.0			62.0	24.0		24.0	34.0				
Max Q Clear Time (g_c+I1), s	4.6			9.5	0.0		17.5	20.7				
Green Ext Time (p_c), s	0.0			32.3	0.0		1.4	11.3				

Intersection Summary												
HCM 6th Ctrl Delay			15.7									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	1005	77	49	1114	0	124	274	54	142	548	57
Future Volume (veh/h)	75	1005	77	49	1114	0	124	274	54	142	548	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	1058	24	52	1173	0	131	288	9	149	577	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	1099	486	67	1042		111	245	306	125	484	
Arrive On Green	0.05	0.31	0.31	0.04	0.29	0.00	0.19	0.19	0.19	0.33	0.33	0.00
Sat Flow, veh/h	1781	3554	1572	1781	3554	1585	576	1266	1585	380	1471	1585
Grp Volume(v), veh/h	79	1058	24	52	1173	0	419	0	9	726	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1572	1781	1777	1585	1842	0	1585	1851	0	1585
Q Serve(g_s), s	6.6	43.9	1.6	4.3	44.0	0.0	29.0	0.0	0.7	49.3	0.0	0.0
Cycle Q Clear(g_c), s	6.6	43.9	1.6	4.3	44.0	0.0	29.0	0.0	0.7	49.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.31		1.00	0.21		1.00
Lane Grp Cap(c), veh/h	95	1099	486	67	1042		356	0	306	608	0	
V/C Ratio(X)	0.83	0.96	0.05	0.78	1.13		1.18	0.00	0.03	1.19	0.00	
Avail Cap(c_a), veh/h	95	1099	486	95	1042		356	0	306	608	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	70.3	51.0	36.3	71.6	53.0	0.0	60.5	0.0	49.1	50.4	0.0	0.0
Incr Delay (d2), s/veh	41.7	19.0	0.1	13.9	69.0	0.0	105.1	0.0	0.0	102.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	21.9	0.6	2.2	29.1	0.0	23.7	0.0	0.3	39.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	112.0	70.0	36.4	85.5	122.0	0.0	165.6	0.0	49.1	152.8	0.0	0.0
LnGrp LOS	F	E	D	F	F		F	A	D	F	A	
Approach Vol, veh/h		1161			1225	A		428			726	A
Approach Delay, s/veh		72.2			120.5			163.1			152.8	
Approach LOS		E			F			F			F	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		33.0	9.6	52.4		55.0	12.0	50.0				
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0				
Max Green Setting (Gmax), s		29.0	8.0	44.0		49.3	8.0	44.0				
Max Q Clear Time (g_c+I1), s		31.0	6.3	45.9		51.3	8.6	46.0				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0	0.0	0.0				

Intersection Summary	
HCM 6th Ctrl Delay	116.4
HCM 6th LOS	F

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	275	366	93	420	117	537	1493	86	145	1938	175
Future Volume (veh/h)	208	275	366	93	420	117	537	1493	86	145	1938	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	289	150	98	442	34	565	1572	43	153	2040	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	581	259	104	507	226	605	2604	808	181	2228	
Arrive On Green	0.08	0.16	0.16	0.06	0.14	0.14	0.17	0.51	0.51	0.10	0.44	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	219	289	150	98	442	34	565	1572	43	153	2040	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	7.5	8.9	10.5	6.6	14.6	2.3	19.3	26.2	1.6	10.1	45.0	0.0
Cycle Q Clear(g_c), s	7.5	8.9	10.5	6.6	14.6	2.3	19.3	26.2	1.6	10.1	45.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	274	581	259	104	507	226	605	2604	808	181	2228	
V/C Ratio(X)	0.80	0.50	0.58	0.94	0.87	0.15	0.93	0.60	0.05	0.85	0.92	
Avail Cap(c_a), veh/h	288	592	264	104	533	238	605	2604	808	267	2228	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.3	45.7	46.4	56.3	50.4	45.1	48.8	20.8	14.8	53.0	31.7	0.0
Incr Delay (d2), s/veh	12.9	1.1	4.2	69.3	15.5	0.6	21.8	1.0	0.1	10.2	6.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.9	4.3	4.9	7.4	0.9	9.8	9.7	0.6	4.9	18.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	46.8	50.6	125.6	65.8	45.7	70.7	21.9	14.9	63.2	38.3	0.0
LnGrp LOS	E	D	D	F	E	D	E	C	B	E	D	
Approach Vol, veh/h		658			574			2180			2193	A
Approach Delay, s/veh		54.5			74.8			34.4			40.1	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	67.2	11.0	25.6	25.0	58.4	13.5	23.1
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	* 6
Max Green Setting (Gmax), s	18.0	55.0	7.0	20.0	21.0	52.0	10.0	* 18
Max Q Clear Time (g_c+I1), s	12.1	28.2	8.6	12.5	21.3	47.0	9.5	16.6
Green Ext Time (p_c), s	0.1	10.8	0.0	1.8	0.0	4.4	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	43.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	416	292	291	648	493	216	645	244	322	1397	7
Future Volume (veh/h)	136	416	292	291	648	493	216	645	244	322	1397	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	143	438	0	306	682	462	227	679	182	339	1471	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	571		379	659	489	297	1337	768	430	1512	
Arrive On Green	0.10	0.16	0.00	0.11	0.19	0.19	0.09	0.38	0.38	0.12	0.43	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1572	3456	3554	1579	3456	3554	1585
Grp Volume(v), veh/h	143	438	0	306	682	462	227	679	182	339	1471	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1572	1728	1777	1579	1728	1777	1585
Q Serve(g_s), s	3.6	10.8	0.0	7.9	17.0	17.0	5.9	13.5	6.1	8.7	37.2	0.0
Cycle Q Clear(g_c), s	3.6	10.8	0.0	7.9	17.0	17.0	5.9	13.5	6.1	8.7	37.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	571		379	659	489	297	1337	768	430	1512	
V/C Ratio(X)	0.43	0.77		0.81	1.03	0.95	0.76	0.51	0.24	0.79	0.97	
Avail Cap(c_a), veh/h	339	582		415	659	489	302	1337	768	679	1512	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.1	36.8	0.0	39.8	37.3	30.9	41.0	22.0	13.7	39.0	25.8	0.0
Incr Delay (d2), s/veh	0.3	5.4	0.0	10.5	44.2	27.5	9.8	0.4	0.2	3.3	17.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.1	0.0	3.9	11.3	13.3	2.7	5.1	2.1	3.6	16.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	42.2	0.0	50.3	81.6	58.4	50.8	22.5	13.9	42.2	42.8	0.0
LnGrp LOS	D	D		D	F	E	D	C	B	D	D	
Approach Vol, veh/h		581	A		1450			1088			1810	A
Approach Delay, s/veh		41.5			67.6			26.9			42.7	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	40.5	15.1	19.7	11.9	45.0	12.8	22.0
Change Period (Y+Rc), s	5.0	6.0	5.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	18.0	26.0	11.0	* 15	8.0	39.0	9.0	17.0
Max Q Clear Time (g_c+I1), s	10.7	15.5	9.9	12.8	7.9	39.2	5.6	19.0
Green Ext Time (p_c), s	0.7	2.6	0.1	0.5	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	46.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	828	69	46	922	388	106	445	49	396	1276	131
Future Volume (veh/h)	120	828	69	46	922	388	106	445	49	396	1276	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	872	21	48	971	0	112	468	0	417	1343	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	999	443	262	905		278	1116		440	1283	570
Arrive On Green	0.10	0.28	0.28	0.08	0.25	0.00	0.08	0.31	0.00	0.13	0.36	0.36
Sat Flow, veh/h	3456	3554	1577	3456	3554	1585	3456	3554	1585	3456	3554	1578
Grp Volume(v), veh/h	126	872	21	48	971	0	112	468	0	417	1343	60
Grp Sat Flow(s),veh/h/ln	1728	1777	1577	1728	1777	1585	1728	1777	1585	1728	1777	1578
Q Serve(g_s), s	3.2	22.0	0.9	1.2	24.0	0.0	2.9	9.8	0.0	11.3	34.0	2.4
Cycle Q Clear(g_c), s	3.2	22.0	0.9	1.2	24.0	0.0	2.9	9.8	0.0	11.3	34.0	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	353	999	443	262	905		278	1116		440	1283	570
V/C Ratio(X)	0.36	0.87	0.05	0.18	1.07		0.40	0.42		0.95	1.05	0.11
Avail Cap(c_a), veh/h	367	999	443	367	905		293	1132		440	1283	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	32.3	24.7	40.8	35.1	0.0	41.2	25.5	0.0	40.8	30.1	20.0
Incr Delay (d2), s/veh	0.2	8.3	0.0	0.1	51.3	0.0	0.4	0.5	0.0	29.5	38.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	10.4	0.3	0.5	16.6	0.0	1.2	4.1	0.0	6.5	20.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	40.6	24.7	40.9	86.4	0.0	41.5	26.0	0.0	70.3	68.5	20.2
LnGrp LOS	D	D	C	D	F		D	C		E	F	C
Approach Vol, veh/h		1019			1019	A		580	A		1820	
Approach Delay, s/veh		40.1			84.3			29.0			67.3	
Approach LOS		D			F			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	35.6	11.2	31.5	11.6	40.0	13.6	29.0
Change Period (Y+Rc), s	4.0	6.0	4.0	* 5	4.0	6.0	4.0	5.0
Max Green Setting (Gmax), s	12.0	30.0	10.0	* 25	8.0	34.0	10.0	24.0
Max Q Clear Time (g_c+I1), s	13.3	11.8	3.2	24.0	4.9	36.0	5.2	26.0
Green Ext Time (p_c), s	0.0	3.8	0.0	0.4	0.1	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	60.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	4	80	26	6	0	149	1271	16	4	1185	14
Future Volume (veh/h)	9	4	80	26	6	0	149	1271	16	4	1185	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	4	84	27	6	0	157	1338	17	4	1247	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	39	110	41	9	0	202	2123	947	6	1732	772
Arrive On Green	0.07	0.07	0.07	0.03	0.03	0.00	0.11	0.60	0.60	0.00	0.49	0.49
Sat Flow, veh/h	1252	556	1585	1470	327	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	13	0	84	33	0	0	157	1338	17	4	1247	15
Grp Sat Flow(s),veh/h/ln	1808	0	1585	1797	0	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.4	0.0	3.1	1.1	0.0	0.0	5.2	14.7	0.3	0.1	16.7	0.3
Cycle Q Clear(g_c), s	0.4	0.0	3.1	1.1	0.0	0.0	5.2	14.7	0.3	0.1	16.7	0.3
Prop In Lane	0.69		1.00	0.82		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	0	110	51	0	0	202	2123	947	6	1732	772
V/C Ratio(X)	0.10	0.00	0.76	0.65	0.00	0.00	0.78	0.63	0.02	0.70	0.72	0.02
Avail Cap(c_a), veh/h	474	0	415	119	0	0	532	2298	1025	236	1732	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	27.6	29.0	0.0	0.0	26.0	7.8	4.9	30.0	12.2	8.0
Incr Delay (d2), s/veh	0.1	0.0	4.1	5.2	0.0	0.0	2.4	0.6	0.0	43.7	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.2	0.5	0.0	0.0	2.0	3.3	0.1	0.1	5.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.4	0.0	31.6	34.2	0.0	0.0	28.4	8.5	5.0	73.7	13.8	8.0
LnGrp LOS	C	A	C	C	A	A	C	A	A	E	B	A
Approach Vol, veh/h		97			33			1512			1266	
Approach Delay, s/veh		30.9			34.2			10.5			14.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	42.0		5.7	10.8	35.4		8.4
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.2
Max Green Setting (Gmax), s	8.0	39.0		4.0	18.0	24.0		15.8
Max Q Clear Time (g_c+I1), s	2.1	16.7		3.1	7.2	18.7		5.1
Green Ext Time (p_c), s	0.0	19.4		0.0	0.2	4.9		0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	0	11	40	0	71	105	926	19	20	1149	8
Future Volume (veh/h)	22	0	11	40	0	71	105	926	19	20	1149	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	0	12	42	0	75	111	975	20	21	1209	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	0	113	261	0	232	163	1717	35	60	1535	10
Arrive On Green	0.07	0.00	0.07	0.15	0.00	0.15	0.09	0.48	0.48	0.03	0.42	0.42
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3561	73	1781	3619	24
Grp Volume(v), veh/h	23	0	12	42	0	75	111	486	509	21	594	623
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1857	1781	1777	1866
Q Serve(g_s), s	0.8	0.0	0.5	1.4	0.0	2.8	4.0	13.0	13.0	0.8	19.2	19.2
Cycle Q Clear(g_c), s	0.8	0.0	0.5	1.4	0.0	2.8	4.0	13.0	13.0	0.8	19.2	19.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.01
Lane Grp Cap(c), veh/h	128	0	113	261	0	232	163	857	895	60	754	792
V/C Ratio(X)	0.18	0.00	0.11	0.16	0.00	0.32	0.68	0.57	0.57	0.35	0.79	0.79
Avail Cap(c_a), veh/h	268	0	238	1098	0	977	214	890	930	214	890	934
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	28.9	24.8	0.0	25.4	29.3	12.3	12.3	31.4	16.6	16.6
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.1	0.0	0.3	2.6	1.2	1.1	1.3	4.9	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	0.6	0.0	1.0	1.7	4.4	4.6	0.3	7.5	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.3	0.0	29.0	24.9	0.0	25.7	31.9	13.5	13.4	32.7	21.4	21.2
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		35			117			1106			1238	
Approach Delay, s/veh		29.2			25.4			15.3			21.5	
Approach LOS		C			C			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		8.8	10.1	33.9		13.7	6.3	37.8				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		10.0	8.0	33.3		41.0	8.0	33.3				
Max Q Clear Time (g_c+I1), s		2.8	6.0	21.2		4.8	2.8	15.0				
Green Ext Time (p_c), s		0.0	0.0	7.0		0.3	0.0	7.3				

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	658	566	184	499	99	388	594	75	579	823	38
Future Volume (veh/h)	26	658	566	184	499	99	388	594	75	579	823	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2001	1924	1924	2001	1924	1924	2001	1924	1924	1954	1879	1879
Adj Flow Rate, veh/h	27	693	536	194	525	32	408	625	17	609	866	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	100	842	602	232	1096	486	519	972	431	695	1135	504
Arrive On Green	0.05	0.23	0.23	0.12	0.30	0.30	0.14	0.27	0.27	0.19	0.32	0.32
Sat Flow, veh/h	1906	3656	1620	1906	3656	1623	3698	3656	1622	3611	3571	1585
Grp Volume(v), veh/h	27	693	536	194	525	32	408	625	17	609	866	9
Grp Sat Flow(s),veh/h/ln	1906	1828	1620	1906	1828	1623	1849	1828	1622	1806	1785	1585
Q Serve(g_s), s	1.4	18.4	23.6	10.2	12.0	1.4	10.9	15.5	0.8	16.8	22.3	0.4
Cycle Q Clear(g_c), s	1.4	18.4	23.6	10.2	12.0	1.4	10.9	15.5	0.8	16.8	22.3	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	842	602	232	1096	486	519	972	431	695	1135	504
V/C Ratio(X)	0.27	0.82	0.89	0.84	0.48	0.07	0.79	0.64	0.04	0.88	0.76	0.02
Avail Cap(c_a), veh/h	186	904	629	354	1226	544	940	1226	544	777	1135	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	37.4	30.3	43.9	29.3	25.6	42.5	33.3	27.9	40.1	31.4	23.9
Incr Delay (d2), s/veh	0.5	6.5	15.1	6.1	0.6	0.1	1.0	1.3	0.1	9.5	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	8.5	13.8	5.0	5.0	0.5	4.8	6.6	0.3	7.9	9.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	43.9	45.4	50.0	29.8	25.7	43.5	34.5	27.9	49.6	34.9	24.0
LnGrp LOS	D	D	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1256			751			1050			1484	
Approach Delay, s/veh		44.6			34.9			37.9			40.8	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	29.3	18.3	38.2	9.4	36.4	23.7	32.9
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	4.0	5.7
Max Green Setting (Gmax), s	19.0	25.3	26.0	30.3	10.0	34.3	22.0	34.3
Max Q Clear Time (g_c+I1), s	12.2	20.4	12.9	24.3	3.4	14.0	18.8	17.5
Green Ext Time (p_c), s	0.3	3.1	1.4	4.8	0.0	8.7	0.9	9.2

Intersection Summary	
HCM 6th Ctrl Delay	40.2
HCM 6th LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1286	73	123	935	52	82
Future Volume (veh/h)	1286	73	123	935	52	82
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1354	77	129	984	55	86
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1621	723	221	2315	311	277
Arrive On Green	0.46	0.46	0.12	0.65	0.17	0.17
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	1354	77	129	984	55	86
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	18.7	1.6	3.8	7.5	1.5	2.6
Cycle Q Clear(g_c), s	18.7	1.6	3.8	7.5	1.5	2.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1621	723	221	2315	311	277
V/C Ratio(X)	0.84	0.11	0.58	0.42	0.18	0.31
Avail Cap(c_a), veh/h	1737	775	255	2608	829	738
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.4	8.7	23.1	4.7	19.6	20.1
Incr Delay (d2), s/veh	3.9	0.1	1.0	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.4	1.4	1.2	0.6	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.2	8.8	24.2	4.9	19.7	20.3
LnGrp LOS	B	A	C	A	B	C
Approach Vol, veh/h	1431			1113	141	
Approach Delay, s/veh	16.8			7.1	20.1	
Approach LOS	B			A	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		13.8	10.9	31.2		42.1
Change Period (Y+Rc), s		4.0	4.0	5.7		* 5.7
Max Green Setting (Gmax), s		26.0	8.0	27.3		* 41
Max Q Clear Time (g_c+I1), s		4.6	5.8	20.7		9.5
Green Ext Time (p_c), s		0.3	0.0	4.8		9.5

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	415	746	44	274	72	385	1244	54	164	1849	92
Future Volume (veh/h)	131	415	746	44	274	72	385	1244	54	164	1849	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	437	0	46	288	0	405	1309	0	173	1946	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	515		226	484		474	2425		462	2494	
Arrive On Green	0.07	0.15	0.00	0.07	0.14	0.00	0.14	0.47	0.00	0.13	0.49	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	138	437	0	46	288	0	405	1309	0	173	1946	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	4.6	14.4	0.0	1.5	9.1	0.0	13.7	21.7	0.0	5.5	37.8	0.0
Cycle Q Clear(g_c), s	4.6	14.4	0.0	1.5	9.1	0.0	13.7	21.7	0.0	5.5	37.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	257	515		226	484		474	2425		462	2494	
V/C Ratio(X)	0.54	0.85		0.20	0.60		0.85	0.54		0.37	0.78	
Avail Cap(c_a), veh/h	259	572		288	613		720	2425		462	2494	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.6	50.0	0.0	53.1	48.7	0.0	50.6	22.2	0.0	47.4	25.4	0.0
Incr Delay (d2), s/veh	1.1	11.7	0.0	0.2	2.0	0.0	4.1	0.9	0.0	0.2	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.0	0.0	0.6	4.1	0.0	5.9	8.1	0.0	2.3	14.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	61.7	0.0	53.3	50.7	0.0	54.7	23.1	0.0	47.6	27.1	0.0
LnGrp LOS	D	E		D	D		D	C		D	C	
Approach Vol, veh/h		575	A		334	A		1714	A		2119	A
Approach Delay, s/veh		60.0			51.1			30.6			28.8	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.1	63.0	11.8	23.1	20.5	64.6	12.9	22.0
Change Period (Y+Rc), s	6.0	* 6	4.0	5.7	4.0	6.0	4.0	* 5.7
Max Green Setting (Gmax), s	14.0	* 57	10.0	19.3	25.0	46.0	9.0	* 21
Max Q Clear Time (g_c+I1), s	7.5	23.7	3.5	16.4	15.7	39.8	6.6	11.1
Green Ext Time (p_c), s	0.2	11.5	0.0	0.8	0.7	5.2	0.1	1.3

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	847	0	5	997	514	0	0	0	330	0	111
Future Volume (veh/h)	96	847	0	5	997	514	0	0	0	330	0	111
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1841	1841	0	1841	1841	1841				1841	0	1841
Adj Flow Rate, veh/h	101	892	0	5	1049	541				347	0	117
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	4	4	0	4	4	4				4	0	4
Cap, veh/h	129	1965	0	0	1445	640				428	0	496
Arrive On Green	0.07	0.56	0.00	0.00	0.41	0.41				0.24	0.00	0.24
Sat Flow, veh/h	1753	3589	0	0	3497	1550				1753	0	1560
Grp Volume(v), veh/h	101	892	0	0	1049	541				347	0	117
Grp Sat Flow(s),veh/h/ln	1753	1749	0	0	1749	1550				1753	0	1560
Q Serve(g_s), s	3.0	8.0	0.0	0.0	13.4	16.7				9.9	0.0	2.9
Cycle Q Clear(g_c), s	3.0	8.0	0.0	0.0	13.4	16.7				9.9	0.0	2.9
Prop In Lane	1.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	129	1965	0	0	1445	640				428	0	496
V/C Ratio(X)	0.78	0.45	0.00	0.00	0.73	0.84				0.81	0.00	0.24
Avail Cap(c_a), veh/h	264	1965	0	0	1558	691				923	0	936
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	24.2	6.9	0.0	0.0	13.1	14.1				18.9	0.0	13.4
Incr Delay (d2), s/veh	3.9	0.2	0.0	0.0	1.6	8.9				1.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.8	0.0	0.0	4.2	5.9				3.8	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	7.0	0.0	0.0	14.7	23.0				20.3	0.0	13.5
LnGrp LOS	C	A	A	A	B	C				C	A	B
Approach Vol, veh/h		993			1590						464	
Approach Delay, s/veh		9.2			17.5						18.6	
Approach LOS		A			B						B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	0.0	35.6		17.6	7.9	27.7
Change Period (Y+Rc), s	4.0	5.7		4.6	4.0	5.7
Max Green Setting (Gmax), s	28.0	24.7		28.0	8.0	23.7
Max Q Clear Time (g_c+I1), s	0.0	10.0		11.9	5.0	18.7
Green Ext Time (p_c), s	0.0	3.7		1.1	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	1015	21	7	1297	344	16	16	12	83	24	241
Future Volume (veh/h)	152	1015	21	7	1297	344	16	16	12	83	24	241
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1885	1826	1826	1885	1885	1885	1791	1791	1732
Adj Flow Rate, veh/h	160	1068	22	7	1365	362	17	17	13	87	25	254
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	1	5	5	1	1	1	1	1	5
Cap, veh/h	190	1795	37	10	1432	631	60	33	25	272	78	293
Arrive On Green	0.11	0.52	0.52	0.01	0.41	0.41	0.03	0.03	0.03	0.20	0.20	0.20
Sat Flow, veh/h	1739	3476	72	1795	3469	1529	1795	991	758	1339	385	1446
Grp Volume(v), veh/h	160	533	557	7	1365	362	17	0	30	112	0	254
Grp Sat Flow(s),veh/h/ln	1739	1735	1813	1795	1735	1529	1795	0	1749	1724	0	1446
Q Serve(g_s), s	6.6	15.7	15.7	0.3	27.9	13.4	0.7	0.0	1.2	4.1	0.0	12.5
Cycle Q Clear(g_c), s	6.6	15.7	15.7	0.3	27.9	13.4	0.7	0.0	1.2	4.1	0.0	12.5
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.43	0.78		1.00
Lane Grp Cap(c), veh/h	190	896	936	10	1432	631	60	0	59	350	0	293
V/C Ratio(X)	0.84	0.59	0.59	0.72	0.95	0.57	0.28	0.00	0.51	0.32	0.00	0.87
Avail Cap(c_a), veh/h	190	896	936	196	1434	632	196	0	191	376	0	316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.0	12.4	12.4	36.4	20.8	16.6	34.6	0.0	34.8	24.9	0.0	28.3
Incr Delay (d2), s/veh	26.4	1.1	1.0	30.3	14.1	1.3	2.5	0.0	6.7	0.5	0.0	20.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	5.1	5.3	0.2	12.3	4.2	0.3	0.0	0.6	1.7	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.5	13.4	13.4	66.7	35.0	17.8	37.1	0.0	41.5	25.4	0.0	48.7
LnGrp LOS	E	B	B	E	C	B	D	A	D	C	A	D
Approach Vol, veh/h		1250			1734			47			366	
Approach Delay, s/veh		19.2			31.5			39.9			41.6	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	43.6		6.5	12.0	36.0		18.9
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	30.3		8.0	8.0	30.3		16.0
Max Q Clear Time (g_c+I1), s	2.3	17.7		3.2	8.6	29.9		14.5
Green Ext Time (p_c), s	0.0	7.9		0.0	0.0	0.3		0.4

Intersection Summary	
HCM 6th Ctrl Delay	28.2
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	781	347	311	1547	252	558
Future Volume (veh/h)	781	347	311	1547	252	558
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	822	365	327	1628	265	587
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	995	733	499	2274	329	736
Arrive On Green	0.28	0.28	0.28	0.64	0.18	0.18
Sat Flow, veh/h	3647	1571	1781	3647	1781	1585
Grp Volume(v), veh/h	822	365	327	1628	265	587
Grp Sat Flow(s),veh/h/ln	1777	1571	1781	1777	1781	1585
Q Serve(g_s), s	16.2	12.2	12.1	22.8	10.7	2.6
Cycle Q Clear(g_c), s	16.2	12.2	12.1	22.8	10.7	2.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	995	733	499	2274	329	736
V/C Ratio(X)	0.83	0.50	0.66	0.72	0.81	0.80
Avail Cap(c_a), veh/h	1137	795	499	2274	404	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.90	0.90	1.00	1.00
Uniform Delay (d), s/veh	25.3	14.0	23.8	9.0	29.3	17.1
Incr Delay (d2), s/veh	4.6	0.5	2.2	1.8	7.7	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	5.5	4.9	6.3	5.0	13.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.9	14.5	26.1	10.7	37.0	21.7
LnGrp LOS	C	B	C	B	D	C
Approach Vol, veh/h	1187			1955	852	
Approach Delay, s/veh	25.1			13.3	26.4	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.0	27.0		17.9		54.0
Change Period (Y+Rc), s	6.0	* 6		4.0		6.0
Max Green Setting (Gmax), s	20.0	* 24		17.0		48.0
Max Q Clear Time (g_c+I1), s	14.1	18.2		12.7		24.8
Green Ext Time (p_c), s	0.4	2.8		1.2		8.1

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	919	252	99	1204	36	348	731	24	57	1101	117
Future Volume (veh/h)	113	919	252	99	1204	36	348	731	24	57	1101	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	967	0	104	1267	0	366	769	0	60	1159	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	1150		125	1232		443	2412		77	1304	
Arrive On Green	0.05	0.32	0.00	0.07	0.35	0.00	0.25	0.47	0.00	0.04	0.26	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	119	967	0	104	1267	0	366	769	0	60	1159	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	5.1	37.9	0.0	8.6	52.0	0.0	29.1	14.0	0.0	5.0	32.8	0.0
Cycle Q Clear(g_c), s	5.1	37.9	0.0	8.6	52.0	0.0	29.1	14.0	0.0	5.0	32.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	1150		125	1232		443	2412		77	1304	
V/C Ratio(X)	0.73	0.84		0.83	1.03		0.83	0.32		0.78	0.89	
Avail Cap(c_a), veh/h	184	1150		143	1232		443	2412		131	1304	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.5	47.1	0.0	68.9	49.0	0.0	53.3	24.6	0.0	71.1	53.8	0.0
Incr Delay (d2), s/veh	9.7	6.0	0.0	26.5	33.2	0.0	11.5	0.1	0.0	6.4	9.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	17.3	0.0	4.8	28.0	0.0	14.2	5.6	0.0	2.4	14.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.2	53.2	0.0	95.4	82.2	0.0	64.7	24.7	0.0	77.5	63.1	0.0
LnGrp LOS	F	D		F	F		E	C		E	E	
Approach Vol, veh/h		1086	A		1371	A		1135	A		1219	A
Approach Delay, s/veh		56.1			83.2			37.6			63.8	
Approach LOS		E			F			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	54.5	43.0	44.0	11.1	58.0	10.4	76.6
Change Period (Y+Rc), s	4.0	* 6	5.7	* 5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	12.0	* 48	32.0	* 38	8.0	52.0	11.0	59.3
Max Q Clear Time (g_c+I1), s	10.6	39.9	31.1	34.8	7.1	54.0	7.0	16.0
Green Ext Time (p_c), s	0.0	4.3	0.1	2.4	0.0	0.0	0.0	6.9

Intersection Summary	
HCM 6th Ctrl Delay	61.4
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	462	171	62	208	155	301	1438	75	157	1622	79
Future Volume (veh/h)	123	462	171	62	208	155	301	1438	75	157	1622	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	129	486	0	65	219	0	317	1514	0	165	1707	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	552		82	415		340	2393		188	2015	
Arrive On Green	0.08	0.16	0.00	0.05	0.12	0.00	0.19	0.47	0.00	0.11	0.39	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	129	486	0	65	219	0	317	1514	0	165	1707	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	10.7	20.1	0.0	5.4	8.7	0.0	26.3	33.6	0.0	13.7	45.6	0.0
Cycle Q Clear(g_c), s	10.7	20.1	0.0	5.4	8.7	0.0	26.3	33.6	0.0	13.7	45.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	552		82	415		340	2393		188	2015	
V/C Ratio(X)	0.85	0.88		0.79	0.53		0.93	0.63		0.88	0.85	
Avail Cap(c_a), veh/h	190	654		107	488		416	2393		273	2015	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.7	62.0	0.0	70.8	62.3	0.0	59.7	30.1	0.0	66.1	41.3	0.0
Incr Delay (d2), s/veh	21.5	12.1	0.0	19.1	1.4	0.0	23.1	1.3	0.0	14.6	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	9.8	0.0	2.9	4.0	0.0	13.8	13.6	0.0	6.9	19.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.2	74.1	0.0	89.9	63.8	0.0	82.8	31.4	0.0	80.8	45.1	0.0
LnGrp LOS	F	E		F	E		F	C		F	D	
Approach Vol, veh/h		615	A		284	A		1831	A		1872	A
Approach Delay, s/veh		77.2			69.7			40.3			48.2	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	29.7	32.7	64.9	16.7	23.9	21.5	76.0
Change Period (Y+Rc), s	4.0	6.4	4.0	5.7	4.0	6.4	5.7	* 5.7
Max Green Setting (Gmax), s	9.0	27.6	35.0	58.3	16.0	20.6	23.0	* 70
Max Q Clear Time (g_c+I1), s	7.4	22.1	28.3	47.6	12.7	10.7	15.7	35.6
Green Ext Time (p_c), s	0.0	1.2	0.4	8.2	0.1	0.8	0.2	16.0

Intersection Summary	
HCM 6th Ctrl Delay	50.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	1248	12	1	878	14	6	0	2	15	4	39
Future Volume (veh/h)	63	1248	12	1	878	14	6	0	2	15	4	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	1314	13	1	924	15	6	0	2	16	4	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	1870	18	3	1565	25	37	0	33	163	41	179
Arrive On Green	0.08	0.52	0.52	0.00	0.44	0.44	0.02	0.00	0.02	0.11	0.11	0.11
Sat Flow, veh/h	1781	3605	36	1781	3579	58	1781	0	1585	1439	360	1585
Grp Volume(v), veh/h	66	647	680	1	459	480	6	0	2	20	0	41
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1860	1781	0	1585	1798	0	1585
Q Serve(g_s), s	1.8	14.1	14.2	0.0	10.0	10.0	0.2	0.0	0.1	0.5	0.0	1.2
Cycle Q Clear(g_c), s	1.8	14.1	14.2	0.0	10.0	10.0	0.2	0.0	0.1	0.5	0.0	1.2
Prop In Lane	1.00		0.02	1.00		0.03	1.00		1.00	0.80		1.00
Lane Grp Cap(c), veh/h	148	922	967	3	777	813	37	0	33	204	0	179
V/C Ratio(X)	0.45	0.70	0.70	0.29	0.59	0.59	0.16	0.00	0.06	0.10	0.00	0.23
Avail Cap(c_a), veh/h	243	1223	1283	243	1223	1281	695	0	618	702	0	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.4	9.3	9.3	25.6	10.9	10.9	24.7	0.0	24.6	20.4	0.0	20.7
Incr Delay (d2), s/veh	0.8	1.9	1.8	16.0	1.2	1.2	0.7	0.0	0.3	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.0	4.2	0.0	3.2	3.3	0.1	0.0	0.0	0.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	11.2	11.1	41.6	12.2	12.1	25.4	0.0	24.9	20.5	0.0	20.9
LnGrp LOS	C	B	B	D	B	B	C	A	C	C	A	C
Approach Vol, veh/h		1393			940			8			61	
Approach Delay, s/veh		11.7			12.2			25.3			20.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	32.3		5.1	8.3	28.1		9.8
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	7.0	35.3		20.0	7.0	35.3		20.0
Max Q Clear Time (g_c+I1), s	2.0	16.2		2.2	3.8	12.0		3.2
Green Ext Time (p_c), s	0.0	10.4		0.0	0.0	7.5		0.1

Intersection Summary		
HCM 6th Ctrl Delay		12.2
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1195	51	57	736	9	35	3	28	10	8	5
Future Volume (veh/h)	26	1195	51	57	736	9	35	3	28	10	8	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1258	54	60	775	9	37	3	29	11	8	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	1717	74	91	1813	809	201	16	193	57	42	86
Arrive On Green	0.04	0.49	0.49	0.05	0.51	0.51	0.12	0.12	0.12	0.05	0.05	0.05
Sat Flow, veh/h	1781	3472	149	1781	3554	1585	1654	134	1585	1052	765	1585
Grp Volume(v), veh/h	27	643	669	60	775	9	40	0	29	19	0	5
Grp Sat Flow(s),veh/h/ln	1781	1777	1844	1781	1777	1585	1788	0	1585	1818	0	1585
Q Serve(g_s), s	0.9	18.3	18.3	2.1	8.7	0.2	1.3	0.0	1.0	0.6	0.0	0.2
Cycle Q Clear(g_c), s	0.9	18.3	18.3	2.1	8.7	0.2	1.3	0.0	1.0	0.6	0.0	0.2
Prop In Lane	1.00		0.08	1.00		1.00	0.92		1.00	0.58		1.00
Lane Grp Cap(c), veh/h	64	879	912	91	1813	809	218	0	193	99	0	86
V/C Ratio(X)	0.42	0.73	0.73	0.66	0.43	0.01	0.18	0.00	0.15	0.19	0.00	0.06
Avail Cap(c_a), veh/h	224	957	993	224	1914	854	309	0	274	599	0	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.1	12.7	12.8	29.7	9.8	7.7	25.1	0.0	25.0	28.8	0.0	28.6
Incr Delay (d2), s/veh	1.7	5.3	5.2	3.0	0.7	0.0	0.1	0.0	0.1	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.9	7.2	0.9	2.8	0.1	0.5	0.0	0.4	0.3	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.7	18.1	17.9	32.6	10.5	7.7	25.3	0.0	25.1	29.1	0.0	28.7
LnGrp LOS	C	B	B	C	B	A	C	A	C	C	A	C
Approach Vol, veh/h		1339			844			69			24	
Approach Delay, s/veh		18.3			12.0			25.2			29.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.8	7.3	37.2		7.5	6.3	38.2				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		11.0	8.0	34.3		21.0	8.0	34.3				
Max Q Clear Time (g_c+I1), s		3.3	4.1	20.3		2.6	2.9	10.7				
Green Ext Time (p_c), s		0.0	0.0	11.2		0.0	0.0	10.7				

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	696	481	67	493	238	117	1317	35	285	1516	211
Future Volume (veh/h)	105	696	481	67	493	238	117	1317	35	285	1516	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	733	0	71	519	0	123	1386	0	300	1596	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	848		261	843		255	2015		360	2098	
Arrive On Green	0.08	0.24	0.00	0.08	0.24	0.00	0.07	0.39	0.00	0.10	0.41	0.00
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	111	733	0	71	519	0	123	1386	0	300	1596	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	7.4	23.7	0.0	2.3	15.7	0.0	4.1	27.1	0.0	10.2	32.1	0.0
Cycle Q Clear(g_c), s	7.4	23.7	0.0	2.3	15.7	0.0	4.1	27.1	0.0	10.2	32.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	848		261	843		255	2015		360	2098	
V/C Ratio(X)	0.81	0.86		0.27	0.62		0.48	0.69		0.83	0.76	
Avail Cap(c_a), veh/h	223	957		288	843		259	2015		461	2098	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.5	43.8	0.0	52.4	40.9	0.0	53.4	30.2	0.0	52.7	30.3	0.0
Incr Delay (d2), s/veh	4.4	8.4	0.0	0.2	1.7	0.0	0.5	1.2	0.0	8.1	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	11.1	0.0	1.0	6.8	0.0	1.7	10.5	0.0	4.7	12.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.9	52.2	0.0	52.6	42.6	0.0	53.9	31.4	0.0	60.9	33.0	0.0
LnGrp LOS	E	D		D	D		D	C		E	C	
Approach Vol, veh/h		844	A		590	A		1509	A		1896	A
Approach Delay, s/veh		53.1			43.8			33.2			37.4	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	53.1	13.1	34.3	14.6	55.0	13.2	34.2
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	5.7	* 5.7	4.0	5.7
Max Green Setting (Gmax), s	16.0	42.3	10.0	32.3	9.0	* 49	15.0	27.3
Max Q Clear Time (g_c+I1), s	12.2	29.1	4.3	25.7	6.1	34.1	9.4	17.7
Green Ext Time (p_c), s	0.3	8.3	0.0	2.9	0.1	10.4	0.1	2.6

Intersection Summary	
HCM 6th Ctrl Delay	39.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	487	0	0	615	371	1	1	0	424	0	13
Future Volume (veh/h)	5	487	0	0	615	371	1	1	0	424	0	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	513	0	0	647	391	1	1	0	446	0	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	0	1686	0	0	887	1215	2	2	0	520	0	463
Arrive On Green	0.00	0.47	0.00	0.00	0.47	0.47	0.00	0.00	0.00	0.29	0.00	0.29
Sat Flow, veh/h	0	3647	0	0	1870	1585	912	912	0	1781	0	1585
Grp Volume(v), veh/h	0	513	0	0	647	391	2	0	0	446	0	14
Grp Sat Flow(s),veh/h/ln	0	1777	0	0	1870	1585	1825	0	0	1781	0	1585
Q Serve(g_s), s	0.0	4.9	0.0	0.0	15.5	4.3	0.1	0.0	0.0	13.2	0.0	0.4
Cycle Q Clear(g_c), s	0.0	4.9	0.0	0.0	15.5	4.3	0.1	0.0	0.0	13.2	0.0	0.4
Prop In Lane	0.00		0.00	0.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1686	0	0	887	1215	4	0	0	520	0	463
V/C Ratio(X)	0.00	0.30	0.00	0.00	0.73	0.32	0.50	0.00	0.00	0.86	0.00	0.03
Avail Cap(c_a), veh/h	0	4599	0	0	1414	1661	721	0	0	1215	0	1081
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.0	0.0	0.0	11.8	2.0	27.8	0.0	0.0	18.6	0.0	14.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	1.2	0.2	31.8	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.5	0.0	0.0	5.1	2.6	0.1	0.0	0.0	5.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.1	0.0	0.0	13.0	2.2	59.6	0.0	0.0	20.3	0.0	14.1
LnGrp LOS	A	A	A	A	B	A	E	A	A	C	A	B
Approach Vol, veh/h		513			1038			2			460	
Approach Delay, s/veh		9.1			8.9			59.6			20.1	
Approach LOS		A			A			E			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		31.3		4.1	0.0	31.3		20.3				
Change Period (Y+Rc), s		4.9		4.0	4.0	4.9		4.0				
Max Green Setting (Gmax), s		72.1		22.0	26.0	42.1		38.0				
Max Q Clear Time (g_c+I1), s		6.9		2.1	0.0	17.5		15.2				
Green Ext Time (p_c), s		2.8		0.0	0.0	8.9		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			11.6									
HCM 6th LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	953	9	3	949	0	19	0	19	76	5	18
Future Volume (veh/h)	0	953	9	3	949	0	19	0	19	76	5	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1003	0	3	999	0	20	0	20	80	5	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1462		12	1806	0	59	0	59	232	44	169
Arrive On Green	0.00	0.41	0.00	0.01	0.51	0.00	0.07	0.00	0.07	0.13	0.13	0.13
Sat Flow, veh/h	0	3741	0	1781	3647	0	839	0	839	1781	341	1296
Grp Volume(v), veh/h	0	1003	0	3	999	0	40	0	0	80	0	24
Grp Sat Flow(s),veh/h/ln	0	1777	0	1781	1777	0	1677	0	0	1781	0	1637
Q Serve(g_s), s	0.0	10.3	0.0	0.1	8.5	0.0	1.0	0.0	0.0	1.8	0.0	0.6
Cycle Q Clear(g_c), s	0.0	10.3	0.0	0.1	8.5	0.0	1.0	0.0	0.0	1.8	0.0	0.6
Prop In Lane	0.00		0.00	1.00		0.00	0.50		0.50	1.00		0.79
Lane Grp Cap(c), veh/h	0	1462		12	1806	0	118	0	0	232	0	213
V/C Ratio(X)	0.00	0.69		0.26	0.55	0.00	0.34	0.00	0.00	0.34	0.00	0.11
Avail Cap(c_a), veh/h	0	1773		322	2735	0	757	0	0	804	0	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.7	0.0	21.9	7.5	0.0	19.6	0.0	0.0	17.5	0.0	17.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	4.2	0.3	0.0	0.6	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.0	0.0	0.0	1.9	0.0	0.4	0.0	0.0	0.7	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.6	0.0	26.1	7.7	0.0	20.2	0.0	0.0	17.9	0.0	17.1
LnGrp LOS	A	B		C	A	A	C	A	A	B	A	B
Approach Vol, veh/h		1003	A		1002			40			104	
Approach Delay, s/veh		11.6			7.8			20.2			17.7	
Approach LOS		B			A			C			B	

Timer - Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	4.3	23.1		7.1		27.4		9.8
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s	8.0	22.1		20.0		34.1		20.0
Max Q Clear Time (g_c+I1), s	2.1	12.3		3.0		10.5		3.8
Green Ext Time (p_c), s	0.0	6.0		0.0		10.4		0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1003	52	162	482	44	221
Future Volume (veh/h)	1003	52	162	482	44	221
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1056	55	171	507	46	233
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1447	75	218	2231	328	292
Arrive On Green	0.42	0.42	0.12	0.63	0.18	0.18
Sat Flow, veh/h	3530	179	1781	3647	1781	1585
Grp Volume(v), veh/h	546	565	171	507	46	233
Grp Sat Flow(s),veh/h/ln	1777	1838	1781	1777	1781	1585
Q Serve(g_s), s	12.2	12.2	4.4	2.9	1.0	6.7
Cycle Q Clear(g_c), s	12.2	12.2	4.4	2.9	1.0	6.7
Prop In Lane		0.10	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	748	774	218	2231	328	292
V/C Ratio(X)	0.73	0.73	0.79	0.23	0.14	0.80
Avail Cap(c_a), veh/h	867	897	301	2334	564	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	11.5	20.2	3.8	16.2	18.5
Incr Delay (d2), s/veh	2.7	2.6	5.9	0.1	0.1	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	4.0	1.9	0.5	0.4	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.2	14.1	26.1	3.9	16.2	20.4
LnGrp LOS	B	B	C	A	B	C
Approach Vol, veh/h	1111			678	279	
Approach Delay, s/veh	14.1			9.5	19.7	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.8	24.8		12.7		34.6
Change Period (Y+Rc), s	4.0	4.9		4.0		4.9
Max Green Setting (Gmax), s	8.0	23.1		15.0		31.1
Max Q Clear Time (g_c+I1), s	6.4	14.2		8.7		4.9
Green Ext Time (p_c), s	0.0	5.8		0.3		5.9

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1149	4	16	1231	90	5	4	12	478	4	57
Future Volume (veh/h)	60	1149	4	16	1231	90	5	4	12	478	4	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	1209	4	17	1296	95	5	4	13	506	0	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	2380	8	20	2085	152	7	5	17	589	0	262
Arrive On Green	0.05	0.66	0.66	0.01	0.62	0.62	0.02	0.02	0.02	0.17	0.00	0.17
Sat Flow, veh/h	1781	3633	12	1781	3357	246	380	304	989	3563	0	1585
Grp Volume(v), veh/h	63	591	622	17	684	707	22	0	0	506	0	60
Grp Sat Flow(s),veh/h/ln	1781	1777	1868	1781	1777	1826	1673	0	0	1781	0	1585
Q Serve(g_s), s	4.2	20.6	20.6	1.1	28.5	28.7	1.6	0.0	0.0	16.6	0.0	3.9
Cycle Q Clear(g_c), s	4.2	20.6	20.6	1.1	28.5	28.7	1.6	0.0	0.0	16.6	0.0	3.9
Prop In Lane	1.00		0.01	1.00		0.13	0.23		0.59	1.00		1.00
Lane Grp Cap(c), veh/h	81	1164	1224	20	1103	1134	29	0	0	589	0	262
V/C Ratio(X)	0.78	0.51	0.51	0.84	0.62	0.62	0.76	0.00	0.00	0.86	0.00	0.23
Avail Cap(c_a), veh/h	134	1164	1224	119	1103	1134	271	0	0	754	0	336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.59	0.59	0.59	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.7	10.7	10.7	59.2	14.0	14.1	58.7	0.0	0.0	48.7	0.0	43.5
Incr Delay (d2), s/veh	5.8	1.6	1.5	17.9	0.7	0.7	25.4	0.0	0.0	7.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.8	8.2	0.6	10.9	11.3	0.9	0.0	0.0	8.0	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	12.3	12.2	77.1	14.7	14.7	84.1	0.0	0.0	56.2	0.0	43.8
LnGrp LOS	E	B	B	E	B	B	F	A	A	E	A	D
Approach Vol, veh/h		1276			1408			22			566	
Approach Delay, s/veh		14.7			15.5			84.1			54.9	
Approach LOS		B			B			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	83.5		6.7	9.5	79.4		24.4
Change Period (Y+Rc), s	4.0	4.9		4.6	4.0	4.9		4.6
Max Green Setting (Gmax), s	8.0	49.1		19.4	9.0	48.1		25.4
Max Q Clear Time (g_c+I1), s	3.1	22.6		3.6	6.2	30.7		18.6
Green Ext Time (p_c), s	0.0	20.5		0.0	0.0	15.6		1.3

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	1755	375	346	1767	199	475	1280	219	217	1165	54
Future Volume (veh/h)	390	1755	375	346	1767	199	475	1280	219	217	1165	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	1847	209	364	1860	0	500	1347	0	228	1226	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	403	1787	550	346	1787		490	1460		288	1162	356
Arrive On Green	0.12	0.35	0.35	0.10	0.35	0.00	0.14	0.29	0.00	0.08	0.23	0.23
Sat Flow, veh/h	3456	5106	1571	3456	5106	1585	3456	5106	1585	3456	5106	1564
Grp Volume(v), veh/h	411	1847	209	364	1860	0	500	1347	0	228	1226	11
Grp Sat Flow(s),veh/h/ln	1728	1702	1571	1728	1702	1585	1728	1702	1585	1728	1702	1564
Q Serve(g_s), s	14.0	42.0	7.8	12.0	42.0	0.0	17.0	30.7	0.0	7.8	27.3	0.7
Cycle Q Clear(g_c), s	14.0	42.0	7.8	12.0	42.0	0.0	17.0	30.7	0.0	7.8	27.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	1787	550	346	1787		490	1460		288	1162	356
V/C Ratio(X)	1.02	1.03	0.38	1.05	1.04		1.02	0.92		0.79	1.06	0.03
Avail Cap(c_a), veh/h	403	1787	550	346	1787		490	1460		288	1162	356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	39.0	12.5	54.0	39.0	0.0	51.5	41.6	0.0	54.0	46.3	36.1
Incr Delay (d2), s/veh	49.8	30.5	2.0	63.1	32.8	0.0	46.2	10.2	0.0	12.9	42.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	21.6	4.3	8.1	22.0	0.0	10.2	13.4	0.0	3.8	15.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.8	69.5	14.5	117.1	71.8	0.0	97.7	51.8	0.0	66.9	88.7	36.1
LnGrp LOS	F	F	B	F	F		F	D		E	F	D
Approach Vol, veh/h		2467			2224	A		1847	A		1465	
Approach Delay, s/veh		70.4			79.2			64.2			84.9	
Approach LOS		E			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	48.0	21.0	33.0	18.0	48.0	14.0	40.0
Change Period (Y+Rc), s	6.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	12.0	42.0	17.0	27.3	14.0	42.0	10.0	34.3
Max Q Clear Time (g_c+I1), s	14.0	44.0	19.0	29.3	16.0	44.0	9.8	32.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	74.0
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1629	115	348	1419	4	52	4	425	8	2	15
Future Volume (veh/h)	44	1629	115	348	1419	4	52	4	425	8	2	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	2106	2106	2106	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	1715	118	366	1494	4	55	4	387	8	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1882	128	383	2468	7	168	12	500	13	3	14
Arrive On Green	0.03	0.50	0.50	0.43	1.00	1.00	0.10	0.10	0.10	0.01	0.01	0.00
Sat Flow, veh/h	2006	3801	259	1781	3636	10	1666	121	1585	1439	360	1585
Grp Volume(v), veh/h	46	895	938	366	730	768	59	0	387	10	0	0
Grp Sat Flow(s),veh/h/ln	2006	2001	2059	1781	1777	1869	1787	0	1585	1798	0	1585
Q Serve(g_s), s	3.4	61.3	63.3	29.9	0.0	0.0	4.6	0.0	15.1	0.8	0.0	0.0
Cycle Q Clear(g_c), s	3.4	61.3	63.3	29.9	0.0	0.0	4.6	0.0	15.1	0.8	0.0	0.0
Prop In Lane	1.00		0.13	1.00		0.01	0.93		1.00	0.80		1.00
Lane Grp Cap(c), veh/h	62	990	1019	383	1206	1268	180	0	500	16	0	14
V/C Ratio(X)	0.74	0.90	0.92	0.96	0.61	0.61	0.33	0.00	0.77	0.61	0.00	0.00
Avail Cap(c_a), veh/h	120	991	1020	392	1206	1268	180	0	500	78	0	69
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.63	0.63	0.63	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	72.1	34.6	35.1	42.1	0.0	0.0	62.7	0.0	46.5	74.1	0.0	0.0
Incr Delay (d2), s/veh	6.2	11.6	13.1	25.2	1.4	1.4	0.4	0.0	6.8	13.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	31.9	34.2	13.3	0.5	0.5	2.1	0.0	13.8	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.3	46.2	48.2	67.3	1.4	1.4	63.1	0.0	53.3	87.0	0.0	0.0
LnGrp LOS	E	D	D	E	A	A	E	A	D	F	A	A
Approach Vol, veh/h		1879			1864			446			10	
Approach Delay, s/veh		48.0			14.3			54.6			87.0	
Approach LOS		D			B			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	36.2	80.0		7.1	8.7	107.5		20.8
Change Period (Y+Rc), s	4.0	5.7		5.7	4.0	* 5.7		5.7
Max Green Setting (Gmax), s	33.0	74.3		6.5	9.0	* 1E2		15.1
Max Q Clear Time (g_c+I1), s	31.9	65.3		2.8	5.4	2.0		17.1
Green Ext Time (p_c), s	0.4	8.9		0.0	0.1	96.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1553	400	121	1685	0	81	0	32	0	5	0
Future Volume (veh/h)	0	1553	400	121	1685	0	81	0	32	0	5	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0	1870	0	1870	0	1870	0
Adj Flow Rate, veh/h	0	1635	405	127	1774	0	85	0	0	0	5	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	0	2	0
Cap, veh/h	0	1734	412	131	2518	0	95	0	0	0	9	0
Arrive On Green	0.00	0.61	0.61	0.07	0.71	0.00	0.05	0.00	0.00	0.00	0.01	0.00
Sat Flow, veh/h	0	2942	677	1781	3647	0	1781	85		0	1870	0
Grp Volume(v), veh/h	0	994	1046	127	1774	0	85	128.8		0	5	0
Grp Sat Flow(s),veh/h/ln	0	1777	1749	1781	1777	0	1781	F		0	1870	0
Q Serve(g_s), s	0.0	74.5	87.4	10.7	43.6	0.0	7.1			0.0	0.4	0.0
Cycle Q Clear(g_c), s	0.0	74.5	87.4	10.7	43.6	0.0	7.1			0.0	0.4	0.0
Prop In Lane	0.00		0.39	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1082	1064	131	2518	0	95			0	9	0
V/C Ratio(X)	0.00	0.92	0.98	0.97	0.70	0.00	0.89			0.00	0.53	0.00
Avail Cap(c_a), veh/h	0	1082	1064	131	2518	0	95			0	287	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	0.39	0.39	1.00	1.00	0.00	1.00			0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	26.1	28.6	69.3	12.7	0.0	70.6			0.0	74.4	0.0
Incr Delay (d2), s/veh	0.0	5.7	13.5	69.6	1.7	0.0	58.2			0.0	30.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	30.9	37.8	7.3	16.2	0.0	4.8			0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	31.8	42.1	139.0	14.4	0.0	128.8			0.0	105.1	0.0
LnGrp LOS	A	C	D	F	B	A	F			A	F	A
Approach Vol, veh/h		2040			1901						5	
Approach Delay, s/veh		37.0			22.7						105.1	
Approach LOS		D			C						F	

Timer - Assigned Phs	1	2	3	4		6
Phs Duration (G+Y+Rc), s	15.0	97.0	12.0	3.8		112.0
Change Period (Y+Rc), s	4.0	5.7	4.0	3.0		5.7
Max Green Setting (Gmax), s	11.0	91.3	8.0	23.0		106.3
Max Q Clear Time (g_c+I1), s	12.7	89.4	9.1	2.4		45.6
Green Ext Time (p_c), s	0.0	1.8	0.0	0.0		28.5

Intersection Summary	
HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	771	572	513	909	65	590	1258	248	204	1499	238
Future Volume (veh/h)	360	771	572	513	909	65	590	1258	248	204	1499	238
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	379	812	0	540	957	64	621	1324	176	215	1578	152
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	369	822		530	977	65	599	1490	653	230	1654	504
Arrive On Green	0.11	0.23	0.00	0.15	0.29	0.29	0.06	0.14	0.14	0.07	0.32	0.32
Sat Flow, veh/h	3456	3554	1585	3456	3376	226	3456	3554	1558	3456	5106	1555
Grp Volume(v), veh/h	379	812	0	540	504	517	621	1324	176	215	1578	152
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1824	1728	1777	1558	1728	1702	1555
Q Serve(g_s), s	16.0	34.1	0.0	23.0	42.2	42.2	26.0	54.9	15.2	9.3	45.4	11.0
Cycle Q Clear(g_c), s	16.0	34.1	0.0	23.0	42.2	42.2	26.0	54.9	15.2	9.3	45.4	11.0
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	369	822		530	514	528	599	1490	653	230	1654	504
V/C Ratio(X)	1.03	0.99		1.02	0.98	0.98	1.04	0.89	0.27	0.93	0.95	0.30
Avail Cap(c_a), veh/h	369	822		530	514	528	599	1490	653	230	1654	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.69	0.69	0.69	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.0	57.4	0.0	63.5	52.9	52.9	70.7	61.2	44.1	69.7	49.6	38.0
Incr Delay (d2), s/veh	54.3	28.3	0.0	44.0	34.5	34.0	40.4	5.9	0.7	40.7	13.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	18.3	0.0	13.2	23.4	23.9	15.5	27.5	6.5	5.4	20.9	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	121.3	85.7	0.0	107.5	87.3	86.8	111.2	67.1	44.8	110.4	62.6	38.5
LnGrp LOS	F	F		F	F	F	F	E	D	F	E	D
Approach Vol, veh/h		1191	A		1561			2121			1945	
Approach Delay, s/veh		97.0			94.1			78.2			66.0	
Approach LOS		F			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.3	40.4	30.0	53.9	20.0	48.7	15.3	68.6
Change Period (Y+Rc), s	5.3	* 5.7	4.0	5.3	4.0	5.3	5.3	* 5.7
Max Green Setting (Gmax), s	23.0	* 35	26.0	47.3	16.0	42.1	10.0	* 63
Max Q Clear Time (g_c+I1), s	25.0	36.1	28.0	47.4	18.0	44.2	11.3	56.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3

Intersection Summary	
HCM 6th Ctrl Delay	81.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1042	10	162	1300	15	18	19	41	30	237	241
Future Volume (veh/h)	89	1042	10	162	1300	15	18	19	41	30	237	241
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	1097	11	171	1368	16	19	20	0	32	249	156
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1498	15	194	1624	19	34	36	61	35	273	262
Arrive On Green	0.06	0.42	0.42	0.11	0.45	0.45	0.04	0.04	0.00	0.17	0.17	0.17
Sat Flow, veh/h	1781	3604	36	1781	3597	42	890	936	1585	212	1648	1585
Grp Volume(v), veh/h	94	541	567	171	675	709	39	0	0	281	0	156
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1863	1826	0	1585	1860	0	1585
Q Serve(g_s), s	7.8	38.4	38.4	14.2	50.5	50.5	3.1	0.0	0.0	22.3	0.0	13.7
Cycle Q Clear(g_c), s	7.8	38.4	38.4	14.2	50.5	50.5	3.1	0.0	0.0	22.3	0.0	13.7
Prop In Lane	1.00		0.02	1.00		0.02	0.49		1.00	0.11		1.00
Lane Grp Cap(c), veh/h	115	738	774	194	802	841	70	0	61	308	0	262
V/C Ratio(X)	0.82	0.73	0.73	0.88	0.84	0.84	0.56	0.00	0.00	0.91	0.00	0.59
Avail Cap(c_a), veh/h	190	738	774	273	802	841	243	0	211	360	0	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	69.3	36.8	36.8	65.9	36.4	36.4	70.9	0.0	0.0	61.5	0.0	57.9
Incr Delay (d2), s/veh	5.3	4.4	4.2	16.4	10.4	10.1	2.5	0.0	0.0	23.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	17.3	18.1	7.3	23.6	24.7	1.5	0.0	0.0	12.6	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.6	41.3	41.1	82.2	46.9	46.5	73.4	0.0	0.0	84.6	0.0	58.9
LnGrp LOS	E	D	D	F	D	D	E	A	A	F	A	E
Approach Vol, veh/h		1202			1555			39			437	
Approach Delay, s/veh		43.8			50.6			73.4			75.4	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.4	67.6		28.8	15.0	73.0		9.8				
Change Period (Y+Rc), s	4.0	5.3		4.0	5.3	* 5.3		4.0				
Max Green Setting (Gmax), s	23.0	60.7		29.0	16.0	* 68		20.0				
Max Q Clear Time (g_c+I1), s	16.2	40.4		24.3	9.8	52.5		5.1				
Green Ext Time (p_c), s	0.2	9.5		0.5	0.1	10.2		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	51.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1054	0	7	1522	14	10	0	5	19	0	27
Future Volume (veh/h)	29	1054	0	7	1522	14	10	0	5	19	0	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	1109	0	7	1602	15	11	0	5	20	0	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	2130	0	10	2103	20	192	0	14	258	0	66
Arrive On Green	0.02	0.60	0.00	0.01	0.58	0.58	0.04	0.00	0.04	0.04	0.00	0.04
Sat Flow, veh/h	1781	3647	0	1781	3607	34	733	0	333	1603	0	1585
Grp Volume(v), veh/h	31	1109	0	7	789	828	16	0	0	20	0	28
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1864	1066	0	0	1603	0	1585
Q Serve(g_s), s	0.7	6.8	0.0	0.1	12.5	12.6	0.4	0.0	0.0	0.0	0.0	0.6
Cycle Q Clear(g_c), s	0.7	6.8	0.0	0.1	12.5	12.6	0.8	0.0	0.0	0.4	0.0	0.6
Prop In Lane	1.00		0.00	1.00		0.02	0.69		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	39	2130	0	10	1036	1087	206	0	0	258	0	66
V/C Ratio(X)	0.79	0.52	0.00	0.70	0.76	0.76	0.08	0.00	0.00	0.08	0.00	0.42
Avail Cap(c_a), veh/h	378	2141	0	378	1071	1123	948	0	0	986	0	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.3	4.4	0.0	18.7	5.9	5.9	17.9	0.0	0.0	17.5	0.0	17.6
Incr Delay (d2), s/veh	12.2	0.3	0.0	27.7	3.3	3.1	0.1	0.0	0.0	0.1	0.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.8	0.0	0.1	2.4	2.5	0.1	0.0	0.0	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	4.6	0.0	46.4	9.1	9.0	18.0	0.0	0.0	17.6	0.0	20.7
LnGrp LOS	C	A	A	D	A	A	B	A	A	B	A	C
Approach Vol, veh/h		1140			1624			16			48	
Approach Delay, s/veh		5.4			9.2			18.0			19.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	27.3		5.6	4.2	27.9		5.6
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	22.7		21.0	8.0	22.7		21.0
Max Q Clear Time (g_c+I1), s	2.7	14.6		2.8	2.1	8.8		2.6
Green Ext Time (p_c), s	0.0	7.4		0.0	0.0	9.7		0.1

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	616	481	695	215	749	742
Future Volume (veh/h)	616	481	695	215	749	742
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	648	506	732	189	788	760
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1050	551	806	208	932	895
Arrive On Green	0.29	0.29	0.29	0.29	0.27	0.27
Sat Flow, veh/h	3563	1870	2889	722	3456	1585
Grp Volume(v), veh/h	648	506	465	456	788	760
Grp Sat Flow(s),veh/h/ln	1781	1870	1777	1740	1728	1585
Q Serve(g_s), s	12.8	21.3	20.6	20.6	17.6	22.0
Cycle Q Clear(g_c), s	12.8	21.3	20.6	20.6	17.6	22.0
Prop In Lane	1.00			0.41	1.00	1.00
Lane Grp Cap(c), veh/h	1050	551	512	502	932	895
V/C Ratio(X)	0.62	0.92	0.91	0.91	0.85	0.85
Avail Cap(c_a), veh/h	1092	573	567	555	932	895
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	27.8	28.0	28.0	28.2	12.5
Incr Delay (d2), s/veh	0.7	18.9	16.6	16.9	6.9	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	11.7	10.4	10.2	7.6	16.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.5	46.8	44.6	44.9	35.0	19.9
LnGrp LOS	C	D	D	D	D	B
Approach Vol, veh/h		1154	921		1548	
Approach Delay, s/veh		34.8	44.7		27.6	
Approach LOS		C	D		C	

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		27.5				28.0	26.0
Change Period (Y+Rc), s		4.0				4.0	4.0
Max Green Setting (Gmax), s		26.0				25.0	22.0
Max Q Clear Time (g_c+I1), s		22.6				23.3	24.0
Green Ext Time (p_c), s		0.9				0.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	766	171	42	665	12	53	9	9	21	14	344
Future Volume (veh/h)	61	766	171	42	665	12	53	9	9	21	14	344
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	806	180	44	700	13	56	9	9	22	15	362
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	1054	235	101	1241	23	365	59	39	359	213	437
Arrive On Green	0.07	0.37	0.37	0.06	0.35	0.35	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	2887	645	1781	3569	66	801	214	141	827	773	1585
Grp Volume(v), veh/h	64	496	490	44	348	365	74	0	0	37	0	362
Grp Sat Flow(s),veh/h/ln	1781	1777	1754	1781	1777	1858	1156	0	0	1600	0	1585
Q Serve(g_s), s	1.5	10.8	10.8	1.1	7.0	7.0	1.2	0.0	0.0	0.0	0.0	9.4
Cycle Q Clear(g_c), s	1.5	10.8	10.8	1.1	7.0	7.0	1.8	0.0	0.0	0.6	0.0	9.4
Prop In Lane	1.00		0.37	1.00		0.04	0.76		0.12	0.59		1.00
Lane Grp Cap(c), veh/h	132	649	640	101	618	646	463	0	0	572	0	437
V/C Ratio(X)	0.49	0.76	0.76	0.44	0.56	0.56	0.16	0.00	0.00	0.06	0.00	0.83
Avail Cap(c_a), veh/h	324	756	746	324	756	790	663	0	0	850	0	721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	12.3	12.3	20.1	11.6	11.6	12.1	0.0	0.0	11.8	0.0	14.9
Incr Delay (d2), s/veh	1.0	4.7	4.8	1.1	1.3	1.2	0.1	0.0	0.0	0.0	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.9	3.9	0.4	2.2	2.3	0.5	0.0	0.0	0.2	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	17.0	17.1	21.2	12.9	12.9	12.2	0.0	0.0	11.8	0.0	16.6
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	B
Approach Vol, veh/h		1050			757			74			399	
Approach Delay, s/veh		17.3			13.4			12.2			16.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	21.4		16.1	7.3	20.6		16.1
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	18.7		20.0	8.0	18.7		20.0
Max Q Clear Time (g_c+I1), s	3.1	12.8		3.8	3.5	9.0		11.4
Green Ext Time (p_c), s	0.0	3.2		0.2	0.0	3.3		0.8

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	522	380	312	339	347	555
Future Volume (veh/h)	522	380	312	339	347	555
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	474	480	328	357	365	584
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	2	2
Cap, veh/h	582	527	467	914	407	1004
Arrive On Green	0.33	0.33	0.25	0.25	0.23	0.54
Sat Flow, veh/h	1781	1610	1870	1585	1781	1870
Grp Volume(v), veh/h	474	480	328	357	365	584
Grp Sat Flow(s),veh/h/ln	1781	1610	1870	1585	1781	1870
Q Serve(g_s), s	16.7	19.5	10.9	8.4	13.6	14.4
Cycle Q Clear(g_c), s	16.7	19.5	10.9	8.4	13.6	14.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	582	527	467	914	407	1004
V/C Ratio(X)	0.81	0.91	0.70	0.39	0.90	0.58
Avail Cap(c_a), veh/h	626	566	731	1138	417	1279
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	22.0	23.3	7.9	25.6	10.6
Incr Delay (d2), s/veh	6.9	17.6	3.0	0.4	20.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	9.0	4.8	5.2	7.5	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.0	39.6	26.4	8.3	46.0	11.5
LnGrp LOS	C	D	C	A	D	B
Approach Vol, veh/h	954		685			949
Approach Delay, s/veh	33.8		17.0			24.8
Approach LOS	C		B			C

Timer - Assigned Phs		2			5	6	8
Phs Duration (G+Y+Rc), s		42.0			19.6	22.3	26.3
Change Period (Y+Rc), s		5.3			4.0	5.3	4.0
Max Green Setting (Gmax), s		46.7			16.0	26.7	24.0
Max Q Clear Time (g_c+I1), s		16.4			15.6	12.9	21.5
Green Ext Time (p_c), s		4.7			0.0	4.2	0.8

Intersection Summary	
HCM 6th Ctrl Delay	26.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	8	35	75	10	64	92	677	150	96	752	63
Future Volume (veh/h)	23	8	35	75	10	64	92	677	150	96	752	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	8	37	79	11	67	97	713	158	101	792	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	75	63	107	143	121	123	1486	461	128	1501	466
Arrive On Green	0.02	0.04	0.04	0.06	0.08	0.08	0.07	0.29	0.29	0.07	0.29	0.29
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	24	8	37	79	11	67	97	713	158	101	792	66
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.5	0.2	0.9	1.6	0.2	1.5	2.0	4.3	2.9	2.1	4.8	1.1
Cycle Q Clear(g_c), s	0.5	0.2	0.9	1.6	0.2	1.5	2.0	4.3	2.9	2.1	4.8	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	42	75	63	107	143	121	123	1486	461	128	1501	466
V/C Ratio(X)	0.57	0.11	0.58	0.74	0.08	0.55	0.79	0.48	0.34	0.79	0.53	0.14
Avail Cap(c_a), veh/h	383	1608	1362	718	1959	1661	335	2606	809	335	2606	809
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	17.2	17.6	17.2	16.0	16.6	17.1	10.9	10.4	17.0	11.0	9.7
Incr Delay (d2), s/veh	11.6	0.6	8.2	9.6	0.2	3.9	10.8	0.2	0.4	10.3	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.4	0.8	0.1	0.6	1.0	1.1	0.8	1.0	1.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	17.9	25.8	26.8	16.2	20.5	27.9	11.1	10.8	27.3	11.3	9.8
LnGrp LOS	C	B	C	C	B	C	C	B	B	C	B	A
Approach Vol, veh/h		69			157			968			959	
Approach Delay, s/veh		26.2			23.3			12.7			12.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	15.8	7.2	6.5	7.6	15.9	5.9	7.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	19.0	15.0	32.0	7.0	19.0	8.0	39.0
Max Q Clear Time (g_c+I1), s	4.1	6.3	3.6	2.9	4.0	6.8	2.5	3.5
Green Ext Time (p_c), s	0.1	4.1	0.1	0.1	0.0	4.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	3	43	0	5	61	115	1090	0	48	861	51
Future Volume (veh/h)	20	3	43	0	5	61	115	1090	0	48	861	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	3	45	0	5	64	121	1147	0	51	906	54
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	367	311	4	99	84	158	2011	624	77	1779	552
Arrive On Green	0.02	0.20	0.20	0.00	0.05	0.05	0.09	0.39	0.00	0.04	0.35	0.35
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	21	3	45	0	5	64	121	1147	0	51	906	54
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.5	0.1	1.0	0.0	0.1	1.6	2.7	7.2	0.0	1.2	5.7	0.9
Cycle Q Clear(g_c), s	0.5	0.1	1.0	0.0	0.1	1.6	2.7	7.2	0.0	1.2	5.7	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	37	367	311	4	99	84	158	2011	624	77	1779	552
V/C Ratio(X)	0.57	0.01	0.14	0.00	0.05	0.76	0.77	0.57	0.00	0.67	0.51	0.10
Avail Cap(c_a), veh/h	479	1464	1241	479	1464	1241	479	3247	1008	479	3247	1008
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	13.2	13.6	0.0	18.4	19.1	18.2	9.7	0.0	19.3	10.6	9.0
Incr Delay (d2), s/veh	13.0	0.0	0.2	0.0	0.2	13.0	7.6	0.3	0.0	9.5	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.3	0.0	0.0	0.8	1.2	1.7	0.0	0.6	1.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	13.2	13.8	0.0	18.6	32.1	25.8	9.9	0.0	28.8	10.8	9.1
LnGrp LOS	C	B	B	A	B	C	C	A	A	C	B	A
Approach Vol, veh/h		69			69			1268			1011	
Approach Delay, s/veh		19.6			31.1			11.5			11.6	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	21.1	0.0	13.0	8.6	19.2	5.8	7.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	26.0	11.0	32.0	11.0	26.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.2	9.2	0.0	3.0	4.7	7.7	2.5	3.6
Green Ext Time (p_c), s	0.0	6.9	0.0	0.1	0.1	5.7	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	78	46	89	1033	1232	191
Future Volume (veh/h)	78	46	89	1033	1232	191
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	48	94	1087	1297	201
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	153	136	126	3383	2379	737
Arrive On Green	0.09	0.09	0.07	0.66	0.47	0.47
Sat Flow, veh/h	1781	1585	1781	5274	5274	1582
Grp Volume(v), veh/h	82	48	94	1087	1297	201
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1582
Q Serve(g_s), s	1.4	0.9	1.6	2.9	5.8	2.5
Cycle Q Clear(g_c), s	1.4	0.9	1.6	2.9	5.8	2.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	153	136	126	3383	2379	737
V/C Ratio(X)	0.54	0.35	0.74	0.32	0.55	0.27
Avail Cap(c_a), veh/h	1120	997	448	5138	3211	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	13.7	14.5	2.3	6.1	5.2
Incr Delay (d2), s/veh	2.9	1.5	8.3	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.8	0.0	0.7	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.8	15.2	22.8	2.4	6.3	5.4
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	130			1181	1498	
Approach Delay, s/veh	16.2			4.0	6.2	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		25.1		6.7	6.3	18.8
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	8.0	20.0
Max Q Clear Time (g_c+I1), s		4.9		3.4	3.6	7.8
Green Ext Time (p_c), s		7.9		0.3	0.1	7.0

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	18	21	42	1104	1223	56
Future Volume (veh/h)	18	21	42	1104	1223	56
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	22	44	1162	1287	59
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	69	61	73	3515	2609	808
Arrive On Green	0.04	0.04	0.04	0.69	0.51	0.51
Sat Flow, veh/h	1781	1585	1781	5274	5274	1582
Grp Volume(v), veh/h	19	22	44	1162	1287	59
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1702	1702	1582
Q Serve(g_s), s	0.3	0.4	0.7	2.7	4.8	0.6
Cycle Q Clear(g_c), s	0.3	0.4	0.7	2.7	4.8	0.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	69	61	73	3515	2609	808
V/C Ratio(X)	0.28	0.36	0.60	0.33	0.49	0.07
Avail Cap(c_a), veh/h	1215	1081	486	5572	4179	1295
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	13.7	13.8	1.8	4.7	3.6
Incr Delay (d2), s/veh	2.1	3.5	7.7	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.3	0.0	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.8	17.2	21.5	1.9	4.8	3.7
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	41			1206	1346	
Approach Delay, s/veh	16.6			2.6	4.8	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		24.2		5.1	5.2	19.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		32.0		20.0	8.0	24.0
Max Q Clear Time (g_c+I1), s		4.7		2.4	2.7	6.8
Green Ext Time (p_c), s		8.6		0.1	0.0	8.1

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	0	42	13	0	4	98	1055	31	13	1381	84
Future Volume (veh/h)	26	0	42	13	0	4	98	1055	31	13	1381	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	0	44	14	0	4	103	1111	33	14	1454	88
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	0	68	38	0	11	132	2705	838	25	2399	743
Arrive On Green	0.07	0.00	0.07	0.03	0.00	0.03	0.07	0.53	0.53	0.01	0.47	0.47
Sat Flow, veh/h	626	0	1021	1346	0	385	1781	5106	1582	1781	5106	1582
Grp Volume(v), veh/h	71	0	0	18	0	0	103	1111	33	14	1454	88
Grp Sat Flow(s),veh/h/ln	1647	0	0	1731	0	0	1781	1702	1582	1781	1702	1582
Q Serve(g_s), s	1.9	0.0	0.0	0.5	0.0	0.0	2.5	5.8	0.4	0.3	9.3	1.4
Cycle Q Clear(g_c), s	1.9	0.0	0.0	0.5	0.0	0.0	2.5	5.8	0.4	0.3	9.3	1.4
Prop In Lane	0.38		0.62	0.78		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	0	0	49	0	0	132	2705	838	25	2399	743
V/C Ratio(X)	0.65	0.00	0.00	0.37	0.00	0.00	0.78	0.41	0.04	0.55	0.61	0.12
Avail Cap(c_a), veh/h	1414	0	0	1486	0	0	322	3345	1036	322	3345	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	0.0	21.1	0.0	0.0	20.1	6.3	5.0	21.7	8.7	6.6
Incr Delay (d2), s/veh	6.4	0.0	0.0	4.5	0.0	0.0	9.5	0.1	0.0	17.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.2	0.0	0.0	1.2	1.1	0.1	0.2	2.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	0.0	0.0	25.6	0.0	0.0	29.6	6.4	5.0	38.9	8.9	6.7
LnGrp LOS	C	A	A	C	A	A	C	A	A	D	A	A
Approach Vol, veh/h		71			18			1247			1556	
Approach Delay, s/veh		26.6			25.6			8.2			9.1	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	27.5		6.9	7.3	24.8		5.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	29.0		38.0	8.0	29.0		38.0
Max Q Clear Time (g_c+I1), s	2.3	7.8		3.9	4.5	11.3		2.5
Green Ext Time (p_c), s	0.0	7.6		0.4	0.1	9.5		0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	825	25	39	908	41	15
Future Volume (veh/h)	825	25	39	908	41	15
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	868	26	41	956	43	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1774	791	80	2257	187	167
Arrive On Green	0.50	0.50	0.04	0.64	0.11	0.11
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	868	26	41	956	43	16
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	7.1	0.4	1.0	5.9	1.0	0.4
Cycle Q Clear(g_c), s	7.1	0.4	1.0	5.9	1.0	0.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1774	791	80	2257	187	167
V/C Ratio(X)	0.49	0.03	0.51	0.42	0.23	0.10
Avail Cap(c_a), veh/h	1992	888	325	2858	812	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.3	5.6	20.5	4.0	18.0	17.8
Incr Delay (d2), s/veh	0.4	0.0	1.9	0.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.1	0.4	0.8	0.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.6	5.6	22.4	4.2	18.2	17.8
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	894			997	59	
Approach Delay, s/veh	7.6			5.0	18.1	
Approach LOS	A			A	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.0	27.6				33.6	10.3
Change Period (Y+Rc), s	4.0	5.7				* 5.7	5.7
Max Green Setting (Gmax), s	8.0	24.6				* 35	20.0
Max Q Clear Time (g_c+I1), s	3.0	9.1				7.9	3.0
Green Ext Time (p_c), s	0.0	11.8				20.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	22	28	21	12	34	56	722	53	67	872	137
Future Volume (veh/h)	46	22	28	21	12	34	56	722	53	67	872	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	23	29	22	13	36	59	760	56	71	918	144
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	118	100	39	80	68	88	1572	488	100	1608	499
Arrive On Green	0.04	0.06	0.06	0.02	0.04	0.04	0.05	0.31	0.31	0.06	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	48	23	29	22	13	36	59	760	56	71	918	144
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	1.0	0.4	0.6	0.4	0.2	0.8	1.2	4.4	0.9	1.4	5.5	2.5
Cycle Q Clear(g_c), s	1.0	0.4	0.6	0.4	0.2	0.8	1.2	4.4	0.9	1.4	5.5	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	118	100	39	80	68	88	1572	488	100	1608	499
V/C Ratio(X)	0.64	0.19	0.29	0.56	0.16	0.53	0.67	0.48	0.11	0.71	0.57	0.29
Avail Cap(c_a), veh/h	441	1648	1396	343	1493	1265	343	2530	785	343	2249	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	16.1	16.2	17.6	16.8	17.0	17.0	10.2	9.0	16.8	10.4	9.4
Incr Delay (d2), s/veh	8.6	0.8	1.6	12.1	0.9	6.2	8.5	0.2	0.1	8.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.2	0.2	0.3	0.1	0.4	0.6	1.0	0.3	0.7	1.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	16.9	17.8	29.7	17.7	23.3	25.5	10.5	9.1	25.6	10.7	9.7
LnGrp LOS	C	B	B	C	B	C	C	B	A	C	B	A
Approach Vol, veh/h		100			71			875			1133	
Approach Delay, s/veh		21.4			24.2			11.4			11.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	16.2	5.8	7.3	6.8	16.4	6.5	6.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	18.0	7.0	32.0	7.0	16.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	3.4	6.4	2.4	2.6	3.2	7.5	3.0	2.8
Green Ext Time (p_c), s	0.0	3.8	0.0	0.2	0.0	4.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	55	43	134	91	0	92	806	233	1	831	87
Future Volume (veh/h)	25	55	43	134	91	0	92	806	233	1	831	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	58	45	141	96	0	97	848	245	1	875	92
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	126	107	188	277	235	124	2085	647	4	1736	539
Arrive On Green	0.03	0.07	0.07	0.11	0.15	0.00	0.07	0.41	0.41	0.00	0.34	0.34
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	26	58	45	141	96	0	97	848	245	1	875	92
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.6	1.2	1.1	3.1	1.9	0.0	2.2	4.8	4.4	0.0	5.6	1.7
Cycle Q Clear(g_c), s	0.6	1.2	1.1	3.1	1.9	0.0	2.2	4.8	4.4	0.0	5.6	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	45	126	107	188	277	235	124	2085	647	4	1736	539
V/C Ratio(X)	0.58	0.46	0.42	0.75	0.35	0.00	0.78	0.41	0.38	0.23	0.50	0.17
Avail Cap(c_a), veh/h	481	1515	1284	787	1836	1556	350	2131	661	350	2131	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	18.3	18.2	17.7	15.6	0.0	18.7	8.6	8.4	20.3	10.7	9.4
Incr Delay (d2), s/veh	11.5	2.6	2.6	5.9	0.7	0.0	10.3	0.4	1.0	24.6	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.5	0.4	1.4	0.7	0.0	1.1	1.1	1.2	0.0	1.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	20.9	20.8	23.6	16.3	0.0	29.0	8.9	9.4	44.9	11.3	9.8
LnGrp LOS	C	C	C	C	B	A	C	A	A	D	B	A
Approach Vol, veh/h		129			237			1190			968	
Approach Delay, s/veh		22.9			20.6			10.7			11.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.0	21.6	8.3	6.8	6.8	18.9	5.0	10.0
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	17.0	18.0	33.0	8.0	17.0	11.0	40.0
Max Q Clear Time (g_c+I1), s	2.0	6.8	5.1	3.2	4.2	7.6	2.6	3.9
Green Ext Time (p_c), s	0.0	7.1	0.3	0.4	0.1	6.3	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	34	0	1125	75	0	1009
Future Volume (veh/h)	34	0	1125	75	0	1009
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	0	1184	79	0	1062
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	63	56	2766	859	8	2766
Arrive On Green	0.04	0.00	0.54	0.54	0.00	0.54
Sat Flow, veh/h	1781	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	36	0	1184	79	0	1062
Grp Sat Flow(s),veh/h/ln	1781	1585	1702	1585	1781	1702
Q Serve(g_s), s	0.5	0.0	3.3	0.6	0.0	2.8
Cycle Q Clear(g_c), s	0.5	0.0	3.3	0.6	0.0	2.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	63	56	2766	859	8	2766
V/C Ratio(X)	0.57	0.00	0.43	0.09	0.00	0.38
Avail Cap(c_a), veh/h	2183	1943	4316	1340	828	7769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.2	0.0	3.2	2.6	0.0	3.1
Incr Delay (d2), s/veh	7.7	0.0	0.1	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.0	0.0	3.3	2.7	0.0	3.2
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	36		1263			1062
Approach Delay, s/veh	19.0		3.3			3.2
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	0.0	17.8				17.8	5.8
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	0.0	5.3				4.8	2.5
Green Ext Time (p_c), s	0.0	6.9				8.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	29	18	52	14	6	69	1197	198	9	1006	117
Future Volume (veh/h)	214	29	18	52	14	6	69	1197	198	9	1006	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	225	31	19	55	15	6	73	1260	208	9	1059	123
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	255	216	79	39	33	96	1790	556	17	1564	485
Arrive On Green	0.16	0.14	0.14	0.04	0.02	0.02	0.05	0.35	0.35	0.01	0.31	0.31
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	225	31	19	55	15	6	73	1260	208	9	1059	123
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	5.3	0.6	0.5	1.3	0.3	0.2	1.8	9.3	4.3	0.2	7.9	2.5
Cycle Q Clear(g_c), s	5.3	0.6	0.5	1.3	0.3	0.2	1.8	9.3	4.3	0.2	7.9	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	255	216	79	39	33	96	1790	556	17	1564	485
V/C Ratio(X)	0.79	0.12	0.09	0.69	0.39	0.18	0.76	0.70	0.37	0.53	0.68	0.25
Avail Cap(c_a), veh/h	450	1373	1164	654	1588	1346	450	1875	582	450	1875	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	16.5	16.4	20.5	21.1	21.0	20.3	12.2	10.6	21.5	13.2	11.4
Incr Delay (d2), s/veh	4.8	0.2	0.2	10.2	6.3	2.7	11.6	1.2	0.4	23.7	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.3	0.2	0.7	0.2	0.1	0.9	2.6	1.3	0.2	2.3	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	16.7	16.6	30.8	27.4	23.6	32.0	13.4	11.0	45.2	14.0	11.6
LnGrp LOS	C	B	B	C	C	C	C	B	B	D	B	B
Approach Vol, veh/h		275			76			1541			1191	
Approach Delay, s/veh		21.4			29.5			13.9			14.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	20.3	6.9	10.9	7.3	18.3	12.0	5.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	16.0	32.0	11.0	16.0	11.0	37.0
Max Q Clear Time (g_c+I1), s	2.2	11.3	3.3	2.6	3.8	9.9	7.3	2.3
Green Ext Time (p_c), s	0.0	3.3	0.1	0.1	0.1	3.4	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	33	5	9	4	33	5	500	38	100	1348	72
Future Volume (veh/h)	28	33	5	9	4	33	5	500	38	100	1348	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	35	5	9	4	35	5	526	40	105	1419	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	196	165	21	156	131	22	1726	768	137	1956	871
Arrive On Green	0.03	0.10	0.10	0.01	0.08	0.08	0.01	0.49	0.49	0.08	0.55	0.55
Sat Flow, veh/h	1781	1870	1576	1781	1870	1576	1781	3554	1582	1781	3554	1582
Grp Volume(v), veh/h	29	35	5	9	4	35	5	526	40	105	1419	76
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1870	1576	1781	1777	1582	1781	1777	1582
Q Serve(g_s), s	0.8	0.9	0.1	0.3	0.1	1.0	0.1	4.5	0.7	2.9	14.9	1.1
Cycle Q Clear(g_c), s	0.8	0.9	0.1	0.3	0.1	1.0	0.1	4.5	0.7	2.9	14.9	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	196	165	21	156	131	22	1726	768	137	1956	871
V/C Ratio(X)	0.49	0.18	0.03	0.43	0.03	0.27	0.23	0.30	0.05	0.77	0.73	0.09
Avail Cap(c_a), veh/h	286	976	822	286	976	822	322	2853	1270	286	2710	1207
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	20.4	20.0	24.5	21.0	21.4	24.4	7.7	6.8	22.6	8.4	5.3
Incr Delay (d2), s/veh	6.2	0.4	0.1	13.3	0.1	1.1	5.4	0.1	0.0	8.6	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.3	0.0	0.2	0.0	0.4	0.1	1.1	0.2	1.4	3.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	20.8	20.1	37.8	21.0	22.5	29.8	7.8	6.8	31.2	9.0	5.3
LnGrp LOS	C	C	C	D	C	C	C	A	A	C	A	A
Approach Vol, veh/h		69			48			571			1600	
Approach Delay, s/veh		24.5			25.2			8.0			10.3	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	28.2	4.6	9.2	4.6	31.4	5.7	8.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	40.0	8.0	26.0	9.0	38.0	8.0	26.0
Max Q Clear Time (g_c+I1), s	4.9	6.5	2.3	2.9	2.1	16.9	2.8	3.0
Green Ext Time (p_c), s	0.1	3.6	0.0	0.1	0.0	10.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	774	5	5	1569	198	5	5	5	81	5	32
Future Volume (veh/h)	81	774	5	5	1569	198	5	5	5	81	5	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	85	815	5	5	1652	208	5	5	5	85	5	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	2117	944	414	1753	782	181	130	110	149	367	311
Arrive On Green	0.07	0.66	0.66	0.55	0.55	0.55	0.08	0.08	0.08	0.09	0.22	0.22
Sat Flow, veh/h	1603	3198	1427	600	3198	1427	1232	1683	1427	1603	1683	1427
Grp Volume(v), veh/h	85	815	5	5	1652	208	5	5	5	85	5	34
Grp Sat Flow(s),veh/h/ln	1603	1599	1427	600	1599	1427	1232	1683	1427	1603	1683	1427
Q Serve(g_s), s	4.4	9.6	0.1	0.3	40.2	6.4	0.3	0.2	0.3	4.2	0.2	1.6
Cycle Q Clear(g_c), s	4.4	9.6	0.1	0.5	40.2	6.4	0.3	0.2	0.3	4.2	0.2	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	2117	944	414	1753	782	181	130	110	149	367	311
V/C Ratio(X)	0.81	0.38	0.01	0.01	0.94	0.27	0.03	0.04	0.05	0.57	0.01	0.11
Avail Cap(c_a), veh/h	154	2150	959	417	1766	788	249	222	188	173	485	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	6.4	4.8	8.6	17.6	10.0	35.6	35.6	35.6	36.2	25.5	26.1
Incr Delay (d2), s/veh	11.0	0.2	0.0	0.0	10.9	0.3	0.0	0.0	0.1	1.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	2.4	0.0	0.0	14.5	1.9	0.1	0.1	0.1	1.7	0.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.4	6.6	4.8	8.7	28.5	10.3	35.6	35.6	35.7	37.5	25.5	26.1
LnGrp LOS	D	A	A	A	C	B	D	D	D	D	C	C
Approach Vol, veh/h		905			1865			15			124	
Approach Delay, s/veh		10.6			26.4			35.6			33.9	
Approach LOS		B			C			D			C	

Timer - Assigned Phs		2		4	5	6	7	8
Phs Duration (G+Y+Rc), s		61.1		22.2	9.5	51.7	11.7	10.4
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0	4.0	4.0
Max Green Setting (Gmax), s		56.0		24.0	8.0	46.0	9.0	11.0
Max Q Clear Time (g_c+I1), s		11.6		3.6	6.4	42.2	6.2	2.3
Green Ext Time (p_c), s		8.7		0.1	0.0	3.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	2	88	16	2	4	348	816	39	13	1449	91
Future Volume (veh/h)	41	2	88	16	2	4	348	816	39	13	1449	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	2	93	17	2	4	366	859	41	14	1525	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	6	123	30	3	29	398	2722	1214	374	1765	787
Arrive On Green	0.08	0.08	0.08	0.02	0.02	0.02	0.22	0.77	0.77	0.50	0.50	0.50
Sat Flow, veh/h	1706	79	1585	1602	188	1585	1781	3554	1585	619	3554	1585
Grp Volume(v), veh/h	45	0	93	19	0	4	366	859	41	14	1525	96
Grp Sat Flow(s),veh/h/ln	1785	0	1585	1790	0	1585	1781	1777	1585	619	1777	1585
Q Serve(g_s), s	2.6	0.0	6.3	1.1	0.0	0.3	21.8	8.1	0.7	1.3	41.1	3.5
Cycle Q Clear(g_c), s	2.6	0.0	6.3	1.1	0.0	0.3	21.8	8.1	0.7	1.3	41.1	3.5
Prop In Lane	0.96		1.00	0.89		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	0	123	33	0	29	398	2722	1214	374	1765	787
V/C Ratio(X)	0.32	0.00	0.76	0.58	0.00	0.14	0.92	0.32	0.03	0.04	0.86	0.12
Avail Cap(c_a), veh/h	312	0	277	263	0	233	459	3104	1384	419	2026	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	0.0	49.2	53.0	0.0	52.5	41.3	3.9	3.1	14.1	24.1	14.7
Incr Delay (d2), s/veh	1.3	0.0	9.1	14.9	0.0	2.1	22.0	0.1	0.0	0.0	3.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	2.8	0.7	0.0	0.1	11.6	2.0	0.2	0.2	16.5	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	0.0	58.2	67.8	0.0	54.6	63.3	4.0	3.1	14.1	27.9	14.7
LnGrp LOS	D	A	E	E	A	D	E	A	A	B	C	B
Approach Vol, veh/h		138			23			1266			1635	
Approach Delay, s/veh		55.2			65.5			21.1			27.0	
Approach LOS		E			E			C			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		88.3		13.4	29.3	59.0		7.0				
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s		95.0		19.0	28.0	62.0		16.0				
Max Q Clear Time (g_c+I1), s		10.1		8.3	23.8	43.1		3.1				
Green Ext Time (p_c), s		6.7		0.3	0.5	10.9		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			26.1									
HCM 6th LOS			C									

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	87	121	164	1095	1331	153
Future Volume (veh/h)	87	121	164	1095	1331	153
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	127	173	1153	1401	161
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	271	241	219	2393	1707	762
Arrive On Green	0.15	0.15	0.12	0.67	0.48	0.48
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	92	127	173	1153	1401	161
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	2.6	4.2	5.4	9.0	19.4	3.4
Cycle Q Clear(g_c), s	2.6	4.2	5.4	9.0	19.4	3.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	271	241	219	2393	1707	762
V/C Ratio(X)	0.34	0.53	0.79	0.48	0.82	0.21
Avail Cap(c_a), veh/h	622	553	373	2790	1798	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.7	22.4	24.4	4.5	12.8	8.6
Incr Delay (d2), s/veh	0.3	0.7	2.4	0.3	3.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.1	1.5	6.2	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.0	23.1	26.8	4.8	16.2	8.9
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	219			1326	1562	
Approach Delay, s/veh	22.6			7.7	15.5	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		44.6		12.7	11.1	33.5
Change Period (Y+Rc), s		6.0		4.0	4.0	6.0
Max Green Setting (Gmax), s		45.0		20.0	12.0	29.0
Max Q Clear Time (g_c+I1), s		11.0		6.2	7.4	21.4
Green Ext Time (p_c), s		13.4		0.4	0.1	6.2

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	33	86	73	64	70	116	769	41	25	1199	202
Future Volume (veh/h)	126	33	86	73	64	70	116	769	41	25	1199	202
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	35	91	77	67	74	122	809	43	26	1262	213
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	218	185	206	217	184	172	1655	738	79	1471	656
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.10	0.47	0.47	0.04	0.41	0.41
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	133	35	91	77	67	74	122	809	43	26	1262	213
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	5.5	1.3	4.1	3.1	2.5	3.3	5.1	12.1	1.1	1.1	24.8	7.0
Cycle Q Clear(g_c), s	5.5	1.3	4.1	3.1	2.5	3.3	5.1	12.1	1.1	1.1	24.8	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	218	185	206	217	184	172	1655	738	79	1471	656
V/C Ratio(X)	0.64	0.16	0.49	0.37	0.31	0.40	0.71	0.49	0.06	0.33	0.86	0.32
Avail Cap(c_a), veh/h	463	486	412	463	486	412	278	1655	738	278	1534	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	30.6	31.8	31.4	31.2	31.5	33.7	14.2	11.3	35.6	20.5	15.3
Incr Delay (d2), s/veh	3.4	0.4	2.1	1.2	0.8	1.5	2.0	0.4	0.1	0.9	5.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.6	1.7	1.3	1.1	1.3	2.1	4.0	0.3	0.5	9.4	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	30.9	34.0	32.6	32.0	33.0	35.8	14.6	11.3	36.5	25.9	15.8
LnGrp LOS	D	C	C	C	C	C	D	B	B	D	C	B
Approach Vol, veh/h		259			218			974			1501	
Approach Delay, s/veh		34.5			32.6			17.1			24.7	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	41.8		13.8	11.4	37.8		13.9
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.9
Max Green Setting (Gmax), s	12.0	33.2		20.0	12.0	33.2		20.0
Max Q Clear Time (g_c+I1), s	3.1	14.1		5.3	7.1	26.8		7.5
Green Ext Time (p_c), s	0.0	6.9		0.7	0.1	5.0		0.8

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	31	26	1380	61	37	1601
Future Volume (veh/h)	31	26	1380	61	37	1601
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	27	1453	64	39	1685
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	47	39	2398	744	65	3336
Arrive On Green	0.05	0.05	0.47	0.47	0.04	0.65
Sat Flow, veh/h	914	748	5274	1585	1781	5274
Grp Volume(v), veh/h	61	0	1453	64	39	1685
Grp Sat Flow(s),veh/h/ln	1690	0	1702	1585	1781	1702
Q Serve(g_s), s	1.2	0.0	7.2	0.8	0.7	5.8
Cycle Q Clear(g_c), s	1.2	0.0	7.2	0.8	0.7	5.8
Prop In Lane	0.54	0.44		1.00	1.00	
Lane Grp Cap(c), veh/h	87	0	2398	744	65	3336
V/C Ratio(X)	0.70	0.00	0.61	0.09	0.60	0.51
Avail Cap(c_a), veh/h	1446	0	3013	935	578	5424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	6.7	5.0	16.1	3.0
Incr Delay (d2), s/veh	9.7	0.0	0.2	0.0	8.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.0	0.1	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.5	0.0	6.9	5.0	24.8	3.2
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	61		1517			1724
Approach Delay, s/veh	25.5		6.8			3.6
Approach LOS	C		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.2	20.9				27.1	6.7
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	20.0				36.0	29.0
Max Q Clear Time (g_c+I1), s	2.7	9.2				7.8	3.2
Green Ext Time (p_c), s	0.0	6.8				14.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	4	234	18	2	14	29	1288	46	34	1498	100
Future Volume (veh/h)	139	4	234	18	2	14	29	1288	46	34	1498	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	4	246	19	2	15	31	1356	48	36	1577	105
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	6	342	33	25	189	49	2241	694	55	2258	699
Arrive On Green	0.10	0.22	0.22	0.02	0.13	0.13	0.03	0.44	0.44	0.03	0.44	0.44
Sat Flow, veh/h	1781	25	1559	1781	189	1418	1781	5106	1581	1781	5106	1581
Grp Volume(v), veh/h	146	0	250	19	0	17	31	1356	48	36	1577	105
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1607	1781	1702	1581	1781	1702	1581
Q Serve(g_s), s	4.4	0.0	8.0	0.6	0.0	0.5	0.9	11.1	1.0	1.1	13.6	2.2
Cycle Q Clear(g_c), s	4.4	0.0	8.0	0.6	0.0	0.5	0.9	11.1	1.0	1.1	13.6	2.2
Prop In Lane	1.00		0.98	1.00		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	0	348	33	0	214	49	2241	694	55	2258	699
V/C Ratio(X)	0.78	0.00	0.72	0.58	0.00	0.08	0.63	0.61	0.07	0.66	0.70	0.15
Avail Cap(c_a), veh/h	261	0	898	261	0	911	261	2241	694	261	2258	699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	0.0	19.8	26.6	0.0	20.8	26.3	11.7	8.9	26.2	12.3	9.1
Incr Delay (d2), s/veh	9.8	0.0	2.8	15.3	0.0	0.2	12.8	1.2	0.2	12.5	1.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	2.8	0.4	0.0	0.2	0.5	3.3	0.3	0.6	4.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	0.0	22.6	41.9	0.0	20.9	39.1	12.9	9.1	38.7	14.1	9.6
LnGrp LOS	C	A	C	D	A	C	D	B	A	D	B	A
Approach Vol, veh/h		396			36			1435			1718	
Approach Delay, s/veh		26.7			32.0			13.4			14.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	28.0	5.0	16.0	5.5	28.2	9.7	11.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	24.0	8.0	31.0	8.0	24.0	8.0	31.0
Max Q Clear Time (g_c+I1), s	3.1	13.1	2.6	10.0	2.9	15.6	6.4	2.5
Green Ext Time (p_c), s	0.0	6.4	0.0	1.4	0.0	5.9	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	5	64	53	5	17	146	245	123	51	625	158
Future Volume (veh/h)	33	5	64	53	5	17	146	245	123	51	625	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	5	67	56	5	18	154	258	129	54	658	166
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	15	110	94	8	91	201	1247	556	79	1004	448
Arrive On Green	0.07	0.07	0.07	0.06	0.06	0.06	0.11	0.35	0.35	0.04	0.28	0.28
Sat Flow, veh/h	1568	224	1585	1642	147	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	40	0	67	61	0	18	154	258	129	54	658	166
Grp Sat Flow(s),veh/h/ln	1792	0	1585	1788	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.9	0.0	1.7	1.4	0.0	0.5	3.5	2.1	2.4	1.2	6.8	3.5
Cycle Q Clear(g_c), s	0.9	0.0	1.7	1.4	0.0	0.5	3.5	2.1	2.4	1.2	6.8	3.5
Prop In Lane	0.87		1.00	0.92		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	124	0	110	103	0	91	201	1247	556	79	1004	448
V/C Ratio(X)	0.32	0.00	0.61	0.59	0.00	0.20	0.76	0.21	0.23	0.68	0.66	0.37
Avail Cap(c_a), veh/h	1113	0	985	1111	0	985	468	1444	644	468	1444	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	0.0	18.9	19.2	0.0	18.8	18.0	9.5	9.6	19.7	13.2	12.0
Incr Delay (d2), s/veh	1.5	0.0	5.4	5.4	0.0	1.0	5.9	0.1	0.2	9.8	0.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	0.6	0.0	0.2	1.5	0.6	0.6	0.6	2.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.0	0.0	24.3	24.6	0.0	19.9	24.0	9.6	9.8	29.5	14.0	12.5
LnGrp LOS	C	A	C	C	A	B	C	A	A	C	B	B
Approach Vol, veh/h		107			79			541			878	
Approach Delay, s/veh		22.7			23.5			13.7			14.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	19.7		7.9	9.7	16.8		7.4
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	11.0	17.0		26.0	11.0	17.0		26.0
Max Q Clear Time (g_c+I1), s	3.2	4.4		3.7	5.5	8.8		3.4
Green Ext Time (p_c), s	0.0	1.5		0.3	0.2	3.0		0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	10	72	12	73	73	118	402	36	34	636	72
Future Volume (veh/h)	40	10	72	12	73	73	118	402	36	34	636	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	11	76	13	77	77	124	423	38	36	669	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	30	128	25	146	146	161	1254	559	57	1048	467
Arrive On Green	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.35	0.35	0.03	0.29	0.29
Sat Flow, veh/h	1426	373	1585	268	1589	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	53	0	76	90	0	77	124	423	38	36	669	76
Grp Sat Flow(s),veh/h/ln	1799	0	1585	1857	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.3	0.0	2.1	2.1	0.0	2.1	3.1	4.0	0.7	0.9	7.4	1.6
Cycle Q Clear(g_c), s	1.3	0.0	2.1	2.1	0.0	2.1	3.1	4.0	0.7	0.9	7.4	1.6
Prop In Lane	0.79		1.00	0.14		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	128	171	0	146	161	1254	559	57	1048	467
V/C Ratio(X)	0.37	0.00	0.60	0.53	0.00	0.53	0.77	0.34	0.07	0.63	0.64	0.16
Avail Cap(c_a), veh/h	1035	0	912	1068	0	912	355	1258	561	670	1887	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	20.1	19.6	0.0	19.6	20.1	10.7	9.7	21.6	13.8	11.8
Incr Delay (d2), s/veh	1.5	0.0	4.4	2.5	0.0	3.0	7.6	0.2	0.1	10.8	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.8	0.9	0.0	0.8	1.4	1.2	0.2	0.5	2.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	0.0	24.5	22.1	0.0	22.5	27.7	10.9	9.7	32.4	14.5	12.0
LnGrp LOS	C	A	C	C	A	C	C	B	A	C	B	B
Approach Vol, veh/h		129			167			585			781	
Approach Delay, s/veh		23.1			22.3			14.4			15.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	20.9		8.6	9.1	18.3		9.2
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	16.0		26.0	9.0	24.0		26.0
Max Q Clear Time (g_c+I1), s	2.9	6.0		4.1	5.1	9.4		4.1
Green Ext Time (p_c), s	0.0	1.9		0.4	0.1	3.9		0.6

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	5	28	5	5	5	36	329	5	5	1011	31
Future Volume (veh/h)	9	5	28	5	5	5	36	329	5	5	1011	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	5	29	5	5	5	38	346	5	5	1064	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	11	66	10	82	69	63	1630	727	10	1523	679
Arrive On Green	0.01	0.05	0.05	0.01	0.04	0.04	0.04	0.46	0.46	0.01	0.43	0.43
Sat Flow, veh/h	1781	238	1383	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	9	0	34	5	5	5	38	346	5	5	1064	33
Grp Sat Flow(s),veh/h/ln	1781	0	1621	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.2	0.0	0.7	0.1	0.1	0.1	0.7	1.9	0.1	0.1	8.1	0.4
Cycle Q Clear(g_c), s	0.2	0.0	0.7	0.1	0.1	0.1	0.7	1.9	0.1	0.1	8.1	0.4
Prop In Lane	1.00		0.85	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	0	78	10	82	69	63	1630	727	10	1523	679
V/C Ratio(X)	0.53	0.00	0.44	0.52	0.06	0.07	0.60	0.21	0.01	0.52	0.70	0.05
Avail Cap(c_a), veh/h	430	0	1125	430	1297	1099	430	1929	860	430	1929	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	15.4	16.4	15.2	15.2	15.8	5.4	4.9	16.4	7.7	5.5
Incr Delay (d2), s/veh	22.8	0.0	3.8	36.8	0.3	0.4	8.7	0.1	0.0	36.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.1	0.0	0.0	0.4	0.3	0.0	0.1	1.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	0.0	19.2	53.3	15.5	15.6	24.5	5.4	4.9	53.3	8.5	5.6
LnGrp LOS	D	A	B	D	B	B	C	A	A	D	A	A
Approach Vol, veh/h		43			15			389			1102	
Approach Delay, s/veh		23.4			28.1			7.3			8.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.2	19.2	4.2	5.6	5.2	18.2	4.3	5.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	18.0	8.0	23.0	8.0	18.0	8.0	23.0
Max Q Clear Time (g_c+I1), s	2.1	3.9	2.1	2.7	2.7	10.1	2.2	2.1
Green Ext Time (p_c), s	0.0	1.7	0.0	0.1	0.0	4.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	13	7	223	36	38	12	311	82	40	961	38
Future Volume (veh/h)	15	13	7	223	36	38	12	311	82	40	961	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	14	7	235	38	40	13	327	86	42	1012	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	35	65	343	360	304	24	1322	588	65	1404	625
Arrive On Green	0.04	0.04	0.04	0.19	0.19	0.19	0.01	0.37	0.37	0.04	0.40	0.40
Sat Flow, veh/h	972	850	1574	1781	1870	1580	1781	3554	1581	1781	3554	1581
Grp Volume(v), veh/h	30	0	7	235	38	40	13	327	86	42	1012	40
Grp Sat Flow(s),veh/h/ln	1822	0	1574	1781	1870	1580	1781	1777	1581	1781	1777	1581
Q Serve(g_s), s	0.7	0.0	0.2	5.5	0.7	0.9	0.3	2.8	1.6	1.0	10.8	0.7
Cycle Q Clear(g_c), s	0.7	0.0	0.2	5.5	0.7	0.9	0.3	2.8	1.6	1.0	10.8	0.7
Prop In Lane	0.53		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	65	343	360	304	24	1322	588	65	1404	625
V/C Ratio(X)	0.40	0.00	0.11	0.69	0.11	0.13	0.55	0.25	0.15	0.65	0.72	0.06
Avail Cap(c_a), veh/h	1263	0	1092	1235	1297	1096	319	1829	813	319	1829	814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	20.6	16.8	14.9	15.0	21.9	9.7	9.3	21.3	11.4	8.4
Incr Delay (d2), s/veh	3.4	0.0	0.7	2.4	0.1	0.2	18.2	0.1	0.1	10.4	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	2.2	0.3	0.3	0.2	0.8	0.4	0.6	3.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	21.4	19.2	15.0	15.1	40.1	9.8	9.4	31.6	12.4	8.4
LnGrp LOS	C	A	C	B	B	B	D	A	A	C	B	A
Approach Vol, veh/h		37			313			426			1094	
Approach Delay, s/veh		23.7			18.2			10.7			13.0	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	20.6		5.8	4.6	21.7		12.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	23.0		31.0	8.0	23.0		31.0
Max Q Clear Time (g_c+I1), s	3.0	4.8		2.7	2.3	12.8		7.5
Green Ext Time (p_c), s	0.0	2.1		0.1	0.0	4.8		1.0

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	2	35	9	3	20	39	484	11	46	1226	108
Future Volume (veh/h)	72	2	35	9	3	20	39	484	11	46	1226	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	2	37	9	3	21	41	509	12	48	1291	114
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	6	211	87	29	102	75	1598	38	67	1473	130
Arrive On Green	0.13	0.13	0.13	0.06	0.06	0.06	0.04	0.45	0.45	0.04	0.45	0.45
Sat Flow, veh/h	1738	46	1585	1352	451	1585	1781	3549	84	1781	3304	291
Grp Volume(v), veh/h	78	0	37	12	0	21	41	255	266	48	693	712
Grp Sat Flow(s),veh/h/ln	1783	0	1585	1803	0	1585	1781	1777	1855	1781	1777	1818
Q Serve(g_s), s	2.2	0.0	1.2	0.4	0.0	0.7	1.3	5.2	5.2	1.5	19.9	20.1
Cycle Q Clear(g_c), s	2.2	0.0	1.2	0.4	0.0	0.7	1.3	5.2	5.2	1.5	19.9	20.1
Prop In Lane	0.97		1.00	0.75		1.00	1.00		0.05	1.00		0.16
Lane Grp Cap(c), veh/h	238	0	211	116	0	102	75	800	835	67	792	810
V/C Ratio(X)	0.33	0.00	0.17	0.10	0.00	0.21	0.55	0.32	0.32	0.72	0.87	0.88
Avail Cap(c_a), veh/h	634	0	563	640	0	563	380	800	835	380	798	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	0.0	21.6	24.8	0.0	25.0	26.4	9.9	9.9	26.8	14.2	14.2
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	0.4	2.3	0.3	0.3	5.3	10.8	11.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.4	0.1	0.0	0.3	0.5	1.6	1.6	0.7	8.2	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	0.0	21.8	24.9	0.0	25.3	28.7	10.2	10.2	32.1	24.9	25.2
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		115			33			562			1453	
Approach Delay, s/veh		22.2			25.2			11.6			25.3	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	31.1		7.6	6.4	30.8		11.5
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	25.3		20.0	12.0	25.3		20.0
Max Q Clear Time (g_c+I1), s	3.5	7.2		2.7	3.3	22.1		4.2
Green Ext Time (p_c), s	0.0	6.5		0.0	0.0	3.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	21.6
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	16	37	15	2	12	67	486	28	10	1110	98
Future Volume (veh/h)	51	16	37	15	2	12	67	486	28	10	1110	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	17	39	16	2	13	71	512	29	11	1168	103
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	52	191	54	7	44	109	1601	91	30	1401	123
Arrive On Green	0.12	0.12	0.12	0.06	0.06	0.06	0.06	0.47	0.47	0.02	0.42	0.42
Sat Flow, veh/h	1370	431	1585	877	110	712	1781	3419	193	1781	3304	291
Grp Volume(v), veh/h	71	0	39	31	0	0	71	266	275	11	627	644
Grp Sat Flow(s),veh/h/ln	1802	0	1585	1698	0	0	1781	1777	1836	1781	1777	1818
Q Serve(g_s), s	1.9	0.0	1.2	0.9	0.0	0.0	2.1	5.0	5.0	0.3	16.8	16.8
Cycle Q Clear(g_c), s	1.9	0.0	1.2	0.9	0.0	0.0	2.1	5.0	5.0	0.3	16.8	16.8
Prop In Lane	0.76		1.00	0.52		0.42	1.00		0.11	1.00		0.16
Lane Grp Cap(c), veh/h	217	0	191	106	0	0	109	832	860	30	754	771
V/C Ratio(X)	0.33	0.00	0.20	0.29	0.00	0.00	0.65	0.32	0.32	0.37	0.83	0.83
Avail Cap(c_a), veh/h	473	0	416	382	0	0	401	832	860	401	810	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	21.1	23.9	0.0	0.0	24.5	8.9	8.9	25.9	13.7	13.7
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.6	0.0	0.0	2.5	0.3	0.3	2.7	7.2	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.4	0.4	0.0	0.0	0.9	1.5	1.5	0.1	6.5	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	0.0	21.3	24.4	0.0	0.0	26.9	9.1	9.1	28.6	20.9	20.9
LnGrp LOS	C	A	C	C	A	A	C	A	A	C	C	C
Approach Vol, veh/h		110			31			612			1282	
Approach Delay, s/veh		21.6			24.4			11.2			20.9	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	30.7		10.4	7.3	28.3		7.3
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	24.3		14.0	12.0	24.3		12.0
Max Q Clear Time (g_c+I1), s	2.3	7.0		3.9	4.1	18.8		2.9
Green Ext Time (p_c), s	0.0	3.3		0.2	0.0	3.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	5	81	11	9	13	103	566	24	20	1081	54
Future Volume (veh/h)	34	5	81	11	9	13	103	566	24	20	1081	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	5	85	12	9	14	108	596	25	21	1138	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	30	217	70	52	107	154	1596	67	44	1369	69
Arrive On Green	0.14	0.14	0.14	0.07	0.07	0.07	0.09	0.46	0.46	0.02	0.40	0.40
Sat Flow, veh/h	1573	219	1585	1039	779	1585	1781	3475	146	1781	3444	172
Grp Volume(v), veh/h	41	0	85	21	0	14	108	304	317	21	587	608
Grp Sat Flow(s),veh/h/ln	1792	0	1585	1818	0	1585	1781	1777	1844	1781	1777	1839
Q Serve(g_s), s	1.1	0.0	2.8	0.6	0.0	0.5	3.3	6.3	6.4	0.7	16.9	16.9
Cycle Q Clear(g_c), s	1.1	0.0	2.8	0.6	0.0	0.5	3.3	6.3	6.4	0.7	16.9	16.9
Prop In Lane	0.88		1.00	0.57		1.00	1.00		0.08	1.00		0.09
Lane Grp Cap(c), veh/h	245	0	217	122	0	107	154	816	847	44	706	731
V/C Ratio(X)	0.17	0.00	0.39	0.17	0.00	0.13	0.70	0.37	0.37	0.47	0.83	0.83
Avail Cap(c_a), veh/h	632	0	559	641	0	559	251	855	887	251	792	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	0.0	22.3	25.0	0.0	24.9	25.2	10.0	10.0	27.3	15.4	15.4
Incr Delay (d2), s/veh	0.3	0.0	1.2	0.7	0.0	0.6	2.2	0.4	0.4	2.9	7.2	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.1	0.3	0.0	0.2	1.4	2.0	2.1	0.3	6.8	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	23.5	25.6	0.0	25.5	27.4	10.4	10.4	30.2	22.6	22.4
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	C	C
Approach Vol, veh/h		126			35			729			1216	
Approach Delay, s/veh		23.0			25.6			12.9			22.6	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	28.3		11.8	5.4	31.7		7.8				
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0				
Max Green Setting (Gmax), s	8.0	25.3		20.0	8.0	27.3		20.0				
Max Q Clear Time (g_c+I1), s	5.3	18.9		4.8	2.7	8.4		2.6				
Green Ext Time (p_c), s	0.0	3.7		0.4	0.0	3.3		0.1				

Intersection Summary			
HCM 6th Ctrl Delay			19.3
HCM 6th LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	6	11	40	10	135	25	1108	19	105	1567	81
Future Volume (veh/h)	17	6	11	40	10	135	25	1108	19	105	1567	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	14	0	42	11	6	26	1166	19	111	1649	78
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	177	150	129	135	114	58	1866	30	142	1962	92
Arrive On Green	0.09	0.09	0.00	0.07	0.07	0.07	0.03	0.52	0.52	0.08	0.57	0.57
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3577	58	1781	3452	162
Grp Volume(v), veh/h	12	14	0	42	11	6	26	579	606	111	844	883
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1859	1781	1777	1838
Q Serve(g_s), s	0.5	0.6	0.0	1.8	0.4	0.3	1.2	18.9	18.9	5.0	32.0	32.6
Cycle Q Clear(g_c), s	0.5	0.6	0.0	1.8	0.4	0.3	1.2	18.9	18.9	5.0	32.0	32.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	168	177	150	129	135	114	58	927	969	142	1010	1045
V/C Ratio(X)	0.07	0.08	0.00	0.33	0.08	0.05	0.45	0.62	0.63	0.78	0.84	0.84
Avail Cap(c_a), veh/h	479	503	426	181	190	161	174	1057	1106	261	1188	1228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	33.8	0.0	36.1	35.4	35.4	38.9	13.9	13.9	37.0	14.5	14.7
Incr Delay (d2), s/veh	0.1	0.1	0.0	1.1	0.2	0.1	2.0	1.1	1.1	3.6	5.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.0	0.8	0.2	0.1	0.5	6.5	6.8	2.2	11.3	12.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	33.9	0.0	37.2	35.6	35.5	40.8	15.0	15.0	40.5	19.5	19.9
LnGrp LOS	C	C	A	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		26			59			1211			1838	
Approach Delay, s/veh		33.9			36.7			15.6			21.0	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	48.4		11.2	6.7	52.2		11.7
Change Period (Y+Rc), s	4.0	5.7		5.3	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	48.7		8.3	8.0	54.7		22.0
Max Q Clear Time (g_c+I1), s	7.0	20.9		3.8	3.2	34.6		2.6
Green Ext Time (p_c), s	0.1	8.1		0.0	0.0	11.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	0	48	15	0	25	53	1081	46	33	1507	2
Future Volume (veh/h)	68	0	48	15	0	25	53	1081	46	33	1507	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870	1870	0	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	0	51	16	0	26	56	1138	48	35	1586	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	2	0	2	2	2	2	2	2	2
Cap, veh/h	213	0	0	65	0	0	120	1836	77	70	1778	793
Arrive On Green	0.12	0.00	0.00	0.04	0.00	0.00	0.07	0.53	0.53	0.04	0.50	0.50
Sat Flow, veh/h	1781	72		1781	16		1781	3474	146	1781	3554	1585
Grp Volume(v), veh/h	72	18.1		16	21.3		56	582	604	35	1586	2
Grp Sat Flow(s),veh/h/ln	1781	B		1781	C		1781	1777	1844	1781	1777	1585
Q Serve(g_s), s	1.6			0.4			1.3	10.1	10.1	0.8	17.7	0.0
Cycle Q Clear(g_c), s	1.6			0.4			1.3	10.1	10.1	0.8	17.7	0.0
Prop In Lane	1.00			1.00			1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	213			65			120	939	974	70	1778	793
V/C Ratio(X)	0.34			0.25			0.46	0.62	0.62	0.50	0.89	0.00
Avail Cap(c_a), veh/h	487			487			487	939	974	487	1806	806
HCM Platoon Ratio	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00			1.00			1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7			20.6			19.7	7.3	7.3	20.6	9.9	5.5
Incr Delay (d2), s/veh	0.3			0.7			1.0	1.6	1.6	2.0	6.3	0.0
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6			0.2			0.5	2.5	2.6	0.3	5.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1			21.3			20.7	8.9	8.8	22.6	16.2	5.5
LnGrp LOS	B			C			C	A	A	C	B	A
Approach Vol, veh/h								1242			1623	
Approach Delay, s/veh								9.4			16.3	
Approach LOS								A			B	

Timer - Assigned Phs	1	2	3		5	6	7
Phs Duration (G+Y+Rc), s	5.7	28.9	9.3		7.0	27.7	5.6
Change Period (Y+Rc), s	4.0	5.7	4.0		4.0	5.7	4.0
Max Green Setting (Gmax), s	12.0	22.3	12.0		12.0	22.3	12.0
Max Q Clear Time (g_c+I1), s	2.8	12.1	3.6		3.3	19.7	2.4
Green Ext Time (p_c), s	0.0	6.1	0.0		0.0	2.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	622	61	298	201	6	106	94	853	65	34	1063	177
Future Volume (veh/h)	622	61	298	201	6	106	94	853	65	34	1063	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	701	0	0	212	6	0	99	898	0	36	1119	186
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	816	0		204	6		128	1888		87	1232	549
Arrive On Green	0.23	0.00	0.00	0.12	0.12	0.00	0.07	0.37	0.00	0.05	0.35	0.35
Sat Flow, veh/h	3563	0	1585	1735	49	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	701	0	0	218	0	0	99	898	0	36	1119	186
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1784	0	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	14.5	0.0	0.0	9.0	0.0	0.0	4.2	10.3	0.0	1.5	23.0	6.7
Cycle Q Clear(g_c), s	14.5	0.0	0.0	9.0	0.0	0.0	4.2	10.3	0.0	1.5	23.0	6.7
Prop In Lane	1.00		1.00	0.97		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	816	0		209	0		128	1888		87	1232	549
V/C Ratio(X)	0.86	0.00		1.04	0.00		0.77	0.48		0.41	0.91	0.34
Avail Cap(c_a), veh/h	930	0		209	0		372	2132		256	1252	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	0.0	33.8	0.0	0.0	35.0	18.5	0.0	35.4	23.9	18.5
Incr Delay (d2), s/veh	7.1	0.0	0.0	73.3	0.0	0.0	3.7	0.3	0.0	3.1	10.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.0	8.1	0.0	0.0	1.8	3.5	0.0	0.7	9.8	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	0.0	0.0	107.2	0.0	0.0	38.6	18.8	0.0	38.5	34.0	19.2
LnGrp LOS	D	A		F	A		D	B		D	C	B
Approach Vol, veh/h		701	A		218	A		997	A		1341	
Approach Delay, s/veh		35.4			107.2			20.8			32.1	
Approach LOS		D			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	34.3		21.6	9.5	32.6		13.0
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	11.0	32.0		20.0	16.0	27.0		9.0
Max Q Clear Time (g_c+I1), s	3.5	12.3		16.5	6.2	25.0		11.0
Green Ext Time (p_c), s	0.0	7.0		1.1	0.1	1.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	6	5	322	0	426	1	583	88	146	1684	0
Future Volume (veh/h)	0	6	5	322	0	426	1	583	88	146	1684	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	6	5	339	0	448	1	614	93	154	1773	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	19	17	466	0	415	2	2156	961	456	2019	900
Arrive On Green	0.00	0.01	0.01	0.26	0.00	0.26	0.00	0.61	0.61	0.57	0.57	0.00
Sat Flow, veh/h	0	1870	1585	1781	0	1585	1781	3554	1585	741	3554	1585
Grp Volume(v), veh/h	0	6	5	339	0	448	1	614	93	154	1773	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	0	1585	1781	1777	1585	741	1777	1585
Q Serve(g_s), s	0.0	0.3	0.3	18.6	0.0	28.0	0.1	8.8	2.6	13.4	46.0	0.0
Cycle Q Clear(g_c), s	0.0	0.3	0.3	18.6	0.0	28.0	0.1	8.8	2.6	18.0	46.0	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	19	17	466	0	415	2	2156	961	456	2019	900
V/C Ratio(X)	0.00	0.31	0.30	0.73	0.00	1.08	0.51	0.28	0.10	0.34	0.88	0.00
Avail Cap(c_a), veh/h	0	280	237	466	0	415	200	3087	1377	568	2556	1140
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	52.6	52.6	36.0	0.0	39.5	53.4	10.0	8.8	15.3	19.9	0.0
Incr Delay (d2), s/veh	0.0	8.6	9.9	5.6	0.0	67.5	131.3	0.1	0.0	0.4	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.2	8.8	0.0	18.6	0.1	2.9	0.8	2.0	16.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	61.2	62.5	41.7	0.0	107.0	184.7	10.1	8.8	15.7	23.1	0.0
LnGrp LOS	A	E	E	D	A	F	F	B	A	B	C	A
Approach Vol, veh/h		11			787			708			1927	
Approach Delay, s/veh		61.8			78.9			10.2			22.5	
Approach LOS		E			E			B			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		68.9		5.1	4.1	64.8		33.0				
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		5.0				
Max Green Setting (Gmax), s		93.0		16.0	12.0	77.0		28.0				
Max Q Clear Time (g_c+I1), s		10.8		2.3	2.1	48.0		30.0				
Green Ext Time (p_c), s		3.0		0.0	0.0	12.8		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	33.0
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	14	350	0	9	116	126	555	0	380	1624	6
Future Volume (veh/h)	1	14	350	0	9	116	126	555	0	380	1624	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	15	15	0	9	4	133	584	0	400	1709	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	47	40	22	24	20	167	1585	0	456	2161	964
Arrive On Green	0.03	0.03	0.03	0.00	0.01	0.01	0.09	0.45	0.00	0.26	0.61	0.61
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3647	0	1781	3554	1585
Grp Volume(v), veh/h	1	15	15	0	9	4	133	584	0	400	1709	3
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	0	1781	1777	1585
Q Serve(g_s), s	0.0	0.6	0.7	0.0	0.4	0.2	5.6	8.4	0.0	16.6	27.9	0.1
Cycle Q Clear(g_c), s	0.0	0.6	0.7	0.0	0.4	0.2	5.6	8.4	0.0	16.6	27.9	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	45	47	40	22	24	20	167	1585	0	456	2161	964
V/C Ratio(X)	0.02	0.32	0.38	0.00	0.38	0.20	0.80	0.37	0.00	0.88	0.79	0.00
Avail Cap(c_a), veh/h	603	633	536	603	633	536	209	1619	0	881	2960	1320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	36.8	36.9	0.0	37.6	37.6	34.1	14.1	0.0	27.4	11.4	5.9
Incr Delay (d2), s/veh	0.2	3.8	5.7	0.0	9.8	4.8	15.5	0.1	0.0	5.5	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.0	0.2	0.1	3.0	2.9	0.0	7.0	8.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.7	40.6	42.6	0.0	47.5	42.4	49.6	14.3	0.0	33.0	12.4	5.9
LnGrp LOS	D	D	D	A	D	D	D	B	A	C	B	A
Approach Vol, veh/h		31			13			717			2112	
Approach Delay, s/veh		41.4			45.9			20.8			16.3	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	24.7	39.3		6.9	12.2	51.7		6.0
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	38.0	35.0		26.0	9.0	64.0		26.0
Max Q Clear Time (g_c+I1), s	18.6	10.4		2.7	7.6	29.9		2.4
Green Ext Time (p_c), s	1.1	3.7		0.1	0.0	16.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	0	76	127	0	0	18	524	220	7	1858	37
Future Volume (veh/h)	27	0	76	127	0	0	18	524	220	7	1858	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	0	80	134	0	0	19	552	232	7	1956	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	0	171	403	0	179	47	1887	842	13	2640	51
Arrive On Green	0.11	0.00	0.11	0.11	0.00	0.00	0.03	0.53	0.53	0.01	0.51	0.51
Sat Flow, veh/h	1781	0	1585	3563	0	1585	1781	3554	1585	1781	5156	100
Grp Volume(v), veh/h	28	0	80	134	0	0	19	552	232	7	1291	703
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1702	1852
Q Serve(g_s), s	1.1	0.0	3.5	2.6	0.0	0.0	0.8	6.4	6.0	0.3	22.3	22.3
Cycle Q Clear(g_c), s	1.1	0.0	3.5	2.6	0.0	0.0	0.8	6.4	6.0	0.3	22.3	22.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	192	0	171	403	0	179	47	1887	842	13	1743	948
V/C Ratio(X)	0.15	0.00	0.47	0.33	0.00	0.00	0.41	0.29	0.28	0.54	0.74	0.74
Avail Cap(c_a), veh/h	477	0	425	954	0	425	191	2284	1019	191	2097	1141
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	0.0	31.3	30.5	0.0	0.0	35.8	9.7	9.6	36.9	14.3	14.3
Incr Delay (d2), s/veh	0.1	0.0	0.7	0.2	0.0	0.0	2.1	0.1	0.2	12.5	1.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.4	1.1	0.0	0.0	0.3	1.9	1.6	0.2	6.7	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	32.0	30.7	0.0	0.0	37.9	9.8	9.9	49.5	15.7	16.8
LnGrp LOS	C	A	C	C	A	A	D	A	A	D	B	B
Approach Vol, veh/h		108			134			803			2001	
Approach Delay, s/veh		31.6			30.7			10.5			16.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	45.6		12.0	6.0	44.2		12.4
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0
Max Green Setting (Gmax), s	8.0	48.0		20.0	8.0	46.0		20.0
Max Q Clear Time (g_c+I1), s	2.3	8.4		5.5	2.8	24.3		4.6
Green Ext Time (p_c), s	0.0	5.4		0.0	0.0	13.9		0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	14	167	63	7	22	93	1384	25	35	2075	62
Future Volume (veh/h)	110	14	167	63	7	22	93	1384	25	35	2075	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	15	176	66	7	23	98	1457	26	37	2184	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	216	28	211	93	10	91	125	2930	52	46	2667	79
Arrive On Green	0.14	0.14	0.14	0.06	0.06	0.06	0.07	0.57	0.57	0.03	0.52	0.52
Sat Flow, veh/h	1586	205	1550	1618	172	1585	1781	5165	92	1781	5094	151
Grp Volume(v), veh/h	131	0	176	73	0	23	98	960	523	37	1457	792
Grp Sat Flow(s),veh/h/ln	1791	0	1550	1789	0	1585	1781	1702	1853	1781	1702	1841
Q Serve(g_s), s	6.6	0.0	10.7	3.9	0.0	1.3	5.2	16.5	16.5	2.0	34.5	34.8
Cycle Q Clear(g_c), s	6.6	0.0	10.7	3.9	0.0	1.3	5.2	16.5	16.5	2.0	34.5	34.8
Prop In Lane	0.89		1.00	0.90		1.00	1.00		0.05	1.00		0.08
Lane Grp Cap(c), veh/h	244	0	211	103	0	91	125	1931	1051	46	1782	964
V/C Ratio(X)	0.54	0.00	0.83	0.71	0.00	0.25	0.79	0.50	0.50	0.80	0.82	0.82
Avail Cap(c_a), veh/h	372	0	322	371	0	329	221	2081	1133	92	1835	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	40.7	44.8	0.0	43.6	44.3	12.6	12.6	46.9	19.2	19.3
Incr Delay (d2), s/veh	0.7	0.0	6.5	3.3	0.0	0.5	4.1	0.4	0.8	10.9	3.4	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	4.5	1.8	0.0	0.5	2.3	5.2	5.8	1.0	12.1	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	0.0	47.2	48.2	0.0	44.2	48.4	13.1	13.4	57.8	22.7	25.6
LnGrp LOS	D	A	D	D	A	D	D	B	B	E	C	C
Approach Vol, veh/h		307			96			1581			2286	
Approach Delay, s/veh		44.0			47.2			15.4			24.2	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	56.7		10.9	6.5	60.9		18.5
Change Period (Y+Rc), s	4.0	6.0		5.3	4.0	6.0		5.3
Max Green Setting (Gmax), s	12.0	52.2		20.1	5.0	59.2		20.1
Max Q Clear Time (g_c+I1), s	7.2	36.8		5.9	4.0	18.5		12.7
Green Ext Time (p_c), s	0.1	13.9		0.1	0.0	19.8		0.5

Intersection Summary	
HCM 6th Ctrl Delay	22.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	408	86	304	1060	198	297	1342	163	284	1850	166
Future Volume (veh/h)	165	408	86	304	1060	198	297	1342	163	284	1850	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	429	10	320	1116	85	313	1413	0	299	1947	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	510	223	327	1330	408	317	2077		353	2131	
Arrive On Green	0.07	0.14	0.14	0.18	0.26	0.26	0.09	0.41	0.00	0.10	0.42	0.00
Sat Flow, veh/h	3456	3554	1552	1781	5106	1567	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	174	429	10	320	1116	85	313	1413	0	299	1947	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1552	1781	1702	1567	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	5.9	14.1	0.7	21.5	24.8	5.1	10.9	27.2	0.0	10.2	43.1	0.0
Cycle Q Clear(g_c), s	5.9	14.1	0.7	21.5	24.8	5.1	10.9	27.2	0.0	10.2	43.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	510	223	327	1330	408	317	2077		353	2131	
V/C Ratio(X)	0.76	0.84	0.04	0.98	0.84	0.21	0.99	0.68		0.85	0.91	
Avail Cap(c_a), veh/h	230	572	250	327	1417	435	317	2077		374	2131	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.1	50.1	44.3	48.8	42.0	34.7	54.4	29.2	0.0	52.9	32.9	0.0
Incr Delay (d2), s/veh	12.1	10.4	0.1	44.1	4.6	0.3	47.1	1.1	0.0	14.6	7.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	6.8	0.3	13.1	10.5	1.9	6.6	10.7	0.0	5.0	18.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	60.4	44.4	92.8	46.6	35.0	101.5	30.3	0.0	67.5	40.4	0.0
LnGrp LOS	E	E	D	F	D	D	F	C		E	D	
Approach Vol, veh/h		613			1521			1726	A		2246	A
Approach Delay, s/veh		62.1			55.7			43.2			44.0	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	56.1	12.0	36.9	16.3	54.8	26.0	22.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	11.0	48.0	8.0	33.3	13.0	* 46	22.0	19.3
Max Q Clear Time (g_c+I1), s	12.9	45.1	7.9	26.8	12.2	29.2	23.5	16.1
Green Ext Time (p_c), s	0.0	2.6	0.0	3.6	0.1	10.3	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	48.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1	26	29	1	20	47	1843	5	16	2208	11
Future Volume (veh/h)	25	1	26	29	1	20	47	1843	5	16	2208	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	1	27	31	1	21	49	1940	5	17	2324	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	2	34	87	1	27	501	4392	11	20	2888	15
Arrive On Green	0.04	0.04	0.04	0.04	0.04	0.04	0.28	0.84	0.84	0.01	0.55	0.55
Sat Flow, veh/h	809	58	867	1011	33	685	1781	5258	14	1781	5242	27
Grp Volume(v), veh/h	54	0	0	53	0	0	49	1256	689	17	1509	827
Grp Sat Flow(s),veh/h/ln	1733	0	0	1729	0	0	1781	1702	1868	1781	1702	1865
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.0	2.4	11.6	11.6	1.1	42.9	43.0
Cycle Q Clear(g_c), s	3.5	0.0	0.0	3.5	0.0	0.0	2.4	11.6	11.6	1.1	42.9	43.0
Prop In Lane	0.48		0.50	0.58		0.40	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	113	0	0	115	0	0	501	2843	1560	20	1875	1028
V/C Ratio(X)	0.48	0.00	0.00	0.46	0.00	0.00	0.10	0.44	0.44	0.84	0.80	0.81
Avail Cap(c_a), veh/h	315	0	0	314	0	0	501	2843	1560	119	2164	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	0.0	57.0	0.0	0.0	31.8	2.6	2.6	59.2	21.7	21.8
Incr Delay (d2), s/veh	3.1	0.0	0.0	2.8	0.0	0.0	0.0	0.5	0.9	27.4	2.2	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	1.7	0.0	0.0	1.0	2.0	2.3	0.7	15.8	17.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	0.0	59.9	0.0	0.0	31.9	3.1	3.5	86.6	23.9	25.7
LnGrp LOS	E	A	A	E	A	A	C	A	A	F	C	C
Approach Vol, veh/h		54			53			1994			2353	
Approach Delay, s/veh		60.2			59.9			3.9			25.0	
Approach LOS		E			E			A			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	105.9		8.7	39.5	71.8		8.7
Change Period (Y+Rc), s	4.0	5.7		4.0	5.7	* 5.7		4.0
Max Green Setting (Gmax), s	8.0	77.3		21.0	9.0	* 76		21.0
Max Q Clear Time (g_c+I1), s	3.1	13.6		5.5	4.4	45.0		5.5
Green Ext Time (p_c), s	0.0	21.9		0.1	0.0	21.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	77	183	154	194	108	372	1855	71	61	2135	83
Future Volume (veh/h)	126	77	183	154	194	108	372	1855	71	61	2135	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	81	14	162	204	0	392	1953	0	64	2247	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	361	159	207	265		440	3459		102	2928	109
Arrive On Green	0.09	0.10	0.10	0.06	0.07	0.00	0.13	0.68	0.00	0.03	0.58	0.58
Sat Flow, veh/h	1781	3554	1562	3456	3554	1585	3456	5106	1585	3456	5052	188
Grp Volume(v), veh/h	133	81	14	162	204	0	392	1953	0	64	1511	820
Grp Sat Flow(s),veh/h/ln	1781	1777	1562	1728	1777	1585	1728	1702	1585	1728	1702	1836
Q Serve(g_s), s	11.0	3.1	1.2	6.9	8.5	0.0	16.7	30.0	0.0	2.7	50.3	50.9
Cycle Q Clear(g_c), s	11.0	3.1	1.2	6.9	8.5	0.0	16.7	30.0	0.0	2.7	50.3	50.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	155	361	159	207	265		440	3459		102	1973	1064
V/C Ratio(X)	0.86	0.22	0.09	0.78	0.77		0.89	0.56		0.63	0.77	0.77
Avail Cap(c_a), veh/h	202	481	211	253	339		507	3459		184	1973	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.5	61.9	61.1	69.5	68.2	0.0	64.4	12.6	0.0	72.0	23.8	24.0
Incr Delay (d2), s/veh	19.7	0.4	0.3	9.5	9.1	0.0	14.8	0.7	0.0	2.3	2.9	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	1.5	0.5	3.4	4.2	0.0	8.2	10.9	0.0	1.2	20.0	22.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.2	62.4	61.4	79.0	77.3	0.0	79.2	13.3	0.0	74.3	26.7	29.4
LnGrp LOS	F	E	E	E	E		E	B		E	C	C
Approach Vol, veh/h		228			366	A		2345	A		2395	
Approach Delay, s/veh		76.8			78.1			24.3			28.9	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	16.9	8.4	107.6	13.0	20.9	23.1	92.9
Change Period (Y+Rc), s	4.0	5.7	4.0	6.0	4.0	5.7	4.0	6.0
Max Green Setting (Gmax), s	17.0	14.3	8.0	91.0	11.0	20.3	22.0	77.0
Max Q Clear Time (g_c+I1), s	13.0	10.5	4.7	32.0	8.9	5.1	18.7	52.9
Green Ext Time (p_c), s	0.1	0.4	0.0	20.3	0.1	0.4	0.4	16.1

Intersection Summary	
HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	27	181	414	50	813	138	1202	210	394	1104	5
Future Volume (veh/h)	5	27	181	414	50	813	138	1202	210	394	1104	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	28	2	436	0	392	145	1265	138	415	1162	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	41	35	540	0	481	167	2085	930	460	2224	992
Arrive On Green	0.02	0.02	0.02	0.15	0.00	0.15	0.09	0.59	0.59	0.13	0.63	0.63
Sat Flow, veh/h	3456	1870	1585	3563	0	3170	1781	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	5	28	2	436	0	392	145	1265	138	415	1162	3
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	0	1585	1781	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.2	2.2	0.2	17.7	0.0	18.0	12.0	34.3	5.9	17.7	27.3	0.1
Cycle Q Clear(g_c), s	0.2	2.2	0.2	17.7	0.0	18.0	12.0	34.3	5.9	17.7	27.3	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	76	41	35	540	0	481	167	2085	930	460	2224	992
V/C Ratio(X)	0.07	0.68	0.06	0.81	0.00	0.82	0.87	0.61	0.15	0.90	0.52	0.00
Avail Cap(c_a), veh/h	369	200	169	808	0	719	202	2085	930	484	2224	992
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.9	72.8	71.8	61.5	0.0	61.6	67.0	19.9	14.0	64.1	15.6	10.5
Incr Delay (d2), s/veh	0.4	18.2	0.7	3.7	0.0	4.5	26.8	1.3	0.3	19.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.3	0.1	8.2	0.0	7.5	6.6	13.8	2.1	8.9	10.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.2	91.0	72.5	65.2	0.0	66.1	93.9	21.2	14.4	83.5	16.5	10.5
LnGrp LOS	E	F	E	E	A	E	F	C	B	F	B	B
Approach Vol, veh/h		35			828			1548			1580	
Approach Delay, s/veh		87.3			65.6			27.4			34.1	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.0	92.0		7.3	18.1	97.9		26.7				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	21.0	63.0		16.0	17.0	67.0		34.0				
Max Q Clear Time (g_c+I1), s	19.7	36.3		4.2	14.0	29.3		20.0				
Green Ext Time (p_c), s	0.2	10.5		0.1	0.1	9.7		2.8				

Intersection Summary	
HCM 6th Ctrl Delay	38.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	68	37	509	73	67	941
Future Volume (veh/h)	68	37	509	73	67	941
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	39	536	77	71	991
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	307	273	1161	518	154	1889
Arrive On Green	0.17	0.17	0.33	0.33	0.09	0.53
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	72	39	536	77	71	991
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	1.2	0.7	4.0	1.2	1.3	6.1
Cycle Q Clear(g_c), s	1.2	0.7	4.0	1.2	1.3	6.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	307	273	1161	518	154	1889
V/C Ratio(X)	0.23	0.14	0.46	0.15	0.46	0.52
Avail Cap(c_a), veh/h	1265	1126	2209	985	422	3261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	11.9	9.0	8.0	14.7	5.1
Incr Delay (d2), s/veh	0.4	0.2	0.6	0.3	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	1.2	0.3	0.5	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.4	12.1	9.6	8.3	15.5	5.6
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	111		613			1062
Approach Delay, s/veh	12.3		9.4			6.2
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	6.9	17.0				24.0	9.8
Change Period (Y+Rc), s	4.0	6.0				6.0	4.0
Max Green Setting (Gmax), s	8.0	21.0				31.0	24.0
Max Q Clear Time (g_c+I1), s	3.3	6.0				8.1	3.2
Green Ext Time (p_c), s	0.0	4.6				9.8	0.4

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	419	239	794	1318	5
Future Volume (veh/h)	11	419	239	794	1318	5
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	173	252	836	1387	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	243	216	299	2514	1640	731
Arrive On Green	0.14	0.14	0.17	0.71	0.46	0.46
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	12	173	252	836	1387	2
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	0.4	6.8	8.8	5.8	22.1	0.0
Cycle Q Clear(g_c), s	0.4	6.8	8.8	5.8	22.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	243	216	299	2514	1640	731
V/C Ratio(X)	0.05	0.80	0.84	0.33	0.85	0.00
Avail Cap(c_a), veh/h	445	396	334	2718	1775	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.0	26.8	25.8	3.6	15.2	9.3
Incr Delay (d2), s/veh	0.1	6.7	16.2	0.1	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.1	4.8	1.3	8.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.1	33.5	42.0	3.7	19.0	9.3
LnGrp LOS	C	C	D	A	B	A
Approach Vol, veh/h	185			1088	1389	
Approach Delay, s/veh	32.9			12.5	19.0	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		50.3		13.8	15.8	34.6
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		49.0		16.0	12.0	32.0
Max Q Clear Time (g_c+I1), s		7.8		8.8	10.8	24.1
Green Ext Time (p_c), s		7.1		0.3	0.1	5.5

Intersection Summary	
HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	3	10	265	6	301	11	955	75	191	1431	29
Future Volume (veh/h)	5	3	10	265	6	301	11	955	75	191	1431	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	3	11	279	6	317	12	1005	79	201	1506	31
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	50	69	251	3	414	37	1408	111	241	1910	39
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.42	0.42	0.14	0.54	0.54
Sat Flow, veh/h	0	190	262	599	13	1576	1781	3336	262	1781	3560	73
Grp Volume(v), veh/h	19	0	0	285	0	317	12	535	549	201	751	786
Grp Sat Flow(s),veh/h/ln	452	0	0	611	0	1576	1781	1777	1821	1781	1777	1857
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	14.1	0.5	19.0	19.0	8.4	25.8	25.9
Cycle Q Clear(g_c), s	20.0	0.0	0.0	20.0	0.0	14.1	0.5	19.0	19.0	8.4	25.8	25.9
Prop In Lane	0.26		0.58	0.98		1.00	1.00		0.14	1.00		0.04
Lane Grp Cap(c), veh/h	179	0	0	254	0	414	37	750	769	241	953	996
V/C Ratio(X)	0.11	0.00	0.00	1.12	0.00	0.77	0.33	0.71	0.71	0.83	0.79	0.79
Avail Cap(c_a), veh/h	179	0	0	254	0	414	187	801	821	281	953	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	0.0	0.0	31.7	0.0	25.9	36.7	18.2	18.2	32.1	14.1	14.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	92.8	0.0	7.5	1.9	3.4	3.3	15.0	4.9	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	11.3	0.0	6.0	0.2	7.2	7.3	4.3	9.1	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	0.0	0.0	124.6	0.0	33.4	38.6	21.6	21.5	47.1	19.0	18.9
LnGrp LOS	C	A	A	F	A	C	D	C	C	D	B	B
Approach Vol, veh/h		19			602			1096			1738	
Approach Delay, s/veh		22.4			76.6			21.7			22.2	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.3	37.8		24.0	5.6	46.5		24.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	34.3		20.0	8.0	38.3		20.0
Max Q Clear Time (g_c+I1), s	10.4	21.0		22.0	2.5	27.9		22.0
Green Ext Time (p_c), s	0.1	11.2		0.0	0.0	10.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	0	37	50	5	38	54	955	23	17	1577	61
Future Volume (veh/h)	59	0	37	50	5	38	54	955	23	17	1577	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	0	1	53	5	1	57	1005	15	18	1660	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	0	73	69	7	65	443	2499	1113	22	1564	58
Arrive On Green	0.05	0.00	0.05	0.04	0.04	0.04	0.25	0.70	0.70	0.01	0.45	0.45
Sat Flow, veh/h	1781	0	1585	1634	154	1542	1781	3554	1583	1781	3493	130
Grp Volume(v), veh/h	62	0	1	58	0	1	57	1005	15	18	841	881
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1789	0	1542	1781	1777	1583	1781	1777	1846
Q Serve(g_s), s	3.1	0.0	0.1	2.9	0.0	0.1	2.2	10.5	0.3	0.9	40.3	40.3
Cycle Q Clear(g_c), s	3.1	0.0	0.1	2.9	0.0	0.1	2.2	10.5	0.3	0.9	40.3	40.3
Prop In Lane	1.00		1.00	0.91		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	82	0	73	75	0	65	443	2499	1113	22	796	827
V/C Ratio(X)	0.76	0.00	0.01	0.77	0.00	0.02	0.13	0.40	0.01	0.84	1.06	1.07
Avail Cap(c_a), veh/h	317	0	282	159	0	137	443	2499	1113	158	796	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	0.0	41.0	42.7	0.0	41.3	26.2	5.5	4.0	44.4	24.9	24.9
Incr Delay (d2), s/veh	5.3	0.0	0.0	6.0	0.0	0.0	0.0	0.3	0.0	25.5	48.1	50.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	1.4	0.0	0.0	0.9	2.5	0.1	0.5	24.7	26.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	0.0	41.0	48.7	0.0	41.3	26.3	5.8	4.0	69.9	73.0	75.0
LnGrp LOS	D	A	D	D	A	D	C	A	A	E	F	F
Approach Vol, veh/h		63			59			1077			1740	
Approach Delay, s/veh		47.7			48.6			6.8			74.0	
Approach LOS		D			D			A			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	28.1	46.0		7.8	5.1	69.0		8.1
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	* 40		8.0	8.0	40.3		16.0
Max Q Clear Time (g_c+I1), s	4.2	42.3		4.9	2.9	12.5		5.1
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	22.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	48.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	0	490	5	4	3	941	700	0	8	1037	591
Future Volume (veh/h)	300	0	490	5	4	3	941	700	0	8	1037	591
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	316	0	0	5	4	0	991	737	0	8	1092	189
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	396	0		36	38	0	922	2338	0	25	1480	660
Arrive On Green	0.11	0.00	0.00	0.02	0.02	0.00	0.27	0.66	0.00	0.01	0.42	0.42
Sat Flow, veh/h	3563	0	1585	1781	1870	0	3456	3647	0	1781	3554	1585
Grp Volume(v), veh/h	316	0	0	5	4	0	991	737	0	8	1092	189
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1728	1777	0	1781	1777	1585
Q Serve(g_s), s	7.8	0.0	0.0	0.2	0.2	0.0	24.0	8.1	0.0	0.4	23.3	7.1
Cycle Q Clear(g_c), s	7.8	0.0	0.0	0.2	0.2	0.0	24.0	8.1	0.0	0.4	23.3	7.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	396	0		36	38	0	922	2338	0	25	1480	660
V/C Ratio(X)	0.80	0.00		0.14	0.11	0.00	1.08	0.32	0.00	0.32	0.74	0.29
Avail Cap(c_a), veh/h	475	0		238	249	0	922	2338	0	158	1480	660
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	0.0	43.3	43.3	0.0	33.0	6.6	0.0	43.9	22.1	17.4
Incr Delay (d2), s/veh	6.5	0.0	0.0	0.7	0.5	0.0	52.1	0.4	0.0	2.7	2.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.0	0.1	0.1	0.0	16.4	2.7	0.0	0.2	8.8	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	0.0	0.0	44.0	43.8	0.0	85.1	7.0	0.0	46.6	24.3	17.8
LnGrp LOS	D	A		D	D	A	F	A	A	D	C	B
Approach Vol, veh/h		316	A		9			1728			1289	
Approach Delay, s/veh		45.5			43.9			51.8			23.5	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	64.9		5.8	27.0	43.2		14.0
Change Period (Y+Rc), s	4.0	5.7		4.0	3.0	* 5.7		4.0
Max Green Setting (Gmax), s	8.0	40.3		12.0	24.0	* 26		12.0
Max Q Clear Time (g_c+I1), s	2.4	10.1		2.2	26.0	25.3		9.8
Green Ext Time (p_c), s	0.0	5.7		0.0	0.0	0.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	204	1	110	30	1	30	85	944	32	77	870	118
Future Volume (veh/h)	204	1	110	30	1	30	85	944	32	77	870	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	216	0	116	32	1	32	89	994	34	81	916	124
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	516	0	230	174	5	151	158	1440	642	130	1384	617
Arrive On Green	0.14	0.00	0.14	0.10	0.10	0.10	0.09	0.41	0.41	0.07	0.39	0.39
Sat Flow, veh/h	3563	0	1585	1781	48	1544	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	216	0	116	32	0	33	89	994	34	81	916	124
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1592	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.4	0.0	4.2	1.0	0.0	1.2	3.0	14.3	0.8	2.7	13.1	3.2
Cycle Q Clear(g_c), s	3.4	0.0	4.2	1.0	0.0	1.2	3.0	14.3	0.8	2.7	13.1	3.2
Prop In Lane	1.00		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	0	230	174	0	156	158	1440	642	130	1384	617
V/C Ratio(X)	0.42	0.00	0.51	0.18	0.00	0.21	0.56	0.69	0.05	0.62	0.66	0.20
Avail Cap(c_a), veh/h	1150	0	512	575	0	514	345	2048	914	345	2048	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	24.4	25.7	0.0	25.7	27.1	15.2	11.2	27.9	15.6	12.5
Incr Delay (d2), s/veh	0.2	0.0	0.6	0.2	0.0	0.2	1.2	0.8	0.0	1.8	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	1.5	0.4	0.0	0.4	1.2	4.9	0.2	1.1	4.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	25.1	25.9	0.0	26.0	28.3	16.0	11.2	29.7	16.3	12.7
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		332			65			1117			1121	
Approach Delay, s/veh		24.6			25.9			16.9			16.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	30.4		10.1	9.5	29.4		13.0				
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0				
Max Green Setting (Gmax), s	12.0	35.7		20.0	12.0	35.7		20.0				
Max Q Clear Time (g_c+I1), s	4.7	16.3		3.2	5.0	15.1		6.2				
Green Ext Time (p_c), s	0.0	8.8		0.1	0.0	8.8		0.5				

Intersection Summary			
HCM 6th Ctrl Delay			18.1
HCM 6th LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	9	8	1	5	10
Future Volume (veh/h)	1	9	8	1	5	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	9	8	1	5	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	34	30	80	67	15	675
Arrive On Green	0.02	0.02	0.04	0.04	0.01	0.36
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	1	9	8	1	5	11
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	0.0	0.1	0.1	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.1	0.1	0.0	0.0	0.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	34	30	80	67	15	675
V/C Ratio(X)	0.03	0.30	0.10	0.01	0.34	0.02
Avail Cap(c_a), veh/h	2320	2064	2552	2163	773	3944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.8	7.8	7.4	7.4	8.0	3.3
Incr Delay (d2), s/veh	0.3	5.4	0.5	0.1	13.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.1	13.2	8.0	7.5	21.1	3.3
LnGrp LOS	A	B	A	A	C	A
Approach Vol, veh/h	10		9			16
Approach Delay, s/veh	12.7		7.9			8.9
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.1	5.7				10.8	5.3
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	7.0	22.0				34.0	21.0
Max Q Clear Time (g_c+I1), s	2.0	2.1				2.1	2.1
Green Ext Time (p_c), s	0.0	0.0				0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	943	45	112	970	41	117	29	25	4	29	2
Future Volume (veh/h)	55	943	45	112	970	41	117	29	25	4	29	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	993	47	118	1021	43	77	95	26	4	31	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	1436	641	153	1599	713	162	170	144	7	51	3
Arrive On Green	0.04	0.40	0.40	0.09	0.45	0.45	0.09	0.09	0.09	0.03	0.03	0.03
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	199	1544	100
Grp Volume(v), veh/h	58	993	47	118	1021	43	77	95	26	37	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1842	0	0
Q Serve(g_s), s	1.5	10.6	0.8	3.0	10.2	0.7	1.9	2.2	0.7	0.9	0.0	0.0
Cycle Q Clear(g_c), s	1.5	10.6	0.8	3.0	10.2	0.7	1.9	2.2	0.7	0.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.11		0.05
Lane Grp Cap(c), veh/h	71	1436	641	153	1599	713	162	170	144	60	0	0
V/C Ratio(X)	0.81	0.69	0.07	0.77	0.64	0.06	0.47	0.56	0.18	0.61	0.00	0.00
Avail Cap(c_a), veh/h	466	2038	909	466	2038	909	583	612	518	563	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.8	11.3	8.4	20.5	9.7	7.1	19.8	20.0	19.3	21.9	0.0	0.0
Incr Delay (d2), s/veh	8.0	0.9	0.1	3.1	0.6	0.0	0.8	1.1	0.2	3.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.9	0.2	1.2	2.6	0.2	0.8	0.9	0.2	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	12.2	8.5	23.6	10.3	7.2	20.6	21.0	19.5	25.6	0.0	0.0
LnGrp LOS	C	B	A	C	B	A	C	C	B	C	A	A
Approach Vol, veh/h		1098			1182			198			37	
Approach Delay, s/veh		12.9			11.5			20.7			25.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		5.5	7.9	24.2		8.2	5.8	26.3				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		14.0	12.0	26.3		15.0	12.0	26.3				
Max Q Clear Time (g_c+I1), s		2.9	5.0	12.6		4.2	3.5	12.2				
Green Ext Time (p_c), s		0.0	0.1	5.9		0.3	0.0	6.2				

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	898	208	121	1089	34	187	37	89	23	27	68
Future Volume (veh/h)	92	898	208	121	1089	34	187	37	89	23	27	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	945	219	127	1146	36	225	0	94	24	28	72
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	1285	573	163	1362	608	371	0	165	138	145	122
Arrive On Green	0.07	0.36	0.36	0.09	0.38	0.38	0.10	0.00	0.10	0.08	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	1781	1870	1585
Grp Volume(v), veh/h	97	945	219	127	1146	36	225	0	94	24	28	72
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1781	1870	1585
Q Serve(g_s), s	2.7	11.6	5.1	3.5	14.7	0.7	3.0	0.0	2.8	0.6	0.7	2.2
Cycle Q Clear(g_c), s	2.7	11.6	5.1	3.5	14.7	0.7	3.0	0.0	2.8	0.6	0.7	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	124	1285	573	163	1362	608	371	0	165	138	145	122
V/C Ratio(X)	0.78	0.74	0.38	0.78	0.84	0.06	0.61	0.00	0.57	0.17	0.19	0.59
Avail Cap(c_a), veh/h	284	1348	601	284	1362	608	569	0	253	558	586	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	13.9	11.9	22.3	14.1	9.7	21.5	0.0	21.4	21.6	21.7	22.3
Incr Delay (d2), s/veh	4.0	2.2	0.6	3.0	5.1	0.1	0.6	0.0	1.1	0.8	0.9	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.8	1.4	1.4	5.2	0.2	1.1	0.0	0.9	0.3	0.3	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	16.2	12.4	25.2	19.2	9.8	22.0	0.0	22.5	22.5	22.6	28.6
LnGrp LOS	C	B	B	C	B	A	C	A	C	C	C	C
Approach Vol, veh/h		1261			1309			319			124	
Approach Delay, s/veh		16.3			19.5			22.2			26.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		9.2	8.6	23.8		8.5	7.5	24.9				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.6	4.0	5.7				
Max Green Setting (Gmax), s		8.0	8.0	19.0		15.7	8.0	19.0				
Max Q Clear Time (g_c+I1), s		5.0	5.5	13.6		4.2	4.7	16.7				
Green Ext Time (p_c), s		0.3	0.0	4.5		0.5	0.0	2.1				

Intersection Summary	
HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	884	99	48	790	4	159	33	8	3	20	82
Future Volume (veh/h)	98	884	99	48	790	4	159	33	8	3	20	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	931	104	51	832	4	167	35	8	3	21	86
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	1331	594	62	1191	531	230	48	246	18	129	126
Arrive On Green	0.07	0.37	0.37	0.03	0.34	0.34	0.16	0.16	0.16	0.08	0.08	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1485	311	1585	232	1626	1585
Grp Volume(v), veh/h	103	931	104	51	832	4	202	0	8	24	0	86
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1796	0	1585	1859	0	1585
Q Serve(g_s), s	2.7	10.6	2.1	1.4	9.7	0.1	5.1	0.0	0.2	0.6	0.0	2.5
Cycle Q Clear(g_c), s	2.7	10.6	2.1	1.4	9.7	0.1	5.1	0.0	0.2	0.6	0.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	0.83		1.00	0.12		1.00
Lane Grp Cap(c), veh/h	132	1331	594	62	1191	531	279	0	246	147	0	126
V/C Ratio(X)	0.78	0.70	0.18	0.82	0.70	0.01	0.72	0.00	0.03	0.16	0.00	0.68
Avail Cap(c_a), veh/h	298	1414	631	298	1265	564	828	0	730	857	0	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	12.6	10.0	22.9	13.8	10.6	19.2	0.0	17.1	20.5	0.0	21.4
Incr Delay (d2), s/veh	3.7	1.7	0.2	9.7	1.9	0.0	4.3	0.0	0.1	0.6	0.0	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.4	0.6	0.7	3.3	0.0	2.3	0.0	0.1	0.3	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.4	14.4	10.2	32.6	15.7	10.6	23.5	0.0	17.2	21.1	0.0	29.1
LnGrp LOS	C	B	B	C	B	B	C	A	B	C	A	C
Approach Vol, veh/h		1138			887			210			110	
Approach Delay, s/veh		15.0			16.6			23.2			27.3	
Approach LOS		B			B			C			C	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		7.8	5.7	22.9		11.4	7.5	21.0
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	4.0	5.0
Max Green Setting (Gmax), s		22.0	8.0	19.0		22.0	8.0	17.0
Max Q Clear Time (g_c+I1), s		4.5	3.4	12.6		7.1	4.7	11.7
Green Ext Time (p_c), s		0.4	0.0	5.3		0.8	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	499	386	31	391	43	332	58	32	64	55	36
Future Volume (veh/h)	28	499	386	31	391	43	332	58	32	64	55	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	29	525	406	33	412	45	393	0	34	67	58	38
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	1090	795	40	710	317	695	0	309	96	83	156
Arrive On Green	0.11	0.31	0.31	0.02	0.20	0.20	0.20	0.00	0.20	0.10	0.10	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	3563	0	1585	976	845	1585
Grp Volume(v), veh/h	29	525	406	33	412	45	393	0	34	125	0	38
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1585	1822	0	1585
Q Serve(g_s), s	0.7	5.4	7.7	0.8	4.7	1.1	4.5	0.0	0.8	3.0	0.0	1.0
Cycle Q Clear(g_c), s	0.7	5.4	7.7	0.8	4.7	1.1	4.5	0.0	0.8	3.0	0.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.54		1.00
Lane Grp Cap(c), veh/h	191	1090	795	40	710	317	695	0	309	179	0	156
V/C Ratio(X)	0.15	0.48	0.51	0.82	0.58	0.14	0.57	0.00	0.11	0.70	0.00	0.24
Avail Cap(c_a), veh/h	316	1420	942	316	1341	598	1898	0	844	323	0	281
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.2	12.7	7.5	21.9	16.3	14.8	16.4	0.0	14.9	19.7	0.0	18.8
Incr Delay (d2), s/veh	0.1	0.5	0.8	14.2	1.2	0.3	0.9	0.0	0.2	1.8	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	3.1	0.5	1.7	0.3	1.7	0.0	0.2	1.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	13.2	8.3	36.1	17.5	15.2	17.3	0.0	15.1	21.5	0.0	19.1
LnGrp LOS	B	B	A	D	B	B	B	A	B	C	A	B
Approach Vol, veh/h		960			490			427			163	
Approach Delay, s/veh		11.3			18.5			17.1			20.9	
Approach LOS		B			B			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.8	5.0	18.8		8.4	9.8	14.0				
Change Period (Y+Rc), s		4.0	4.0	5.0		4.0	5.0	* 5				
Max Green Setting (Gmax), s		24.0	8.0	18.0		8.0	8.0	* 17				
Max Q Clear Time (g_c+I1), s		6.5	2.8	9.7		5.0	2.7	6.7				
Green Ext Time (p_c), s		2.3	0.0	4.1		0.1	0.0	2.3				

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	232	16	44	18	7	4	56	984	8	7	809	186
Future Volume (veh/h)	232	16	44	18	7	4	56	984	8	7	809	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1864	1864	1864	1870	1870	1870	1776	1776	1776	2027	2027	2027
Adj Flow Rate, veh/h	244	17	46	19	7	4	59	1036	8	7	852	196
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	67	182	175	40	23	92	2093	648	18	2139	662
Arrive On Green	0.17	0.15	0.15	0.05	0.04	0.04	0.05	0.43	0.43	0.01	0.39	0.39
Sat Flow, veh/h	1776	443	1200	3456	1116	638	1692	4849	1502	1931	5535	1714
Grp Volume(v), veh/h	244	0	63	19	0	11	59	1036	8	7	852	196
Grp Sat Flow(s),veh/h/ln	1776	0	1643	1728	0	1753	1692	1616	1502	1931	1845	1714
Q Serve(g_s), s	7.2	0.0	1.8	0.3	0.0	0.3	1.8	8.4	0.2	0.2	6.0	1.7
Cycle Q Clear(g_c), s	7.2	0.0	1.8	0.3	0.0	0.3	1.8	8.4	0.2	0.2	6.0	1.7
Prop In Lane	1.00		0.73	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	0	250	175	0	63	92	2093	648	18	2139	662
V/C Ratio(X)	0.83	0.00	0.25	0.11	0.00	0.17	0.64	0.50	0.01	0.39	0.40	0.30
Avail Cap(c_a), veh/h	328	0	607	703	0	723	250	2213	686	285	2527	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	20.2	24.5	0.0	25.3	25.1	11.1	8.8	26.7	12.0	1.7
Incr Delay (d2), s/veh	13.1	0.0	0.4	0.1	0.0	0.5	2.8	0.4	0.0	5.1	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.7	0.1	0.0	0.1	0.7	2.1	0.0	0.1	1.8	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	0.0	20.7	24.6	0.0	25.8	27.8	11.5	8.8	31.8	12.3	2.2
LnGrp LOS	C	A	C	C	A	C	C	B	A	C	B	A
Approach Vol, veh/h		307			30			1103			1055	
Approach Delay, s/veh		32.0			25.0			12.3			10.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	29.4	6.7	13.5	6.9	26.9	14.3	6.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.3	4.0	6.0	5.3	* 4
Max Green Setting (Gmax), s	8.0	24.7	11.0	20.0	8.0	24.7	10.0	* 22
Max Q Clear Time (g_c+I1), s	2.2	10.4	2.3	3.8	3.8	8.0	9.2	2.3
Green Ext Time (p_c), s	0.0	12.0	0.0	0.3	0.0	12.9	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	27	25	16	14	16	93	169	0	32	177	177
Future Volume (veh/h)	25	27	25	16	14	16	93	169	0	32	177	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	28	26	17	15	17	98	178	0	34	186	186
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	39	36	20	18	20	122	1236	0	44	261	261
Arrive On Green	0.06	0.06	0.06	0.03	0.03	0.03	0.07	0.35	0.00	0.02	0.30	0.30
Sat Flow, veh/h	566	609	566	601	530	601	1781	3647	0	1781	858	858
Grp Volume(v), veh/h	80	0	0	49	0	0	98	178	0	34	0	372
Grp Sat Flow(s),veh/h/ln	1740	0	0	1732	0	0	1781	1777	0	1781	0	1716
Q Serve(g_s), s	1.4	0.0	0.0	0.9	0.0	0.0	1.7	1.1	0.0	0.6	0.0	6.2
Cycle Q Clear(g_c), s	1.4	0.0	0.0	0.9	0.0	0.0	1.7	1.1	0.0	0.6	0.0	6.2
Prop In Lane	0.32		0.32	0.35		0.35	1.00		0.00	1.00		0.50
Lane Grp Cap(c), veh/h	111	0	0	57	0	0	122	1236	0	44	0	521
V/C Ratio(X)	0.72	0.00	0.00	0.85	0.00	0.00	0.80	0.14	0.00	0.78	0.00	0.71
Avail Cap(c_a), veh/h	870	0	0	433	0	0	389	2109	0	445	0	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	0.0	15.4	0.0	0.0	14.7	7.2	0.0	15.5	0.0	9.9
Incr Delay (d2), s/veh	8.6	0.0	0.0	12.4	0.0	0.0	4.6	0.1	0.0	10.7	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.5	0.0	0.0	0.7	0.3	0.0	0.3	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	0.0	0.0	27.8	0.0	0.0	19.3	7.2	0.0	26.2	0.0	11.7
LnGrp LOS	C	A	A	C	A	A	B	A	A	C	A	B
Approach Vol, veh/h		80			49			276			406	
Approach Delay, s/veh		23.3			27.8			11.5			12.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	15.1		5.1	6.2	13.7		7.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		5.0
Max Green Setting (Gmax), s	8.0	19.0		8.0	7.0	17.0		16.0
Max Q Clear Time (g_c+I1), s	2.6	3.1		2.9	3.7	8.2		3.4
Green Ext Time (p_c), s	0.0	0.9		0.0	0.0	1.6		0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	0	151	10	2	6	221	1755	6	35	1788	151
Future Volume (veh/h)	88	0	151	10	2	6	221	1755	6	35	1788	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	0	7	11	2	0	233	1847	6	37	1882	107
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	0	131	45	8	47	260	2499	8	53	2033	907
Arrive On Green	0.08	0.00	0.08	0.03	0.03	0.00	0.15	0.69	0.69	0.03	0.57	0.57
Sat Flow, veh/h	1781	0	1585	1518	276	1585	1781	3633	12	1781	3554	1585
Grp Volume(v), veh/h	93	0	7	13	0	0	233	903	950	37	1882	107
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1794	0	1585	1781	1777	1868	1781	1777	1585
Q Serve(g_s), s	5.9	0.0	0.5	0.8	0.0	0.0	15.0	37.5	37.6	2.4	56.0	3.6
Cycle Q Clear(g_c), s	5.9	0.0	0.5	0.8	0.0	0.0	15.0	37.5	37.6	2.4	56.0	3.6
Prop In Lane	1.00		1.00	0.85		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	147	0	131	53	0	47	260	1222	1285	53	2033	907
V/C Ratio(X)	0.63	0.00	0.05	0.25	0.00	0.00	0.90	0.74	0.74	0.69	0.93	0.12
Avail Cap(c_a), veh/h	306	0	273	309	0	273	260	1222	1285	123	2083	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	49.2	55.2	0.0	0.0	48.8	11.5	11.5	55.9	22.6	11.4
Incr Delay (d2), s/veh	1.7	0.0	0.1	0.9	0.0	0.0	29.8	2.6	2.5	5.9	7.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.2	0.4	0.0	0.0	8.6	12.9	13.5	1.1	22.7	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.3	0.0	49.2	56.1	0.0	0.0	78.7	14.2	14.1	61.7	30.4	11.5
LnGrp LOS	D	A	D	E	A	A	E	B	B	E	C	B
Approach Vol, veh/h		100			13			2086			2026	
Approach Delay, s/veh		53.0			56.1			21.3			30.0	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	86.0		8.3	20.9	72.5		14.5
Change Period (Y+Rc), s	4.0	6.0		4.9	4.0	6.0		4.9
Max Green Setting (Gmax), s	8.0	77.2		20.0	17.0	68.2		20.0
Max Q Clear Time (g_c+I1), s	4.4	39.6		2.8	17.0	58.0		7.9
Green Ext Time (p_c), s	0.0	21.2		0.0	0.0	8.5		0.1

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	378	8	276	17	16	25	210	1577	8	5	1371	581
Future Volume (veh/h)	378	8	276	17	16	25	210	1577	8	5	1371	581
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	404	0	291	18	17	26	221	1660	8	5	1443	612
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	782	0	348	31	29	53	268	2081	10	7	1777	792
Arrive On Green	0.22	0.00	0.22	0.03	0.03	0.03	0.08	0.57	0.57	0.00	0.50	0.50
Sat Flow, veh/h	3563	0	1585	938	886	1585	3456	3627	17	1781	3554	1585
Grp Volume(v), veh/h	404	0	291	35	0	26	221	813	855	5	1443	612
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1823	0	1585	1728	1777	1867	1781	1777	1585
Q Serve(g_s), s	10.3	0.0	18.1	1.9	0.0	1.7	6.5	37.1	37.1	0.3	35.2	32.4
Cycle Q Clear(g_c), s	10.3	0.0	18.1	1.9	0.0	1.7	6.5	37.1	37.1	0.3	35.2	32.4
Prop In Lane	1.00		1.00	0.51		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	782	0	348	60	0	53	268	1019	1071	7	1777	792
V/C Ratio(X)	0.52	0.00	0.84	0.58	0.00	0.50	0.82	0.80	0.80	0.72	0.81	0.77
Avail Cap(c_a), veh/h	1037	0	461	531	0	461	268	1019	1071	138	1845	823
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	0.0	38.5	49.1	0.0	49.0	46.8	17.3	17.3	51.3	21.7	21.0
Incr Delay (d2), s/veh	0.5	0.0	9.8	8.5	0.0	7.0	17.4	5.2	5.0	41.0	3.3	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	8.0	1.0	0.0	0.8	3.4	14.8	15.5	0.2	14.1	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	0.0	48.3	57.6	0.0	56.0	64.2	22.5	22.3	92.3	25.0	26.4
LnGrp LOS	D	A	D	E	A	E	E	C	C	F	C	C
Approach Vol, veh/h		695			61			1889			2060	
Approach Delay, s/veh		41.1			56.9			27.3			25.5	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	64.6		7.4	12.0	57.0		26.6
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		4.0
Max Green Setting (Gmax), s	8.0	54.5		30.0	8.0	53.5		30.0
Max Q Clear Time (g_c+I1), s	2.3	39.1		3.9	8.5	37.2		20.1
Green Ext Time (p_c), s	0.0	12.4		0.2	0.0	14.3		2.5

Intersection Summary	
HCM 6th Ctrl Delay	28.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	752	790	971	404	996	726
Future Volume (veh/h)	752	790	971	404	996	726
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1034	526	1022	180	1048	764
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1069	951	992	442	1037	2229
Arrive On Green	0.30	0.30	0.28	0.28	0.30	0.63
Sat Flow, veh/h	3563	1585	3647	1585	3456	3647
Grp Volume(v), veh/h	1034	526	1022	180	1048	764
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1728	1777
Q Serve(g_s), s	31.5	0.0	30.7	10.2	33.0	11.2
Cycle Q Clear(g_c), s	31.5	0.0	30.7	10.2	33.0	11.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1069	951	992	442	1037	2229
V/C Ratio(X)	0.97	0.55	1.03	0.41	1.01	0.34
Avail Cap(c_a), veh/h	1069	951	992	442	1037	2229
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	13.2	39.7	32.2	38.5	9.7
Incr Delay (d2), s/veh	19.9	0.4	36.7	0.8	30.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.4	16.2	18.2	4.0	18.1	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.9	13.6	76.3	33.1	69.2	9.8
LnGrp LOS	E	B	F	C	F	A
Approach Vol, veh/h	1560		1202			1812
Approach Delay, s/veh	43.0		69.8			44.1
Approach LOS	D		E			D

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			73.0		37.0	37.0	36.0
Change Period (Y+Rc), s			4.0		4.0	4.0	5.3
Max Green Setting (Gmax), s			69.0		33.0	33.0	30.7
Max Q Clear Time (g_c+I1), s			13.2		33.5	35.0	32.7
Green Ext Time (p_c), s			5.3		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	98	298	703	10	260	809
Future Volume (veh/h)	98	298	703	10	260	809
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	314	740	11	274	852
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	801	367	1815	563	328	3096
Arrive On Green	0.23	0.23	0.36	0.36	0.18	0.61
Sat Flow, veh/h	3456	1585	5274	1585	1781	5274
Grp Volume(v), veh/h	103	314	740	11	274	852
Grp Sat Flow(s),veh/h/ln	1728	1585	1702	1585	1781	1702
Q Serve(g_s), s	1.4	11.4	6.5	0.3	8.9	4.7
Cycle Q Clear(g_c), s	1.4	11.4	6.5	0.3	8.9	4.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	801	367	1815	563	328	3096
V/C Ratio(X)	0.13	0.85	0.41	0.02	0.84	0.28
Avail Cap(c_a), veh/h	1154	529	2582	802	476	4287
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	22.0	14.6	12.5	23.6	5.6
Incr Delay (d2), s/veh	0.0	6.6	0.3	0.0	5.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.4	2.0	0.1	3.7	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.2	28.6	14.8	12.6	29.3	5.7
LnGrp LOS	B	C	B	B	C	A
Approach Vol, veh/h	417		751			1126
Approach Delay, s/veh	26.1		14.8			11.4
Approach LOS	C		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.0	27.0				42.0	17.9
Change Period (Y+Rc), s	4.0	5.7				5.7	4.0
Max Green Setting (Gmax), s	16.0	30.3				50.3	20.0
Max Q Clear Time (g_c+I1), s	10.9	8.5				6.7	13.4
Green Ext Time (p_c), s	0.3	12.8				22.5	0.5

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	568	75	179	785	146	170	21	110	214	6	75
Future Volume (veh/h)	126	568	75	179	785	146	170	21	110	214	6	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	598	79	188	826	154	179	22	116	229	0	79
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	1128	147	232	1316	408	266	33	264	593	0	264
Arrive On Green	0.12	0.25	0.25	0.13	0.26	0.26	0.17	0.17	0.17	0.17	0.00	0.17
Sat Flow, veh/h	1781	4571	596	1781	5106	1585	1595	196	1585	3563	0	1585
Grp Volume(v), veh/h	133	443	234	188	826	154	201	0	116	229	0	79
Grp Sat Flow(s),veh/h/ln	1781	1702	1763	1781	1702	1585	1791	0	1585	1781	0	1585
Q Serve(g_s), s	4.2	6.7	6.9	6.1	8.6	4.8	6.3	0.0	3.9	3.4	0.0	2.6
Cycle Q Clear(g_c), s	4.2	6.7	6.9	6.1	8.6	4.8	6.3	0.0	3.9	3.4	0.0	2.6
Prop In Lane	1.00		0.34	1.00		1.00	0.89		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	840	435	232	1316	408	298	0	264	593	0	264
V/C Ratio(X)	0.63	0.53	0.54	0.81	0.63	0.38	0.67	0.00	0.44	0.39	0.00	0.30
Avail Cap(c_a), veh/h	597	1751	907	239	1600	497	420	0	372	597	0	266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.0	19.5	19.5	25.2	19.6	18.2	23.3	0.0	22.4	22.2	0.0	21.8
Incr Delay (d2), s/veh	1.1	1.1	2.1	16.9	1.1	1.2	1.0	0.0	0.4	0.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.5	2.7	3.4	3.1	1.7	2.6	0.0	1.4	1.4	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	20.5	21.6	42.2	20.7	19.4	24.3	0.0	22.8	22.3	0.0	22.0
LnGrp LOS	C	C	C	D	C	B	C	A	C	C	A	C
Approach Vol, veh/h		810			1168			317			308	
Approach Delay, s/veh		21.8			24.0			23.8			22.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.8	20.0		13.9	11.1	20.7		13.9
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	30.7		10.0	20.0	18.7		14.0
Max Q Clear Time (g_c+I1), s	8.1	8.9		5.4	6.2	10.6		8.3
Green Ext Time (p_c), s	0.0	5.9		0.4	0.2	4.7		0.4

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	651	501	202	655	213	496	700	55	107	679	263
Future Volume (veh/h)	221	651	501	202	655	213	496	700	55	107	679	263
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	2145	2145	2145
Adj Flow Rate, veh/h	233	685	167	213	689	85	522	737	22	113	715	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	768	343	234	739	330	541	2195	681	143	1151	357
Arrive On Green	0.14	0.22	0.22	0.13	0.21	0.21	0.30	0.43	0.43	0.07	0.20	0.20
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	5106	1585	2043	5857	1818
Grp Volume(v), veh/h	233	685	167	213	689	85	522	737	22	113	715	61
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1702	1585	2043	1952	1818
Q Serve(g_s), s	15.8	22.8	11.3	14.4	23.2	5.5	35.2	11.7	1.0	6.6	13.6	3.4
Cycle Q Clear(g_c), s	15.8	22.8	11.3	14.4	23.2	5.5	35.2	11.7	1.0	6.6	13.6	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	768	343	234	739	330	541	2195	681	143	1151	357
V/C Ratio(X)	0.94	0.89	0.49	0.91	0.93	0.26	0.97	0.34	0.03	0.79	0.62	0.17
Avail Cap(c_a), veh/h	248	781	348	234	740	330	541	2262	702	251	1537	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	46.4	41.9	52.3	47.4	40.4	41.8	23.1	20.1	55.8	44.8	40.7
Incr Delay (d2), s/veh	39.9	13.1	2.2	35.1	18.8	0.6	29.9	0.1	0.0	3.6	0.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	11.4	4.5	8.7	12.2	2.2	19.4	4.6	0.4	3.5	6.6	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.9	59.5	44.0	87.4	66.3	41.1	71.7	23.3	20.1	59.4	45.7	41.1
LnGrp LOS	F	E	D	F	E	D	E	C	C	E	D	D
Approach Vol, veh/h		1085			987			1281			889	
Approach Delay, s/veh		64.1			68.7			43.0			47.1	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	31.7	41.0	29.3	21.0	30.7	12.5	57.7
Change Period (Y+Rc), s	4.0	* 5.3	4.0	5.3	4.0	5.3	4.0	5.3
Max Green Setting (Gmax), s	16.0	* 27	37.0	32.0	17.0	25.4	15.0	54.0
Max Q Clear Time (g_c+I1), s	16.4	24.8	37.2	15.6	17.8	25.2	8.6	13.7
Green Ext Time (p_c), s	0.0	1.5	0.0	8.3	0.0	0.1	0.1	13.3

Intersection Summary	
HCM 6th Ctrl Delay	55.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	22	83	149	16	340	73	803	34	243	991	73
Future Volume (veh/h)	75	22	83	149	16	340	73	803	34	243	991	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1988	1988	1988	1870	1945	1870	2145	2231	2145
Adj Flow Rate, veh/h	79	23	87	157	17	358	77	845	36	256	1043	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	49	191	363	39	608	116	1014	43	305	2225	664
Arrive On Green	0.12	0.12	0.12	0.21	0.21	0.21	0.07	0.28	0.28	0.15	0.37	0.37
Sat Flow, veh/h	1395	406	1585	1716	186	1682	1781	3609	154	2043	6091	1818
Grp Volume(v), veh/h	102	0	87	174	0	358	77	433	448	256	1043	77
Grp Sat Flow(s),veh/h/ln	1801	0	1585	1902	0	1682	1781	1848	1915	2043	2030	1818
Q Serve(g_s), s	3.8	0.0	3.7	5.8	0.0	12.6	3.1	16.0	16.0	8.9	9.6	2.0
Cycle Q Clear(g_c), s	3.8	0.0	3.7	5.8	0.0	12.6	3.1	16.0	16.0	8.9	9.6	2.0
Prop In Lane	0.77		1.00	0.90		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	218	0	191	402	0	608	116	519	538	305	2225	664
V/C Ratio(X)	0.47	0.00	0.45	0.43	0.00	0.59	0.66	0.83	0.83	0.84	0.47	0.12
Avail Cap(c_a), veh/h	222	0	196	540	0	730	244	532	552	336	2225	664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	0.0	29.8	24.9	0.0	18.9	33.3	24.6	24.6	30.1	17.7	15.3
Incr Delay (d2), s/veh	0.6	0.0	0.6	0.3	0.0	0.3	2.4	12.1	11.7	14.3	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.4	2.5	0.0	4.4	1.3	8.1	8.3	5.3	4.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	0.0	30.4	25.2	0.0	19.2	35.7	36.7	36.3	44.5	18.1	15.5
LnGrp LOS	C	A	C	C	A	B	D	D	D	D	B	B
Approach Vol, veh/h		189			532			958			1376	
Approach Delay, s/veh		30.4			21.2			36.4			22.8	
Approach LOS		C			C			D			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.8	8.7	31.9		19.4	14.9	25.8				
Change Period (Y+Rc), s		4.0	4.0	5.3		4.0	4.0	5.3				
Max Green Setting (Gmax), s		9.0	10.0	23.0		20.7	12.0	21.0				
Max Q Clear Time (g_c+I1), s		5.8	5.1	11.6		14.6	10.9	18.0				
Green Ext Time (p_c), s		0.1	0.0	9.3		0.8	0.1	2.4				

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	36	38	957	14	136	933
Future Volume (veh/h)	36	38	957	14	136	933
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	40	1007	15	143	982
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	187	1425	21	256	2299
Arrive On Green	0.12	0.12	0.40	0.40	0.14	0.65
Sat Flow, veh/h	1781	1585	3678	53	1781	3647
Grp Volume(v), veh/h	38	40	499	523	143	982
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1861	1781	1777
Q Serve(g_s), s	0.7	0.9	8.9	8.9	2.8	5.1
Cycle Q Clear(g_c), s	0.7	0.9	8.9	8.9	2.8	5.1
Prop In Lane	1.00	1.00		0.03	1.00	
Lane Grp Cap(c), veh/h	211	187	706	740	256	2299
V/C Ratio(X)	0.18	0.21	0.71	0.71	0.56	0.43
Avail Cap(c_a), veh/h	950	845	938	982	376	2898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	15.1	9.6	9.6	15.1	3.3
Incr Delay (d2), s/veh	0.2	0.2	2.1	2.0	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	2.5	2.6	0.9	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.2	15.3	11.6	11.5	15.8	3.4
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	78		1022			1125
Approach Delay, s/veh	15.3		11.6			5.0
Approach LOS	B		B			A

Timer - Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				29.4		8.5	9.4	20.0
Change Period (Y+Rc), s				4.9		4.0	4.0	* 4.9
Max Green Setting (Gmax), s				30.9		20.2	8.0	* 20
Max Q Clear Time (g_c+I1), s				7.1		2.9	4.8	10.9
Green Ext Time (p_c), s				4.7		0.1	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	18	0	25	0	1715	27	22	1879	0
Future Volume (veh/h)	0	0	0	18	0	25	0	1715	27	22	1879	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	19	0	26	0	1805	28	23	1978	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	3	3	63	0	56	3	2601	40	29	2882	1286
Arrive On Green	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.73	0.73	0.02	0.81	0.00
Sat Flow, veh/h	0	1870	1585	1781	0	1585	1781	3582	55	1781	3554	1585
Grp Volume(v), veh/h	0	0	0	19	0	26	0	894	939	23	1978	0
Grp Sat Flow(s),veh/h/ln	0	1870	1585	1781	0	1585	1781	1777	1860	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.9	0.0	16.1	16.2	0.7	13.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.6	0.0	0.9	0.0	16.1	16.2	0.7	13.8	0.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	0	3	3	63	0	56	3	1290	1351	29	2882	1286
V/C Ratio(X)	0.00	0.00	0.00	0.30	0.00	0.46	0.00	0.69	0.70	0.81	0.69	0.00
Avail Cap(c_a), veh/h	0	774	656	737	0	656	338	1442	1510	246	2882	1286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	27.3	0.0	27.4	0.0	4.4	4.4	28.5	2.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	2.2	0.0	2.1	2.1	17.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.4	0.0	2.7	2.8	0.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	28.2	0.0	29.6	0.0	6.5	6.5	46.0	3.3	0.0
LnGrp LOS	A	A	A	C	A	C	A	A	A	D	A	A
Approach Vol, veh/h		0			45			1833			2001	
Approach Delay, s/veh		0.0			29.0			6.5			3.8	
Approach LOS					C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.9	47.0		6.1	0.0	52.0		0.0
Change Period (Y+Rc), s	4.0	4.9		4.0	5.0	4.9		4.0
Max Green Setting (Gmax), s	8.0	47.1		24.0	11.0	38.1		24.0
Max Q Clear Time (g_c+I1), s	2.7	18.2		2.9	0.0	15.8		0.0
Green Ext Time (p_c), s	0.0	23.9		0.0	0.0	19.4		0.0

Intersection Summary		
HCM 6th Ctrl Delay		5.4
HCM 6th LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	24	40	49	22	67	27	1661	38	92	1834	37
Future Volume (veh/h)	67	24	40	49	22	67	27	1661	38	92	1834	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	25	42	52	23	71	28	1748	40	97	1931	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	54	91	154	34	105	70	2001	46	126	2120	43
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.04	0.56	0.56	0.07	0.60	0.60
Sat Flow, veh/h	1781	627	1054	1781	392	1211	1781	3551	81	1781	3562	72
Grp Volume(v), veh/h	71	0	67	52	0	94	28	872	916	97	960	1010
Grp Sat Flow(s),veh/h/ln	1781	0	1681	1781	0	1603	1781	1777	1855	1781	1777	1857
Q Serve(g_s), s	3.4	0.0	3.4	2.5	0.0	5.1	1.4	37.8	38.2	4.8	42.7	43.4
Cycle Q Clear(g_c), s	3.4	0.0	3.4	2.5	0.0	5.1	1.4	37.8	38.2	4.8	42.7	43.4
Prop In Lane	1.00		0.63	1.00		0.76	1.00		0.04	1.00		0.04
Lane Grp Cap(c), veh/h	154	0	145	154	0	139	70	1001	1045	126	1058	1105
V/C Ratio(X)	0.46	0.00	0.46	0.34	0.00	0.68	0.40	0.87	0.88	0.77	0.91	0.91
Avail Cap(c_a), veh/h	317	0	299	317	0	285	159	1062	1109	159	1070	1118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	0.0	39.1	38.6	0.0	39.8	42.1	16.8	16.9	41.0	16.0	16.1
Incr Delay (d2), s/veh	1.8	0.0	2.0	1.1	0.0	4.8	1.4	8.1	8.2	12.0	11.2	11.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.5	1.1	0.0	2.2	0.6	15.0	15.8	2.4	17.1	18.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.9	0.0	41.0	39.7	0.0	44.6	43.5	25.0	25.1	53.0	27.2	27.7
LnGrp LOS	D	A	D	D	A	D	D	C	C	D	C	C
Approach Vol, veh/h		138			146			1816			2067	
Approach Delay, s/veh		41.0			42.9			25.3			28.6	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	58.8		11.7	10.4	55.9		11.8
Change Period (Y+Rc), s	4.0	* 5.3		4.0	4.0	5.3		4.0
Max Green Setting (Gmax), s	8.0	* 54		16.0	8.0	53.7		16.0
Max Q Clear Time (g_c+I1), s	3.4	45.4		5.4	6.8	40.2		7.1
Green Ext Time (p_c), s	0.0	7.2		0.3	0.0	10.4		0.3

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	21	11	102	29	51	3	2095	12	46	2481	57
Future Volume (veh/h)	45	21	11	102	29	51	3	2095	12	46	2481	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1945	1870	1870	1945	1870	1870	1841	1841	1870	1841	1841
Adj Flow Rate, veh/h	47	22	12	107	31	54	3	2205	13	48	2612	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	4	4	2	4	4
Cap, veh/h	59	28	15	120	35	60	4	3468	20	62	3564	81
Arrive On Green	0.06	0.06	0.06	0.12	0.12	0.12	0.00	1.00	1.00	0.03	0.71	0.71
Sat Flow, veh/h	1067	500	272	1004	291	506	1781	5155	30	1781	5054	115
Grp Volume(v), veh/h	81	0	0	192	0	0	3	1433	785	48	1727	945
Grp Sat Flow(s),veh/h/ln	1839	0	0	1801	0	0	1781	1675	1835	1781	1675	1820
Q Serve(g_s), s	6.5	0.0	0.0	15.8	0.0	0.0	0.3	0.0	0.0	4.0	47.0	47.8
Cycle Q Clear(g_c), s	6.5	0.0	0.0	15.8	0.0	0.0	0.3	0.0	0.0	4.0	47.0	47.8
Prop In Lane	0.58		0.15	0.56		0.28	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	101	0	0	215	0	0	4	2254	1235	62	2362	1283
V/C Ratio(X)	0.80	0.00	0.00	0.89	0.00	0.00	0.72	0.64	0.64	0.78	0.73	0.74
Avail Cap(c_a), veh/h	123	0	0	252	0	0	36	2254	1235	107	2362	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.40	0.40	0.40	0.39	0.39	0.39
Uniform Delay (d), s/veh	70.0	0.0	0.0	65.1	0.0	0.0	74.6	0.0	0.0	71.8	13.5	13.6
Incr Delay (d2), s/veh	21.5	0.0	0.0	25.6	0.0	0.0	28.5	0.6	1.0	3.1	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.0	8.8	0.0	0.0	0.1	0.2	0.3	1.9	16.1	18.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.5	0.0	0.0	90.7	0.0	0.0	103.1	0.6	1.0	74.9	13.9	14.5
LnGrp LOS	F	A	A	F	A	A	F	A	A	E	B	B
Approach Vol, veh/h		81			192			2221			2720	
Approach Delay, s/veh		91.5			90.7			0.9			15.2	
Approach LOS		F			F			A			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.3	9.2	106.6		21.9	4.4	111.5				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7				
Max Green Setting (Gmax), s		10.0	9.0	92.3		21.0	3.0	98.3				
Max Q Clear Time (g_c+I1), s		8.5	6.0	2.0		17.8	2.3	49.8				
Green Ext Time (p_c), s		0.0	0.0	82.3		0.1	0.0	47.8				

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	0	184	376	0	14	39	2143	48	21	2439	141
Future Volume (vph)	21	0	184	376	0	14	39	2143	48	21	2439	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Lane Util. Factor	1.00		1.00	1.00		1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00		0.98	1.00		0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00	
Frt	1.00		0.85	1.00		0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770		1553	1770		1553	1770	5064		1770	5032	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770		1553	1770		1553	1770	5064		1770	5032	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	22	0	194	396	0	15	41	2256	51	22	2567	148
RTOR Reduction (vph)	0	0	150	0	0	12	0	1	0	0	4	0
Lane Group Flow (vph)	22	0	44	396	0	3	41	2306	0	22	2711	0
Confl. Peds. (#/hr)	4		4	4		4	4		4	4		4
Confl. Bikes (#/hr)			2			2			2			2
Turn Type	Prot		Perm	Prot		Perm	Prot	NA		Prot	NA	
Protected Phases	6			5			7	4		3	8	
Permitted Phases			6			5						
Actuated Green, G (s)	34.0		34.0	34.0		34.0	6.0	77.0		4.3	75.3	
Effective Green, g (s)	34.0		34.0	34.0		34.0	6.0	77.0		4.3	75.3	
Actuated g/C Ratio	0.23		0.23	0.23		0.23	0.04	0.51		0.03	0.50	
Clearance Time (s)	4.0		4.0	4.0		4.0	4.0	5.7		4.0	5.7	
Vehicle Extension (s)	2.0		2.0	2.0		2.0	2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	401		352	401		352	70	2599		50	2526	
v/s Ratio Prot	0.01			c0.22			c0.02	0.46		0.01	c0.54	
v/s Ratio Perm			0.03			0.00						
v/c Ratio	0.05		0.12	0.99		0.01	0.59	0.89		0.44	1.07	
Uniform Delay, d1	45.4		46.2	57.8		45.0	70.8	32.6		71.7	37.4	
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00		1.12	0.64	
Incremental Delay, d2	0.0		0.1	41.1		0.0	7.8	5.0		1.5	38.8	
Delay (s)	45.4		46.2	98.9		45.0	78.6	37.6		81.6	62.8	
Level of Service	D		D	F		D	E	D		F	E	
Approach Delay (s)		46.1			97.0			38.3			62.9	
Approach LOS		D			F			D			E	

Intersection Summary			
HCM 2000 Control Delay	54.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	94.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	18	327	343	42	146	38
Future Volume (veh/h)	18	327	343	42	146	38
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	344	361	44	154	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	26	1606	995	444	233	208
Arrive On Green	0.01	0.45	0.28	0.28	0.13	0.13
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	19	344	361	44	154	40
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.3	1.5	2.1	0.5	2.1	0.6
Cycle Q Clear(g_c), s	0.3	1.5	2.1	0.5	2.1	0.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	26	1606	995	444	233	208
V/C Ratio(X)	0.72	0.21	0.36	0.10	0.66	0.19
Avail Cap(c_a), veh/h	1121	6333	3537	1577	1689	1503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	4.2	7.3	6.8	10.5	9.8
Incr Delay (d2), s/veh	12.8	0.1	0.4	0.2	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.5	0.1	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.2	4.3	7.7	6.9	11.7	10.0
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		363	405		194	
Approach Delay, s/veh		5.4	7.6		11.4	
Approach LOS		A	A		B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		17.2		8.2	4.4	12.8
Change Period (Y+Rc), s		5.7		4.9	4.0	5.7
Max Green Setting (Gmax), s		45.3		24.1	16.0	25.3
Max Q Clear Time (g_c+I1), s		3.5		4.1	2.3	4.1
Green Ext Time (p_c), s		3.0		0.4	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	325	503	175	459	46	393	497	236	8	460	117
Future Volume (veh/h)	43	325	503	175	459	46	393	497	236	8	460	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	342	0	184	483	0	414	523	0	8	484	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	529		220	785		464	1494		26	890	
Arrive On Green	0.05	0.15	0.00	0.12	0.22	0.00	0.26	0.42	0.00	0.01	0.17	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	5274	0
Grp Volume(v), veh/h	45	342	0	184	483	0	414	523	0	8	484	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1702	0
Q Serve(g_s), s	1.6	5.9	0.0	6.6	7.9	0.0	14.5	6.5	0.0	0.3	5.6	0.0
Cycle Q Clear(g_c), s	1.6	5.9	0.0	6.6	7.9	0.0	14.5	6.5	0.0	0.3	5.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	92	529		220	785		464	1494		26	890	
V/C Ratio(X)	0.49	0.65		0.84	0.62		0.89	0.35		0.31	0.54	
Avail Cap(c_a), veh/h	220	1096		220	1118		549	1917		220	1811	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.9	26.0	0.0	27.8	22.8	0.0	23.1	12.8	0.0	31.6	24.4	0.0
Incr Delay (d2), s/veh	1.5	2.1	0.0	22.6	1.6	0.0	13.7	0.3	0.0	2.5	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.4	0.0	3.9	3.2	0.0	7.3	2.3	0.0	0.1	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	28.1	0.0	50.4	24.4	0.0	36.8	13.1	0.0	34.1	25.5	0.0
LnGrp LOS	C	C		D	C		D	B		C	C	
Approach Vol, veh/h		387	A		667	A		937	A		492	A
Approach Delay, s/veh		28.5			31.6			23.6			25.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	15.4	20.9	16.6	7.3	20.0	4.9	32.6
Change Period (Y+Rc), s	4.0	5.7	4.0	5.3	4.0	* 5.7	4.0	5.3
Max Green Setting (Gmax), s	8.0	20.0	20.0	23.0	8.0	* 20	8.0	35.0
Max Q Clear Time (g_c+I1), s	8.6	7.9	16.5	7.6	3.6	9.9	2.3	8.5
Green Ext Time (p_c), s	0.0	1.8	0.4	3.7	0.0	2.9	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	21	164	166	37	165	46	806	28	44	1360	21
Future Volume (veh/h)	10	21	164	166	37	165	46	806	28	44	1360	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	22	2	175	39	0	48	848	27	46	1432	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	29	38	199	44		302	2266	72	59	1756	
Arrive On Green	0.02	0.02	0.02	0.14	0.14	0.00	0.17	0.64	0.64	0.03	0.49	0.00
Sat Flow, veh/h	613	1226	1585	1469	327	1585	1781	3515	112	1781	3647	0
Grp Volume(v), veh/h	33	0	2	214	0	0	48	429	446	46	1432	0
Grp Sat Flow(s),veh/h/ln	1840	0	1585	1797	0	1585	1781	1777	1850	1781	1777	0
Q Serve(g_s), s	2.1	0.0	0.1	14.0	0.0	0.0	2.8	13.6	13.6	3.1	41.0	0.0
Cycle Q Clear(g_c), s	2.1	0.0	0.1	14.0	0.0	0.0	2.8	13.6	13.6	3.1	41.0	0.0
Prop In Lane	0.33		1.00	0.82		1.00	1.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	44	0	38	244	0		302	1146	1193	59	1756	
V/C Ratio(X)	0.75	0.00	0.05	0.88	0.00		0.16	0.37	0.37	0.78	0.82	
Avail Cap(c_a), veh/h	186	0	160	316	0		302	1146	1193	119	1756	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.2	0.0	57.2	50.9	0.0	0.0	42.5	10.0	10.0	57.6	25.7	0.0
Incr Delay (d2), s/veh	17.2	0.0	0.4	18.2	0.0	0.0	0.1	0.3	0.3	7.9	4.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.1	7.5	0.0	0.0	1.2	4.8	5.0	1.5	17.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	0.0	57.7	69.1	0.0	0.0	42.6	10.3	10.2	65.4	30.0	0.0
LnGrp LOS	E	A	E	E	A		D	B	B	E	C	
Approach Vol, veh/h		35			214	A		923			1478	A
Approach Delay, s/veh		74.4			69.1			11.9			31.1	
Approach LOS		E			E			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.8	26.1	65.0		21.2	8.0	83.1				
Change Period (Y+Rc), s		4.9	5.7	* 5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		12.1	8.0	* 59		21.1	8.0	59.3				
Max Q Clear Time (g_c+I1), s		4.1	4.8	43.0		16.0	5.1	15.6				
Green Ext Time (p_c), s		0.0	0.0	8.9		0.3	0.0	5.7				

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	2	4	46	4	56	5	837	20	42	1618	14
Future Volume (veh/h)	9	2	4	46	4	56	5	837	20	42	1618	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	2	4	48	4	59	5	881	21	44	1703	15
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	55	7	291	58	3	291	94	2379	57	57	2295	20
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.67	0.67	0.03	0.64	0.64
Sat Flow, veh/h	0	38	1585	0	14	1585	1781	3547	85	1781	3610	32
Grp Volume(v), veh/h	11	0	4	52	0	59	5	441	461	44	838	880
Grp Sat Flow(s),veh/h/ln	38	0	1585	14	0	1585	1781	1777	1855	1781	1777	1865
Q Serve(g_s), s	0.0	0.0	0.2	0.0	0.0	3.8	0.3	13.1	13.1	2.9	39.0	39.1
Cycle Q Clear(g_c), s	22.0	0.0	0.2	22.0	0.0	3.8	0.3	13.1	13.1	2.9	39.0	39.1
Prop In Lane	0.82		1.00	0.92		1.00	1.00		0.05	1.00		0.02
Lane Grp Cap(c), veh/h	62	0	291	60	0	291	94	1192	1244	57	1130	1186
V/C Ratio(X)	0.18	0.00	0.01	0.86	0.00	0.20	0.05	0.37	0.37	0.78	0.74	0.74
Avail Cap(c_a), veh/h	62	0	291	60	0	291	119	1192	1244	119	1130	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	40.1	58.9	0.0	41.6	54.0	8.7	8.7	57.7	15.1	15.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	66.9	0.0	0.1	0.1	0.3	0.3	8.3	4.4	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	2.7	0.0	1.5	0.1	4.7	4.9	1.4	15.3	16.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	0.0	40.1	125.8	0.0	41.7	54.1	8.9	8.9	65.9	19.5	19.3
LnGrp LOS	D	A	D	F	A	D	D	A	A	E	B	B
Approach Vol, veh/h		15			111			907			1762	
Approach Delay, s/veh		45.0			81.1			9.2			20.5	
Approach LOS		D			F			A			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	82.0		26.0	7.8	86.2		26.0
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	* 76		22.0	8.0	76.3		22.0
Max Q Clear Time (g_c+I1), s	2.3	41.1		24.0	4.9	15.1		24.0
Green Ext Time (p_c), s	0.0	19.8		0.0	0.0	8.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	75	803	75	125	1545
Future Volume (veh/h)	25	75	803	75	125	1545
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	79	845	79	132	1626
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	125	111	1998	187	166	2729
Arrive On Green	0.07	0.07	0.61	0.61	0.19	1.00
Sat Flow, veh/h	1781	1585	3378	307	1781	3647
Grp Volume(v), veh/h	26	79	457	467	132	1626
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1815	1781	1777
Q Serve(g_s), s	0.8	2.9	8.1	8.1	4.2	0.0
Cycle Q Clear(g_c), s	0.8	2.9	8.1	8.1	4.2	0.0
Prop In Lane	1.00	1.00		0.17	1.00	
Lane Grp Cap(c), veh/h	125	111	1081	1104	166	2729
V/C Ratio(X)	0.21	0.71	0.42	0.42	0.80	0.60
Avail Cap(c_a), veh/h	594	528	1081	1104	238	2729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.76	0.76
Uniform Delay (d), s/veh	26.3	27.3	6.2	6.2	23.9	0.0
Incr Delay (d2), s/veh	0.3	3.1	0.3	0.3	5.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.6	2.2	2.3	1.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.6	30.4	6.5	6.5	29.4	0.7
LnGrp LOS	C	C	A	A	C	A
Approach Vol, veh/h	105		924			1758
Approach Delay, s/veh	29.4		6.5			2.9
Approach LOS	C		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		51.8		8.2	9.6	42.2
Change Period (Y+Rc), s		5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		30.3		20.0	8.0	18.3
Max Q Clear Time (g_c+I1), s		2.0		4.9	6.2	10.1
Green Ext Time (p_c), s		13.8		0.2	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	5.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	690	0	213	1	3	2	239	1481	1	1	1361	280
Future Volume (veh/h)	690	0	213	1	3	2	239	1481	1	1	1361	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1856	1870	1870	1870	1664	1708	1723	2067	2007	2052
Adj Flow Rate, veh/h	726	0	50	1	3	0	252	1559	1	1	1433	200
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	3	2	2	2	6	3	2	2	6	3
Cap, veh/h	781	0	342	4	11	0	241	1913	861	4	1676	764
Arrive On Green	0.22	0.00	0.22	0.01	0.01	0.00	0.15	0.59	0.59	0.00	0.44	0.44
Sat Flow, veh/h	3534	0	1546	462	1385	0	1585	3246	1460	1968	3813	1739
Grp Volume(v), veh/h	726	0	50	4	0	0	252	1559	1	1	1433	200
Grp Sat Flow(s),veh/h/ln	1767	0	1546	1847	0	0	1585	1623	1460	1968	1906	1739
Q Serve(g_s), s	25.2	0.0	3.3	0.3	0.0	0.0	19.0	47.5	0.0	0.1	42.2	9.1
Cycle Q Clear(g_c), s	25.2	0.0	3.3	0.3	0.0	0.0	19.0	47.5	0.0	0.1	42.2	9.1
Prop In Lane	1.00		1.00	0.25		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	781	0	342	15	0	0	241	1913	861	4	1676	764
V/C Ratio(X)	0.93	0.00	0.15	0.26	0.00	0.00	1.05	0.82	0.00	0.23	0.86	0.26
Avail Cap(c_a), veh/h	792	0	346	296	0	0	241	1913	861	126	1696	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	0.0	39.2	61.6	0.0	0.0	53.0	20.3	10.5	62.3	31.5	22.2
Incr Delay (d2), s/veh	17.4	0.0	0.3	12.7	0.0	0.0	70.7	3.0	0.0	9.9	4.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	0.0	1.2	0.2	0.0	0.0	12.0	16.2	0.0	0.0	18.8	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.1	0.0	39.5	74.3	0.0	0.0	123.7	23.3	10.6	72.2	36.2	22.5
LnGrp LOS	E	A	D	E	A	A	F	C	B	E	D	C
Approach Vol, veh/h		776			4			1812			1634	
Approach Delay, s/veh		63.5			74.3			37.3			34.5	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	80.1		7.0	23.0	61.3		33.6
Change Period (Y+Rc), s	4.0	6.4		6.0	4.0	6.4		6.0
Max Green Setting (Gmax), s	8.0	66.6		20.0	19.0	55.6		28.0
Max Q Clear Time (g_c+I1), s	2.1	49.5		2.3	21.0	44.2		27.2
Green Ext Time (p_c), s	0.0	16.0		0.0	0.0	10.8		0.5

Intersection Summary	
HCM 6th Ctrl Delay	41.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	0	31	2	0	2	55	1693	2	5	1526	45
Future Volume (veh/h)	19	0	31	2	0	2	55	1693	2	5	1526	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	0	33	2	0	2	58	1782	2	5	1606	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	0	143	19	0	17	74	2280	1017	12	2156	962
Arrive On Green	0.09	0.00	0.09	0.01	0.00	0.01	0.04	0.64	0.64	0.01	0.61	0.61
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	20	0	33	2	0	2	58	1782	2	5	1606	47
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	0.0	1.4	0.1	0.0	0.1	2.4	26.4	0.0	0.2	23.8	0.9
Cycle Q Clear(g_c), s	0.8	0.0	1.4	0.1	0.0	0.1	2.4	26.4	0.0	0.2	23.8	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	0	143	19	0	17	74	2280	1017	12	2156	962
V/C Ratio(X)	0.12	0.00	0.23	0.11	0.00	0.12	0.78	0.78	0.00	0.43	0.74	0.05
Avail Cap(c_a), veh/h	292	0	259	486	0	432	292	2792	1245	292	2792	1245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.7	0.0	31.0	35.9	0.0	35.9	34.8	9.4	4.7	36.3	10.3	5.8
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.9	0.0	1.1	6.6	1.5	0.0	8.8	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.5	0.0	0.0	0.0	1.1	6.7	0.0	0.1	6.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.8	0.0	31.3	36.8	0.0	37.1	41.4	10.9	4.7	45.1	11.4	5.9
LnGrp LOS	C	A	C	D	A	D	D	B	A	D	B	A
Approach Vol, veh/h		53			4			1842			1658	
Approach Delay, s/veh		31.1			36.9			11.9			11.4	
Approach LOS		C			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.6	7.0	50.9		4.8	4.5	53.4				
Change Period (Y+Rc), s		4.0	4.0	6.4		4.0	4.0	6.4				
Max Green Setting (Gmax), s		12.0	12.0	57.6		20.0	12.0	57.6				
Max Q Clear Time (g_c+I1), s		3.4	4.4	25.8		2.1	2.2	28.4				
Green Ext Time (p_c), s		0.1	0.0	17.6		0.0	0.0	18.6				

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	2	438	13	9	2	261	1470	19	6	1373	184
Future Volume (veh/h)	287	2	438	13	9	2	261	1470	19	6	1373	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	303	0	110	16	6	0	275	1547	11	6	1445	76
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	460	0	205	154	81	0	312	1979	883	17	1996	620
Arrive On Green	0.13	0.00	0.13	0.04	0.04	0.00	0.18	0.56	0.56	0.01	0.39	0.39
Sat Flow, veh/h	3563	0	1585	3563	1870	0	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	303	0	110	16	6	0	275	1547	11	6	1445	76
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	6.7	0.0	5.4	0.4	0.3	0.0	12.6	28.5	0.3	0.3	20.0	2.6
Cycle Q Clear(g_c), s	6.7	0.0	5.4	0.4	0.3	0.0	12.6	28.5	0.3	0.3	20.0	2.6
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	460	0	205	154	81	0	312	1979	883	17	1996	620
V/C Ratio(X)	0.66	0.00	0.54	0.10	0.07	0.00	0.88	0.78	0.01	0.36	0.72	0.12
Avail Cap(c_a), veh/h	855	0	380	385	202	0	342	1979	883	171	2033	631
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.5	0.0	34.0	38.3	38.3	0.0	33.5	14.5	8.2	41.0	21.6	16.2
Incr Delay (d2), s/veh	2.5	0.0	3.4	0.5	0.6	0.0	19.8	2.4	0.0	4.8	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	2.3	0.2	0.1	0.0	6.7	9.5	0.1	0.1	7.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.1	0.0	37.4	38.8	38.9	0.0	53.4	16.9	8.3	45.9	23.0	16.4
LnGrp LOS	D	A	D	D	D	A	D	B	A	D	C	B
Approach Vol, veh/h		413			22			1833			1527	
Approach Delay, s/veh		37.2			38.8			22.3			22.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	52.8		16.5	18.6	39.0		9.3
Change Period (Y+Rc), s	4.0	* 6.4		5.7	4.0	6.4		5.7
Max Green Setting (Gmax), s	8.0	* 42		20.0	16.0	33.2		9.0
Max Q Clear Time (g_c+I1), s	2.3	30.5		8.7	14.6	22.0		2.4
Green Ext Time (p_c), s	0.0	10.9		2.0	0.1	10.5		0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	5	249	135	8	83	162	1490	59	90	1641	61
Future Volume (veh/h)	215	5	249	135	8	83	162	1490	59	90	1641	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	230	0	18	142	8	7	171	1568	29	95	1727	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	0	145	170	10	159	198	2013	625	449	2805	871
Arrive On Green	0.09	0.00	0.09	0.10	0.10	0.10	0.11	0.39	0.39	0.25	0.55	0.55
Sat Flow, veh/h	3563	0	1585	1691	95	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	230	0	18	150	0	7	171	1568	29	95	1727	29
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1786	0	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	7.5	0.0	1.3	9.9	0.0	0.5	11.3	32.2	1.4	5.1	27.6	1.0
Cycle Q Clear(g_c), s	7.5	0.0	1.3	9.9	0.0	0.5	11.3	32.2	1.4	5.1	27.6	1.0
Prop In Lane	1.00		1.00	0.95		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	0	145	179	0	159	198	2013	625	449	2805	871
V/C Ratio(X)	0.70	0.00	0.12	0.84	0.00	0.04	0.86	0.78	0.05	0.21	0.62	0.03
Avail Cap(c_a), veh/h	623	0	277	313	0	277	223	2013	625	449	2805	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	0.0	50.1	53.0	0.0	48.8	52.4	31.8	22.4	35.4	18.4	12.4
Incr Delay (d2), s/veh	1.0	0.0	0.1	3.9	0.0	0.0	23.8	3.1	0.1	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.5	4.7	0.0	0.2	6.2	13.0	0.5	2.1	10.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.0	0.0	50.2	56.9	0.0	48.8	76.3	34.8	22.6	35.5	19.1	12.4
LnGrp LOS	D	A	D	E	A	D	E	C	C	D	B	B
Approach Vol, veh/h		248			157			1768			1851	
Approach Delay, s/veh		53.7			56.6			38.6			19.8	
Approach LOS		D			E			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	36.0	53.0		16.0	17.3	71.6		15.0
Change Period (Y+Rc), s	5.7	* 5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	13.0	* 47		21.0	15.0	45.3		21.0
Max Q Clear Time (g_c+I1), s	7.1	34.2		11.9	13.3	29.6		9.5
Green Ext Time (p_c), s	0.1	10.4		0.2	0.1	12.9		0.5

Intersection Summary	
HCM 6th Ctrl Delay	31.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	361	122	211	36	106	21	297	1534	67	27	2087	476
Future Volume (veh/h)	361	122	211	36	106	21	297	1534	67	27	2087	476
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	380	128	54	38	112	2	313	1615	31	28	2197	304
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	430	364	107	152	129	317	2556	793	81	2320	720
Arrive On Green	0.21	0.23	0.23	0.06	0.08	0.08	0.09	0.50	0.50	0.05	0.45	0.45
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	3456	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	380	128	54	38	112	2	313	1615	31	28	2197	304
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1728	1702	1585	1781	1702	1585
Q Serve(g_s), s	25.0	6.8	3.3	2.5	7.0	0.1	10.9	27.7	1.2	1.8	49.4	15.5
Cycle Q Clear(g_c), s	25.0	6.8	3.3	2.5	7.0	0.1	10.9	27.7	1.2	1.8	49.4	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	430	364	107	152	129	317	2556	793	81	2320	720
V/C Ratio(X)	1.02	0.30	0.15	0.36	0.74	0.02	0.99	0.63	0.04	0.35	0.95	0.42
Avail Cap(c_a), veh/h	371	457	387	148	223	189	317	2556	793	134	2320	720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	38.2	36.8	54.2	53.8	50.7	54.4	21.9	15.3	55.5	31.4	22.1
Incr Delay (d2), s/veh	53.0	0.6	0.3	0.7	10.4	0.1	47.1	1.2	0.1	0.9	9.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	3.1	1.3	1.1	3.7	0.1	6.6	10.4	0.4	0.8	20.4	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	100.5	38.8	37.1	54.9	64.3	50.8	101.5	23.1	15.4	56.5	40.7	22.8
LnGrp LOS	F	D	D	D	E	D	F	C	B	E	D	C
Approach Vol, veh/h		562			152			1959			2529	
Approach Delay, s/veh		80.3			61.8			35.5			38.7	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	66.1	11.2	33.3	15.0	60.5	29.0	15.5
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	4.0	6.0	4.0	5.7
Max Green Setting (Gmax), s	9.0	52.0	10.0	29.3	11.0	50.0	25.0	14.3
Max Q Clear Time (g_c+I1), s	3.8	29.7	4.5	8.8	12.9	51.4	27.0	9.0
Green Ext Time (p_c), s	0.0	14.4	0.0	1.0	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	42.7
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	686	20	1	376	11	0	2	0	6	0	5
Future Volume (veh/h)	6	686	20	1	376	11	0	2	0	6	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	6	722	21	1	396	12	0	2	0	6	0	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	1552	45	5	1510	46	0	8	0	21	0	18
Arrive On Green	0.01	0.44	0.44	0.00	0.43	0.43	0.00	0.00	0.00	0.02	0.00	0.02
Sat Flow, veh/h	1781	3526	103	1781	3522	107	0	1870	0	920	0	767
Grp Volume(v), veh/h	6	364	379	1	199	209	0	2	0	11	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1852	1781	1777	1851	0	1870	0	1686	0	0
Q Serve(g_s), s	0.1	4.8	4.8	0.0	2.4	2.4	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.1	4.8	4.8	0.0	2.4	2.4	0.0	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.06	0.00		0.00	0.55		0.45
Lane Grp Cap(c), veh/h	23	782	815	5	762	794	0	8	0	39	0	0
V/C Ratio(X)	0.26	0.47	0.47	0.19	0.26	0.26	0.00	0.24	0.00	0.28	0.00	0.00
Avail Cap(c_a), veh/h	641	975	1016	641	975	1015	0	1345	0	1163	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.3	6.6	6.6	16.6	6.1	6.1	0.0	16.6	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.7	0.7	6.1	0.3	0.3	0.0	5.5	0.0	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.9	0.0	0.4	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.5	7.3	7.3	22.7	6.4	6.4	0.0	22.1	0.0	17.5	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	A	C	A	B	A	A
Approach Vol, veh/h		749			409			2			11	
Approach Delay, s/veh		7.4			6.5			22.1			17.5	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		4.8	4.1	20.4		4.1	4.4	20.0
Change Period (Y+Rc), s		4.0	4.0	5.7		4.0	4.0	5.7
Max Green Setting (Gmax), s		23.0	12.0	18.3		24.0	12.0	18.3
Max Q Clear Time (g_c+I1), s		2.2	2.0	6.8		2.0	2.1	4.4
Green Ext Time (p_c), s		0.0	0.0	7.9		0.0	0.0	5.4

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	607	18	21	372	29	5	1	15	25	0	119
Future Volume (veh/h)	190	607	18	21	372	29	5	1	15	25	0	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	639	19	22	392	31	5	1	16	26	0	125
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	1084	484	48	667	297	18	4	58	279	0	248
Arrive On Green	0.14	0.31	0.31	0.03	0.19	0.19	0.05	0.05	0.05	0.16	0.00	0.16
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	372	74	1191	1781	0	1585
Grp Volume(v), veh/h	200	639	19	22	392	31	22	0	0	26	0	125
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1637	0	0	1781	0	1585
Q Serve(g_s), s	4.6	6.5	0.4	0.5	4.3	0.7	0.6	0.0	0.0	0.5	0.0	3.1
Cycle Q Clear(g_c), s	4.6	6.5	0.4	0.5	4.3	0.7	0.6	0.0	0.0	0.5	0.0	3.1
Prop In Lane	1.00		1.00	1.00		1.00	0.23		0.73	1.00		1.00
Lane Grp Cap(c), veh/h	257	1084	484	48	667	297	79	0	0	279	0	248
V/C Ratio(X)	0.78	0.59	0.04	0.46	0.59	0.10	0.28	0.00	0.00	0.09	0.00	0.50
Avail Cap(c_a), veh/h	503	1587	708	503	1587	708	462	0	0	1143	0	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.5	12.5	10.4	20.4	15.8	14.3	19.5	0.0	0.0	15.4	0.0	16.4
Incr Delay (d2), s/veh	1.9	0.6	0.0	2.5	1.0	0.2	0.7	0.0	0.0	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.9	0.1	0.2	1.4	0.2	0.2	0.0	0.0	0.2	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	13.1	10.4	22.9	16.7	14.5	20.2	0.0	0.0	15.4	0.0	17.0
LnGrp LOS	B	B	B	C	B	B	C	A	A	B	A	B
Approach Vol, veh/h		858			445			22			151	
Approach Delay, s/veh		14.5			16.9			20.2			16.7	
Approach LOS		B			B			C			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.1	5.1	19.0		12.4	10.1	14.0				
Change Period (Y+Rc), s		4.0	4.0	6.0		5.7	4.0	6.0				
Max Green Setting (Gmax), s		12.0	12.0	19.0		27.3	12.0	19.0				
Max Q Clear Time (g_c+I1), s		2.6	2.5	8.5		5.1	6.6	6.3				
Green Ext Time (p_c), s		0.0	0.0	2.6		0.3	0.2	1.7				

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	460	2	79	274	2	319
Future Volume (veh/h)	460	2	79	274	2	319
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	484	2	83	288	2	336
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	829	370	113	1561	490	436
Arrive On Green	0.23	0.23	0.06	0.44	0.28	0.28
Sat Flow, veh/h	3647	1585	1781	3647	1781	1585
Grp Volume(v), veh/h	484	2	83	288	2	336
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1777	1781	1585
Q Serve(g_s), s	4.2	0.0	1.6	1.7	0.0	6.8
Cycle Q Clear(g_c), s	4.2	0.0	1.6	1.7	0.0	6.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	829	370	113	1561	490	436
V/C Ratio(X)	0.58	0.01	0.74	0.18	0.00	0.77
Avail Cap(c_a), veh/h	1623	724	559	3247	915	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	10.3	16.1	6.0	9.2	11.7
Incr Delay (d2), s/veh	0.7	0.0	9.0	0.1	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.8	0.3	0.0	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.6	10.3	25.1	6.0	9.2	14.6
LnGrp LOS	B	B	C	A	A	B
Approach Vol, veh/h	486			371	338	
Approach Delay, s/veh	12.6			10.3	14.6	
Approach LOS	B			B	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.6	7.2	13.2		20.4
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		18.0	11.0	16.0		32.0
Max Q Clear Time (g_c+I1), s		8.8	3.6	6.2		3.7
Green Ext Time (p_c), s		0.8	0.1	2.0		1.7

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1179	484	258	602	104	326
Future Volume (veh/h)	1179	484	258	602	104	326
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1241	185	272	122	109	343
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1447	664	374	317	142	711
Arrive On Green	0.42	0.42	0.20	0.20	0.08	0.38
Sat Flow, veh/h	3456	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	1241	185	272	122	109	343
Grp Sat Flow(s),veh/h/ln	1728	1585	1870	1585	1781	1870
Q Serve(g_s), s	16.2	3.8	6.8	3.3	3.0	6.9
Cycle Q Clear(g_c), s	16.2	3.8	6.8	3.3	3.0	6.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1447	664	374	317	142	711
V/C Ratio(X)	0.86	0.28	0.73	0.39	0.77	0.48
Avail Cap(c_a), veh/h	1598	733	602	510	394	1204
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	9.5	18.6	17.2	22.4	11.7
Incr Delay (d2), s/veh	4.5	0.2	2.7	0.8	8.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	1.1	2.9	1.1	1.5	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.6	9.7	21.4	18.0	30.8	12.2
LnGrp LOS	B	A	C	B	C	B
Approach Vol, veh/h	1426		394			452
Approach Delay, s/veh	16.6		20.3			16.7
Approach LOS	B		C			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.0	14.9				23.9	25.8
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0				32.0	23.0
Max Q Clear Time (g_c+I1), s	5.0	8.8				8.9	18.2
Green Ext Time (p_c), s	0.1	1.2				2.1	2.6

Intersection Summary	
HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	704	11	10	871	464	2	8	8	208	9	51
Future Volume (veh/h)	85	704	11	10	871	464	2	8	8	208	9	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	741	12	11	917	488	2	8	8	219	9	54
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	1494	667	20	1307	583	16	65	70	318	13	294
Arrive On Green	0.06	0.42	0.42	0.01	0.37	0.37	0.04	0.04	0.04	0.19	0.19	0.19
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	370	1481	1585	1714	70	1585
Grp Volume(v), veh/h	89	741	12	11	917	488	10	0	8	228	0	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1852	0	1585	1785	0	1585
Q Serve(g_s), s	2.6	8.1	0.2	0.3	11.7	14.9	0.3	0.0	0.3	6.3	0.0	1.5
Cycle Q Clear(g_c), s	2.6	8.1	0.2	0.3	11.7	14.9	0.3	0.0	0.3	6.3	0.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	0.20		1.00	0.96		1.00
Lane Grp Cap(c), veh/h	114	1494	667	20	1307	583	81	0	70	331	0	294
V/C Ratio(X)	0.78	0.50	0.02	0.55	0.70	0.84	0.12	0.00	0.11	0.69	0.00	0.18
Avail Cap(c_a), veh/h	268	1494	667	268	1338	597	1255	0	1074	1210	0	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.5	11.3	9.0	26.1	14.3	15.3	24.4	0.0	24.4	20.2	0.0	18.2
Incr Delay (d2), s/veh	4.3	0.3	0.0	8.3	1.7	10.1	0.2	0.0	0.3	1.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.4	0.1	0.2	3.9	5.7	0.1	0.0	0.1	2.4	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	11.6	9.0	34.5	16.0	25.5	24.7	0.0	24.7	21.2	0.0	18.4
LnGrp LOS	C	B	A	C	B	C	C	A	C	C	A	B
Approach Vol, veh/h		842			1416			18			282	
Approach Delay, s/veh		13.3			19.4			24.7			20.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	28.3		6.3	7.4	25.5		13.8				
Change Period (Y+Rc), s	4.0	6.0		4.0	4.0	6.0		4.0				
Max Green Setting (Gmax), s	8.0	21.0		36.0	8.0	20.0		36.0				
Max Q Clear Time (g_c+I1), s	2.3	10.1		2.3	4.6	16.9		8.3				
Green Ext Time (p_c), s	0.0	6.3		0.0	0.0	2.6		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	777	0	0	1356	84	3	0	0	32	0	25
Future Volume (veh/h)	53	777	0	0	1356	84	3	0	0	32	0	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	818	0	0	1427	88	3	0	0	34	0	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	2285	1019	3	1804	805	6	90	76	53	139	118
Arrive On Green	0.04	0.64	0.00	0.00	0.51	0.51	0.00	0.00	0.00	0.03	0.00	0.07
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	56	818	0	0	1427	88	3	0	0	34	0	26
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	5.7	0.0	0.0	17.7	1.6	0.1	0.0	0.0	1.0	0.0	0.8
Cycle Q Clear(g_c), s	1.7	5.7	0.0	0.0	17.7	1.6	0.1	0.0	0.0	1.0	0.0	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	2285	1019	3	1804	805	6	90	76	53	139	118
V/C Ratio(X)	0.75	0.36	0.00	0.00	0.79	0.11	0.52	0.00	0.00	0.64	0.00	0.22
Avail Cap(c_a), veh/h	365	2285	1019	365	2117	944	365	557	472	365	557	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.4	4.4	0.0	0.0	10.9	6.9	26.7	0.0	0.0	25.8	0.0	23.4
Incr Delay (d2), s/veh	13.6	0.1	0.0	0.0	1.8	0.1	56.8	0.0	0.0	12.4	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.0	0.0	0.0	5.0	0.4	0.1	0.0	0.0	0.6	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	4.5	0.0	0.0	12.7	6.9	83.5	0.0	0.0	38.2	0.0	24.3
LnGrp LOS	D	A	A	A	B	A	F	A	A	D	A	C
Approach Vol, veh/h		874			1515			3			60	
Approach Delay, s/veh		6.7			12.4			83.5			32.2	
Approach LOS		A			B			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	7.6	0.0	39.5	5.2	9.0	7.3	32.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	16.0	11.0	32.0	11.0	16.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	3.0	0.0	0.0	7.7	2.1	2.8	3.7	19.7
Green Ext Time (p_c), s	0.0	0.0	0.0	5.5	0.0	0.0	0.0	7.5

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	686	328	30	56	843	130	46	444	36	83	775	717
Future Volume (veh/h)	686	328	30	56	843	130	46	444	36	83	775	717
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	722	345	0	59	887	0	48	467	0	87	816	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	782	504		1199	932		212	535		449	856	
Arrive On Green	0.23	0.14	0.00	0.35	0.26	0.00	0.06	0.15	0.00	0.13	0.24	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	722	345	0	59	887	0	48	467	0	87	816	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	18.9	8.5	0.0	1.1	22.7	0.0	1.2	11.9	0.0	2.1	21.0	0.0
Cycle Q Clear(g_c), s	18.9	8.5	0.0	1.1	22.7	0.0	1.2	11.9	0.0	2.1	21.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	782	504		1199	932		212	535		449	856	
V/C Ratio(X)	0.92	0.69		0.05	0.95		0.23	0.87		0.19	0.95	
Avail Cap(c_a), veh/h	783	1431		1199	932		298	537		597	856	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.1	37.8	0.0	20.1	33.6	0.0	41.4	38.5	0.0	36.0	34.7	0.0
Incr Delay (d2), s/veh	16.2	2.8	0.0	0.0	19.0	0.0	0.2	15.1	0.0	0.1	20.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	3.7	0.0	0.4	11.4	0.0	0.5	6.0	0.0	0.8	10.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	40.6	0.0	20.1	52.6	0.0	41.6	53.6	0.0	36.0	55.2	0.0
LnGrp LOS	D	D		C	D		D	D		D	E	
Approach Vol, veh/h		1067	A		946	A		515	A		903	A
Approach Delay, s/veh		47.8			50.5			52.5			53.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.1	18.8	9.7	28.0	25.0	30.0	17.7	19.9
Change Period (Y+Rc), s	4.0	5.7	4.0	5.7	4.0	5.7	5.7	* 6
Max Green Setting (Gmax), s	8.0	37.3	8.0	22.3	21.0	24.3	16.0	* 14
Max Q Clear Time (g_c+I1), s	3.1	10.5	3.2	23.0	20.9	24.7	4.1	13.9
Green Ext Time (p_c), s	0.0	2.6	0.0	0.0	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	357	23	148	1010	45	15	116	77	49	106	50
Future Volume (veh/h)	22	357	23	148	1010	45	15	116	77	49	106	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	376	24	156	1063	47	16	122	81	52	112	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	1032	66	197	1326	59	56	167	111	143	249	118
Arrive On Green	0.03	0.30	0.30	0.11	0.38	0.38	0.03	0.16	0.16	0.08	0.21	0.21
Sat Flow, veh/h	1781	3393	216	1781	3466	153	1781	1049	696	1781	1200	568
Grp Volume(v), veh/h	23	196	204	156	545	565	16	0	203	52	0	165
Grp Sat Flow(s),veh/h/ln	1781	1777	1832	1781	1777	1843	1781	0	1745	1781	0	1768
Q Serve(g_s), s	0.7	4.6	4.7	4.6	14.7	14.7	0.5	0.0	6.0	1.5	0.0	4.4
Cycle Q Clear(g_c), s	0.7	4.6	4.7	4.6	14.7	14.7	0.5	0.0	6.0	1.5	0.0	4.4
Prop In Lane	1.00		0.12	1.00		0.08	1.00		0.40	1.00		0.32
Lane Grp Cap(c), veh/h	58	541	557	197	680	705	56	0	278	143	0	367
V/C Ratio(X)	0.40	0.36	0.37	0.79	0.80	0.80	0.28	0.00	0.73	0.36	0.00	0.45
Avail Cap(c_a), veh/h	232	836	861	199	803	832	265	0	847	298	0	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.5	14.6	14.7	23.3	14.8	14.8	25.5	0.0	21.5	23.4	0.0	18.6
Incr Delay (d2), s/veh	1.6	0.5	0.5	17.7	5.5	5.3	1.0	0.0	5.0	0.6	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.6	1.7	2.7	5.7	5.8	0.2	0.0	2.6	0.6	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	15.2	15.2	41.0	20.3	20.1	26.5	0.0	26.6	24.0	0.0	19.8
LnGrp LOS	C	B	B	D	C	C	C	A	C	C	A	B
Approach Vol, veh/h		423			1266			219			217	
Approach Delay, s/veh		15.8			22.7			26.6			20.8	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	13.5	10.0	22.1	5.7	16.1	5.7	26.3
Change Period (Y+Rc), s	4.0	4.9	4.0	5.7	4.0	4.9	4.0	5.7
Max Green Setting (Gmax), s	9.0	26.1	6.0	25.3	8.0	27.1	7.0	24.3
Max Q Clear Time (g_c+I1), s	3.5	8.0	6.6	6.7	2.5	6.4	2.7	16.7
Green Ext Time (p_c), s	0.0	1.0	0.0	2.0	0.0	0.8	0.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	21.6
HCM 6th LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	502	1326	33	42	0
Future Volume (veh/h)	10	502	1326	33	42	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	528	1396	35	44	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	31	2462	1862	47	139	124
Arrive On Green	0.02	0.69	0.53	0.53	0.08	0.00
Sat Flow, veh/h	1781	3647	3636	89	1781	1585
Grp Volume(v), veh/h	11	528	700	731	44	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1854	1781	1585
Q Serve(g_s), s	0.2	2.0	11.7	11.7	0.9	0.0
Cycle Q Clear(g_c), s	0.2	2.0	11.7	11.7	0.9	0.0
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	31	2462	934	975	139	124
V/C Ratio(X)	0.36	0.21	0.75	0.75	0.32	0.00
Avail Cap(c_a), veh/h	375	3206	1136	1185	1265	1126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.5	2.1	7.1	7.1	16.6	0.0
Incr Delay (d2), s/veh	2.6	0.1	2.5	2.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.3	2.4	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.0	2.2	9.6	9.5	17.0	0.0
LnGrp LOS	C	A	A	A	B	A
Approach Vol, veh/h		539	1431		44	
Approach Delay, s/veh		2.5	9.6		17.0	
Approach LOS		A	A		B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		32.0		6.0	6.4	25.7
Change Period (Y+Rc), s		5.7		3.0	5.7	* 5.7
Max Green Setting (Gmax), s		34.3		27.0	8.0	* 24
Max Q Clear Time (g_c+I1), s		4.0		2.9	2.2	13.7
Green Ext Time (p_c), s		3.4		0.1	0.0	6.2

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	485	55	105	1349	0	60	0	52	0	0	0
Future Volume (veh/h)	0	485	55	105	1349	0	60	0	52	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	511	58	111	1420	0	63	0	55	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	5	1165	132	167	2023	0	277	0	246	0	5	0
Arrive On Green	0.00	0.36	0.36	0.09	0.57	0.00	0.16	0.00	0.16	0.00	0.00	0.00
Sat Flow, veh/h	1781	3218	364	1781	3647	0	1781	0	1585	0	1870	0
Grp Volume(v), veh/h	0	281	288	111	1420	0	63	0	55	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1805	1781	1777	0	1781	0	1585	0	1870	0
Q Serve(g_s), s	0.0	4.2	4.3	2.1	10.1	0.0	1.1	0.0	1.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.2	4.3	2.1	10.1	0.0	1.1	0.0	1.1	0.0	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	5	643	653	167	2023	0	277	0	246	0	5	0
V/C Ratio(X)	0.00	0.44	0.44	0.66	0.70	0.00	0.23	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	404	1275	1295	404	2651	0	404	0	360	0	424	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.5	8.5	15.4	5.4	0.0	13.0	0.0	13.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.6	1.7	0.7	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	1.1	0.7	1.2	0.0	0.4	0.0	0.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.2	9.2	17.1	6.1	0.0	13.2	0.0	13.2	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	B	A	A	A
Approach Vol, veh/h		569			1531			118			0	
Approach Delay, s/veh		9.2			6.9			13.2			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	18.5		9.5	0.0	25.8		0.0
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	25.3		8.0	8.0	26.3		8.0
Max Q Clear Time (g_c+I1), s	4.1	6.3		3.1	0.0	12.1		0.0
Green Ext Time (p_c), s	0.1	3.0		0.1	0.0	8.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	702	37	86	1453	21	44	15	107	30	10	24
Future Volume (veh/h)	22	702	37	86	1453	21	44	15	107	30	10	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	739	39	91	1529	22	46	16	113	32	11	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	1290	68	189	1613	23	150	33	359	146	31	359
Arrive On Green	0.03	0.38	0.38	0.11	0.45	0.45	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1781	3433	181	1781	3586	52	74	148	1585	53	139	1585
Grp Volume(v), veh/h	23	382	396	91	757	794	62	0	113	43	0	25
Grp Sat Flow(s),veh/h/ln	1781	1777	1838	1781	1777	1861	221	0	1585	192	0	1585
Q Serve(g_s), s	0.6	8.0	8.1	2.3	19.2	19.3	0.7	0.0	2.8	0.5	0.0	0.6
Cycle Q Clear(g_c), s	0.6	8.0	8.1	2.3	19.2	19.3	10.6	0.0	2.8	10.6	0.0	0.6
Prop In Lane	1.00		0.10	1.00		0.03	0.74		1.00	0.74		1.00
Lane Grp Cap(c), veh/h	58	668	691	189	799	837	183	0	359	177	0	359
V/C Ratio(X)	0.40	0.57	0.57	0.48	0.95	0.95	0.34	0.00	0.31	0.24	0.00	0.07
Avail Cap(c_a), veh/h	303	843	872	303	805	843	602	0	809	568	0	809
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.3	11.7	11.7	19.8	12.4	12.4	18.8	0.0	15.1	16.9	0.0	14.3
Incr Delay (d2), s/veh	1.6	1.0	1.0	0.7	20.0	19.7	0.4	0.0	0.2	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.3	2.4	0.8	9.0	9.4	0.7	0.0	0.9	0.3	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	12.7	12.7	20.5	32.4	32.1	19.2	0.0	15.3	17.1	0.0	14.3
LnGrp LOS	C	B	B	C	C	C	B	A	B	B	A	B
Approach Vol, veh/h		801			1642			175			68	
Approach Delay, s/veh		13.0			31.6			16.7			16.1	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	23.5		15.1	5.5	26.9		15.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	8.0	22.3		24.0	8.0	21.3		24.0
Max Q Clear Time (g_c+I1), s	4.3	10.1		12.6	2.6	21.3		12.6
Green Ext Time (p_c), s	0.0	3.4		0.3	0.0	0.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	628	5	4	1092	81	5	0	12	160	0	204
Future Volume (veh/h)	88	628	5	4	1092	81	5	0	12	160	0	204
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	661	5	4	1149	85	5	0	13	168	0	215
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	1843	14	13	1399	103	17	0	45	305	0	272
Arrive On Green	0.10	0.51	0.51	0.01	0.42	0.42	0.04	0.00	0.04	0.17	0.00	0.17
Sat Flow, veh/h	1781	3615	27	1781	3355	248	454	0	1181	1781	0	1585
Grp Volume(v), veh/h	93	325	341	4	608	626	18	0	0	168	0	215
Grp Sat Flow(s),veh/h/ln	1781	1777	1865	1781	1777	1826	1635	0	0	1781	0	1585
Q Serve(g_s), s	3.2	7.1	7.1	0.1	19.7	19.7	0.7	0.0	0.0	5.6	0.0	8.4
Cycle Q Clear(g_c), s	3.2	7.1	7.1	0.1	19.7	19.7	0.7	0.0	0.0	5.6	0.0	8.4
Prop In Lane	1.00		0.01	1.00		0.14	0.28		0.72	1.00		1.00
Lane Grp Cap(c), veh/h	179	906	951	13	741	761	63	0	0	305	0	272
V/C Ratio(X)	0.52	0.36	0.36	0.30	0.82	0.82	0.29	0.00	0.00	0.55	0.00	0.79
Avail Cap(c_a), veh/h	330	906	951	330	885	909	479	0	0	522	0	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.7	9.5	9.5	32.0	16.8	16.8	30.3	0.0	0.0	24.6	0.0	25.8
Incr Delay (d2), s/veh	0.9	0.3	0.3	4.5	5.8	5.7	0.9	0.0	0.0	0.6	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.1	2.2	0.1	7.5	7.7	0.3	0.0	0.0	2.3	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	9.9	9.8	36.6	22.5	22.4	31.2	0.0	0.0	25.2	0.0	27.7
LnGrp LOS	C	A	A	D	C	C	C	A	A	C	A	C
Approach Vol, veh/h		759			1238			18			383	
Approach Delay, s/veh		12.1			22.5			31.2			26.6	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	38.8		6.5	10.5	32.8		15.1
Change Period (Y+Rc), s	4.0	5.7		4.0	4.0	5.7		4.0
Max Green Setting (Gmax), s	12.0	32.3		19.0	12.0	32.3		19.0
Max Q Clear Time (g_c+I1), s	2.1	9.1		2.7	5.2	21.7		10.4
Green Ext Time (p_c), s	0.0	3.6		0.0	0.1	5.3		0.7

Intersection Summary		
HCM 6th Ctrl Delay		20.0
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	7	32	152	4	68	20	917	206	59	892	17
Future Volume (veh/h)	25	7	32	152	4	68	20	917	206	59	892	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	7	34	160	4	72	21	965	217	62	939	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	68	58	205	237	201	37	1623	504	88	1768	549
Arrive On Green	0.02	0.04	0.04	0.12	0.13	0.13	0.02	0.32	0.32	0.05	0.35	0.35
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	26	7	34	160	4	72	21	965	217	62	939	18
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.6	0.2	0.9	3.6	0.1	1.7	0.5	6.6	4.5	1.4	6.1	0.3
Cycle Q Clear(g_c), s	0.6	0.2	0.9	3.6	0.1	1.7	0.5	6.6	4.5	1.4	6.1	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	44	68	58	205	237	201	37	1623	504	88	1768	549
V/C Ratio(X)	0.58	0.10	0.59	0.78	0.02	0.36	0.57	0.59	0.43	0.71	0.53	0.03
Avail Cap(c_a), veh/h	300	1441	1221	300	1531	1297	300	2212	687	300	2212	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	19.4	19.7	17.9	15.9	16.6	20.2	11.9	11.2	19.5	10.9	9.0
Incr Delay (d2), s/veh	11.6	0.7	9.3	7.7	0.0	1.1	13.0	0.4	0.6	10.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.4	1.7	0.0	0.6	0.3	1.8	1.3	0.7	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	20.0	29.0	25.6	15.9	17.7	33.2	12.3	11.8	29.4	11.1	9.0
LnGrp LOS	C	C	C	C	B	B	C	B	B	C	B	A
Approach Vol, veh/h		67			236			1203			1019	
Approach Delay, s/veh		29.1			23.0			12.5			12.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	18.2	9.8	6.5	5.9	19.4	6.0	10.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	18.0	7.0	32.0	7.0	18.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	3.4	8.6	5.6	2.9	2.5	8.1	2.6	3.7
Green Ext Time (p_c), s	0.0	4.6	0.1	0.1	0.0	4.2	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	14	26	163	36	18	64	1117	295	38	1022	16
Future Volume (veh/h)	8	14	26	163	36	18	64	1117	295	38	1022	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	15	27	172	38	19	67	1176	311	40	1076	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	67	57	229	293	248	89	1884	585	62	1807	561
Arrive On Green	0.01	0.04	0.04	0.13	0.16	0.16	0.05	0.37	0.37	0.03	0.35	0.35
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	8	15	27	172	38	19	67	1176	311	40	1076	17
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.2	0.4	0.8	4.3	0.8	0.5	1.7	8.8	7.1	1.0	8.0	0.3
Cycle Q Clear(g_c), s	0.2	0.4	0.8	4.3	0.8	0.5	1.7	8.8	7.1	1.0	8.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	67	57	229	293	248	89	1884	585	62	1807	561
V/C Ratio(X)	0.53	0.22	0.47	0.75	0.13	0.08	0.75	0.62	0.53	0.65	0.60	0.03
Avail Cap(c_a), veh/h	269	1291	1094	845	2017	1710	269	2423	752	269	2423	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	21.7	21.9	19.5	16.8	16.7	21.7	12.0	11.5	22.1	12.3	9.8
Incr Delay (d2), s/veh	26.1	1.6	5.9	4.9	0.2	0.1	12.1	0.3	0.8	10.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.3	1.9	0.3	0.2	0.9	2.4	2.1	0.5	2.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.0	23.4	27.9	24.3	17.0	16.8	33.8	12.3	12.2	32.9	12.6	9.8
LnGrp LOS	D	C	C	C	B	B	C	B	B	C	B	A
Approach Vol, veh/h		50			229			1554			1133	
Approach Delay, s/veh		29.9			22.5			13.2			13.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	22.1	11.0	6.7	7.3	21.4	5.4	12.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	22.0	22.0	32.0	7.0	22.0	7.0	50.0
Max Q Clear Time (g_c+I1), s	3.0	10.8	6.3	2.8	3.7	10.0	2.2	2.8
Green Ext Time (p_c), s	0.0	6.4	0.4	0.1	0.0	5.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	7	40	44	15	80	98	1420	105	46	1108	53
Future Volume (veh/h)	23	7	40	44	15	80	98	1420	105	46	1108	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	7	42	46	16	84	103	1495	111	48	1166	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	109	92	69	138	117	132	2125	660	71	1951	606
Arrive On Green	0.02	0.06	0.06	0.04	0.07	0.07	0.07	0.42	0.42	0.04	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	24	7	42	46	16	84	103	1495	111	48	1166	56
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.6	0.2	1.2	1.2	0.4	2.4	2.6	11.0	2.0	1.2	8.3	1.0
Cycle Q Clear(g_c), s	0.6	0.2	1.2	1.2	0.4	2.4	2.6	11.0	2.0	1.2	8.3	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	41	109	92	69	138	117	132	2125	660	71	1951	606
V/C Ratio(X)	0.59	0.06	0.46	0.67	0.12	0.72	0.78	0.70	0.17	0.67	0.60	0.09
Avail Cap(c_a), veh/h	275	1318	1117	353	1400	1187	275	2440	757	275	2440	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	20.2	20.7	21.5	19.6	20.6	20.7	10.9	8.3	21.5	11.2	9.0
Incr Delay (d2), s/veh	12.6	0.2	3.5	10.5	0.4	8.0	9.6	0.8	0.1	10.5	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.5	0.6	0.2	1.0	1.2	2.8	0.6	0.6	2.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	20.5	24.2	32.0	20.0	28.5	30.2	11.7	8.4	32.0	11.5	9.1
LnGrp LOS	C	C	C	C	C	C	C	B	A	C	B	A
Approach Vol, veh/h		73			146			1709			1270	
Approach Delay, s/veh		27.2			28.7			12.6			12.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	24.2	6.8	7.6	8.4	22.7	6.0	8.4
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	7.0	21.7	9.0	32.0	7.0	21.7	7.0	34.0
Max Q Clear Time (g_c+I1), s	3.2	13.0	3.2	3.2	4.6	10.3	2.6	4.4
Green Ext Time (p_c), s	0.0	5.9	0.0	0.1	0.0	5.7	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	66	31	36	71	3	48	98	12	2	45	59
Future Volume (veh/h)	93	66	31	36	71	3	48	98	12	2	45	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	69	33	38	75	3	51	103	13	2	47	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	304	256	65	221	9	83	289	36	6	97	128
Arrive On Green	0.08	0.16	0.16	0.04	0.12	0.12	0.05	0.18	0.18	0.00	0.13	0.13
Sat Flow, veh/h	1781	1870	1575	1781	1785	71	1781	1627	205	1781	728	961
Grp Volume(v), veh/h	98	69	33	38	0	78	51	0	116	2	0	109
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	0	1857	1781	0	1832	1781	0	1689
Q Serve(g_s), s	1.6	0.9	0.5	0.6	0.0	1.1	0.8	0.0	1.6	0.0	0.0	1.7
Cycle Q Clear(g_c), s	1.6	0.9	0.5	0.6	0.0	1.1	0.8	0.0	1.6	0.0	0.0	1.7
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.11	1.00		0.57
Lane Grp Cap(c), veh/h	134	304	256	65	0	229	83	0	325	6	0	225
V/C Ratio(X)	0.73	0.23	0.13	0.59	0.00	0.34	0.62	0.00	0.36	0.33	0.00	0.48
Avail Cap(c_a), veh/h	769	1711	1441	461	0	1378	523	0	1929	461	0	1720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.1	10.5	10.4	13.7	0.0	11.6	13.6	0.0	10.5	14.4	0.0	11.6
Incr Delay (d2), s/veh	7.4	0.4	0.2	8.2	0.0	0.9	7.2	0.0	0.7	27.9	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.3	0.1	0.3	0.0	0.4	0.4	0.0	0.5	0.1	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	10.9	10.6	21.9	0.0	12.5	20.8	0.0	11.1	42.3	0.0	13.2
LnGrp LOS	C	B	B	C	A	B	C	A	B	D	A	B
Approach Vol, veh/h		200			116			167			111	
Approach Delay, s/veh		15.6			15.6			14.1			13.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	9.6	5.6	9.2	5.8	8.4	6.7	8.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	30.5	7.5	26.5	8.5	29.5	12.5	21.5
Max Q Clear Time (g_c+I1), s	2.0	3.6	2.6	2.9	2.8	3.7	3.6	3.1
Green Ext Time (p_c), s	0.0	0.6	0.0	0.4	0.0	0.6	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	42	367	406	8	526	580
Future Volume (veh/h)	42	367	406	8	526	580
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	30	427	2	554	611
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	92	82	535	453	641	1397
Arrive On Green	0.05	0.05	0.29	0.29	0.36	0.75
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	44	30	427	2	554	611
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	1.2	0.9	10.5	0.0	14.3	6.1
Cycle Q Clear(g_c), s	1.2	0.9	10.5	0.0	14.3	6.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	92	82	535	453	641	1397
V/C Ratio(X)	0.48	0.37	0.80	0.00	0.86	0.44
Avail Cap(c_a), veh/h	575	511	792	671	1006	2037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	22.7	16.4	12.7	14.7	2.4
Incr Delay (d2), s/veh	3.8	2.7	3.6	0.0	4.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.4	4.4	0.0	5.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.7	25.5	19.9	12.7	19.6	2.6
LnGrp LOS	C	C	B	B	B	A
Approach Vol, veh/h	74		429			1165
Approach Delay, s/veh	26.2		19.9			10.7
Approach LOS	C		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	22.9	19.2				42.0	7.6
Change Period (Y+Rc), s	5.0	5.0				5.0	5.0
Max Green Setting (Gmax), s	28.0	21.0				54.0	16.0
Max Q Clear Time (g_c+I1), s	16.3	12.5				8.1	3.2
Green Ext Time (p_c), s	1.5	1.7				4.8	0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	17	140	274	28	181	441
Future Volume (veh/h)	17	140	274	28	181	441
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	147	288	29	191	464
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	222	198	878	744	721	878
Arrive On Green	0.12	0.12	0.47	0.47	0.47	0.47
Sat Flow, veh/h	1781	1585	1870	1585	1063	1870
Grp Volume(v), veh/h	18	147	288	29	191	464
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1063	1870
Q Serve(g_s), s	0.2	2.0	2.1	0.2	3.0	3.9
Cycle Q Clear(g_c), s	0.2	2.0	2.1	0.2	5.2	3.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	222	198	878	744	721	878
V/C Ratio(X)	0.08	0.74	0.33	0.04	0.26	0.53
Avail Cap(c_a), veh/h	1284	1143	2107	1786	1419	2107
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.6	9.4	3.7	3.2	5.3	4.1
Incr Delay (d2), s/veh	0.2	5.4	0.2	0.0	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.1	0.0	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.7	14.8	3.9	3.2	5.5	4.6
LnGrp LOS	A	B	A	A	A	A
Approach Vol, veh/h	165		317			655
Approach Delay, s/veh	14.2		3.8			4.9
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		15.4				15.4	6.8
Change Period (Y+Rc), s		5.0				5.0	4.0
Max Green Setting (Gmax), s		25.0				25.0	16.0
Max Q Clear Time (g_c+I1), s		4.1				7.2	4.0
Green Ext Time (p_c), s		1.5				3.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	359	6	50	525	0	91	0	22	0	0	0
Future Volume (veh/h)	0	359	6	50	525	0	91	0	22	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	378	6	53	553	0	96	0	23	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	1023	455	90	1855	827	144	0	175	8	9	0
Arrive On Green	0.00	0.29	0.29	0.05	0.52	0.00	0.08	0.00	0.11	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1580	1781	3554	1585	1781	0	1580	1781	1870	0
Grp Volume(v), veh/h	0	378	6	53	553	0	96	0	23	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1580	1781	1777	1585	1781	0	1580	1781	1870	0
Q Serve(g_s), s	0.0	1.8	0.1	0.6	1.9	0.0	1.1	0.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.8	0.1	0.6	1.9	0.0	1.1	0.0	0.3	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	8	1023	455	90	1855	827	144	0	175	8	9	0
V/C Ratio(X)	0.00	0.37	0.01	0.59	0.30	0.00	0.67	0.00	0.13	0.00	0.00	0.00
Avail Cap(c_a), veh/h	655	4245	1887	655	4245	1893	573	0	2322	655	2835	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.2	5.5	10.1	2.9	0.0	9.7	0.0	8.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	6.1	0.1	0.0	5.2	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	0.3	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.4	5.6	16.2	3.0	0.0	14.9	0.0	9.1	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		384			606			119			0	
Approach Delay, s/veh		6.4			4.2			13.8			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	6.4	5.1	10.3	5.8	0.6	0.0	15.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	32.0	8.0	26.0	7.0	33.0	8.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.3	2.6	3.8	3.1	0.0	0.0	3.9
Green Ext Time (p_c), s	0.0	0.1	0.0	2.3	0.1	0.0	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1	4	217	1	119	7	397	111	81	663	2
Future Volume (veh/h)	4	1	4	217	1	119	7	397	111	81	663	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	1	4	228	1	125	7	418	117	85	698	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	151	128	397	358	304	26	1033	321	217	1316	408
Arrive On Green	0.00	0.08	0.08	0.12	0.19	0.19	0.01	0.20	0.20	0.06	0.26	0.26
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	4	1	4	228	1	125	7	418	117	85	698	2
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.0	0.0	0.1	2.3	0.0	2.6	0.1	2.6	2.4	0.9	4.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	2.3	0.0	2.6	0.1	2.6	2.4	0.9	4.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	151	128	397	358	304	26	1033	321	217	1316	408
V/C Ratio(X)	0.27	0.01	0.03	0.57	0.00	0.41	0.27	0.40	0.36	0.39	0.53	0.00
Avail Cap(c_a), veh/h	1024	806	683	1024	806	683	1024	2339	726	1024	2339	726
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	15.7	15.7	15.6	12.1	13.2	18.3	12.9	12.8	16.7	11.8	10.2
Incr Delay (d2), s/veh	9.1	0.0	0.1	1.3	0.0	0.9	5.5	0.3	0.7	1.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.8	0.0	0.8	0.0	0.7	0.7	0.3	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	15.7	15.8	16.9	12.1	14.1	23.8	13.1	13.4	17.9	12.2	10.2
LnGrp LOS	C	B	B	B	B	B	C	B	B	B	B	B
Approach Vol, veh/h		9			354			542			785	
Approach Delay, s/veh		21.0			15.9			13.3			12.8	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	12.5	9.3	8.0	5.3	14.6	5.2	12.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	4.6	4.3	2.1	2.1	6.4	2.0	4.6
Green Ext Time (p_c), s	0.1	2.3	0.4	0.0	0.0	3.2	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	183	21	32	507	69	10	22	8	31	24	73
Future Volume (veh/h)	52	183	21	32	507	69	10	22	8	31	24	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	193	22	34	534	73	11	23	8	33	25	77
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	1024	457	57	972	434	67	71	60	191	201	170
Arrive On Green	0.05	0.29	0.29	0.03	0.27	0.27	0.04	0.04	0.04	0.11	0.11	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	55	193	22	34	534	73	11	23	8	33	25	77
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.1	1.5	0.4	0.7	4.8	1.3	0.2	0.4	0.2	0.6	0.5	1.7
Cycle Q Clear(g_c), s	1.1	1.5	0.4	0.7	4.8	1.3	0.2	0.4	0.2	0.6	0.5	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	83	1024	457	57	972	434	67	71	60	191	201	170
V/C Ratio(X)	0.66	0.19	0.05	0.60	0.55	0.17	0.16	0.33	0.13	0.17	0.12	0.45
Avail Cap(c_a), veh/h	524	2280	1017	524	2280	1017	1143	1200	1017	762	800	678
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	10.0	9.6	17.9	11.6	10.3	17.4	17.5	17.4	15.2	15.1	15.7
Incr Delay (d2), s/veh	8.7	0.1	0.0	9.8	0.5	0.2	1.1	2.6	1.0	0.4	0.3	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.4	0.1	0.4	1.5	0.4	0.1	0.2	0.1	0.2	0.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	10.1	9.7	27.6	12.1	10.5	18.5	20.2	18.4	15.6	15.4	17.5
LnGrp LOS	C	B	A	C	B	B	B	C	B	B	B	B
Approach Vol, veh/h		270			641			42			135	
Approach Delay, s/veh		13.4			12.7			19.4			16.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		6.4	6.2	15.8		9.0	6.7	15.2				
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0	5.0	5.0				
Max Green Setting (Gmax), s		24.0	11.0	24.0		16.0	11.0	24.0				
Max Q Clear Time (g_c+I1), s		2.4	2.7	3.5		3.7	3.1	6.8				
Green Ext Time (p_c), s		0.1	0.0	1.1		0.3	0.0	3.4				

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	5	33	5	67	5	517	10	137	604	5
Future Volume (veh/h)	5	5	5	33	5	67	5	517	10	137	604	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	5	5	35	5	71	5	544	11	144	636	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	125	106	59	177	150	10	1144	355	189	1657	514
Arrive On Green	0.01	0.07	0.07	0.03	0.09	0.09	0.01	0.22	0.22	0.11	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	5	5	5	35	5	71	5	544	11	144	636	5
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	0.1	0.1	0.1	0.7	0.1	1.5	0.1	3.2	0.2	2.8	3.4	0.1
Cycle Q Clear(g_c), s	0.1	0.1	0.1	0.7	0.1	1.5	0.1	3.2	0.2	2.8	3.4	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	125	106	59	177	150	10	1144	355	189	1657	514
V/C Ratio(X)	0.52	0.04	0.05	0.60	0.03	0.47	0.52	0.48	0.03	0.76	0.38	0.01
Avail Cap(c_a), veh/h	559	853	723	559	853	723	559	2474	768	559	2474	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	15.3	15.3	16.7	14.4	15.1	17.4	11.8	10.6	15.3	9.1	8.0
Incr Delay (d2), s/veh	36.9	0.1	0.2	9.3	0.1	2.3	36.9	0.3	0.0	6.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.4	0.0	0.5	0.1	0.8	0.1	1.1	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	15.4	15.5	26.0	14.5	17.4	54.3	12.1	10.7	21.6	9.3	8.0
LnGrp LOS	D	B	B	C	B	B	D	B	B	C	A	A
Approach Vol, veh/h		15			111			560			785	
Approach Delay, s/veh		28.4			20.0			12.5			11.5	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	12.9	6.2	7.4	5.2	16.4	5.2	8.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	4.8	5.2	2.7	2.1	2.1	5.4	2.1	3.5
Green Ext Time (p_c), s	0.2	2.6	0.0	0.0	0.0	3.1	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	113	5	93	141	0	5	0	51	0	0	0
Future Volume (veh/h)	0	113	5	93	141	0	5	0	51	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	119	5	98	148	0	5	0	54	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	537	239	148	1673	746	10	104	88	8	9	8
Arrive On Green	0.00	0.15	0.15	0.08	0.47	0.00	0.01	0.00	0.06	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	0	119	5	98	148	0	5	0	54	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	0.0	0.6	0.1	1.1	0.5	0.0	0.1	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.6	0.1	1.1	0.5	0.0	0.1	0.0	0.7	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	8	537	239	148	1673	746	10	104	88	8	9	8
V/C Ratio(X)	0.00	0.22	0.02	0.66	0.09	0.00	0.51	0.00	0.61	0.00	0.00	0.00
Avail Cap(c_a), veh/h	928	3704	1652	1266	4378	1953	928	1950	1652	928	1950	1652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.9	7.6	9.4	3.1	0.0	10.5	0.0	9.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	5.0	0.0	0.0	36.0	0.0	6.8	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.1	7.7	14.4	3.1	0.0	46.5	0.0	16.5	0.0	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	D	A	B	A	A	A
Approach Vol, veh/h		124			246			59			0	
Approach Delay, s/veh		8.1			7.6			19.1			0.0	
Approach LOS		A			A			B				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	6.2	6.7	8.2	5.1	1.1	0.0	14.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	22.0	15.0	22.0	11.0	22.0	11.0	26.0
Max Q Clear Time (g_c+I1), s	0.0	2.7	3.1	2.6	2.1	0.0	0.0	2.5
Green Ext Time (p_c), s	0.0	0.1	0.2	0.6	0.0	0.0	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	84	106	13	5	159	523	83	5	721	5
Future Volume (veh/h)	5	1	84	106	13	5	159	523	83	5	721	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	1	88	112	14	5	167	551	87	5	759	5
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	19	145	123	246	268	227	300	1758	546	19	1342	417
Arrive On Green	0.01	0.08	0.08	0.07	0.14	0.14	0.09	0.34	0.34	0.01	0.26	0.26
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	3456	5106	1585	3456	5106	1585
Grp Volume(v), veh/h	5	1	88	112	14	5	167	551	87	5	759	5
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1728	1702	1585	1728	1702	1585
Q Serve(g_s), s	0.1	0.0	2.2	1.2	0.3	0.1	1.8	3.2	1.5	0.1	5.1	0.1
Cycle Q Clear(g_c), s	0.1	0.0	2.2	1.2	0.3	0.1	1.8	3.2	1.5	0.1	5.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	19	145	123	246	268	227	300	1758	546	19	1342	417
V/C Ratio(X)	0.27	0.01	0.72	0.45	0.05	0.02	0.56	0.31	0.16	0.27	0.57	0.01
Avail Cap(c_a), veh/h	953	750	636	953	750	636	953	2177	676	953	2177	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	17.0	18.0	17.8	14.7	14.7	17.5	9.6	9.1	19.8	12.7	10.9
Incr Delay (d2), s/veh	7.4	0.0	7.6	1.3	0.1	0.0	1.6	0.1	0.1	7.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.0	0.5	0.1	0.0	0.6	0.8	0.4	0.0	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	17.0	25.6	19.1	14.8	14.7	19.1	9.7	9.2	27.2	13.1	10.9
LnGrp LOS	C	B	C	B	B	B	B	A	A	C	B	B
Approach Vol, veh/h		94			131			805			769	
Approach Delay, s/veh		25.6			18.5			11.6			13.2	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	18.7	7.8	8.1	8.5	15.5	5.2	10.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	11.0	17.0	11.0	16.0	11.0	17.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	2.1	5.2	3.2	4.2	3.8	7.1	2.1	2.3
Green Ext Time (p_c), s	0.0	2.9	0.2	0.2	0.3	3.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	971	0	15	406	12	2	1	33	23	1	32
Future Volume (veh/h)	22	971	0	15	406	12	2	1	33	23	1	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	1022	0	16	427	13	2	1	35	24	1	34
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	1471	656	29	1435	44	3	2	60	99	3	86
Arrive On Green	0.02	0.41	0.00	0.02	0.41	0.41	0.04	0.04	0.04	0.06	0.06	0.06
Sat Flow, veh/h	1781	3554	1585	1781	3521	107	84	42	1467	1781	45	1539
Grp Volume(v), veh/h	23	1022	0	16	215	225	38	0	0	24	0	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1851	1593	0	0	1781	0	1584
Q Serve(g_s), s	0.4	8.0	0.0	0.3	2.8	2.8	0.8	0.0	0.0	0.4	0.0	0.7
Cycle Q Clear(g_c), s	0.4	8.0	0.0	0.3	2.8	2.8	0.8	0.0	0.0	0.4	0.0	0.7
Prop In Lane	1.00		1.00	1.00		0.06	0.05		0.92	1.00		0.97
Lane Grp Cap(c), veh/h	41	1471	656	29	724	754	65	0	0	99	0	88
V/C Ratio(X)	0.56	0.69	0.00	0.54	0.30	0.30	0.58	0.00	0.00	0.24	0.00	0.40
Avail Cap(c_a), veh/h	421	1890	843	421	945	984	988	0	0	1105	0	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.4	8.2	0.0	16.5	6.8	6.8	15.9	0.0	0.0	15.3	0.0	15.4
Incr Delay (d2), s/veh	11.5	0.8	0.0	14.7	0.2	0.2	7.9	0.0	0.0	1.2	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.5	0.0	0.2	0.5	0.6	0.4	0.0	0.0	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	8.9	0.0	31.3	7.0	7.0	23.8	0.0	0.0	16.5	0.0	18.3
LnGrp LOS	C	A	A	C	A	A	C	A	A	B	A	B
Approach Vol, veh/h		1045			456			38			59	
Approach Delay, s/veh		9.4			7.8			23.8			17.6	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		5.4	4.6	18.0		5.9	4.8	17.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	8.0	18.0		21.0	8.0	18.0
Max Q Clear Time (g_c+I1), s		2.8	2.3	10.0		2.7	2.4	4.8
Green Ext Time (p_c), s		0.1	0.0	3.9		0.2	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	1	16	19	0	29	8	127	37	78	144	11
Future Volume (veh/h)	16	1	16	19	0	29	8	127	37	78	144	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	1	17	20	0	31	8	134	39	82	152	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	133	112	37	138	116	15	318	268	125	433	365
Arrive On Green	0.02	0.07	0.07	0.02	0.00	0.07	0.01	0.17	0.17	0.07	0.23	0.23
Sat Flow, veh/h	1781	1870	1576	1781	1870	1576	1781	1870	1576	1781	1870	1578
Grp Volume(v), veh/h	17	1	17	20	0	31	8	134	39	82	152	12
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1870	1576	1781	1870	1576	1781	1870	1578
Q Serve(g_s), s	0.2	0.0	0.2	0.3	0.0	0.4	0.1	1.5	0.5	1.1	1.6	0.1
Cycle Q Clear(g_c), s	0.2	0.0	0.2	0.3	0.0	0.4	0.1	1.5	0.5	1.1	1.6	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	32	133	112	37	138	116	15	318	268	125	433	365
V/C Ratio(X)	0.53	0.01	0.15	0.54	0.00	0.27	0.52	0.42	0.15	0.66	0.35	0.03
Avail Cap(c_a), veh/h	595	1718	1447	595	1718	1447	595	1796	1513	595	1796	1516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	10.3	10.4	11.6	0.0	10.5	11.8	8.9	8.5	10.9	7.7	7.1
Incr Delay (d2), s/veh	13.2	0.0	0.6	11.6	0.0	1.2	24.4	0.9	0.2	5.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	0.2	0.0	0.1	0.1	0.4	0.1	0.5	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	10.4	11.1	23.3	0.0	11.7	36.3	9.8	8.7	16.6	8.2	7.2
LnGrp LOS	C	B	B	C	A	B	D	A	A	B	A	A
Approach Vol, veh/h		35			51			181			246	
Approach Delay, s/veh		17.7			16.2			10.7			10.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	8.1	4.5	5.7	4.2	9.5	4.4	5.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	23.0	8.0	22.0	8.0	23.0	8.0	22.0
Max Q Clear Time (g_c+I1), s	3.1	3.5	2.3	2.2	2.1	3.6	2.2	2.4
Green Ext Time (p_c), s	0.1	0.7	0.0	0.0	0.0	0.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

SimTraffic Post-Processor | **Kaiser Roseville Campus Expansion TIS**
Average Results from 10 Runs | **Cumulative Plus Project Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 5 **Cirby Way/Cirby Hills Dr-Kaiser North Driveway** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	180	155	85.9%	121.3	48.0	F
	Through						
	Right Turn	330	334	101.3%	16.0	1.6	B
	Subtotal	510	489	95.9%	49.7	17.0	D
SB	Left Turn	30	28	93.7%	68.1	20.5	E
	Through						
	Right Turn	70	68	97.7%	33.3	11.9	C
	Subtotal	100	97	96.5%	41.9	10.6	D
EB	Left Turn	60	51	85.5%	66.7	20.5	E
	Through	1,440	1,162	80.7%	16.4	1.1	B
	Right Turn	80	66	82.2%	13.1	2.2	B
	Subtotal	1,580	1,279	81.0%	18.2	1.1	B
WB	Left Turn	50	31	62.3%	90.8	13.6	F
	Through	1,700	1,194	70.3%	44.2	20.0	D
	Right Turn	20	14	68.4%	40.2	32.6	D
	Subtotal	1,770	1,239	70.0%	45.3	19.6	D
Total		3,960	3,104	78.4%	34.6	9.2	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	64	74	178	51	24	84	574	222	20	858	2
Future Volume (veh/h)	53	64	74	178	51	24	84	574	222	20	858	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	67	78	187	54	25	88	604	234	21	903	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	132	209	237	68	269	116	695	589	53	1222	3
Arrive On Green	0.13	0.13	0.13	0.17	0.17	0.17	0.07	0.37	0.37	0.03	0.34	0.34
Sat Flow, veh/h	833	996	1585	1397	403	1585	1781	1870	1585	1781	3638	8
Grp Volume(v), veh/h	123	0	78	241	0	25	88	604	234	21	441	464
Grp Sat Flow(s),veh/h/ln	1829	0	1585	1801	0	1585	1781	1870	1585	1781	1777	1869
Q Serve(g_s), s	3.6	0.0	2.6	7.5	0.0	0.8	2.8	17.4	6.3	0.7	12.8	12.8
Cycle Q Clear(g_c), s	3.6	0.0	2.6	7.5	0.0	0.8	2.8	17.4	6.3	0.7	12.8	12.8
Prop In Lane	0.46		1.00	0.78		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	242	0	209	305	0	269	116	695	589	53	597	628
V/C Ratio(X)	0.51	0.00	0.37	0.79	0.00	0.09	0.76	0.87	0.40	0.40	0.74	0.74
Avail Cap(c_a), veh/h	817	0	708	805	0	708	276	1598	1354	184	1460	1535
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	23.0	23.2	0.0	20.4	26.7	17.0	13.5	27.7	17.1	17.1
Incr Delay (d2), s/veh	0.6	0.0	0.4	1.7	0.0	0.1	3.8	1.4	0.2	1.8	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.9	3.1	0.0	0.3	1.3	6.7	2.0	0.3	4.9	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	0.0	23.5	24.9	0.0	20.4	30.5	18.3	13.6	29.5	18.8	18.7
LnGrp LOS	C	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		201			266			926			926	
Approach Delay, s/veh		23.9			24.5			18.3			19.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	26.9		11.7	7.8	24.8		13.9
Change Period (Y+Rc), s	4.0	5.3		4.0	4.0	* 5.3		4.0
Max Green Setting (Gmax), s	6.0	49.7		26.0	9.0	* 48		26.0
Max Q Clear Time (g_c+I1), s	2.7	19.4		5.6	4.8	14.8		9.5
Green Ext Time (p_c), s	0.0	2.2		0.4	0.0	4.0		0.5

Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	210	0	374	433	4	0	363	358	0	419	330
Future Volume (veh/h)	216	210	0	374	433	4	0	363	358	0	419	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	227	221	0	394	456	4	0	382	377	0	441	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	329	345	0	573	596	5	0	577	489	0	577	
Arrive On Green	0.18	0.18	0.00	0.32	0.32	0.32	0.00	0.31	0.31	0.00	0.31	0.00
Sat Flow, veh/h	1781	1870	0	1781	1851	16	0	1870	1585	0	1870	0
Grp Volume(v), veh/h	227	221	0	394	0	460	0	382	377	0	441	0
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1867	0	1870	1585	0	1870	0
Q Serve(g_s), s	8.8	8.1	0.0	14.2	0.0	16.4	0.0	13.1	16.0	0.0	15.8	0.0
Cycle Q Clear(g_c), s	8.8	8.1	0.0	14.2	0.0	16.4	0.0	13.1	16.0	0.0	15.8	0.0
Prop In Lane	1.00		0.00	1.00		0.01	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	329	345	0	573	0	601	0	577	489	0	577	
V/C Ratio(X)	0.69	0.64	0.00	0.69	0.00	0.77	0.00	0.66	0.77	0.00	0.76	
Avail Cap(c_a), veh/h	549	577	0	718	0	752	0	728	617	0	1282	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	28.2	27.9	0.0	21.8	0.0	22.6	0.0	22.2	23.2	0.0	23.1	0.0
Incr Delay (d2), s/veh	5.4	4.2	0.0	3.5	0.0	5.4	0.0	2.9	6.8	0.0	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	3.9	0.0	6.0	0.0	7.5	0.0	5.9	6.5	0.0	6.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	32.1	0.0	25.3	0.0	28.0	0.0	25.2	30.0	0.0	24.7	0.0
LnGrp LOS	C	C	A	C	A	C	A	C	C	A	C	
Approach Vol, veh/h		448			854			759			441	A
Approach Delay, s/veh		32.8			26.8			27.6			24.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		28.0		28.1		17.9		28.1				
Change Period (Y+Rc), s		* 4.2		5.3		4.2		* 5.3				
Max Green Setting (Gmax), s		* 30		50.7		22.8		* 29				
Max Q Clear Time (g_c+I1), s		18.4		17.8		10.8		18.0				
Green Ext Time (p_c), s		5.4		1.4		2.9		4.8				

Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	587	136	47	488	26	229	29	75	7	36	17
Future Volume (veh/h)	19	587	136	47	488	26	229	29	75	7	36	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	618	143	49	514	27	241	31	79	7	38	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	868	752	171	688	34	573	42	355	163	239	102
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	20	1829	1585	58	1450	72	1443	186	1585	69	1069	455
Grp Volume(v), veh/h	638	0	143	590	0	0	272	0	79	63	0	0
Grp Sat Flow(s),veh/h/ln	1849	0	1585	1580	0	0	1629	0	1585	1594	0	0
Q Serve(g_s), s	0.0	0.0	1.4	1.3	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.4	0.0	1.4	8.7	0.0	0.0	3.8	0.0	1.1	3.9	0.0	0.0
Prop In Lane	0.03		1.00	0.08		0.05	0.89		1.00	0.11		0.29
Lane Grp Cap(c), veh/h	1014	0	752	893	0	0	614	0	355	504	0	0
V/C Ratio(X)	0.63	0.00	0.19	0.66	0.00	0.00	0.44	0.00	0.22	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1871	0	1505	1669	0	0	1379	0	1225	1436	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.7	0.0	4.1	5.6	0.0	0.0	9.7	0.0	8.6	8.5	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.7	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.2	1.1	0.0	0.0	0.9	0.0	0.2	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.2	0.0	4.2	6.3	0.0	0.0	9.9	0.0	8.7	8.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		781			590			351			63	
Approach Delay, s/veh		5.8			6.3			9.6			8.5	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	17.1	10.1	17.1	10.1
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 26	21.0	* 26	21.0
Max Q Clear Time (g_c+I1), s	9.4	5.8	10.7	5.9
Green Ext Time (p_c), s	2.8	0.7	2.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	513	19	54	668	65	18	30	28	115	76	90
Future Volume (veh/h)	55	513	19	54	668	65	18	30	28	115	76	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	540	20	57	703	68	19	32	29	121	80	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	877	31	141	842	78	488	211	191	265	123	118
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	89	1621	57	65	1555	145	1210	904	819	539	526	503
Grp Volume(v), veh/h	618	0	0	828	0	0	19	0	61	296	0	0
Grp Sat Flow(s),veh/h/ln	1768	0	0	1766	0	0	1210	0	1723	1567	0	0
Q Serve(g_s), s	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	1.0	5.2	0.0	0.0
Cycle Q Clear(g_c), s	8.3	0.0	0.0	14.4	0.0	0.0	0.4	0.0	1.0	6.4	0.0	0.0
Prop In Lane	0.09		0.03	0.07		0.08	1.00		0.48	0.41		0.32
Lane Grp Cap(c), veh/h	1065	0	0	1061	0	0	488	0	402	505	0	0
V/C Ratio(X)	0.58	0.00	0.00	0.78	0.00	0.00	0.04	0.00	0.15	0.59	0.00	0.00
Avail Cap(c_a), veh/h	1687	0	0	1721	0	0	804	0	852	906	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.7	0.0	0.0	7.0	0.0	0.0	10.9	0.0	11.1	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	2.9	0.0	0.0	0.1	0.0	0.3	1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.1	0.0	0.0	8.0	0.0	0.0	10.9	0.0	11.1	13.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	A
Approach Vol, veh/h		618			828			80			296	
Approach Delay, s/veh		6.1			8.0			11.1			13.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	23.9	12.5	23.9	12.5
Change Period (Y+Rc), s	* 4.2	4.0	* 4.2	4.0
Max Green Setting (Gmax), s	* 34	18.0	* 34	18.0
Max Q Clear Time (g_c+I1), s	10.3	3.0	16.4	8.4
Green Ext Time (p_c), s	2.5	0.1	3.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	516	26	456	478	11	45	38	314	68	107	53
Future Volume (veh/h)	67	516	26	456	478	11	45	38	314	68	107	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	543	25	480	503	11	47	40	45	72	113	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	601	28	535	1072	23	193	140	280	138	153	48
Arrive On Green	0.05	0.34	0.34	0.30	0.59	0.59	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1781	1774	82	1781	1823	40	618	796	1585	374	865	275
Grp Volume(v), veh/h	71	0	568	480	0	514	87	0	45	226	0	0
Grp Sat Flow(s),veh/h/ln	1781	0	1856	1781	0	1863	1414	0	1585	1514	0	0
Q Serve(g_s), s	2.6	0.0	19.3	17.0	0.0	10.4	0.0	0.0	1.6	6.6	0.0	0.0
Cycle Q Clear(g_c), s	2.6	0.0	19.3	17.0	0.0	10.4	3.1	0.0	1.6	9.7	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.02	0.54		1.00	0.32		0.18
Lane Grp Cap(c), veh/h	91	0	629	535	0	1095	333	0	280	339	0	0
V/C Ratio(X)	0.78	0.00	0.90	0.90	0.00	0.47	0.26	0.00	0.16	0.67	0.00	0.00
Avail Cap(c_a), veh/h	216	0	753	701	0	1264	408	0	360	420	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	31.0	0.0	20.8	22.1	0.0	7.7	23.6	0.0	23.0	26.5	0.0	0.0
Incr Delay (d2), s/veh	5.4	0.0	12.4	10.2	0.0	0.3	0.2	0.0	0.1	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	9.7	8.1	0.0	3.4	1.1	0.0	0.6	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	0.0	33.2	32.3	0.0	8.0	23.7	0.0	23.1	28.1	0.0	0.0
LnGrp LOS	D	A	C	C	A	A	C	A	C	C	A	A
Approach Vol, veh/h		639			994			132			226	
Approach Delay, s/veh		33.6			19.7			23.5			28.1	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.8	26.6		15.6	7.4	43.0		15.6
Change Period (Y+Rc), s	4.0	* 4.2		4.0	4.0	* 4.2		4.0
Max Green Setting (Gmax), s	26.0	* 27		15.0	8.0	* 45		15.0
Max Q Clear Time (g_c+I1), s	19.0	21.3		5.1	4.6	12.4		11.7
Green Ext Time (p_c), s	0.8	1.1		0.1	0.0	1.8		0.2

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	104	198	196	110	28	542	1083	54	39	1112	0
Future Volume (veh/h)	70	104	198	196	110	28	542	1083	54	39	1112	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	109	54	206	116	4	571	1140	29	41	1171	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	109	158	190	107	260	534	1346	600	421	1169	
Arrive On Green	0.10	0.10	0.10	0.16	0.16	0.16	0.30	0.38	0.38	0.24	0.33	0.00
Sat Flow, veh/h	741	1092	1585	1159	653	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	183	0	54	322	0	4	571	1140	29	41	1171	0
Grp Sat Flow(s),veh/h/ln	1833	0	1585	1812	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	14.0	0.0	4.4	23.0	0.0	0.3	42.0	41.1	1.6	2.5	46.1	0.0
Cycle Q Clear(g_c), s	14.0	0.0	4.4	23.0	0.0	0.3	42.0	41.1	1.6	2.5	46.1	0.0
Prop In Lane	0.40		1.00	0.64		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	158	298	0	260	534	1346	600	421	1169	
V/C Ratio(X)	1.00	0.00	0.34	1.08	0.00	0.02	1.07	0.85	0.05	0.10	1.00	
Avail Cap(c_a), veh/h	183	0	158	298	0	260	534	1930	861	421	1169	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	63.0	0.0	58.8	58.6	0.0	49.1	49.1	39.8	27.5	41.8	47.0	0.0
Incr Delay (d2), s/veh	66.1	0.0	0.5	75.8	0.0	0.0	58.8	3.0	0.0	0.0	26.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	0.0	1.8	16.9	0.0	0.1	27.0	18.0	0.6	1.1	24.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	129.2	0.0	59.2	134.4	0.0	49.1	107.8	42.8	27.6	41.8	73.7	0.0
LnGrp LOS	F	A	E	F	A	D	F	D	C	D	F	
Approach Vol, veh/h		237			326			1740			1212	A
Approach Delay, s/veh		113.2			133.3			63.9			72.6	
Approach LOS		F			F			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	37.1	58.0		27.0	45.0	50.1		18.0
Change Period (Y+Rc), s	4.0	4.9		4.0	3.0	* 4		4.0
Max Green Setting (Gmax), s	10.0	76.1		23.0	42.0	* 46		14.0
Max Q Clear Time (g_c+I1), s	4.5	43.1		25.0	44.0	48.1		16.0
Green Ext Time (p_c), s	0.0	10.0		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	76.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	688	0	0	596	280	0	0	0	181	0	38
Future Volume (veh/h)	63	688	0	0	596	280	0	0	0	181	0	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	724	0	0	627	295	0	0	0	228	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	2238	0	0	853	720	0	6	0	473	248	0
Arrive On Green	0.05	0.63	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.13	0.00	0.00
Sat Flow, veh/h	1781	3647	0	0	1870	1578	0	1870	0	3563	1870	0
Grp Volume(v), veh/h	66	724	0	0	627	295	0	0	0	228	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1578	0	1870	0	1781	1870	0
Q Serve(g_s), s	1.2	3.2	0.0	0.0	9.2	4.2	0.0	0.0	0.0	2.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	3.2	0.0	0.0	9.2	4.2	0.0	0.0	0.0	2.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	97	2238	0	0	853	720	0	6	0	473	248	0
V/C Ratio(X)	0.68	0.32	0.00	0.00	0.73	0.41	0.00	0.00	0.00	0.48	0.00	0.00
Avail Cap(c_a), veh/h	423	3165	0	0	1221	1031	0	444	0	2327	1221	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.6	2.9	0.0	0.0	7.5	6.1	0.0	0.0	0.0	13.5	0.0	0.0
Incr Delay (d2), s/veh	7.9	0.1	0.0	0.0	1.4	0.4	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.3	0.0	0.0	2.4	0.9	0.0	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	3.0	0.0	0.0	8.9	6.5	0.0	0.0	0.0	14.3	0.0	0.0
LnGrp LOS	C	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		790			922			0			228	
Approach Delay, s/veh		4.7			8.1			0.0			14.3	
Approach LOS		A			A						B	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		0.0		25.2		8.5	5.8	19.4				
Change Period (Y+Rc), s		4.0		4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		8.0		30.0		22.0	8.0	22.0				
Max Q Clear Time (g_c+I1), s		0.0		5.2		4.0	3.2	11.2				
Green Ext Time (p_c), s		0.0		5.4		0.7	0.0	4.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	326	576	586	252	56	569
Future Volume (veh/h)	326	576	586	252	56	569
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	343	128	441	511	59	162
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	444	395	526	1037	302	255
Arrive On Green	0.25	0.25	0.30	0.55	0.16	0.16
Sat Flow, veh/h	1781	1585	1781	1870	1870	1575
Grp Volume(v), veh/h	343	128	441	511	59	162
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1575
Q Serve(g_s), s	7.3	2.7	9.5	6.8	1.1	3.9
Cycle Q Clear(g_c), s	7.3	2.7	9.5	6.8	1.1	3.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	444	395	526	1037	302	255
V/C Ratio(X)	0.77	0.32	0.84	0.49	0.20	0.64
Avail Cap(c_a), veh/h	698	622	698	1650	733	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.2	12.5	13.5	5.6	14.8	16.0
Incr Delay (d2), s/veh	2.9	0.5	6.9	0.4	0.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.1	4.0	1.6	0.4	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.1	13.0	20.4	5.9	15.1	18.6
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	471			952	221	
Approach Delay, s/veh	16.0			12.6	17.7	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		26.6		14.2	16.0	10.6
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		36.0		16.0	16.0	16.0
Max Q Clear Time (g_c+I1), s		8.8		9.3	11.5	5.9
Green Ext Time (p_c), s		3.5		0.9	0.7	0.6

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection 10 **Diamond Creek Blvd-Prarie Woods Wy/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	183	179	97.8%	132.3	42.1	F
	Through	64	63	99.2%	126.2	43.2	F
	Right Turn	47	48	101.9%	50.4	36.2	D
	Subtotal	294	290	98.7%	117.9	42.7	F
SB	Left Turn	247	239	96.9%	48.2	4.3	D
	Through	30	30	100.1%	60.5	14.3	E
	Right Turn	164	165	100.6%	44.8	4.6	D
	Subtotal	441	434	98.5%	48.0	4.0	D
EB	Left Turn	53	57	108.3%	72.6	9.0	E
	Through	1,556	1,558	100.1%	28.6	3.2	C
	Right Turn	30	30	100.1%	8.4	1.6	A
	Subtotal	1,639	1,645	100.4%	29.8	3.2	C
WB	Left Turn	52	37	71.6%	84.1	21.4	F
	Through	2,300	1,918	83.4%	37.7	11.5	D
	Right Turn	272	230	84.5%	17.5	6.3	B
	Subtotal	2,624	2,185	83.3%	36.5	10.8	D
Total		4,998	4,555	91.1%	40.3	7.2	D

Intersection 11 **Woodcreek Oaks Blvd/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	340	340	99.9%	79.0	23.7	E
	Through	427	363	85.1%	55.5	3.4	E
	Right Turn	201	192	95.5%	17.8	3.8	B
	Subtotal	968	895	92.4%	56.6	10.5	E
SB	Left Turn	322	315	97.8%	61.8	9.7	E
	Through	548	477	87.0%	65.1	12.9	E
	Right Turn	44	43	96.7%	25.7	6.5	C
	Subtotal	914	834	91.3%	62.0	10.6	E
EB	Left Turn	153	156	101.8%	78.1	9.3	E
	Through	1,449	1,450	100.1%	60.7	15.5	E
	Right Turn	194	187	96.2%	24.4	4.1	C
	Subtotal	1,796	1,792	99.8%	58.5	12.7	E
WB	Left Turn	518	505	97.6%	48.8	12.7	D
	Through	2,084	1,669	80.1%	30.0	11.2	C
	Right Turn	337	287	85.2%	18.1	6.3	B
	Subtotal	2,939	2,462	83.8%	32.5	10.8	C
Total		6,617	5,983	90.4%	48.0	3.5	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 12 **Walgreens Dwy-Roseville Pkwy/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	5	91.2%	27.4	29.2	C
	Through	5	3	60.8%	19.3	26.1	B
	Right Turn	5	3	68.4%	7.8	13.1	A
	Subtotal	15	11	73.5%	29.3	21.3	C
SB	Left Turn	72	64	89.2%	65.3	16.4	E
	Through	16	14	90.3%	22.5	21.3	C
	Right Turn						
	Subtotal	88	79	89.4%	58.8	13.8	E
EB	Left Turn	11	7	65.6%	56.5	25.1	E
	Through	1,920	1,904	99.2%	28.3	9.0	C
	Right Turn	5	6	114.0%	9.1	3.3	A
	Subtotal	1,936	1,917	99.0%	28.4	9.0	C
WB	Left Turn	5	5	98.8%	60.7	39.9	E
	Through	2,810	2,282	81.2%	16.6	1.9	B
	Right Turn	31	28	89.5%	2.5	1.4	A
	Subtotal	2,846	2,315	81.3%	16.6	1.9	B
Total		4,885	4,322	88.5%	22.7	4.3	C

Intersection 13 **New Meadow Dr/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	5	4	76.0%	27.3	25.7	C
	Through	5	5	91.2%	52.6	47.5	D
	Right Turn	5	7	144.4%	13.6	8.7	B
	Subtotal	15	16	103.9%	33.5	17.9	C
SB	Left Turn	123	125	102.0%	53.5	5.1	D
	Through	5	9	174.8%	37.6	30.8	D
	Right Turn	25	25	100.3%	13.2	10.5	B
	Subtotal	153	159	104.1%	47.3	4.0	D
EB	Left Turn	40	47	117.8%	58.8	19.1	E
	Through	1,952	1,914	98.1%	11.3	2.0	B
	Right Turn	5	6	121.6%	4.5	4.0	A
	Subtotal	1,997	1,968	98.5%	12.5	2.3	B
WB	Left Turn	5	4	76.0%	40.5	41.6	D
	Through	2,816	2,295	81.5%	9.6	1.4	A
	Right Turn	309	264	85.6%	7.3	1.1	A
	Subtotal	3,130	2,563	81.9%	9.5	1.3	A
Total		5,295	4,706	88.9%	12.1	1.4	B

Intersection 14 **Collector C/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	10	8	79.8%	47.2	27.2	D
	Through	10	9	87.4%	77.3	45.1	E
	Right Turn	10	12	117.8%	13.8	15.1	B
	Subtotal	30	29	95.0%	50.9	13.8	D
SB	Left Turn	10	8	76.0%	49.9	42.0	D
	Through	10	6	64.6%	64.8	43.6	E
	Right Turn	10	11	106.4%	28.0	17.5	C
	Subtotal	30	25	82.3%	48.1	17.8	D
EB	Left Turn	10	10	98.8%	69.6	36.5	E
	Through	2,152	2,138	99.3%	18.3	3.6	B
	Right Turn	10	10	102.6%	10.3	5.5	B
	Subtotal	2,172	2,158	99.3%	18.5	3.5	B
WB	Left Turn	10	10	95.0%	78.1	32.8	E
	Through	3,181	2,630	82.7%	8.5	0.8	A
	Right Turn	10	8	79.8%	3.8	3.2	A
	Subtotal	3,201	2,647	82.7%	8.8	0.8	A
Total		5,433	4,858	89.4%	13.6	1.8	B

Intersection 15 **Foothills Blvd/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	365	375	102.8%	97.2	44.8	F
	Through	907	537	59.2%	130.5	44.5	F
	Right Turn	568	584	102.8%	75.1	50.5	E
	Subtotal	1,840	1,496	81.3%	100.6	46.5	F
SB	Left Turn	723	533	73.7%	135.1	51.7	F
	Through	671	589	87.7%	53.4	11.7	D
	Right Turn	297	305	102.7%	24.5	2.2	C
	Subtotal	1,691	1,427	84.4%	77.9	22.1	E
EB	Left Turn	113	119	105.6%	85.1	10.5	F
	Through	1,809	1,647	91.0%	59.9	9.7	E
	Right Turn	250	280	112.2%	26.1	8.0	C
	Subtotal	2,172	2,047	94.2%	56.8	8.0	E
WB	Left Turn	347	333	95.8%	64.8	17.4	E
	Through	2,539	1,964	77.4%	36.4	1.5	D
	Right Turn	474	260	54.8%	13.3	2.0	B
	Subtotal	3,360	2,556	76.1%	37.8	2.6	D
Total		9,063	7,526	83.0%	62.7	12.3	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 16 **SR 65 Ramps-Fidelity Wy/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	175	121	69.3%	165.3	54.8	F
	Through						
	Right Turn	130	100	76.9%	158.2	56.5	F
	Subtotal	305	221	72.5%	161.7	54.3	F
SB	Left Turn						
	Through						
	Right Turn	1,080	1,083	100.2%	3.3	0.7	A
	Subtotal	1,080	1,083	100.2%	3.3	0.7	A
EB	Left Turn						
	Through	3,270	2,431	74.3%	158.4	18.3	F
	Right Turn	23	16	71.0%	150.0	17.9	F
	Subtotal	3,293	2,448	74.3%	158.3	18.3	F
WB	Left Turn	36	29	81.3%	52.8	16.9	D
	Through	2,214	1,373	62.0%	5.9	0.4	A
	Right Turn						
	Subtotal	2,250	1,402	62.3%	6.9	0.6	A
Total		6,928	5,153	74.4%	84.8	8.6	F

Intersection 17 **SR 65 Ramps-Washington Blvd/Blue Oaks Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	781	9	1.1%	590.6	25.5	F
	Through						
	Right Turn	816	116	14.3%	437.4	60.8	F
	Subtotal	1,597	125	7.8%	457.3	78.6	F
SB	Left Turn	131	124	94.3%	52.5	13.6	D
	Through	484	534	110.3%	65.4	14.7	E
	Right Turn	249	238	95.7%	23.9	10.9	C
	Subtotal	864	896	103.7%	52.6	13.1	D
EB	Left Turn						
	Through	1,272	1,157	91.0%	15.1	1.8	B
	Right Turn	2,128	1,375	64.6%	23.7	1.9	C
	Subtotal	3,400	2,532	74.5%	19.8	1.7	B
WB	Left Turn	447	345	77.1%	124.2	28.1	F
	Through	1,220	1,155	94.7%	24.1	3.3	C
	Right Turn	378	393	104.0%	17.9	2.8	B
	Subtotal	2,045	1,893	92.6%	41.1	7.2	D
Total		7,906	5,446	68.9%	41.3	9.8	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 31 **Foothills Blvd/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	347	330	95.2%	120.9	25.4	F
	Through	512	464	90.5%	46.7	4.8	D
	Right Turn	622	491	78.9%	165.2	42.8	F
	Subtotal	1,481	1,284	86.7%	111.0	18.4	F
SB	Left Turn	240	201	83.6%	161.6	19.3	F
	Through	1,468	1,209	82.4%	145.0	13.8	F
	Right Turn	477	385	80.6%	157.7	22.9	F
	Subtotal	2,185	1,794	82.1%	149.5	13.0	F
EB	Left Turn	320	319	99.6%	103.7	41.1	F
	Through	1,439	1,397	97.0%	52.3	7.4	D
	Right Turn	160	158	98.6%	20.2	3.9	C
	Subtotal	1,919	1,873	97.6%	58.6	10.9	E
WB	Left Turn	791	669	84.6%	80.4	8.5	F
	Through	1,952	1,683	86.2%	48.2	7.4	D
	Right Turn	106	89	84.2%	27.6	3.8	C
	Subtotal	2,849	2,441	85.7%	56.3	5.2	E
Total		8,434	7,393	87.7%	89.1	6.1	F

Intersection 32 **Washington Blvd/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	357	310	86.8%	145.7	27.3	F
	Through	529	524	99.1%	44.4	4.5	D
	Right Turn	371	369	99.6%	7.0	1.0	A
	Subtotal	1,257	1,203	95.7%	59.0	8.6	E
SB	Left Turn	160	130	81.5%	199.5	41.6	F
	Through	1,044	867	83.1%	172.8	42.3	F
	Right Turn	212	184	86.6%	149.6	42.8	F
	Subtotal	1,416	1,181	83.4%	172.5	41.8	F
EB	Left Turn	205	173	84.5%	125.2	17.8	F
	Through	1,880	1,566	83.3%	100.2	17.9	F
	Right Turn	178	131	73.4%	80.8	21.3	F
	Subtotal	2,263	1,870	82.6%	101.2	17.6	F
WB	Left Turn	412	348	84.4%	211.7	49.7	F
	Through	2,117	1,783	84.2%	158.3	37.9	F
	Right Turn	87	79	90.4%	106.7	36.3	F
	Subtotal	2,616	2,209	84.5%	165.0	37.6	F
Total		7,552	6,463	85.6%	128.0	14.8	F

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 33 **Hallisy Dr-Gold Coast Dr/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	367	331	90.2%	71.9	26.5	E
	Through	72	73	100.8%	70.9	27.2	E
	Right Turn	35	32	92.3%	37.8	30.8	D
	Subtotal	474	436	92.0%	69.3	26.4	E
SB	Left Turn	80	73	91.7%	49.2	9.1	D
	Through	35	35	101.0%	27.9	15.0	C
	Right Turn						
	Subtotal	115	109	94.5%	42.6	6.8	D
EB	Left Turn	21	14	68.8%	81.5	16.1	F
	Through	2,278	1,936	85.0%	37.5	4.6	D
	Right Turn	30	30	100.1%	21.8	3.1	C
	Subtotal	2,329	1,981	85.0%	37.6	4.5	D
WB	Left Turn	78	79	100.8%	67.7	10.7	E
	Through	2,233	2,142	95.9%	23.6	3.2	C
	Right Turn	94	106	112.8%	9.6	1.7	A
	Subtotal	2,405	2,326	96.7%	24.4	3.0	C
Total		5,323	4,851	91.1%	34.3	4.0	C

Intersection 35 **Pleasant Grove Blvd/Highland Pointe Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	380	309	81.3%	148.9	41.2	F
	Through	2,634	1,705	64.7%	242.9	24.0	F
	Right Turn	35	18	51.0%	275.5	38.2	F
	Subtotal	3,049	2,032	66.6%	229.1	24.9	F
SB	Left Turn	186	165	88.9%	92.7	29.6	F
	Through	1,824	1,784	97.8%	48.8	17.0	D
	Right Turn	289	290	100.5%	16.1	6.4	B
	Subtotal	2,299	2,240	97.4%	47.9	15.9	D
EB	Left Turn	541	374	69.1%	267.9	46.1	F
	Through	5	5	106.4%	62.8	42.7	E
	Right Turn	453	411	90.7%	83.2	21.2	F
	Subtotal	999	790	79.1%	170.4	27.6	F
WB	Left Turn	279	277	99.3%	72.6	18.1	E
	Through	40	41	101.7%	68.8	19.4	E
	Right Turn	340	335	98.6%	41.6	27.9	D
	Subtotal	659	653	99.1%	56.6	21.9	E
Total		7,006	5,714	81.6%	130.4	10.1	F

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 36 **SR 65 SB Ramps/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	194	193	99.5%	27.7	6.5	C
	Through						
	Right Turn	484	485	100.2%	30.5	7.4	C
	Subtotal	678	678	100.0%	29.7	7.0	C
EB	Left Turn						
	Through	2,556	1,807	70.7%	17.8	1.3	B
	Right Turn	497	297	59.8%	15.7	1.9	B
	Subtotal	3,053	2,104	68.9%	17.5	1.4	B
WB	Left Turn						
	Through	2,098	2,015	96.0%	18.0	9.5	B
	Right Turn	307	296	96.4%	9.8	4.8	A
	Subtotal	2,405	2,311	96.1%	17.0	8.9	B
Total		6,136	5,093	83.0%	18.9	5.1	B

Intersection 37 **SR 65 NB Ramps/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	606	598	98.6%	62.3	7.6	E
	Through						
	Right Turn	684	703	102.8%	29.8	8.6	C
	Subtotal	1,290	1,301	100.9%	44.8	6.5	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	2,276	1,694	74.4%	20.2	3.5	C
	Right Turn	474	310	65.5%	11.3	1.5	B
	Subtotal	2,750	2,004	72.9%	18.8	3.1	B
WB	Left Turn	206	190	92.2%	59.7	12.9	E
	Through	1,799	1,725	95.9%	3.6	0.4	A
	Right Turn						
	Subtotal	2,005	1,915	95.5%	9.2	1.7	A
Total		6,045	5,220	86.4%	21.8	1.9	C

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Unconstrained Conditions**
Volume and Delay by Movement **PM Peak Hour**

Intersection 38 **Fairway Dr/Pleasant Grove Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	616	530	86.1%	55.5	12.2	E
	Through	1,242	1,058	85.1%	40.1	3.2	D
	Right Turn	728	528	72.5%	15.4	1.9	B
	Subtotal	2,586	2,116	81.8%	38.0	4.7	D
SB	Left Turn	108	114	105.9%	67.1	8.6	E
	Through	704	683	97.1%	59.4	4.0	E
	Right Turn	153	146	95.1%	22.7	3.0	C
	Subtotal	965	943	97.7%	54.7	4.0	D
EB	Left Turn	226	230	101.6%	63.0	5.9	E
	Through	421	405	96.3%	50.9	4.8	D
	Right Turn	514	466	90.6%	109.2	31.3	F
	Subtotal	1,161	1,100	94.8%	78.0	13.5	E
WB	Left Turn	654	626	95.7%	62.8	14.5	E
	Through	603	597	99.0%	37.4	2.2	D
	Right Turn	116	103	88.4%	9.8	1.7	A
	Subtotal	1,373	1,325	96.5%	47.4	8.1	D
Total		6,085	5,485	90.1%	51.2	4.0	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 34 **Pleasant Grove Blvd/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1,100	655	59.6%	137.3	13.1	F
	Through	1,243	888	71.4%	65.7	8.9	E
	Right Turn	1,218	869	71.3%	24.2	3.5	C
	Subtotal	3,561	2,411	67.7%	70.2	7.6	E
SB	Left Turn	406	333	81.9%	118.5	32.2	F
	Through	986	775	78.6%	183.2	39.1	F
	Right Turn	21	19	88.7%	44.4	22.6	D
	Subtotal	1,413	1,126	79.7%	161.9	37.1	F
EB	Left Turn	47	46	97.0%	119.1	31.0	F
	Through	1,377	1,240	90.0%	121.3	29.8	F
	Right Turn	882	766	86.9%	73.5	37.3	E
	Subtotal	2,306	2,052	89.0%	103.4	32.3	F
WB	Left Turn	838	480	57.3%	334.7	42.2	F
	Through	1,555	1,466	94.3%	55.5	9.0	E
	Right Turn	274	264	96.4%	20.6	5.3	C
	Subtotal	2,667	2,211	82.9%	111.9	14.6	F
Total		9,947	7,801	78.4%	103.7	10.8	F

Intersection 63 **Gibson Dr (W)/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	38	32	84.0%	118.4	38.4	F
	Through						
	Right Turn	1,203	1,018	84.7%	74.7	37.5	E
	Subtotal	1,241	1,050	84.6%	76.0	37.1	E
EB	Left Turn	469	346	73.7%	82.4	9.3	F
	Through	2,229	1,672	75.0%	19.2	3.2	B
	Right Turn						
	Subtotal	2,698	2,018	74.8%	30.1	3.2	C
WB	Left Turn						
	Through	2,337	1,468	62.8%	105.7	21.0	F
	Right Turn	30	18	60.8%	128.3	64.3	F
	Subtotal	2,367	1,487	62.8%	105.9	21.3	F
Total		6,306	4,555	72.2%	65.0	11.5	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 64 **Chase Dr/Rosville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	50	54	107.2%	56.4	18.6	E
	Through						
	Right Turn	77	77	99.7%	1.4	0.3	A
	Subtotal	127	130	102.6%	23.3	7.4	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	2,189	1,623	74.1%	24.1	7.7	C
	Right Turn	78	55	70.2%	12.0	4.5	B
	Subtotal	2,267	1,677	74.0%	23.7	7.5	C
WB	Left Turn	458	323	70.5%	73.2	15.3	E
	Through	2,317	1,735	74.9%	24.8	3.7	C
	Right Turn						
	Subtotal	2,775	2,058	74.2%	32.5	5.9	C
Total		5,169	3,866	74.8%	28.3	6.1	C

Intersection 65 **Gibson Dr-Castaic Dr/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	2	0	0.0%	11.7	37.1	B
	Through	3	5	164.7%	84.4	64.9	F
	Right Turn	44	50	114.0%	38.1	13.1	D
	Subtotal	49	55	112.4%	44.9	13.0	D
SB	Left Turn	1,101	760	69.0%	234.2	38.2	F
	Through	7	2	32.6%	197.5	134.0	F
	Right Turn	369	259	70.2%	208.3	37.6	F
	Subtotal	1,477	1,021	69.2%	227.8	38.3	F
EB	Left Turn	200	131	65.7%	207.6	84.6	F
	Through	2,062	1,526	74.0%	22.8	16.4	C
	Right Turn						
	Subtotal	2,262	1,658	73.3%	37.2	21.9	D
WB	Left Turn	42	32	75.1%	96.6	13.9	F
	Through	2,404	1,844	76.7%	53.6	10.5	D
	Right Turn	597	458	76.7%	20.4	5.5	C
	Subtotal	3,043	2,333	76.7%	47.7	9.3	D
Total		6,831	5,067	74.2%	79.8	8.2	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 66 **West Dr/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	39	31	78.9%	83.2	12.3	F
	Through	2,664	2,163	81.2%	16.8	5.0	B
	Right Turn	114	89	78.0%	2.3	1.2	A
	Subtotal	2,817	2,283	81.0%	17.2	5.0	B
SB	Left Turn	279	196	70.1%	80.7	15.8	F
	Through	2,921	2,078	71.1%	24.1	7.2	C
	Right Turn	31	20	65.0%	13.3	10.0	B
	Subtotal	3,231	2,294	71.0%	28.9	7.7	C
EB	Left Turn	26	21	80.4%	73.8	19.3	E
	Through	20	13	66.5%	60.5	25.2	E
	Right Turn	24	26	109.3%	42.1	16.6	D
	Subtotal	70	60	86.3%	58.9	11.8	E
WB	Left Turn	133	132	99.1%	55.7	8.7	E
	Through	2	2	114.0%	22.9	30.2	C
	Right Turn	337	325	96.5%	23.4	3.4	C
	Subtotal	472	459	97.3%	32.9	4.9	C
Total		6,590	5,097	77.3%	24.4	4.8	C

Intersection 67 **Reserve Dr/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	427	352	82.3%	148.4	38.7	F
	Through	100	78	77.9%	155.8	35.1	F
	Right Turn	418	351	84.0%	124.1	39.9	F
	Subtotal	945	781	82.6%	138.3	38.4	F
SB	Left Turn	276	293	106.2%	40.0	4.2	D
	Through	181	181	99.9%	44.8	5.2	D
	Right Turn	83	89	107.1%	4.9	2.2	A
	Subtotal	540	563	104.2%	36.1	3.9	D
EB	Left Turn	34	22	65.9%	91.5	21.5	F
	Through	2,652	1,879	70.9%	80.1	10.7	F
	Right Turn	340	230	67.6%	60.1	10.5	E
	Subtotal	3,026	2,131	70.4%	78.0	10.6	E
WB	Left Turn	320	246	77.0%	77.8	13.0	E
	Through	2,297	1,883	82.0%	47.4	9.1	D
	Right Turn	238	178	74.7%	24.1	8.3	C
	Subtotal	2,855	2,307	80.8%	48.9	8.0	D
Total		7,366	5,782	78.5%	70.4	9.0	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 68 **Galleria Blvd/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	594	401	67.6%	259.6	29.4	F
	Through	1,003	1,006	100.3%	57.7	6.4	E
	Right Turn	64	69	108.1%	8.5	2.6	A
	Subtotal	1,661	1,477	88.9%	110.4	11.5	F
SB	Left Turn	660	336	50.8%	355.7	26.1	F
	Through	759	654	86.2%	78.5	12.6	E
	Right Turn	563	502	89.2%	35.2	6.1	D
	Subtotal	1,982	1,492	75.3%	126.5	12.7	F
EB	Left Turn	659	483	73.3%	95.9	19.8	F
	Through	1,658	1,289	77.8%	44.9	9.0	D
	Right Turn	1,032	739	71.6%	12.9	0.7	B
	Subtotal	3,349	2,512	75.0%	45.3	7.9	D
WB	Left Turn	255	215	84.3%	102.9	20.6	F
	Through	1,698	1,387	81.7%	65.8	10.4	E
	Right Turn	741	641	86.5%	10.3	1.8	B
	Subtotal	2,694	2,242	83.2%	53.6	8.0	D
Total		9,686	7,722	79.7%	75.7	4.6	E

Intersection 69 **Creekside Ridge Dr/Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	27	26	95.7%	68.6	17.4	E
	Through	10	9	91.2%	59.4	43.4	E
	Right Turn	23	24	102.4%	5.8	2.9	A
	Subtotal	60	59	97.5%	43.3	9.9	D
SB	Left Turn	495	484	97.8%	70.9	25.2	E
	Through	4	4	104.5%	55.3	57.6	E
	Right Turn	151	149	98.6%	62.1	26.8	E
	Subtotal	650	637	98.0%	68.9	25.4	E
EB	Left Turn	76	49	64.5%	75.2	4.3	E
	Through	2,226	1,576	70.8%	24.3	2.3	C
	Right Turn	17	11	62.6%	7.4	0.7	A
	Subtotal	2,319	1,636	70.5%	25.8	2.5	C
WB	Left Turn	42	37	87.8%	93.7	14.1	F
	Through	2,268	1,890	83.3%	36.4	4.7	D
	Right Turn	339	259	76.3%	25.0	4.1	C
	Subtotal	2,649	2,185	82.5%	36.1	4.6	D
Total		5,678	4,517	79.6%	37.2	5.3	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 70 **Taylor Rd/E Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	523	485	92.8%	115.4	41.4	F
	Through	376	363	96.5%	48.2	5.3	D
	Right Turn	234	244	104.1%	25.3	11.9	C
	Subtotal	1,133	1,092	96.4%	73.1	19.0	E
SB	Left Turn	583	253	43.5%	371.0	43.9	F
	Through	320	315	98.4%	44.8	5.8	D
	Right Turn	236	244	103.2%	28.8	4.0	C
	Subtotal	1,139	812	71.3%	142.1	15.7	F
EB	Left Turn	340	203	59.7%	194.8	49.9	F
	Through	2,128	1,483	69.7%	73.5	22.5	E
	Right Turn	277	211	76.3%	41.9	20.1	D
	Subtotal	2,745	1,897	69.1%	82.9	18.5	F
WB	Left Turn	252	189	74.9%	150.3	41.6	F
	Through	2,102	1,632	77.7%	97.7	19.7	F
	Right Turn	804	562	69.9%	71.7	11.4	E
	Subtotal	3,158	2,383	75.5%	96.1	17.5	F
Total		8,175	6,184	75.6%	93.9	9.1	F

Intersection 71 **N Sunrise Ave/E Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	576	549	95.4%	113.8	23.0	F
	Through	109	112	102.8%	43.9	9.1	D
	Right Turn	379	366	96.5%	5.3	1.9	A
	Subtotal	1,064	1,027	96.5%	67.8	14.2	E
SB	Left Turn	105	92	87.9%	172.2	64.8	F
	Through	267	225	84.1%	135.2	74.0	F
	Right Turn	306	295	96.4%	34.6	9.0	C
	Subtotal	678	612	90.2%	90.9	35.7	F
EB	Left Turn	106	79	74.6%	71.9	6.5	E
	Through	2,120	1,419	66.9%	36.4	5.2	D
	Right Turn	417	265	63.6%	11.7	1.3	B
	Subtotal	2,643	1,764	66.7%	34.3	4.4	C
WB	Left Turn	345	295	85.4%	118.6	23.1	F
	Through	2,103	1,686	80.2%	84.4	28.0	F
	Right Turn	42	33	79.6%	44.0	19.3	D
	Subtotal	2,490	2,014	80.9%	88.8	26.5	F
Total		6,875	5,417	78.8%	66.5	9.5	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 72 **Secret Ravine Pkwy/E Roseville Pkwy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1	1	114.0%	4.7	11.1	A
	Through						
	Right Turn						
	Subtotal	1	1	114.0%	4.7	11.1	A
SB	Left Turn	141	147	104.0%	65.5	17.7	E
	Through						
	Right Turn	578	529	91.4%	58.3	23.6	E
	Subtotal	719	675	93.9%	59.9	17.7	E
EB	Left Turn	737	505	68.5%	63.2	22.1	E
	Through	1,815	1,271	70.1%	36.5	25.7	D
	Right Turn	4	3	66.5%	32.0	70.0	C
	Subtotal	2,556	1,779	69.6%	44.1	24.7	D
WB	Left Turn	13	15	114.0%	93.8	39.9	F
	Through	1,879	1,695	90.2%	56.3	26.9	E
	Right Turn	144	133	92.1%	32.0	24.0	C
	Subtotal	2,036	1,843	90.5%	54.9	26.6	D
Total		5,312	4,298	80.9%	50.4	11.9	D

Intersection 73 **E Roseville Pkwy/Alexandra Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,902	1,881	98.9%	18.2	2.8	B
	Right Turn	403	396	98.3%	14.4	3.4	B
	Subtotal	2,305	2,277	98.8%	17.6	2.9	B
SB	Left Turn	120	94	78.5%	33.7	3.7	C
	Through	1,821	1,306	71.7%	11.3	2.3	B
	Right Turn						
	Subtotal	1,941	1,401	72.2%	12.8	2.0	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	79	86	108.2%	22.9	3.5	C
	Through						
	Right Turn	64	62	96.2%	10.2	2.4	B
	Subtotal	143	147	102.8%	17.6	2.0	B
Total		4,389	3,825	87.2%	15.8	1.8	B

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 74 **E Roseville Pkwy/Rocky Ridge Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	86	87	101.2%	70.6	12.6	E
	Through	2,023	2,020	99.9%	14.1	2.3	B
	Right Turn						
	Subtotal	2,109	2,107	99.9%	16.4	2.4	B
SB	Left Turn						
	Through	1,665	1,245	74.8%	15.1	2.9	B
	Right Turn	235	184	78.3%	8.1	1.5	A
	Subtotal	1,900	1,429	75.2%	14.2	2.6	B
EB	Left Turn	282	282	100.0%	51.0	2.0	D
	Through						
	Right Turn	211	204	96.5%	15.2	3.5	B
	Subtotal	493	486	98.5%	36.0	2.3	D
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		4,502	4,022	89.3%	18.0	1.5	B

Intersection 75 **E Roseille Pkwy/Lead Hill Blvd-Orvietto Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	212	215	101.5%	69.7	9.2	E
	Through	1,697	1,675	98.7%	17.5	1.9	B
	Right Turn	4	3	76.0%	1.8	2.5	A
	Subtotal	1,913	1,894	99.0%	23.4	2.1	C
SB	Left Turn	17	12	71.5%	62.3	19.4	E
	Through	1,799	1,287	71.5%	35.0	7.9	C
	Right Turn	76	56	74.0%	17.6	4.5	B
	Subtotal	1,892	1,355	71.6%	34.6	7.7	C
EB	Left Turn	417	437	104.9%	63.3	9.5	E
	Through	22	20	91.5%	64.2	28.4	E
	Right Turn	255	249	97.6%	16.6	4.2	B
	Subtotal	694	706	101.8%	46.8	6.9	D
WB	Left Turn	3	2	50.7%	22.0	48.4	C
	Through	20	20	98.8%	48.2	17.0	D
	Right Turn						
	Subtotal	23	21	92.5%	51.8	19.7	D
Total		4,522	3,977	87.9%	31.5	3.2	C

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Unconstrained Conditions**
Volume and Delay by Movement **PM Peak Hour**

Intersection 174 **Galleria Blvd/Antelope Creek Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	119	83	69.6%	56.0	4.8	E
	Through	1,893	1,760	93.0%	22.4	4.8	C
	Right Turn	181	158	87.5%	2.7	0.4	A
	Subtotal	2,193	2,001	91.3%	22.2	4.3	C
SB	Left Turn	307	222	72.4%	133.7	48.3	F
	Through	1,342	1,148	85.5%	67.5	21.7	E
	Right Turn	259	264	102.0%	11.3	1.8	B
	Subtotal	1,908	1,634	85.7%	66.6	18.9	E
EB	Left Turn	505	490	97.1%	93.0	24.7	F
	Through	75	65	86.1%	62.6	20.3	E
	Right Turn	124	135	108.8%	2.4	0.4	A
	Subtotal	704	690	98.0%	72.6	19.4	E
WB	Left Turn	430	244	56.6%	171.3	71.8	F
	Through	88	86	97.6%	61.1	12.1	E
	Right Turn	431	393	91.1%	13.3	17.4	B
	Subtotal	949	722	76.1%	67.6	25.7	E
Total		5,754	5,048	87.7%	49.1	5.4	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 76 **E Roseville Pkwy/Olympus Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	11	12	107.1%	76.8	34.2	E
	Through	1,528	1,439	94.2%	44.1	11.5	D
	Right Turn	174	165	94.8%	10.2	2.7	B
	Subtotal	1,713	1,616	94.3%	40.9	10.8	D
SB	Left Turn	390	333	85.4%	93.7	15.5	F
	Through	1,831	1,699	92.8%	35.7	10.3	D
	Right Turn	43	40	92.8%	28.2	10.7	C
	Subtotal	2,264	2,071	91.5%	45.0	11.6	D
EB	Left Turn	112	102	90.9%	110.5	22.9	F
	Through	209	194	92.7%	92.3	20.7	F
	Right Turn	102	99	97.2%	78.0	19.6	E
	Subtotal	423	395	93.3%	93.3	20.2	F
WB	Left Turn	67	65	97.0%	73.1	17.8	E
	Through	171	175	102.4%	52.0	3.8	D
	Right Turn	211	209	99.1%	2.9	0.2	A
	Subtotal	449	449	100.0%	32.1	3.5	C
Total		4,849	4,531	93.4%	46.5	7.3	D

Intersection 77 **E Roseville Pkwy/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	183	196	106.9%	74.0	11.3	E
	Through	628	596	94.9%	50.5	4.2	D
	Right Turn	50	52	103.4%	17.6	5.0	B
	Subtotal	861	844	98.0%	54.0	5.4	D
SB	Left Turn	732	656	89.5%	75.3	12.9	E
	Through	1,030	946	91.9%	44.0	8.5	D
	Right Turn	102	101	99.5%	27.9	4.6	C
	Subtotal	1,864	1,703	91.4%	55.1	6.8	E
EB	Left Turn	182	150	82.5%	75.9	8.0	E
	Through	1,804	1,576	87.4%	31.1	3.7	C
	Right Turn	391	315	80.6%	20.3	2.8	C
	Subtotal	2,377	2,041	85.9%	32.6	3.1	C
WB	Left Turn	106	107	101.1%	84.2	19.8	F
	Through	1,670	1,582	94.7%	62.8	11.5	E
	Right Turn	863	829	96.0%	64.0	26.2	E
	Subtotal	2,639	2,518	95.4%	64.2	16.2	E
Total		7,741	7,106	91.8%	51.8	6.0	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 85 **I-80 WB Ramps/Eureka Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	1,367	1,250	91.4%	64.6	28.0	E
	Subtotal	1,367	1,250	91.4%	64.6	28.0	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	885	811	91.6%	68.7	24.7	E
	Right Turn	614	474	77.2%	108.2	27.7	F
	Subtotal	1,499	1,285	85.7%	83.3	25.8	F
WB	Left Turn	838	502	59.9%	168.3	48.9	F
	Through	1,551	1,338	86.3%	6.5	1.9	A
	Right Turn						
	Subtotal	2,389	1,840	77.0%	50.6	14.3	D
Total		5,255	4,375	83.3%	64.0	14.5	E

Intersection 86 **Taylor Rd-I-80 EB Ramps/Eureka Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	180	176	97.7%	40.5	7.1	D
	Through	576	586	101.7%	47.9	3.4	D
	Right Turn	389	362	93.1%	5.1	0.5	A
	Subtotal	1,145	1,124	98.1%	33.0	1.7	C
SB	Left Turn	522	376	72.1%	233.7	35.9	F
	Through						
	Right Turn	533	371	69.6%	281.6	77.9	F
	Subtotal	1,055	747	70.8%	253.7	45.7	F
EB	Left Turn	191	151	79.2%	159.6	63.7	F
	Through	1,693	1,535	90.7%	56.5	9.8	E
	Right Turn	368	317	86.1%	12.5	1.6	B
	Subtotal	2,252	2,003	89.0%	57.5	7.2	E
WB	Left Turn						
	Through	1,783	1,544	86.6%	49.3	14.6	D
	Right Turn	1,608	1,465	91.1%	41.6	9.7	D
	Subtotal	3,391	3,009	88.7%	45.6	11.9	D
Total		7,843	6,883	87.8%	69.5	6.7	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 87 **N Sunrise Ave/Eureka Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	579	430	74.2%	229.3	83.2	F
	Through	473	497	105.1%	48.5	5.7	D
	Right Turn	246	230	93.6%	4.3	0.7	A
	Subtotal	1,298	1,157	89.1%	105.0	26.1	F
SB	Left Turn	157	152	96.6%	58.0	5.2	E
	Through	501	529	105.6%	47.8	2.4	D
	Right Turn	505	480	95.0%	83.2	41.4	F
	Subtotal	1,163	1,161	99.8%	64.0	18.9	E
EB	Left Turn	240	196	81.5%	81.9	20.7	F
	Through	1,764	1,561	88.5%	32.8	8.5	C
	Right Turn	441	385	87.4%	14.6	6.2	B
	Subtotal	2,445	2,142	87.6%	33.9	7.7	C
WB	Left Turn	121	121	99.9%	77.0	11.7	E
	Through	2,331	2,228	95.6%	45.5	8.3	D
	Right Turn	148	135	90.9%	21.7	11.3	C
	Subtotal	2,600	2,483	95.5%	45.8	8.1	D
Total		7,506	6,943	92.5%	54.8	6.0	D

Intersection 90 **Eureka Rd/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	509	496	97.4%	74.7	13.0	E
	Through	667	672	100.8%	59.3	3.7	E
	Right Turn	21	20	94.1%	40.3	18.6	D
	Subtotal	1,197	1,188	99.2%	65.6	5.9	E
SB	Left Turn	930	715	76.9%	234.5	40.5	F
	Through	899	852	94.8%	90.2	17.4	F
	Right Turn	131	120	92.0%	97.8	29.3	F
	Subtotal	1,960	1,688	86.1%	152.0	17.1	F
EB	Left Turn	162	156	96.2%	55.4	6.2	E
	Through	1,245	1,152	92.5%	25.1	2.8	C
	Right Turn	452	409	90.4%	22.4	1.6	C
	Subtotal	1,859	1,716	92.3%	27.3	2.0	C
WB	Left Turn	87	78	89.1%	87.5	10.5	F
	Through	1,637	1,497	91.5%	37.4	3.0	D
	Right Turn	635	594	93.5%	21.4	1.1	C
	Subtotal	2,359	2,169	91.9%	34.8	2.7	C
Total		7,375	6,761	91.7%	67.5	4.4	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 98 **Harding Blvd/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	35	33	93.4%	63.2	13.3	E
	Through	32	30	92.6%	72.6	14.8	E
	Right Turn	105	119	113.6%	60.4	14.5	E
	Subtotal	172	182	105.6%	62.9	9.3	E
SB	Left Turn	982	869	88.5%	54.6	5.6	D
	Through	16	14	85.5%	61.0	23.8	E
	Right Turn	371	332	89.4%	33.2	5.7	C
	Subtotal	1,369	1,214	88.7%	49.0	5.4	D
EB	Left Turn	328	251	76.5%	238.9	32.7	F
	Through	1,315	985	74.9%	167.8	22.6	F
	Right Turn	18	16	86.6%	149.9	54.1	F
	Subtotal	1,661	1,251	75.3%	182.1	22.5	F
WB	Left Turn	70	56	79.8%	78.4	19.0	E
	Through	1,068	833	78.0%	48.8	12.8	D
	Right Turn	779	566	72.6%	31.3	6.7	C
	Subtotal	1,917	1,454	75.9%	43.3	10.1	D
Total		5,119	4,101	80.1%	88.2	9.1	F

Intersection 99 **I-80 WB Ramps/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	421	418	99.4%	51.6	11.9	D
	Through	524	529	100.9%	54.5	13.7	D
	Right Turn	172	169	98.1%	50.7	12.6	D
	Subtotal	1,117	1,116	99.9%	52.9	12.8	D
EB	Left Turn						
	Through	1,420	1,157	81.5%	23.3	3.0	C
	Right Turn	264	223	84.6%	18.2	4.5	B
	Subtotal	1,684	1,380	82.0%	22.5	3.0	C
WB	Left Turn						
	Through	1,745	1,310	75.1%	64.9	19.4	E
	Right Turn	723	481	66.6%	47.2	19.9	D
	Subtotal	2,468	1,792	72.6%	60.2	19.1	E
Total		5,269	4,288	81.4%	46.2	8.2	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 100 **I-80 EB Ramps/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	1,008	882	87.5%	35.5	49.4	D
	Subtotal	1,008	882	87.5%	35.5	49.4	D
SB	Left Turn						
	Through						
	Right Turn	642	593	92.3%	52.9	19.3	D
	Subtotal	642	593	92.3%	52.9	19.3	D
EB	Left Turn	460	369	80.2%	39.7	18.3	D
	Through	1,381	1,167	84.5%	12.2	11.9	B
	Right Turn						
	Subtotal	1,841	1,536	83.5%	18.8	13.3	B
WB	Left Turn						
	Through	2,548	1,860	73.0%	35.3	8.3	D
	Right Turn	609	461	75.7%	8.2	1.1	A
	Subtotal	3,157	2,321	73.5%	29.8	6.3	C
Total		6,648	5,333	80.2%	29.3	11.6	C

Intersection 101 **N Sunrise Ave/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	495	265	53.6%	356.6	62.9	F
	Through	558	474	85.0%	63.9	7.4	E
	Right Turn	125	104	83.0%	29.4	6.3	C
	Subtotal	1,178	843	71.6%	153.9	33.9	F
SB	Left Turn	206	193	93.5%	135.4	23.4	F
	Through	878	868	98.8%	68.2	11.5	E
	Right Turn	493	475	96.4%	34.0	11.7	C
	Subtotal	1,577	1,536	97.4%	66.3	13.0	E
EB	Left Turn	543	430	79.2%	148.8	38.0	F
	Through	1,629	1,356	83.3%	51.2	12.6	D
	Right Turn	217	188	86.7%	18.9	7.7	B
	Subtotal	2,389	1,974	82.6%	69.9	18.8	E
WB	Left Turn	251	216	86.0%	74.5	15.7	E
	Through	2,169	1,685	77.7%	77.8	16.3	E
	Right Turn	111	82	73.9%	63.3	14.2	E
	Subtotal	2,531	1,982	78.3%	76.9	14.6	E
Total		7,675	6,336	82.6%	81.8	9.3	F

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 102 **Santa Clara Dr/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	63	52	82.0%	97.2	26.6	F
	Through	22	18	81.2%	57.3	17.7	E
	Right Turn	76	67	88.0%	19.7	9.2	B
	Subtotal	161	136	84.7%	54.3	13.3	D
SB	Left Turn	174	165	94.8%	54.8	9.1	D
	Through	119	125	105.4%	60.4	9.9	E
	Right Turn	171	168	98.0%	39.6	7.9	D
	Subtotal	464	458	98.7%	50.7	8.1	D
EB	Left Turn	141	111	78.7%	74.1	12.5	E
	Through	1,627	1,388	85.3%	20.0	3.1	C
	Right Turn	38	33	88.0%	17.2	3.2	B
	Subtotal	1,806	1,533	84.9%	23.9	2.2	C
WB	Left Turn	122	108	88.5%	44.8	4.6	D
	Through	2,187	1,873	85.6%	23.6	8.9	C
	Right Turn	37	32	87.3%	13.7	4.0	B
	Subtotal	2,346	2,013	85.8%	24.6	8.5	C
Total		4,777	4,140	86.7%	28.3	5.1	C

Intersection 103 **Sierra Gardens Dr/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	152	149	97.8%	96.9	62.0	F
	Through	31	26	84.6%	112.3	63.0	F
	Right Turn	27	24	90.1%	96.7	74.3	F
	Subtotal	210	199	94.8%	99.2	64.1	F
SB	Left Turn	207	209	101.1%	54.6	8.2	D
	Through	58	55	94.3%	59.7	11.2	E
	Right Turn	35	37	105.3%	52.0	12.5	D
	Subtotal	300	301	100.3%	55.1	6.6	E
EB	Left Turn	65	54	83.6%	53.1	13.6	D
	Through	1,705	1,513	88.7%	15.0	7.3	B
	Right Turn	46	32	70.2%	10.9	7.8	B
	Subtotal	1,816	1,600	88.1%	16.2	7.1	B
WB	Left Turn	39	36	92.6%	60.9	16.2	E
	Through	2,271	2,043	89.9%	27.6	6.7	C
	Right Turn	40	40	100.7%	15.7	3.5	B
	Subtotal	2,350	2,119	90.2%	27.9	6.5	C
Total		4,676	4,219	90.2%	29.0	6.2	C

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 104 **Target Dwy/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	131	122	92.8%	88.4	35.9	F
	Through	23	26	112.3%	63.9	35.4	E
	Right Turn	63	64	101.9%	43.7	21.3	D
	Subtotal	217	212	97.5%	72.4	30.8	E
SB	Left Turn	80	75	94.1%	82.6	36.4	F
	Through	10	11	114.0%	70.2	28.6	E
	Right Turn	126	126	99.8%	56.5	27.5	E
	Subtotal	216	212	98.3%	66.4	28.8	E
EB	Left Turn	151	125	83.0%	62.6	20.8	E
	Through	1,598	1,439	90.1%	15.0	2.9	B
	Right Turn	56	55	98.4%	17.3	6.2	B
	Subtotal	1,805	1,620	89.7%	18.8	3.3	B
WB	Left Turn	77	68	88.8%	102.0	13.5	F
	Through	2,156	2,003	92.9%	30.0	9.3	C
	Right Turn	13	11	84.8%	27.2	9.4	C
	Subtotal	2,246	2,083	92.7%	32.4	9.6	C
Total		4,484	4,127	92.0%	31.1	6.8	C

Intersection 105 **Rocky Ridge Dr/Douglas Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	313	293	93.7%	96.0	26.3	F
	Through	469	460	98.1%	50.9	4.5	D
	Right Turn	270	267	98.9%	24.2	4.4	C
	Subtotal	1,052	1,021	97.0%	56.8	6.0	E
SB	Left Turn	271	270	99.6%	58.0	5.2	E
	Through	1,039	1,016	97.8%	49.8	3.2	D
	Right Turn	437	418	95.6%	64.6	20.9	E
	Subtotal	1,747	1,703	97.5%	54.7	6.8	D
EB	Left Turn	186	165	88.5%	64.6	12.7	E
	Through	1,347	1,217	90.4%	34.8	4.8	C
	Right Turn	136	112	82.4%	15.7	3.6	B
	Subtotal	1,669	1,494	89.5%	36.7	5.2	D
WB	Left Turn	353	324	91.7%	74.9	9.4	E
	Through	1,685	1,542	91.5%	49.4	3.6	D
	Right Turn	178	158	88.8%	19.9	3.4	B
	Subtotal	2,216	2,024	91.3%	51.2	3.4	D
Total		6,684	6,242	93.4%	49.8	2.8	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 178 **Harding Blvd/Estates Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	67	46	69.2%	37.0	4.0	D
	Through	1,125	890	79.1%	15.2	3.2	B
	Right Turn	5	5	98.8%	7.8	8.4	A
	Subtotal	1,197	941	78.6%	16.3	2.8	B
SB	Left Turn	71	69	96.9%	57.8	7.8	E
	Through	1,137	1,025	90.2%	48.1	18.5	D
	Right Turn	220	192	87.4%	60.3	28.2	E
	Subtotal	1,428	1,286	90.1%	50.5	18.9	D
EB	Left Turn	266	257	96.4%	28.1	1.9	C
	Through	14	18	127.6%	26.3	12.3	C
	Right Turn	24	26	109.3%	19.6	4.3	B
	Subtotal	304	301	98.9%	27.4	2.0	C
WB	Left Turn	20	23	115.9%	41.9	14.0	D
	Through	15	13	88.7%	38.6	18.7	D
	Right Turn	20	18	89.3%	12.1	7.5	B
	Subtotal	55	54	98.8%	30.7	7.5	C
Total		2,984	2,582	86.5%	34.9	10.0	C

Intersection 179 **Harding Blvd/Roseville Sq** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	124	87	70.2%	35.3	6.8	D
	Through	1,007	763	75.7%	15.5	2.1	B
	Right Turn	8	7	85.5%	11.7	12.0	B
	Subtotal	1,139	857	75.2%	17.6	2.2	B
SB	Left Turn	29	29	98.3%	74.9	15.1	E
	Through	1,107	969	87.5%	67.1	21.1	E
	Right Turn	45	38	85.3%	79.4	25.9	E
	Subtotal	1,181	1,036	87.7%	67.8	20.9	E
EB	Left Turn	153	152	99.1%	28.2	5.9	C
	Through	19	15	78.0%	34.4	15.1	C
	Right Turn	102	99	96.9%	15.2	6.3	B
	Subtotal	274	265	96.8%	23.7	5.9	C
WB	Left Turn	160	147	91.9%	34.9	4.5	C
	Through	8	5	57.0%	32.8	28.0	C
	Right Turn	37	33	88.3%	12.3	6.3	B
	Subtotal	205	184	89.9%	31.1	4.1	C
Total		2,799	2,342	83.7%	41.3	9.2	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 107 **Foothills Blvd/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	559	486	87.0%	110.0	31.7	F
	Right Turn	473	378	80.0%	161.3	25.8	F
	Subtotal	1,032	865	83.8%	132.7	26.6	F
SB	Left Turn	1,492	1,414	94.7%	52.4	10.4	D
	Through	729	708	97.2%	14.2	13.8	B
	Right Turn						
	Subtotal	2,221	2,122	95.5%	39.6	9.7	D
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	650	449	69.1%	54.8	9.8	D
	Through						
	Right Turn	1,607	1,212	75.4%	7.1	0.7	A
	Subtotal	2,257	1,661	73.6%	20.0	2.5	B
Total		5,510	4,648	84.4%	49.9	8.1	D

Intersection 108 **Vernon St/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	62	68	110.3%	64.8	9.5	E
	Through	66	61	92.7%	41.1	13.2	D
	Right Turn	125	124	99.4%	30.4	4.4	C
	Subtotal	253	254	100.3%	42.4	4.0	D
SB	Left Turn	94	85	90.6%	155.5	48.2	F
	Through	151	147	97.4%	141.7	44.1	F
	Right Turn	584	581	99.6%	64.9	18.4	E
	Subtotal	829	814	98.1%	88.4	25.4	F
EB	Left Turn	385	333	86.5%	70.4	12.2	E
	Through	1,673	1,460	87.3%	40.2	4.3	D
	Right Turn	29	23	79.9%	36.1	13.1	D
	Subtotal	2,087	1,816	87.0%	45.8	5.6	D
WB	Left Turn	82	56	68.6%	99.8	13.8	F
	Through	1,672	1,075	64.3%	53.0	12.1	D
	Right Turn	43	34	78.7%	36.4	14.3	D
	Subtotal	1,797	1,165	64.8%	54.7	11.6	D
Total		4,966	4,048	81.5%	56.6	5.7	E

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 109 **Lindsay Dr-Northridge Dr/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	4	3	66.5%	7.4	10.1	A
	Through						
	Right Turn	17	15	89.4%	22.8	12.6	C
	Subtotal	21	18	85.0%	22.4	12.8	C
SB	Left Turn	34	32	95.0%	26.7	7.6	C
	Through						
	Right Turn	14	15	105.9%	13.0	11.1	B
	Subtotal	48	47	98.2%	21.7	6.1	C
EB	Left Turn	26	25	97.9%	42.7	16.3	D
	Through	1,824	1,493	81.9%	24.6	15.2	C
	Right Turn	5	2	38.0%	6.0	3.5	A
	Subtotal	1,855	1,521	82.0%	24.9	15.1	C
WB	Left Turn	15	10	63.3%	32.1	19.6	C
	Through	1,892	1,275	67.4%	19.0	7.3	B
	Right Turn	8	6	71.3%	19.9	19.4	B
	Subtotal	1,915	1,290	67.4%	19.1	7.4	B
Total		3,839	2,876	74.9%	22.0	8.2	C

Intersection 110 **Melody Ln/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	258	215	83.5%	86.8	53.7	F
	Subtotal	258	215	83.5%	86.8	53.7	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,859	1,412	75.9%	43.0	16.4	D
	Right Turn	8	8	99.8%	21.9	8.1	C
	Subtotal	1,867	1,420	76.0%	42.9	16.4	D
WB	Left Turn	333	230	68.9%	29.8	3.8	C
	Through	1,961	1,308	66.7%	15.0	2.6	B
	Right Turn						
	Subtotal	2,294	1,538	67.0%	17.3	2.5	B
Total		4,419	3,173	71.8%	33.1	7.7	C

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 111 **Riverside Ave/Cirby Wy** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	1,029	730	71.0%	152.2	20.0	F
	Through	771	649	84.2%	71.0	12.8	E
	Right Turn	309	253	81.8%	52.5	10.9	D
	Subtotal	2,109	1,632	77.4%	104.8	16.7	F
SB	Left Turn	343	335	97.7%	93.6	40.7	F
	Through	844	676	80.1%	178.3	30.4	F
	Right Turn	193	113	58.5%	260.1	41.1	F
	Subtotal	1,380	1,124	81.5%	161.4	26.2	F
EB	Left Turn	163	129	79.3%	85.9	13.5	F
	Through	1,102	796	72.3%	56.7	7.6	E
	Right Turn	900	705	78.4%	22.0	3.1	C
	Subtotal	2,165	1,631	75.3%	43.9	4.8	D
WB	Left Turn	374	260	69.4%	188.1	28.7	F
	Through	1,129	735	65.1%	204.1	27.2	F
	Right Turn	132	73	55.0%	203.7	36.2	F
	Subtotal	1,635	1,067	65.3%	200.7	23.9	F
Total		7,289	5,455	74.8%	116.6	10.5	F

Intersection 203 **Riverside Ave/I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,641	1,362	83.0%	72.2	24.0	E
	Right Turn	443	423	95.4%	22.3	9.0	C
	Subtotal	2,084	1,784	85.6%	60.3	19.8	E
SB	Left Turn						
	Through	989	845	85.5%	16.0	2.7	B
	Right Turn	1,129	787	69.7%	7.6	0.4	A
	Subtotal	2,118	1,632	77.0%	12.0	1.6	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	866	846	97.7%	37.3	9.9	D
	Through						
	Right Turn	411	349	85.0%	58.6	22.3	E
	Subtotal	1,277	1,195	93.6%	43.4	13.2	D
Total		5,479	4,611	84.2%	38.7	10.5	D

SimTraffic Post-Processor **Roseville General Plan**
Average Results from 10 Runs **Cumulative Unconstrained Conditions**
Volume and Delay by Movement **PM Peak Hour**

Intersection 204 **Riverside Ave/I-80 EB Ramps-Orlando Ave** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	1,274	1,217	95.5%	32.6	9.9	C
	Right Turn	43	44	103.4%	24.7	10.6	C
	Subtotal	1,317	1,261	95.8%	32.3	9.9	C
SB	Left Turn	110	103	93.6%	52.2	7.9	D
	Through	1,454	1,322	90.9%	29.6	8.3	C
	Right Turn						
	Subtotal	1,564	1,425	91.1%	31.2	8.2	C
EB	Left Turn						
	Through	439	427	97.2%	28.1	0.9	C
	Right Turn	196	190	96.7%	18.8	2.3	B
	Subtotal	635	616	97.1%	25.2	0.6	C
WB	Left Turn	184	171	93.1%	31.2	3.2	C
	Through						
	Right Turn	415	418	100.8%	2.1	0.4	A
	Subtotal	599	590	98.5%	10.6	1.8	B
Total		4,115	3,892	94.6%	27.5	5.5	C

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 169 **Stanford Ranch Rd/Fairway Dr** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	198	191	96.3%	57.8	6.9	E
	Through	986	968	98.2%	27.9	5.5	C
	Right Turn	198	192	97.1%	11.6	2.2	B
	Subtotal	1,382	1,351	97.7%	29.9	4.3	C
SB	Left Turn	67	67	99.3%	49.9	8.2	D
	Through	793	831	104.8%	25.2	2.8	C
	Right Turn	52	45	87.0%	5.3	2.3	A
	Subtotal	912	943	103.4%	26.0	2.3	C
EB	Left Turn	91	95	104.4%	53.0	5.5	D
	Through	350	345	98.6%	43.1	5.8	D
	Right Turn	223	206	92.5%	10.1	6.2	B
	Subtotal	664	646	97.3%	33.9	4.1	C
WB	Left Turn	189	199	105.4%	51.8	5.5	D
	Through	194	187	96.2%	37.2	6.0	D
	Right Turn	21	20	94.1%	40.6	15.8	D
	Subtotal	404	405	100.4%	44.2	4.5	D
Total		3,362	3,346	99.5%	31.3	2.1	C

Intersection 170 **Stanford Ranch Rd/SR 65 NB** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	542	539	99.4%	59.7	6.9	E
	Through	1,242	1,224	98.6%	27.5	1.6	C
	Right Turn	286	290	101.4%	7.5	1.2	A
	Subtotal	2,070	2,053	99.2%	33.2	2.2	C
SB	Left Turn	55	52	95.3%	69.2	16.1	E
	Through	1,155	1,172	101.5%	48.6	5.4	D
	Right Turn	114	119	104.7%	18.8	4.8	B
	Subtotal	1,324	1,344	101.5%	46.8	5.4	D
EB	Left Turn	137	121	88.2%	81.0	30.1	F
	Through	98	92	93.8%	88.8	25.5	F
	Right Turn	254	260	102.3%	40.4	13.3	D
	Subtotal	489	473	96.7%	60.0	18.7	E
WB	Left Turn	308	306	99.4%	57.0	8.7	E
	Through	86	75	87.5%	58.8	7.7	E
	Right Turn	94	100	106.3%	28.1	6.9	C
	Subtotal	488	481	98.7%	51.1	7.5	D
Total		4,371	4,351	99.6%	42.4	3.9	D

SimTraffic Post-Processor | **Roseville General Plan**
Average Results from 10 Runs | **Cumulative Unconstrained Conditions**
Volume and Delay by Movement | **PM Peak Hour**

Intersection 171 **Stanford Ranch Rd/SR 65 NB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	685	692	101.0%	27.2	4.0	C
	Through	1,824	1,818	99.7%	9.0	0.7	A
	Right Turn						
	Subtotal	2,509	2,510	100.0%	14.1	1.0	B
SB	Left Turn						
	Through	1,936	1,930	99.7%	22.5	3.1	C
	Right Turn						
	Subtotal	1,936	1,930	99.7%	22.5	3.1	C
EB	Left Turn						
	Through						
	Right Turn	512	492	96.0%	3.4	1.6	A
	Subtotal	512	492	96.0%	3.4	1.6	A
WB	Left Turn						
	Through						
	Right Turn	701	674	96.2%	4.4	0.5	A
	Subtotal	701	674	96.2%	4.4	0.5	A
Total		5,658	5,606	99.1%	14.9	1.2	B

Intersection 172 **Stanford Ranch Rd/SR 65 NB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn						
	Through	2,319	2,316	99.9%	24.4	6.2	C
	Right Turn	674	668	99.2%	30.8	12.2	C
	Subtotal	2,993	2,985	99.7%	25.9	5.4	C
SB	Left Turn	905	871	96.2%	42.7	15.1	D
	Through	1,479	1,465	99.1%	28.4	2.9	C
	Right Turn						
	Subtotal	2,384	2,336	98.0%	33.8	6.1	C
EB	Left Turn						
	Through						
	Right Turn	1,039	1,041	100.2%	16.4	1.3	B
	Subtotal	1,039	1,041	100.2%	16.4	1.3	B
WB	Left Turn						
	Through						
	Right Turn	190	198	104.2%	2.8	1.0	A
	Subtotal	190	198	104.2%	2.8	1.0	A
Total		6,606	6,560	99.3%	26.6	3.6	C

APPENDIX E

Internal Guidance for Management of
Tribal Cultural Resources and Consultation

Exhibit A

Internal Guidance for Management of Tribal Cultural Resources and Consultation
Volume I: Policy

City of Roseville

July 2020

CITY OF ROSEVILLE CALIFORNIA

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MANAGEMENT SUMMARY

In 2018, the City of Roseville determined a need for internal guidance intended to provide consistency and fairness in the manner in which tribes are consulted with prior to and during project construction, to ensure a consistent application of policies for all discretionary projects by the City, and to exercise responsible management and use of public funds.

This guidance document is organized into two parts. First is the City's position on tribal participation during the project planning and approval process for discretionary projects. This includes both private sector and public (City) projects, which are subject to state and local laws and regulations that are under the jurisdiction of the City. It also includes guidance for City planners on determining when mitigation measures related to Native American participation are warranted under CEQA, standard treatment and mitigation measures that can be used consistently in project planning, and guidance on the City's use of public funding when conducting consultation.

Second, this guidance document also provides information and guidance for City staff and contractors during the project construction and implementation phases. This includes thresholds for payment for tribal participation, instructions for contractors in the event of an unanticipated discovery, and guidance for City staff in assessing and acting upon unanticipated discoveries.

This guidance document is organized into two sections. Volume 1 is the City policy and procedures, which was adopted by the City Council on July 15, 2020. Volume II is the implementation manual, which includes templates, forms, and example mitigation measure language. The City will periodically review Volume I to determine if revisions to the City's policies warrant consideration by the City Council. Volume II is intended to be a living document, and modifications to that volume will not require City Council adoption, as long as those amendments are consistent with the policy in Volume 1.

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LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
CC&Rs	Covenants, Conditions, and Restrictions
CEQA	California Environmental Quality Act
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
PRC	Public Resources Code
SB	Senate Bill
TCR	Tribal Cultural Resources
UAIC	United Auburn Indian Community of the Auburn Rancheria
USACE	U.S. Army Corps of Engineers

1.0 INTRODUCTION

1.1 Regulatory Setting

In recent years, a number of changes have occurred in the regulatory context within which the City operates. These changes occurred at various levels of jurisdiction, including at the city, state, and national levels and in the thresholds and expectations for best professional practices in cultural resources management. Changes have also occurred in terms of the level of involvement by stakeholders in cultural resources, particularly Native American tribes, as well as historical societies and the general public. The relevant laws and regulations include the following.

- Assembly Bill (AB) 52, passed by the California legislature in 2014, amended the California Environmental Quality Act (CEQA) to require early consultation with California Native American tribes when preparing a CEQA document for a specific project. The City, as CEQA lead agency, must offer consultation with tribes that request notification of projects at the initiation of CEQA. The consultation, if initiated, is to determine whether or not Tribal Cultural Resources (TCR), as defined by AB 52, would be affected by the project. Subsequently, an update to the CEQA Guidelines took effect September 27, 2016 that revised Appendix G to the CEQA Guidelines to separate the consideration of tribal cultural resources from cultural and paleontological resources, and to add sample checklist questions.
- Senate Bill (SB) 18 was signed into law in September 2004 and became effective in March 2005. SB 18 (Burton, Chapter 905, Statutes of 2004) requires city and county governments to consult with California Native American tribes early in the planning process with the intent of protecting traditional tribal cultural places. The purpose of involving tribes at the early stage of planning efforts is to allow consideration of tribal cultural places in the context of broad local land use policy before project-level land use decisions are made by a local government. As such, SB 18 applies to the adoption or substantial amendment of general or specific plans. The process by which consultation must occur in these cases was published by the Governor's Office of Planning and Research through its *Tribal Consultation Guidelines: Supplement to General Plan Guidelines* (November 14, 2005).
- The regulations implementing Section 106 of the National Historic Preservation Act (NHPA) of 1966 were amended in 2000 and 2004. The amended regulations, found in the Federal Register at 36 CFR Part 800, specify how federal agencies are required to take into account the effects of their undertakings on historic properties. The Section 106 regulations apply to projects in the City when the project would receive federal funding, assistance, licenses, approvals, or permits (such as a Section 404 Clean Water Act permit from the U.S. Army Corps of Engineers [USACE] or funding by the Federal Highway Administration through the California Department of Transportation (Caltrans)). While the City is not a lead agency under Section 106, its projects may be subject to compliance with it.
- Section 5097.5 (a, b & c) of the California Public Resources Code Section states:

> "A person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological, rock art, or vertebrate paleontological site, including fossilized footprints, inscriptions made by

human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof."

- Public Resources Code 5097.9 establishes that no public agency or private party using or occupying public property or operating on public property, under a public license, permit, grant, lease, or contract made on or after July 1, 1977 shall interfere with the free expression or exercise of Native American religion. This code also prohibits damage to a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.
- Public Resources Code 5097.98 specifies procedures to be followed in the event of the discovery of Native American human remains. This code specifies that the county coroner shall immediately notify the persons believed to be most likely descended from the deceased Native American. It provides that the most likely descendant (MLD) has the right to inspect the site, with permission of the land owner, and provide recommendations for treatment of the remains and grave goods within 48 hours of being granted access to the site. The code also provides procedures in the event that the MLD is unable to be identified or the identified descendants fail to make a recommendation.
- Public Resources Code 5097.99 states that no person shall obtain or possess any Native American artifacts or human remains except as otherwise provided by law. The code further states that unlawful possession of these items is a felony, punishable by imprisonment.
- Health and Safety Code 7050.5 establishes the intentional disturbance, mutilation, or removal of interred human remains a misdemeanor. This code also requires that upon the discovery of human remains outside of a dedicated cemetery excavation or disturbance of land cease until a county coroner makes a report. The code also requires that the county coroner contact the NAHC within 24-hours if he or she determines the remains to be of Native American origin.

In addition, the City is constrained by budgetary factors, coupled with a recent post-recession increase in private-sector development, that have led to the need for mindful expenditures of public funds. Thus, efficiency and consistency in compliance with the above laws and regulations are driving the need to develop standardized guidance for City staff.

1.2 History of Tribal Participation in City Projects

Overall, there has been an increased awareness of the importance of early consultation with resource stakeholders as part of project planning, particularly with tribes. There is an increasingly complex tribal consultation process that the City is either directly or indirectly affected by, and which varies from project to project. Typically, tribal consultation involves two classifications of consulting parties: the California Native American Heritage Commission (NAHC) and California Native American Tribes.

The California NAHC is composed of a nine-member governor-appointed advisory body responsible for the identification and cataloging of places of special religious or social significance to Native Americans,

including sacred sites and known Native American graves and cemeteries. The NAHC may serve as a trustee agency under CEQA and is responsible for identifying an MLD for Native American human remains that are unearthed in California. The NAHC may also serve as a mediator between landowners, agencies, and California Native American tribes.

California Native American Tribes (tribes) are defined in Section 21073 of the California Public Resources Code and Chapter 905 of the Statutes of 2004 and apply to both AB 52 and SB 18 tribal consultation. Under the former, the tribes that notified the City in writing of their request to receive notice of all projects subject to CEQA are subject to specific procedures enacted by AB 52. These tribes need not be physically located in or near Roseville but must be traditionally and culturally affiliated with the land currently under the jurisdiction of the City. In addition, California Native American Tribes, including but not limited to those that do not request that the City notice them under AB 52, may be consulted under SB 18. The SB 18 lists of tribal contacts typically provided by the NAHC in response to City requests include a number of tribes in the Roseville region. The City is required to offer consultation to all of the tribes named by the NAHC on its SB 18 list, when SB 18 applies.

With both AB 52 and SB 18 consultation, the culturally affiliated tribes that most often engages the City in consultation during project planning and construction is the United Auburn Indian Community of the Auburn Rancheria (UAIC); however, other culturally affiliated tribes are given equal opportunities to consult with the City. The tribal participation in projects typically occurs in one of two points in the process: 1) during pre-project planning and environmental review under CEQA (AB 52) and/or SB 18; and 2) during unanticipated discoveries that may occur during construction. Often, the former leads to requests for more involvement during project construction and implementation, which must be balanced by the requirements and thresholds of CEQA and other applicable laws and regulations.

1.3 Purpose and Need for Internal Guidance

The need for internal guidance for City staff is based on several factors, including the project-specific regulatory complexity for any given project, the diversity and inevitable turnover of City planning staff and elected officials, and limitations on public funding. Internal City guidance is intended to provide consistency and fairness in the manner in which tribes are consulted with prior to and during project construction, to ensure a consistent application of policies for all discretionary projects by the City, and to exercise responsible management and use of public funds.

Therefore, the City developed the following internal guidance, which is organized into the two phases noted above. Section 2.0 describes the City's position on tribal participation during the project planning and approval process for discretionary projects. This includes both private sector and public (City) projects, which are subject to state and local laws and regulations that are under the jurisdiction of the City. Section 2.0 also includes guidance for City planners on determining when mitigation measures related to Native American tribal participation are warranted under CEQA, standard treatment and mitigation measures that can be used consistently in project planning, and guidance on the City's use of public funding when conducting consultation.

Section 3.0 provides information and guidance for City staff and contractors during the project construction and implementation phases. This includes thresholds for payment for tribal participation, instructions for contractors in the event of an unanticipated discovery, and guidance for City staff in assessing and acting upon unanticipated discoveries.

This internal guidance document was developed by the City staff and assembled by a qualified professional who meets Secretary of the Interior's Professional Qualification Standards for Archaeology codified in 36 CFR Part 61.

This guidance document is organized into two sections. Volume 1 is the City policy and procedures, which was adopted by the City Council on July 15, 2020. Volume II is the implementation manual, which includes templates, forms, and example mitigation measure language. Volume II is intended to be a living document, and modifications to that volume will not require City Council adoption, as long as those amendments are consistent with the policy in Volume 1.

2.0 TRIBAL CONSULTATION DURING PROJECT PLANNING AND APPROVAL

2.1 Coordination with Existing Laws and Confidentiality Requirements

In developing this internal guidance, it is the City's intent to follow closely the requirements in applicable law. Nothing in this guidance document is intended to conflict with existing law, and where such conflicts may arise, existing law governs. This applies to the statute and guidelines implementing CEQA, the California Public Resources Code, the California Government Code, and the California Health and Safety Code. The City previously developed standard operating procedures for compliance with AB 52 and SB 18, which are provided in Volume II of this guidance document.

With regard to compliance with AB 52, the City's legal interpretation of the requirements thereof will require tribal consultation when the City is preparing any of the following:

- Initial Study/Negative Declaration
- Initial Study/Mitigated Negative Declaration
- Project or Program Environmental Impact Report
- Supplemental Environmental Impact Report
- Subsequent Environmental Impact Report

It is the City's interpretation of current state law that tribal consultation is not required under AB 52 for Statutory Exemptions, Categorical Exemptions, consistency determinations, or preparation of Addendum CEQA documents; however, tribes may request receipt of all routing notices as notification of all City projects, regardless of the type of discretionary review, thereby allowing for tribal input on the use of Categorical Exemptions.

With regard to compliance with SB 18, the City's legal interpretation of the requirements thereof will require tribal consultation when the City is preparing any of the following:

- Adoption or Amendment of a General Plan
- Adoption or Amendment of a Specific Plan
- Dedication of Open Space that Contains Tribal Resources

In the event that an SB 18 action also triggers CEQA review, then both SB 18 and AB 52 consultation are required; however, it is not necessarily the case that an SB 18 action will trigger a CEQA document that is subject to AB 52.

TCRs may or may not manifest as archaeological sites. In some cases, TCRs are viewsheds, plant gathering areas, or other sacred spaces that are not readily identifiable to non-tribal members. In many cases, TCRs also include an archaeological component, such as artifacts, features, and sites (with or without human remains), and these "archaeological TCRs" are more visible to the public, and thus, more likely to be subject to looting or pothunting. Therefore, maintaining confidentiality of the location and nature of archaeological sites and TCRs is of the utmost importance to the City. Similarly, federal and state law recognize this need. As it pertains specifically to CEQA and this internal guidance document, the City shall make best efforts to ensure that information about the location, description, and use of the tribal cultural resources is not included in the environmental document or otherwise disclosed by the City to the public. Such information is protected from public dissemination through an exemption to the California Public Records Act. In addition, although no federal lands currently exist within the City boundaries, dissemination of archaeological site information is also prohibited by Exemption 3 of the federal Freedom of Information Act (5 USC 552), because the disclosure of cultural resources location information is prohibited by the Archaeological Resources Protection Act of 1979 (16 USC 470hh) and Section 304 of the NHPA. Therefore, it is also exempted from disclosure under the Freedom of Information Act.

In light of these requirements for confidentiality, it is the City's policy to not make publicly available the locations of cultural resources and TCRs, and dissemination of such information will be tightly guarded on a "need to know" basis only. Such circumstances are generally limited to City staff, landowners of property that contain resources, and consultants and engineers who are responsible for designing proposed projects in accordance with these Guidelines.

2.2 Policy of Payment for Consultation

In many areas of California, including the City of Roseville, some tribes have requested payment of public funds for their participation in the early planning stages of City projects. The purpose of this guidance is to clarify what costs the City will pay in the event the City receives a request for payment for participation in a project planning process.

Currently, there are no laws or regulations that require payment to either consulting parties or tribes during project planning activities, consultation, or construction. In fact, "consultation" is defined by Government Code Section 65352.4 as "the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance."

The City recognizes the importance of providing information, staff time, or contract labor time at no cost to the tribes and expects tribes to provide information to the City at no cost to the City. Additionally, there are numerous California Native American tribes in the region that may ascribe cultural affiliation to the Roseville area and may request consultation or participation in the future. Because different tribes have

different opinions, interpretations, cultural values, and information, it is the City's intent to consult meaningfully with all California Native American tribes who wish to do so.

Furthermore, because CEQA is founded on consultation with interested parties, commenting agencies, stakeholders, and the public, the City is tasked with consulting with many organizations and individuals regarding all aspects of CEQA review, including biological and wildlife non-profit organizations, professional societies and associations, and members of the public. All voluntarily provide input and information to the City on a wide range of environmental topics covered by CEQA, which is taken into account during the decision-making process for discretionary projects. It has always been the City's view that meaningful consultation cannot take place if such discussions are couched in financial or contractual relationships between the consulting parties and the public.

In addition, the City recognizes the difference between a "consulting party" (as described above) and a "consultant," where the City delegates the preparation of environmental documents and supporting technical information to third party consultants, selected according to qualifications, cost, and technical expertise. Use of registered professionals is defined further in Section 15149 of the CEQA Guidelines and does not include consulting parties. Such consultants represent the subject matter being analyzed and do not require concurrence or agreement from other experts in the field to be considered valid for the purposes of CEQA.

The City does not generally compensate any "consulting parties," including tribes, members of the public, or stakeholders, during project planning and environmental review for: 1) consultation during the City's project planning process; 2) for information that any consulting tribe or party wishes the City to take into consideration during project planning; and 3) for tribes, members of the public, stakeholders, or other parties to visit or survey project areas to make recommendations to the City.

2.3 Accommodations for the Expression of Religion

The City recognizes the right of all citizens to freely express religion, and the City does not intend to willfully interfere with religious expression by Native American tribes or by any member of the public in implementing this internal guidance or during the environmental review or consultation processes. Therefore, it is the City's policy to make "reasonable accommodations" for the expression of religion. "Reasonable accommodations" would be evaluated on a case by case basis and may include, but are not limited to:

- Facilitating project area tours during the project planning process;
- Providing privacy for tribal members when visiting TCRs;
- Honoring requests for meetings with tribal members to receive comments verbally, when members do not wish to document comments in writing;
- Temporarily pausing construction activities to accommodate a visit by tribal representatives, when determined by the City to be reasonable and feasible;
- Developing access agreements with tribes to allow for legal visitation of TCRs on City-owned property;

- Accommodating voluntary tribal observation during construction when tribal monitoring is not warranted under CEQA;
- Offering tribal representatives an opportunity to participate in pre-construction meetings with contractors to express tribal views regarding unanticipated discoveries;
- Requiring, as a mitigation measure, tribal monitoring during construction activities where such monitoring is deemed necessary under CEQA;
- Developing TCR treatment and reburial methods that are mindful of tribal values and culture;
- Providing reasonable opportunity for comment in order for the tribe to provide comments on projects during project planning that is subject to AB 52 and SB 18 consultation; and
- Any other accommodation deemed reasonable by the City.

Reasonable accommodations may be rescinded, revoked, or denied in the event of any of the following:

- Cause an unreasonable cost increase or delay that jeopardizes the viability of the project as determined by the City;
- Willful trespass of tribal members or representatives;
- After the City has initiated consultation, failure of a tribe or its representatives to respond to the City in a timely manner or in good faith;
- Any other behavior that is deemed to not be in good faith, as determined by the City.

2.4 Standard Mitigation Measures and Conditions of Approval

The City has developed standard mitigation measures and conditions of approval for discretionary projects under the City's jurisdiction. Below are descriptions of these measures, including guidance on their applicability and use. Actual example mitigation measure language is provided in Volume II (Implementation Manual).

2.4.1 Avoidance and Preservation in Place

Consistent with Section 21084.3(a) of the Public Resources Code, the City shall, when feasible, avoid damaging effects to any TCR. This can be achieved through several possible scenarios, depending on the project circumstances. Each of the following scenarios represents a different level or strength of protection.

Use of Exclusionary Fencing

Where the City has determined that a TCR is located immediately adjacent to ground-disturbing activity, but where the location of the TCR is not proposed for impact, the City may require the placement of temporary construction fencing to prevent accidental or incidental impacts to the location during construction. This may also be appropriate when the TCR is located within a riparian area that cannot be impacted by the project. The exclusionary fencing must be included on all construction plans, specifications, and bid packages, which must stipulate the timing of the installation and conditions under which fencing is monitored and inspected until removal. This mechanism is appropriate when

construction-related activities could inadvertently impact a site but does not provide long-term management or preservation measures.

Modification of Project Boundaries

Where the City has determined that a TCR is located in an area that can be feasibly excluded from the project entirely, it may require that the project be redesigned to avoid the site. This may require either a lot line adjustment, construction perimeter fencing, or other feasible avoidance options. Such a decision would need to occur during the preparation of the CEQA document and could be memorialized as a mitigation measure if agreeable to all parties. This mechanism would allow for avoidance during construction, as well as post-construction, however it would not guarantee preservation of the resource that is no longer within the project boundary.

Incorporation into Open Space with Deed Restrictions

For projects that include the planned dedication of open space (which would also require compliance with SB 18), there may exist an opportunity to capture the TCR into the open space, either as currently designed or through a modification to open space boundaries to incorporate the TCR into it. This is common in oak woodland areas, where there tends to be a correlation between oak trees and bedrock mortars, as one example. Open space typically requires that the landowner restrict future development through recording of a deed restriction on the property; any such restrictions are public documents and must not specifically identify the location of TCRs. Moreover, care should be exercised when using deed restrictions, which can be reversed by landowners in the future. Therefore, this option may be better suited for City projects, as opposed to third party developers, unless additional measures can be put into place that ensure the deed restriction is not reversed without the City's knowledge.

Management of open space may be the responsibility of a homeowner's association, parks and recreation department, or non-profit preserve manager, all of whom would require knowledge of the resource and its location. Furthermore, because open space areas may allow for public visitation, the use of open space as an avoidance and preservation mechanism must be accompanied by a plan that dictates the activities that are allowed and prohibited within the location of the TCR. These activities may differ between the TCR and that which are allowed in the balance of the open space. In general, management of the protected resource should include, but not be limited to, the same types of activities that apply to deed restrictions, as described below.

Use of Development Restrictions in Perpetuity

The strongest method of avoidance and preservation in perpetuity of TCRs is the dedication of a deed restriction or declaration of covenants and restrictions over the site, recorded with the County, to restrict development in perpetuity. The easement may be held either by the City, the County, a non-profit corporation, or a California Native American tribe, as long as the landowner and the easement holder are not the same.

Development restrictions in perpetuity take much longer to negotiate and record, are more expensive due to the funding assurances required (Property Analysis Records and endowments) and are typically more expensive to manage (third party preserve managers and more stringent monitoring and management requirements); however, they are also very difficult to reverse in the future. As such, deed restrictions provide the highest level of assurances that a site will be preserved in perpetuity.

The entity selected for management must be able to demonstrate capability to perform the following actions, as deemed appropriate: fence and gate repair; sign replacement; regular monitoring and associated reporting by a professional archaeologist for damage; erosion control; trash removal; vegetation and weed control; security patrols; vandalism abatement; and removal of trespassers. No signs indicating the presence of tribal cultural resources shall be permitted.

In addition, on a case by case basis, the City should consider **prohibiting** the following activities within the boundaries of preserved sites, even if such activities are permissible in other areas of larger biological or open space preserves, within which the site may be located:

- Unseasonable watering
- Use of fertilizers, pesticides, biocides, herbicides or other agricultural chemicals
- Use of off-road vehicles and use of other motorized vehicles except on existing roadways
- Agricultural cultivation activity of any kind
- Recreational activities, including, but not limited to, camping, with the exception of the use of a pedestrian trail adjacent to the site boundaries
- Construction, reconstruction, erecting or placement of any building, billboard or sign (except for that which is designed to keep the public out), or any other structure or improvement
- Depositing or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other materials
- Lighting fires, incendiary devices, or flammable substances
- Planting, introduction, or dispersal of nonnative or exotic plant or animal species (animal grazing is permitted for fire control)
- Filling, dumping, excavating, draining, dredging, mining, drilling, removing, or exploring for or extracting artifacts, minerals, loam, soil, sand, gravel, rock, or other material on or below the surface of the sites, or granting or authorizing surface entry for any of these purposes
- Altering the surface or general topography of the sites, including but not limited to any alterations to habitat, building roads or trails, over paving or otherwise covering the sites with concrete, asphalt or any other impervious material, except for capping, if required and specified in the deed restriction as allowable
- Removing, destroying, or cutting of trees, shrubs, or other vegetation, except as required by law for fire control and prevention or treatment of disease, or as required to maintain public safety
- Mechanical or chemical weed abatement activities (hand and grazing methods are acceptable)
- Manipulating, impounding or altering any natural water course, body of water, or water circulation on the sites, and any activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters
- Engaging in any use or activity that may violate, or may fail to comply with, relevant federal, state, or local laws, regulations, permit conditions, or applicable policies

- Signs indicating the presence of the protected TCR

The above restrictions and management requirements may be stipulated either in the deed restriction document itself, or in a separate Operations & Management Plan.

Finally, deed restrictions are public documents and must not specifically identify the location of TCRs; however, the document must specifically include the conservation of cultural and tribal values.

2.4.2 Pre-Project Repatriation Designation

The City may recommend that the landowner or project proponent (if not the City) designate a reburial location on the property for any tribal cultural materials or human remains that may be unearthed during ground-disturbing activities during the project. The location shall be one that will not be subjected to ground-disturbing activities in the future. This location will be documented as a reinternment location by the Native American tribe, and the tribe may file it as such with the NAHC, County, City, and the California Historical Resources Information System. The site of any reburial of Native American human remains shall be kept confidential and not be disclosed pursuant to the California Public Records Act, California Government Code §§ 6254.10, 6254(r). The Placer County Coroner is also responsible for withholding from public disclosure any information related to such reburials, pursuant to the specific exemption set forth in California Government Code § 6254.5(e).

2.4.3 Pre-Construction Inspections

In some cases, vegetation, structures, or pavement obscure the ground surface, making identification of archaeological TCRs difficult. When the project description calls for the removal of the material, exposure of the natural soil may reveal evidence of archaeological sites, features, or constituents that were not visible during project planning, which would justify the need for construction monitoring. Conversely, it may indicate that no sites exist below the material, such that monitoring during construction was, in hindsight, not necessary. Therefore, the City may elect to allow tribal representatives an opportunity to perform an inspection during the first week of ground-disturbing activity, in lieu of full-time construction monitoring. The City's policies regarding payment (Section 2.2) shall apply.

In this event, a minimum of seven calendar days prior to beginning earthwork or other soil disturbance activities, the construction manager should notify the City's representative of the proposed earthwork start-date, in order to provide the City with time to contact a culturally affiliated tribe. A tribal representative would be invited to inspect the project location, including any soil piles, trenches, or other disturbed areas, within the first five days of ground-breaking activity, at the discretion of the tribe. During this inspection, a meeting of construction personnel is recommended in order to afford the tribal representative the opportunity to provide tribal cultural resources awareness information. In the event that the tribe does not send a representative within the prescribed time frame, then the City is not obligated to re-invite the tribe and activity will proceed.

2.4.4 Tribal Monitoring

As part of environmental and CEQA review, tribal consultation may or may not cause the City to determine that TCRs (as defined by Section 21074(a) of the Public Resources Code) may be significantly impacted by a proposed project. In many cases, the City receives requests from tribes for tribal

monitoring, regardless of the CEQA findings. The purpose of this section is to define the thresholds for when tribal monitoring shall be a mitigation measure or condition of approval, and when it should not.

As shown in the flow charts and procedures in Volume II, the City first must determine, through consultation if requested by a tribe, whether or not a TCR is present within the project area. The City will evaluate the information provided by consulting tribes to determine if the information meets the definitions in Section 21074(a)(1) of the Public Resources Code. If not, then the City will next determine if substantial evidence has been provided, pursuant to Section 21074(a)(2) of the Public Resources Code. The City does not recognize the fair argument standard as meeting the definition of substantial evidence under Section 21074(a)(2).

If the City determines that information submitted by a tribe does not meet the legal definitions of a TCR under state law, then the City shall document this finding in the administrative record, CEQA document, and in its termination of consultation (without agreement) letter to the tribe. The City may elect to use the following language as part of the record:

> "After reviewing the information provided by the tribe, the City has determined that there is not substantial evidence present to support the notion that Tribal Cultural Resources, as defined in Section 21074(a) of the Public Resources Code, will be impacted by the proposed project; however, we would welcome any input on the contractor awareness training session, should you so desire. In addition, the City will notify the tribe in the unlikely event of an unanticipated discovery of potential Tribal Cultural Resources so that we may consult with you on identification and appropriate treatment, pursuant to applicable state law. The City hereby concludes consultation with the tribe pursuant to Section 21080.3.2(b)(2) of the Public Resources Code."

However, if the City determines that a TCR is present, then the City next will determine whether or not the TCR will be significantly impacted by the project (see Volume II). The presence (or likely or possible presence) of a TCR within a project area does not, in and of itself, trigger mitigation. Only after the City determines that the TCR will be significantly impacted does the City consider the appropriate type of mitigation. Tribal consultation will assist the City in making the following decisions.

Appropriate mitigation for TCRs must take into account two primary factors. The first is that the proposed mitigation must be appropriate for the nature of the resource being impacted. For example, tribal monitoring during construction would not necessarily be appropriate if the resource is not archaeological in nature, or if the location will be protected from project activity by exclusionary fencing. Tribal monitoring would also not be appropriate for most activities that occur above the ground surface, or those that are located within and would not excavate below areas of documented fill. Tribal monitoring would, however, be appropriate when there is a known or high likelihood that an archaeological TCR will be encountered during ground-disturbing activities. The City should consider whether or not tribal monitoring, if warranted, should be focused only on vegetation removal, ground disturbance to a specific depth, or in only certain portions of the project.

The second factor is that the proposed mitigation must pass the seven tests for mitigation under CEQA (Figure 1). If the City determines that tribal monitoring (or any mitigation measure) is appropriate given the nature of the TCR and project activity, then the City must subject the proposed measure to the seven tests shown in Figure 1.

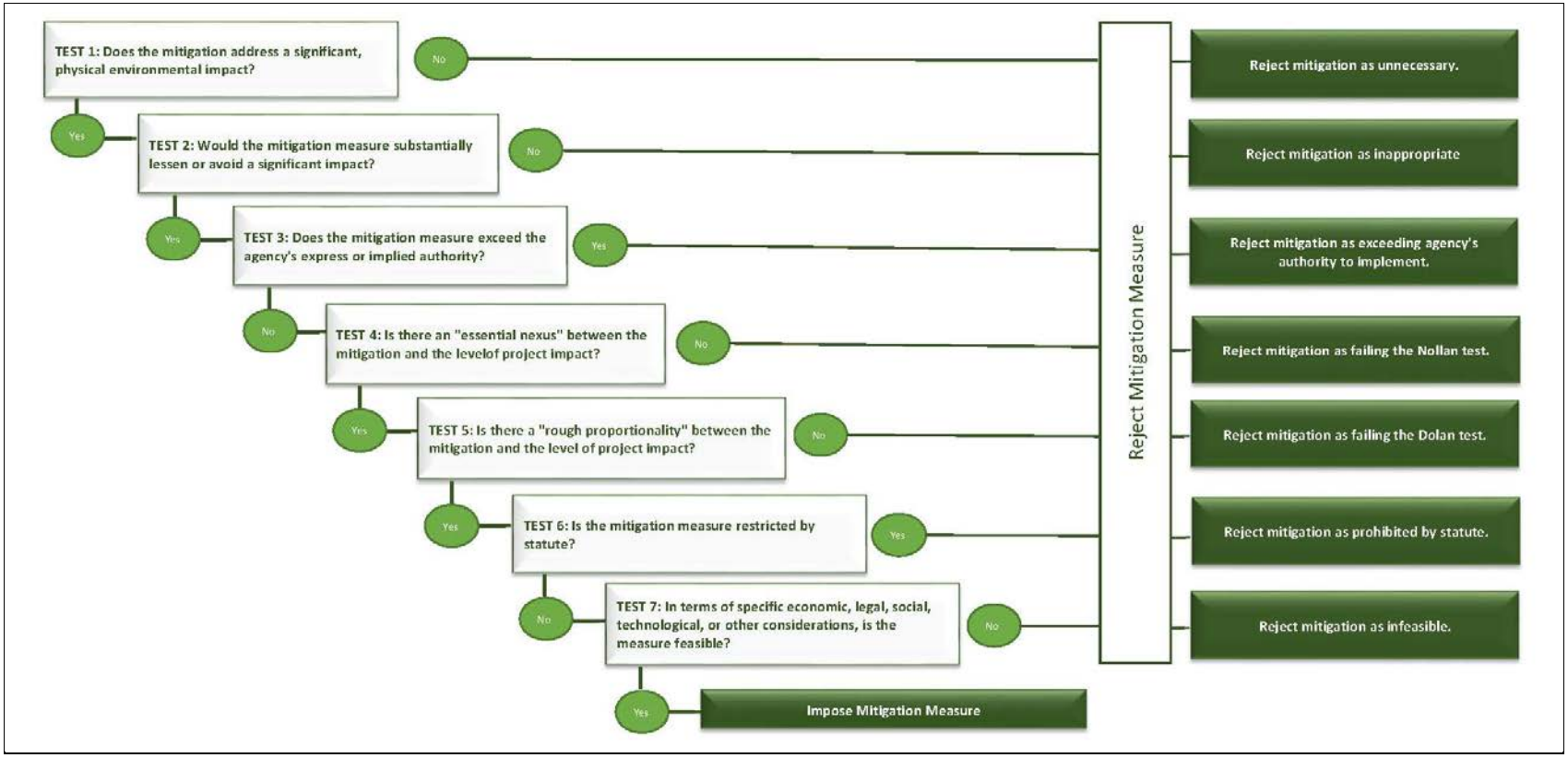

Figure 1. Seven Tests for Mitigation Measures (adapted from Placeworks 2012).

If the City determines that the proposed mitigation of tribal monitoring is both appropriate for the nature of the resource and passes the seven tests for mitigation under CEQA, then the City shall require that as a mitigation measure in the environmental document, pursuant to Section 21082.3(a) of the Public Resources Code. The City should then terminate consultation (with agreement) according to Section 21080.3.2(b)(1) and consider the requirement for payment of tribal monitoring, as described in Section 3.0.

In the event that the City applies the screening methods above to a tribe's proposal for tribal monitoring and determines that the mitigation is neither appropriate nor allowable under CEQA, then the City shall reject the tribe's recommendation. In doing so, the City must document the justification for the decision in the administrative record and in the termination of consultation (without agreement) letter to the tribe. The City may consider using part or all of the following response:

> "In determining appropriate mitigation for significant impacts to Tribal Cultural Resources, the City considered: 1) recommendations submitted by the tribe during AB 52 consultation under Section 21080.3.2(a) of the Public Resources Code; 2) requirements under Section 15041(a) and 15126.4(a)(3) of the CEQA Guidelines for feasible and mandatory mitigation, respectively; and 3) Section 21082.3 of the Public Resources Code regarding mitigation of significant impacts to Tribal Cultural Resources. After evaluating the information provided by the tribe through consultation, and in consideration of the City's legal obligations under CEQA and the requirements cited above, the City determined that tribal monitoring during construction will not reduce the impact to TCRs to a level that is Less Than Significant. However, in accordance with Section 21084.3(b), the City determined that appropriate and feasible mitigation will be composed of the following: [insert].
>
> The City hereby concludes consultation with the tribe pursuant to Section 21080.3.2(b)(2) of the Public Resources Code."

In consideration of the factors above, in general, tribal monitoring would be considered under any of the following circumstances:

- when one or more buried archaeological or known (non-isolate) TCRs is likely in the vicinity, but its specific location is unknown;
- when ground-disturbing activities will come within 100 feet of a recorded Native American archaeological site or TCR; and
- when installing or verifying the placement and integrity of temporary exclusionary (orange barrier or silt) fencing around TCRs that must be avoided.

Mitigation measures that require tribal monitoring must be written with specificity in mind, and must, at minimum:

- specify the exact number of tribal monitors for the project (as these will be paid monitors);
- not name a specific tribe, but reference "a culturally affiliated tribe;"
- clearly define the scope of what should be monitored (e.g., "all ground-disturbing activity for the project," or "initial vegetation removal only," or "ground disturbance down to X feet below the surface," or "all ground-disturbing activity in the [define] area of the project");

- specify the number of hours' notice that a tribe is given in advance of the start of monitoring activity (e.g., 72 hours);
- indicate whether or not activity can proceed without a monitor who did not arrive as scheduled, as long as the notification procedures were followed;
- specify the authority of the tribal monitor to halt project activity and for how long (see Section 3.0 for more information); and
- specify the reporting requirements back to the City for reconciliation with the Mitigation Measure Reporting Program (e.g., monitoring logs).

The City further recognizes that there are numerous culturally affiliated tribes with whom it consults, and that the City is not able to hire more monitors than are necessary simply because there is more than one interested tribe. In cases where more than one tribe wishes to monitor, then the City may require that interested tribes alternate monitoring days or projects, in cases where there are multiple project phases or segments.

Finally, monitoring is considered a last resort to minimizing or mitigating significant impacts and is not the default treatment for all projects. Should the City determine that monitoring is not an appropriate mitigation, then the City (with permission from the landowner, if on private property), may extend an opportunity to tribes to visit the project during construction on a volunteer basis, provided that, if required by the landowner, the visitors receive safety training and sign liability release waivers. The City does not have the authority to grant property access to private property over the objections of the landowner.

2.4.5 Capping

In certain cases, the use of capping with natural materials (e.g. certified sterile soils) may be used to effectively bury a TCR or archaeological site to protect it. This could include sites that are located in highly visible areas where public access could otherwise present a risk to the preservation of the site, where existing topography or future grade differentials could cause erosion and stabilization issues, or where there is not sufficient horizontal separation from project activities, but that vertical separation could be achievable. In these scenarios, the use of capping with soil, vegetation, and/or geotextile fabric may be preferred over complete exposure of the site.

If determined appropriate by the City, in consultation with culturally affiliated tribes, temporary protection, as discussed below, may be provided to cemeteries, burials, burial objects, burial soil, sacred objects, sacred sites, and sacred structures within the direct area of impact or exposed by project-related activities during project construction. These procedures may be undertaken where there is the potential for construction activities to damage site, objects, or human remains. In consultation with a City representative, a tribal monitor and qualified archaeologist will demarcate the limits of the area to be capped.

Where capping is considered an appropriate treatment measure, the following guidelines are recommended:

- The culturally affiliated tribe(s) should be afforded an opportunity to review and comment upon the capping plan and monitor its installation.

- The thickness of the soil cap must take into consideration the size and shape of the site, particularly the elevation of above-surface features like bedrock outcrops.
- The methods used to cap the resource must be designed to avoid damage to the resource during the process of installing the cap (such as prohibition of heavy equipment during installation).
- Caps may be covered with vegetation (without invasive root systems) to discourage erosion and unauthorized digging.
- No buildings or structures shall be placed on top of the cap.
- Non-motorized pedestrian paths may be placed over the cap, but only when constructed of natural materials such as bark or pea gravel (i.e., no pavement, brick, imported stone) and only when the entire site is capped by at least 18 inches of soil.
- No signage to indicate the location of a site beneath the cap shall be installed.
- Deed restrictions that limit future use and development in perpetuity should be considered for areas subject to capping.
- As appropriate, the capping should include a combination of layers of culturally sterile and chemically-compatible soil of different colors and/or the layering of cyclone, chain link, or orange barrier fencing to discourage digging.

2.4.6 Project-Specific Public Interpretation and Education

In cases where a significant effect to a TCR will occur and the TCR is deemed significant because of its association with tribal culture, history, religion, or other values, but where the impact by the project is determined to be indirect, or because the qualities that convey the significance of the TCR are not location or materials, interpretation of the TCR for the benefit of the public may be an appropriate mitigation.

This can be achieved through the development of:

- One or more interpretive panels in parks, along trails, or at scenic overlooks (without disclosing the specific locations to the public);
- An educational module for K-12 students;
- Development of an exhibit for the Maidu Museum & Historic Site;
- Creating replicas of artifacts, including the potential for commissioning the creation of cultural items from Native American artisans for museum or educational use; or
- Digital scanning and archiving of sites.

The consultation conducted with the culturally affiliated tribe would determine whether or not one or more of these measures is appropriate for TCRs.

2.4.7 Covenants, Conditions, and Restrictions

For residential development projects that may be located in close proximity to known and/or preserved TCRs, the City may elect to require a notice to future property owners of the prohibition of artifact collecting and excavation, without disclosing specific locations of sites. This can be accomplished through Covenants, Conditions, and Restrictions (CC&Rs) that are recorded on each parcel. In such a case, the City may require the following:

> "The collecting, digging, disturbance, or removal of any artifact or other prehistoric [precontact] or historic object located in an open space area, conservation easement, a lot subject to a deed restriction, or to any archaeological site that may become unearthed in the future, is prohibited."

2.4.8 Tribal Access Agreements

One of the barriers to traditional use of tribal resources has been private land. Many tribes have not been able to demonstrate a continuum of use of a TCR because the land upon which it is located was claimed or deeded to others. This has resulted in either an inability to use TCRs, or the need to risk trespass in order to do so.

In order for a California Native American tribe to gain access to a TCR (located on City property) for visitation, the City may develop a right-of-access authorization for requesting tribes. The authorization shall specify the terms under which tribal access can be legally achieved and shall define the acceptable and prohibited uses thereof, and appropriate liability waivers.

In the event that a tribe requests access to a TCR that is located on private property, the City may require the landowner to develop an access agreement with a culturally affiliated tribe as part of a CEQA mitigation measure.

2.4.9 Contractor Awareness Training

There always remains a possibility that unanticipated discoveries may occur during project construction. For this reason, an archaeological sensitivity training program (Contractor Awareness Training) may be appropriate for both cultural resources and TCRs. In that event the City will develop a program with a focus that is tailored to the type of resources likely to be encountered. For example, a project that involves demolition and replacement of a historic-era building in old Roseville might have a greater potential for the discovery of historic (non-Native American) archaeological materials, and thus, a training program would be developed by a qualified professional archaeologist and not require participation by tribes. However, in cases where the project location is near a natural waterbody or is in an area determined to be sensitive for precontact or Native American resources, then the development of a training program would require input from culturally affiliated tribes.

If deemed necessary by the City, in consultation with a culturally affiliated tribe, sensitivity training should be conducted during a pre-construction meeting for construction supervisors prior to beginning any ground-disturbing project work. The sensitivity training program should provide information about notification procedures when potential archaeological material is discovered, procedures for coordination between construction personnel and monitoring personnel, and information about other treatment or issues that may arise if cultural resources (including human remains) are discovered during project construction. This protocol shall be communicated to all new construction personnel during orientation,

prior to the employee beginning ground-disturbing work on the project, and on a poster that is placed in a visible location inside the construction job trailer.

If the project has the potential to impact TCRs, then tribal input into the program is advised. In this case, the program should include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating state laws and regulations. The program should also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential TCRs are encountered. The program should also underscore the requirement for confidentiality and culturally appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

2.4.10 Post-Review Discoveries

There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources or TCRs, even for projects that do not have known resources present. If subsurface deposits believed to be cultural or human in origin are discovered during construction, then the City must carry out steps to identify, evaluate, and treat the find in accordance with applicable state law. Because this potential exists for all projects that involve ground disturbance, it is recommended that an unanticipated discovery procedure be a required mitigation measure or condition of approval for all projects that will disturb the ground. Specific procedures for addressing discoveries are provided in the following chapter.

2.4.11 Alternative Treatment Measures

Based on the number and type of resources within a project, or based on the construction timing of the project, there may be a need to develop and negotiate certain types of mitigation that are not provided for above. There may also be requests from consulting tribes for methods of identification that may be considered to be non-traditional in mainstream cultural resources management (hereafter, “alternative”). The City, in consultation with appropriate professionals, experts, and tribes, shall be solely responsible for making the decision about whether or not an alternative method is appropriate for City projects. For private projects, where a project applicant objects to an alternative method, the City may opt to require a suitable substitute, as long as it has a similar result or effect. In any case, the City shall not require mitigation when the effects are found under CEQA to be not significant, and any such mitigation must be commensurate with the impact.

However, there are specific types of alternative methods that the City has determined are not appropriate at this time, including:

- Unless mutually agreed to by all culturally affiliated consulting tribe(s) and the City, use of forensic or human remains detection canines for surveys;
- Use of compensatory mitigation (payment of funds in exchange for impacts);
- Any mitigation or treatment that appears to benefit a specific entity, person, or tribe, rather than mitigating for a resource;

- Any method that is not proven or accepted by the professional community that would create an undue financial burden on the City or applicant; and
- Any other method or treatment that the City deems is not appropriate.

Controlled Grading

One example of an alternative method is controlled grading to slowly and carefully remove overburden and allow for less destructive exposure of any cultural constituents. This may be implemented during the excavation of soil that is identified as part of a precontact site. When used specifically for precontact archaeological sites or TCRs, this technique would, by definition, require the use of both an archaeological monitor and a tribal monitor from a culturally affiliated tribe. Because a tribal monitor would be required in this scenario, payment for monitoring is appropriate (see Section 3.0 for policies on payment).

Controlled grading would not be required for soil that is identified as non-cultural formational soil or fill dirt imported to the site that is determined to lack cultural constituents. The determination of the transition from cultural soil to formational soil should be made jointly by the project's archaeological consultant, City staff, culturally affiliated tribe(s), and geotechnical professionals.

Controlled grading will involve use of a small piece of equipment or a road grader to peel away native soil using shallow cuts made in approximately two-to-five-inch-deep layers. The grading equipment will push the shallow cuts of soil to the outside of the cultural deposit area. This deposited soil may be sampled and screened to ensure adequate detection of any cultural materials that may be present. The monitors will observe and may provide input on the controlled grading process; however, the pace of the grading and the depth of layers to be removed will be directed by the City and implemented by the contractor. The potential exists that discoveries may temporarily suspend the controlled grading process if they are significant and require focused archaeological excavations or other appropriate treatment.

The archaeological monitor and tribal monitor will observe the removal of soil by a backhoe equipped with a flat-edge bucket or follow closely behind the grading equipment and mark any cultural material with pin flags. Each artifact will be recorded to provide horizontal and vertical locational data. If no cultural deposits are encountered, the road grader will continue to make passes until one of two conditions are met (whichever occurs first):

- Grading will continue to a depth of 30 centimeters below the depth of any recorded artifacts, suggesting an end to the potential for cultural deposits; or
- Non-cultural formational soils are encountered that predate any human occupation of this location.

Once the cultural deposit has been completely removed, the controlled grading process will be terminated, and mass grading may proceed.

3.0 TRIBAL PARTICIPATION DURING PROJECT CONSTRUCTION

The intent of tribal consultation during project planning and environmental review is to resolve potential conflicts between projects and resources early in the planning stages. In many cases under the City's jurisdiction, this has been successful. However, there are circumstances that arise during project construction, such as unanticipated discoveries, that can lead to additional participation by tribes. This section describes the City's policies and procedures for addressing tribal participation during construction.

3.1 Policy of Payment for Tribal Participation During Construction

If the City determines that tribal monitoring or participation is required as a mitigation measure or condition of approval, then payment is appropriate (payment for non-required tribal observation and for consultation is not; see Section 2.0.). The following policy is intended for both City and private projects under the jurisdiction of the City.

When a mitigation measure of a certified environmental document or a condition of a permit or approval requires tribal monitoring of construction-related activities, the City shall retain the specified number of tribal monitor(s) under contract for the purpose expressed in the mitigation measure using the payment schedule provided further below.

3.1.1 Tribal Monitor

A tribal representative that is paid for his or her participation as a monitor:

- has the Tribe's authority to make daily decisions on Native American beliefs, wishes or policy, but may consult with other tribal members with authority and/or experience when it does not delay project progress;
- has the Tribe's authority to consult on their behalf with the Project Archaeologist on the archaeological investigations;
- is required to report to the appropriate tribal members on project progress, activities, finds, problems by whatever methods are appropriate;
- is required to report to the designated job supervisor on a daily basis; and
- has the Tribe's authority to lodge a formal complaint.

Examples (for the purpose of this section) include Tribal Historic Preservation Officers, Tribal Council Members, and Tribal Monitors. The Maximum Actual Hourly Rate paid for a Tribal Monitor shall be consistent with the most current version of the Caltrans North Region Native American Monitoring Procedures pay rates. The City will revisit the pay schedule with each update of these Guidelines, which may or may not result in a revision.

In addition, the following parameters apply:

- Tribal Monitors shall be compensated only for City-authorized labor spent on the job site and are subject to applicable labor laws with respect to paid rest breaks and unpaid meal periods.

- Tribal monitors shall be provided with a mileage reimbursement, based on the Internal Revenue Service reimbursement rate in effect at the time of travel. Mileage shall be calculated based on the distance between the job site and the main tribal office.
- The City shall not compensate more than one Tribal Monitor per project without prior approval by City staff in advance.
- The City shall not compensate trainees or interns for tribal monitoring.
- The City shall not pay for monitoring of activities that do not involve ground or vegetation disturbance that would have the potential to impact a TCR, as determined through the City's environmental review and associated consultation process.
- All representatives and monitors must adhere to job site safety protocols.
- Private property owners reserve the right to prohibit entry to private lands.
- The City will identify Tribal Monitors and will discuss Tribal Monitor assignments with culturally affiliated tribes prior to monitoring activities.
- The City shall use a temporary employment agency to handle all employment paperwork, insurance, and employment law compliance; Tribal Monitors shall not be considered employees of the City.

Pay rates for tribal monitoring and participation for private developments (where the City is not the project proponent) may be separately negotiated between the tribe and project proponent. Nothing in these guidelines or in applicable law prohibits a private landowner from separately entering into an agreement with a tribe to provide unrequired monitoring or monitoring at higher rates, so long as doing so does not attempt to circumvent existing laws and consultation processes.

In the event that the City receives a request for tribal monitoring after project approval, which may be just before or during construction, when tribal monitoring was not a mitigation measure or condition of approval, the City shall not pay for tribal monitoring. However, the City will consider requests from interested tribes to visit the project site to observe project activities on a voluntary basis, as long as appropriate safety procedures are followed and a waiver of liability (including proof of workers compensation insurance) is on file with the City.

3.2 Contractor Guidance for the Response to Unanticipated Discoveries

In the event that project construction activities result in the discovery of previously unknown cultural resources, which may or may not include TCRs, the following procedures generally apply. These procedures may be superseded by equivalent or more effective mitigation measures in the approved CEQA document, or by federal permits and conditions. Therefore, these procedures are intended to serve as guidance when another permit or environmental document is silent on one or more of these issues. Deviation from these procedures may also be warranted, in the event that the discovery is atypical. The City shall exercise discretion in deviating from this guidance. The City may also choose to extend the timelines as stated in the procedures below. Any extension of timelines shall be documented in writing, which may be satisfied by electronic communication.

3.2.1 Initial Pause and Assessment for All Discoveries, Regardless of Cultural Affiliation

In the event of an unanticipated discovery during construction, all ground disturbing work must pause within a 100-foot radius of the discovery, and the construction manager must take reasonable measures to protect the discovery from damage by equipment or personnel. This may include placement of plywood or steel plates over the excavation area (if feasible), or placement of exclusionary fencing. Work may continue on other parts of the project while the following procedures are carried out, but construction personnel are strictly prohibited from disclosing the discovery to the public, which includes posting on social media.

Immediately upon taking reasonable measures to protect the discovery, the construction manager must notify the City's representative by phone, regardless of the presence of an archaeological or tribal monitor. The City's representative will immediately coordinate with the monitoring archaeologist (if present) or contact the project archaeologist, or, in the absence of either, contact a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for archaeologist.

The professional archaeologist must make a determination, based on professional judgement and supported by substantial evidence, within one business day of being notified, as to whether or not the find represents a cultural resource or has the potential to be a tribal cultural resource. The subsequent actions will be determined by the type of discovery, as described below. These include: 1) a work pause that, upon further investigation, is not actually a discovery and the work pause was simply needed in order to allow for closer examination of soil (a "false alarm"); 2) a work pause and subsequent action for discoveries that are clearly not related to tribal resources, such as can and bottle dumps, artifacts of European origin, and remnants of built environment features; and 3) a work pause and subsequent action for discoveries that are likely related to tribal resources, such as midden soil, bedrock mortars, groundstone, or other similar expressions.

Whenever there is question as to whether or not the discovery represents a tribal resource, the City shall consult with culturally affiliated tribes in making the determination. Whenever a tribal monitor is present, he or she shall be consulted.

3.2.2 Response to False Alarms

If the professional archaeologist determines that the find is negative for any cultural indicators, then work may resume immediately upon notice to proceed from the City's representative. No further notifications or tribal consultation is necessary, because the discovery is not a cultural resource of any kind. Should tribal representatives or monitors desire to take possession of non-cultural materials, the tribe may execute a voluntary agreement with the property owner to take possession as long as removal has been approved in writing by the property owner (if not the City). In this case, where the find is determined to not be a cultural resource, then the maximum delay to the project activities is expected to be one business day.

If the find represents a paleontological resource, then the City's representative will notify a professionally qualified paleontologist to address the find separately and notice to resume work at that location cannot occur until authorized by the City's representative, and the time required to do so is not addressed in this

guidance. Tribal representatives may not remove paleontological materials without permission from the City and property owner (if not the City).

If the find is determined to be a cultural resource, then the procedures below apply.

3.2.3 Response to Non-Tribal Discoveries

If a tribal monitor is not present at the time of discovery and the professionally qualified archaeologist determines that the discovery is a cultural resource but is not reasonably associated with Native American culture, then the City shall notify by e-mail any tribes that specifically requested notification of such discoveries, with a description and a photograph of the find. These requests for notification must be provided to the City in writing in advance of a discovery. Notified tribes shall be afforded up to 24 hours (none of which time period may fall on weekends or City holidays) to review the information (which may or may not include a site visit) and determine whether or not the tribe possesses information about the discovery that would differ from the determination made by the professionally qualified archaeologist. If a notified tribe responds within 24 hours to indicate that the find represents a tribal cultural resource, then work may not resume at the location until the City, in consultation with the tribe(s), addresses the find in accordance with CEQA and Section 3.2.4.

If the tribe fails to respond within 24 hours or responds to concur with the archaeologist that the discovery does not constitute a tribal resource, then the archaeologist shall submit to the City, within two business days, a brief plan for evaluating the significance and recommended treatment. The City shall have up to two business days to review and approve the implementation of the plan.

Upon receiving a notice to proceed from the City, the professional archaeologist must complete the evaluation within five business days, unless additional time is granted by the City in light of the nature of the find. The results of the evaluation may be communicated to the City in an email; formal reporting may continue during construction, after the data collection is completed and the City authorizes a notice to resume work at the location.

If the evaluation results in a finding that the discovery is not a historical resource under CEQA, then work may resume at the location of the discovery immediately upon notification of such from the City's representative. The delay to project construction at that location would be expected to be no more than 10 business days.

If the evaluation results in a finding that the discovery is a historical resource under CEQA, then the professional archaeologist shall immediately implement the treatment specified in the work plan. Work may not resume at the location of the discovery until the City issues a notice to proceed. The amount of delay to the discovery location depends on the nature and extent of the discovery; however, the City shall issue a notice to resume work at that location as soon as data collection is completed by the archaeologist. Formal reporting and analysis may continue during construction, after the City authorizes a notice to resume work at the location.

3.2.4 Response to Tribal Discoveries

If the professional archaeologist determines within one business day that the find does represent a cultural resource, and that it is reasonably believed to be associated with Native American culture, or when a notified tribe responds pursuant to the notification process in Section 3.2.3 that the find does, in fact,

represent tribal resources, then the City shall notify by email, within one business day of receiving such information, all culturally affiliated tribes that specifically requested such tribal consultation notification during environmental review and planning. Tribes that did not respond to offers to consult or declined consultation without such request for notification will not be contacted. Each notified tribe will have one business day from the time of notification to request a visit of the discovery location (if so desired). Tribal representatives who wish to visit the location must notify the City's representative in its response to obtain access and safety information and all non-agency and non-contracted personnel are subject to approval by private property owners. However, it should be noted that while a property owner has the legal right to approve non-agency and non-contracted personnel, the City will not authorize work to resume until appropriate personnel have been approved for entry so that the project conditions can be satisfied. Notified tribes that do not respond or visit the location within one business day may submit comments to the City in writing; however, field visits may or may not be accommodated.

Each visiting tribe will have two business days from the time of the site visit to submit written recommendations to the City for appropriate treatment. Recommendations must be accompanied by supporting information that constitutes substantial evidence for any determination of a TCR. Any recommendations for treatment or mitigation are subject to the process illustrated in Figure 1. Only those recommendations that are determined by the City, as lead agency and engaging in good faith consultation, to be both appropriate and allowable under CEQA would be subject to payment for tribal representatives or monitors.

The City shall have three business days from the close of the two-day comment period to review the information submitted and determine: 1) whether or not the find is subject to state law; 2) whether or not the find represents either a TCR or a historical resource; 3) whether or not the find has been significantly impacted; and if so, then 4) the appropriate treatment. In the absence of substantial evidence or in the case of conflicting tribal comments, the City may elect to exercise one or more of the options specified in Section 21084.3(b), if feasible. Any recommendations submitted by tribes that are not implemented by the City shall be documented in the administrative record with an explanation as to why the recommendations were rejected. If the City determines that the find is either a TCR or a historical resource, then work cannot resume at that location until the resource is treated to the satisfaction of the City, acting as the Lead Agency.

If the City determines that the find is neither a TCR nor a historical resource, then no additional treatment is necessary under state law, and the City's representative shall issue a notice to proceed with activity at that location. In this case, the maximum delay to project activities is expected to be eight business days.

The amount of delay to the discovery location depends on the nature and extent of the discovery; however, the City shall issue a notice to resume work at that location as soon as possible. If other areas outside of the 100-foot radius of the discovery are available to continue with work, notice to resume work may be given for these locations. Formal reporting or other types of mitigation (such as public interpretation) may continue during construction, after the City authorizes a notice to resume work at the location.

3.2.5 Response to Human Remains Subject to State Law

If it is determined that human remains are found, or remains that are potentially human, then the treatment shall conform to the requirements of state law under California Health and Safety Code Section 7050.5

and Public Resources Code (PRC) Section 5097.98. For the purposes of this project, the definition of remains subject to state law (Section 5097.98) shall apply. This definition states: "(d)(1) Human remains of a Native American may be an inhumation or cremation, and in any state of decomposition or skeletal completeness. (2) Any items associated with the human remains that are placed or buried with the Native American human remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains. "The City understands that Native American tribes ascribe importance to objects and surrounding soil matrix associated with human remains that is broader than what is defined in state law. The City will consider requests from tribes to treat additional objects and matrix in the same manner as human remains and will exercise its discretion in doing so on a case-by-case basis.

If the find includes human remains, or remains that are potentially human (as defined in state law), then the individual making the discovery shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641, Native American human remains and multiple human remains). The archaeologist shall notify the Placer County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, then the Coroner will notify the NAHC, which then will designate a Native American MLD for the project (Section 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the landowner does not agree with the recommendations of the MLD, then the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center, using an open space zoning designation or deed restriction as appropriate, and/or recording a reinterment document with Placer County (AB 2641).

3.3 Policy of Payment for Unanticipated Discovery Response

Under state law (Public Resources Code section 5097.98(a)), where human remains are encountered and the NAHC identifies a MLD, the MLD "may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site." The landowner must next discuss and confer with the MLD "all reasonable options regarding the descendants' preferences for treatment."

The Public Resources Code (PRC section 5097.98(e)) further provides: "Whenever the commission is unable to identify a descendant, or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance."

The Public Resources Code requires that under limited circumstances (e.g., when the MLD fails to make a recommendation, or the landowner rejects the recommendation) the landowner must reinter remains and associated items. It is therefore the City's policy to cover the reasonable cost of that reinterment when the find occurs on City property. In the event that reinterment applies to projects on non-City (private) property, then the landowner may negotiate the cost separately with the MLD.

In the event of the disturbance of human remains on City-owned property, the City shall be responsible for the reasonable reinterment of remains in a manner that is considered equivalent to the physical condition that the remains were in at the time of discovery, with the intent of restoring the remains to that form. That is, the City is responsible for mitigating direct, physical construction impacts caused by a City project to human remains, consistent with the nexus provisions of CEQA. Any proposal for reburial on City property must first be reviewed and approved by the City to confirm the location does not conflict with current or reasonably foreseeable City improvements, utilities, maintenance, or other City operations.

For the purposes of this section, "remains" is inclusive of associated grave goods, plus any additional objects and matrix the City has agreed to treat in the same manner are human remains. The City will not compensate or reimburse for the processing of remains or reburial using methods that cannot be reasonably ascertained from the discovery. The City is responsible for the reasonable and necessary costs of the disinterment and reinterment process, but not for any cleaning, blessing, data recovery, or other "processing" of the remains, or for any interim storage where the purpose is to provide space for such "processing." As an example, if the remains were encountered as a cremation, the City will not pay for the cost of reinterring the cremains in wooden boxes or with other materials, as doing so would not be returning them to their original form at the time of discovery. However, the City will make reasonable accommodations of time for the MLD to prepare the cremains in any other manner that is beyond that which the City can compensate. Examples are given below; they are intended for illustrative purposes only and may not represent all potential scenarios encountered. These examples would also provide guidance to the discovery of non-Native American human remains that are not the result of a crime scene. These examples are written based on the assumption that the remains are left in place until the new burial site is prepared, and therefore interim storage is not needed. However, there may be circumstances in which the City determines that interim storage would be needed, such as if the remains need to be removed from the construction site before the new burial site is ready.

3.3.1 Scenario 1

In the event of the discovery of cremated or fragmented remains in a discrete concentration, the City will be financially responsible for securing a location free from future disturbance; retaining a tribal representative to oversee or carry out the placement of remains into the reinterment location; transport of the remains to the reinterment site; providing a backhoe and operator to excavate a reinterment location roughly proportional to the dimensions of the concentrations and backfilling after reinterment; and filing of a deed restriction on the location to ensure no future disturbance, as necessary. The City will not be financially responsible for religious ceremony, ritual, or blessing; wrapping, padding, or similar preparation; wooden boxes or vessels; or space for interim storage or processing; however, the City will not willfully interfere with religious expression by Native American tribes, should they wish to provide additional treatment of materials prior to reburial.

3.3.2 Scenario 2

In the event of the discovery of cremated or fragmented remains in a dispersed context that are not in a discrete concentration or intact burial, the City will be financially responsible for securing a location free from future disturbance; retaining a tribal representative to oversee or carry out the placement of remains into the reinterment location; transport of the remains to the reinterment site; providing a backhoe and operator to excavate a reinterment location roughly proportional to the volume of material recovered, and backfilling after reinterment; and filing of a deed restriction on the location to ensure no future disturbance, as necessary. The City will not be financially responsible for religious ceremony, ritual, or blessing; wrapping, padding, or similar preparation; wooden boxes or vessels; or space for interim storage or processing; however, the City will not willfully interfere with religious expression by Native American tribes, should they wish to provide additional treatment of materials prior to reburial.

3.3.3 Scenario 3

In the event of the discovery of an intact burial (articulated skeleton), the City will be financially responsible for securing a location free from future disturbance; retaining a tribal representative from the MLD to oversee or carry out the placement of remains into the reinterment location in a similar configuration as original burial; transport of the remains to the reinterment site; providing a backhoe and operator to excavate a reinterment location roughly proportional to the dimensions of the burial(s), and backfilling after reinterment; and filing of a deed restriction on the location to ensure no future disturbance, as necessary. The City will not be financially responsible for religious ceremony, ritual, or blessing; wrapping, padding, or similar preparation; wooden boxes or vessels; or space for interim storage or processing; however, the City will not willfully interfere with religious expression by Native American tribes, should they wish to provide additional treatment of materials prior to reburial.

3.3.4 Scenario 4

In the event of the discovery of an intact grave with remnants of, or an intact, coffin or container, the City will be financially responsive for securing a location free from future disturbance; if the coffin or container was damaged during the unanticipated discovery, materials and labor to create or provide a replacement coffin or container that is roughly in-kind if requested by the MLD[1]; retaining a tribal representative to oversee or carry out the placement of remains into the coffin or container and into the reinterment location; transport of the remains to the reinterment site; providing a backhoe and operator to excavate a reinterment location roughly proportional to the dimensions of the grave, and backfilling after reinterment; and filing of a deed restriction on the location to ensure no future disturbance, as necessary. The City will not be financially responsible for religious ceremony, ritual, or blessing; wrapping, padding, or similar preparation; or space for interim storage or processing; however, the City will not willfully interfere with religious expression by Native American tribes, should they wish to provide additional treatment of materials prior to reburial.

[1] The original coffin or container may be of religious or other significance to the MLD, and therefore replacement should be offered, but should be a decision of the MLD.

4.0 REFERENCES

Placeworks. 2012. A Practical Guide to the California Environmental Quality Act.

Exhibit B

Internal Guidance for Management of Tribal Cultural Resources and Consultation

Volume II: Implementation Manual

City of Roseville

July 2020

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CONTENTS

Part A – AB 52 Procedures

Part B – SB 18 Procedures

Part C – Mitigation Measure Language

Part D – General Reference Materials

July 2020

CITY OF ROSEVILLE CALIFORNIA

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PART A

AB 52 Procedures

July 2020

CITY OF ROSEVILLE CALIFORNIA

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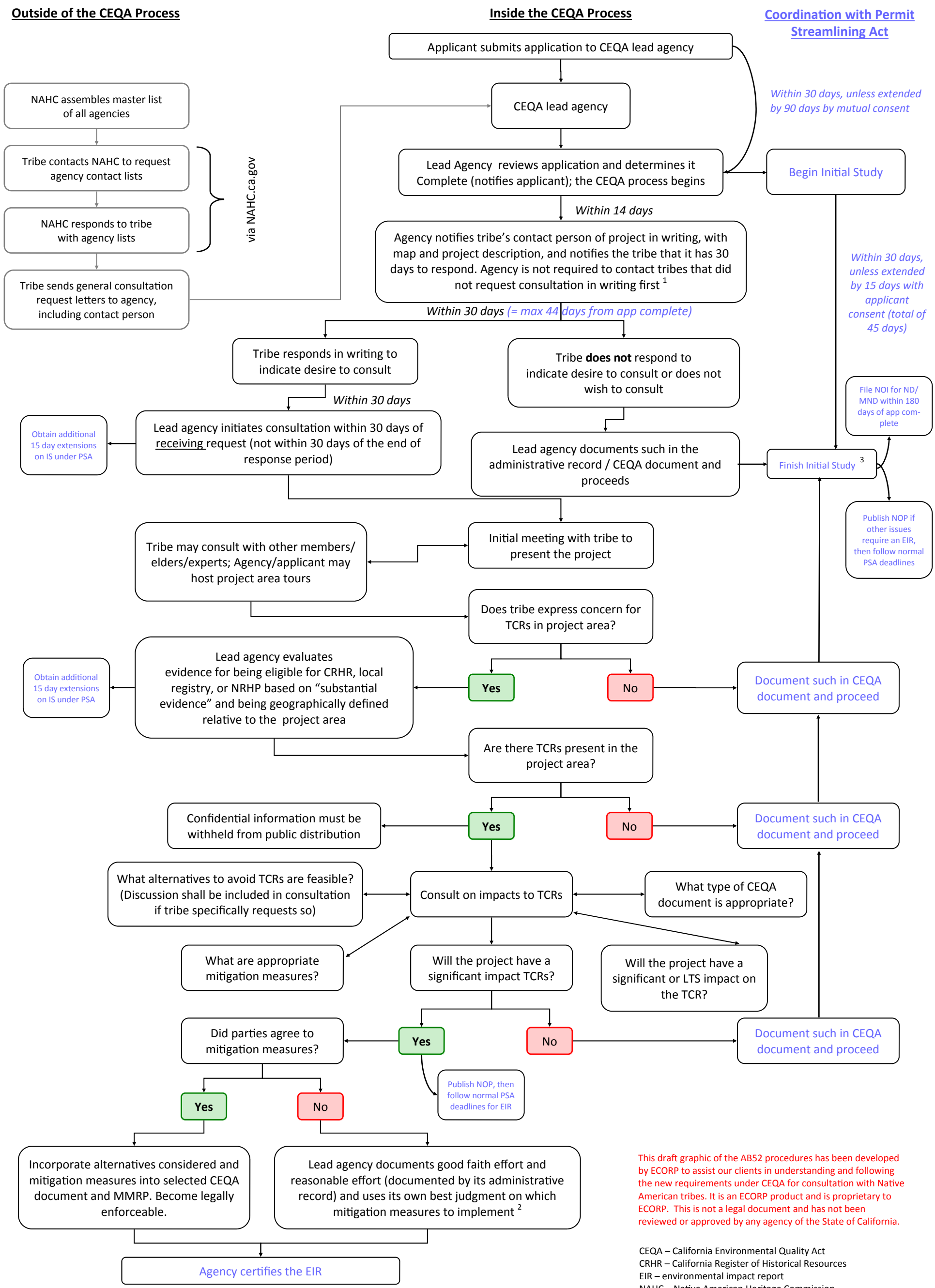
An Interpretation of AB 52 Native American Consultation Procedures Under CEQA



This draft graphic of the AB52 procedures has been developed by ECORP to assist our clients in understanding and following the new requirements under CEQA for consultation with Native American tribes. It is an ECORP product and is proprietary to ECORP. This is not a legal document and has not been reviewed or approved by any agency of the State of California.

CEQA – California Environmental Quality Act
CRHR – California Register of Historical Resources
EIR – environmental impact report
NAHC – Native American Heritage Commission
ND/MND – negative declaration/mitigated negative declaration
MMRP – mitigation monitoring and reporting program
TCR – tribal cultural resources

[1] *in accordance with 21080.3.1(b)(1), consultation is triggered by a tribe notifying the Lead Agency in writing of its desire to consult. This does not preclude optional tribal consultation with tribes who did not send a general request letter, but in such a case, said consultation does not technically fall under AB 52.*

[2] *e.g., preservation and avoidance; protecting cultural character, traditional use, and confidentiality; and use of conservation easements.*

[3] *even absent formal tribal consultation, the CEQA document must still address impacts to TCRs, which should, at minimum, include results of a search of the Sacred Lands File by the NAHC.*

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

10/6/2015

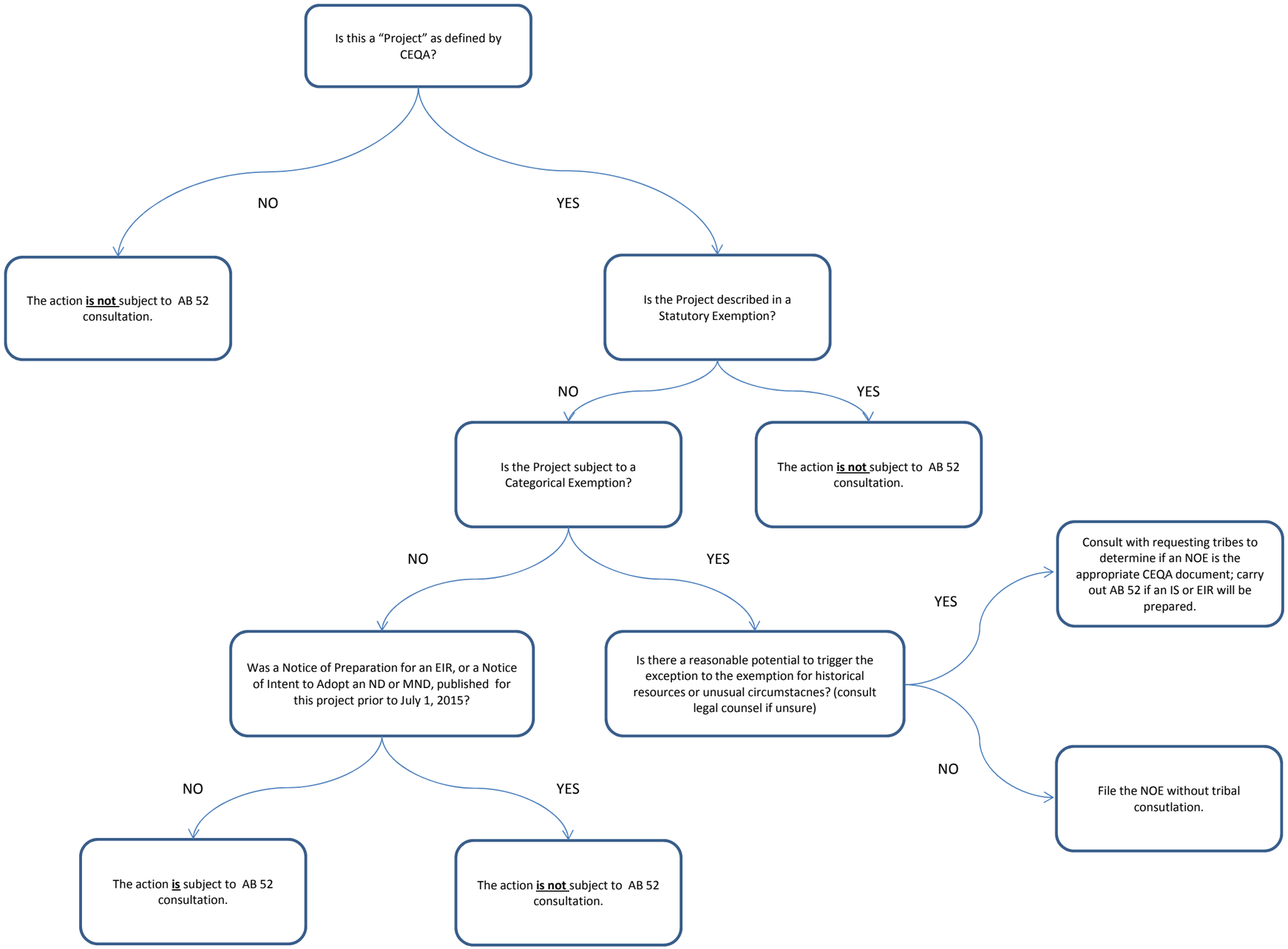

Is this a "Project" as defined by CEQA?
NO
YES
The action **is not** subject to AB 52 consultation.
Is the Project described in a Statutory Exemption?
NO
YES
Is the Project subject to a Categorical Exemption?
The action **is not** subject to AB 52 consultation.
NO
YES
Was a Notice of Preparation for an EIR, or a Notice of Intent to Adopt an ND or MND, published for this project prior to July 1, 2015?
Is there a reasonable potential to trigger the exception to the exemption for historical resources or unusual circumstacnes? (consult legal counsel if unsure)
YES
Consult with requesting tribes to determine if an NOE is the appropriate CEQA document; carry out AB 52 if an IS or EIR will be prepared.
NO
File the NOE without tribal consutlation.
NO
YES
The action **is** subject to AB 52 consultation.
The action **is not** subject to AB 52 consultation.

Chart 1

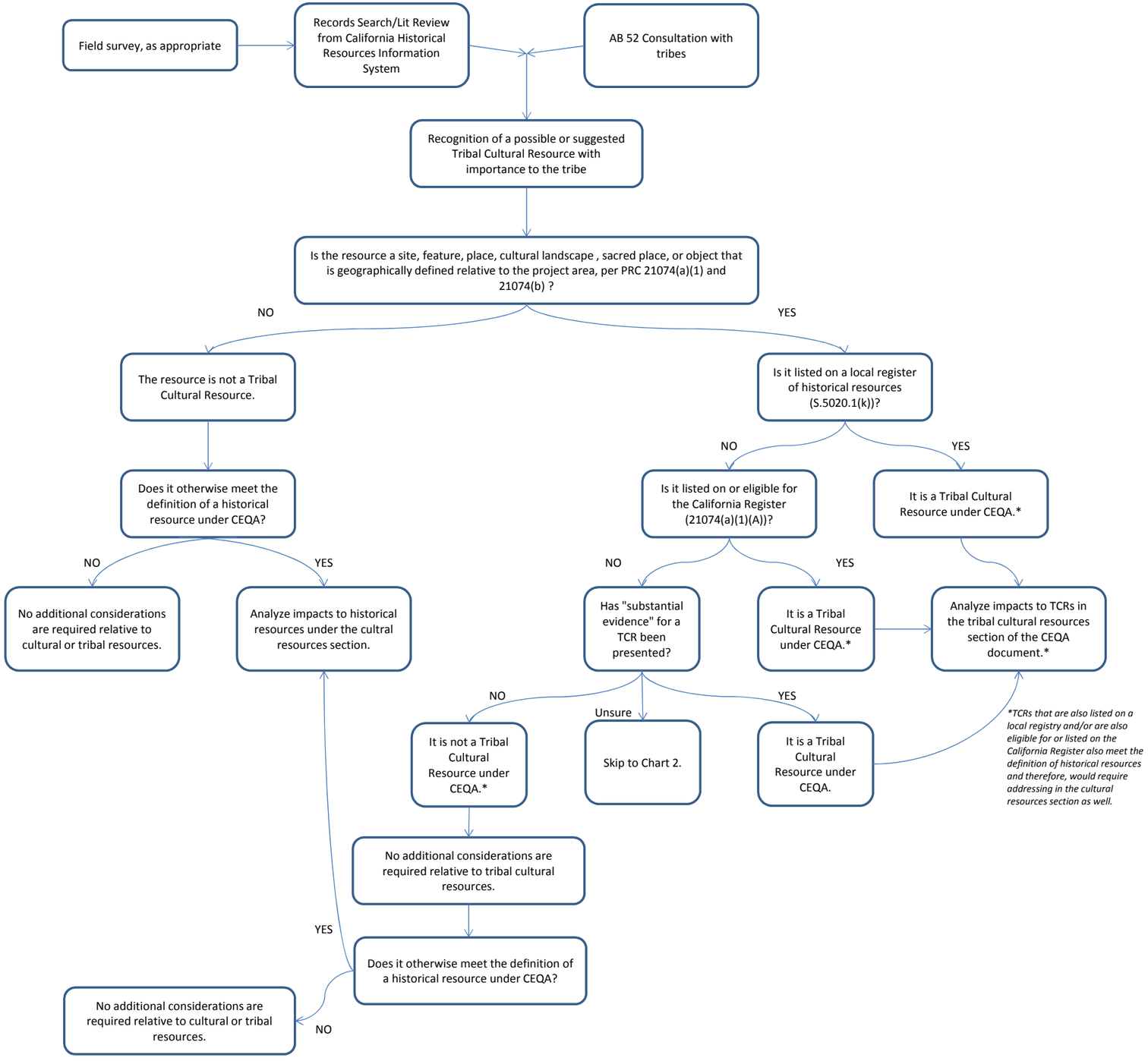
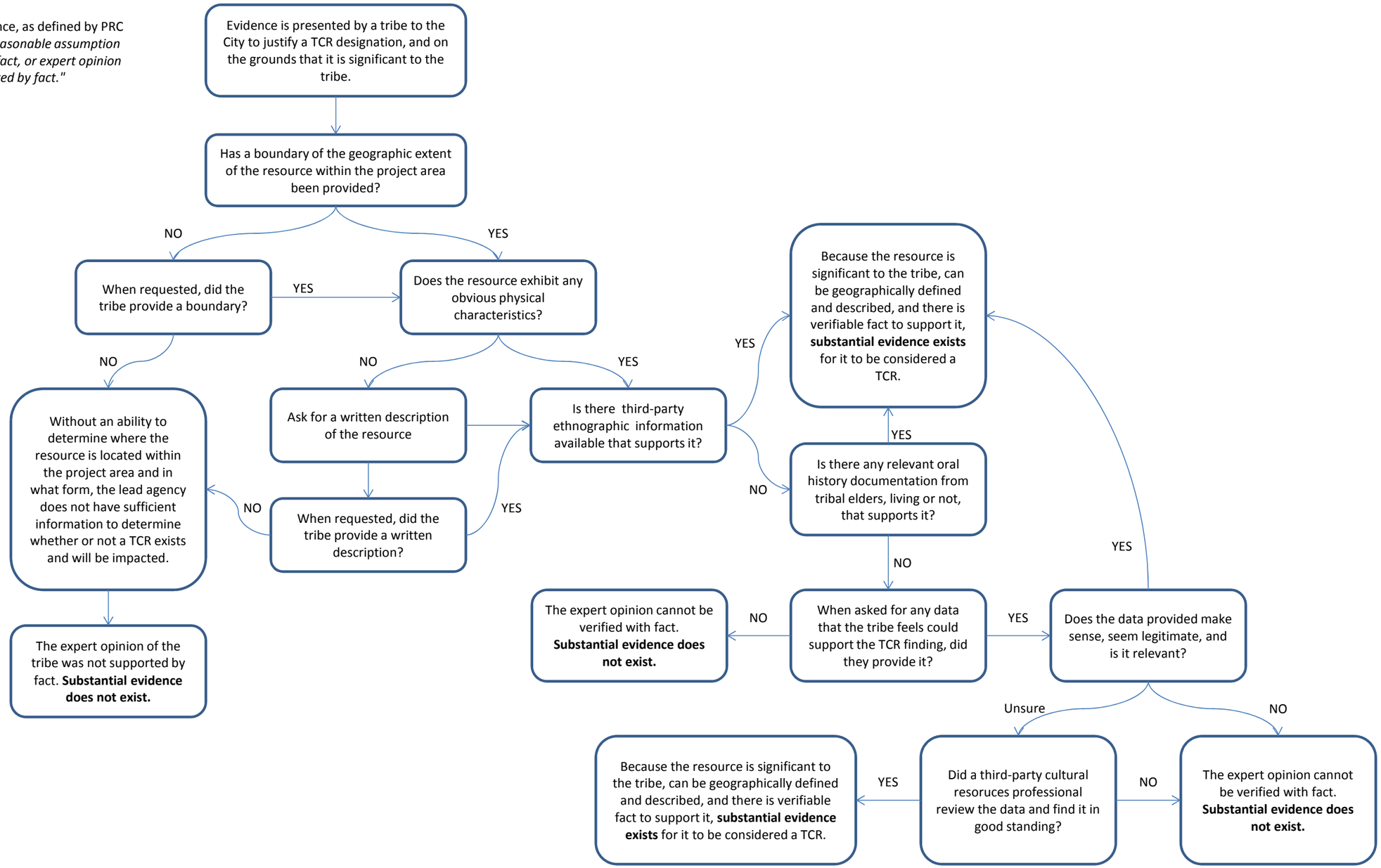

Field survey, as appropriate
Records Search/Lit Review from California Historical Resources Information System
AB 52 Consultation with tribes
Recognition of a possible or suggested Tribal Cultural Resource with importance to the tribe
Is the resource a site, feature, place, cultural landscape , sacred place, or object that is geographically defined relative to the project area, per PRC 21074(a)(1) and 21074(b) ?
NO
YES
The resource is not a Tribal Cultural Resource.
Is it listed on a local register of historical resources (S.5020.1(k))?
NO
YES
Does it otherwise meet the definition of a historical resource under CEQA?
Is it listed on or eligible for the California Register (21074(a)(1)(A))?
It is a Tribal Cultural Resource under CEQA.*
NO
YES
NO
YES
No additional considerations are required relative to cultural or tribal resources.
Analyze impacts to historical resources under the cultral resources section.
Has "substantial evidence" for a TCR been presented?
It is a Tribal Cultural Resource under CEQA.*
Analyze impacts to TCRs in the tribal cultural resources section of the CEQA document.*
NO
Unsure
YES
It is not a Tribal Cultural Resource under CEQA.*
Skip to Chart 2.
It is a Tribal Cultural Resource under CEQA.
*TCRs that are also listed on a local registry and/or are also eligible for or listed on the California Register also meet the definition of historical resources and therefore, would require addressing in the cultural resources section as well.
No additional considerations are required relative to tribal cultural resources.
YES
Does it otherwise meet the definition of a historical resource under CEQA?
No additional considerations are required relative to cultural or tribal resources.
NO

Chart 2

Substantial evidence, as defined by PRC 21080: *"fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact."*



AB 52 Compliance Verification

Project Name: Click here to enter text.

Project Number: Click here to enter text.

Screening Checklist

Result: project ☐ **is** ☐ **is not** subject to AB 52 consultation

Date determined: Click here to enter a date. **Staff**: Click here to enter text.

Comments: Click here to enter text.

Date of Decision to Initiate CEQA: Click here to enter a date. **Staff**: Click here to enter text.

(reminder: 14-day notification letters must be sent by Click here to enter a date.)

Review of General Consultation Request Directory

Date reviewed: Click here to enter a date. **Staff**: Click here to enter text.

The following letters are on file with the City and pertain to this project, and constitute the tribes that will be consulted under AB 52 for this project:

Tribe: Click here to enter text. **Letter date:** Click here to enter a date.

Tribe: Click here to enter text. **Letter date:** Click here to enter a date.

Tribe: Click here to enter text. **Letter date:** Click here to enter a date.

Tribe: Click here to enter text. **Letter date:** Click here to enter a date.

Tribe: Click here to enter text. **Letter date:** Click here to enter a date.

14-day Notification Letters

Letter date: Click here to enter a date. **Mailed date**: Click here to enter a date.

Method: Choose an item. **Mailed date is:** Click here to enter text.days past start of CEQA.

30-day response window ends: Click here to enter a date.

Comments: Click here to enter text.

Responses Received from 14-day Notification Letters

Tribe: Click here to enter text. **Date:** Click here to enter a date. **Response**: Choose an item.

Tribe: Click here to enter text. **Date:** Click here to enter a date. **Response**: Choose an item.

Tribe: Click here to enter text. **Date:** Click here to enter a date. **Response**: Choose an item.

Tribe: Click here to enter text. **Date:** Click here to enter a date. **Response**: Choose an item.

Tribe: Click here to enter text. **Date:** Click here to enter a date. **Response**: Choose an item.

Note: for tribes accepting consultation invitation, initiation must occur within 30 days of receiving the response, not 30 days from the end of the 30-day response period.

Initiation of Consultation

☐ check here if no tribes requested consultation

The following letters were sent to consulting tribes to initiate consultation:

Tribe: Click here to enter text. **Date**: Click here to enter a date.

Tribe: Click here to enter text. **Date**: Click here to enter a date.

Tribe: Click here to enter text. **Date**: Click here to enter a date.

Tribe: Click here to enter text. **Date**: Click here to enter a date.

Tribe: Click here to enter text. **Date**: Click here to enter a date.

Consultation

Indicate for each tribe consulted whether or not it requested a discussion on alternatives and whether or not it recommended mitigation measures. Refer to consultation record for details.

Tribe: Click here to enter text. ☐ requested alternatives ☐ recommended mitigation measures

Tribe: Click here to enter text. ☐ requested alternatives ☐ recommended mitigation measures

Tribe: Click here to enter text. ☐ requested alternatives ☐ recommended mitigation measures

Tribe: Click here to enter text. ☐ requested alternatives ☐ recommended mitigation measures

Tribe: Click here to enter text. ☐ requested alternatives ☐ recommended mitigation measures

---

Conclusion of Consultation

Tribe: Click here to enter text.

Concurrence: ☐ **was** ☐ **was not** achieved with the City for the following reason: Click here to enter text.

Tribe: Click here to enter text.

Concurrence: ☐ **was** ☐ **was not** achieved with the City for the following reason: Click here to enter text.

Tribe: Click here to enter text.

Concurrence: ☐ **was** ☐ **was not** achieved with the City for the following reason: Click here to enter text.

Tribe: Click here to enter text.

Concurrence: ☐ **was** ☐ **was not** achieved with the City for the following reason: Click here to enter text.

Tribe: Click here to enter text.

Concurrence: ☐ **was** ☐ **was not** achieved with the City for the following reason: Click here to enter text.

Required Mitigation Measures

MM-TCR 1: Click here to enter text.

MM-TCR 2: Click here to enter text.

MM-TCR 3: Click here to enter text.

Consultation Termination Letters

Letter date: Click here to enter a date. **Mailed date**: Click here to enter a date.

Method: Choose an item.

Assembly Bill No. 52

CHAPTER 532

An act to amend Section 5097.94 of, and to add Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to, the Public Resources Code, relating to Native Americans.

[Approved by Governor September 25, 2014. Filed with Secretary of State September 25, 2014.]

LEGISLATIVE COUNSEL'S DIGEST

AB 52, Gatto. Native Americans: California Environmental Quality Act.

Existing law, the Native American Historic Resource Protection Act, establishes a misdemeanor for unlawfully and maliciously excavating upon, removing, destroying, injuring, or defacing a Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources.

The California Environmental Quality Act, referred to as CEQA, requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of, an environmental impact report on a project that it proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not have that effect. CEQA also requires a lead agency to prepare a mitigated negative declaration for a project that may have a significant effect on the environment if revisions in the project would avoid or mitigate that effect and there is no substantial evidence that the project, as revised, would have a significant effect on the environment. CEQA requires the lead agency to provide a responsible agency with specified notice and opportunities to comment on a proposed project. CEQA requires the Office of Planning and Research to prepare and develop, and the Secretary of the Natural Resources Agency to certify and adopt, guidelines for the implementation of CEQA that include, among other things, criteria for public agencies to following in determining whether or not a proposed project may have a significant effect on the environment.

This bill would specify that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment. The bill would require a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The bill would

specify examples of mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources. The bill would make the above provisions applicable to projects that have a notice of preparation or a notice of negative declaration filed or mitigated negative declaration on or after July 1, 2015. The bill would require the Office of Planning and Research to revise on or before July 1, 2016, the guidelines to separate the consideration of tribal cultural resources from that for paleontological resources and add consideration of tribal cultural resources. By requiring the lead agency to consider these effects relative to tribal cultural resources and to conduct consultation with California Native American tribes, this bill would impose a state-mandated local program.

Existing law establishes the Native American Heritage Commission and vests the commission with specified powers and duties.

This bill would additionally require the commission to provide each California Native American tribe, as defined, on or before July 1, 2016, with a list of all public agencies that may be a lead agency within the geographic area in which the tribe is traditionally and culturally affiliated, the contact information of those agencies, and information on how the tribe may request those public agencies to notify the tribe of projects within the jurisdiction of those public agencies for the purposes of requesting consultation.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. (a) The Legislature finds and declares all of the following:

(1) Current state law provides a limited measure of protection for sites, features, places, objects, and landscapes with cultural value to California Native American tribes.

(2) Existing law provides limited protection for Native American sacred places, including, but not limited to, places of worship, religious or ceremonial sites, and sacred shrines.

(3) The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not readily or directly include California Native American tribes' knowledge and concerns. This has resulted in significant environmental impacts to tribal cultural resources and sacred places, including cumulative impacts, to the detriment of California Native American tribes and California's environment.

(4) As California Native Americans have used, and continue to use, natural settings in the conduct of religious observances, ceremonies, and cultural practices and beliefs, these resources reflect the tribes' continuing cultural ties to the land and their traditional heritages.

(5) Many of these archaeological, historical, cultural, and sacred sites are not located within the current boundaries of California Native American reservations and rancherias, and therefore are not covered by the protectionist policies of tribal governments.

(b) In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, it is the intent of the Legislature, in enacting this act, to accomplish all of the following:

(1) Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.

(2) Establish a new category of resources in the California Environmental Quality Act called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.

(3) Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.

(4) Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because the California Environmental Quality Act calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.

(5) In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in the California Environmental Quality Act environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decisionmaking body of the lead agency.

(6) Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

(7) Ensure that local and tribal governments, public agencies, and project proponents have information available, early in the California Environmental Quality Act environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.

(8) Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.

(9) Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

SEC. 2. Section 5097.94 of the Public Resources Code is amended to read:

5097.94. The commission shall have the following powers and duties:

(a) To identify and catalog places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands. The identification and cataloguing of known graves and cemeteries shall be completed on or before January 1, 1984. The commission shall notify landowners on whose property such graves and cemeteries are determined to exist, and shall identify the Native American group most likely descended from those Native Americans who may be interred on the property.

(b) To make recommendations relative to Native American sacred places that are located on private lands, are inaccessible to Native Americans, and have cultural significance to Native Americans for acquisition by the state or other public agencies for the purpose of facilitating or assuring access thereto by Native Americans.

(c) To make recommendations to the Legislature relative to procedures which will voluntarily encourage private property owners to preserve and protect sacred places in a natural state and to allow appropriate access to Native American religionists for ceremonial or spiritual activities.

(d) To appoint necessary clerical staff.

(e) To accept grants or donations, real or in kind, to carry out the purposes of this chapter.

(f) To make recommendations to the Director of Parks and Recreation and the California Arts Council relative to the California State Indian Museum and other Indian matters touched upon by department programs.

(g) To bring an action to prevent severe and irreparable damage to, or assure appropriate access for Native Americans to, a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, pursuant to Section 5097.97. If the court finds that severe and irreparable damage will occur or that appropriate access will be denied, and appropriate mitigation measures are not available, it shall issue an injunction, unless it finds, on clear and convincing evidence, that the public interest and necessity require otherwise. The Attorney General shall represent the commission and the state in litigation concerning affairs of the commission, unless the Attorney General has determined to represent the agency against whom the commission's action is directed, in which case the commission shall be authorized to employ other counsel. In any action to enforce the provisions of this subdivision the commission shall introduce evidence showing that such cemetery, place, site, or shrine has been historically regarded as a sacred or sanctified place by Native American people and represents a place of unique historical and cultural significance to an Indian tribe or community.

(h) To request and utilize the advice and service of all federal, state, local, and regional agencies.

(i) To assist Native Americans in obtaining appropriate access to sacred places that are located on public lands for ceremonial or spiritual activities.

(j) To assist state agencies in any negotiations with agencies of the federal government for the protection of Native American sacred places that are located on federal lands.

(k) To mediate, upon application of either of the parties, disputes arising between landowners and known descendents relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

The agreements shall provide protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction and provide for sensitive treatment and disposition of Native American burials, skeletal remains, and associated grave goods consistent with the planned use of, or the approved project on, the land.

(*l*) To assist interested landowners in developing agreements with appropriate Native American groups for treating or disposing, with appropriate dignity, of the human remains and any items associated with Native American burials.

(m) To provide each California Native American tribe, as defined in Section 21073, on or before July 1, 2016, with a list of all public agencies that may be a lead agency pursuant to Division 13 (commencing with Section 21000) within the geographic area with which the tribe is traditionally and culturally affiliated, the contact information of those public agencies, and information on how the tribe may request the public agency to notify the tribe of projects within the jurisdiction of those public agencies for the purposes of requesting consultation pursuant to Section 21080.3.1.

SEC. 3. Section 21073 is added to the Public Resources Code, to read:

21073. "California Native American tribe" means a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004.

SEC. 4. Section 21074 is added to the Public Resources Code, to read:

21074. (a) "Tribal cultural resources" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the

lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

SEC. 5. Section 21080.3.1 is added to the Public Resources Code, to read:

21080.3.1. (a) The Legislature finds and declares that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources.

(b) Prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation. When responding to the lead agency, the California Native American tribe shall designate a lead contact person. If the California Native American tribe does not designate a lead contact person, or designates multiple lead contact people, the lead agency shall defer to the individual listed on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004. For purposes of this section and Section 21080.3.2, "consultation" shall have the same meaning as provided in Section 65352.4 of the Government Code.

(c) To expedite the requirements of this section, the Native American Heritage Commission shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated with the project area.

(d) Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

(e) The lead agency shall begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation.

SEC. 6. Section 21080.3.2 is added to the Public Resources Code, to read:

21080.3.2. (a) As a part of the consultation pursuant to Section 21080.3.1, the parties may propose mitigation measures, including, but not limited to, those recommended in Section 21084.3, capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource. If the California Native American tribe requests consultation regarding alternatives to the project, recommended mitigation measures, or significant effects, the consultation shall include those topics. The consultation may include discussion concerning the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and, if necessary, project alternatives or the appropriate measures for preservation or mitigation that the California Native American tribe may recommended to the lead agency.

(b) The consultation shall be considered concluded when either of the following occurs:

(1) The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource.

(2) A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

(c) (1) This section does not limit the ability of a California Native American tribe or the public to submit information to the lead agency regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any appropriate measures to mitigate the impact.

(2) This section does not limit the ability of the lead agency or project proponent to incorporate changes and additions to the project as a result of the consultation, even if not legally required.

(d) If the project proponent or its consultants participate in the consultation, those parties shall respect the principles set forth in this section.

SEC. 7. Section 21082.3 is added to the Public Resources Code, to read:

21082.3. (a) Any mitigation measures agreed upon in the consultation conducted pursuant to Section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to paragraph (2) of subdivision (b), and shall be fully enforceable.

(b) If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

(1) Whether the proposed project has a significant impact on an identified tribal cultural resource.

(2) Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.

(c) (1) Any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with subdivision (r) of Section 6254 of, and Section 6254.10 of, the Government Code, and subdivision (d) of Section 15120 of Title 14 of the California Code of Regulations, without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. This subdivision does not prohibit the confidential exchange of the submitted information between public agencies that have lawful jurisdiction over the preparation of the environmental document.

(2) (A) This subdivision does not prohibit the confidential exchange of information regarding tribal cultural resources submitted by a California Native American tribe during the consultation or environmental review process among the lead agency, the California Native American tribe, the project applicant, or the project applicant's agent. Except as provided in subparagraph (B) or unless the California Native American tribe providing the information consents, in writing, to public disclosure, the project applicant or the project applicant's legal advisers, using a reasonable degree of care, shall maintain the confidentiality of the information exchanged for the purposes of preventing looting, vandalism, or damage to a tribal cultural resources and shall not disclose to a third party confidential information regarding tribal cultural resources.

(B) This paragraph does not apply to data or information that are or become publicly available, are already in the lawful possession of the project applicant before the provision of the information by the California Native American tribe, are independently developed by the project applicant or the project applicant's agents, or are lawfully obtained by the project applicant from a third party that is not the lead agency, a California Native American tribe, or another public agency.

(3) This subdivision does not affect or alter the application of subdivision (r) of Section 6254 of the Government Code, Section 6254.10 of the Government Code, or subdivision (d) of Section 15120 of Title 14 of the California Code of Regulations.

(4) This subdivision does not prevent a lead agency or other public agency from describing the information in general terms in the environmental document so as to inform the public of the basis of the lead agency's or other public agency's decision without breaching the confidentiality required by this subdivision.

(d) In addition to other provisions of this division, the lead agency may certify an environmental impact report or adopt a mitigated negative declaration for a project with a significant impact on an identified tribal cultural resource only if one of the following occurs:

(1) The consultation process between the California Native American tribe and the lead agency has occurred as provided in Sections 21080.3.1 and 21080.3.2 and concluded pursuant to subdivision (b) of Section 21080.3.2.

(2) The California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage, in the consultation process.

(3) The lead agency has complied with subdivision (d) of Section 21080.3.1 and the California Native American tribe has failed to request consultation within 30 days.

(e) If the mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of the consultation or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to subdivision (b) of Section 21084.3.

(f) Consistent with subdivision (c), the lead agency shall publish confidential information obtained from a California Native American tribe during the consultation process in a confidential appendix to the environmental document and shall include a general description of the information, as provided in paragraph (4) of subdivision (c) in the environmental document for public review during the public comment period provided pursuant to this division.

(g) This section is not intended, and may not be construed, to limit consultation between the state and tribal governments, existing confidentiality provisions, or the protection of religious exercise to the fullest extent permitted under state and federal law.

SEC. 8. Section 21083.09 is added to the Public Resources Code, to read:

21083.09. On or before July 1, 2016, the Office of Planning and Research shall prepare and develop, and the Secretary of the Natural Resources Agency shall certify and adopt, revisions to the guidelines that update Appendix G of Chapter 3 (commencing with Section 15000) of Division 6 of Title 4 of the California Code of Regulations to do both of the following:

(a) Separate the consideration of paleontological resources from tribal cultural resources and update the relevant sample questions.

(b) Add consideration of tribal cultural resources with relevant sample questions.

SEC. 9. Section 21084.2 is added to the Public Resources Code, to read:

21084.2. A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.

SEC. 10. Section 21084.3 is added to the Public Resources Code, to read:

21084.3. (a) Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.

(b) If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process provided in Section 21080.3.2, the following are examples of mitigation measures that, if feasible, may be considered to avoid or minimize the significant adverse impacts:

(1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

(2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

(A) Protecting the cultural character and integrity of the resource.

(B) Protecting the traditional use of the resource.

(C) Protecting the confidentiality of the resource.

(3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

(4) Protecting the resource.

SEC. 11. (a) This act does not alter or expand the applicability of the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) concerning projects occurring on Native American tribal reservations or rancherias.

(b) This act does not prohibit any California Native American tribe or individual from participating in the California Environmental Quality Act on any issue of concern as an interested California Native American tribe, person, citizen, or member of the public.

(c) This act shall apply only to a project that has a notice of preparation or a notice of negative declaration or mitigated negative declaration filed on or after July 1, 2015.

SEC. 12. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.

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PART B

SB 18 Procedures

July 2020

CITY OF ROSEVILLE CALIFORNIA

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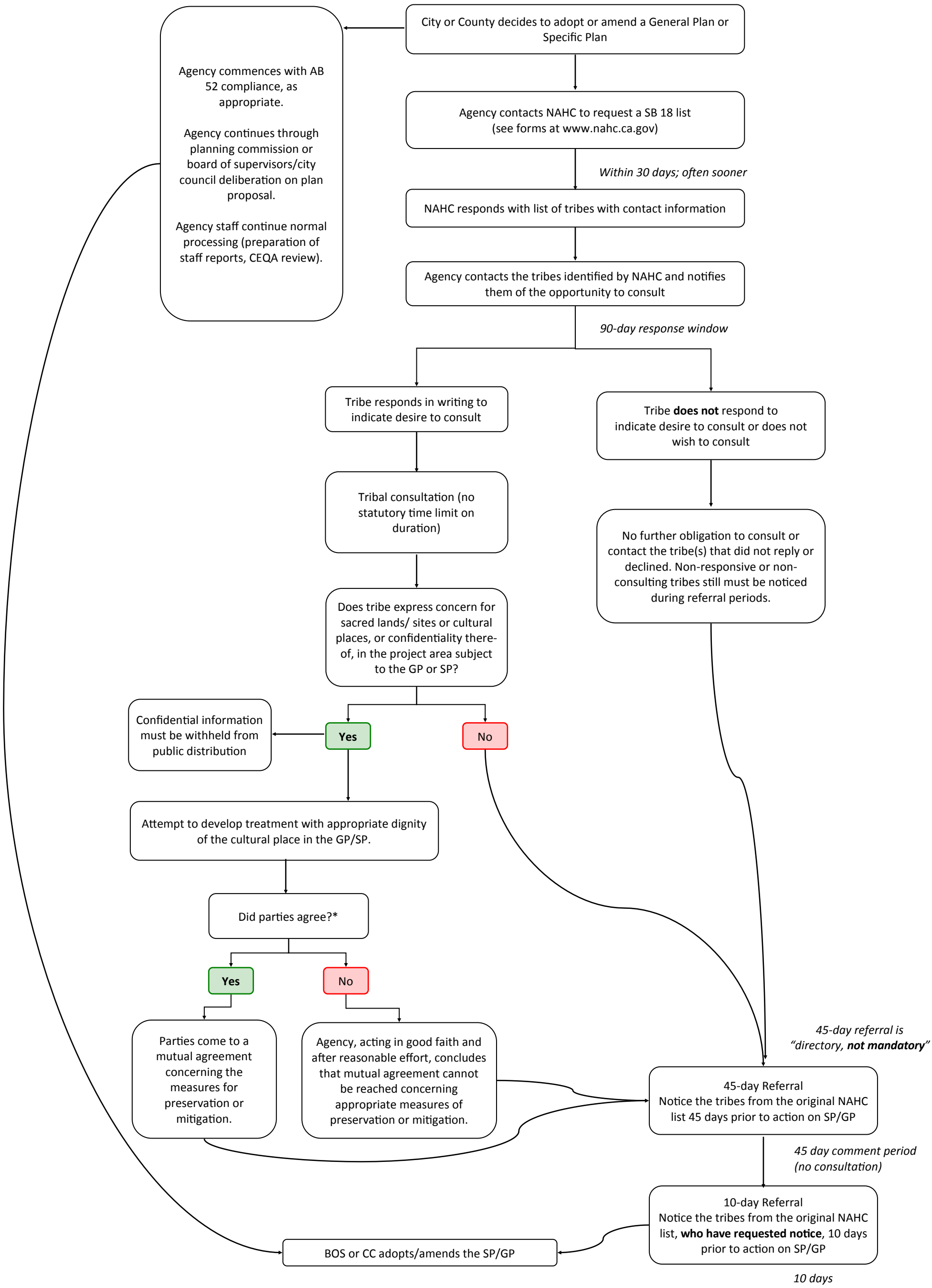
An Interpretation of SB 18 Native American Consultation Procedures



This draft graphic of the SB 18 procedures has been developed by ECORP to assist our clients in understanding and following the requirements for consultation with Native American tribes. It is an ECORP product and is proprietary to ECORP. This is not a legal document and has not been reviewed or approved by any agency of the State of California.

*the requirements for concluding consultation (in terms of the requirement to include measures in plans and MMRPs, and in terms of timing relative to the referral noticing) differ from, and are generally less stringent than, that under AB 52. Special care should be taken to ensure thresholds for both AB 52 and SB 18 are met prior to taking final action.

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

7/2017

Reconciliation with the Tribal Consultation Guidelines:
Supplement to General Plan Guidelines
(November 14, 2005) for Implementing SB 18
(Governor's Office of Planning and Research)

for the
[PROJECT NAME]

Step	OPR Guidelines (GDL) Section and Statutory Reference	Date completed
Adoption or amendment of any general plan (GP) or specific plan (SP) is proposed on or after March 1, 2005	GDL Section IV GC § 65352.3 (a)(1)	
Local government sends proposal information to NAHC and requests contact information for the tribes with traditional lands or places located within the geographical areas affected by the proposed changes.	GDL Section IV GC § 65352.3 (a)(2)	
NAHC provides tribal contact information. OPR recommends that the NAHC provide written information as soon as possible but no later than 30 days after receiving a local government's request.	GDL Section IV	
Local government contacts tribe(s) identified by NAHC and notifies them of the opportunity to consult. Pursuant to Government Code § 65352.3, local government must consult with tribes on the NAHC contact list.	GDL Section IV	
Tribe(s) responds to a local government notice within 90 days, indicating whether or not they want to consult with the local government. Consultation does not begin until/unless a tribe requests it within 90 days of receiving a notice of the opportunity to consult. Tribes can agree to a shorter timeframe (less than 90 days) to request consultation.	GDL Section IV GC § 65352.3 (a)(2)	
Consultation begins, if requested by tribe. No statutory limit on the duration of the consultation. Consultation may continue through planning commission or board of supervisors/city council deliberation on plan proposal.	GDL Section IV	

Step	OPR Guidelines (GDL) Section and Statutory Reference	Date completed
Local government continues normal processing of GP/SP adoption or amendment. (CEQA review, preparation of staff reports, consultation, etc. may be ongoing.)		
90-day consultation period ends		
At least 45 days before local government adopts or substantially amends GP/SP, local government refers proposed action to agencies, including tribe(s). Referral is required regardless of whether or not there has been prior consultation. This does not initiate a new consultation process. This opens a 45-day comment period before approval by board of supervisors/city council.	GDL Section III GC § 65352 (a)(11)	
At least 10 days before public hearing, local government provides notice of hearing to tribes and any other persons who have requested such notice.	GDL Section III GC § 65092	
Public hearing of board of supervisors/city council to take final action on the GP/SP.		

STATE OF CALIFORNIA

Tribal Consultation Guidelines

SUPPLEMENT TO GENERAL PLAN GUIDELINES

November 14, 2005

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

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November 2005

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This document is available on the Internet at http://www.opr.ca.gov/SB182004.html.

Director's Message

November 14, 2005

The Governor's Office of Planning and Research (OPR) is proud to announce the publication of this November 2005 Supplement to the *General Plan Guidelines*. The 2005 Supplement (also known as Tribal Consultation Guidelines) provides advisory guidance to cities and counties on the process for consulting with Native American Indian tribes during the adoption or amendment of local general plans or specific plans, in accordance with the statutory requirements of Senate Bill 18 (Chapter 905, Statutes of 2004). It reflects recent changes to the California Public Records Act which will facilitate this consultation process.

It is our hope that this 2005 Supplement will be useful not only to city and county planning staffs for implementing the provisions of SB 18, but also to local elected officials, planning consultants, landowners, and tribal members who are involved in the general plan process.

In all of its work, OPR attempts to encourage more collaborative and comprehensive land use planning at the local, regional, and statewide levels. These goals are consistent with the goals of Senate Bill 18, which for the first time in the nation, requires cities and counties to consult with Native American tribes when adopting and amending their general plans or specific plans.

The development of this 2005 Supplement would not have been possible without the advice and assistance of many organizations and individuals, whose support OPR acknowledges and appreciates. These organizations and individuals include the Native American Heritage Commission and its staff, the members and representatives of numerous California Native American tribes, many city and county governments, state agency representatives, professional associations and academic institutions. We appreciate their assistance in preparing this 2005 Supplement, including participation at several meetings and public workshops.

OPR met the statutory deadline of March 1, 2005, to publish these guidelines by issuing interim guidelines on March 1. In developing the interim guidelines, OPR consulted with a wide range of stakeholders and experts. We consulted with city and county representatives (planners, legislative staff and legal counsels); tribal representatives and associations; staff of the Native American Heritage Commission (NAHC), including attendance at two NAHC commission meetings; federal agencies with experience in tribal consultation; academic institutions; and professional associations that deal with archaeological and cultural resource protection. In addition, we consulted with numerous tribal liaisons within state government and sought the input of the League of California Cities and the California State Association of Counties.

Based upon this consultation, OPR issued Draft Tribal Consultation Guidelines on February 22, 2005 for public review and comment. OPR conducted a public workshop on February 25, 2005, which was well attended and resulted in a productive discussion of the process envisioned by SB 18, as well as many specific recommendations for improvements to the 2005 Supplement.

In response to requests from many parties for additional time to consult with OPR regarding the 2005 Supplement, OPR continued to reach out to stakeholders for an additional 45 days to ensure that their interests were heard. Between March 1 and April 15, OPR held four meetings throughout the State to receive additional comments. The meetings were held in Klamath, Corning, Sonora, and Temecula. On April 15, OPR published the guidelines reflecting the comments and concerns expressed at those four meetings, as well as written comments received by OPR.

This November edition of the guidelines reflects recent changes to the Public Records Act that exempt from public disclosure certain documents pertaining to Native American cultural places.

We hope that you will find this 2005 Supplement to be an informative guide and a useful tool in the practice of local planning. I invite your suggestions on ways to improve OPR's *General Plan Guidelines* and this 2005 Supplement, as OPR continues to refine and update all of its guidance to city and county planning agencies.

Sean Walsh
Director, OPR

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Part A
SB 18 Context and Basic Requirements

Sections I through III of the 2005 Supplement provide background information to familiarize local government agencies with the intent of Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) and the importance of protecting California Native American traditional tribal cultural places. Local governments will be better prepared to enter into consultations with tribes if they have a basic knowledge of tribal concerns and the value of cultural places to tribes. The key provisions of SB 18 are also outlined in table and text form.

I. Introduction

This 2005 Supplement to the *2003 General Plan Guidelines* addresses the requirements of SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004. SB 18 requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. SB 18 also requires the Governor's Office of Planning and Research (OPR) to include in the *General Plan Guidelines* advice to local governments for how to conduct these consultations.

The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level land use decisions are made by a local government.

SB 18 requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.). Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, existing state planning law requires local governments to use the same processes for adoption and amendment of specific plans as for general plans (see Government Code §65453). Therefore, where SB 18 requires consultation and/or notice for a general plan adoption or amendment, the requirement extends also to a specific plan adoption or amendment. Although the new law took effect on January 1, 2005, several of its provisions regarding tribal consultation and notice did not take effect until March 1, 2005.

The *General Plan Guidelines* is an advisory document that explains California legal requirements for general plans.[1] The *General Plan Guidelines* closely adheres to statute and case law. It also relies upon commonly accepted principles of contemporary planning practice.

[1] California Government Code §65040.2

When the words "shall" or "must" are used, they represent a statutory or other legal requirement. "May" and "should" are used when there is no such requirement. The 2005 Supplement:

- Provides background information regarding California Native American cultural places and tribes.
- Outlines the basic requirements of SB 18.
- Provides step-by-step guidance to local governments on how and when to consult with tribes.
- Offers advice to help local governments effectively engage in consultation with tribes.
- Provides information about preserving, or mitigating impacts to, cultural places.
- Discusses methods to protect confidentiality of information regarding cultural places.
- Presents ways of encouraging voluntary landowner involvement in the preservation of cultural places.

II. Background Information

The principal objective of SB 18 is to preserve and protect cultural places of California Native Americans. SB 18 is unique in that it requires local governments to involve California Native Americans in early stages of land use planning, extends to both public and private lands, and includes both federally recognized and non-federally recognized tribes. This section provides an overview of California Native American cultural places and California Native Americans.

California Native American Cultural Places

SB 18 refers to Public Resources Code §5097.9 and 5097.995 to define cultural places:[2]

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (Public Resources Code §5097.9).
- Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (Public Resources Code §5097.995).[3]

These definitions can be inclusive of a variety of places. Archaeological or historic sites may include places of tribal habitation and activity, in addition to burial grounds or cemeteries. Some examples are village sites and sites with evidence (artifacts) of economic, artistic, or other cultural activity. Religious or ceremonial sites and sacred shrines may include places associated with creation stories or other significant spiritual history, as well as modern day places of worship. Collection or gathering sites are specific places where California Native Americans access certain plants for food, medicine, clothing, ceremonial objects, basket making, and other

[2] Due to a drafting error, SB 18 contains multiple references to Public Resources Code (PRC) §5097.995 which is no longer in existence. In 2004, PRC §5097.995 was amended and renumbered to PRC §5097.993 by Senate Bill 1264 (Chapter 286). Local governments should refer to PRC §5097.993 when looking for PRC §5097.995.
[3] *Ibid.*

crafts and uses important to on-going cultural traditions and identities; these places may qualify as religious or ceremonial sites as well as sites that are listed or eligible for listing in the California Register of Historic Resources.

Native American cultural places are located throughout California because California Native American people from hundreds of different tribes made these lands their home for thousands of years. Due to the forced relocation of tribes by the Spanish, Mexicans, and Americans, most tribes do not currently control or occupy the lands on which many of their cultural places are located. As a result, California Native Americans have limited ability to maintain, protect, and access many of their cultural places.

A number of federal and state laws have been enacted to preserve cultural resources and have enabled some Native American tribes to promote the preservation and protection of their cultural places. The National Historic Preservation Act (NHPA), which established historic preservation as a national policy in 1966, includes a Section 106 review process that requires consultation to mitigate damage to "historic properties" (defined per 36 CFR 800.16(1) as places that qualify for the National Register of Historic Places), including Native American traditional cultural places (TCPs, as described in National Register Bulletin 38) whenever any agency directs a project, activity or program using any federal funds or requiring a federal permit, license or approval (36CFR800.16). The National Environmental Policy Act (NEPA) requires every federal project to include in an Environmental Impact Statement documentation of environmental concerns, including effects on important historic, cultural, and natural aspects of our national heritage. Presidential Executive Order 13007, "Indian Sacred Sites," ensures that federal agencies are as responsive as possible to the concerns of Native American tribes regarding their cultural places. The Archaeological Resources Protection Act (ARPA) makes desecration of Native American cultural places on federal lands a felony.

California state law includes a variety of provisions that promote the protection and preservation of Native American cultural places. A number of these provisions address intentional desecration or destruction of cultural places and define certain of such acts as misdemeanors or felonies punishable by both fines and imprisonment. These include the Native American Historic Resource Protection Act (PRC §5097.995-5097.996[4]), Public Resources Code §5097.99, Penal Code §622.5 and Health and Safety Code §7050.5, §7052. Other provisions require consideration of potential impacts of planned projects on cultural resources, which may include Native American cultural places. Public Resources Code 5097.2 requires archaeological surveys to determine the potential impact that any major public works project on state land may have on archaeological resources. The California Environmental Quality Act (CEQA) requires project lead agencies to consider impacts, and potential mitigation of impacts, to unique archaeological and historical resources.[5] California Executive Order W-26-92 affirms that all state agencies shall recognize and, to the extent possible, preserve and maintain the significant heritage resources of the State. Public Resources Code §5097.9, which mandates noninterference of free expression or exercise of Native American religion on public lands, promotes preservation of certain Native American cultural places by ensuring tribal access to these places.

[4] *Ibid.*

[5] CEQA Statutes at Public Resources Code §21083.2-21084.1; CEQA Guidelines at 14 CCR 15064.5-15360.

While these and other laws permit Native Americans to have some say in how impacts to cultural places could be avoided or mitigated, the laws rarely result in Native American input at early stages of land use planning. Generally, these laws provide protection only to those sites located on public or Native American trust lands and address only the concerns of Native Americans who belong to federally recognized tribes, with no official responsibility to non-federally recognized tribes. The intent of SB 18 is to provide all California Native American tribes, as identified by the NAHC, an opportunity to consult with local governments for the purpose of preserving and protecting their cultural places.

California Native American Tribes

SB 18 uses the term, California Native American tribe, and defines this term as "a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the Native American Heritage Commission" (NAHC). "Federal recognition" is a legal distinction that applies to a tribe's rights to a government-to-government relationship with the federal government and eligibility for federal programs. All California Native American tribes, whether officially recognized by the federal government or not, represent distinct and independent governmental entities with specific cultural beliefs and traditions and unique connections to areas of California that are their ancestral homelands. SB 18 recognizes that protection of traditional tribal cultural places is important to all tribes, whether federally recognized or not, and it provides all California Native American tribes with the opportunity to participate in consultation with city and county governments for this purpose. As used in this document, the term "tribe(s)" refers to a California Native American tribe(s).

California has the largest number of tribes and the largest Native American population of any state in the contiguous United States. California is home to 109 federally recognized tribes and several dozen non-federally recognized tribes. According to a 2004 California Department of Finance estimate, the Native American population in California is 383,197.

Tribal governments throughout California vary in organizational forms and size. Some tribes use the government form established under the Indian Reorganization Act of 1934 (25CFR81) with an adopted constitution and bylaws. Other tribes have adopted constitutions and bylaws that incorporate traditional values in governing tribal affairs. Many tribal governments are comprised of a decision making body of elected officials (tribal governing body) with an elected or designated tribal leader. Some tribes use lineal descent as the means of identifying the tribe's leader. In general, tribal governing bodies and leaders serve for limited terms and are elected or designated by members of the tribe. Tribal governments control tribal assets, laws/regulations, membership, and land management decisions that affect the tribe.

III. Basic Requirements of SB 18

This section provides a brief summary of the statutory requirements of SB 18. Later sections of the Supplement provide additional detail regarding these requirements and offer advice to local governments on how to fulfill the notification and consultation requirements of SB 18. (Please refer to Section IV and Section V of these guidelines for additional information regarding the responsibilities outlined below.)

Responsibilities of OPR

Government Code §65040.2(g) requires the Governor's Office of Planning and Research (OPR) to amend the *General Plan Guidelines* to contain advice to local governments on the following:

- Consulting with tribes on the preservation of, or the mitigation of impacts to, cultural places.
- Procedures for identifying through the Native American Heritage Commission (NAHC) the appropriate California Native American tribes with whom to consult.
- Procedures for continuing to protect the confidentiality of information concerning the specific identity, location, character, and use of cultural places.
- Procedures to facilitate voluntary landowner participation to preserve and protect the specific identity, location, character, and use of cultural places.

Responsibilities of Local Governments

SB 18 established responsibilities for local governments to contact, provide notice to, refer plans to, and consult with tribes. The provisions of SB 18 apply only to city and county governments and not to other public agencies. The following list briefly identifies the contact and notification responsibilities of local governments, in sequential order of their occurrence.

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code §65352.3).[6]
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45 day comment period (Government Code §65352). Notice must be sent

[6] SB 18 added this new provision to state planning law. It applies to any amendment or adoption of a general plan or specific plan, regardless of the type or nature of the amendment. Adoption or amendment of a local coastal program by a city or county constitutes a general plan amendment.

regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.[7]

- Local governments must send notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code §65092).[8]

Under SB 18, local governments must consult with tribes under two circumstances:

- On or after March 1, 2005, local governments must consult with tribes that have requested consultation in accordance with Government Code §65352.3. The purpose of this consultation is to preserve, or mitigate impacts to, cultural places that may be affected by a general plan or specific plan amendment or adoption.
- On or after March 1, 2005, local governments must consult with tribes before designating open space, if the affected land contains a cultural place and if the affected tribe has requested public notice under Government Code §65092. The purpose of this consultation is to protect the identity of the cultural place and to develop treatment with appropriate dignity of the cultural place in any corresponding management plan (Government Code §65562.5).

Responsibilities of NAHC

The NAHC is charged with the responsibility to maintain a list of California Native American tribes with whom local governments must consult or provide notices (as required in Government Code §65352.3, §65352, and §65092). The criteria for defining "tribe" for the purpose of inclusion on this list are the responsibility of the NAHC. The list of tribes, for the purposes of notice and consultation, is distinct from the Most Likely Descendent (MLD) list that the NAHC maintains.

Upon request, the NAHC will provide local governments with a written contact list of tribes with traditional lands or cultural places located within a city's or county's jurisdiction. These are the tribes that a local government must contact, for purposes of consultation, prior to adoption or amendment of a general plan or specific plan. The NAHC will identify the tribes that must be contacted, based on NAHC's understanding of where traditional lands are located within the State.

For more information on the NAHC's roles and responsibilities, contact the NAHC. (See also Part F: Additional Resources)

[7] Government Code §65352 was amended by SB 18 to include tribes among the entities to whom the proposed action must be referred. The term "substantial amendment" has been in the statute for many years and was not modified by SB 18.

[8] Government Code §65092 was modified by SB 18 to include certain tribes as "persons" that are eligible to request and receive notices of public hearing. "Person" now includes a California Native American tribe that is on the contact list maintained by the NAHC.

Other Elements of SB 18

In addition to the notice and consultation requirements outlined above, SB 18 amended Government Code §65560 to allow the protection of cultural places in the open space element of the general plan. *(See Section X.)* Open space is land designated in the city or county open space element of the general plan for one or more of a variety of potential purposes, including protection of cultural places.

SB 18 also amended Civil Code §815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements. Tribes on the contact list maintained by the NAHC now have the ability to acquire, on terms mutually satisfactory to the tribe and the landowner, conservation easements for the purpose of protecting their cultural places. *(See Section IX.)*

Process Overview: General Plan or Specific Plan Adoption or Amendment

As discussed above, SB 18 establishes responsibilities for local government to contact, refer plans to, and consult with tribes. The following table provides an overview of SB 18 requirements related to the adoption or amendment of a general plan or specific plan. All statutory references are to the Government Code (GC).

Overview of SB 18 Consultation and Notice Requirements

Step	***OPR Guidelines (GDL) Section and Statutory Reference***
Adoption or amendment of any general plan (GP) or specific plan (SP) is proposed on or after March 1, 2005.	GDL Section IV GC §65352.3(a)(1)
Local government sends proposal information to NAHC and requests contact information for tribes with traditional lands or places located within the geographical areas affected by the proposed changes.	GDL Section IV GC §65352.3(a)(2)
NAHC provides tribal contact information. – OPR recommends that NAHC provide written information as soon as possible but no later than 30 days after receiving a local government's request	GDL Section IV
Local government contacts tribe(s) identified by NAHC and notifies them of the opportunity to consult. – Pursuant to Government Code §65352.3, local government must consult with tribes on the NAHC contact list.	GDL Section IV
Tribe(s) responds to a local government notice within 90 days, indicating whether or not they want to consult with the local government. – Consultation does not begin until/unless a tribe requests it within 90 days of receiving a notice of the opportunity to consult. – Tribes can agree to a shorter timeframe (less than 90 days) to request consultation.	GDL Section IV GC §65352.3(a)(2)

Step	***OPR Guidelines (GDL) Section and Statutory Reference***
Consultation begins, if requested by tribe. No statutory limit on the duration of the consultation. – Consultation may continue through planning commission or board of supervisors/city council deliberation on plan proposal.	GDL Section IV
Local government continues normal processing of GP/SP adoption or amendment. (CEQA review, preparation of staff reports, consultation, etc., may be ongoing.)	
At least 45 days before local government adopts or substantially amends GP/SP, local government refers proposed action to agencies, including tribe(s). – Referral required regardless of whether or not there has been prior consultation. – This does not initiate a new consultation process. – This opens 45 day comment period before approval by board of supervisors/city council. – Referral required on or after March 1, 2005.	GDL Section III GC §65352(a)(8)
At least 10 days before public hearing, local government provides notice of hearing to tribes and any other persons who have requested such notice.	GDL Section III GC §65092
Public hearing of board of supervisors/city council to take final action on the GP/SP.	

Note: The Permit Streamlining Act (PSA) (GC §65920 et seq.) establishes time limits for public agencies to take action on privately initiated development projects. Some general plan amendments may involve a private applicant for a development project. The PSA does not apply to a project that requires approval by a legislative act, such as a general plan amendment or rezone, even if there is a quasi-judicial approval involved (such as a use permit or subdivision map). Therefore, time limits for project approval under the PSA should not interfere with a local government's process for consultation.

Part B
When and How to Consult with California Native American Tribes

Sections IV and V of the 2005 Supplement provide step-by-step guidance to local government agencies on how and when to consult with tribes, including when to provide certain types of notices during the planning process. It is very important to review the information in Part C (Pre-Consultation) before undertaking consultation on a general plan or specific plan proposal.

IV. Consultation: General Plan and Specific Plan Adoption or Amendment

Each time a local government considers a proposal to adopt or amend the general plan or specific plan, they are required to contact the appropriate tribes identified by the NAHC. If requested by tribes, local governments must consult for the purpose of preserving or mitigating impacts to cultural places. The following section provides basic guidance to local governments on the notification and consultation requirements in Government Code §65352.3.

What Triggers Consultation?

Government Code §65352.3 requires local governments to consult with tribes prior to the adoption or amendment of a general plan or specific plan proposed on or after March 1, 2005. Local governments should consider the following when determining whether a general plan or specific plan adoption or amendment is subject to notice and consultation requirements:

- In the case of an applicant-initiated plan proposal, if the local government accepts a complete application (as defined in Government Code §65943) on or after March 1, 2005, the proposal is subject to Government Code §65352.3.
- In the case of a general plan or specific plan amendment initiated by the local government, any proposal introduced for study in a public forum on or after March 1, 2005 is subject to Government Code §65352.3. A legislative body must take certain actions to initiate, or propose, a general plan or general plan amendment. These actions must be taken in a duly noticed public meeting, and may include, but are not limited to, any of the following: appropriation of funds, adoption of a work program, engaging the services of a consultant, or directing the planning staff to begin research on the activity.

Under Government Code §65352.3, only if a tribe is identified by the NAHC, and that tribe requests consultation after being contacted by a local government, must a local government consult with the tribe on the plan proposal.

Local governments are encouraged to consult with tribes as early as possible and may, if appropriate, begin consultation even before a formal proposal is submitted by an applicant or initiated by the local government.

Identifying Tribes through the NAHC

Once a local government or private applicant initiates a proposal to adopt or amend a general plan or specific plan, the local government must send a written request to the NAHC asking for a list of tribes with whom to consult. OPR recommends that the written request be sent to the NAHC as soon as possible. Local governments should consider the following points when submitting a request to the NAHC:

- All written requests should be sent to the NAHC via certified mail or by fax.
- Requests to the NAHC should include the specific location of the area that is subject to the proposed action, preferably with a map clearly showing the area of land involved.
- Requests should clearly state that the local government is seeking information about tribes that are on the "SB 18 Consultation List."
- Contact information for the NAHC:

  Native American Heritage Commission
  915 Capitol Mall, Room 364
  Sacramento, CA 95814
  Phone: 916-653-4082
  Fax: 916-657-5390
  http://www.nahc.ca.gov

A sample form for submitting a request to the NAHC is provided in Exhibit A. The tribal consultation list request form is also available on the NAHC website.

The NAHC will provide local governments with a written contact list of tribes with traditional lands or cultural places located within the local government's jurisdiction. For each listed tribe, the NAHC will provide the tribal representative's name, name of tribe, address, and phone number (if available, fax and email address). Although there is no statutory deadline for NAHC to respond to the local government, OPR recommends that the NAHC provide written contact information as soon as possible but no later than 30 days after receiving a written request from the local government.

Contacting Tribes Pursuant to Government Code §65352.3

Once a tribal contact list is received from the NAHC, local governments must contact the appropriate tribe(s) and invite them to participate in consultation. OPR suggests that local governments contact tribes as soon as possible upon receiving the tribal contact list. While the statute does not specify by what means tribe(s) should be contacted, OPR suggests that local governments send a written notice by certified mail with return receipt requested. Sending a written notice does not preclude a local government from also contacting the tribe by telephone, FAX, or e-mail.

Notices should be concise, clear, and informative so that tribes understand what they are receiving. Try to avoid using a standard public notice format to invite a tribe to consult, as most public notices do not contain sufficient information about the proposed action to enable a tribe to

respond. Keep in mind that the purpose of this notice is to invite a tribe to request consultation. Notices sent from a local government to a tribe, inquiring whether consultation is desired, should contain the following information:

- A clear statement of purpose, inviting the tribe to consult and declaring the importance of the tribe's participation in the local planning process.
- A description of the proposed general plan or specific plan being considered, the reason for the proposal, and the specific geographic area(s) that will be affected by the proposal. Relevant technical documents should be provided with a concise explanation that clearly describes the proposed general plan or specific plan amendment and its potential impacts on cultural resources, if known.
- Maps that clearly detail the geographic areas described in the explanation. Maps should be in a reasonable scale with sufficient references for easy identification of the affected areas.
- The deadline (date) by which the tribe must request a consultation with the local government. By law, tribes have 90 days from the date of receipt of the notice to request consultation (Government Code §65352.3(a)(2)).
- Contact information for representatives of the local government to whom the tribe should respond.
- Contact information for the project proponent/applicant and landowner(s), if applicable.
- Technical reports, including summaries of cultural resource reports and archaeological reports applicable to that tribe's cultural place(s), if available.
- Information on proposed grading or other ground-disturbing activities, if applicable. (This may be included in the project description.)

Subject to confidentiality procedures, both parties should maintain clear records of communications, including letters, telephone calls, and faxes. Both parties may send notices by certified mail and keep logs of telephone calls and faxes. Any returned or unanswered correspondence should be retained in order to verify efforts to communicate. Documentation of notification and consultation requests should be included in the local government's public record.

In addition to the above recommendations, local governments may, in cooperation with tribes, develop notification procedures as a part of consultation protocols established in cooperation with a tribal government. Local governments should be aware that some tribes already have consultation protocols. In addition, local governments may adopt policies regarding consultation with a tribal government. *(See Section VI.)*

After Notification is Sent to the Tribe

Once local governments have sent notification, tribes are responsible for requesting consultation. Pursuant to Government Code §65352.3(a)(2), each tribe has 90 days from the date on which they receive notification to respond and request consultation. Some key points to consider include:

- The time period for consultation (undefined) is independent of the time period for tribes to request consultation (90 days).
- Local governments should be aware that tribes may require the entire 90-day period allowed by law to respond to a consultation request. Tribal governing bodies may need to meet to take a formal position on consultation.
- Local governments and tribal governments may consider addressing the method and timing of a tribe's response to a consultation request in a jointly-developed consultation protocol. *(See Section VI.)*
- At their discretion, tribes can agree to a shorter timeframe (less than 90 days) to respond and request consultation.
- After the information about a proposed plan or plan amendment is received by the tribe, local governments should cooperate to provide any additional pertinent information about the proposed plan or plan amendment that the tribe may request. Local governments may consider extending the 90 day timeframe for the tribe to review the new information and respond accordingly.
- If the tribe does not respond within 90 days or declines consultation, consultation is not required under Government Code §65352.3.

Conducting Consultation on General Plan or Specific Plan Adoption or Amendment

Once a tribe requests consultation, consultation for the purpose of preserving or mitigating impacts to cultural places should begin within a reasonable time. Consultation should focus on how the proposed general plan or specific plan amendment or adoption might impact cultural places located on land affected by the plan proposal. The objectives of consultation, according to the legislative intent of SB 18, include:

- Recognizing that cultural places are essential elements in tribal culture, traditions, heritages and identities.
- Establishing meaningful dialogue between local and tribal governments in order to identify cultural places and consider cultural places in local land use planning.
- Avoiding potential conflicts over the preservation of Native American cultural places by ensuring local and tribal governments have information available early in the land use planning process.
- Encouraging the preservation and protection of Native American cultural places in the land use process by placing them in open space.
- Developing proper treatment and management plans in order to preserve cultural places.
- Enabling tribes to manage and act as caretakers of their cultural places.

Consultation is a process in which both the tribe and local government invest time and effort into seeking a mutually agreeable resolution for the purpose of preserving or mitigating impacts to a cultural place, where feasible. Government Code §65352.4 provides a definition of consultation for use by local governments and tribes:

> *Consultation means the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.*

Effective consultation is an ongoing process, not a single event. The process should focus on identifying issues of concern to tribes pertinent to the cultural place(s) at issue – including cultural values, religious beliefs, traditional practices, and laws protecting California Native American cultural sites – and on defining the full range of acceptable ways in which a local government can accommodate tribal concerns.

Items to Consider When Conducting Consultation

The following list identifies recommendations for how local governments and tribes may approach consultation on general plan and specific plan proposals.

- As defined in Government Code §65352.4, consultation is to be conducted between two parties: the local government and the tribe. Both parties to the consultation are required to carefully consider the views of the other.
- Consultation does not necessarily predetermine the outcome of the plan or amendment. In some instances, local governments may be unable to reach agreement due to other state laws or competing public policy objectives.
- Local governments must consult with each tribe who is identified by the NAHC and requests consultation. The NAHC will identify whether there are, in fact, any tribes with whom the local government must consult. One or more tribes may have traditional cultural ties to land within the local government's jurisdiction and have an interest in preserving cultural places on those lands. Therefore, local governments may have to consult with more than one tribe on any particular plan proposal.
- OPR recommends that local governments consult with tribes one at a time (individually). If multiple tribes are involved and willing to jointly consult, local governments may consult with more than one tribe at a time.
- When a local government first contacts a tribe, its initial inquiry should be made to the tribal representative identified by the NAHC. OPR recommends that a local government department head or other official of similar or higher rank make the initial contact.
- Government leaders of the two consulting parties may consider delegating consultation responsibilities (such as attending meetings, sharing information, and negotiating the needs and concerns of both parties) to staff. Designated representatives should maintain direct relationships with and have ready access to their respective government leaders. These individuals may, but are not required to, be identified in a jointly-developed consultation protocol. *(See Section VI.)* In addition, the services of other professionals (attorneys,

contractors, or consultants) may be utilized to develop legal, factual, or technical information necessary to facilitate consultation.

- Simply notifying a tribe of a plan proposal is not the same as consultation.[9]
- Local governments should be aware of the potential for vast differences in tribal governments' level of staffing and other resources necessary to participate in the manner required by Government Code §65352.3 and §65352.4. Some may be able to respond more promptly and efficiently than others. Local governments should keep this in mind if and when developing a consultation protocol with a tribe. *(See Section VI.)*
- As a part of consultation, local governments may conduct record searches through the NAHC and California Historic Resources Information System (CHRIS) to determine if any cultural places are located within the area(s) affected by the proposed action. Local governments should be aware, however, that records maintained by the NAHC and CHRIS are not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a cultural place.
- Local governments should be aware that the confidentiality of cultural places is critical to tribal culture and that many tribes may seek confidentiality assurances prior to divulging information about those sites. *(See Section VIII.)*
- Tribal consultation should be done face-to-face. If acceptable to both parties, local and tribal governments may wish to define circumstances under which parts of the consultation process can be carried out via conference calls, e-mails, or letters. *(See Section VIII.)*
- Tribal consultations should be conducted in a setting that promotes confidential treatment of any sensitive information that is shared about cultural places. Consultation should not take place in public meetings or public hearings.
- The time and location of consultation meetings should be flexible to accommodate the needs of both the local government and tribe. Local governments should recognize that travel required for in-person consultation may be time-consuming, due to the rural location of a tribe. Local governments should also take into account time zone changes when setting meeting times. Local governments should offer a meeting location at the city hall, county administrative building, or other appropriate location. Local governments should also be open to a tribe's invitation to meet at tribal facilities.
- The local government and tribe can agree to mutually invite private landowners to participate in consultation, if both parties feel that landowner involvement would be appropriate.
- Local governments are encouraged to establish a collaborative relationship with tribes as early as possible, prior to the need to consult on a particular general plan or specific plan

[9] In *Pueblo of Sandia v. United States*, 50 F.3d 856 (10th Cir. 1995), the court held that the U.S. Forest Service had not fulfilled its consultation responsibilities under the National Historic Preservation Act by merely sending letters to request information from tribes. The court ruling held that written correspondence requesting consultation with a tribe was not sufficient for the purpose of conducting consultation as required by law, and that telephone calls or more direct forms of contact may be required.

amendment or adoption. Local governments may consider conducting pre-consultation meetings and developing consultation protocols in cooperation with tribes. *(See Section VI.)*

- Both parties should attempt to document the progress of consultation, including letters, telephone calls, and direct meetings, without disclosing sensitive information about a cultural place. Local governments may also want to document how the local government representative(s) fulfilled their obligations under Government Code §65352.3 and §65352.4.

When is Consultation Over?

Alan Downer, of the Advisory Council on Historic Preservation, described consultation as "conferring between two or more parties to identify issues and make a good faith attempt to find a mutually acceptable resolution of any differences identified."[10] Differences of opinion and of priorities will arise in consultation between local and tribal governments. Whenever feasible, both local and tribal governments should strive to find mutually acceptable resolutions to differences identified through consultation.

When engaging in consultation, local government and tribal representatives should consider leaving the process open-ended to allow every opportunity for mutual agreement to be reached. Some consultations may involve highly sensitive and complex issues that cannot be resolved in just one discussion. Consultation may require a series of meetings before a mutually acceptable agreement may be achieved. Consultation must be concluded prior to the formal adoption or amendment of a general plan or specific plan.

Consultation, pursuant to Government Code §65352.3 and §65352.4, should be considered concluded at the point in which:

- the parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- either the local government or tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning appropriate measures of preservation or mitigation.

V. Consultation: Cultural Places Located in Open Space

On and after March 1, 2005, if land designated, or proposed to be designated as open space contains a cultural place, and if an affected tribe has requested notice of public hearing under Government Code §65092, then local governments must consult with the tribe. The purpose of this consultation is to determine the level of confidentiality required to protect the specific identity, location, or use of the cultural place, and to develop treatment with appropriate dignity of the cultural place in any corresponding management plan (Government Code §65562.5). This consultation provision does not apply to lands that were designated as open space before March 1, 2005.

[10] From "The Navajo Nation Model: Tribal Consultation Under the National Historic Preservation Act" (2000).

What Triggers Consultation?

Government Code §65562.5 applies to land that is designated, or proposed to be designated, as open space, on or after March 1, 2005. Local governments must consider several criteria when determining whether consultation is required, prior to designating open space on or after March 1, 2005.

Local governments must first learn whether the land designated, or proposed to be designated, as open space contains a cultural place. The following are methods by which local governments may be informed if a cultural place is located on designated or proposed open space:

- Conduct a record search through the NAHC to learn whether any listed cultural places are located on land proposed to be designated as open space. The local government should provide maps of lands proposed as open space to the NAHC with a request to identify whether there are any cultural places on the property. Because the NAHC's sacred lands file is confidential, the commission will only divulge the presence or absence of a listed site and will direct the local government to the appropriate tribe(s) for more information.
- Conduct a record search through CHRIS to learn whether any listed cultural places are located on land proposed to be designated as open space. Local governments should enter into agreements with CHRIS information centers to establish procedures and protocols for requesting searches of historical resource records.
- Request that tribes identify the existence of any cultural places on the proposed open space land. Local governments should send a written request to the NAHC asking for a written list of tribes that have traditional cultural ties to the proposed open space. The NAHC will provide tribal contact information. Local governments should contact each tribe on the list provided by the NAHC to learn whether any cultural places are located on the land proposed as open space. Local government should provide the tribe with a sufficiently detailed map of the open space together with a concise notice as to why the tribe is being contacted. (Note: This contact is strictly for the purpose of identifying whether a cultural place is or may be located on the proposed open space land. It does not start consultation with a tribe.)

Local governments should be aware that records maintained by the NAHC and CHRIS are not exhaustive, and a negative response to searches does not preclude the existence of a cultural place. In most instances, and especially because of associated confidentiality issues, it is likely that tribes will be the only source of information regarding certain cultural places.

After a local government learns that a cultural place is or may be located on land designated or proposed to be designated as open space, the local government must notify the appropriate tribes of the opportunity to participate in consultation. The appropriate tribes are those which have: (1) been identified by the NAHC, <u>and</u> (2) requested notice of public hearing from the local government pursuant to Government Code §65092.

Conducting Consultation Regarding Open Space

The purpose of this consultation is to determine the level of confidentiality required to protect the specific identity, location, character, or use of the cultural place and to develop treatment with appropriate dignity of the cultural place in any corresponding open space management plan. The reference to "any corresponding management plan" is not meant to imply that there is such a plan or that the local government must develop such a management plan. This language is intended to encourage consideration of management policies and practices which may be discussed between the local government and tribe and incorporated into a new or existing management plan for the cultural place.

The following are examples of appropriate items to consider and discuss during consultation:

- Encourage tribal involvement in the treatment and management of the cultural place though contracting, monitoring, co-management, and other forms of joint local-tribal participation.
- Tribes may only wish to disclose a sufficient amount of information to protect the site and to allow for the proper treatment and management of the cultural place. *(See Section VIII.)*
- Tribes may wish to have access to cultural places located on open space for gathering, performing ceremonies and/or helping maintain the site.
- Tribes may want to recommend management practices that avoid disturbing or impacting the cultural place.
- Tribes may wish to discourage certain land uses (e.g. recreation) within the open space that could adversely impact the cultural place. Local governments may be asked to consider appropriate land uses in the open space designation that would avoid direct impacts to the cultural place.

The designation of open space, as provided in Government Code §65562.5, may but does not always, involve amending the general plan. In some jurisdictions, designation of open space may occur through rezoning of land from one zone designation to an open space zone designation, without the need for a general plan amendment. However, for proposals to designate open space that require a general plan or specific amendment, the local government should consider the above recommendations as well as the recommendations outlined in Section IV of these guidelines.

When is Consultation Over?

Please refer to Section IV for additional information regarding the meaning of consultation.

Part C
Pre-Consultation

Section VI provides advice to local governments that is intended to help them more effectively engage in consultation with tribes. This part of the 2005 Supplement provides information that may help local governments establish working relationships with tribes prior to entering into the required consultation pursuant to Government Code §65352.3 and §65562.5.

VI. Preparing for Consultation

As discussed above, Government Code §65352.3 requires consultation during the process of amending or adopting general plans or specific plans. In addition, Government Code §65562.5 requires consultation to determine the proper level of confidentiality to protect and treat a cultural place with appropriate dignity, where such places are located on lands to be designated as open space. Before engaging in consultation in either of these cases, local governments may want to consider developing relationships with tribes that have traditional lands within their jurisdiction. Although not required by law, these pre-consultation efforts may develop a foundation for a mutually respectful and cooperative relationship that helps to ensure more smooth and effective communication in future consultations.

Local governments way wish to consider the following when undertaking pre-consultation meetings:

- Contact the NAHC to obtain a list of all appropriate tribes with whom to pre-consult. Because this list may be revised over time by the NAHC, local governments should periodically request updated contact lists.
- Contact the NAHC and CHRIS to learn if any historical or cultural places are located within the city's or county's jurisdiction. (Note that the NAHC and CHRIS have different procedures for searching information about cultural sites. See Part F for more information about each organization and how to contact them. As previously noted, NAHC and CHRIS records pertaining to cultural places are not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place.)
- Invite each tribal government's leaders to meet with local government leaders for the purpose of establishing working relationships and exchanging information about respective governmental structures, practices, and processes. Pre-consultation meetings may include discussion about community goals, planning priorities, and how cultural places play a role in the tribal culture.
- Hold informational workshops or meetings with the tribe(s) to discuss the general plan process, the existing general plan, and any contemplated amendments. Local governments should not expect or ask a tribe to share confidential information in a meeting with other tribes or the general public.
- Ask tribes whether they have existing consultation protocols.

- Develop a consultation protocol that addresses how a cooperative relationship can be maintained and how future consultations should be conducted. Some tribes may already have established protocols through working with other agencies, such as state and federal entities, that can be used as models.

If a tribe and local government decide to develop a consultation protocol, both parties should suggest topics that they believe will facilitate consultation. The following are examples of items that may be appropriate to discuss and include in a jointly-developed consultation protocol:

- Representative(s) from each consulting party who will be designated to participate in consultations and manage the information resulting from the consultations.
- Key points in the consultation process when elected government leaders may need to be directly involved in consultation.
- Method(s) of contact preferred by the tribal government and additional tribal representatives that the local government should contact regarding a proposed action.
- Procedures for giving and receiving notice, including method and timing.
- Preferred method(s) of consultation. While in-person consultation is recommended, it may be acceptable to both parties that certain aspects of consultation occur through conference calls, e-mails, or letters.
- Preferred locations of consultation meetings.
- The tribe's willingness to participate in joint consultation, should a specific site be of interest to more than one tribe.
- Procedures to allow tribal access to the local government's consultation records.
- Procedures for maintaining accurate, up-to-date contact information.

Over time, the initial approach to consultation may need to be updated. Both parties should be open to identifying and agreeing on changes to their consultation protocol.

Part D
Preservation, Mitigation, Confidentiality, and Landowner Participation

Sections VII through IX provide advice to local governments for considering issues such as appropriate means to preserve, or mitigate impacts to, cultural places; methods to protect the confidentiality of cultural places; and ways to encourage the participation of landowners in voluntary preservation efforts.

VII. Preservation of, or Mitigation of Impacts to, Cultural Places

Government Code §65352.3 requires local governments to conduct consultations with tribes (when requested) for the purpose of "preserving or mitigating impacts" to California Native American cultural places. In the course of adopting or amending a general plan or specific plan, local governments may be informed of the existence of a cultural place within the affected area. Should a tribe request consultation to discuss any impacts to the cultural place, local governments should consider a variety of factors when participating in the consultations, including: the history and importance of the cultural place, the adverse impact the local government action may have on the cultural place, options for preserving the cultural place, and options for mitigating impacts of the proposal to the cultural place.

When participating in consultations, it is important that local governments consider that, because of philosophical differences, mitigation will not always be viewed as an appropriate option to protect cultural, and often irreplaceable, places. Many tribes may determine that impacts to a cultural place cannot be mitigated; that the only appropriate treatment may be to preserve the cultural place without impact to its physical or spiritual integrity. Of course, this is not to say that tribes will not engage in discussions regarding mitigation of impacts to their cultural places, but local governments should consider the vastly different perspectives that tribes may have. What a local government may consider to be acceptable treatment under current environmental, land use, and cultural resource protection laws, may not be considered by a tribe to be acceptable treatment for a sacred or religious place.

The following is a discussion of preservation and mitigation, as mentioned in Government Code §65352.3. Local governments should check with their legal counsels to identify any other legal obligations to preserve or mitigate impacts to Native American cultural resources.

What are Preservation and Mitigation?

Preservation is the conscious act of avoiding or protecting a cultural place from adverse impacts including loss or harm. Mitigation, on the other hand, is the act of moderating the adverse impacts that general plan or specific plan adoption or amendment may have on a cultural place.

While local governments should strive to help preserve the integrity of, access to, and use of cultural places[11], mitigation may often be achieved through a broad range of measures:

- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the impacted cultural place.
- Reducing or eliminating the impact over time through monitoring and management of the cultural place.

Other methods of mitigation may include:

- Designation of open space land in accordance with Government Code §65560(b).
- Enhancement of habitat or open space properties for protection of cultural place.
- Development of an alternate site suitable for tribal purposes and acceptable to the tribe.
- Other alternative means of preserving California Native American cultural features, where feasible.

It is important that local governments consider that mitigation measures may largely differ depending on customs of a particular tribe, the characteristics and uses of a site or object, the cultural place's location, and the importance of the site to the tribe's cultural heritage. Where a cultural place is affected by a proposed general or specific plan adoption or amendment, consultations with tribes should focus on preserving, or mitigating the impacts to, that specific cultural place.

Seeking Agreement Where Feasible

Although Government Code §65352.3(a) requires consultation for the purpose of preserving or mitigating against the adverse impacts that a general plan or specific plan adoption or amendment may have on a cultural place, there is no requirement to preserve a cultural place or adopt mitigation measures, if agreement cannot be reached. Under the definition of "consultation" within Government Code §65352.4, local governments and tribes are required to carefully consider each other's views and are required to seek an agreement, "where feasible." For the purposes of Government Code §65352.4, agreements should be considered "feasible" when capable of being accomplished in a successful manner within a reasonable time taking into account economic, environmental, social and technological factors.[12] If, after conducting consultations in good faith and within the spirit of the definition, the tribe or local government cannot reach agreement on preservation or mitigation of any impact to a California Native American cultural place, neither party is required to take any action under Government Code §65352.3(a).

[11] Cultural Places referring to places, features, and objects under Government Code §65352.3(a) and described in Government Code §§5097.9 and 5097.995.
[12] See *State of California General Plan Guidelines*, Governor's Office of Planning & Research, Glossary, page 261.

Monitoring and Management

During consultations, local governments should consider the involvement of tribes in the ongoing treatment and management of cultural places, objects, or cultural features through a specific monitoring program, co-management, or other forms of participation.

Where a cemetery, burial ground, or village site may be present, the planning of treatment and management activities should address the possibility that California Native American human remains may be involved when protecting cultural features. Local governments should consider working with tribes to develop an appropriate plan for the identification and treatment of such discoveries in accordance with Public Resources Code §5097.98.

Private Landowner Involvement

During consideration of a proposed general plan adoption or amendment, a local government may discover or be informed of a cultural place that exists on privately owned land within an affected area. In such an instance, local governments should first contact the appropriate tribe or tribes to offer consultations and determine an acceptable level of landowner involvement. Local governments should be aware that there may be some occasions where a tribe may prefer to maintain strict confidentiality without the inclusion of a private, third party landowner.

If a tribe is interested in involving the landowner in preservation or mitigation activities, the local government should consider facilitating such involvement. It is important that local governments and tribes understand that there is no statutory requirement to include private landowners under the government-to-government consultations requirements of Government Code §65352.3(a). However, because landowner participation is encouraged, local governments may consider suggesting the following methods to facilitate landowner involvement:

- Suggesting that the tribe contact the private landowner directly to facilitate discussions between the tribe and landowner.
- Offering to contact the private landowner directly on behalf of the tribe.
- Suggesting that the private landowner be included as a party to the consultations.

VIII. Confidentiality of Information

Protecting the confidentiality of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places is one of the most important objectives of SB 18. This is clearly evidenced by SB 18's legislative intent as well as its statutory additions and amendments which address the issue of confidentiality and requires "each city and county to protect the confidentiality of information concerning" cultural places.[13] By maintaining the confidentiality of a cultural place, including its location, traditional uses, and characteristics, local governments can help assure tribes of continued access and use of these cultural places, in addition to aiding in the preservation of a cultural place's integrity. However, local governments should take into consideration other state and federal laws which may impose conflicting public policy priorities or requirements.

[13] See SB 18 §1(b)(3), (Burton, Ch. 905, Stat. 2004); Govt. Code §§ 65040.2(g)(3), 65352.3, 65352.4, and 65562.5.

Public Disclosure Laws

The California Public Records Act (Government Code §6250 et. seq.) and California's open meeting laws applying to local governments (The Brown Act, Government Code §54950 et. seq.) both have implications with regard to maintaining confidentiality of California Native American cultural place information. Local governments are encouraged to carefully consider these laws in greater detail, and adopt or incorporate these recommendations into their own confidentiality procedures in order to avoid the unintended disclosure of confidential cultural place information.

<u>The California Public Records Act (CPRA)</u>

Subject to specified exemptions, the CPRA provides that all written records maintained by local or state government are public documents and are to be made available to the public, upon request. Written records include all forms of recorded information (including electronic) that currently exist or that may exist in the future. The CPRA requires government agencies to make records promptly available to any citizen who asks, unless an exemption applies.

The CPRA contains two exemptions which aid in the protection of records relating to Native American cultural places. Amended in October of 2005 for broad application, these exemptions now permit any state or local agency to deny a CPRA request and withhold from public disclosure:

1) "records of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in Section 5097.9 and 5097.993 of the Public Resources Code maintained by, or in the possession of, the Native American Heritage Commission, another state agency, or a local agency" (GC § 6254(r)); and
2) "records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency" (GC § 6254.10).

With these two CPRA exemptions in place, information related to Native American cultural places is specifically protected from mandatory public disclosure. Such protections are intended to facilitate the free exchange of information between Native American tribes and California local governments when conducting tribal consultations. Even with this protection, however, it is important for local governments to understand that some tribes may withhold information during consultations due to conflicts with their cultural beliefs and practices. Local governments and Native American tribes should discuss such issues early in consultations, or during pre-consultation, so that each has an understanding of what information can and cannot be divulged. Additionally, it is important for all parties to recognize that a legislative body of a city or county must have access to certain information in order to make an informed decision regarding the given plan adoption or amendment.

The Brown Act

The Brown Act governs the legislative bodies of all local agencies within California. It requires that meetings held by these bodies be "open and public." Under this Act, no local legislative body may take an action in secret, nor will the body's action be upheld if it is in violation of California's open meeting laws. The Brown Act defines a "meeting" as a gathering of a majority of the members of a applicable body to hear, discuss, or deliberate on matters within the agency's or board's jurisdiction.

While the Brown Act does contain some exceptions for "closed meetings," none of these exceptions would allow the quorum of a local legislative body to participate in tribal consultations within a closed meeting. Should a local legislative body participate in confidential tribal consultations, it is important that they do so as an advisory committee with *less than* a quorum, so as to not invoke the Brown Act's requirements of public participation (see Government Code §54952(b)). Otherwise, the Brown Act will require that the consultations be held in public, thereby defeating the purpose of confidentiality, or, alternatively, any decisions made by the quorum of the body within a closed meeting would be rendered invalid.

In order to efficiently conduct tribal consultation meetings, in addition to maintaining confidentiality at all times, local governments are encouraged to develop procedures in advance that would designate a committee or agency in charge. In doing so, local governments should consider the problems associated with elected official participation within tribal consultations, and should tailor their procedures accordingly.

Public Hearings

General plan amendments, specific plan amendments, and the adoption of a general or specific plan each require both a planning commission and a city council or board of supervisors to conduct public hearings. The decision to approve or deny these proposals must be based in reason and upon evidence in the record of the public hearing. When addressing an adoption or amendment involving a cultural place, elected officials will need to be apprised of the cultural site implications in order to make informed decision. However, to maintain the confidentiality of this cultural place information, local governments and tribes, during consultations, should agree on what non-specific information may be disclosed during the course of a public hearing. Additionally, local governments should avoid including any specific cultural place information within CEQA documents (such as Environmental Impact Reports, Negative Declaration, and Mitigated Negative Declarations) or staff reports which are required to be available at a public hearing. In such cases, confidential cultural resource inventories or reports generated for environmental documents should be maintained under separate cover and shall not be available to the public.

Additional Confidentiality Procedures

Additionally, local governments should consider the following items when considering steps to be taken in order to maintain confidentiality:

- Local governments should develop "in-house" confidentiality procedures.

- Procedures should be established to allow for tribes to share information with local government officials in a confidential setting.
- Only those tribal designees, planning officials, qualified professional archaeologists, and landowners involved in the particular planning activity should obtain information about a specific site.
- Participating landowners should be asked to sign a non-disclosure agreement with the appropriate tribe prior to gaining access to any specific site information.
- Local governments should not include detailed (confidential) information about cultural places in any of its public documents.
- Possible procedures to require local government to notify participating tribes and landowners whenever records containing specific site information have been requested for public disclosure.

Local governments should also keep in mind that the terms for confidentiality may differ depending upon the nature of the site, the tribe, the local government, the landowner, or who proposes to protect the site. Local governments should collaborate with tribes to develop informational materials to educate landowners regarding the cultural sensitivity of divulging site information, explaining the tribe's interest in maintaining the confidentiality and preservation of a site. Landowners should be informed of criminal penalties within the law for the unlawful and intentional destruction, degradation or removal of California Native American cultural or spiritual places located on public or private lands (Public Resources Code §5097.995).[14]

Confidentiality Procedures for Private Landowner Involvement

In order to successfully preserve or mitigate impacts to a California Native American cultural place, local governments and tribes may find it necessary or advantageous to involve private landowners early in the consultation process. Often, landowners may not be aware that a cultural place exists on their property, or alternatively, may not realize that the site has become subject to a general plan adoption or amendment. Due to the confidential nature of certain information involved, local governments should consider working with tribes to adopt procedures that would balance the value of landowner involvement with the need for cultural place confidentiality. Local governments and California Native American tribes may wish to consider the following procedures that would inform and potentially involve landowners in the consultation process, without compromising the confidentiality of a cultural place:

- Local governments, at the request of a tribe, may consider contacting a landowner directly and, without disclosing the exact location or characteristics of the site, inform the landowner of the existence of a culturally significant place on their property. A local government may consider inquiring as to whether the landowner would be willing to further discuss the matter directly with the appropriate tribal representative under a non-disclosure agreement.

[14] Due to a drafting error, SB 18 contains multiple references to Public Resources Code (PRC) §5097.995 which is no longer in existence. In 2004, PRC §5097.995 was amended and renumbered to PRC §5097.993 by Senate Bill 1264 (Chapter 286). Local governments should refer to PRC §5097.993 when looking for PRC §5097.995.

- Local governments may consider giving the landowner's contact information to a tribe so that the tribe may contact the landowner directly. Discussion about conservation easements is an example of a case in which a tribe and landowner may wish to meet without the direct participation of the local government.
- Local governments may also consider informing a landowner of the ability of landowners to access CHRIS for cultural resource information specific to their land. Local governments should keep in mind that the CHRIS system does not contain a catalog of every cultural place within California.

IX. Procedures to Facilitate Voluntary Landowner Protection Efforts

In addition to their own consultation with tribes, local governments may help facilitate landowner participation in preserving and protecting cultural places. While each city and county should develop its own policies on landowner participation, general strategies for encouraging landowner awareness of and participation in cultural place protection may include:

- Collaborating with local tribes to offer cultural awareness and other educational events for landowners.
- Encouraging landowner participation in discussions about appropriate preservation and mitigation measures.
- Promoting the use of conservation easements and other private conservation efforts.

It should be noted that SB 18 does not require landowners to dedicate or sell conservation easements for the purpose of cultural place preservation. Neither are local governments required to play a direct role in any private conservation activity. Government Code §65040.2(g), however, does require OPR to recommend procedures to facilitate voluntary landowner participation in the preservation and protection of cultural places.

Landowner Education and Participation

Public workshops, seminars, and other educational sessions may provide forums for tribal representatives to share tribal and cultural information and discuss general protection concerns with landowners. These sessions may build cultural awareness, develop landowner understanding of the importance of cultural places, and also encourage further dialogue between tribes and landowners. These sessions should generally inform landowners of the importance of cultural places and should not compromise the confidentiality of a specific cultural place.

Local governments may also encourage landowner participation in discussions about preserving or mitigating impacts to a cultural place located on a landowner's private property. (*See Section VII and Section VIII for further information.*)

Private Conservation Efforts

Although local governments are not required to play a direct role in any private conservation activity, they can promote the use of conservation easements and other conservation programs to protect cultural places. Local governments may consider adoption of a policy to encourage voluntary landowner participation in protection programs. Local governments may also develop and distribute informational materials about potential incentives for private conservation efforts, such as Mills Act tax credits or the tax benefits of donating or selling conservation easements.

A conservation easement is a voluntary agreement between a landowner and an authorized party (including a tribe pursuant to Civil Code 815.3(c)) that allows the easement holder to limit the type or amount of development on the property while the landowner retains title to the land. The landowner is compensated for voluntarily giving up some development opportunities. The easement is binding upon successive owners of the land. It is common for a conservation

easement to be recorded against the property as a way to inform future purchasers of the existence of an easement. Granting of a conservation easement may qualify as a charitable contribution for tax purposes.

Should a landowner choose to sell a conservation easement, the landowner should first consult with all tribes affiliated with the land on which the easement is proposed. It is also recommended that tribes hold conservation easements only within their areas of cultural affiliation.

As an alternative to conservation easements, local governments may also promote private preservation of cultural places through the use of Memoranda of Understanding (MOU). As a direct agreement between a landowner and tribe, a MOU allows a tribe and landowner to agree on appropriate treatment of cultural places located on the landowner's private property and may give certain privileges to tribes, such as access to perform ceremonial rituals. MOUs may also be used to facilitate co-management by tribes, landowners, and conservation organizations. For example, if a conservation easement established for wildlife protection also contains a cultural place, the landowner, conservation entity, and tribe could agree on co-management (in the MOU) that protects both the habitat and cultural place.

Part E
Open Space

Section X provides information for incorporating the protection of cultural places into the open space element of the general plan.

X. Open Space for the Protection of Cultural Places

SB 18 amended Government Code §66560 to include open space for the protection of cultural places as an allowable purpose of the open space element. Local governments may, but are not required to, consider adopting open space policies regarding the protection of cultural places. Local governments may wish to consider the following when and if they develop such policies:

- Limiting the types of land uses allowed in an open space designation in order to protect the cultural place from potentially harmful uses.
- Facilitating access to tribes for maintenance and traditional use of cultural places.
- Protecting the confidentiality of cultural places by not disclosing specific information about their identity, location, character, or use.
- Giving developers incentives to protect cultural places through voluntary measures.
- Incorporating goals for protection of cultural places in open space that is also part of a regional habitat conservation and protection program, for example, a local or regional Habitat Conservation Plan (HCP) or Natural Community Conservation Program (NCCP).
- Reviewing and conforming other elements of the general plan that deal with conservation of natural and cultural resources to the open space element.

The development of open space policies for the protection of cultural places should be done in consultation with culturally-affiliated tribes. It is important to note that the importance of cultural places is not solely rooted in the land or other physical features or objects related to the land on which the cultural place is located. The sense of "place" is often as important as any physical or tangible characteristic. It may be important to a tribe to preserve a certain non-material aspect of a cultural place, such as views or vantage points from or to the cultural place. Cultural interpretation and importance of the place to the tribe should be taken into consideration, in addition to any potential archaeological importance of the place. With this in mind, local governments should be prepared to consider creative solutions for preservation and protection of cultural places.

Neither Government Code §65560(b)(5) nor Government Code §65562.5 mandate local review or revision of the existing open space element of the general plan to inventory and/or protect cultural places. However, local governments should consider doing so in future updates of or comprehensive revisions to the open space element.

Part F Additional Resources

XI. Additional Resources

In addition to the information provided in the 2005 Supplement to the *General Plan Guidelines*, local governments may wish to investigate additional resources that can provide more detailed information about Native American people, cultural places, tribal governments, consultation, confidentiality, conservation easements, and other issues related to SB 18. Sources of additional information include federal and state government agencies that have previous experience with tribal consultations, colleges and universities, private organizations and foundations, and the literature and web sites associated with these groups. Although it is not intended to be a comprehensive list, some potentially useful resources are included below.

It is important that local governments keep in mind that Native American tribes are often the best source of information concerning a cultural place's location and characteristics. Local governments are encouraged to seek this information, if available, directly from the tribes themselves.

State Agencies

California Native American Heritage Commission (NAHC)

The NAHC is the state commission responsible for advocating preservation and protection of Native American human remains and cultural resources. NAHC maintains confidential records concerning places of special religious or social significance to Native Americans, including graves and cemeteries and other cultural places. The NAHC reviews CEQA documents to provide recommendations to lead agencies about consulting with tribes to mitigate potential project impacts to these sites.

The NAHC maintains a list of California tribes and the corresponding contacts that local governments should use for the purpose of meeting SB 18 consultation requirements.

The NAHC web site also provides a number of links to information about federal and state laws, local ordinances and codes, and cultural resources in relation to Native Americans.

Native American Heritage Commission
1556 Harbor Blvd.
West Sacramento, CA 95691
916-373-3710
916-373-5471 - Fax
http://www.nahc.ca.gov

California Office of Historic Preservation (OHP)
California Historical Resources Information System (CHRIS)
Pursuant to state and federal law, the California Office of Historic Preservation (OHP) administers the California Historical Resources Information system (CHRIS). The CHRIS is organized by county and managed by regional information centers (posted on the OHP website). These CHRIS centers house records, reports, and other documents relating to cultural and archaeological resources, and provide information and recommendations regarding such resources on a fee-for-service basis. Local governments may enter into agreements with CHRIS information centers to establish procedures and protocols for requesting searches of historical resource records.

The OHP also provides assistance to local governments to encourage direct participation in historic preservation. OHP provides technical assistance to local governments including training for local commissions and review boards, drafting of preservation plans and ordinances, and developing archaeological and historical surveys.

Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296-0001
Phone: (916) 653-6624
Fax: (916) 653-9824
http://www.ohp.parks.ca.gov

California Department of Conservation
Division of Land Resource Protection (DLRP)
The DLRP works with landowners, local governments, and researchers to conserve productive farmland and open spaces.

California Department of Conservation
Division of Land Resource Protection
801 K Street, MS 18-01
Sacramento, CA 95814-3528
Phone: (916) 324-0850
http://www.consrv.ca.gov/DLRP/index.htm

California Department of Housing and Community Development
California Indian Assistance Program (CIAP)
The California Indian Assistance Program's primary role is to assist tribal governments with obtaining and managing funds for community development and government enhancement. CIAP's *2004 Field Directory of the California Indian Community* is a good reference for California Native American tribes, including location of Indian lands, federal recognition status of tribes, history of laws affecting tribes, and other programs and agencies involved in tribal relationships.

California Indian Assistance Program
1800 Third Street, Room 365
Sacramento, CA 95814
Phone: (916) 445-4727
http://www.hcd.ca.gov/ca/ciap/

California Department of Transportation (DOT)
Native American Liaison Branch
The California DOT administers most of its projects with some federal funding and is therefore subject to Section 106 consultation requirements under NHPA. The department has a Native American Liaison Branch (NALB), with headquarters in Sacramento and Native American Liaisons in each of its twelve districts. The NALB web site contains policy statements and links to other useful resources.

Office of Regional and Interagency Planning
Native American Liaison Branch
1120 N Street, MS 32
Sacramento, CA 95814
Phone: (916) 651-8195
Phone: (916) 654-2389
Fax: (916) 653-0001
http://www.dot.ca.gov/hq/tpp/offices/orip/na/native_american.htm

Federal Agencies

Federal Highway Administration – AASHTO (American Association of State Highway and Transportation Officials) Center for Environmental Excellence
The AASHTO Center for Environmental Excellence provides a web site designed to provide tools for Section 106 of the National Historical Preservation Act (NHPA) tribal consultation. This site contains documents and links to web sites that address key aspects of tribal consultation relevant to SB 18. Information also includes federal, tribal, and state policies and protocols, case law, and best practices as implemented by federal and state agencies and tribes.
http://environment.transportation.org/environmental_issues/tribal_consultation/overview.htm

U.S. Army Corps of Engineers
The U.S. Army Corps of Engineers has lasting and positive relations with many tribal governments. The "Tribal Affairs and Initiatives" section of their web site provides information regarding the U.S. Army Corps of Engineers' approach to tribal consultation and preservation of cultural resources.
http://www.usace.army.mil/inet/functions/cw/cecwp/tribal/index.htm

USDA Forest Service
The Forest Service has extensive experience in consulting with Native American tribes. The Forest Service's *Forest Service National Resource Book on American Indian and Alaska Native Relations* is an excellent resource book on tribal beliefs and practices, tribal consultation, and laws affecting Native Americans. The Forest Service's *Report of the National Tribal Relations Program Implementation Team* (June 2003) reviews relationships between the Forest Service and tribes, identifying pervasive problems and concerns and making recommendations to improve the effectiveness of the program at maintaining long-term collaborative relationships with tribal governments.

USDA Forest Service
Regional Office of Tribal Relations
Sonia Tamez
1323 Club Drive
Vallejo, CA 95492
Phone: (707) 562-8919
www.r5.fs.fed.us

USDA National Sustainable Agriculture Information Service (ATTRA)
The ATTRA provides information and other technical assistance to farmers, ranchers, Extension agents, educators, and others involved in sustainable agriculture in the United States. The ATTRA publication, *Conservation Easements, Resource Series (2003)*, provides an overview of what holding and selling conservation easements entail.

ATTRA - National Sustainable Agriculture Information Service
PO Box 3657
Fayetteville, AR 72702
Phone: (800) 346-9140
Fax: (479) 442-9842
http://attra.ncat.org/

USDA Natural Resources Conservation Service (NRCS)
The mission of the NRCS is to address natural resource conservation on private lands. The web site contains links to various conservation technical resources and to additional contact information for area offices and service centers.

California NRCS State Office
430 G Street #4164
Davis, CA 95616-4164
Phone: (530) 792-5600
Fax: (530) 792-5610
http://www.ca.nrcs.usda.gov/

U.S. Department of Interior – Bureau of Indian Affairs
The Bureau of Indian Affairs (BIA) is responsible for the administration and management of 55.7 million acres of land held in trust by the United States for American Indians, Indian tribes, and Alaska Natives. Developing forestlands, leasing assets on these lands, directing agricultural

programs, protecting water and land rights, developing and maintaining infrastructure, and economic development are all agency responsibilities. The BIA web site includes links to other federal agencies, inter-tribal organizations, environmental organizations, and cultural resources.

Bureau of Indian Affairs
Phone: (202) 208-3710
http://www.doi.gov/bureau-indian-affairs.html

U.S. Department of Interior – Bureau of Land Management
The Bureau of Land Management manages 261 million acres of land and has staff whose duties include coordination and consultation with Native Americans. The Bureau publishes *Native American Coordination and Consultation, Manual Section 8160 with Handbook H-8160-1*. The handbook is devoted to providing general guidance for tribal consultation, and can be found online at: http://www.blm.gov/nhp/efoia/wo/handbook/h8160-1.html.

Bureau of Land Management
California State Office
2800 Cottage Way, Suite W-1834
Sacramento, CA 95825-1886
Phone: (916) 978-4400
Phone: (916) 978-4416
TDD: (916) 978-4419
http://www.ca.blm.gov/

U.S. Department of Interior- National Park Service
The following National Park Service web site specifically focuses on cultural resource preservation. The site includes links to tools for cultural resource preservation, different areas of cultural resource protection and different offices of the National Park Service that handle cultural preservation issues. Included among these offices is the American Indian Liaison Office, the web site of which contains a number of information resources that are potentially useful to local governments learning how to consult with Native American tribes on land use policy.
http://www.cr.nps.gov

U.S. Department of Interior – Office of Collaborative Action and Dispute Resolution
This web site provides links to federal agencies' policies on tribal consultation:
http://mits.doi.gov/cadr/main/G2GAgencyPolicies.cfm

Colleges and Universities

Humboldt State University
The Center for Indian Community Development (CICD)
The CICD primarily focuses on Indian language education, but also acts in the capacity of a liaison between Native American tribes and the community. The CICD includes a cultural resource facility where information about Native American burial grounds and cultural resource monitoring can be found. The CICD offers useful publications on tribal governments and cultural approaches to environmental protection of Native American lands on its web site.

Humboldt State University
Center for Indian Community Development
#1 Harpst Street
Arcata, CA 95521
Phone: (707) 826-3711
http://www.humboldt.edu/~cicd/

University of California, Los Angeles
American Indian Studies Center (AISC)
The AISC has spent a number of years conducting research on issues affecting Native American Indian communities. The center has sponsored conferences on issues including California tribes, repatriation, federal recognition, and Indian gaming. The AISC offers a number of publications on issues ranging from Contemporary Native American Issues and Native American Politics to Native American Theater and Native American Literature.

UCLA American Indian Studies Center
3220 Campbell Hall
Los Angeles, CA 90095-1548
Phone: (310) 825-7315
Fax: (310) 206-7060
http://www.aisc.ucla.edu/

University of California, Los Angeles School of Law
Native Nations Law and Policy Center (NNLPC)
The mission of NNLPC at UCLA Law is to support Native nations throughout the United States, with a special focus on California tribes, in developing their systems of governance and in addressing critical public policy issues and to apply the resources of state-supported education together with tribal expertise to address contemporary educational needs for California Tribes. The Research and Publications division secures grants, carries out research, and sponsors conferences and roundtables drawing together scholars, tribal leaders, and federal/state policy-makers.

UCLA School of Law
P.O. Box 951476
Los Angeles, CA 90095-1476
Phone: (310) 825-4841
http://www.law.ucla.edu/students/academicprograms/nativenations/nnlapc.htm

Private Organizations and Foundations

American Farmland Trust (AFT)
Since its founding in 1980, the AFT has helped to achieve permanent protection for over a million acres of American farmland. The AFT focuses its strategies on protecting land through publicly funded agricultural conservation easement programs and encouraging conservation practices in community planning and growth management.

American Farmland Trust
1200 18th Street NW
Washington, D.C. 20036
Phone: (202) 331-7300
Fax: (202) 659-8339
http://www.farmland.org/

Inter-Tribal Council of California, Inc. (ITCC)
The key role of the Inter-Tribal Council of California (ITCC) is to assist in bridging relationships between California tribal governments and other organizations, including local government agencies. The ITCC offers workshops on Native American cultural proficiency and tribal governments for the purpose of educating non-Native Americans on how to effectively communicate with tribal governments, in addition to other training and technical assistance. The ITCC is experienced in assisting the development of Memoranda of Understanding and Agreement, protocols, and educational outreach materials.

Inter-Tribal Council of California, Inc.
2755 Cottage Way, Suite 14
Sacramento, CA 95825
Phone: (916) 973-9581
Fax: (916) 973-0117

Land Trust Alliance (LTA)
The Land Trust Alliance promotes voluntary land conservation by offering training, conferences, literature, reports, and other information on land conservation. The LTA has several publications discussing conservation techniques. Their web site addresses different conservation options for landowners and includes questions and answers about conservation easements, land donation, and bargain sale of land.

Land Trust Alliance
1331 H Street NW, Suite 400
Washington D.C. 20005-4734
Phone: (202) 638-4725
Fax: (202) 638-4730
http://www.lta.org/conserve/options.htm

Native American Land Conservancy
The Native American Land Conservancy is a nonprofit corporation formed for the conservation and preservation of Native American sacred lands.

Native American Land Conservancy
Kurt Russo, Executive Director
PO Box 1829
Indio, CA 92202
Phone: (800) 6770-6252

The Nature Conservancy (TNC)
The Nature Conservancy is a non-profit organization that works with communities, businesses, and individuals to preserve lands with natural and cultural resources.

The Nature Conservancy
4245 North Fairfax Drive, Suite 100
Arlington, VA 22203-1606
http://nature.org/

Southern California Tribal Chairmen's Association (SCTCA)
The Southern California Tribal Chairmen's Association (SCTCA) is a multi-service non-profit corporation established in 1972 for a consortium of 19 Federally recognized Indian tribes in Southern California. The Primary goals and objectives of SCTCA are the health, welfare, safety, education, culture, economic and employment opportunities for its tribal members. A board of directors comprised of tribal chairpersons from each of its member tribes governs SCTCA.

Southern California Tribal Chairmen's Association
Denis Turner
Executive Director
Phone: (760) 742-8600 x100
http://www.sctca.net/

Trust for Public Land (TPL)
The Trust for Public Land (TPL) is a national, nonprofit, land conservation organization that conserves land for people to enjoy as parks, community gardens, historic sites, rural lands, and other natural places, ensuring livable communities for generations to come. Since 1972, TPL has worked with willing landowners, community groups, and national, state, and local agencies to complete more than 2,700 land conservation projects in 46 states, protecting nearly 2 million acres.

Trust for Public Land National Office
116 New Montgomery St., 4th Floor
San Francisco, CA 94105
Phone: (415) 495-4014
Fax: (415) 495-4103
http://www.tpl.org

Exhibit A: Sample Request to the NAHC for Tribal Contact Information

LOCAL GOVERNMENT
TRIBAL CONSULTATION LIST REQUEST
NATIVE AMERICAN HERITAGE COMMISSION
1556 HARBOR BLVD.
WEST SACRAMENTO, CA 95691
916-373-3710
916-373-5471 - Fax

Project Title: _____

Local Government/Lead Agency: _____ Contact Person: _____

_____ Phone: _____

Street Address: _____ Fax: _____

___General Plan Amendment ___ Specific Plan Amendment

___ Pre-planning Outreach Activity

Project Description:

NAHC Use Only

Date Received: _____

Date Completed _____

Native American Tribal Consultation lists are only applicable for consulting with California Native American tribes per Government Code Section 65352.3.

BILL NUMBER: SB 18 CHAPTERED
BILL TEXT

CHAPTER 905
FILED WITH SECRETARY OF STATE SEPTEMBER 30, 2004
APPROVED BY GOVERNOR SEPTEMBER 29, 2004
PASSED THE SENATE AUGUST 19, 2004
PASSED THE ASSEMBLY AUGUST 9, 2004
AMENDED IN ASSEMBLY JULY 1, 2004
AMENDED IN ASSEMBLY JUNE 28, 2004
AMENDED IN ASSEMBLY JUNE 14, 2004
AMENDED IN ASSEMBLY JUNE 10, 2004
AMENDED IN ASSEMBLY SEPTEMBER 12, 2003
AMENDED IN ASSEMBLY SEPTEMBER 5, 2003
AMENDED IN ASSEMBLY AUGUST 25, 2003
AMENDED IN ASSEMBLY AUGUST 18, 2003
AMENDED IN ASSEMBLY JULY 9, 2003

INTRODUCED BY Senators Burton, Chesbro, and Ducheny

DECEMBER 2, 2002

An act to amend Section 815.3 of the Civil Code, to amend Sections 65040.2, 65092, 65351, 65352, and 65560 of, and to add Sections 65352.3, 65352.4, and 65562.5 to the Government Code, relating to traditional tribal cultural places.

LEGISLATIVE COUNSEL'S DIGEST

SB 18, Burton. Traditional tribal cultural places.

(1) Existing law establishes the Native American Heritage Commission and authorizes the commission to bring an action to prevent severe and irreparable damage to, or assure appropriate access for Native Americans to, a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property.

Existing law authorizes only specified entities or organizations, including certain tax-exempt nonprofit organizations, and local government entities to acquire and hold conservation easements, if those entities and organizations meet certain conditions.

This bill would include a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the Native American Heritage Commission, among those entities and organizations that may acquire and hold conservation easements, as specified.

(2) Existing law requires the Office of Planning and Research to implement various long range planning and research policies and goals that are intended to shape statewide development patterns and significantly influence the quality of the state's environment and, in connection with those responsibilities, to adopt guidelines for the preparation and content of the mandatory elements required in city and county general plans.

This bill would require that, by March 1, 2005, the guidelines contain advice, developed in consultation with the Native American Heritage Commission, for consulting with California Native American tribes for the preservation of, or the mitigation of impacts to, specified Native American places, features, and objects. The bill

would also require those guidelines to address procedures for identifying the appropriate California Native American tribes, for continuing to protect the confidentiality of information concerning the specific identity, location, character, and use of those places, features, and objects, and for facilitating voluntary landowner participation to preserve and protect the specific identity, location, character, and use of those places, features, and objects. The bill would define a California Native American tribe that is on the contact list maintained by the Native American Heritage Commission as a "person" for purposes of provisions relating to public notice of hearings relating to local planning issues.

(3) Existing law requires a planning agency during the preparation or amendment of the general plan, to provide opportunities for the involvement of citizens, public agencies, public utility companies, and civic, education, and other community groups, through public hearings and any other means the city or county deems appropriate.

This bill would require the planning agency on and after March 1, 2005, to refer the proposed action to California Native American tribes, as specified, and also provide opportunities for involvement of California Native American tribes. The bill would require that, prior to the adoption or amendment of a city or county's general plan, the city or county conduct consultations with California Native American tribes for the purpose of preserving specified places, features, and objects that are located within the city or county's jurisdiction. The bill would define the term "consultation" for purposes of those provisions. By imposing new duties on local governments with respect to consultations regarding the protection and preservation of California Native American historical, cultural, and sacred sites, the bill would impose a state-mandated local program.

On and after March 1, 2005, this bill would include open space for the protection of California Native American historical, cultural, and sacred sites within the definition of "local open-space plan" for purposes of provisions governing the preparation of the open-space element of a city and county general plan.

(4) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement, including the creation of a State Mandates Claims Fund to pay the costs of mandates that do not exceed $1,000,000 statewide and other procedures for claims whose statewide costs exceed $1,000,000.

This bill would provide that with regard to certain mandates no reimbursement is required by this act for a specified reason.

With regard to any other mandates, this bill would provide that, if the Commission on State Mandates determines that the bill contains costs so mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. (a) The Legislature finds and declares all of the following:

(1) Current state law provides a limited measure of protection for California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places.

(2) Existing law provides limited protection for Native American sanctified cemeteries, places of worship, religious, ceremonial sites, sacred shrines, historic or prehistoric ruins, burial grounds,

archaeological or historic sites, inscriptions made by Native Americans at those sites, archaeological or historic Native American rock art, and archaeological or historic features of Native American historic, cultural, and sacred sites.

(3) Native American places of prehistoric, archaeological, cultural, spiritual, and ceremonial importance reflect the tribes' continuing cultural ties to the land and to their traditional heritages.

(4) Many of these historical, cultural, and religious sites are not located within the current boundaries of California Native American reservations and rancherias, and therefore are not covered by the protectionist policies of tribal governments.

(b) In recognition of California Native American tribal sovereignty and the unique relationship between California local governments and California tribal governments, it is the intent of the Legislature, in enacting this act, to accomplish all of the following:

(1) Recognize that California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places are essential elements in tribal cultural traditions, heritages, and identities.

(2) Establish meaningful consultations between California Native American tribal governments and California local governments at the earliest possible point in the local government land use planning process so that these places can be identified and considered.

(3) Establish government-to-government consultations regarding potential means to preserve those places, determine the level of necessary confidentiality of their specific location, and develop proper treatment and management plans.

(4) Ensure that local and tribal governments have information available early in the land use planning process to avoid potential conflicts over the preservation of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places.

(5) Enable California Native American tribes to manage and act as caretakers of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places.

(6) Encourage local governments to consider preservation of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places in their land use planning processes by placing them in open space.

(7) Encourage local governments to consider the cultural aspects of California Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places early in land use planning processes.

SEC. 2. Section 815.3 of the Civil Code is amended to read:

815.3. Only the following entities or organizations may acquire and hold conservation easements:

(a) A tax-exempt nonprofit organization qualified under Section 501(c)(3) of the Internal Revenue Code and qualified to do business in this state which has as its primary purpose the preservation, protection, or enhancement of land in its natural, scenic, historical, agricultural, forested, or open-space condition or use.

(b) The state or any city, county, city and county, district, or other state or local governmental entity, if otherwise authorized to acquire and hold title to real property and if the conservation easement is voluntarily conveyed. No local governmental entity may condition the issuance of an entitlement for use on the applicant's granting of a conservation easement pursuant to this chapter.

(c) A federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on

the contact list maintained by the Native American Heritage Commission to protect a California Native American prehistoric, archaeological, cultural, spiritual, or ceremonial place, if the conservation easement is voluntarily conveyed.

SEC. 3. Section 65040.2 of the Government Code is amended to read:

65040.2. (a) In connection with its responsibilities under subdivision (l) of Section 65040, the office shall develop and adopt guidelines for the preparation and content of the mandatory elements required in city and county general plans by Article 5 (commencing with Section 65300) of Chapter 3. For purposes of this section, the guidelines prepared pursuant to Section 50459 of the Health and Safety Code shall be the guidelines for the housing element required by Section 65302. In the event that additional elements are hereafter required in city and county general plans by Article 5 (commencing with Section 65300) of Chapter 3, the office shall adopt guidelines for those elements within six months of the effective date of the legislation requiring those additional elements.

(b) The office may request from each state department and agency, as it deems appropriate, and the department or agency shall provide, technical assistance in readopting, amending, or repealing the guidelines.

(c) The guidelines shall be advisory to each city and county in order to provide assistance in preparing and maintaining their respective general plans.

(d) The guidelines shall contain the guidelines for addressing environmental justice matters developed pursuant to Section 65040.12.

(e) The guidelines shall contain advice including recommendations for best practices to allow for collaborative land use planning of adjacent civilian and military lands and facilities. The guidelines shall encourage enhanced land use compatibility between civilian lands and any adjacent or nearby military facilities through the examination of potential impacts upon one another.

(f) The guidelines shall contain advice for addressing the effects of civilian development on military readiness activities carried out on all of the following:

(1) Military installations.

(2) Military operating areas.

(3) Military training areas.

(4) Military training routes.

(5) Military airspace.

(6) Other territory adjacent to those installations and areas.

(g) By March 1, 2005, the guidelines shall contain advice, developed in consultation with the Native American Heritage Commission, for consulting with California Native American tribes for all of the following:

(1) The preservation of, or the mitigation of impacts to, places, features, and objects described in Sections 5097.9 and 5097.995 of the Public Resources Code.

(2) Procedures for identifying through the Native American Heritage Commission the appropriate California Native American tribes.

(3) Procedures for continuing to protect the confidentiality of information concerning the specific identity, location, character, and use of those places, features, and objects.

(4) Procedures to facilitate voluntary landowner participation to preserve and protect the specific identity, location, character, and use of those places, features, and objects.

(h) The office shall provide for regular review and revision of the guidelines established pursuant to this section.

SEC. 4. Section 65092 of the Government Code is amended to read:

65092. (a) When a provision of this title requires notice of a public hearing to be given pursuant to Section 65090 or 65091, the notice shall also be mailed or delivered at least 10 days prior to the hearing to any person who has filed a written request for notice with either the clerk of the governing body or with any other person designated by the governing body to receive these requests. The local agency may charge a fee which is reasonably related to the costs of providing this service and the local agency may require each request to be annually renewed.

(b) As used in this chapter, "person" includes a California Native American tribe that is on the contact list maintained by the Native American Heritage Commission.

SEC. 5. Section 65351 of the Government Code is amended to read:

65351. During the preparation or amendment of the general plan, the planning agency shall provide opportunities for the involvement of citizens California Native American Indian tribes, public agencies, public utility companies, and civic, education, and other community groups, through public hearings and any other means the city or county deems appropriate.

SEC. 6. Section 65352 of the Government Code is amended to read:

65352. (a) Prior to action by a legislative body to adopt or substantially amend a general plan, the planning agency shall refer the proposed action to all of the following entities:

(1) A city or county, within or abutting the area covered by the proposal, and a special district that may be significantly affected by the proposed action, as determined by the planning agency.

(2) An elementary, high school, or unified school district within the area covered by the proposed action.

(3) The local agency formation commission.

(4) An areawide planning agency whose operations may be significantly affected by the proposed action, as determined by the planning agency.

(5) A federal agency if its operations or lands within its jurisdiction may be significantly affected by the proposed action, as determined by the planning agency.

(6) A public water system, as defined in Section 116275 of the Health and Safety Code, with 3,000 or more service connections, that serves water to customers within the area covered by the proposal. The public water system shall have at least 45 days to comment on the proposed plan, in accordance with subdivision (b), and to provide the planning agency with the information set forth in Section 65352.5.

(7) The Bay Area Air Quality Management District for a proposed action within the boundaries of the district.

(8) On and after March 1, 2005, a California Native American tribe, that is on the contact list maintained by the Native American Heritage Commission, with traditional lands located within the city or county's jurisdiction.

(b) Each entity receiving a proposed general plan or amendment of a general plan pursuant to this section shall have 45 days from the date the referring agency mails it or delivers it in which to comment unless a longer period is specified by the planning agency.

(c) (1) This section is directory, not mandatory, and the failure to refer a proposed action to the other entities specified in this section does not affect the validity of the action, if adopted.

(2) To the extent that the requirements of this section conflict with the requirements of Chapter 4.4 (commencing with Section 65919), the requirements of Chapter 4.4 shall prevail.

SEC. 7. Section 65352.3 is added to the Government Code, to read:

65352.3. (a) (1) Prior to the adoption or any amendment of a city or county's general plan, proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes that are on the contact list maintained by the Native American Heritage Commission for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.995 of the Public Resources Code that are located within the city or county's jurisdiction.

(2) From the date on which a California Native American tribe is contacted by a city or county pursuant to this subdivision, the tribe has 90 days in which to request a consultation, unless a shorter timeframe has been agreed to by that tribe.

(b) Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Section 65040.2, the city or county shall protect the confidentiality of information concerning the specific identity, location, character, and use of those places, features, and objects.

SEC. 8. Section 65352.4 is added to the Government Code, to read:

65352.4. For purposes of Section 65351, 65352.3, and 65562.5, "consultation" means the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

SEC. 9. Section 65560 of the Government Code is amended to read:

65560. (a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.

(b) "Open-space land" is any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional or state open-space plan as any of the following:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; areas adjacent to military installations, military training routes, and restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.

(2) Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including, but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and

streams, trails, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.

(5) Open space for the protection of places, features, and objects described in Sections 5097.9 and 5097.995 of the Public Resources Code.

SEC. 10. Section 65562.5 is added to the Government Code, to read:

65562.5. On and after March 1, 2005, if land designated, or proposed to be designated as open space, contains a place, feature, or object described in Sections 5097.9 and 5097.995 of the Public Resources Code, the city or county in which the place, feature, or object is located shall conduct consultations with the California Native American tribe, if any, that has given notice pursuant to Section 65092 for the purpose of determining the level of confidentiality required to protect the specific identity, location, character, or use of the place, feature, or object and for the purpose of developing treatment with appropriate dignity of the place, feature, or object in any corresponding management plan.

SEC. 11. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution for certain costs that may be incurred by a local agency or school district because in that regard this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

However, notwithstanding Section 17610 of the Government Code, if the Commission on State Mandates determines that this act contains other costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code. If the statewide cost of the claim for reimbursement does not exceed one million dollars ($1,000,000), reimbursement shall be made from the State Mandates Claims Fund.

PART C

Mitigation Measure Language

July 2020

CITY OF ROSEVILLE CALIFORNIA

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EXAMPLE MITIGATION MEASURE LANGUAGE

Section 2.4 of Volume I of the guidance document presents standard mitigation measures and conditions of approval that can be used by the City in CEQA documentation for projects. Section 2.4 provides general purpose and intent, thresholds, limitations, exclusions, and general parameters for such standard measures and conditions. Following are examples of actual mitigation measure language that are designed to be incorporated into CEQA documents and Mitigation Monitoring and Reporting Programs; however, modifications to these measures and conditions may be required to fit project-specific dynamics and to address the responsibilities for certain actions (which differ between City and private projects). As long as any such modifications do not conflict with the guidance in Volume I, then such modifications will be considered appropriate and not subject to additional review and approval outside of the project's CEQA process.

Use of Exclusionary Fencing

Prior to ground-disturbing activities commencing, the contractor shall install high-visibility temporary exclusionary fencing around site [**number**]. A photograph of the installed fencing and a map indicating the photo point shall be submitted to the City as proof of compliance. Fence installation shall be monitored by a qualified professional archaeologist and, for tribal cultural resources, a culturally affiliated tribal monitor, and inspected at least once per month during active construction to ensure integrity of the fence line. Once all construction equipment and personnel have vacated the project area, the exclusionary fencing may be removed. The contractor shall provide the City with a brief letter report from the qualified archaeologist confirming that the fence was installed, monitored, and removed in compliance with this measure.

Incorporation into Open Space with Deed Restrictions

Prior to [**recording of the final map OR to issuance of building permits or improvement plans**], the property owner shall record a deed restriction over site [**name or number**] to restrict development in the future. The area included in the deed restriction shall be delineated by a qualified professional archaeologist and described by a licensed surveyor prior to recording. Because archaeological site locations are restricted from public distribution, the deed restriction shall cite an "environmentally sensitive area." A copy of the recorded deed restriction that includes the site shall be provided to the City for retention in a confidential project file as proof of compliance. The qualified professional archaeologist shall submit a copy of the deed restriction to the North Central Information Center of the California Historical Resources Information System and shall copy the City on this correspondence.

Use of Development Restrictions in Perpetuity

Prior to [**recording of the final map OR to issuance of building permits or improvement plans**], site [**name or number**] shall be protected in perpetuity by a conservation easement or declaration of covenants and restrictions, or an equally effective restrictive mechanism, recorded with the County of Placer, which prohibits the conversion of the open space designation over the site into one that allows development. The area included in the conservation easement shall be delineated by a qualified professional archaeologist and described by a licensed surveyor prior to recording. Because

archaeological site locations are restricted from public distribution, the conservation easement shall cite an "environmentally sensitive area" and "cultural, natural, and/or environmental values."

Management in perpetuity shall be the responsibility of a qualified third-party preserve manager through implementation of an agency-approved operations and management plan that shall include but is not limited to the following measures, as deemed appropriate and stipulated in either the restrictive instrument or operations and management plan: fence and gate repair; sign replacement; regular monitoring and associated reporting by a professional archaeologist for damage; erosion control; trash removal; vegetation and weed control; security patrols; vandalism abatement; and removal of trespassers. Any signage indicating the presence of a cultural resource shall be discussed between the City, tribes, or other interested parties and must not conflict with state law regarding disclosure of archaeological site location information.

A copy of the recorded conservation easement that includes the site shall be provided to the City for retention in a confidential project file as proof compliance. The qualified professional archaeologist shall submit a copy of the deed restriction to the North Central Information Center of the California Historical Resources Information System and shall copy the City on this correspondence.

Repatriation Location Designation

If tribal cultural resources are discovered during construction activities, ground-disturbing activities shall cease and the property owner shall identify a location to accommodate reburial of any tribal cultural resources (as defined in Section 21074 of the Public Resources Code) or human remains (as defined in Section 5097.98 of the Public Resources Code). The location selected shall be under the control of the property owner, in an area not planned for future disturbance, and can accommodate the recording of a deed restriction, should the reburial location be utilized for the project. A copy of a map showing the reburial location shall be filed with the City for proof of compliance prior to construction and shall remain confidential. A deed restriction over the reburial location need not be filed with the County until materials have been reburied at the selected location. If the reburial location is not utilized for the project, then no further documentation or deed restrictions are required.

In the event that human remains or tribal cultural resources are encountered, the consultation and evaluation process in Mitigation Measure **[XX]** for the management of unanticipated discoveries shall be followed. Upon conclusion of that process, the Construction Manager shall rebury specified materials in the location selected for reburial, at the City's direction and discretion. The City shall reserve the right to dictate the nature, methods, and timing of the reburial.

Within 30 days of the reburial, and consistent with Section 5097.98(e) of the Public Resources Code, the location of the reburial shall be further recorded by a qualified professional on a DPR 523 Series Primary Record and Location Map and submitted to the North Central Information Center of the California Historical Resources Information Center [5097.98(e)(1)], Native American Heritage Commission, and a reinternment record filed with the County [5097.98(e)(3)]. A copy of the confidential record and transmittal to each repository shall be provided to the City as proof of compliance within 30 days of recording.

Pre-Construction Inspections

A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the Construction Manager shall notify the City of the proposed earthwork start-date, in order to provide the City representative sufficient time to contact the **[tribe name]**. A tribal representative shall be invited to, at its discretion, voluntarily inspect the project location, including any soil piles, trenches, or other disturbed areas, within the first five days of ground-breaking activity. Construction activity may be ongoing during this time. Should the tribe choose not to perform a field visit within the first five days, construction activities may continue as scheduled, as long as the notification was made.

Tribal Monitoring

The Construction Manager shall retain one tribal monitor to monitor all vegetation clearing and removal, and all initial surface grading of the project area, down to **[X#]** feet below the surface. Tribal monitoring is not required below **[X#]** feet, during above-surface construction activities, or when excavating or re-excavating imported fill or soil which has already been previously disturbed as part of the construction project.

The tribal monitor shall have the authority to temporarily pause ground disturbance within 100 feet of the discovery for a duration long enough to examine potential tribal cultural resources that may become unearthed during the activity. If no tribal cultural resources are identified, then construction activities shall proceed and no agency notifications are required. In the event that a tribal cultural resource is identified, the unanticipated discovery procedures in Mitigation Measure **[XX]** shall be implemented.

The tribal monitor shall maintain daily monitoring logs, which shall be submitted to the City no later than the conclusion of the monitoring as proof of compliance.

Unpaid Tribal Observation

A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the Construction Manager shall notify the City of the proposed earthwork start-date, in order to provide the City representative sufficient time to contact the **[tribe name]**. A tribal representative shall be invited to, at its discretion, voluntarily observe any or all ground-disturbing activities during construction. The tribe shall be provided 72 hours to accept or decline observation. All tribal observers shall be required to comply with all job site safety requirements and shall sign a waiver of liability prior to entering the job site. Should the tribe choose not to observe any or all of the activity, the City shall deem the mitigation measure completed in good faith without tribal observation as long as the notification was made and documented.

Capping

Site [**number or name**] shall be capped to protect and preserve subsurface archaeological deposits identified within the project area, as described in this measure, and in consultation with a qualified professional archaeologist. Capping design may include a combination of geotextile fabric, culturally-sterile soil, or other barriers or restrictions to prevent accidental or unauthorized excavation in the future. Only fill material that is approved by the consulting tribe and City may be used. The City shall provide the consulting tribe with a list of any proposed fill or capping material prior to any capping activity for approval; such approval shall not be unreasonably withheld. All parties will work diligently to cap the

site as quickly as possible. The capping specifications shall be demarcated on the project construction plans and approved by the City prior to issuance of improvement plans, grading permits, or building permits, and prior to commencement of ground-disturbing activities.

The capping shall be monitored by a qualified professional archaeologist and culturally affiliated tribal monitor. Within 30 days of the conclusion of the capping activity, the property owner shall record a deed restriction or other type of development restriction (approved by the City) over the capped site to restrict disturbance in the future. Prior to recording, the proposed boundaries of the restriction shall be subject to City review. Because archaeological site and tribal resource locations are restricted from public distribution, the restriction shall cite an "environmentally sensitive area." A copy of the recorded restriction that includes the site shall be provided to the City for retention in a confidential project file as proof compliance. The qualified professional archaeologist shall submit a copy of the restriction and updated site record documenting the capping to the North Central Information Center of the California Historical Resources Information System and shall copy the City on this correspondence.

Public Interpretation and Education

Interpretive Panels, Museum Exhibits, and/or Websites.

The Project Proponent shall ensure that the precontact context of the project area will be interpreted for the benefit of the general public through the development and installation of **[X #]** interpretive panel(s), developed in consultation with the **[tribe(s)].** The panel(s) that shall be incorporated into publicly accessible areas of the project, or in a locale amenable to the City and consulting tribe(s). The proposed location of the panel, as well as conceptual layouts of the panel, shall be developed by a qualified professional and submitted to the City no later than 30 days prior to the initiation of construction. The City will submit the conceptual layout to the **[tribe name].** The project construction may proceed during subsequent review and approval. The [**tribe name**] shall have 60 days to provide comments to the City; this period may commence after the initiation of construction. Upon the close of the 60-day comment period, the City will forward any comments received to the qualified professional for incorporation, as deemed appropriate by the City. The final design of the panel is subject to review and approval by the City. A PDF of the final panel(s), a photograph of the installed panel(s), and a map showing the location of the panel(s) shall be submitted by the contractor or qualified professional to the City within 60 days of installation, as proof of compliance. This information may be tied to a website, with provisions for long-term maintenance of the website.

If requested by a [tribe(s)], the City may extend the timeframes in this measure, which shall be documented in writing (electronic communication may be used to satisfy this measure).

Educational Lesson Plans

The Project Proponent shall ensure that the precontact context of the project area and its relationship to contemporary descendant communities will be interpreted for the benefit of the general public through the development of a lesson plan to be made available for use by K–8 schools in Roseville and, if the tribe chooses, for the [**tribe's]** educational system. The intent and content of the educational plan will be created in consultation with tribes or other interested parties, as identified through consultation. The proposed outline of the lesson plan shall be developed by a qualified professional and submitted to the City no later than 30 days prior to the initiation of construction. The City will submit the conceptual

outline to the **[tribe name].** The project construction may proceed during subsequent review and approval. The **[tribe name]** shall have 60 days to provide comments to the City; this period may commence after the initiation of construction. Upon the close of the 60-day comment period, the City will forward any comments received to the qualified professional for incorporation, as deemed appropriate by the City. The final design of the lesson plan is subject to review and approval by the City. A PDF of the completed lesson plan shall be provided to the City and made available to schools and educators through a link on the City's website or other appropriate distribution method, as approved by the City.

If requested by a [tribe(s)], the City may extend the timeframes in this measure, which shall be documented in writing (electronic communication may be used to satisfy this measure).

Covenants, Conditions, and Restrictions

Notification of the restrictions on artifact collection and digging shall be included in a restrictive type of covenant recorded on each parcel, as follows: "The collecting, digging, disturbance, or removal of any artifact or other prehistoric or historic object located in an open space area, conservation easement, a lot subject to a deed restriction, or to any archaeological site that may become unearthed in the future, is prohibited." The form and language of the covenant shall be provided by the Project Proponent to the City for approval prior to execution or recordation. A copy of the recorded or executed covenant shall be provided by the Project Proponent to the City as proof of compliance within 30 days of the sale of each lot subject to this restriction.

Tribal Access Agreement

Prior to the recording of open space that contains tribal cultural resources, the [**Tribe**] shall be invited by the landowner, in coordination with the City, to execute a tribal access agreement to allow for permitted access to the tribal cultural resource referred to as [**name or number**]. The Project Proponent shall provide a copy of the executed agreement to the City for retention in a confidential project file as proof of compliance. Any restrictive document filed over open space containing the site (conservation easement, declaration of covenants and restrictions, or deed restriction) and its associated management plan (if applicable) must allow for the implementation of the access agreement.

Within 45 days of the invitation, should the tribe decline entering into the agreement, or should the parties fail to come to agreement on the terms of access, the City will deem the effort completed in good faith without execution of an agreement, and the management of the resource shall be dictated exclusively by the terms and conditions of the restrictive document and/or project conditions of approval.

Contractor Awareness Training

The Construction Manager shall ensure that a Contractor Awareness Training Program is delivered to train equipment operators about cultural resources and tribal cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the City of any occurrences; and project-specific requirements; and enforcement of penalties and repercussions for non-compliance with the program.

The training shall be prepared by a qualified professional archaeologist and reviewed by City for approval, and may be provided in an audio-visual format, such as a DVD. The Construction Manager

shall provide culturally affiliated tribes that consulted on the project **[tribe name]** the option of attending the initial training in person and/or providing additional materials germane to the unanticipated discovery of tribal cultural resources for incorporation into the training.

The training program shall be required for all construction supervisors, forepersons, and operators of ground-disturbing equipment, and all personnel shall be required to sign a training roster and display a hard hat sticker that is visible to City inspectors. The construction manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the City as proof of compliance.

Post-Review Discovery Procedures

If subsurface deposits believed to be cultural or human in origin, or tribal cultural resources, are discovered during construction, all work shall halt within a 100-foot radius of the discovery, and the Construction Manager shall immediately notify the City of Roseville Development Services Director by phone. The Construction Manager shall also immediately coordinate with the monitoring archeologist or project archaeologist and (if present) tribal monitor, or, in the absence of either, contact a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for archaeology and subject to approval by the City, to evaluate the significance of the find and develop appropriate management recommendations. All management recommendations shall be provided to the City in writing for the City's review and approval. If recommended by the qualified professional and approved by the City, this may include modification of the no-work radius.

The professional archaeologist must make a determination, based on professional judgement and supported by substantial evidence, within one business day of being notified, as to whether or not the find represents a cultural resource or has the potential to be a tribal cultural resource. The subsequent actions will be determined by the type of discovery, as described below. These include: 1) a work pause that, upon further investigation, is not actually a discovery and the work pause was simply needed in order to allow for closer examination of soil (a "false alarm"); 2) a work pause and subsequent action for discoveries that are clearly not related to tribal resources, such as can and bottle dumps, artifacts of European origin, and remnants of built environment features; and 3) a work pause and subsequent action for discoveries that are likely related to tribal resources, such as midden soil, bedrock mortars, groundstone, or other similar expressions.

Whenever there is question as to whether or not the discovery represents a tribal resource, culturally affiliated tribes shall be consulted in making the determination. Whenever a tribal monitor is present, the monitor shall be consulted.

The following processes shall apply, depending on the nature of the find, subject to the review and approval of the City:

- Response to False Alarms: If the professional archaeologist determines that the find is negative for any cultural indicators, then work may resume immediately upon notice to proceed from the City's representative. No further notifications or tribal consultation is necessary, because the discovery is not a cultural resource of any kind. The professional archaeologist shall provide written documentation of this finding to the City.

- Response to Non-Tribal Discoveries: If a tribal monitor is not present at the time of discovery and a professional archaeologist determines that the find represents a non-tribal cultural resource from any time period or cultural affiliation, the City shall be notified immediately, to consult on a finding of eligibility and implementation of appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. The professional archaeologist shall provide a photograph of the find and a written description to the City of Roseville. The City of Roseville will notify any [tribe(s)] who, in writing, requested notice of unanticipated discovery of non-tribal resources. Notice shall include the photograph and description of the find, and a tribal representative shall have the opportunity to determine whether or not the find represents a tribal cultural resource. If a response is not received within 24 hours of notification (none of which time period may fall on weekends or City holidays), the City will deem this portion of the measure completed in good faith as long as the notification was made and documented. If requested by a [tribe(s)], the City may extend this timeframe, which shall be documented in writing (electronic communication may be used to satisfy this measure). If a notified tribe responds within 24 hours to indicate that the find represents a tribal cultural resource, then the Response to Tribal Discoveries portion of this measure applies. If the tribe does not respond or concurs that the discovery is non-tribal, work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to its satisfaction.

- Response to Tribal Discoveries: If the find represents a tribal or potentially tribal cultural resource that does not include human remains, the **[tribe(s)]** and City shall be notified. The City will consult with the tribe(s) on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be either a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines, or a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code. Preservation in place is the preferred treatment, if feasible. Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) not a Tribal Cultural Resource, as defined in Section 21074 of the Public Resources Code; or 3) that the treatment measures have been completed to its satisfaction.

- Response to Human Remains: If the find includes human remains, or remains that are potentially human, the construction supervisor or on-site archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641) and shall notify the City and Placer County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Public Resources Code § 5097.94

provides structure for mediation through the NAHC if necessary. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the Public Resources Code).

If no agreement is reached, the landowner must rebury the remains in a respectful manner where they will not be further disturbed (§ 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.

Controlled Grading

The Construction Manager shall retain a qualified professional archaeologist, subject to the approval of the City, to monitor controlled grading activities. A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the Construction Manager shall notify the City of the proposed earthwork start-date, in order to provide the City representative sufficient time to contact the **[tribe name]** to monitor the controlled grading of the area shown on confidential map **[#]**, which is on file with the City.

Under the observation of a tribal monitor and qualified archaeologist, the contractor shall use either a small piece of equipment or observe the removal of soil by a backhoe equipped with a flat-edge bucket to peel away native soil using shallow cuts made in approximately two- to five-inch-deep layers. The grading equipment will push the shallow cuts of soil to the outside of the cultural deposit area and random samples may be screened to ensure adequate detection of any cultural materials that may be present. In the event that cultural materials or human remains are exposed, the procedures for unanticipated discoveries in Mitigation Measure **[XX]** shall apply.

Grading shall continue to a depth of 30 centimeters below the depth of any recorded artifacts, suggesting an end to the potential for cultural deposits, or when non-cultural formational soils are encountered that predate any human occupation of this location, as determined by the qualified professional archaeologist. Following this, the controlled grading process will be terminated and mass grading may proceed, subject to the review and approval by the City.

Controlled grading is not required for soil that is identified as non-cultural formational soil or fill dirt imported to the site.

SAMPLE (SUBJECT TO CHANGE)

RIGHT-OF-ACCESS AUTHORIZATION
Federally-Recognized and/or California Native American Tribes

1. Purpose. It is the purpose of this Right-of-Access Authorization ("Authorization") to protect historic properties and cultural resources managed by the City of Roseville ("City") while allowing reasonable access to federally-recognized and/or California Native American tribes ("Tribe") for the purpose of visitation.

2. Tribe. This Authorization is hereby granted by the City of Roseville to the following Tribe and its employees, members, and authorized representatives:

[Tribe name]
[Tribe Recognition/Registration Number and Jurisdiction (US or CA)]
[Address]
[Phone number]

This Authorization is not transferrable.

3. Sites. This Authorization pertains specifically to cultural resources identified on the confidential cultural resources map as site numbers:

[site number]
[site number]

Passage through the areas designated as Open Space (including Conservation Easement areas and Passive Open Space) along existing trails and access roads is permissible for the purpose of accessing the Sites named above. Access to other cultural resources or areas without existing public access, or restricted from public access by the property owner, is prohibited, unless specified in another Authorization.

4. Duration. This Authorization for access for the period beginning [start date] and ending [end date].

The Tribe shall provide at least ____ hours' notice to the City prior to visitation while this Authorization is in effect. Notice shall be provided to the following:

[City staff name]
[Phone number]
[email address]

Visitation is limited to the hours between dawn and dusk only.

5. Terms and Conditions. To ensure that visitation does not conflict with the agency-mandated management plans and preservation requirements, and does not create a hazard to human health or safety of visitors or adjacent residents, only passive visitation to the Sites identified in this Authorization is authorized, and no other activities, including but not limited to the following, shall be permitted:

A) Use of off-road vehicles and use of any other motorized vehicles except on existing roadways.

B) Agricultural cultivation activity of any kind.

C) Recreational activities, including, but not limited to, camping.

D) Construction, reconstruction, erecting or placement of any building, billboard or sign, or any other structure or improvement of any kind.

E) Depositing or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other materials.

F) Lighting fires, incendiary devices, or flammable substances.

G) Use of, or visitation by, animals, either domestic, pastoral, or otherwise.

H) Planting, introduction, or dispersal of non-native or exotic plant or animal species.

I) Filling, dumping, excavating, draining, dredging, mining, drilling, removing or exploring for or extracting artifacts, minerals, loam, soil, sand, gravel, rock or other material on or below the surface.

J) Altering the surface or general topography, including but not limited to any alterations to habitat, building roads or trails, or otherwise covering the ground surface.

K) Removing, destroying, or cutting of trees, shrubs, or other vegetation.

L) Manipulating, impounding or altering any natural water course, body of water or water circulation, and any activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters.

M) Engaging in any use or activity that may violate, or may fail to comply with, relevant federal, state, or local laws, regulations, or policies.

6. Costs and Liabilities. The Tribe is solely responsible for the cost of visitation under the terms of this Authorization and agrees to assume all risks associated with such visitation, including but

not limited to property damage and bodily injuries, including death, from any act, omission, condition or other matter related to or occurring on or about the Sites.

7. Liability Release and Waiver/Indemnity.

In consideration of being granted a temporary right of access to the Sites for purpose of passive visitation only and for no other purpose, the Tribe, on its behalf and on behalf of its members, officers and each of the persons accessing the Site under this Authorization, as well as their heirs, administrators, personal representatives and assigns:

A. Hereby releases, waives, discharges and covenants not to sue the City of Roseville and its officers, agents, employees and volunteers, and the owners and maintainers of the Site for any and all loss or damage, and any claim or demands therefor on account of injury arising out of or related to visiting the Site.

B. Hereby acknowledges that walking on the trails or unimproved land has inherent risks attendant thereto and involves the risk of serious injury and/or death and/or property damage and voluntarily assumes that risk.

C. Hereby agrees to protect, defend, indemnify and hold harmless the City of Roseville and its officers, agents, employees, volunteers and insurers from any claims, of whatever nature that may arise out of or relate to visiting the Site.

D. Hereby agrees that this Release and Waiver of Liability, Assumption of Risk and Indemnity provision extends to all acts of negligence by the City of Roseville, its officers, agents, employees, or volunteers, or the owners and maintainers of the Site, and is intended to be as broad and inclusive as is permitted by the laws of the City, county and State in which the visitation is conducted and that if any portion thereof is held invalid, the Tribe agrees that the balance shall, notwithstanding, continue in full legal force and effect.

E. Acknowledges and agrees that this release applies to all claims for injuries, damages or losses to the Tribe and its members, officers and each of the persons accessing the Site under this Authorization, real or personal, whether those injuries, damages, or losses are known or unknown, foreseen or unforeseen, or patent or latent, that the Tribe and/or its members, officers and each of the persons accessing the Site under this Authorization may have against City in connection with the visit, and further hereby waives application of California Civil Code Section 1542 on behalf of the Tribe and its members, officers and each of the persons accessing the Site under this Authorization.

I certify that I have read the following provisions of California Civil Code Section 1542:

"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his settlement with the debtor."

And indicate that fact by placing my initials here: _____

8. The City may terminate this Authorization any time by mailing a notice in writing to the Tribe that the Authorization is terminated. Said Authorization shall then be deemed terminated, and the Tribe shall have no further right of access to the Sites.

9. This Authorization shall not be amended, modified, or otherwise changed unless in writing and signed by both parties hereto.

10. This Authorization constitutes the entire understanding and agreement of the parties and supersedes all previous and/or contemporaneous understanding or agreement between the parties with respect to all or any part of the subject matter hereof.

11. This Authorization and all matters relating to it shall be governed by the laws of the State of California and any action brought relating to this Authorization shall be held exclusively in a state court in the County of Sacramento.

12. The person or persons executing this Authorization on behalf of the parties hereto warrants and represents that he/she/they has/have the authority to execute this Authorization on behalf of their entity and has/have the authority to bind their party to the performance of its obligations hereunder.

City of Roseville:

BY: _____

NAME: _____

TITLE: _____

DATE: _____

Tribe:

_____
[NAME OF TRIBE]

I have carefully read this entire Right-of-Access Authorization and understand its terms and their legal significance. The waiver, release and indemnification contained in this document is freely and voluntarily given with the understanding that right to legal proceeding against the

City is knowingly given up in return for allowing the Tribe and its members to visit the Sites identified in this Authorization. My signature is intended not only to bind the Tribe, but also its members, officers and each of the persons accessing the Site under this Authorization, as well as their heirs, administrators, personal representatives and assigns. No oral representations, statements or inducements apart from this written agreement have been made.

BY: _____

NAME: _____

TITLE: _____

DATE: _____

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PART D

General Reference Material

July 2020

CITY OF ROSEVILLE CALIFORNIA

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Preserving America's Heritage

CONSULTATION WITH INDIAN TRIBES IN THE SECTION 106 REVIEW PROCESS: A HANDBOOK

December 2012

An independent federal agency, the Advisory Council on Historic Preservation (ACHP) promotes the preservation, enhancement, and productive use of our nation's historic resources and advises the President and Congress on national historic preservation policy. It also provides a forum for influencing federal activities, programs, and policies that affect historic properties. In addition, the ACHP has a key role in carrying out the Administration's Preserve America initiative.

Milford Wayne Donaldson, of Sacramento, California, is chairman of the 23-member council, which is served by a professional staff with offices in Washington, D.C. For more information about the ACHP, contact:

Advisory Council on Historic Preservation
1100 Pennsylvania Avenue NW, Suite 803
Washington, D.C. 20004
Phone: 202-606-8503
Web site: www.achp.gov

Consultation with Indian Tribes in the Section 106 Review Process: A Handbook

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Office of Native American Affairs
Advisory Council on Historic Preservation

June 2012

I. About This Handbook

Many different statutes, regulations, executive orders, and federal policies direct federal agencies to consult with Indian tribes including the National Historic Preservation Act (NHPA), 16 U.S.C. Section 470f). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and provide the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on those undertakings. The ACHP has issued the regulations implementing Section 106 (Section 106 regulations), 36 CFR Part 800, "Protection of Historic Properties." The NHPA requires that, in carrying out the Section 106 review process, federal agency must consult with any Indian tribe that attaches religious and cultural significance to historic properties that may be affected by the agency's undertakings.

The ACHP offers this handbook as a reference for federal agency staff responsible for compliance with Section 106. Tribal Historic Preservation Officers (THPOs) and tribal cultural resource managers may also find this handbook helpful. Readers should have a basic understanding of the Section 106 review process as this document focuses only on Section 106 tribal consultation. It is not a source for understanding the full breadth of Section 106 responsibilities, such as consulting with State Historic Preservation Officers (SHPOs), involving the public, or consulting with Native Hawaiian organizations (NHOs).[1]

This handbook will be periodically updated by the ACHP when new information is obtained or laws or policies change. Agencies should also supplement this document with their own agency-specific regulations, directives, policies, and guidance pertaining to tribal consultation. Federal agencies should also be aware that many Indian tribes have their own statutes, regulations, and policies that apply to undertakings on tribal lands.

In addition, federal agency staff may refer questions on the Section 106 review process, and the requirements to consult with Indian tribes within this process, to their agency's Federal Preservation Officer (FPO).

Finally, agency staff may obtain assistance from the ACHP in understanding and interpreting the requirements of Section 106, including tribal consultation. For general information on the requirements of Section 106, access the ACHP website at http://www.achp.gov.

For additional questions about tribal consultation, contact:

Office of Native American Affairs
Advisory Council on Historic Preservation
1100 Pennsylvania Ave., NW
Room 803
Washington, DC 20004
native@achp.gov

[1] For information on the requirements to consult with NHOs, visit http://www.achp.gov

II. Federal Government Consultation with Indian Tribes

A. The Government-to-Government Relationship between the United States and Indian Tribes

The federal government's unique relationship with each and every Indian tribe is embodied in the U.S. Constitution, treaties, court decisions, federal statutes, and executive orders. This relationship is deeply rooted in history, dating back to the earliest contact between colonial and tribal governments. As the colonial powers did, the United States acknowledges federally recognized Indian tribes as sovereign nations; thus, their interaction takes place on a "government-to-government" basis.

Legally, there is a distinction between Indian tribes who are federally recognized and those who are not. Federal recognition signifies that the U.S. government acknowledges the political sovereignty and Indian identity of a tribe and from that recognition flows the obligation to conduct dealings with that tribe's leadership on a "government-to-government" basis. When federally recognized tribes speak of "government-to-government" consultation, they are often referring to consultation between a designated tribal representative and a designated representative of the federal government.

Executive Order 13175 (2000), *Consultation and Coordination with Tribal Government*s lists as one of its purposes "to strengthen the United States' government-to-government relationships with Indian tribes…" Thus, the government-to-government consultation process continues to embody the unique relationship between the United States and Indian tribes.

Federal agency staff responsible for carrying out tribal consultation should be familiar with the history of the relationship between the U.S. government and Indian tribes because that history may influence the context of consultation.

B. The Federal Trust Responsibility Toward Indian Tribes

The federal government's trust responsibility emanates from the Constitution, Indian treaties, statutes, case law, executive orders, and the historic relationships between the federal government and Indian tribes. It applies to all federal agencies. Each agency defines the scope of its own trust responsibility towards tribes.

This trust responsibility is rooted, in large part, in the treaties through which Indian tribes ceded large portions of their aboriginal lands to the United States in return for promises to protect tribal rights as self-governing nations within the reserved lands (reservations) and certain reserved rights (i.e. aboriginal hunting, fishing, and gathering rights) to resources outside of those reserved lands.

Trust responsibility is legally construed in different forms, depending on the context in which it is invoked and includes: full fiduciary, which arises in the context of federal agency management of tribal assets; the "Indian canons of statutory construction," by which ambiguities in legislation dealing with tribal issues are to be construed liberally in favor of tribes; and, general, which is fulfilled by a federal agency's compliance with general regulations and statutes.

Each agency defines the scope of its trust responsibility to Indian tribes. The ACHP's trust responsibility is to ensure that its regulations implement the requirements of Section 106 of the National Historic Preservation Act and that such regulations incorporate the procedural requirement that federal agencies consult with Indian tribes that attach religious and cultural significance to historic properties that may be affected by their undertakings.

Questions regarding your agency's trust responsibility to Indian tribes should be directed to your tribal liaison/Native American coordinator or office of general counsel. The ACHP neither defines such a scope for others nor advises agencies on this issue.

C. Legal Requirements and Directives to Consult with Indian Tribes

1) Statutes

A number of federal statutes require federal agencies to consult or coordinate with Indian tribes.[2] This section will address only those applicable in the areas of historic preservation, natural resource protection, and cultural resource protection. It is useful to be familiar with these various statutory requirements not only to ensure compliance, but also to explore opportunities to maximize consultation opportunities. For instance, if a project requires compliance with both the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA), it may be helpful to carry out consultation in a comprehensive manner by including discussions about historic properties and natural resources in the same meetings. (Note: The ACHP regulations at 36 CFR. Section 800.8 set out principles and requirements for coordinating or combining NHPA and NEPA procedures.)

In addition, federal agencies should talk with interested Indian tribes as *early in the planning process as possible* to identify any special legal authorities that carry additional requirements for consultation or consideration, such as a treaty that reserves certain tribal rights that could be impinged upon by a proposed project.

Historic Preservation, Natural Resource Protection, and Cultural Resource Protection Statutes

The following are broad summaries of key federal historic preservation, natural resource protection, and cultural resource protection statutes that require agencies to consult with Indian tribes or accommodate tribal views and practices. This is not an exhaustive list of requirements, nor does it imply that each of these statutes is applicable to each proposed project.

- Amended in 1992, the **National Historic Preservation Act of 1966 (NHPA)** is the basis for tribal consultation in the Section 106 review process. The two amended sections of NHPA that have a direct bearing on the Section 106 review process are:

    - Section 101(d)(6)(A), which clarifies that properties of religious and cultural significance to Indian tribes may be eligible for listing in the National Register of Historic Places; and

    - Section 101(d)(6)(B), which requires that federal agencies, in carrying out their Section 106 responsibilities, consult with any Indian tribe that attaches religious and cultural significance to historic properties that may be affected by an undertaking.

  The Section 106 regulations incorporate these provisions and reflect other directives about tribal consultation from executive orders, presidential memoranda, and other authorities.

    - Section 106 requires federal agencies to consider the effects of their undertakings on historic properties and to provide the ACHP an opportunity to comment. Also known

[2] A list of federal authorities that require tribal consultation was compiled by an interagency working group and is available on the ACHP's webpage at www.achp.gov.

as the Section 106 review process, it seeks to avoid unnecessary harm to historic properties from federal actions. The procedure for meeting Section 106 requirements is defined in the Section 106 regulations, 36 CFR. Part 800, "Protection of Historic Properties."[3]

The Section 106 regulations include both general direction regarding tribal consultation and specific requirements at each stage of the review process. (Section 106 is discussed more fully in the next section, "Consultation with Indian Tribes under Section 106 of NHPA.")

For more information about the NHPA and the ACHP's regulations, visit www.achp.gov

- **The National Environmental Policy Act of 1969 (NEPA)** requires the preparation of an environmental impact statement (EIS) for any proposed major federal action that may significantly affect the quality of the human environment. While the statutory language of NEPA does not mention Indian tribes, the Council on Environmental Quality (CEQ) regulations[4] and guidance[5] do require agencies to contact Indian tribes and provide them with opportunities to participate at various stages in the preparation of an environmental assessment or EIS. CEQ has issued a Memorandum for Tribal Leaders encouraging tribes to participate as cooperating agencies with federal agencies in NEPA reviews.[6]

- **The American Indian Religious Freedom Act of 1978 (AIRFA)** establishes the policy of the federal government "to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including, but not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites."

- **The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA)**, Section 3(c) requires federal land-managing agencies to consult with federally recognized Indian tribes prior the intentional removal or excavation of Native American human remains and other cultural items as defined in NAGPRA from federal lands.

    - On tribal lands, planned excavation requires the consent of the appropriate Indian tribe (43 CFR § 10.3).

  In instances where a proposed project that is funded or licensed by a federal agency may cross federal or tribal lands, it is the federal land managing agency that is responsible for compliance with NAGPRA. Detailed information about NAGPRA and its implementing regulations is available at the National Park Service (NPS) National NAGPRA Web site.[7]

2) Executive Orders

In many instances, presidential executive orders apply to agencies on an agency-wide or program-wide basis rather than on a project-by-project basis. However, staff responsible for working or coordinating with Indian tribal governments should be familiar with the applicable executive orders and act in accordance with the intent of the directives. Several of the orders specific to consultation with federally recognized Indian tribes include:

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[3] Available at http://www.achp.gov/regs-rev04.pdf
[4] Available at http://ceq.hss.doe.gov/nepa/regs/ceq/1506.htm
[5] Available at http://ceq.hss.doe.gov/nepa/regs/ej/justice.pdf
[6] Available at http://ceq.hss.doe.gov/nepa/regs/cooperating/cooperatingagenciesdistributionmemo.html
[7] Available at http://www.cr.nps.gov/nagpra/

- **Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments"** (2000), directs federal agencies to respect tribal self-government and sovereignty, tribal rights, and tribal responsibilities whenever they formulate policies "significantly or uniquely affecting Indian tribal governments." The executive order applies to all federal agencies other than those considered independent federal agencies, encouraging "meaningful and timely" consultation with tribes, and consideration of compliance costs imposed on tribal governments when developing policies or regulations that may affect Indian tribes.

- **Executive Order 13007, "Indian Sacred Sites"** (1996), applies to all federally owned lands except "Indian trust lands." It encourages land managing agencies to:

    - accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners; and

    - avoid adversely affecting the physical integrity of such sites.

- **Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"** (1994), is designed to focus federal attention on the environmental and human health conditions in minority communities and low-income communities. It is also designed to promote non-discrimination in federal programs substantially affecting human health and the environment.

    - Section 6-606 of the order states that, "each federal agency responsibility set forth under this order shall apply equally to Native American programs."

III. Consultation with Indian Tribes in the Section 106 Process

Consultation means the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the Section 106 process.(36 CFR Section 800.16 (f)).

Consultation constitutes more than simply notifying an Indian tribe about a planned undertaking. The ACHP views consultation as a process of communication that may include written correspondence, meetings, telephone conferences, site visits, and e-mails.

The requirements to consult with Indian tribes in the Section 106 review process are derived from the specific language of Section 101(d)(6)(B) of NHPA. They are also based on the unique legal relationship between federally recognized Indian tribes and the federal government embodied in the U.S. Constitution, treaties, court decisions, federal statutes, and executive orders.

Agencies are required to consult with Indian tribes at specific steps in the Section 106 review process. A common misunderstanding is that tribal consultation is only required for undertakings on tribal lands, when, in fact, consultation is also required for undertakings that occur off tribal lands. Tribal consultation for projects off tribal lands is required because the NHPA does not restrict tribal consultation to tribal lands alone and those off tribal lands may be the ancestral homelands of an Indian tribe or tribes, and thus may contain historic properties of religious and cultural significance to them.

A. Role of the Tribal Historic Preservation Officer (THPO)[8] in the Section 106 Process

NHPA's 1992 amendments include provisions for Indian tribes to assume the responsibilities of the State Historic Preservation Officer (SHPO) *on tribal lands*, and establish the position of a Tribal Historic Preservation Officer (THPO). The Section 106 regulations use the term "THPO" to mean the Tribal Historic Preservation Officer under Section 101(d)(2) of the NHPA. *Tribal lands* are defined in the NHPA and the ACHP's regulations (36 CFR Part 800) as, 1) all lands within the exterior boundaries of any Indian reservation; and 2) all dependent Indian communities.[9]

As the tribal counterpart to the SHPO, the THPO may assume some or all of the duties for historic preservation *on tribal lands* that the SHPO performs on private, state, or federal lands. These responsibilities may include maintaining an inventory of historic properties under its jurisdiction and assisting federal agencies in the review of federal undertakings.

THPOs have been delegated authority by the Secretary of the Interior to serve as the historic preservation officer for tribal lands; however, they may not have been designated by their tribal governments to function as the sole point of contact for federal undertakings on and off tribal lands. Therefore, agencies should contact both the tribal governmental leaders and the THPO prior to formal initiation of Section 106 consultation in order to determine the appropriate point(s) of contact.

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[8] The National Park Service (NPS) administers the national THPO program and maintains an up-to-date listing of all tribes who have established 101(d)(2) Tribal Historic Preservation Officers and the contact information of their Tribal Historic Preservation Officers, available at www.nps.gov/history/hps/tribal/thpo.htm

[9] The U.S. Supreme Court decision in *Alaska v. Native Village of Venetie Tribal Government*, 522 U.S. 520 (1998) held that "dependent Indian communities" refers to a limited category of Indian lands that are neither reservations nor allotments and that must satisfy two requirements: first, they must have been set aside by the federal government for the use of the Indians as Indian land; second, they must be under federal superintendence.

Under the Section 106 regulations, a THPO who has assumed Section 106 review functions is subject to the time frames set forth in the Section 106 regulations for responding to requests to review an agency's Section 106 findings and determinations *for undertakings on or affecting tribal lands*. Failure of a THPO to respond when there is such a time frame permits an agency to proceed with its finding or determination, or to consult with the ACHP in the THPO's absence in accordance with the Section 106 regulations. Subsequent involvement by the THPO is not precluded, but the agency is not required reopen a finding or determination that a THPO failed to respond to in a timely manner earlier in the process.

Once a tribe has established a THPO, the SHPO may still participate in consultation for undertakings on tribal lands if: 1) the THPO requests SHPO participation; 2) the undertaking takes place on tribal lands but affects historic properties located off tribal lands; or 3) a non-tribal member who owns lands within the exterior boundaries of a reservation requests that the SHPO participate in Section 106 consultation. This provision, located at Section 101(d)(2)(D)(iii) of NHPA and in the Section 106 regulations at 36 CFR Section 800.3(c)(1), is intended to provide a property owner an opportunity to include the SHPO in the consultation if that property owner feels that his/her interests in historic preservation may not necessarily be represented by the THPO. This inclusion of the SHPO in the consultation *does not*, however, replace the role of the THPO, who still participates fully and retains its Section 106 role. .

B. Role of the THPO: *Off Tribal Lands*

The THPO's role for federal undertakings *off tribal lands* (in other words, on non-tribal lands such as private, state, or federal lands) is different from its role on its own tribal lands. If the proposed undertaking's area of potential effect (APE) is *located outside of the tribal lands it oversees*, the THPO does not supplant the jurisdiction or have the same rights as the SHPO, but rather may serve as the official representative designated by his/her tribe to represent its interests as a consulting party in Section 106 consultation.

C. When there is no THPO

For proposed undertakings *on or affecting the tribal lands* of an Indian tribe that *has not* assumed THPO responsibilities, the federal agency carries out consultation with that tribe's designated representative in addition to—*and on the same basis as*—consultation with the SHPO. The tribe retains the same consultation rights regarding agency findings and determinations, and to execute a Memorandum of Agreement (MOA) or Programmatic Agreement (PA), as it would if it had a THPO.

For proposed undertakings *off tribal lands*, a tribe designates who will represent it in consultation regarding historic properties of religious and cultural significance to it. A tribe that does not have a THPO has the same rights to be a consulting party as tribes that do have THPOs when the proposed federal undertaking is not on or affecting tribal lands.

D. Regulatory Principles and General Directions for Section 106 Tribal Consultation

The procedures for meeting Section 106 requirements are defined in the Section 106 regulations, "Protection of Historic Properties" (36 CFR Part 800).[10] Under the NHPA, "historic properties" are defined as those properties that are listed on the National Register of Historic Places, or are eligible for such listing.

The regulations provide both overall direction as well as specific requirements regarding consultation at each step of the Section 106 review process. The Section 106 regulations at 36 CFR Section 800.2(c)(2)

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[10] Available at http://www.achp.gov/regs-rev04.pdf

outline the following important principles and general directions to federal agencies regarding consultation with tribes:

- The agency shall ensure that consultation provides the Indian tribe a reasonable opportunity to identify its concerns about historic properties; advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance to them; articulate its views on the undertaking's effects on such properties; and participate in the resolution of adverse effects.
- Tribal consultation should commence early in the planning process, in order to identify and discuss relevant preservation issues and plan how to address concerns about confidentiality of information obtained during the consultation process.
- Historic properties of religious and cultural significance to an Indian tribe may be located on ancestral (also referred to as aboriginal) homelands, or on officially ceded lands (lands that were ceded to the U.S. government by the tribe via treaty). In many cases, because of migration or forced removal, Indian tribes may now be located far away from historic properties that still hold such significance for them. Accordingly, the regulations require that agencies make a *reasonable and good-faith effort* [11]to identify Indian tribes that may attach religious and cultural significance to historic properties that may be affected by the undertaking, even if tribes are now located a great distance away from such properties and undertakings.
- The agency official shall ensure that consultation under the Section 106 review process is respectful of tribal sovereignty in conducting consultation and must recognize the government-to-government relationship that exists between the federal government and federally recognized Indian tribes.
- An Indian tribe may enter into an agreement with a federal agency regarding any aspect of tribal participation in the review process. The agreement may specify a tribe's geographic area of interest, types of projects about which they wish to be consulted, or provide the Indian tribe with additional participation or concurrence in agency decisions under Section 106 provided that no modification is made to the roles of other parties without their consent.

The Section 106 regulations recognize an Indian tribe's sovereign authority regarding proposed undertakings *on or affecting its tribal lands* in several ways. The regulations require the federal agency to provide the THPO, as appropriate,[12] an opportunity to review, and thus to concur with or object to, agency findings and determinations. The regulations also require federal agencies to invite the THPO (or designated tribal representative, if the tribe has not assumed THPO duties) to sign a Memorandum Of Agreement (MOA) as well as a Programmatic Agreement (PA). If the THPO/tribe terminates consultation, the ACHP must provide comment to the head of the agency rather than execute an agreement without the tribe.

While the Section 106 regulations are fairly prescriptive in nature, they only direct agencies on what to do and at which stages of the process to engage in consultation. They do not provide direction on how to

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[11] Tips on how to fulfill this requirement are provided under the heading "How do I identify tribes that must be invited to consult," at Section V(A)(3) of this handbook.

[12] Note that the regulations clarify that THPOs and those tribes that do not have a 101(d)(2) THPO have the same rights in the process for undertakings on or affecting tribal lands, for purposes of Section 106. The difference is whether the SHPO participates. Where there is a THPO, the SHPO only participates in consultation if the THPO invites the SHPO to participate, if an undertaking on tribal lands affects a historic property off tribal lands, or if a non-tribal member who owns a parcel within the exterior boundaries of the reservation so requests. For undertakings on tribal lands where there is no THPO, the agency consults with both the designated tribal official and the SHPO.

carry out consultation. Thus, the following questions and answers are intended to clarify the most common questions and issues regarding tribal consultation under the Section 106 review process.

V. General Questions and Answers

The following list of questions is meant to address general issues that commonly arise in the Section 106 review process, typically before an agency begins the review process or very early in the process. Section V addresses questions that might arise at each step of the Section 106 review process.

1) When are federal agencies required to consult with Indian tribes?

The 1992 amendments to NHPA require federal agencies, in carrying out the Section 106 review process, to consult with Indian tribes when a federal undertaking may affect historic properties of traditional religious and cultural significance to them. An "undertaking" means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; or those requiring a federal permit, license or approval. This requirement applies to all undertakings regardless of whether they are located on or off tribal lands.

2) Which Indian tribes must be consulted?

Federally recognized tribes that attach religious and cultural significance to historic properties that may be affected by undertakings must be consulted. Federal agencies must make "a reasonable and good faith" effort[13] to identify each and every such Indian tribe and invite them to be consulting parties.

This includes Indian tribes that no longer reside in a given area but may still have ancestral ties to an area. Many Indian tribes were removed from their homelands, while others traditionally moved from place to place. Consequently, an Indian tribe may very well attach significance to historic properties located in an area where they may not have physically resided for many years. If an Indian tribe that may attach significance to a historic property that may be affected by the undertaking has not been invited by the agency to consult, the tribe may request in writing to be a consulting party. The NHPA and the Section 106 regulations require that the agency grant consulting party status to such a tribe.

3) How would I know if an Indian tribe is federally recognized?

Consult the list maintained by the U.S. Department of the Interior's Bureau of Indian Affairs (BIA).[14] The list is regularly published in the *Federal Register*. Another way to determine if a tribe is federally recognized is to contact BIA headquarters in Washington, D.C. or one of the BIA regional offices throughout the United States.

4) If there are no federally recognized Indian tribes in the state where the project is located, does the agency still have to consult with any tribes?

Even when there are no federally recognized Indian tribes with tribal lands in the state where the project is located, the agency must still make a reasonable and good faith[15] effort to identify and consult with any Indian tribes that attach religious and cultural significance to historic properties that may be affected by the undertaking. The circumstances of history may have resulted in an Indian tribe now being located a great distance from its ancestral homelands and places of importance. Therefore, agencies are required to

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[13] Tips on how to fulfill this requirement are provided under the heading "How do I identify tribes that must be invited to consult," at Section V(A)(3) of this handbook.

[14] Available at http://library.doi.gov/internet/native.html

[15] Tips for fulfilling this requirement are provided under the heading "How do I identify tribes that must be invited to consult," at Section V(A)(3) of this handbook.

identify Indian tribes that may attach religious and cultural significance to historic properties in the area of the undertaking, even if there are no tribes near the area of the undertaking or within the state.

5) What is the federal agency's responsibility to consult with state recognized Indian tribes or tribes who have neither federal nor state recognition?

Under the Section 106 regulations at 36 CFR Section 800.2(c)(5), a federal agency *may* invite such groups to participate in consultation as "additional consulting parties" based on a "demonstrated interest" (discussed below) in the undertaking's effects on historic properties. However, the term "Indian tribe" as it appears in the NHPA refers only to federally recognized Indian tribes, which includes Alaska Native Villages and Village and Regional Corporations. In other words, only federally recognized Indian tribes that attach religious and cultural significance to historic properties that may be affected by the proposed undertaking have a statutory right to be consulting parties in the Section 106 process.

The question of inviting non-federally recognized tribes to participate in consultation can be both complicated and sensitive and thus deserves careful consideration. For example, some tribes may not be federally recognized but may have ancestral ties to an area. Other non-federally recognized tribes may have lost their recognition as a result of federal government actions in the 1950s to terminate relationships with certain tribes.[16] In other cases, such as in California,[17] the situation is complicated because there are more than 100 federally recognized tribes and more than 100 non-federally recognized tribes; again, the result of historical circumstances.

While non-federally recognized tribes do not have a statutory right to be consulting parties in the Section 106 process, the agency may invite them to consult as an "additional consulting party" as provided under the ACHP's regulations at 36 CFR Section 800.2(c)(5), if they have a "demonstrated interest."
The agency should consider whether the non-federally recognized tribe can meet the threshold of a "demonstrated interest"—for example, whether the tribe can demonstrate it has ancestral ties to the area of the undertaking, or that it is concerned with the effects of the undertaking on historic properties for other reasons. In some cases, members of a non-federally recognized tribe may be direct descendants of indigenous peoples who once occupied a particular Native American site to be affected by the undertaking, or they might be able to provide the federal agency with additional information regarding historic properties that should be considered in the review process.

The inclusion of non-federally recognized groups in consultation may raise objections from some federally recognized tribes. Yet, there are other tribes who routinely support the invitation of non-recognized tribes into consultation, recognizing their interests as well.

The ultimate decision on whether to consult with non-federally recognized tribes, however, rests with the federal agency. The decision should be given careful consideration and made in consultation with the SHPO (or if on or affecting tribal lands, with the THPO or designated tribal official). In addition, the federal agency may elicit input on the question from any federally recognized Indian tribes that are consulting parties. If the agency decides that it is inappropriate to invite non-federally recognized tribes to consult as "additional consulting parties," those tribes can still provide their views to the agency as members of the public under 36 CFR Section 800.2(d).

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[16] During the "Termination Period" of the 1950s, Congress ended the federal government's relationship with more than 100 tribes in an attempt to assimilate members of Indian tribes into the broader society. Many, but not all, tribes regained their recognition. Some Indian tribes, however, are still seeking restoration of their federal recognition. For more information on this topic, visit www.epa.gov/indian

[17] For more information about Indian tribes in California, their history, and a list of federally and state recognized tribes, visit the California Native American Heritage Commission website at http://ceres.ca.gov/nanc

6) The federal agency believes a state recognized tribe should be included in the consultation process, but the federally recognized tribes object. How should the agency proceed?

It is important to remember that the federal agency ultimately makes the decision regarding the involvement of other consulting parties, including non-federally recognized tribes. However, reasonable objections raised by any parties should always be considered.

Not granting consulting party status to parties that have a demonstrated interest in the affected historic properties (see 36 CFR Section 800.2(d)) is legally allowable but may not be consistent with the spirit and intent of the Section 106 process. The Section 106 process is intended to provide both the public and certain individuals or groups with the opportunity to provide their views so that the federal agency can make an informed decision. Because non-federally recognized tribes may have information that assists the Section 106 process, consulting with them may enhance the agency's decision-making process.

Rather than denying a party the opportunity to participate in consultation, there may be ways in which every party can be accommodated. For instance, separate consultation meetings can be held, with information and views shared amongst all the consulting parties, as appropriate. However, there may be instances where an Indian tribe's leadership is only willing to share sensitive information with the federal agency (as part of the government-to-government relationship) and not with the other consulting parties, including other tribes. If confidentiality concerns are foreseeable, the federal agency should have a plan in place for how to handle these concerns in accordance with applicable law as the Section 106 process moves forward. Such a plan would also provide parties with clear expectations on how these issues will be handled. The issue of confidentiality is a very important one in Section 106 tribal consultation and is discussed in greater detail at Section V(B)(4) of this handbook.

7) What are appropriate consultation methods for individual undertakings?

The consultation process must provide an Indian tribe a reasonable opportunity to identify its concerns about historic properties; advise on the identification and evaluation of historic properties, including those of religious and cultural significance to the tribe; articulate views on the undertaking's effects on such properties; and participate in the resolution of adverse effects. (See 36 CFR Section 800.2(c)(2)(ii)(A).

Once it has accepted the agency's invitation to consult, the tribal leadership may find it acceptable for consultation to take place between the agency and designated tribal staff, such as the THPO or, if the tribe has not established a THPO, the cultural resource officer, for instance. In some cases tribal leadership may want to remain directly involved in the consultation process as well.

Face-to-face meetings or on-site visits may be the most practical way to conduct consultation. In all cases, consultation should be approached with flexibility that respects the tribe's role within the overall project planning process and facilitates its full participation.

A federal agency and an Indian tribe may enter into an agreement in accordance with the Section 106 regulations at 36 CFR Section 800.2(c)(2)(ii)(E) regarding how Section 106 consultation will take place. Such agreements can cover all potential agency undertakings, or apply only to a specific undertaking. They can establish protocols for carrying out tribal consultation, including how the agency will address tribal concerns about confidentiality of sensitive information. Such agreements also can cover all aspects of the Section 106 process, provided that no modification is made in the roles for other parties to the Section 106 process without their consent. Determining the types of undertakings and the potential geographic project areas on which a tribe wants to be consulted, and how that consultation will take place can lead to tremendous efficiencies for both the federal agency and the Indian tribe. Filing such

agreements with both the appropriate SHPO and the ACHP is required per 36 CFR Section 800.2(c)(2)(ii)(E), and can eliminate questions about tribal consultation when either the SHPO or the ACHP is reviewing a proposed undertaking.

Documentation of consultation is important because it allows consulting parties to more accurately track the stages of the Section 106 process. Federal agencies should document all efforts to initiate consultation with an Indian tribe or tribes, as well as documenting the consultation process once it has begun. Such documentation, in the form of correspondence, telephone logs, e-mails, etc., should be included in the agency's official Section 106 record. Agencies should also keep notes so that the consultation record documents the *content* of consultation meetings, site visits, and phone calls in addition to information about dates and who participated. Doing so allows agencies and consulting parties to review proceedings and correct any errors or omissions, thus facilitating better overall communication. Keeping information confidential can present unique challenges (see Section V(B)(4) of this handbook.

8) Can a federal agency pay for expenses that facilitate consultation with Indian tribes?

Yes, the ACHP encourages federal agencies to take the steps necessary to facilitate tribal participation at all stages of the Section 106 process. These steps may range from scheduling meetings in places and at times that are convenient for Indian tribes, to paying travel expenses for participating tribal representatives. Indeed, agencies are strongly encouraged to use available resources to help overcome financial impediments to effective tribal participation in the Section 106 process. Likewise, if a tribe has consented (in advance and in writing) to allow an applicant for federal assistance or federal permit to carry out tribal consultation, the applicant is encouraged to use available resources to facilitate and support tribal participation. However, federal agencies should not expect to pay a fee to an Indian tribe or any consulting party to provide comments or concurrence in an agency finding or determination.

9) Can a federal agency pay a fee to an Indian tribe for services provided in the Section 106 process?

Yes, though it should be noted that while the ACHP encourages agencies to utilize their resources to facilitate consultation with Indian tribes, this encouragement is not a legal mandate; nor does any portion of the NHPA or the ACHP's regulations require an agency or an applicant to pay for any form of tribal involvement.

However, during the identification and evaluation phase of the Section 106 process when the agency or applicant is carrying out its duty to identify historic properties that may be significant to an Indian tribe, it may ask a tribe for specific information and documentation regarding the location, nature, and condition of individual sites, or even request that a survey be conducted by the tribe. In doing so, the agency or applicant is essentially asking the tribe to fulfill the duties of the agency in a role similar to that of a consultant or contractor. In such cases, the tribe would be justified in requesting payment for its services, just as is appropriate for any other contractor. Since Indian tribes are a recognized source of information regarding historic properties of religious and cultural significance to them, federal agencies should reasonably expect to pay for work carried out by tribes. The agency or applicant is free to refuse just as it may refuse to pay for an archaeological consultant, but the agency still retains the duties of obtaining the necessary information for the identification of historic properties, the evaluation of their National Register eligibility, and the assessment of effects on those historic properties, through reasonable methods.

10) What specific activities might be reimbursed?

Examples of reimbursable costs may include those costs associated with expert consultants to identify and evaluate historic properties as outlined in the immediately preceding answer. This may include field visits

to provide information about specific places or sites, monitoring activities, research associated with historical investigation, documentation production costs, and related travel expenses.

For more information, see "Fees in the Section 106 Review Process" on the ACHP Web site.[18]

11) Aside from applicable federal statutes, are there specific tribal laws the agency must comply with for undertakings on tribal lands?

The agency should be aware that the sovereign status of Indian tribes on their tribal lands may dictate other obligations and requirements in addition to those outlined in Section 106 and other federal laws. Many tribes have developed their own statutes, regulations, and policies that may apply to undertakings on their own lands and federal agency officials, staff, applicants, and contractors must comply with them as applicable. Inquiring about such legal requirements early in the planning process demonstrates a respect for tribal sovereignty.

12) If a proposed undertaking is on tribal lands, but the tribe has not assumed THPO duties, does the agency consult with the tribe's designated representative and the SHPO?

Yes, the agency carries out consultation with the non-THPO Indian tribe regarding undertakings on or affecting that tribe's lands *in addition to—and on the same basis as*—consultation with the SHPO. If the SHPO withdraws from consultation, the agency and the tribal representative may complete the review process with any other consulting parties. While the SHPO may participate in consultation, the tribe maintains the same rights of consultation for agency findings and determinations, and the same rights to be signatories to MOAs and PAs that would apply on their tribal lands, as it would if it had a THPO.

Be aware that some Indian tribes may not wish to consult with the SHPO, thus, requiring the agency to approach consultation with flexibility and understanding. In fact, some tribes may not welcome the SHPO to meetings or site visits on tribal lands, and they are within their rights to do so. However, the agency will still be responsible for carrying out consultation with the SHPO.

13) Can Indian tribes, as well as federal agencies, request ACHP involvement in the Section 106 review process?

Yes. Any party, including Indian tribes, may request that the ACHP review the substance of any federal agency's finding, determination, or decision or the adequacy of an agency's compliance with the Section 106 regulations.

An Indian tribe may request that the ACHP enter the Section 106 review process for any number of reasons, including concerns about the identification, evaluation or assessment of effects on historic properties of religious and cultural significance to them. It may also request ACHP involvement in the resolution of adverse effects or where there are questions about policy, interpretation, or precedent under Section 106 The ACHP has discretion in determining whether to become involved in the process.

14) Does the ACHP have a policy on the treatment of burials that are located on state or private lands (and thus not subject to the disinterment provisions of NAGPRA)?

Yes. On February 23, 2007, the members of the Advisory Council on Historic Preservation unanimously adopted its revised "Policy Statement Regarding the Treatment of Burial Sites, Human Remains and Funerary Objects." This policy is designed to guide federal agencies in making decisions about the

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[18] Available at http://www.achp.gov/regs-fees.html

identification and treatment of burial sites, human remains, and funerary objects encountered in the Section 106 process in various instances including those where federal or state law does not prescribe a course of action. The policy is not exclusively directed toward Native American burials, human remains or funerary objects, but those would be included under the policy. In accordance with Section 106, the policy does not recommend a specific outcome from the consultation process, but rather focuses on issues and perspectives that federal agencies ought to consider when making their Section 106 decisions. The policy is available at http://www.achp.gov/docs/hrpolicy0207.pdf

V. Consultation with Indian Tribes for Proposed Undertakings Off—and On—Tribal Lands

As noted earlier in the handbook, under the NHPA, tribal consultation is required for *all* federal undertakings, regardless of whether the undertaking's Area of Potential Effect (APE) includes federal, tribal, state, or private lands so long as the undertaking may affect historic properties of religious and cultural significance to an Indian tribe. However, different Section 106 consultation requirements do exist, depending on whether the proposed undertaking may affect non-tribal, or tribal, lands.

This section outlines tribal consultation requirements for proposed undertakings that will occur:

- "off" tribal lands (in other words, on non-tribal land such as federal, state, or private lands outside tribal lands);
- "on" or affecting tribal lands. Tribal lands are defined in the NHPA and the Section 106 regulations (36 CFR Part 800) as all lands within the exterior boundaries of any Indian reservation and all dependent Indian communities.[19]
- Where the required steps are the same both off and on (or affecting) tribal lands, a single response is provided.

This section of the handbook is presented to correspond with the Section 106 review process's four steps of initiation, identification, assessment, and resolution.

A. Initiation of the Section 106 Process

1) How would I know if historic properties of traditional religious and cultural significance to Indian tribes may be affected by the proposed undertaking?

Unless such properties have already been identified and the information is readily available, you probably will not know in advance. As with any undertaking that might affect historic properties, you must determine whether the proposed undertaking is generically the kind that might affect historic properties assuming such properties are present. Therefore, if the undertaking is the kind of action that might affect places such as archaeological sites, burial grounds, sacred landscapes or features, ceremonial areas, or plant and animal communities, then you should consult with Indian tribes that might attach significance to such places. Please note that this list of examples is not all-inclusive, as the histories, cultures, and traditions of Indian tribes vary widely. It is through consultation with Indian tribes themselves that such properties can be properly identified and evaluated.

2) If a federal undertaking will not occur on or affect historic properties on tribal lands, is the agency still required to identify Indian tribes and invite them to consult?

Yes, NHPA requires consultation with Indian tribes that may attach religious and cultural significance to historic properties that may be affected by the proposed undertaking, *regardless of the location of the proposed undertaking*. At this stage of the process, the federal agency identifies any Indian tribes that

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[19] The U.S. Supreme Court decision in *Alaska v. Native Village of Venetie Tribal Government*, 522 U.S. 520 (1998) held that "dependent Indian communities" refers to a limited category of Indian lands that are neither reservations nor allotments and that must satisfy two requirements: first, they must have been set aside by the federal government for the use of the Indians as Indian land; second, they must be under federal superintendence.

might attach religious and cultural significance to historic properties that may exist in the proposed undertaking's Area of Potential Effect (APE), and invites them to consult.

3) How do I identify the Indian tribes that must be invited to consult?

a) Off Tribal Lands

Identification of Indian tribes that must be invited to consult could entail a number of initiatives. For instance, it might be useful to check with other federal agencies and their cultural resource specialists in the state or region for a list of tribes with whom they have consulted in past Section 106 reviews. The SHPO and Indian tribes in the region might also be able to suggest which tribes to contact. Other sources for such information may include ethnographies, local histories, experts at local universities, and oral accounts.

While we cannot vouch for their accuracy, certain websites may be useful references as part of a broader agency effort to identify relevant Indian tribes. The National Park Service maintains the Native American Consultation Database (NACD), which may be helpful in identifying Indian tribes with an interest in an area.[20] Other Internet sources include MAPS: GIS Windows on Native Lands, Current Places, and History,[21] which provides maps on current and ancestral locations of Indian lands, and the Library of Congress Indian Land Cessions document Web site,[22] which has information on historic Indian land areas.

National and regional intertribal organizations, such as the National Congress of American Indians,[23] the United South and Eastern Tribes,[24] the National Association of Tribal Historic Preservation Officers,[25] the Michigan Anishinaabek Cultural Preservation and Repatriation Alliance,[26] and the Affiliated Tribes of Northwest Indians[27] may also be able to provide assistance in identifying tribes with ancestral connections to an area.

Keep in mind that identification of Indian tribes with ancestral connections to an area is not a "one stop shopping" endeavor in which any single source can be depended upon to fulfill the agency's legal responsibilities. Agency officials should bear in mind that while Internet sources are convenient and can be useful, their informational content may be incomplete.

Once the agency has identified a tribe or tribes that may attach religious and cultural significance to any historic properties that may exist in the APE, the agency must invite them to consult.

Finally, it is important to remember that documentary or other sources of information that do not clearly support a tribe's assertions should not be used to deny a tribe the opportunity to participate in consultation. A common misunderstanding is that an Indian tribe needs to document its ties to historic properties in the area of the undertaking. Instead, the NHPA requires agencies to consult with <u>any</u> federally recognized Indian tribe that attaches religious and cultural significance to a historic property. It stands to reason that the best source for determining what historic properties have significance for a tribe

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20 Available at http://www.cr.nps.gov/nacd/
21 Available at http://www.kstrom.net/isk/maps/mapmenu.html
22 Available at http://www.memory.loc.gov/ammem/amlaw/lwss-ilc.html
23 Official Web site at http://www.ncai.org
24 Official Web site at http://www.usetinc.org
25 Official Web site at http://www.nathpo.org
26 Official Web site at http://www.macpra.org
27 Official Web site at http://www.atnitribes.org

would be the experts designated by the tribe to determine the tribe's own interest. Such experts might include elders, traditional practitioners, tribal historians, the THPO or tribal cultural resource staff. The tribe will designate the appropriate tribal representative(s) to represent its interests in the Section 106 consultation process.

b) On Tribal Lands

Undertakings on tribal lands that are carried out by a federal agency, that use federal funds, or that require federal approval/licensing/permitting are also subject to Section 106 review. The federal agency will consult with the THPO, or, if the tribe has not assumed THPO duties, with its cultural resource officer, or another designated tribal official. The tribe may also wish to have one or more representative of its tribal government directly involved in the consultation process.

It may be easy to assume that because the proposed undertaking is located on tribal lands, there is no need to identify additional Indian tribes that may attach religious and cultural significance to historic properties within the APE. However, the responsibility for the agency to identify additional tribes that may attach religious and cultural significance to any historic properties within the APE applies *even when an undertaking is on tribal land.* Therefore, the suggestions given above in part (a) of this question are also applicable here.

The need to identify tribes that may attach significance to sites within an APE on another tribe's lands is rooted in history. When the U.S. government established Indian reservations, it often set boundaries where they did not previously exist. Many tribes were removed to reservations far from their traditional homelands and relocated onto the homelands of other tribes. In other instances, territories that were shared by several tribes became the reservation of one exclusively. The end result is the possibility that an undertaking on Tribe A's tribal lands (within the exterior boundaries of its reservation) may contain historic properties that hold religious and cultural significance for Tribe B and Tribe C, as well.

Therefore, the agency carrying out, or providing the funding or approval/licensing/permitting, for the undertaking on Tribe A's tribal lands still has a responsibility to identify any other tribes that may attach religious and cultural significance to historic properties within the proposed undertaking's APE and invite them to consult. Accordingly, it may be necessary to consult with each tribe individually and to do so off the reservation where the undertaking is proposed.

4) Who initiates the consultation process with an Indian tribe?

Consultation with an Indian tribe or tribes should be initiated by the agency official[28] through a letter to the leadership of each tribe, with a copy going to each tribe's THPO, or for a tribe without a THPO, its cultural resource officer. Indian tribes are sovereign nations and their leaders must be shown the same respect and formality given to leaders of other sovereign nations. Since tribal elections often result in changes in leadership, agency officials should contact the tribe prior to executing the letters in order to ascertain that the correspondence is correctly addressed to the appropriate points of contact. It is helpful to follow up such correspondence with direct telephone communication to ensure the letter has been received.

If the agency official has correspondence from tribal leadership designating a person or position within the tribe to act on the tribe's behalf in the Section 106 process, the agency may initiate consultation

[28] As defined in Section 800.2 of the ACHP regulations, an agency official is one who has jurisdiction over the undertaking and takes legal and financial responsibility for Section 106 compliance.

accordingly. It is good practice, in this instance, to send a copy of all correspondence to tribal leadership as well.

5) Can applicants for federal permits or contractors hired by the agency initiate and carry out tribal consultation?

No, federal agencies cannot unilaterally delegate their responsibilities to conduct government-to-government consultation with Indian tribes to non-federal entities. It is important to remember that Indian tribes are sovereign nations and that their relationship with the federal agency exists on a government-to-government basis. For that reason, some Indian tribes may be unwilling to consult with non-federal entities associated with a particular undertaking. Such non-federal entities include applicants[29] for federal permits or assistance (which would include any contractors hired by the applicant), as well as contractors who are not government employees but are hired to perform historic preservation duties for a federal agency. In such cases, the wishes of the tribe for government-to-government consultation must be respected, and the agency must carry out tribal consultation for the undertaking.

However*, if an Indian tribe agrees in advance*, the agency may rely, where appropriate, on an applicant (or the applicant's contractor), or the agency's own historic preservation contractor to carry out day-to-day, project-specific tribal consultation. In order to ensure that the tribe, the agency, and the applicant or contractor all fully understand that the tribe may request the federal agency to step in and assume consultation duties if problems arise, the agency should obtain the tribe's concurrence with the agency's delegation in writing.

Even when an Indian tribe agrees to consult with an applicant, the federal agency remains responsible for ensuring that the consultation process is carried out properly, meeting the letter and spirit of the law, as well as resolving any issues or disputes. Therefore, any agreement between the agency and an Indian tribe documenting the tribe's willingness to consult with a non-federal entity should contain a provision that explains the agency's responsibility to assume consultation responsibilities at the tribe's request. The government-to-government relationship requires that the federal agency is ultimately responsible for tribal consultation.

6) What are the consultation responsibilities for undertakings that involve more than one federal agency?

The Section 106 regulations at 36 CFR Section 800.2 (a)(2) provide that, if more than one agency is involved in an undertaking, some or all of the agencies may designate a lead federal agency who will act on their behalf to fulfill their collective responsibilities under Section 106, including tribal consultation. Those agencies that do not designate a lead agency remain individually responsible for their Section 106 compliance; thus, they each would need to initiate and carry out tribal consultation duties for their Section 106 compliance for their undertaking.

B. Identification of Historic Properties

1) Does the federal agency consult with Indian tribes to carry out identification and evaluation of historic properties?

a) Off Tribal Lands

[29] An applicant may be a state agency, local government, organization, or individual seeking federal assistance, permits, licenses, and other approvals.

Yes, the agency consults with Indian tribes to carry out identification efforts and to evaluate the National Register eligibility of identified properties for proposed undertakings located off tribal lands.

Many agencies assume that agency or contract archaeologists can identify which properties are of significance to which Indian tribes when they conduct archaeological surveys. However, unless an archeologist has been specifically authorized by a tribe to speak on its behalf on the subject, it should not be assumed that the archaeologist possesses the appropriate expertise to determine what properties are or are not of significance to an Indian tribe. The appropriate individual to carry out such a determination is the representative designated by the tribe for this purpose. Identification efforts may include site visits to assist in identifying these types of properties.

The Section 106 regulations state that the agency official shall acknowledge that Indian tribes possess special expertise in assessing the National Register eligibility of historic properties that may possess religious and cultural significance to them (36 CFR § 800.4(c)(1)).

The agency should provide Indian tribes with the same information that is provided to the SHPO during consultation, including information on buildings and other standing structures that may be affected by the proposed undertaking. A common assumption is that Indian tribes are not interested in historic buildings and structures. However, a federal agency should not assume to know what is of significance to a particular tribe unless it has been advised by that tribe. For instance, there may be a historic school in the path of a proposed undertaking. The school might have originally served as an Indian boarding school in its early history and may be of significance to a tribe or tribes.

b) On Tribal Lands

The same points made regarding “off tribal lands” above, apply on tribal lands. In addition, on tribal lands, the agency consults with that tribe’s THPO, or other tribal official designated for this purpose. The tribe may also involve other tribal experts that assist the THPO in both the identification and evaluation of the National Register eligibility of any historic properties. When a tribe has a THPO, the SHPO does not participate in the Section 106 process for proposed undertakings on tribal lands. The few exceptions to this rule occur when the THPO invites the SHPO to participate; when an undertaking on tribal lands affects a historic property located off tribal land; and when a non-tribal member who owns land in fee simple within the exterior boundaries of the tribe's reservation so requests. In those limited instances, the SHPO participates in consultation in addition to the THPO.

If the tribe has not assumed THPO responsibilities, the agency will carry out identification and evaluation in consultation with both the tribe’s cultural resource officer (and any other parties designated by the tribe for this purpose) and the SHPO. In this situation, the tribal cultural resource officer (or other such designated tribal official) has the same rights as a THPO would have in eligibility determinations.

As noted in Section V(A)(3) above, it is possible that the APE for a proposed federal undertaking on one tribe's lands may contain historic properties that are of religious and cultural significance to other tribes. To continue the hypothetical model introduced in Section V(A)(3), a proposed undertaking is located on Tribe A’s tribal lands. Once the agency has identified the other tribes that may attach significance to historic properties within the APE and invited them to consult, the agency must determine the best way to afford those tribes an opportunity to participate in the identification and evaluation of any such historic properties. In such cases, it is the prerogative of Tribe A, in keeping with its status as a sovereign nation, whether to grant access to the APE within its tribal lands to other consulting parties. If Tribe A decides not to grant access, the agency must still consult with the other tribes in order to provide them a reasonable opportunity to identify their concerns about historic properties, advise on the identification and evaluation of historic properties, articulate their views on the undertaking’s effects on such properties, and

participate in the resolution of adverse effects. Accordingly, it may be necessary to consult with each tribe individually and to do so off the reservation.

In such cases, concerns may arise about confidentiality and protection of sensitive information that may be provided to the federal agency by one or more of the consulting parties. This issue is a very important one in Section 106 tribal consultation and is discussed in greater detail in Section (V)(B)(4) of this handbook.

2) How can I identify historic properties that may possess traditional religious and cultural significance to Indian tribes and determine their National Register eligibility?

The identification of those historic properties that are of traditional religious and cultural significance to a tribe must be made by that tribe's designated representative as part of the Section 106 consultation process. This is true regardless of whether the proposed undertaking is off or on tribal lands.

3) What are Traditional Cultural Properties?

The term "Traditional Cultural Property" (TCP) is used in the National Park Services (NPS) Bulletin 38, entitled *"Guidelines for Evaluating and Documenting Traditional Cultural Properties."*[30] That bulletin explains how to identify a property "that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that a) are rooted in that community's history, and b) are important in maintaining the continuing cultural identity of the community." For a TCP to be found eligible for the National Register, it must meet the existing National Register criteria for eligibility as a building, site, structure, object, or district. TCPs are defined only in NPS guidance and are not referenced in any statute or regulation, and **refer to places of importance to any community, not just to Indian tribes.** Therefore, this terminology may be used when an agency is considering whether <u>any</u> property is eligible for the National Register.

Within the Section 106 process, the appropriate terminology for sites of importance to Indian tribes is **"historic property of religious and cultural significance to an Indian tribe.**" Unlike the term TCP, this phrase appears in NHPA and the Section 106 regulations. **It applies (strictly) to tribal sites, unlike the term TCP.** Furthermore, Section 101(d)(6)(A) of the NHPA reminds agencies that historic properties of religious and cultural significance to Indian tribes may be eligible for the National Register. Thus, it is not necessary to use the term TCP when considering whether a site with significance to a tribe is eligible for the National Register as part of the Section 106 process. The NPS Bulletin 38 guidelines are helpful, however, in providing an overview of how National Register criteria are applied.

Another issue with the term TCP is that Bulletin 38 has sometimes been interpreted as requiring an Indian tribe to demonstrate continual use of a site in order for it to be considered a TCP in accordance with Bulletin 38. This requirement could be problematic in that tribal use of a historic property may be dictated by cyclical religious or cultural timeframes that do not comport with mainstream conceptions of "continuous" use; while in many other cases, tribes have been geographically separated from and/or denied access to historic properties of religious and cultural significance to them. It is important to note that under the NHPA and the Section 106 regulations, the determination of a historic property's religious and cultural significance to Indian tribes is **not** tied to continual or physical use of the property.

4) What procedures should be followed if an Indian tribe does not want to divulge information to the federal agency regarding places of traditional religious and cultural significance?

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[30] Available at http://www.cr.nps.gov/nr/publications/bulletins/nrb38/nrb38%20introduction.htm

Many Indian tribes have belief systems that require the location and even the existence of traditional religious and cultural properties not be divulged. It is thus vital that the federal agency work with tribes to identify sensitive locations while respecting tribal desires to withhold specific information about such sites. The ACHP's regulations at 36 CFR Section 800.4(b)(i) state, in part, that "[t]he agency official shall take into account any confidentiality concerns raised by Indian tribes during the identification process."

The NHPA and the Section 106 regulations also provide a vehicle for protecting information that an Indian tribe has disclosed for the purpose of identification and evaluation in the Section 106 process. Section 304 of the NHPA (16 U.S.C. 470w-3(a)) and the regulations at 36 CFR Section 800.11(c)(1) provide that an agency, after consultation with the Secretary of the Interior, "*shall* withhold from disclosure to the public" information about the location, character, or ownership of a historic property when the agency and the Secretary determine that the disclosure of such information may cause a significant invasion of privacy; risk harm to the historic property; or, impede the use of a traditional religious site by practitioners. After such a determination, the Secretary of the Interior will determine who, if anyone, may have access to the information for purposes of the NHPA.

One important caveat: the Section 304 confidentiality provisions only apply to properties that have been determined eligible for the National Register. Thus, it is possible that information disclosed prior to an eligibility determination may not be protected. Therefore, the ACHP suggests that agencies and Indian tribes contact National Register staff for guidance regarding the amount of information and detail needed to make a determination of eligibility when such information might be at risk of disclosure. It may be possible for a tribe to share just enough information for the agency to identify the existence of a site and make a determination of eligibility without compromising the site or the tribe's beliefs. Such information might include general aspects of the historic property's attributes, i.e., that an important yearly ceremony takes place in a certain general location, that quiet is required in an area where spirits reside, that visual impacts will impede the ability to properly perform a required ritual, or that important ceremonial harvesting activities must occur at a particular place, time, or under certain conditions. However, if there are questions about the adequacy of such information in making determinations of eligibility, the National Register staff should be consulted.

Issues of confidentiality and sensitivity of information require flexibility and cooperation among the consulting parties. There may be situations where a tribe is only willing to share information with the federal agency and not with the other non-federal consulting parties. This can challenge the traditional Section 106 process where the federal agency also consults with the SHPO to determine eligibility of properties off tribal lands or on tribal lands where the tribe has not assumed THPO responsibilities. In such cases, it is recommended that the agency promptly talk with the ACHP or the National Register staff about how to resolve such a situation.

5) Is the federal agency required to verify a tribe's determination of significance with archaeological or ethnographic evidence before making a National Register eligibility determination?

No. The agency is not required to verify a tribe's determination that a historic property is of religious and cultural significance to the tribe. The ACHP regulations at 36 CFR 800.4(c)(1) state, in part, that "[t]he agency official shall acknowledge that Indian tribes…possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them." The National Register considers the information obtained from a tribe's recognized expert to be a valid line of evidence in

considering determinations of significance. For additional guidance on making eligibility determinations, the agency should consult with the staff of the National Register.[31]

6) Does the federal agency need to obtain an Indian tribe's concurrence with the agency's determination of National Register eligibility?

a) Off Tribal Lands

No. The agency does not need to obtain an Indian tribe's concurrence with eligibility determinations when the undertaking is not on tribal lands or the affected property is not on tribal lands. The agency only needs the concurrence of the SHPO for a determination and, absent such concurrence, the matter goes to the Keeper of the National Register for final resolution. The federal agency must acknowledge, however, that Indian tribes possess special expertise in assessing the eligibility of historic properties that may be of significance to them, as required in the Section 106 regulations at 36 CFR Section 800.4(c)(1).

Also, if an Indian tribe disagrees with the federal agency's determination of eligibility, the Indian tribe may, per the Section 106 regulations at 36 CFR 800.4(c)(2), ask the ACHP to request that the federal agency obtain a formal eligibility determination from the Keeper of the National Register.

b) On Tribal Lands

On tribal lands, the THPO (or the tribe's designated official) have rights of concurrence on National Register eligibility determinations. If the agency and the THPO/tribal official do not agree on a site's eligibility, the ACHP regulations at 800.4(c)(2) state that the agency shall obtain a determination of eligibility from the Keeper of the National Register.

7) Once the required identification and evaluation efforts are completed, does the federal agency need to consult with an Indian tribe in reaching a finding that there are no historic properties that will be affected by the undertaking, or that there are historic properties present but the undertaking will have no effect on them?

a) Off Tribal Lands

Despite the requirements for tribal consultation up to this point in the process, the agency does not need to consult with an Indian tribe in reaching a finding that there are no historic properties present, or that the proposed undertaking will not affect an identified historic property. However, the agency must provide notification and documentation supporting its finding on these questions to any consulting Indian tribe.

If a consulting tribe disagrees with the agency's finding, it should immediately contact the ACHP and request that the ACHP object to the finding, per CFR 800.4(d)(1)(iii). If, upon the review of the finding, the ACHP also objects to the finding, the ACHP may provide its opinion to the agency official, and, if the ACHP determines the issue warrants it, to the head of the agency. The regulations stipulate that if the ACHP objects to a finding, it must do so within 30 days of the agency's issuance of that finding.

b) On Tribal Lands

On tribal lands, a finding of no historic properties present or no historic properties affected requires the agency to provide the THPO (or designated tribal official, if the tribe has not assumed THPO duties)

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[31] Contact information for National Register headquarters in Washington, D.C., available at http://www.cr.nps.gov/nr/about.htm#contactus

documentation of this finding. The agency also provides this documentation to other consulting parties. Upon receipt of an adequately documented finding, the THPO/tribe has 30 days to object. If the THPO/tribe does not object within 30 days, the agency's Section 106 responsibilities have been fulfilled. If the THPO/tribe does object to the finding, the agency shall either consult with the THPO/tribe to resolve the disagreement, or forward the finding to the ACHP and request that it be reviewed. When the agency makes such a request, it is also required to concurrently notify all consulting parties of the request and make the request and documentation available to the public. The ACHP then has 30 days to review the finding and provide the agency official, and, if the ACHP determines the issue warrants it, the head of the agency, with the ACHP's opinion regarding the finding.

C. Assessment of Adverse Effects

1) Which parties does the federal agency consult with to apply the criteria of adverse effect to historic properties within the APE?
a) Off Tribal Lands

The agency consults with the SHPO and Indian tribes in applying the criteria of adverse effect to historic properties within the APE. Again, federal agencies must recognize the special expertise of Indian tribes to determine the religious and cultural significance of historic properties to them per 36 CFR 800.4(c)(1), and 36 CFR 800.5(a) requires that agencies apply the criteria of adverse effect in consultation with Indian tribes. Therefore, in assessing how a proposed undertaking might affect historic properties of religious and cultural significance to tribes located off tribal lands, federal agencies need to consider the views of tribes.

b) On Tribal Lands

On tribal lands, the agency consults with the THPO (or the designated tribal representative and the SHPO if the tribe has not assumed THPO duties)—and with any other Indian tribe that attaches religious and cultural significance to identified historic properties within the APE—in applying the criteria of adverse effect to historic properties, as is required by 36 CFR 800.5(a).

2) When proposing a finding of "no adverse effect," does the federal agency consult with Indian tribes?

a) Off Tribal Lands

No, the agency consults with the SHPO in proposing a finding of "no adverse effect," but notifies consulting parties such as Indian tribes, and provides them with documentation supporting that finding. The agency is encouraged, but not required, to seek the concurrence of Indian tribes that attach religious and cultural significance to the historic property subject to the finding.

b) On Tribal Lands

The agency consults with the THPO (or designated tribal official and the SHPO if the tribe has not assumed THPO duties) in proposing a finding of "no adverse effect," and provides other consulting parties with documentation supporting that finding, as described above.

3) What happens if an Indian tribe disagrees with a finding of "no adverse effect"?

a) Off Tribal Lands

If a consulting Indian tribe disagrees with a proposed agency finding of "no adverse effect," it must specify the reasons for its objection in writing within 30 days of receipt of the agency's issuance of the proposed finding. Once a timely written objection is received, the agency must either consult with the objecting tribe to resolve the disagreement or request ACHP review of the "no adverse effect" finding, per 36 CFR 800.5(c)(2)(i). The agency must concurrently notify all other consulting parties that it has requested ACHP review of the finding.

Consulting Indian tribes can make a direct request to the ACHP to review the finding, specifying, in writing and within the 30 day review period, the reasons for its objection, per 36 CFR 800.5(c)(2)(iii).

After review of the objection, the ACHP may provide its opinion to the agency official, and, if the ACHP determines the issue warrants it, to the head of the agency. The regulations stipulate that if the ACHP objects to a finding on its own initiative, it must do so within 30 days of receipt of the agency's issuance of that finding.

b) On Tribal Lands

If the THPO (or designated tribal official if the tribe has not assumed THPO duties) disagrees with a finding of "no adverse effect" within the 30 day review period, the THPO notifies the agency in writing that it disagrees and specifies the reasons for the disagreement like any other consulting party. Once a timely written objection is received, the agency must either consult with the THPO to resolve the disagreement or request ACHP review of the "no adverse effect" finding. The agency must concurrently notify all other consulting parties that it has requested ACHP review of the finding.

Consulting parties have the same rights to disagree with a "no adverse effect" finding on tribal lands as they do off tribal lands. Should another Indian tribe that is a consulting party (i.e., a tribe who attaches religious and cultural significance to a historic property located on another tribe's lands) object to a finding of "no adverse effect," that tribe may, just as in the case for non-tribal lands (above), file an written objection with the federal agency within the 30 day review period. Again, once a timely written objection is received from any consulting party, the agency must either consult with the objecting tribe to resolve the disagreement or request ACHP review of the "no adverse effect" finding, per 36 CFR 800.5(c)(2)(i). The agency must concurrently notify all other consulting parties that it has requested ACHP review of the finding.

Just as is the case off tribal lands, consulting Indian tribes can also make a direct request to the ACHP to review the finding, specifying, in writing and within the 30 day review period, the reasons for its objection, per 36 CFR 800.5(c)(2)(iii).

Regardless of whether the THPO (or designated tribal official) or a consulting party makes the objection to the agency finding, the ACHP's response is the same: after review of the finding, the ACHP may provide its opinion to the agency official, and, if the ACHP determines the issue warrants it, to the head of the agency. The regulations stipulate that if the ACHP objects to a finding on its own initiative, it must do so within 30 days of receipt of the agency's issuance of that finding.

D. Resolution of Adverse Effects

1) Which parties does the federal agency consult with to develop and evaluate alternatives or modifications to the undertakings to avoid, minimize, or mitigate adverse effects?

a) Off Tribal Lands

The agency consults with the SHPO, Indian tribes, and other consulting parties at this phase of the Section 106 process. The agency must provide project documentation to all consulting parties and invite the ACHP into consultation. Any consulting party may request ACHP participation in consultation to facilitate the resolution of adverse effects.

In fact, the Section 106 regulations at 36 CFR Section 800.2(b) stipulate that the ACHP may enter into the consultation at any point in the Section 106 process without invitation when it determines that its involvement is necessary to ensure that the purposes of Section 106 are met. As specified in Appendix A to 36 CFR Part 800, the ACHP may elect to enter the consultation if, among other things, an undertaking presents issues of concern to Indian tribes.

b) On Tribal Lands

On tribal lands, the process and requirements are the same as for proposed undertakings off tribal lands, except that agency consults with the THPO (or designated tribal official and SHPO if the tribe has not assumed THPO duties), and other consulting parties. Again, the agency should continue to be cognizant of any confidentiality issues—see the discussion of confidentiality at Section V(B)(4) of this handbook.

2) What happens if agreement is reached on how to resolve adverse effects?

a) Off Tribal Lands

If agreement is reached, the agency, SHPO and consulting parties, including Indian tribes, develop a Section 106 memorandum of agreement (MOA) or programmatic agreement (PA) outlining how the adverse effects will be addressed

b) On Tribal Lands

The agency and the THPO (or designated tribal official and the SHPO, if the tribe has not assumed THPO duties) and consulting parties develop an MOA or a PA outlining how the adverse effects will be addressed (the decision to prepare a PA requires the agency to invite the ACHP to participate). The agency must invite the THPO/tribe to be a signatory to an MOA or PA. 36 CFR 800.2(c)(2)(ii)(F) provides that an Indian tribe that has not assumed THPO duties may notify the agency in writing that it is waiving its rights to execute an MOA for undertakings on its tribal lands.

3) Is the federal agency obligated to invite an Indian tribe to be a signatory or a concurring party to an MOA or PA?

a) Off Tribal Lands

No, the agency may, but is not required to, invite an Indian tribe to become a signatory or concurring party when the undertaking or affected historic properties are not on tribal lands. A signatory to an MOA or PA possesses the same rights with regard to seeking amendments to or terminating the agreement as all other signatories, which include the agency official, the SHPO, and the ACHP, if participating. Those that sign as a concurring party do not have such rights to amend or terminate the MOA or PA. Refusal by an Indian tribe to become a signatory or concurring party to an MOA or PA for an undertaking on non-tribal lands, however, does not invalidate it. Certainly, agencies are encouraged to invite Indian tribes that attach religious and cultural significance to affected historic properties to sign the agreement. If a tribe is assuming review or other responsibilities under the MOA or PA, the agency should consider inviting the tribe to become a signatory.

b) On Tribal Lands

MOAs and PAs for undertakings on tribal lands require that the THPO (or the designated tribal official if the tribe has not assumed THPO duties) be a signatory, with the same rights to seeking amendments to or terminating the agreement as all other signatories. The agency and the signatories may invite other consulting parties to be signatories or sign as concurring parties. Those that sign as a concurring party do not have such rights to amend or terminate the MOA or PA. 36 CFR 800.2(c)(2)(ii)(F) provides that an Indian tribe that has not assumed THPO duties may notify the agency in writing that it is waiving its rights to execute an MOA for undertakings on its tribal lands.

4) What happens if agreement is not reached on how to resolve adverse effects?

a) Off Tribal Lands

If agreement is not reached, the agency, the SHPO, or the ACHP (if participating), may terminate consultation. Other consulting parties, including Indian tribes, may decline to participate, but they cannot terminate consultation. After consultation is terminated, the ACHP prepares its formal comments to the head of the agency, who must consider the ACHP's comments in reaching a final decision. Per the Section 106 regulations at 36 CFR Section 800.7 (c), the ACHP must provide an opportunity for the agency, all consulting parties, and the public to provide their views to the ACHP during the time in which the comments are being developed. When the ACHP issues comments, it means the full ACHP membership issues the comments, not the ACHP staff. In addition to providing the comments to the head of the agency, the ACHP shall provide copies of those comments to each of the consulting parties. Once the head of the agency has received the ACHP's comments, he or she is required to prepare a summary of his or her final decision regarding the proposed federal undertaking that contains both the rationale for its decision as well as evidence that it had considered the ACHP's comments when making that decision. In addition, the agency must provide copies of this summary to all consulting parties.

b) On Tribal Lands

If the agency and the THPO (or designated tribal official, if the tribe has not assumed THPO duties) fail to agree, the agency must invite the ACHP to join the consultation.

The THPO/tribe may determine that further consultation will not be productive and terminate consultation. The THPO/tribe must then notify the agency and other consulting parties of the determination and the reasons for terminating. The ACHP must then issue its comments to the head of the agency when the THPO/tribe terminates consultation because the federal agency and the ACHP cannot execute an agreement without the THPO/tribe for undertakings on or affecting historic properties on tribal lands. The procedure for the development of the ACHP's comments and the requirements to provide copies of both ACHP comments and the agency's summary of its final decision to consulting parties is identical to that explained in answer A) (above) for undertakings affecting historic properties off tribal lands.

5) When an undertaking takes place or affects historic properties on tribal lands, can a Section 106 agreement be concluded between the federal agency and the Indian tribe when the SHPO opts out of consultation, even though the designated tribal representative is not a THPO?

Yes, an agreement can be concluded in this circumstance because such a tribe has the same rights as a THPO, per 36 CFR 800.2(c)(2)(i)(B). An Indian tribe may reach agreement with a federal agency on the terms of a Section 106 agreement (MOA or PA). Execution of the agreement by a designated tribal

representative and the agency (along with filing the agreement with the ACHP), and agency compliance with the terms of the agreement, would complete the Section 106 process.

VI. Consultation Tools

While federal authorities direct agencies to consult and coordinate with Indian tribes on proposed actions, little guidance exists on how to carry out such consultation. On a national level, such guidance is general because of the differences between federal agencies, Indian tribes, and local circumstances.

Agreements

The Section 106 regulations at 36 CFR Section 800.2©(2)(ii)(E) provide for agreements between federal agencies and Indian tribes that tailor how consultation will be carried out. Such agreements are not project-specific but, instead, are more general and are focused on the relationship between an agency and an Indian tribe. An agreement can cover all aspects of the consultation process and could grant an Indian tribe additional rights to participate or concur in agency decisions in the Section 106 process beyond those specified in the regulations. The only restriction on the scope of such agreements is that the role of other parties in the process may not be modified without their consent.

A common misunderstanding is that such agreements are required before an agency and a tribe can enter into Section 106 consultation for individual undertakings. In fact, consultation agreements are not required but are meant to facilitate consultation.

A number of federal agencies have entered into such agreements with Indian tribes as a means not only to ensure that consultation would be carried out to the satisfaction of both parties but also as a workload management tool. Agreements can outline the areas of a state or region in which a tribe has an interest or the types of undertakings that might not require consultation with the tribe.

If an Indian tribe agrees in advance to such delegation, an agreement with the tribe would be the vehicle through which an agency could delegate the day-to-day consultation and coordination with the tribe to an applicant.[32] The agreement itself illustrates recognition of the government-to-government relationship between the federal agency and an Indian tribe. However, absent prior agreement by a tribe, an agency cannot delegate its government-to-government consultation responsibilities to an applicant.

The negotiation process to develop an agreement with an Indian tribe does not require participation by any other parties outside of the agency (there may be other entities within the agency, such as the agency's office of legal counsel that must participate). These agreements are, in fact, between the federal government and a sovereign nation. Therefore, unless the tribe agrees, it would be inappropriate to invite another party to participate. The only requirements for such agreements under the ACHP's regulations are that:

- the role of other parties is not modified without their consent; and
- the agreement is filed with both the ACHP and appropriate SHPO.

Summits and Meetings

Some agencies have hosted summits with Indian tribes and continue to do so on a regular basis. These meetings provide a means for agencies to share information about proposed undertakings and for Indian

[32] An applicant may be a state agency, local government, organization, or individual seeking federal assistance, permits, licenses, and other approvals.

tribes to voice their views and talk with agency personnel. They also serve to develop trust and build relationships.

Some agencies host annual or regular meetings with Indian tribes to ensure that the consultation relationships are working and to address any outstanding issues. These gatherings are separate from Section 106 consultation meetings. They provide a forum for airing more general concerns, a means for recharging the relationship, and an opportunity to meet new agency personnel and tribal representatives.

Guidance Materials and Training

Many agencies have published or are currently developing various guidance materials for their staff and leadership on consultation with Indian tribes. Most of these materials are intended to serve as department or agency-wide guidance.

Training is also extremely useful in that it ensures that both federal agencies and Indian tribes have a common understanding of legal requirements, organizational structures, decision-making, and other important mechanics of the consultation relationship. Training can also address cultural issues to help foster greater mutual understanding. Some agencies have hosted joint training sessions, while others require new personnel to receive training specific to their new duties. For instance, the ACHP has an internal requirement to train all staff and members regarding tribal consultation within the Section 106 process.

On-line training resources are also becoming more prevalent. The ACHP played a large role, along with several other departments and agencies,[33] in the development of the "Working Effectively With Tribal Governments" on-line training program that is available through the U.S. Office of Personnel Management's GoLearn website.[34] This course provides content useful to all federal employees, including information essential to understanding the unique political status of federally recognized Indian tribes, an overview of federal Indian law and polices, and cultural information that can increase the quality of cross-cultural communications. Other agencies have developed agency specific on-line training, such as the course that the Federal Emergency Management Agency (FEMA) has developed for its employees on working with Indian tribes.

VII. Principles and Tips for Successful Consultation

The key to success in any consultation relationship is building trust, having common goals, and remaining flexible. There is no "one size fits all" model for consultation with Indian tribes—all tribes are unique, and different undertakings present different challenges. There are, however, central principles that should be kept in mind when conducting tribal consultation and this final section of the Tribal Consultation Handbook provides helpful tips on how to put them into practice.

Respect is Essential

- Be respectful of tribal sovereignty.

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[33] Other federal departments and agencies involved in the development of the "Working Effectively With Tribal Governments" on-line training course include the Environmental Protection Agency, the Department of Justice, the Department of Interior, the U.S. Forest Service, the Small Business Administration, the General Services Administration, the Department of Health and Human Services and the Department of Energy.

[34] Available at: http://www.golearn.gov

- Become aware of tribal conventions and protocols and follow them; respect tribal customs.

- Dress respectfully. Do not wear shorts, short skirts, sleeveless shirts, or shirts with plunging necklines to meetings. Check with your tribal contact as to appropriate dress for site visits or tribal events.

- Do not take photographs without obtaining permission first.

- Behavior you may perceive as normal may be insulting or offensive to others. For example, some tribes consider pointing one's finger to be offensive, and consider a gentle handshake a sign of respect instead of a sign of weakness. Consider native perspectives and values. When in doubt, ask respectfully.

- Tribal leaders have many duties; be aware of this fact and do not demand that everyone adhere to your deadline. Instead, explain why your deadline exists, who set it, and why it is important. Above all, strive to be as flexible as possible. Look for ways to work cooperatively, because this is your undertaking and consultation is your responsibility.

- Be sensitive to time and costs. A tribe's lack of human and financial resources may impede its representatives' ability to respond quickly or travel to meetings. Make an effort to facilitate and support consultation with available agency resources.

- Do not voice your opinion on what is best for the tribe; that is for tribal leaders to determine.

- Be mindful of the significance of history. The history of U.S. government relations with Indian tribes may color current perceptions and attitudes and cause distrust or suspicion. Take the time to learn about the unique history of the tribe you are consulting with.

Communication is Key

- Communicate with tribal representatives directly whenever possible—do not rely solely on letters. Follow up written correspondence by phone or in person. Create documentation of your communications, such as notes on the content of discussions, keep phone logs, etc.

- Do not expect quick answers. Tribal officials may need time to consult with others, including tribal councils or the head of the tribal government. Make sure you understand the timelines for tribal decision-making.

- Do not assume silence means concurrence; it could signal disagreement. Always verify views with the official tribal representative.

- Always ask tribal representatives about their preferred way of doing business and any specific tribal protocols for meetings. Be aware that the cultural norms of tribal citizens may be different from yours, and that each of the more than 560 Indian tribes has a unique culture and heritage.

- Do not assume everyone is the same. For example, traditional cultural authorities may sometimes have perspectives that differ from those of their tribal governments. It is important to listen to all consultation participants, but also to be sure that you understand the position of the elected tribal leadership on every issue.

- Develop points of contact through the tribal government. Do research ahead of time to find out whom you will be consulting with and their tribal positions, then make the effort to get to know them. Tribal governments may consist of elected leadership (tribal leader, tribal council, tribal courts), traditional leaders (treaty councils, tribal elders, spiritual leaders), and tribal administration (program managers, administrators, and staff).

- Be mindful of appropriate behaviors—be sure to demonstrate respect to tribal leaders just as you would to a leader of a foreign nation. Always show deference toward tribal elders and allow them plenty of time to speak first. Do not interrupt or raise your voice. Learn by observation and by talking to others. Again, when in doubt, ask respectfully.

Consultation: Early and Often

- Make sure you identify and initiate consultation with tribes at the ***start*** of the planning process for your agency's undertaking.

- Suggest a process for consultation and discuss it with the tribes. Collaborate in a way that accommodates tribal protocols and schedules. The ACHP regulations at 36 CFR Section 800.2(c)(2)(ii)(E) provide for agreements with tribes that set out procedures for Section 106 consultation and can address tribal concerns about confidentiality of information.

- Consider establishing an on-going working group that can provide continuity for future undertakings by your agency.

- Focus on partnerships rather than on project-by-project coordination.

- Remember to document all correspondence, follow-up telephone calls, consultation meetings and visits to project sites and reservations. Be sure to include the content of your communications in your documentation.

- Find out if the tribal leadership wants to receive additional copies of all the consultation materials and documentation that you are providing to the tribe's designated representative (THPO, or cultural resources staff person) as part of your consultation.

- Ask tribal representatives to keep you up-to-date on any changes to tribal postal or email addresses and contact information for new tribal leadership.

Effective Meetings are a Primary Component of Successful Consultation

- Develop an understanding of the tribe's decision-making process and get to know its decision makers.

- Offer to go on-site with traditional authorities. Some people may be uncomfortable relying solely on maps, and site visits may stimulate consideration of alternatives.

- Do not create expectations or make commitments that you are unable or unwilling to fulfill. Before entering into consultation, be certain that what you are negotiating is supported by the Office of General Counsel or Solicitor of your agency, and anyone else who will need to review and approve your position.

- Do not set your own meeting agenda without consulting with tribal representatives to learn what they expect the process and substance to be. Tribes may have their own ways of conducting meetings.

- Inform tribal representatives in advance of the meeting's goal and what needs to be accomplished in the time you have, so that participants can stay focused. Like you, tribal representatives are there to work and accomplish results.

- Give plenty of notice beforehand so that tribal representatives have adequate time to prepare. Provide participants with maps, hotel information, a list of all attendees, an agenda, and most importantly, complete project documentation.

- Speak to tribal members by phone beforehand so that you know who will be attending the meeting. Allow tribes to send as many representatives as they wish, but explain any limitations that your agency may have with funding travel.

- Check if anyone has special needs. Some tribal elders may need special accommodations.

- Offer the tribal participants the opportunity to make an opening or welcoming statement.

- Make sure you invite tribal representatives to sit at the table with you, and introduce all participants with their proper titles. Check with your tribal contact beforehand so you know if certain officials or elders should be introduced and acknowledged first.

- Review your agency's mission and operations at the start of the meeting. Do not assume that everyone knows how your agency functions or is familiar with all of the programs it oversees.
- Take accurate notes during the meeting, or, ***if the tribe agrees in advance***, arrange for meetings to be recorded (it is still advisable to take notes to avoid problems should a recording be lost or damaged). It is important to document not only that you have consulted with the tribe, but the substance of the meeting and the views and concerns expressed by the tribe, as well. Be sensitive to the issue of confidentiality, which may require that you switch the recorder off, or to omit certain sensitive information from your notes if the tribe so requests. Documenting meeting content ensures that participants can later review and correct any inaccuracies, and also provides the agency with a solid consultation record.

- Remember that consent by one tribal member does not necessarily mean consent by the tribe. Make sure that the tribe's governing body has approved final decisions.

- Be prepared on the issues and be open to tribal perspectives.

Conclusion

We hope this handbook has been helpful. If needed, you may obtain further assistance from the ACHP in understanding and interpreting the requirements of Section 106, including tribal consultation. For general information, please visit the ACHP web site at www.achp.gov.

Preserving America's Heritage

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Preserving America's Heritage

MEETING THE "REASONABLE AND GOOD FAITH" IDENTIFICATION STANDARD IN SECTION 106 REVIEW

The regulations implementing Section 106 of the National Historic Preservation Act ("Protection of Historic Properties," 36 CFR Part 800) require federal agencies to identify historic properties within the Area of Potential Effects (APE) that may be affected by their undertakings. Section 800.4(b)(1) of these regulations states that federal agency officials shall make a "reasonable and good faith effort" to identify historic properties.

The ACHP is regularly asked how to determine when an adequate identification effort has been made—that is, at what point a federal agency has made a reasonable and good faith effort to determine whether historic properties are located within an undertaking's APE, which is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." Answering this question requires an understanding of what the ACHP's regulations say regarding the identification of historic properties.

Prior to beginning the identification stage in the Section 106 process, the regulations (at 36 CFR § 800.4) require the federal agency to do the following:

- Determine and document the APE in order to define where the agency will look for historic properties that may be directly or indirectly affected by the undertaking;
- Review existing information on known and potential historic properties within the APE, so the agency will have current data on what can be expected, or may be encountered, within the APE;
- Seek information from others who may have knowledge of historic properties in the area. This includes the State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer (THPO) and, as appropriate, Indian tribes or Native Hawaiian organizations who may have concerns about historic properties of religious and cultural significance to them within the APE.

Following these initial steps, the regulations (36 CFR § 800.4(b)(1)) set out several factors the agency must consider in determining what is a "reasonable and good faith effort" to identify historic properties. They call for the agency official to "take into account past planning, research and studies; the magnitude and nature of the undertaking and the degree of federal involvement; the nature and extent of potential effects on historic properties; and the likely nature and location of historic properties within the APE. The Secretary of the Interior's standards and guidelines for identification provide guidance on this subject. The agency official should also consider other applicable professional, state, tribal, and local laws, standards, and guidelines. The regulations note that a reasonable and good faith effort may consist of or include "background research, consultation, oral history interviews, sample field investigation, and field survey."

When asked to provide its advisory opinion (pursuant to 36 CFR § 800.2(b)(2)) on the adequacy of a specific identification effort, the ACHP will evaluate the agency's efforts in light of these factors and the following criteria.

1. The identification effort is reasonable when it is logically designed to identify eligible properties that may be affected by the undertaking, without being excessive or inadequate in light of the factors cited above. While it may be appropriate in some circumstances to identify all historic properties in the APE, it is important to note that the regulations *do not require* identification of all properties. A reasonable identification plan is one that includes the following:

- Documentation of the horizontal and vertical extent of the APE that accounts for direct and indirect effects;
- An explanation of how the factors cited above inform the content and intensity of the identification plan. This could include information on past work in the area, scope of federal involvement in the undertaking, and the undertaking's magnitude and anticipated effects on any historic properties that might exist in the APE;
- A review of existing information on historic properties within the APE, including information about possible historic properties not yet identified;
- A cognizance of applicable professional, state, tribal, and local laws, standards, and guidelines;
- A familiarity with methodologies used in other historic property surveys in the area that have been effective in terms of time and cost;
- A clear description of the steps that will be taken during field investigations, during the analysis of field results, and in the subsequent reporting and consultation, to determine the presence or absence of historic properties within the APE.

2. The identification effort is carried out in good faith when it is fully implemented by or on behalf of the federal agency. An identification plan that is appropriate to the nature and scale of the undertaking is carried out in good faith when it meets the following criteria:

- The plan is carried out in consultation with, as appropriate, the SHPO, THPO, and any Indian tribe or Native Hawaiian organization that might attach religious and cultural significance to historic properties within the APE;
- Is initiated in a timely manner that allows for appropriate analysis and reporting, with adequate time for review by the consulting parties;
- Is carried out by a qualified individual or individuals who meet the Secretary of the Interior's qualification standards and have a demonstrated familiarity with the range of potentially historic properties that may be encountered, and their characteristics;
- Acknowledges the special expertise possessed by Indian tribes and Native Hawaiian organizations in assessing the eligibility of historic properties that may possess religious and cultural significance to them (regardless of whether or not such tribes and organizations meet the Secretary's qualification standards);
- Is fully supported by adequate funding and other necessary resources, and
- Is not compromised by lack of integrity or omission, such as manipulating or ignoring evidence.

Note that the regulations require that a reasonable and good faith effort to identify historic properties *include some level of effort*—at a minimum, a review of existing information on historic properties that are located or may be located within the APE (36 CFR § 800.4(a)(2)). Such an effort may consist of one or more methodologies and should be designed so that the federal agency can ensure that it produces enough information, in enough detail, to determine what the undertaking's effects will likely be on historic properties.

It is also important to keep in mind what a reasonable and good faith identification effort does *not* require:

- The "approval" of a SHPO/THPO or other consulting party. The ACHP, SHPO/THPO and other consulting parties advise and assist the federal agency official in developing its identification efforts, but do not dictate its scope or intensity.
- Identification of every historic property within the APE. One of the reasons the ACHP's regulations contain a post-review discovery provision (36 CFR § 800.13) is that a reasonable and good faith effort to identify historic properties may well not be exhaustive and, therefore, some properties might be identified as the project is implemented.
- Investigations outside of, or below, a properly documented APE. The Section 106 process does not require that the agency search for all historic properties in a given area. Because the APE defines the geographic limits of federal agency responsibility for purposes of Section 106 review, identification efforts are carried out within its boundaries.
- Ground verification of the entire APE. In many cases, areas can be considered to have a certain probability of containing historic properties based on current knowledge. This or similar characterizations can be used to justify where within the APE most identification efforts will or should be targeted. Predictive models that have been tested and found to be reasonably efficient can also assist federal agencies to meet the "reasonable and good faith" identification standard.

In sum, the Section 106 regulations require federal agencies to make a "reasonable and good faith effort" to identify historic properties that may be affected by their undertakings. The regulations set out several factors that need to be considered in making the effort both *reasonable* in terms of intensity and scale, and carried out in *good faith* through its development and execution. The ACHP's online archaeology guidance provides further detailed discussion on how these factors can be applied to archaeological sites to ensure Section 106 identification plans are adequate and appropriate to a given situation (http://www.achp.gov/archguide/). The ACHP's professional staff is also available to assist agencies, SHPOs/THPOs, consultants, and contractors in interpreting the reasonable and good faith standard when questions or disputes arise.

NATIONAL REGISTER BULLETIN

Technical information on the the National Register of Historic Places: survey, evaluation, registration, and preservation of cultural resources

U.S. Department of the Interior
National Park Service
Cultural Resources
National Register, History and Education

Guidelines for Evaluating and Documenting Traditional Cultural Properties

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to tribes.

This material is partially based upon work conducted under a cooperative agreement with the National Conference of State Historic Preservation Officers and the U.S. Department of the Interior.

Cover photographs:

Many traditional cultural properties are used for practical purposes by those who value them. This sedge preserve in northern California, for example, is tended and harvested by Pomo Indian basketmakers as a vital source of material for making their world famous baskets. The preserve was established at Lake Sonoma by the U.S. Army Corps of Engineers. (Richard Lerner)

This bedrock mortar in central California plays an essential role in processing Black Oak acorns. (Theodoratus Cultural Research)

NATIONAL REGISTER BULLETIN

GUIDELINES FOR EVALUATING AND DOCUMENTING TRADITIONAL CULTURAL PROPERTIES

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U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL REGISTER, HISTORY AND EDUCATION
NATIONAL REGISTER OF HISTORIC PLACES

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I. INTRODUCTION

WHAT ARE TRADITIONAL CULTURAL PROPERTIES?

The National Register of Historic Places contains a wide range of historic property types, reflecting the diversity of the nation's history and culture. Buildings, structures, and sites; groups of buildings, structures or sites forming historic districts; landscapes; and individual objects are all included in the Register if they meet the criteria specified in the National Register's Criteria for Evaluation (36 CFR 60.4). Such properties reflect many kinds of significance in architecture, history, archeology, engineering, and culture.

There are many definitions of the word "culture," but in the National Register programs the word is understood to mean the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the people of the nation as a whole.[1]

One kind of cultural significance a property may possess, and that may make it eligible for inclusion in the Register, is *traditional cultural significance.* "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Examples of properties possessing such significance include:

- a location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
- a rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
- an urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
- a location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and
- a location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

A traditional cultural property, then, can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. Various kinds of traditional cultural properties will be discussed, illustrated, and related specifically to the National Register Criteria later in this bulletin.

[1] For a detailed definition, see Appendix I.

Numerous African Americans left the South to migrate to the Midwest. The A.M.E. Church (on left) and District No. 1 School remain in Nicodemus Historic District in Nicodemus, Kansas, which was declared a National Historic Landmark by the Secretary of the Interior in 1976. (Clayton B. Fraser for the Historic American Buildings Survey)

PURPOSE OF THIS BULLETIN

Traditional cultural values are often central to the way a community or group defines itself, and maintaining such values is often vital to maintaining the group's sense of identity and self respect. Properties to which traditional cultural value is ascribed often take on this kind of vital significance, so that any damage to or infringement upon them is perceived to be deeply offensive to, and even destructive of, the group that values them. As a result, it is extremely important that traditional cultural properties be considered carefully in planning; hence it is important that such properties, when they are eligible for inclusion in the National Register, be nominated to the Register or otherwise identified in inventories for planning purposes.

Traditional cultural properties are often hard to recognize. A traditional ceremonial location may look like merely a mountaintop, a lake, or a stretch of river; a culturally important neighborhood may look like any other aggregation of houses, and an area where culturally important economic or artistic activities have been carried out may look like any other building, field of grass, or piece of forest in the area. As a result, such places may not necessarily come to light through the conduct of archeological, historical, or architectural surveys. The existence and significance of such locations often can be ascertained only through interviews with knowledgeable users of the area, or through other forms of ethnographic research. The subtlety with which the significance of such locations may be expressed makes it easy to ignore them; on the other hand it makes it difficult to distinguish between properties having real significance and those whose putative significance is spurious. As a result, clear guidelines for evaluation of such properties are needed.

In the 1980 amendments to the National Historic Preservation Act, the Secretary of the Interior, with the American Folklife Center, was directed to study means of:

> preserving and conserving the intangible elements of our cultural heritage such as arts, skills, folklife, and folkways. . .

The German Village Historic District in Columbus, Ohio, reflects the ethnic heritage of 19th century German immigrants. The neighborhood includes many simple vernacular brick cottages with gable roofs. (Christopher Cline)

and to recommend ways to:

> preserve, conserve, and encourage the continuation of the diverse traditional prehistoric, historic, ethnic, and folk cultural traditions that underlie and are a living expression of our American heritage. (NHPA 502; 16 U.S.C. 470a note)

The report that was prepared in response to 502, entitled *Cultural Conservation*, was submitted to the President and Congress on June 1, 1983, by the Secretary of the Interior. The report recommended in general that traditional cultural resources, both those that are associated with historic properties and those without specific property referents, be more systematically addressed in implementation of the National Historic Preservation Act and other historic preservation authorities. In transmitting the report, the Secretary directed the National Park Service to take several actions to implement its recommendations. Among other actions, the Service was directed to prepare guidelines to assist in the documentation of intangible cultural resources, to coordinate the incorporation of provisions for the consideration of such resources into Departmental planning documents and administrative manuals, and to encourage the identification and documentation of such resources by States and Federal agencies.

This bulletin has been developed as one aspect of the Service's response to the *Cultural Conservation* report and the Secretary's direction. It is intended to be an aid in determining whether properties thought or alleged to have traditional cultural significance are eligible for inclusion in the National Register. It is meant to assist Federal agencies, State Historic Preservation Officers (SHPOs), Certified Local Governments, Indian Tribes, and other historic preservation practitioners who need to evaluate such properties when nominating them for inclusion in the National Register or when considering their eligibility for the Register as part of the review process prescribed by the Advisory Council on Historic Preservation under 106 of the National Historic Preservation Act. It is designed to supplement other National Register guidance, particularly *How to Apply the National Register Criteria for Evaluation* and *Guidelines for Completing National Register of Historic Places Forms.* It should be used in conjunction with these two Bulletins and other applicable guidance available from the National Register, when applying the National Register Criteria and preparing documentation to support nominations or determinations that a given property is or is not eligible for inclusion in the Register.

This Bulletin is also responsive to the American Indian Religious Free-

dom Act (AIRFA) of 1978, which requires the National Park Service, like other Federal agencies, to evaluate its policies and procedures with the aim of protecting the religious freedoms of Native Americans (Pub. L. 95341 2). Examination of the policies and procedures of the National Register suggests that while they are in no way intended to be so interpreted, they can be interpreted by Federal agencies and others in a manner that excludes historic properties of religious significance to Native Americans from eligibility for inclusion in the National Register. This in turn may exclude such properties from the protections afforded by 106, which may result in their destruction, infringing upon the rights of Native Americans to use them in the free exercise of their religions. To minimize the likelihood of such misinterpretation, this Bulletin gives special attention to properties of traditional cultural significance to Native American groups, and to discussing the place of religion in the attribution of such significance.

The fact that this Bulletin gives special emphasis to Native American properties should not be taken to imply that only Native Americans ascribe traditional cultural value to historic properties, or that such ascription is common only to ethnic minority groups in general. Americans of every ethnic origin have properties to which they ascribe traditional cultural value, and if such properties meet the National Register criteria, they can and should be nominated for inclusion in the Register.

This Bulletin does not address cultural resources that are purely "intangible"—i.e. those that have no property referents—except by exclusion. The Service is committed to ensuring that such resources are fully considered in planning and decision making by Federal agencies and others. Historic properties represent only some aspects of culture, and many other aspects, not necessarily reflected in properties as such, may be of vital importance in maintaining the integrity of a social group. However, the National Register is not the appropriate vehicle for recognizing cultural values that are purely intangible, nor is there legal authority to address them under 106 unless they are somehow related to a historic property.

The National Register lists, and 106 requires review of effects on, tangible cultural resources—that is, historic properties. However, the attributes that give such properties significance, such as their association with historical events, often are intangible in nature. Such attributes cannot be ignored in evaluating and managing historic properties; properties and their intangible attributes of significance must be considered together. This Bulletin is meant to encourage its users to address the intangible cultural values that may make a property historic, and to do so in an evenhanded way that reflects solid research and not ethnocentric bias.

Finally, no one should regard this Bulletin as the only appropriate source of guidance on its subject, or interpret it rigidly. Although traditional cultural properties have been listed and recognized as eligible for inclusion in the National Register since the Register's inception, it is only in recent years that organized attention has been given to them. This Bulletin represents the best guidance the Register can provide as of the late 1980s, and the examples listed in the bibliography include the best known at this time.[2] It is to be expected that approaches to such properties will continue to evolve. This Bulletin also is meant to supplement, not substitute for, more specific guidelines, such as those used by the National Park Service with respect to units of the National Park System and those used by some other agencies, States, local governments, or Indian tribes with respect to their own lands and programs.

[2] It is notable that most of these examples are unpublished manuscripts. The literature pertaining to the identification and evaluation of traditional cultural properties, to say nothing of their treatment, remains a thin one.

These sandbars in the Rio Grande River are eligible for inclusion in the National Register because they have been used for generations by the people of Sandia Pueblo for rituals involving immersion in the river's waters. (Thomas F. King)

ETHNOGRAPHY, ETHNOHISTORY, ETHNOCENTRISM

Three words beginning with "ethno" will be used repeatedly in this Bulletin, and may not be familiar to all readers. All three are derived from the Greek ethnos, meaning "nation;" and are widely used in the study of anthropology and related disciplines.

Ethnography is the descriptive and analytic study of the culture of particular groups or communities. An ethnographer seeks to understand a community through interviews with its members and often through living in and observing it (a practice referred to as "participant observation").

Ethnohistory is the study of historical data, including but not necessarily limited to, documentary data pertaining to a group or community, using an ethnographic perspective.

Ethnographic and ethnohistorical research are usually carried out by specialists in cultural anthropology, and by specialists in folklore and folklife, sociology, history, archeology and related disciplines with appropriate technical training.[3]

Ethnocentrism means viewing the world and the people in it only from the point of view of one's own culture and being unable to sympathize with the feelings, attitudes, and beliefs of someone who is a member of a different culture. It is particularly important to understand, and seek to avoid, ethnocentrism in the evaluation of traditional cultural properties. For example, Euroamerican society tends to emphasize "objective" observation of the physical world as the basis for making statements about that world. However, it may not be possible to use such observations as the major basis for evaluating a traditional cultural property. For example, there may be nothing observable to the outsider about a place regarded as sacred by a Native American group. Similarly, such a group's belief that its ancestors emerged from the earth at a specific location at the beginning of time may contradict Euroamerican science's belief that the group's ancestors migrated to North America from Siberia. These facts in no way diminish the significance of the locations in question in the eyes of those who value them; indeed they are irrelevant to their significance. It would be ethnocentric in the extreme to say that "whatever the Native American group says about this place, I can't see anything here so it is not significant" or "since I know these people's ancestors came from Siberia, the place where they think they emerged from the earth is of no significance." It is vital to evaluate properties thought to have traditional cultural significance from the standpoint of those who may ascribe such significance to them, whatever one's own perception of them, based on one's own cultural values, may be. This is not to say that a group's assertions about the significance of a place should not be questioned or subjected to critical analysis, but they should not be rejected based on the premise that the beliefs they reflect are inferior to one's own.

[3] For a detailed discussion of the qualifications that a practitioner of ethnography or ethnohistory should possess, see Appendix II.

EVALUATION, CONSIDERATION, AND PROTECTION

One more point that should be remembered in evaluating traditional cultural properties—as in evaluating any other kind of properties—is that establishing that a property is eligible for inclusion in the National Register does not necessarily mean that the property must be protected from disturbance or damage. Establishing that a property is eligible means that it must be considered in planning Federal, federally assisted, and federally licensed undertakings, but it does not mean that such an undertaking cannot be allowed to damage or destroy it.

Consultation must occur in accordance with the regulations of the Advisory Council (36 CFR Part 800) to identify, and if feasible adopt, measures to protect it, but if in the final analysis the public interest demands that the property be sacrificed to the needs of the project, there is nothing in the National Historic Preservation Act that prohibits this.

This principle is especially important to recognize with respect to traditional cultural properties, because such properties may be valued by a relatively small segment of a community that, on the whole, favors a project that will damage or destroy it. The fact that the community as a whole may be willing to dispense with the property in order to achieve the goals of the project does not mean that the property is not significant, but the fact that it is significant does not mean that it cannot be disturbed, or that the project must be foregone.

II. TRADITIONAL CULTURAL VALUES IN PRESERVATION PLANNING

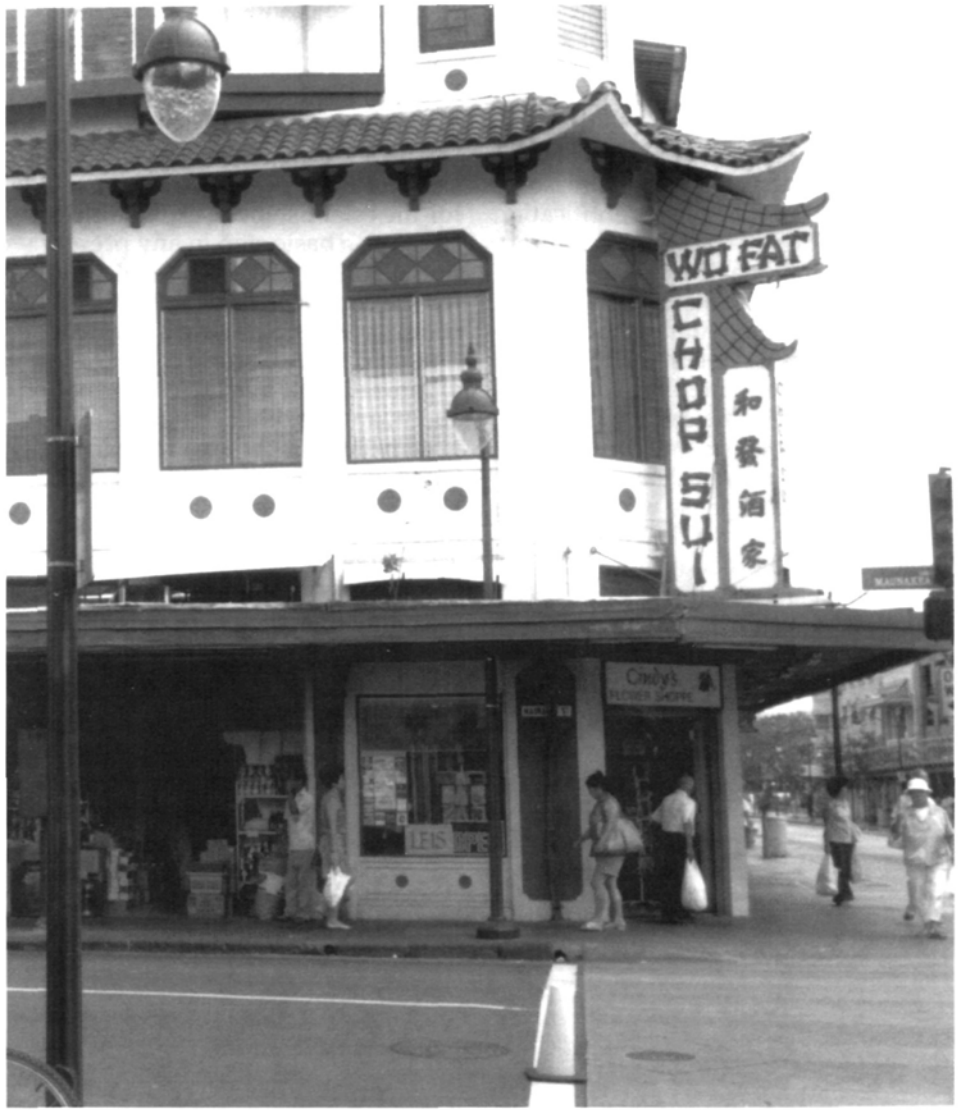
Traditional cultural properties, and the beliefs and institutions that give them significance, should be systematically addressed in programs of preservation planning and in the historic preservation components of land use plans. One very practical reason for this is to simplify the identification and evaluation of traditional cultural properties that may be threatened by construction and land use projects. Identifying and evaluating such properties can require detailed and extensive consultation, interview programs, and ethnographic fieldwork as discussed below. Having to conduct such activities may add considerably to the time and expense of compliance with 106, the National Environment Policy Act, and other authorities. Such costs can be reduced significantly, however, by early, proactive planning that identifies significant properties or areas likely to contain significant properties before specific projects are planned that may affect them, identifies parties likely to ascribe cultural value to such properties, and establishes routine systems for consultation with such parties.

The *Secretary of the Interior's Standards for Preservation Planning* provide for the establishment of "historic contexts" as a basic step in any preservation planning process be it planning for the comprehensive survey of a community or planning a construction project. A historic context is an organization of available information about, among other things, the cultural history of the area to be investigated, that identifies "the broad patterns of development in an area that may be represented by historic properties" (48 FR 44717). The traditions and traditional lifeways of a planning area may represent such "broad patterns," so information about them should be used as a basis for historic context development.

The *Secretary of the Interior's Guidelines for Preservation Planning* emphasize the need for organized public participation in context development (48 FR 44717). The Advisory Council on Historic Preservation's *Guidelines for Public Participation in Historic Preservation Review* (ACHP 1988) provide detailed recommendations regarding such participation. Based on these standards and guidelines, groups that may ascribe traditional cultural values to an area's historic properties should be contacted and asked to assist in organizing information on the area. Historic contexts should be considered that reflect the history and culture of such groups as the groups themselves understand them, as well as their history and culture as defined by Euroamerican scholarship, and processes for consultation with such groups should be integrated into routine planning and project review procedures.

III. IDENTIFYING TRADITIONAL CULTURAL PROPERTIES

Some traditional cultural properties are well known to the residents of an area. The San Francisco Peaks in Arizona, for example, are extensively documented and widely recognized as places of extreme cultural importance to the Hopi, Navajo, and other American Indian people of the Southwest, and it requires little study to recognize that Honolulu's Chinatown is a place of cultural importance to the city's Asian community. Most traditional cultural properties, however, must be identified through systematic study, just as most other kinds of historic properties must be identified. This section of the Bulletin will discuss some factors to consider in identifying traditional cultural properties.[4]



Honolulu's Chinatown reflects the cultural values and traditions of its inhabitants not only in its architectural details but also in its organization of space and the activities that go on there. (Ramona K. Mullahey)

ESTABLISHING THE LEVEL OF EFFORT

Any comprehensive effort to identify historic properties in an area, be the area a community, a rural area, or the area that may be affected by a construction or land-use project, should include a reasonable effort to identify traditional cultural properties. What constitutes a "reasonable" effort depends in part on the likelihood that such properties may be present. The likelihood that such properties may be present can be reliably assessed only on the basis of background knowledge of the area's history, ethnography, and contemporary society developed through preservation planning. As a general although not in-

[4] For general guidelines for identification see the *Secretary of the Interior's Standards and Guidelines for Identification* (48 FR 44720-23), *Guidelines for Local Surveys: A Basis for Preservation Planning* (National Register of Historic Places bulletin) and *Identification in Historic Preservation Review: a Decisionmaking Guide* (ACHP/DOI 1988).

variable rule, however, rural areas are more likely than urban areas to contain properties of traditional cultural importance to American Indian or other native American communities, while urban areas are more likely to contain properties of significance to ethnic and other traditional neighborhoods.

Where identification is conducted as part of planning for a construction or land-use project, the appropriate level of effort depends in part on whether the project under consideration is the type of project that could affect traditional cultural properties. For example, as a rule the rehabilitation of historic buildings may have relatively little potential for effect on such properties. However, if a rehabilitation project may result in displacement of residents,"gentrification" of a neighborhood, or other sociocultural impacts, the possibility that the buildings to be rehabilitated, or the neighborhood in which they exist, may be ascribed traditional cultural value by their residents or others should be considered. Similarly, most day-to-day management activities of a land managing agency may have little potential for effect on traditional cultural properties, but if the management activity involves an area or a kind of resource that has high significance to a traditional group—for example, timber harvesting in an area where an Indian tribe's religious practitioners may continue to carry out traditional ceremonies—the potential for effect will be high.

These general rules of thumb aside, the way to determine what constitutes a reasonable effort to identify traditional cultural properties is to consult those who may ascribe cultural significance to locations within the study area. The need for community participation in planning identification, as in other forms of preservation planning, cannot be over-emphasized.

CONTACTING TRADITIONAL COMMUNITIES AND GROUPS

An early step in any effort to identify historic properties is to consult with groups and individuals who have special knowledge about and interests in the history and culture of the area to be studied. In the case of traditional cultural properties, this means those individuals and groups who may ascribe traditional cultural significance to locations within the study area, and those who may have knowledge of such individuals and groups. Ideally, early planning will have identified these individuals and groups, and established how to consult with them. As a rule, however, the following steps are recommended:

BACKGROUND RESEARCH

An important first step in identifying such individuals and groups is to conduct background research into what is already recorded about the area's history, ethnography, sociology, and folklife. Published and unpublished source material on the historic and contemporary composition of the area's social and cultural groups should be consulted; such source material can often be found in the anthropology, sociology, or folklife libraries of local universities or other academic institutions. Professional and nonprofessional students of the area's social and cultural groups should also be consulted—for example, professional and avocational anthropologists and folklorists who have studied the area. The SHPO and any other official agency or organization that concerns itself with matters of traditional culture—for example, a State Folklorist or a State Native American Commission—should be contacted for recommendations about sources of information and about groups and individuals to consult.

MAKING CONTACT

Having reviewed available background data, the next step is to contact knowledgeable groups and individuals directly, particularly those groups that are native to the area or have resided there for a long time. Some such groups have official repre-

Federal agencies and others have found a variety of ways to contact knowledgeable parties in order to identify and evaluate traditional cultural properties. Generally speaking, the detail and complexity of the methods employed depend on the nature and complexity of the properties under consideration and the effects the agency's management or other activities may have on them. For example:

- The Black Hills National Forest designated a culturally sensitive engineer to work with local Indian tribes in establishing procedures by which the tribes could review Forest Service projects that might affect traditional cultural properties;
- The Air Force sponsored a conference of local traditional cultural authorities to review plans for deployment of an intercontinental missile system in Wyoming, resulting in guidelines to ensure that effects on traditional cultural properties would be minimized.
- The New Mexico Power Authority employed a professional cultural anthropologist to consult with Native American groups within the area to be affected by the Four Corners Power Project.
- The Ventura County (California) Flood Control Agency consulted with local Native American groups designated by the State Native American Heritage Commission to determine how to handle human remains to be exhumed from a cemetery that had to be relocated to make way for a flood control project.
- The Utah State Historic Preservation Officer entered into an agreement with the American Folklife Center to develop a comprehensive overview of the tangible and intangible historic resources of Grouse Creek, a traditional Mormon cowboy community.
- The Forest Service contracted for a full-scale ethnographic study to determine the significance of the Helkau Historic District on California's Six Rivers National Forest.

sentatives—the tribal council of an Indian tribe, for example, or an urban neighborhood council. In other cases, leadership may be less officially defined, and establishing contact may be more complicated. The assistance of ethnographers, sociologists, folklorists, and others who may have conducted research in the area or otherwise worked with its social groups may be necessary in such cases, in order to design ways of contacting and consulting such groups in ways that are both effective and consistent with their systems of leadership and communication.

It should be clearly recognized that expertise in traditional cultural values may not be found, or not found solely, among contemporary community leaders. In some cases, in fact, the current political leadership of a community or neighborhood may be hostile to or embarrassed about traditional matters. As a result, it may be necessary to seek out knowledgeable parties outside the community's official political structure. It is of course best to do this with the full knowledge and cooperation of the community's contemporary leaders; in most cases it is appropriate to ask such leaders to identify members of the community who are knowledgeable about traditional cultural matters, and use these parties as an initial network of consultants on the group's traditional values. If there is serious hostility between the group's contemporary leadership and its traditional experts, however, such cooperation may not be extended, and efforts to consult with traditional authorities may be actively opposed. Where this occurs, and it is necessary to proceed with the identification and evaluation of properties—for example, where such identification and evaluation are undertaken in connection with review of an undertaking under 106—careful negotiation and mediation may be necessary to overcome opposition and establish mutually acceptable ground rules for consultation. Again, the assistance of anthropologists or others with training and experience in work with the community, or with similar communities, may be necessary.

The Helkau Historic District, in the Six Rivers National Forest of California, is eligible for inclusion in the National Register because of its association with significant cultural practices of the Tolowa, Yorok, Karuk, and Hoopa Indian tribes of the area, who have used the district for generations to make medicine and communicate with spirits. (Theodoratus Cultural Research)

FIELDWORK

Fieldwork to identify properties of traditional cultural significance involves consultation with knowledgeable parties, coupled with field inspection and recordation of locations identified as significant by such parties. It is often appropriate and efficient to combine such fieldwork with surveys to identify other kinds of historic properties, for example archeological sites and properties of architectural significance. If combined fieldwork is conducted, however, the professional standards appropriate to each kind of fieldwork should be adhered to, and appropriate expertise in each relevant discipline should be represented on the study team. The kinds of expertise typically needed for a detailed ethnographic study of traditional cultural properties are outlined in Appendix II. Applicable research standards can be found in *Systematic Fieldwork, Volume 2: Ethnographic Analysis and Data Management.* (Werner and Schoepfle 1986)

CULTURALLY SENSITIVE CONSULTATION

Since knowledge of traditional cultural values may not be shared readily with outsiders, knowledgeable parties should be consulted in cultural contexts that are familiar and reasonable to them. It is important to understand the role that the information being solicited may play in the culture of those from whom it is being solicited, and the kinds of rules that may surround its transmittal. In some societies traditional information is regarded as powerful, even dangerous. It is often believed that such information should be transmitted only under particular circumstances or to particular kinds of people. In some cases information is regarded as a valued commodity for which payment is in order, in other cases offering payment may be offensive. Sometimes information may be regarded as a gift, whose acceptance obligates the receiver to reciprocate in some way, in some cases by carrying out the activity to which the information pertains.

It may not always, or even often, be possible to arrange for information to be sought in precisely the way those being consulted might prefer, but when it is not, the interviewer should clearly understand that to some extent he or she is asking those interviewed to violate their cultural norms. The interviewer should try to keep such violations to a minimum, and should be patient with the reluctance that those interviewed may feel toward sharing information under conditions that are not fully appropriate from their point of view.

Culturally sensitive consultation may require the use of languages other than English, the conduct of

community meetings in ways consistent with local traditional practice, and the conduct of studies by trained ethnographers, ethnohistorians, sociologists, or folklorists with the kinds of expertise outlined in Appendix II. Particularly where large projects or large land areas are involved, or where it is likely that particularly sensitive resources may be at issue, formal ethnographic studies should be carried out, by or under the supervision of a professionally qualified cultural anthropologist.

FIELD INSPECTION AND RECORDATION

It is usually important to take knowledgeable consultants into the field to inspect properties that they identify as significant. In some cases such properties may not be discernible as such to anyone but a knowledgeable member of the group that ascribes significance to them; in such cases it may be impossible even to find the relevant properties, or locate them accurately, without the aid of such parties. Even where a property is readily discernible as such to the outside observer, visiting the property may help a consultant recall information about it that he or she is unlikely to recall during interviews at a remote location, thus making for a richer and more complete record.

Where the property in question has religious significance or supernatural connotations, it is particularly important to ensure that any visit is carried out in accordance with appropriate modes of behavior. In some cases, ritual purification is necessary before a property can be approached, or spirits must be propitiated along the way. Some groups forbid visits to such locations by menstruating women or by people of inappropriate ages. The taking of photographs or the use of electronic recording equipment may not be appropriate. Appropriate ways to approach the property should be discussed with knowledgeable consultants before undertaking a field visit.

To the extent compatible with the cultural norms of the group involved, traditional cultural properties should be recorded on National Register of Historic Places forms or their equivalent.[5] Where items normally included in a National Register nomination or request for a determination of eligibility cannot be included (for example, if it is culturally inappropriate to photograph the property), the reasons for not including the item should be explained. To the extent possible in the property's cultural context, other aspects of the documentation (for example, verbal descriptions of the property) should be enhanced to make up for the items not included.

If making the location of a property known to the public would be culturally inappropriate, or compromise the integrity of the property or associated cultural values (for example, by encouraging tourists to intrude upon the conduct of traditional practices), the "Not for Publication" box on the National Register form should be checked; this indicates that the reproduction of locational information is prohibited, and that other information contained in the nomination will not be reproduced without the permission of the nominating authority. In the case of a request for a determination of eligibility in which a National Register form is not used, the fact that the information is not for publication should be clearly specified in the documentation, so that the National Register can apply the same controls to this information as it would to restricted information in a nomination.[6]

RECONCILING SOURCES

Sometimes an apparent conflict exists between documentary data on traditional cultural properties and the testimony of contemporary consultants. The most common kind of conflict occurs when ethnographic and ethnohistorical documents do not identify a given place as playing an important role in the tradition and culture of a group, while contemporary members of the group say the property does have such a role. More rarely, documentary sources may indicate that a property does have cultural significance while contemporary sources say it does not. In some cases, too, contemporary sources may disagree about the significance of a property.

Much of the significance of traditional cultural properties can be learned only from testimony of the traditional people who value them, like this old man being interviewed in Truk. (Micronesia Institute)

[5] For general instructions on the completion of National Register documentation, see *How to Complete the National Register of Historic Places Form.*

[6] Section 304 of the National Historic Preservation Act provides the legal authority to withhold National Register information from the public when release might "create a substantial risk of harm, theft, or destruction." For detailed guidelines concerning restricting access to information see the National Register bulletin entitled, *Guidelines for Restricting Information About Historic and Prehistoric Resources.*

Where available documents fail to identify a property as culturally significant, but contemporary sources identify it as such, several points should be considered.

(a) Ethnographic and ethnohistorical research has not been conducted uniformly in all parts of the nation; some areas are better documented than others simply because they have been the focus of more research.

(b) Ethnographic and ethnohistorical documents reflect the research interests of those who prepared them; the fact that one does not identify a property as culturally important may reflect only the fact that the individual who prepared the report had research interests that did not require the identification of such properties.

(c) Some kinds of traditional cultural properties are regarded by those who value them as the loci of supernatural or other power, or as having other attributes that make people reluctant to talk about them. Such properties are not likely to be recorded unless someone makes a very deliberate effort to do so, or unless those who value them have a special reason for revealing the information—for example, a perception that the property is in some kind of danger.

Particularly because properties of traditional cultural significance are often kept secret, it is not uncommon for them to be "discovered" only when something threatens them—for example, when a change in land-use is proposed in their vicinity. The sudden revelation by representatives of a cultural group which may also have other economic or political interests in the proposed change can lead quickly to charges that the cultural significance of a property has been invented only to obstruct or otherwise influence those planning the change. This may be true, and the possibility that traditional cultural significance is attributed to a property only to advance other, unrelated interests should be carefully considered. However, it also may be that until the change was proposed, there simply was no reason for those who value the property to reveal its existence or the significance they ascribe to it.

Where ethnographic, ethnohistorial, historical, or other sources identify a property as having cultural significance, but contemporary sources say that it lacks such significance, the interests of the contemporary sources should be carefully considered. Individuals who have economic interests in the potential development of an area may be strongly motivated to deny its cultural significance. More subtly, individuals who regard traditional practices and beliefs as backward and contrary to the best contemporary interests of the group that once ascribed significance to a property may feel justified in saying that such significance has been lost, or was never ascribed to the property. On the other hand, of course, it may be that the documentary sources are wrong, or that the significance ascribed to the property when the documents were prepared has since been lost.

Similar consideration must be taken into account in attempting to reconcile conflicting contemporary sources. Where one individual or group asserts that a property has traditional cultural significance, and another asserts that it does not or where there is disagreement about the nature or extent of a property's significance, the motives and values of the parties, and the cultural constraints operating on each, must be carefully analyzed.

In general, the only reasonably reliable way to resolve conflict among sources is to review a wide enough range of documentary data, and to interview a wide enough range of authorities to minimize the likelihood either of inadvertent bias or of being deliberately misled.

Authorities consulted in most cases should include both knowledgeable parties within the group that may attribute cultural value to a property and appropriate specialists in ethnography, sociology, history, and other relevant disciplines.[7]

[7] For excellent examples of studies designed in whole or in part to identify and evaluate traditional cultural properties based on both documentary sources and the testimony of consultants, see Bean and Vane 1978; Carroll 1983; Johnston and Budy 1983; Stoffle and Dobyns 1982, 1983; Theodoratus 1979.

IV. DETERMINING ELIGIBILITY: STEP BY STEP

Whether a property is known in advance or found during an identification effort, it must be evaluated with reference to the National Register Criteria for Evaluation (36 CFR Part 60) in order to determine whether it is eligible for inclusion in the Register. This section discusses the process of evaluation as a series of sequential steps. In real life of course, these steps are often collapsed into one another or taken together.

STEP ONE:

ENSURE THAT THE ENTITY UNDER CONSIDERATION IS A PROPERTY

Because the cultural practices or beliefs that give a traditional cultural property its significance are typically still observed in some form at the time the property is evaluated, it is sometimes perceived that the intangible practices or beliefs themselves, not the property, constitute the subject of evaluation. There is naturally a dynamic relationship between tangible and intangible traditional cultural resources, and the beliefs or practices associated with a traditional cultural property are of central importance in defining its significance. However, it should be clearly recognized at the outset that the National Register does not include intangible resources themselves. The entity evaluated must be a tangible property—that is, a district, site, building, structure, or object.[8] The relationship between the property and the beliefs or practices associated with it should be carefully considered, however, since it is the beliefs and practices that may give the property its significance and make it eligible for inclusion in the National Register.

Construction by human beings is a necessary attribute of buildings and structures, but districts, sites, and objects do not have to be the products of, or contain, the work of human beings in order to be classified as properties. For example, the National Register defines a "site" as "the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure."[9] Thus a property may be defined as a "site" as long as it was the location of a significant event or activity, regardless of whether the event or activity left any evidence of its occurrence. A culturally significant natural landscape may be classified as a site, as may the specific location where significant traditional events, activities, or cultural observances have taken place. A natural object such as a tree or a rock outcrop may be an eligible object if it is associated with a significant tradition or use. A concentration, linkage, or continuity of such sites or objects, or of structures comprising a culturally significant entity, may be classified as a district.

In considering the eligibility of a property that contains no observable evidence of human activity, however, the documentary or oral evidence for the association of the property with traditional events, activities or observances should be carefully weighed and assessed. The National Register discourages the nomination of natural features without sound documentation of their historical or cultural significance.

STEP TWO:

CONSIDER THE PROPERTY'S INTEGRITY

In order to be eligible for inclusion in the Register, a property must have "integrity of location, design, setting, materials, workmanship, feeling, and association" (36 CFR Part 60).

In the case of a traditional cultural property, there are two fundamental questions to ask about integrity. First, does the property have an integral relationship to traditional cultural practices or beliefs; and second, is the condition of the property such that the relevant relationships survive?

INTEGRITY OF RELATIONSHIP

Assessing the integrity of the relationship between a property and the beliefs or practices that may give it significance involves developing some understanding about how the group that holds the beliefs or carries out the practices is likely to view the property. If the property is known or likely to be regarded by a traditional cultural group as important in the retention or transmittal of a belief, or to the performance of a practice, the property can be taken to have an integral relationship with the belief or practice, and vice-versa.

For example, imagine two groups living along the shores of a lake. Each group practices a form of baptism to mark an individual's acceptance into the group. Both carry out baptism in the lake. One group, however, holds that baptism is appropriate in any body of water that is available; the lake happens to be available, so it is used, but another lake, a river or creek, or a swimming pool would be just as acceptable. The second group regards baptism in this particular lake as essential to its acceptance of an individual as a member. Clearly the lake is integrally related to the second group's practice, but not to that of the first.

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[8] See *How to Apply the National Register Criteria for Evaluation* for discussion of property types.

[9] See *How to Complete the National Register Form.*

INTEGRITY OF CONDITION

Like any other kind of historic property, a property that once had traditional cultural significance can lose such significance through physical alteration of its location, setting, design, or materials. For example, an urban neighborhood whose structures, objects, and spaces reflect the historically rooted values of a traditional social group may lose its significance if these aspects of the neighborhood are substantially altered.

In some cases a traditional cultural property can also lose its significance through alteration of its setting or environment. For example, a location used by an American Indian group for traditional spirit questing is unlikely to retain its significance for this purpose if it has come to be surrounded by housing tracts or shopping malls.

A property may retain its traditional cultural significance even though it has been substantially modified, however. Cultural values are dynamic, and can sometimes accommodate a good deal of change. For example, the Karuk Indians of northwestern California continue to carry on world renewal rites, ancient ceremonies featuring elaborate dances, songs, and other ritual activities, along a stretch of the Klamath River that is now the site of a highway, a Forest Service Ranger Station, a number of residences, and a timber cutting operation. Specific locations important in aspects of the ceremony remain intact, and accommodation has been reached between the Karuk and other users of the land. The State Department of Transportation has even erected "Ritual Crossing" signs at locations where the Karuk religious practitioners cross the highway, and built shallow depressions into the roadway which are filled with sand in advance of the ceremony, so the feet of the practitioners need not be profaned by contact with man-made macadam. As this example shows, the integrity of a possible traditional cultural property must be considered with reference to the views of traditional practitioners; if its integrity has not been lost in their eyes, it probably has sufficient integrity to justify further evaluation.

Some kinds of traditional cultural significance also may be retained regardless of how the surroundings of a property may be changed. For example, the First African Baptist Church Cemetery in Philadelphia, rediscovered during archeological work in advance of highway construction in 1985, has considerable cultural significance for the congregation that traces descent from those interred in the Cemetery, and for Philadelphia's African American community in general, even though its graves had been buried under fill and modern construction for many decades.

It should also be recalled that even if a property has lost integrity as a possible traditional cultural property, it may retain integrity with reference to some other aspect of significance. For example, a property whose cultural significance has been lost through disturbance may still retain archeological deposits of significance for their information content, and a neighborhood whose traditional residents no longer ascribe significance to it may contain buildings of architectural importance.

Cannonball Island, off Cape Alava on the coast of Washington State, is a traditional cultural property of importance to the Makah Indian people. It was used in the past, and is still used today, as a navigation marker for Makah fisherman, who established locations at sea by triangulation from this and other landmarks. It also was a lookout point for seal and whale hunters and for war parties, a burial site, and a kennel for dogs raised for their fur. (Makah Cultural and Research Center Archives)

STEP THREE:

EVALUATE THE PROPERTY WITH REFERENCE TO THE NATIONAL REGISTER CRITERIA

Assuming the entity to be evaluated is a property, and that it retains integrity, it is next necessary to evaluate it against the four basic National Register Criteria set forth in the National Register regulations (36 CFR Part 60). If the property meets one or more of the criteria, it may be eligible; if it does not, it is not eligible.[10]

CRITERION (A): ASSOCIATION WITH EVENTS THAT HAVE MADE A SIGNIFICANT CONTRIBUTION TO THE BROAD PATTERNS OF OUR HISTORY.

The word "our" in this criterion may be taken to refer to the group to which the property may have traditional cultural significance, and the word "history" may be taken to include traditional oral history as well as recorded history. For example, Mt. Tonaachaw on Moen Island in Truk, Federated States of Micronesia, is in the National Register in part because of association with oral traditions about the establishment of Trukese society.

"Events" can include specific moments in history of a series of events reflecting a broad pattern or theme.

[10] For general guidelines, see *How to Apply the National Register Criteria for Evaluation.*

For example, the ongoing participation of an ethnic or social group in an area's history, reflected in a neighborhood's buildings, streetscapes, or patterns of social activity, constitutes such a series of events.

The association of a property with significant events, and its existence at the time the events took place, must be documented through accepted means of historical research. The means of research normally employed with respect to traditional cultural properties include ethnographic, ethnohistorical, and folklore studies, as well as historical and archeological research. Sometimes, however, the actual time a traditional event took place may be ambiguous; in such cases it may be impossible, and to some extent irrelevant, to demonstrate with certainty that the property in question existed at the time the traditional event occurred. For example, events recounted in the traditions of Native American groups may have occurred in a time before the creation of the world as we know it, or at least before the creation of people. It would be fruitless to try to demonstrate, using the techniques of history and science, that a given location did or did not objectively exist in a time whose own existence cannot be demonstrated scientifically. Such a demonstration is unnecessary for purposes of eligibility determination; as long as the tradition itself is rooted in the history of the group, and associates the property with traditional events, the association can be accepted.

CRITERION (B): ASSOCIATION WITH THE LIVES OF PERSONS SIGNIFICANT IN OUR PAST.

Again, the word "our" can be interpreted with reference to the people who are thought to regard the property as traditionally important. The word "persons" can be taken to refer both to persons whose tangible, human existence in the past can be inferred on the basis of historical, ethnographic, or other research, and to "persons" such as gods and demigods who feature in the traditions of a group. For example, Tahquitz Canyon in southern California is included in the National Register in part because of its association with Tahquitz, a Cahuilla Indian demigod who figures importantly in the tribe's traditions and is said to occupy an obsidian cave high in the canyon.

CRITERION (C)(1):[11] EMBODIMENT OF THE DISTINCTIVE CHARACTERISTICS OF A TYPE, PERIOD, OR METHOD OF CONSTRUCTION.

This subcriterion applies to properties that have been constructed, or contain constructed entities—that is, buildings, structures, or built objects. For example, a neighborhood that has traditionally been occupied by a particular ethnic group may display particular housing styles, gardens, street furniture or ornamentation distinctive of the group. Honolulu's Chinatown, for example, embodies the distinctive cultural values of the City's Asian community in its architecture, landscaping, signage, and ornamentation.

[11] Note: Criterion (C) is not subdivided into subcriteria (1), (2), etc. in 36 CFR Part 60.4. The subdivision given here is only for the convenience of the reader.

CRITERION (C)(2): REPRESENTATIVE OF THE WORK OF A MASTER.

A property identified in tradition or suggested by scholarship to be the work of a traditional master builder or artisan may be regarded as the work of a master, even though the precise identity of the master may not be known.

CRITERION (C)(3): POSSESSION OF HIGH ARTISTIC VALUES.

A property made up of or containing art work valued by a group for traditional cultural reasons, for example a petroglyph or pictograph site venerated by an Indian group, or a building whose decorative elements reflect a local ethnic groups distinctive modes of expression, may be viewed as having high artistic value from the standpoint of the group.

In Trukese tradition, the Tonaachaw Historic District was the location to which Sowukachaw, founder of the Trukese society, came and established his meetinghouse at the beginning of Trukese history. The mountain, in what is now the Federated States of Micronesia, is a powerful landmark in the traditions of the area. (Lawrence E. Aten)

CRITERION (C)(4): REPRESENTATIVE OF A SIGNIFICANT AND DISTINGUISHABLE ENTITY WHOSE COMPONENTS MAY LACK INDIVIDUAL DISTINCTION.

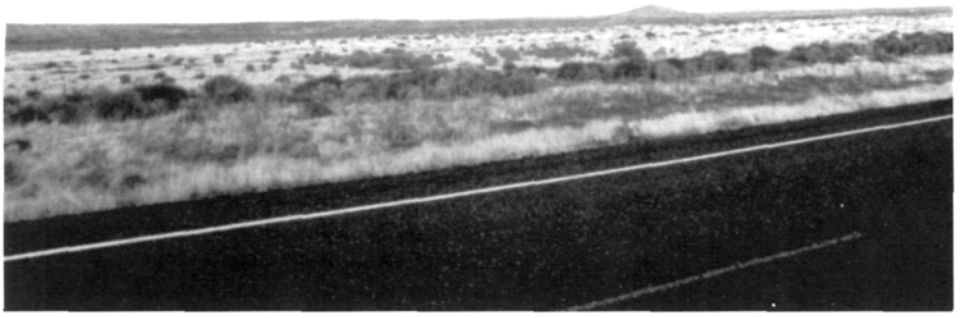
A property may be regarded as representative of a significant and distinguishable entity, even though it lacks individual distinction, if it represents or is an integral part of a larger entity of traditional cultural importance. The larger entity may, and usually does, possess both tangible and intangible components. For example, certain locations along the Russian River in California are highly valued by the Pomo Indians, and have been for centuries, as sources of high quality sedge roots needed in the construction of the Pomo's world famous basketry.

Although the sedge fields themselves are virtually indistinguishable from the surrounding landscape, and certainly indistinguishable by the untrained observer from other sedge fields that produce lower quality roots, they are representative of, and vital to, the larger entity of Pomo basketmaking. Similarly, some deeply venerated landmarks in Micronesia are natural features, such as rock outcrops and groves of trees; these are indistinguishable visually (at least to the outside observer) from other rocks and trees, but they figure importantly in chants embodying traditional sailing directions and lessons about traditional history. As individual objects they lack distinction, but the larger entity of which they are a part—Micronesian navigational and historical tradition—is of prime importance in the area's history.

CRITERION (D): HISTORY OF YIELDING, OR POTENTIAL TO YIELD, INFORMATION IMPORTANT IN PREHISTORY OR HISTORY.

Properties that have traditional cultural significance often have already yielded, or have the potential to yield, important information through ethnographic, archeological, sociological, folkloric, or other studies. For example, ethnographic and ethnohistorical studies of Kaho'olawe Island in Hawai'i, conducted in order to clarify its eligibility for inclusion in the National Register, have provided important insights into Hawai'ian traditions and culture and into the history of twentieth century efforts to revitalize traditional Hawai'ian culture.

Similarly, many traditional American Indian village sites are also archeological sites, whose study can provide important information about the history and prehistory of the group that lived there. Generally speaking, however, a traditional cultural property's history of yielding, or potential to yield, information, if relevant to its significance at all, is secondary to its association with the traditional history and culture of the group that ascribes significance to it.



Many traditional cultural properties look like very little on the ground. The small protuberance in the center of this photo, known to residents of the Hanford Nuclear Reservation in Washington State as Goose Egg Hill, is regarded by the Yakima Indians of the area as the heart of a goddess who was torn apart by jealous compatriots. They scattered her pieces across the landscape, creating a whole complex of culturally significant landforms. (Thomas F. King)

STEP 4:

DETERMINE WHETHER ANY OF THE NATIONAL REGISTER CRITERIA CONSIDERATIONS (36 CFR 60.4) MAKE THE PROPERTY INELIGIBLE

Generally speaking, a property is not eligible for inclusion in the Register if it represents a class of properties to which one or more of the six "criteria considerations" listed in 36 CFR 60.4 applies, and is not part of a district that is eligible.

In applying the criteria considerations, it is important to be sensitive to the cultural values involved, and to avoid ethnocentric bias, as discussed below.

CONSIDERATION A: OWNERSHIP BY A RELIGIOUS INSTITUTION OR USE FOR RELIGIOUS PURPOSES.

A "religious property," according to National Register guidelines, requires additional justification (for nomination) because of the necessity to avoid any appearance of judgement by government about the merit of any religion or belief."[12] Conversely, it is necessary to be careful not to allow a similar judgement to serve as the basis for determining a property to be ineligible for inclusion in the Register. Application of this criteria consideration to traditional cultural properties is fraught with the potential for ethnocentrism and discrimination. In many traditional societies, including most American Indian societies, the clear distinction made by Euroamerican society between religion and the rest of culture does not exist. As a result, properties that have traditional cultural significance are regularly discussed by those who value them in terms that have religious connotations. Inyan Karan Mountain, for example, a National Register property in the Black Hills of South Dakota, is sig-

[12] *How to Complete the National Register Form.*

nificant in part because it is the abode of spirits in the traditions of the Lakota and Cheyenne. Some traditional cultural properties are used for purposes that are definable as religious in Euroamerican terms, and this use is intrinsic to their cultural significance.

Kootenai Falls on the Kootenai River in Idaho, part of the National Register-eligible Kootenai Falls Cultural Resource District, has been used for centuries as a vision questing site by the Kootenai tribe. The Helkau Historic District in northern California is a place where traditional religious practitioners go to make medicine and commune with spirits, and Mt. Tonaachaw in Truk is an object of spiritual veneration. The fact that such properties have religious connotations does not automatically make them ineligible for inclusion in the Register.

Applying the "religious exclusion" without careful and sympathetic consideration to properties of significance to a traditional cultural group can result in discriminating against the group by effectively denying the legitimacy of its history and culture. The history of a Native American group, as conceived by its indigenous cultural authorities, is likely to reflect a kind of belief in supernatural beings and events that Euroamerican culture categorizes as religious, although the group involved, as is often the case with Native American groups, may not even have a word in its language for "religion." To exclude from the National Register a property of cultural and historical importance to such a group, because its significance tends to be expressed in terms that to the Euroamerican observer appear to be "religious" is ethnocentric in the extreme.

In simplest terms, the fact that a property is used for religious purposes by a traditional group, such as seeking supernatural visions, collecting or preparing native medicines, or carrying out ceremonies, or is described by the group in terms that are classified by the outside observer as "religious" should not by itself be taken to make the property ineligible, since these activities may be expressions of traditional cultural beliefs and may be intrinsic to the continuation of traditional cultural practices. Similarly, the fact that the group that owns a property—for example, an American Indian tribe—describes it in religious terms, or constitutes a group of traditional religious practitioners, should not automatically be taken to exclude the property from inclusion in the Register. Criteria Consideration A was included in the Criteria for Evaluation in order to avoid allowing historical significance to be determined on the basis of religious doctrine, not in order to exclude arbitrarily any property having religious associations. National Register guidelines stress the fact that properties can be listed in or determined eligible for the Register for their association with religious history, or with persons significant in religion, if such significance has "scholarly, secular recognition."[13] The integral relationship among traditional Native American culture, history, and religion is widely recognized in secular scholarship.[14] Studies leading to the nomination of traditional cultural properties to the Register should have among their purposes the application of secular scholarship to the association of particular properties with broad patterns of traditional history and culture. The fact that traditional history and culture may be discussed in religious terms does not make it less historical or less significant to culture, nor does it make properties associated with traditional history and culture ineligible for inclusion in the National Register.

CONSIDERATION B: RELOCATED PROPERTIES.

Properties that have been moved from their historically important locations are not usually eligible for inclusion in the Register, because "the significance of (historic properties) is embodied in their locations and settings as well as in the (properties) themselves" and because "one basic purpose of the National Register is to encourage the preservation of historic properties as living parts of their communities."[15] This consideration is relevant but rarely applied formally to traditional cultural properties; in most cases the property in question is a site or district which cannot be relocated in any event. Even where the property can be relocated, maintaining it on its original site is often crucial to maintaining its importance in traditional culture, and if it has been moved, most traditional authorities would regard its significance as lost.

Where a property is intrinsically portable, however, moving it does not

[13] *How to Complete the National Register Form.*

[14] For example see U.S. Commission on Civil Rights 1983; Michaelson 1986.

[15] *How to Complete the National Register Form.*

The fact that a property has religious connotations does not automatically disqualify it for inclusion in the National Register. This Shaker community in Massachusetts, for example, while religious in orientation, is included in the Register because it expresses the cultural values of the Shakers as a society. (Historic American Buildings Survey)

Some traditional cultural properties may be moveable, like this traditional war canoe still in use in the Republic if Palua. (Papua Historic Preservation Officer)

destroy its significance, provided it remains "located in a historically appropriate setting."[16] For example, a traditionally important canoe or other watercraft would continue to be eligible as long as it remained in the water or in an appropriate dry land context (e.g., a boathouse). A property may also retain its significance if it has been moved historically.[17] For example, totem poles moved from one Northwest Coast village to another in early times by those who made or used them would not have lost their significance by virtue of the move. In some cases, actual or putative relocation even contributes to the significance of a property. The topmost peak of Mt. Tonaachaw in Truk, for example, is traditionally thought to have been brought from another island; the stories surrounding this magical relocation are parts of the mountains cultural significance.

In some cases it may be possible to relocate a traditionally significant property and still retain its significance, provided the property's "historic and present orientation, immediate setting, and general environment" are carefully considered in planning and executing the move.[18] At Lake Sonoma in California, for example, the U.S. Army Corps of Engineers relocated a number of boulders containing petroglyphs having artistic, archeological, and traditional cultural significance to protect them from inundation. The work was done in consultation with members of the local Pomo Indian tribe, and apparently did not destroy the significance of the boulders in the eyes of the tribe.[19]

CONSIDERATION C: BIRTHPLACES AND GRAVES.

Birthplaces and graves of famous persons are not usually eligible for inclusion in the Register as such. If the birthplace or gravesite of a historical person is significant for reasons other than its association with that person, however, the property can of course be eligible.[20] Thus in the case of a traditional cultural property, if someone's birth or burial within the property's boundaries was incidental to the larger traditional significance of the property, the fact that it occurred does not make the property ineligible. For example, in South Texas, the burial site of Don Pedrito Jaramillo, a well documented folk healer who practiced at the turn of the century, has for more than seventy years been a culturally significant site for the performance of traditional healing rituals by Mexican American folk healers. Here the cultural significance of the site as a center for healing is related to the intangible belief that Don Pedrito's spirit is stronger there than in other places, rather than to the fact of his burial there.

On the other hand, it is possible for the birth or burial itself to have been ascribed such cultural importance that its association with the property contributes to its significance.

Tahquitz Canyon in southern California, for example, is in a sense the traditional "birthplace" of the entire Cahuilla Indian people. Its status as such does not make it ineligible; on the contrary, it is intrinsic to its eligibility. Mt. Tonaachaw in Truk is according to some traditions the birth-

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[16] *How to Complete the National Register Form.*

[17] *How to Complete the National Register Form.*

[18] *How to Complete the National Register Form.*

[19] The location to which a property is relocated, and the extent to which it retains its integrity after relocation, must be carefully considered in judging its continued eligibility for inclusion in the National Register. See *How to Complete the National Register Form* for general guidelines.

[20] *How to Complete the National Register Form.*

place of the culture hero Souwooniras, whose efforts to organize society among the islands of Truk Lagoon are the stuff of Trukese legend. The association of his birth with the mountain does not make the mountain ineligible; rather, it contributes to its eligibility.

CONSIDERATION D: CEMETERIES.

Cemeteries are not ordinarily eligible for inclusion in the Register unless they "derive (their) primary significance from graves of persons of transcendent importance, from age, from distinctive design values, or from association with historic events."[21] Many traditional cultural properties contain cemeteries, however, whose presence contributes to their significance.

Tahquitz Canyon, for example, whose major significance lies in its association with Cahuilla traditional history, contains a number of cemeteries that are the subjects of great concern to the Cahuilla people. The fact that they are present does not render the Canyon ineligible; on the contrary, as reflections of the long historical association between the Cahuilla and the Canyon, the cemeteries reflect and contribute to the Canyon's significance. Thus the fact that a traditional cultural property is or contains a cemetery should not automatically be taken to render it ineligible.

CONSIDERATION E: RECONSTRUCTION.

A reconstructed property—that is, a new construction that ostensibly reproduces the exact form and detail of a property or portion of a property that has vanished, as it appeared at a specific period in time—is not normally eligible for inclusion in the Register unless it meets strict criteria.[22] The fact that some reconstruction has occurred within the boundaries of a traditional cultural property, however, does not justify regarding the property as ineligible for inclusion in the Register. For example, individuals involved in the revitalization of traditional Hawai'ian culture and religion have reconstructed certain religious structures on the island of Kaho'olawe; while the structures themselves might not be eligible for inclusion in the Register, their construction in no way diminishes the island's eligibility.

CONSIDERATION F: COMMEMORATION.

Like other properties, those constructed to commemorate a traditional event or person cannot be found eligible for inclusion in the Register based on association with that event or person alone.[23] The mere fact that commemoration is involved in the use or design of a property should not be taken to make the property ineligible, however. For example, traditional meetinghouses in the Republic of Palau, included in the National Register, are typically ornamented with "story boards" commemorating traditional events; these derive their design from traditional Palauan aesthetic values, and thus contribute to the cultural significance of the structures. They connect the structures with the traditional history of the islands, and in no way diminish their cultural, ethnographic, and architectural significance.

CONSIDERATION G: SIGNIFICANCE ACHIEVED WITHIN THE PAST 50 YEARS.

Properties that have achieved significance only within the 50 years preceding their evaluation are not eligible for inclusion in the Register unless "sufficient historical perspective exists to determine that the property is exceptionally important and will continue to retain that distinction in the future."[24] This is an extremely important criteria consideration with respect to traditional cultural values. A significance ascribed to a property only in the past 50 years cannot be considered traditional.

As an example, consider a mountain peak used by an Indian tribe for communication with the supernatural. If the peak has been used by members of the tribe for many years, or if it was used by members of the tribe in prehistory or early history, it may be eligible, but if its use has begun only within the past 50 years, it is probably not eligible.

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[21] *How to Complete the National Register Form.*

[22] *How to Complete the National Register Form.*

[23] *How to Complete the National Register Form.*

[24] *How to Complete the National Register Form.*

Several hundred persons visit this shrine to Don Pedrito Jaramillo, curandero (faith healer), yearly to seek his healing spirit. (Curtis Tunnell, Texas Historical Commission)

Tahquitz Canyon, in southern California, is included in the National Register because of its association with the traditions of the Cahuilla Indians. The ancestors of the Cahuilla came into this world from a lower one at the beginning of time, and an evil spirit, named Tahquitz, is believed to live in the upper reaches of the canyon. (Thomas F. King)

The fact that a property may have gone unused for a lengthy period of time, with use beginning again only recently, does not make the property ineligible for the Register. For example, assume that the Indian tribe referred to above used the mountain peak in prehistory for communication with the supernatural, but was forced to abandon such use when it was confined to a distant reservation, or when its members were converted to Christianity. Assume further that a revitalization of traditional religion has begun in the last decade, and as a result the peak is again being used for vision quests similar to those carried out there in prehistory. The fact that the contemporary use of the peak has little continuous time depth does not make the peak ineligible; the peak's association with the traditional activity reflected in its contemporary use is what must be considered in determining eligibility.

The length of time a property has been used for some kinds of traditional purposes may be difficult to establish objectively. Many cultural uses may have left little or no physical evidence, and may not have been noted by ethnographers or early visitors to the area. Some such uses are explicitly kept from outsiders by members of the group ascribing significance to the property. Indirect evidence and inference must be weighed carefully, by or in consultation with trained ethnographers, ethnohistorians, and other specialists, and professional judgements made that represent one's best, good-faith interpretation of the available data.

V. DOCUMENTING TRADITIONAL CULTURAL PROPERTIES

GENERAL CONSIDERATIONS

Generally speaking, documentation of a traditional cultural property, on a National Register nomination form or in eligibility documentation, should include a presentation of the results of interviews and observations that systematically describe the behavior, beliefs, and knowledge that are germane to understanding the property's cultural significance, and an organized analysis of these results. The data base from which the formal nomination or eligibility determination documents are derived should normally include appropriate tape recordings, photographs, field notes, and primary written records.

Obtaining and presenting such documentation can present special challenges, however. First, those who ascribe significance to the property may be reluctant to allow its description to be committed to paper, or to be filed with a public agency that might release information about it to inappropriate people. Second, documentation necessarily involves addressing not only the physical characteristics of the property as perceived by an outside observer, but culturally significant aspects of the property that may be visible or knowable only to those in whose traditions it is significant. Third, boundaries are often difficult to define. Fourth, in part because of the difficulty involved in defining boundaries, it is important to address the setting of the property.

THE PROBLEM OF CONFIDENTIALITY

Particularly where a property has supernatural connotations in the minds of those who ascribe significance to it, or where it is used in ongoing cultural activities that are not readily shared with outsiders, it may be strongly desired that both the nature and the precise location of the property be kept secret. Such a desire on the part of those who value a property should of course be respected, but it presents considerable problems for the use of National Register data in planning. In simplest terms, one cannot protect a property if one does not know that it is there.

The need to reveal information about something that one's cultural system demands be kept secret can present agonizing problems for traditional groups and individuals. It is one reason that information on traditional cultural properties is not readily shared with Federal agencies and others during the planning and environmental review of construction and land use projects. However concerned one may be about the impacts of such a project on a traditional cultural property, it may be extremely difficult to express these concerns to an outsider if one's cultural system provides no acceptable mechanism for doing so. These difficulties are sometimes hard for outsiders to understand, but they should not be underrated. In some cultures it is sincerely believed that sharing information inappropriately with outsiders will lead to death or severe injury to one's family or group.

As noted above, information on historic properties, including traditional cultural properties, may be kept confidential under the authority of 304 of the National Historic Preservation Act. [25] This may not always be enough to satisfy the concerns of those who value, but fear the results of releasing information on, traditional cultural properties. In some cases these concerns may make it necessary not to nominate such properties formally at all, or not to seek formal determinations of eligibility, but simply to maintain some kind of minimal data in planning files. For example, in planning deployment of the MX missile system in Wyoming, the Air Force became aware that the Lakota Indian tribe in the area had concerns about the project's impacts on traditional cultural properties, but was unwilling to identify and document the precise locations and significance of such properties. To resolve this problem, Air Force representatives met with the tribe's traditional cultural authorities and indicated where they wanted to construct the various facilities required by the deployment; the tribe's authorities indicated which of these locations were likely to present problems, without saying what the nature of the problems might be. The Air Force then designed the project to minimize use of such areas. In a narrow sense, obviously, the Air Force did not go through the process of evaluation recommended by this Bulletin; no specific properties were identified or evaluated to determine their eligibility for inclusion in the National Register. In a broader sense, however, the Air Force's approach represents excellent practice in the identification and treatment of traditional cultural prop-

[25] For details regarding maintaining confidentiality, see *Guidelines for Restricting Information About Historic and Prehistoric Resources.*

erties. The Air Force consulted carefully and respectfully with those who ascribed traditional cultural significance to properties in the area, and sought to accommodate their concerns. The tribe responded favorably to this approach, and did not take undue advantage of it. Presumably, had the tribe expressed concern about such expansive or strategically located areas as to suggest that it was more interested in impeding the deployment than in protecting its valued properties the Air Force would have had to use a different approach.

In summary: the need that often exists to keep the location and nature of a traditional cultural property secret can present intractable problems. These must be recognized and dealt with flexibly, with an understanding of the fact that the management problems they may present to Federal agencies or State Historic Preservation Officers may pale into insignificance when compared with the wrenching cultural conflicts they may present to those who value the properties.

DOCUMENTING VISIBLE AND NON-VISIBLE CHARACTERISTICS

Documentation of a traditional cultural property should present not only its contemporary physical appearance and, if known, its historical appearance, but also the way it is described in the relevant traditional belief or practice. For example, one of the important cultural locations on Mt. Tonaachaw in Truk is an area called "Neepisaram," which physically looks like nothing but a grassy slope near the top of the mountain. In tradition, however, it is seen as the ear of "kuus," a metaphorical octopus identified with the mountain, and as the home of "Saraw," a warrior spirit/barracuda. Obviously a nomination of "Neepisaram" would be incomplete and largely irrelevant to its significance if it identified it only as a grassy slope near the top of the mountain.

PERIOD OF SIGNIFICANCE

Describing the period of significance for a traditional cultural property can be an intellectual challenge, particularly where the traditions of a Native American or Micronesian group are involved. In such cases there are often two different kinds of "periods." One of these is the period in which, in tradition, the property gained its significance—the period during which the Cahuilla people emerged from the lower world through Tahquitz Canyon, or the period when civilization came to Truk through the magical arrival of the culture-bearer Sowukachaw on Mt. Tonaachaw. Such periods often have no fixed referent in time as it is ordinarily construed by Euroamerican scholarship.[26] To the Cahuilla, their ancestors simply emerged from the lower world at the beginning of human life on earth, whenever that may have been. A Trukese traditional authority will typically say simply that Sowukachaw came to Truk *"nóómw nóómw nóómw"* (long, long ago). It is usually fruitless, and of little or no relevance to the eligibility of the property involved for inclusion in the National Register, to try to relate this sort of traditional time to time as measured by Euroamerican history. Traditional "periods" should be defined in their own terms. If a traditional group says a property was created at the dawn of time, this should be reported in the nomination or eligibility documentation; for purposes of National Register eligibility there is no need to try to establish whether, according to Euroamerican scholarship or radiocarbon age determination, it really was created at the dawn of time.

The second period that is often relevant to a traditional property is its period of use for traditional purposes. Although direct, physical evidence for such use at particular periods in the past may be rare in the case of properties used by native American groups, it is usually possible to fix a period of use, at least in part, in ordinary chronological time. Establishing the period of use often involves the weighing of indirect evidence and inference. Interviews with traditional cultural authorities are usually the main sources of data, sometimes, supplemented by the study of historical accounts or by archeological investigations. Based on such sources of data it should be possible at least to reach supportable inferences about whether generations before the present one have used a property for traditional purposes, suggesting that it was used for such purposes more than fifty years ago. It is seldom possible to determined when the traditional use of property began, however—this tends to be lost, as it were, in the mists of antiquity.

BOUNDARIES

Defining the boundaries of a traditional cultural property can present considerable problems. In the case of the Helkau Historic District in northern California, for example, much of the significance of the property in the eyes of its traditional users is related to the fact that it is quiet, and that is presents extensive views of natural landscape without modern intrusions.

These factors are crucial to the medicine making done by traditional religious practitioners in the district. If the boundaries of the district were defined on the basis of these factors, however, the district would take in a substantial portion of California's North coast Range. Practically speaking, the boundaries of a property like the Helkau District must be defined more narrowly, even though this may involve making some rather arbitrary decisions. In the case of the Helkau District, the boundary was finally drawn along topographic lines that included all the locations at which traditional practitioners carry out medicine-making and similar activities, the travel routes between such locations, and the immediate viewshed surround this complex of locations and routes.

In defining boundaries, the traditional uses to which the property is put must be carefully considered. For example, where a property is used as the Helkau District is used, for contemplative purposes, viewsheds are important and must be considered in boundary definition. In an urban district significant for its association with a given social group, boundaries might be established where residence or use by the group ends, or where such residence or use is no longer reflected in the architecture or spatial organization of the neighborhood. Changes in boundaries through time should also be taken into consideration.

For example, archeological evidence may indicate that a particular cultural practice occurred within particular boundaries in the past, but the practice today may occur within dif-

[26] Except, perhaps, by some of the more esoteric subfields of cosmology and quantum mechanics.

ferent boundaries perhaps larger, perhaps smaller, perhaps covering different areas. The fact that such changes have taken place, and the reasons they have taken place, if these can be ascertained, should be documented and considered in developing a rationale for the boundaries identified in the nomination or eligibility documentation.

DESCRIBING THE SETTING

The fact that the boundaries of a traditional cultural property may be drawn more narrowly than they would be if they included all significant viewsheds or lands on which noise might be intrusive on the practices that make the property significant does not mean that visual or auditory intrusions occurring outside the boundaries can be ignored. In the context of eligibility determination or nomination, such intrusions if severe enough may compromise the property's integrity. In planning subsequent to nomination or eligibility determination, the Advisory Council's regulations define "isolation of the property from or alteration of the character of the property's setting" as an adverse effect "when that character contributes to the property's qualification for the National Register" (36 CFR 800.9(b)(2)). Similarly, the Council's regulations define as adverse effects "introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting" (36 CFR 800.9 (b)(3)).

To assist in determining whether a given activity outside the boundaries of a traditional cultural property may constitute an adverse effect, it is vital that the nomination form or eligibility documentation discuss those qualities of a property's visual, auditory, and atmospheric setting that contribute to its significance, including those qualities whose expression extends beyond the boundaries of the property as such into the surrounding environment.

Individual structures can have traditional cultural significance, like this Yapese men's house, used by Yapese today in the conduct of deliberations on matters of cultural importance. (Yap State Historic Preservation Office)

COMPLETING REGISTRATION FORMS

The following discussion is organized with reference to the National Register of Historic Places Registration Form (NPS 10-900), which must be used in nominating properties to the National Register. To the extent feasible, documentation supporting a request for a determination of eligibility should be organized with reference to, and if possible using, the Registration Form as well. Where the instructions given in the National Register bulletin entitled *How to Complete the National Register Registration Form,* are sufficient without further discussion, this is indicated.

1. Name of Property
The name given a traditional cultural property by its traditional users should be entered as its **historic name.** Names, inventory reference numbers, and other designations ascribed to the property by others should be entered under **other names/ site number.**

2. Location
Follow *How to Complete the National Register Registration Form,* but note discussion of the problem of confidentiality above.

3. Classification
Follow *How to Complete the National Register Registration Form.*

4. State/Federal Agency Certification
Follow *How to Complete the National Register Registration Form.*

5. National Park Service Certification
To be completed by National Register.

6. Function or Use
Follow *How to Complete the National Register Registration Form.*

7. Description
Follow *How to Complete the National Register Registration Form* as applicable. It may be appropriate to address both visible and non-visible aspects of the property here, as discussed under General Considerations above; alternatively, non-visible aspects of the property may be discussed in the statement of significance.

8. Statement of Significance
Follow *How to Complete the National Register Registration Form,* being careful to address significance with sensitivity for the viewpoints of those who ascribe traditional cultural significance to the property.

9. Major Bibliographical References
Follow *How to Complete the National Register Registration Form.* Where oral sources have been employed, append a list of those consulted and identify the locations where field notes, audio or video tapes, or other records of interviews are housed, unless consultants have required that this information be kept confidential; if this is the case, it should be so indicated in the documentation.

10. Geographical Data
Follow *How to Complete the National Register Registration Form* as applicable, but note the discussion of boundaries and setting under **General Considerations** above. If it is necessary to discuss the setting of the property in detail, this discussion should be appended as accompanying documentation and referenced in this section.

11. Form Prepared By
Follow *How to Complete the National Register Registration Form.*

Accompanying Documentation
Follow *How to Complete the National Register Registration Form,* except that if the group that ascribes cultural significance to the property objects to the inclusion of photographs, photographs need not be included. If photographs are not included, provide a statement explaining the reason for their exclusion.

VI. CONCLUSION

The National Historic Preservation Act, in its introductory section, establishes that "the historical and cultural foundations of the Nation should be preserved as a living part of our community life in order to give a sense of orientation to the American people"[27] (16 U.S.C. 470(b)(2)). The cultural foundations of America's ethnic and social groups, be they Native American or historical immigrant, merit recognition and preservation, particularly where the properties that represent them can continue to function as living parts of the communities that ascribe cultural value to them. Many such properties have been included in the National Register, and many others have been formally determined eligible for inclusion, or regarded as such for purposes of review under 106 of the Act. Federal agencies, State Historic Preservation Officers, and others who are involved in the inclusion of such properties in the Register, or in their recognition as eligible for inclusion, have raised a number of important questions about how to distinguish between traditional cultural properties that are eligible for inclusion in the Register and those that are not. It is our hope that this Bulletin will help answer such questions.

[27] 16 U.S.C. 470(b)(2).

VII. RECOMMENDED BIBLIOGRAPHY AND SOURCES

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How to Apply the National Register Criteria for Evaluation

How to Complete the National Register Registration Form

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VIII. APPENDIX I

A DEFINITION OF "CULTURE"

Early in this Bulletin a shorthand definition of the word "culture" is used. A longer and somewhat more complex definition is used in the National Park Service's internal cultural resource management guidelines (NPS-28). This definition is consistent with that used in this Bulletin, and may be helpful to those who require further elucidation of the term. The definition reads as follows:

"Culture (is) a system of behaviors, values, ideologies, and social arrangements. These features, in addition to tools and expressive elements such as graphic arts, help humans interpret their universe as well as deal with features of their environments, natural and social.

Culture is learned, transmitted in a social context, and modifiable. Synonyms for culture include "lifeways," "customs," "traditions," "social practices," and "folkways." The terms "folk culture" and "folklife" might be used to describe aspects of the system that are unwritten, learned without formal instruction, and deal with expressive elements such as dance, song, music and graphic arts as well as storytelling."

IX. APPENDIX II PROFESSIONAL QUALIFICATIONS: ETHNOGRAPHY

When seeking assistance in the identification, evaluation, and management of traditional cultural properties, agencies should normally seek out specialists with ethnographic research training, typically including, but not necessarily limited to:

I. Language skills: it is usually extremely important to talk in their own language with those who may ascribe value to traditional cultural properties. While ethnographic fieldwork can be done through interpreters, ability in the local language is always preferable.

II. Interview skills, for example:

- The ability to approach a potential informant in his or her own cultural environment, explain and if necessary defend one's research, conduct an interview and minimize disruption, elicit required information, and disengage from the interview in an appropriate manner so that further interviews are welcome; and
- The ability to create and conduct those types of interviews that are appropriate to the study being carried out, ensuring that the questions asked are meaningful to those being interviewed, and that answers are correctly understood through the use of such techniques as translating and back-translating. Types of interviews normally carried out by ethnographers, one or more of which may be appropriate during evaluation and documentation of a traditional cultural property, include:
- semi-structured interview on a broad topic;
- semi-structured interview on a narrow topic;
- structured interview on a well defined specific topic; open ended life history/life cycle interview; and
- genealogical interview.

III. Skill in making and accurately recording direct observations of human behavior, typically including:

- The ability to observe and record individual and group behavior in such a way as to discern meaningful patterns; and
- The ability to observe and record the physical environment in which behavior takes place, via photography, mapmaking, and written description.

IV. Skill in recording, coding, and retrieving pertinent data derived from analysis of textural materials, archives, direct observation, and interviews.

Proficiency in such skills is usually obtained through graduate and post-graduate training and supervised experience in cultural anthropology and related disciplines, such as folklore/folklife.

X. APPENDIX III LIST OF NATIONAL REGISTER BULLETINS

The Basics

How to Apply National Register Criteria for Evaluation *

Guidelines for Completing National Register of Historic Places Form
Part A: How to Complete the National Register Form *
Part B: How to Complete the National Register Multiple Property Documentation Form

Researching a Historic Property *

Property Types

Guidelines for Evaluating and Documenting Historic Aids to Navigation *

Guidelines for Identifying, Evaluating and Registering America's Historic Battlefields

Guidelines for Evaluating and Registering Historical Archeological Sites

Guidelines for Evaluating and Registering Cemeteries and Burial Places

How to Evaluate and Nominate Designed Historic Landscapes *

Guidelines for Identifying, Evaluating and Registering Historic Mining Sites

How to Apply National Register Criteria to Post Offices *

Guidelines for Evaluating and Documenting Properties Associated with Significant Persons

Guidelines for Evaluating and Documenting Properties That Have Achieved Significance Within the Last Fifty Years

Guidelines for Evaluating and Documenting Rural Historic Landscapes *

Guidelines for Evaluating and Documenting Traditional Cultural Properties *

Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places

Technical Assistance

Contribution of Moved Buildings to Historic Districts; Tax Treatments for Moved Buildings; and Use of Nomination Documentation in the Part I Certification Process

Defining Boundaries for National Register Properties*

Guidelines for Local Surveys: A Basis for Preservation Planning *

How to Improve the Quality of Photographs for National Register Nominations

National Register Casebook: Examples of Documentation *

Using the UTM Grid System to Record Historic Sites

The above publications may be obtained by writing to the National Register of Historic Places, National Park Service, 1849 C Street, NW, Washington, D.C. 20240. Publications marked with an asterisk (*) are also available in electronic form on the World Wide Web at www.cr.nps.gov/nr, or send your request by e-mail to nr_reference@nps.gov.