Traffic Impact Study

John Adams Academy
Multi-Purpose Room (MPR)
Roseville, California

June 28, 2017

Prepared for:

City of Roseville, California

Prepared by:

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EXECUTIVE SUMMARY

This report documents the results of a traffic impact study completed for the John Adams Academy (JAA) Multi-Purpose Room ("MPR", the "proposed project", or "project"). The project proposes to construct an 11,600-square foot multi-purpose room on their campus located at 1 Sierragate Plaza in Roseville. Based on information provided by JAA, the Academy is understood to currently serve 1,305 students, with a full occupancy target of 1,608 students. The addition of the MPR is understood to add an additional 42 students bringing the maximum occupancy to 1,650 students. Access to the site is currently, and will continue to be provided at the existing single site driveway intersection with Harding Boulevard.

The purpose of this impact study is to identify potential environmental impacts to transportation facilities as required by the California Environmental Quality Act (CEQA). This study was performed in accordance with the scope of work approved by the City of Roseville, and in a manner consistent with the City of Roseville's standards.

The following intersections are included in this evaluation:

1. Atlantic Street @ Wills Road
2. Atlantic Street @ I-80 Westbound On-Ramp
3. Atlantic Street @ I-80 Eastbound Off-Ramp/Taylor Road
4. Eureka Road @ Sunrise Avenue
5. Galleria Boulevard @ Roseville Parkway
6. Harding Boulevard @ Wills Road
7. Harding Boulevard @ Lead Hill Boulevard
8. Sunrise Avenue @ Lead Hill Boulevard
9. Harding Boulevard @ Estates Drive
10. Harding Boulevard @ Roseville Square
11. Douglas Boulevard @ Harding Boulevard
12. Douglas Boulevard @ I-80 Westbound Off-Ramp
13. Douglas Boulevard @ I-80 Eastbound Off-Ramp
14. Douglas Boulevard @ Sunrise Avenue

This traffic impact study was conducted for the study facilities for the following scenarios:

A. Existing (2017) Conditions
B. Existing (2017) plus Proposed Project Conditions[+]
C. CIP Cumulative (2035) Conditions[++]
D. CIP Cumulative (2035) plus Proposed Project Conditions[+++]

[+] Scenario adds traffic associated with 42 new students to Existing (2017) Conditions
[++] Scenario considers the current City CIP Cumulative Travel Demand Model (TDM) land uses for the project site and adjusts the forecasts to reflect 1,608 students.
[+++] Scenario adds traffic associated with 42 new students to CIP Cumulative (2035) Conditions

Significant findings of this study include:

- The proposed project is estimated to generate 38 new trips during the AM peak-hour, 24 new trips during the School PM peak-hour, and 8 new trips during the traditional PM peak-hour.
- The proposed project is located in Traffic Analysis Zone (TAZ) (#78). This study considered the City's CIP Cumulative Travel Demand Model (TDM) land uses for the project site and adjusted the forecasts to reflect 1,608 students. Therefore, the CIP Cumulative (2035) scenario incorporates vehicle trips from the currently projected build-out of the JAA campus at 1,608 students. The effect of the project under CIP Cumulative (2035) conditions adds traffic associated with 42 new students.

- As defined by the City, the addition of the proposed project to the Cumulative (2035) scenario results in an impact at the Harding Boulevard intersection with Douglas Boulevard (Intersection #11) during the AM peak-hour. However, this impact can be mitigated to be ***less than significant***.

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INTRODUCTION

This report documents the results of a traffic impact study completed for the John Adams Academy (JAA) Multi-Purpose Room ("MPR", the "proposed project", or "project"). The project proposes to construct an 11,600-square foot multi-purpose room on their campus located at 1 Sierragate Plaza in Roseville. Based on information provided by JAA, the Academy is understood to currently serve 1,305 students, with a full occupancy target of 1,608 students. The addition of the MPR is understood to add an additional 42 students bringing the maximum occupancy to 1,650 students. Access to the site is currently, and will continue to be provided at the existing single site driveway intersection with Harding Boulevard.

The purpose of this impact study is to identify potential environmental impacts to transportation facilities as required by the California Environmental Quality Act (CEQA). This study was performed in accordance with the scope of work approved by the City of Roseville, and in a manner consistent with the City of Roseville's standards[1]. The remaining sections of this report document the proposed project, analysis methodologies, impacts and mitigation, and general study conclusions.

PROJECT DESCRIPTION

The project proposes to construct an 11,600-square foot multi-purpose room (MPR) on their campus located at 1 Sierragate Plaza. The addition of the MPR adds an additional 42 students to the campus, bringing the maximum occupancy to 1,650 students. Access to the site is currently, and will continue to be provided at the existing single site driveway intersection with Harding Boulevard. The project location is shown in **Figure 1**, and the proposed project site plan is shown in **Figure 2**. The following intersections are included in this evaluation:

1. Atlantic Street @ Wills Road
2. Atlantic Street @ I-80 Westbound On-Ramp
3. Atlantic Street @ I-80 Eastbound Off-Ramp/Taylor Road
4. Eureka Road @ Sunrise Avenue
5. Galleria Boulevard @ Roseville Parkway
6. Harding Boulevard @ Wills Road
7. Harding Boulevard @ Lead Hill Boulevard
8. Sunrise Avenue @ Lead Hill Boulevard
9. Harding Boulevard @ Estates Drive
10. Harding Boulevard @ Roseville Square
11. Douglas Boulevard @ Harding Boulevard
12. Douglas Boulevard @ I-80 Westbound Off-Ramp
13. Douglas Boulevard @ I-80 Eastbound Off-Ramp
14. Douglas Boulevard @ Sunrise Avenue

Figure 3 illustrates the study intersections facilities, existing traffic control, and existing lane configurations.

[1] Section 4 *Traffic Impact Studies*, *City of Roseville Design Standards*, January 2016.

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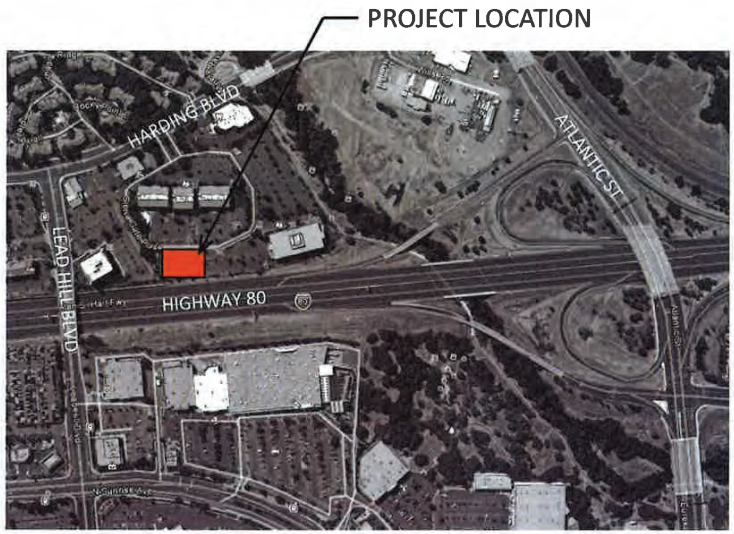
Figure 1
Vicinity Map

LEGAL DESCRIPTION

ADDRESS:	1 SIERRA GATE PLAZA ROSEVILLE CA, 95678
	7 SIERRA GATE PLAZA ROSEVILLE CA, 95678
APN:	015-240-13 015-240-24 015-240-42
ZONING:	BP
SETBACKS:	TO BE DETERMINED
SITE AREA:	4.5 ACRES 6.15 ACRES

VICINITY MAP



John Adams ACADEMY

VEHICLE PARKING ANALYSIS

K-8 CLASSROOMS: 27 PARKING REQ'D.: 54 LOADING ZONE: 486'
K-8 PARKING PROVIDED: 171 STANDARD STALLS

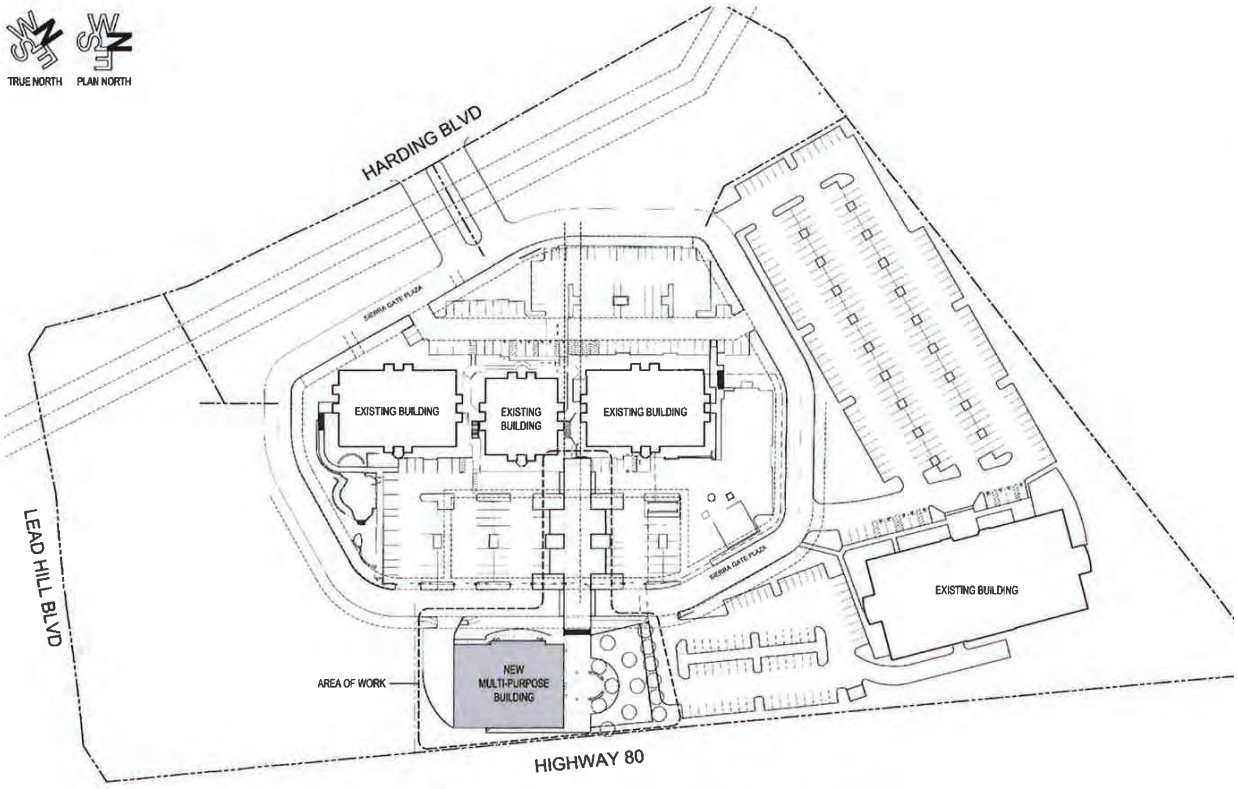
9-12 CLASSROOMS: 23 PARKING REQ'D.: 196 LOADING ZONE: 207'
9-12 PARKING PROVIDED: 309 STANDARD STALLS

MULTI-PURPOSE PARKING REQ'D. (2 CLASSROOMS + ASSEMBLY): 193
TOTAL PARKING REQUIRED: 443
TOTAL PARKING PROVIDED: 480

NEW BUILDING INFORMATION

BUILDING GROSS AREA:	11,400 SQ FT
BUILDING HEIGHT:	36'-0"
BUILDING USE:	ASSEMBLY EDUCATION

SITE PLAN



williams + paddon ARCHITECTS // PLANNERS // PEOPLE

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Figure 2
Proposed Project Site Plan

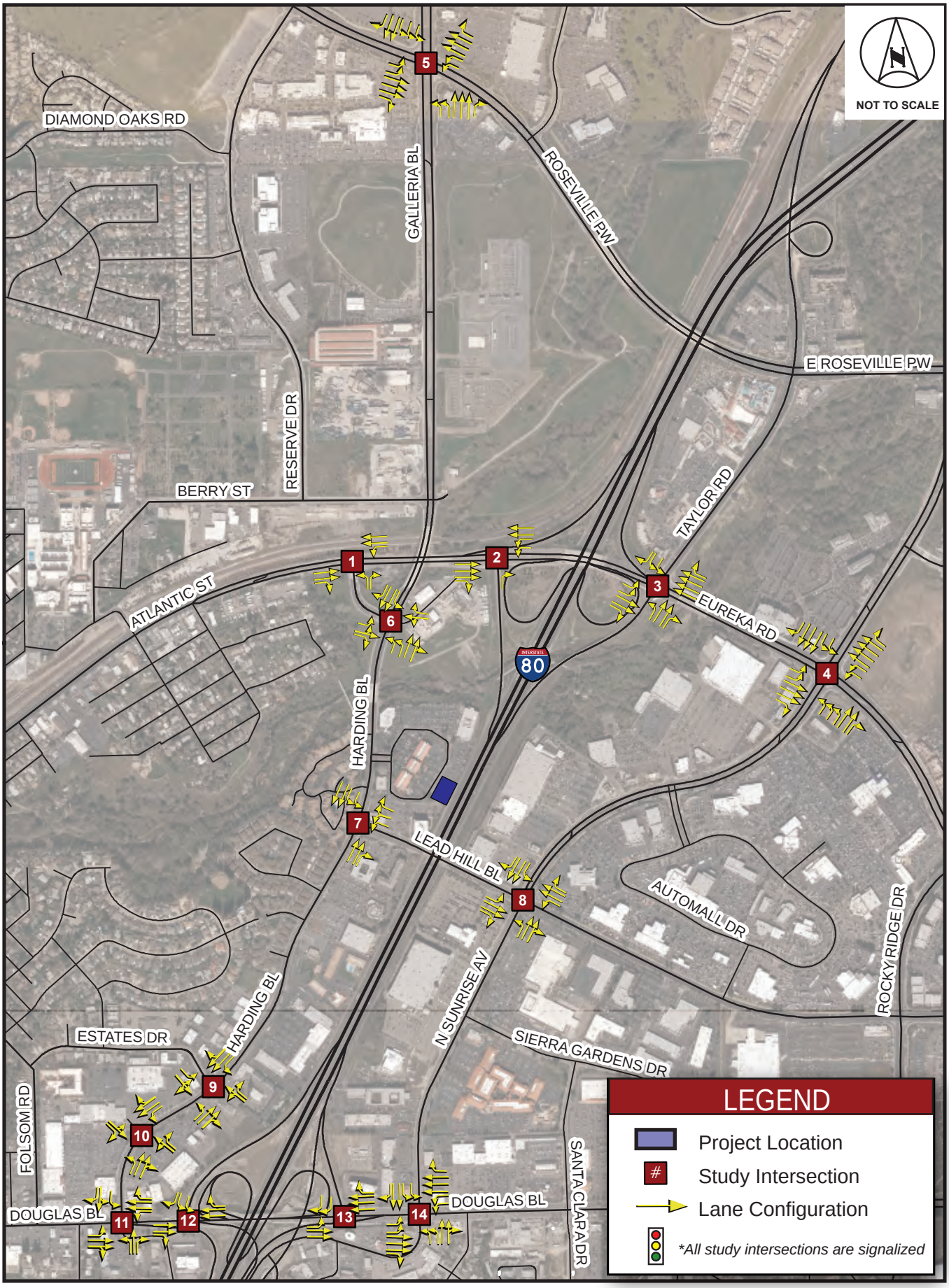

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Figure 3
Study Intersections, Traffic Control, and Lane Geometries

PROJECT AREA ROADWAYS

The following are descriptions of the primary roadways in the vicinity of the project.

Interstate 80 (I-80) is a freeway facility that forms the western boundary of the proposed project site. I-80 is the primary east-west transportation route in Northern California regionally connecting the San Francisco Bay Area with Sacramento and the Lake Tahoe Basin. Through the project area, I-80 have five travel lanes in each direction and accommodates approximately 183,000 vehicles per day (vpd)[2]. Two nearby interchanges provide access to the project site, Atlantic Street/Eureka Road and Douglas Boulevard.

Harding Boulevard is a north-south arterial roadway adjacent to the proposed project site. This roadway provides connectivity between Douglas Boulevard and Atlantic Street, after which it changes names and becomes Galleria Boulevard. Harding Boulevard provides access to numerous commercial and residential areas though the general project area. Adjacent to the project site this roadway has two travel lanes in each direction and a continuous, two-way left turn lane (TWLTL).

Lead Hill Boulevard is an east-west arterial facility that links Harding Boulevard on the west with East Roseville Parkway on the east. Between these connections, this roadway provides access to the City's core office and commercial district. Through its overcrossing of I-80, Lead Hill Boulevard provides connectivity between the project site and areas to the east of I-80.

ASSESSMENT OF PROPOSED PROJECT

Proposed Project Trip Generation and Assignment

The number of trips anticipated to be generated by the proposed project was derived using site-specific trip generation rates previously developed for the project[3], as well as data included in the *Trip Generation Manual, 9th Edition,* published by the Institute for Traffic Engineering (ITE). As presented in the previous study, a unique trip generation rate of 0.58 was calculated for the School PM Peak-Hour. However, considering that the School PM Peak-Hour occurs between 3:00 and 4:00 PM, this rate was determined to not be appropriate for use in the traditional PM Peak-Hour analyzed within this study (4:00-6:00 PM). Therefore, a proportional rate for the traditional PM Peak-Hour was calculated using ITE Land Use Code 536 for Private Schools (K-12), which indicates an AM Peak-Hour rate of 0.81 and a PM Peak-Hour rate of 0.17. In this case, the PM Peak-Hour rate is approximately 21-percent of the AM Peak-Hour Rate. Applying this peak-hour relationship to the JAA site-specific AM Peak-Hour rate, the proportional traditional PM Peak-Hour rate would be 0.19. This rate is considered appropriate for traditional PM Peak-Hour trip generation. As a result, the following rates represent unique John Adams Academy trip generation rates used in this evaluation:

AM Peak-Hour:	*0.90 trips/student*
School PM Peak-Hour:	*0.58 trips/student*
PM Peak-Hour:	*0.19 trips/student*

AM, School PM, and PM Peak-Hour in and out percentages were calculated based on the previous study. The proposed project trip generation for the three peak-hours are presented in **Table 1**.

As shown in **Table 1**, the proposed project is estimated to generate 38 new trips during the AM peak-hour, 24 new trips during the School PM peak-hour, and 8 new trips during the traditional PM peak-hour. Project traffic was distributed to the roadway network based on existing traffic volumes, output from the City's travel demand model, and professional judgment. The project trip distribution percentages are provided in **Figure 4** (2017 scenario), and the assignment of project trips is depicted in **Figure 5**.

[2] http://www.dot.ca.gov/trafficops/census/volumes2015/Route71-80.html
[3] *John Adams Academy Traffic Access and Circulation Evaluation*, Kimley-Horn and Associates, Inc., January 13, 2016.

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Figure 4
Proposed Project Trip Distribution

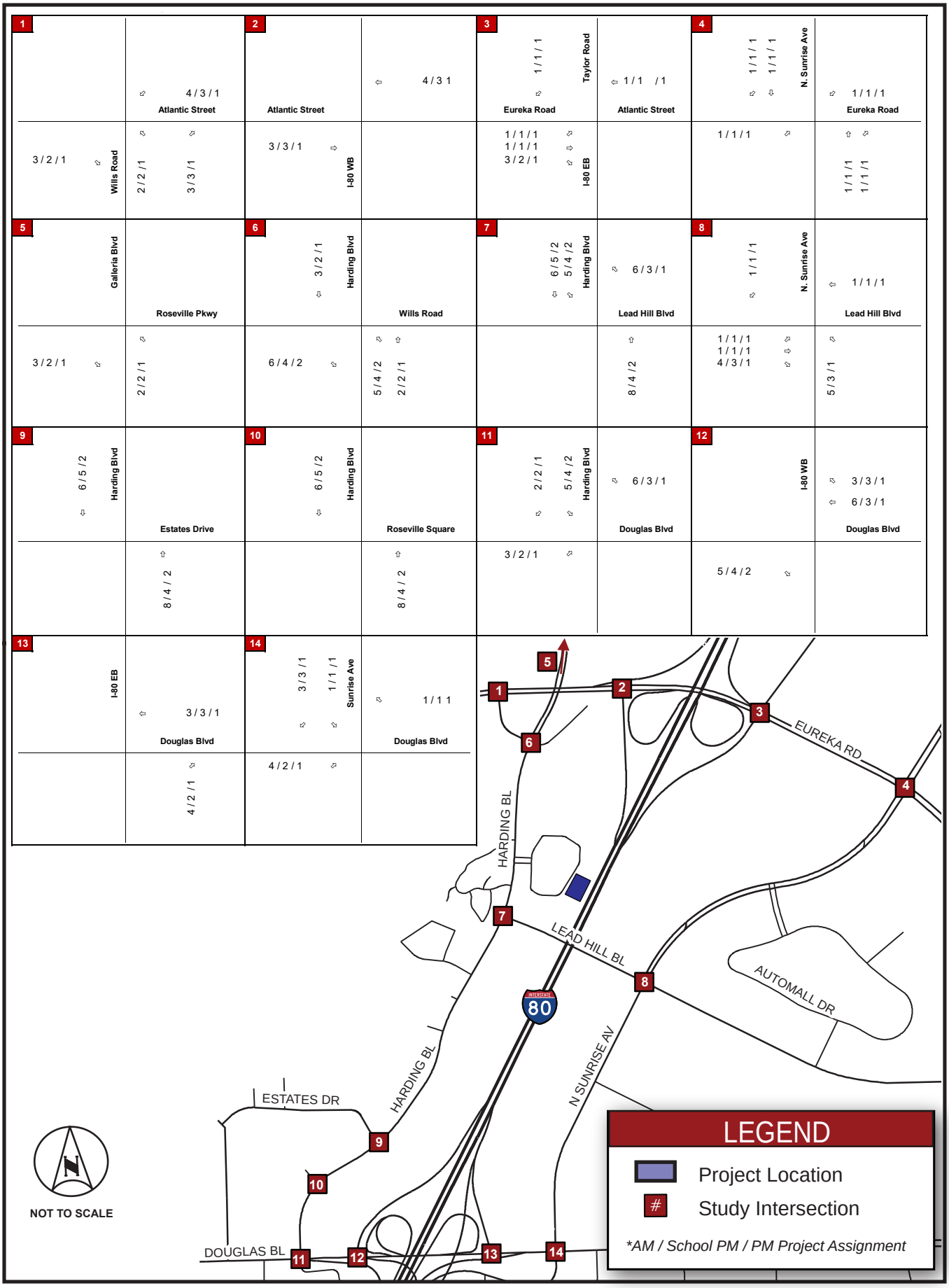

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Figure 5
Proposed Project Trip Assignment

Table 1 – Proposed Project Trip Generation

Land Use	Size (students)	AM Peak-Hour					School PM Peak-Hour					PM Peak-Hour				
		Total Trips	IN		OUT		Total Trips	IN		OUT		Total Trips	IN		OUT	
			%	Trips	%	Trips		%	Trips	%	Trips		%	Trips	%	Trips
John Adams Academy	42	38	56%	21	44%	17	24	46%	11	54%	13	8	46%	4	54%	4
Net New External Trips:		*38*		*21*		*17*	*24*		*11*		*13*	*8*		*4*		*4*

Trip Rate Source: *John Adams Academy Traffic Access and Circulation Evaluation,* Kimley-Horn and Associates Inc., *2016.*
Note: School PM Peak-Hour (2:00 - 4:00 PM), Traditional PM Peak-Hour (4:00 - 6:00 PM)

TRANSPORTATION IMPACT STUDY METHODOLOGY

This traffic impact study was performed in accordance with the City's requirements[1].

Level of Service Definitions

Analysis of transportation facility significant environmental impacts is based on the concept of Level of Service (LOS). The LOS of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. Levels of Service for this study were determined using methods defined in the *Highway Capacity Manual (HCM) 2010*.

Intersection Analysis

The HCM includes procedures for analyzing signalized intersections. The signalized intersection procedure defines LOS as a function of average control delay for the intersection as a whole. **Table 2** presents intersection LOS definitions as defined in the HCM.

Table 2 – Intersection Level of Service Criteria

Level of Service (LOS)	Un-Signalized	Signalized
	Average Control Delay* (sec/veh)	Average Control Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F	> 50	> 80

Source: Highway Capacity Manual, 2010
* Applied to the worst lane/lane group(s) for SSSC

Analysis Scenarios

Based on direction received from the City, and in a manner consistent with the City's guidelines[1], this LOS analysis was conducted for the study facilities for the following scenarios:

A. Existing (2017) Conditions
B. Existing (2017) plus Proposed Project Conditions[+]
C. CIP Cumulative (2035) Conditions[++]
D. CIP Cumulative (2035) plus Proposed Project Conditions[+++]

[+] Scenario adds traffic associated with 42 new students to Existing (2017) Conditions
[++] Scenario considers the current City CIP Cumulative Travel Demand Model (TDM) land uses for the project site and adjusts the forecasts to reflect 1,608 students.
[+++] Scenario adds traffic associated with 42 new students to CIP Cumulative (2035) Conditions

EXISTING (2017) CONDITIONS

Weekday intersection turning movement traffic counts were obtained from the City for the fourteen (14) study intersections. This count data was collected through the City's Intelligent Transportation System (ITS) on Thursday, April 27, 2017. The count data was provided for the 24-hour period from which the individual intersections' peak-hours were identified. Existing (2017) peak-hour turn movement volumes are presented in **Figure 6**, and the traffic count data sheets are provided in **Appendix A**. Analysis worksheets for this scenario are provided in **Appendix B**. **Table 3** presents the intersection operating conditions for this analysis scenario. As indicated in **Table 3**, the study intersections operate from LOS A to LOS F.

Table 3 – Existing (2017) Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Existing (2017)	
				Delay (sec)	LOS
1	Atlantic Street @ Wills Road	Signal	AM	11.4	B
			School PM	9.7	A
			PM	11.2	B
2	Atlantic Street @ I-80 WB Ramps	Signal	AM	137.3	F
			School PM	23.2	C
			PM	19.7	B
3	Atlantic Street/Eureka Road @ US-80 EB Ramps/Taylor Road	Signal	AM	26.9	C
			School PM	24.0	C
			PM	38.8	D
4	N. Sunrise Avenue @ Eureka Road	Signal	AM	17.9	B
			School PM	16.9	B
			PM	19.4	B
5	Galleria Blvd @ Roseville Pkwy	Signal	AM	19.3	B
			School PM	27.2	C
			PM	34.1	C
6	Harding Blvd @ Wills Road	Signal	AM	17.2	B
			School PM	17.1	B
			PM	17.4	B
7	Harding Blvd @ Lead Hill Blvd	Signal	AM	12.7	B
			School PM	14.6	B
			PM	41.9	D
8	N. Sunrise Aveue @ Lead Hill Blvd	Signal	AM	18.4	B
			School PM	33.2	C
			PM	71.0	E
9	Harding Blvd @ Estates Drive	Signal	AM	16.7	B
			School PM	15.4	B
			PM	18.7	B
10	Harding Blvd @ Roseville Square	Signal	AM	10.9	B
			School PM	19.2	B
			PM	19.9	B
11	Harding Blvd @ Douglas Blvd	Signal	AM	20.4	C
			School PM	27.8	C
			PM	36.9	D
12	Douglas Blvd @ I-80 WB Ramps	Signal	AM	8.3	A
			School PM	9.2	A
			PM	11.6	B
13	Douglas Blvd @ I-80 EB Ramps	Signal	AM	6.9	A
			School PM	10.1	B
			PM	10.7	B
14	Douglas Blvd @ Sunrise Avenue	Signal	AM	23.3	C
			School PM	33.6	C
			PM	41.0	D

Notes:

Bold represents substandard operations.

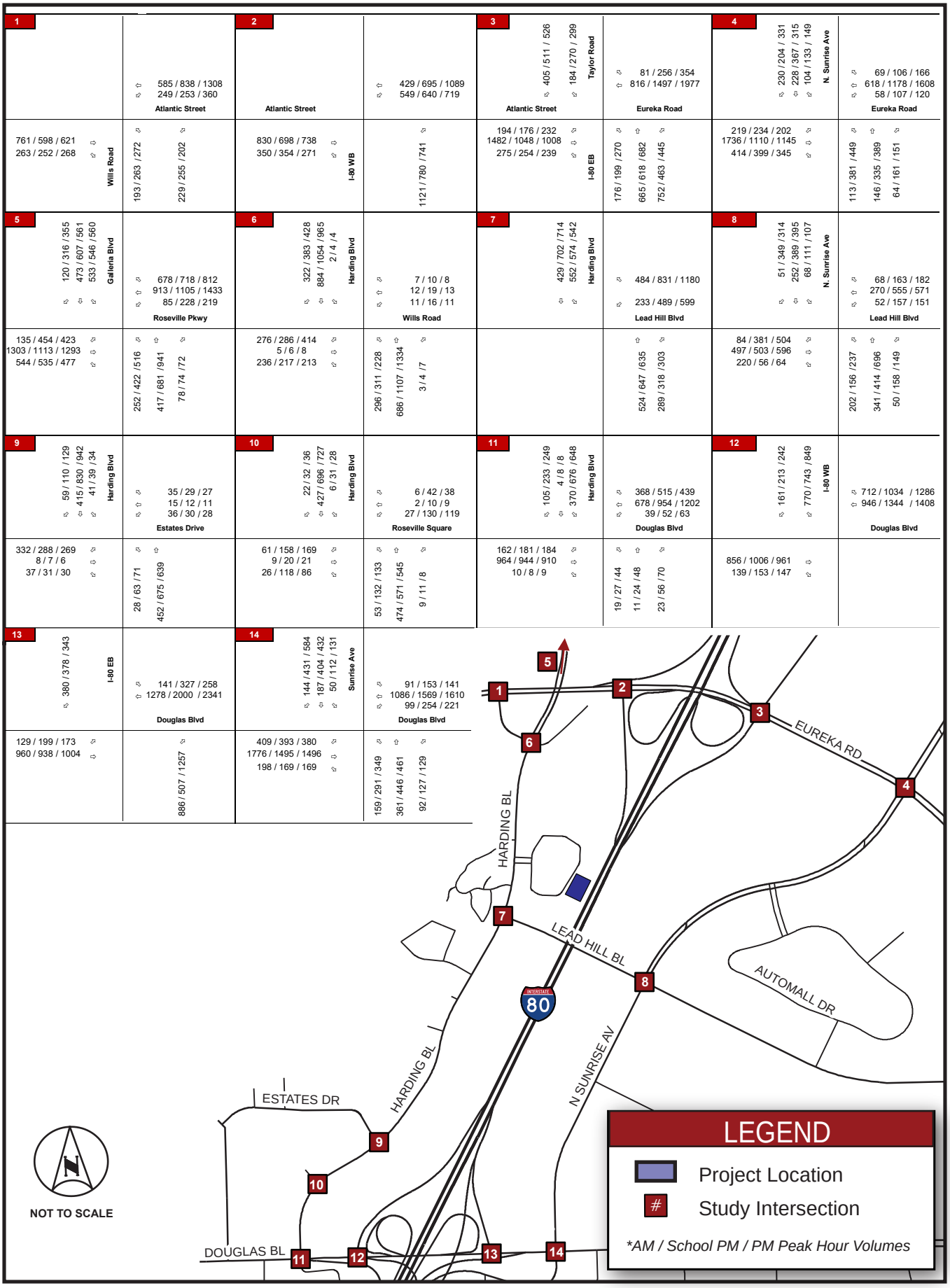

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Figure 6
Existing (2017) Peak Hour Volumes

EXISTING (2017) PLUS PROPOSED PROJECT CONDITIONS

As previously discussed, the number of trips anticipated to be generated by the proposed project was derived using site-specific trip generation rates previously developed for the project, as well as data published by ITE. These trips were then assigned to the roadway network based on existing traffic volumes, output from the City's travel demand model, and professional judgment. Using these volumes, levels of service were determined at the study facilities. Peak-hour turn movement volumes for this scenario are presented in **Figure 7** and analysis worksheets are provided in **Appendix C**. **Table 4** presents the intersection operating conditions for this analysis scenario. As indicated in **Table 4**, the study intersections operate from LOS A to LOS F.

Table 4 – Existing (2017) and Existing (2017) plus Proposed Project Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Existing (2017)		Existing (2017) plus Project	
				Delay (sec)	LOS	Delay (sec)	LOS
1	Atlantic Street @ Wills Road	Signal	AM	11.4	B	12.0	B
			School PM	9.7	A	9.8	A
			PM	11.2	B	11.2	B
2	Atlantic Street @ I-80 WB Ramps	Signal	AM	137.3	F	137.0	F
			School PM	23.2	C	23.2	C
			PM	19.7	B	19.8	B
3	Atlantic Street/Eureka Road @ US-80 EB Ramps/Taylor Road	Signal	AM	26.9	C	26.9	C
			School PM	24.0	C	24.0	C
			PM	38.8	D	38.8	D
4	N. Sunrise Avenue @ Eureka Road	Signal	AM	17.9	B	17.9	B
			School PM	16.9	B	16.9	B
			PM	19.4	B	19.4	B
5	Galleria Blvd @ Roseville Pkwy	Signal	AM	19.3	B	19.3	B
			School PM	27.2	C	27.2	C
			PM	34.1	C	34.1	C
6	Harding Blvd @ Wills Road	Signal	AM	17.2	B	17.3	B
			School PM	17.1	B	17.2	B
			PM	17.4	B	17.4	B
7	Harding Blvd @ Lead Hill Blvd	Signal	AM	12.7	B	12.7	B
			School PM	14.6	B	14.6	B
			PM	41.9	D	41.9	D
8	N. Sunrise Aveue @ Lead Hill Blvd	Signal	AM	18.4	B	18.5	B
			School PM	33.2	C	33.3	C
			PM	71.0	E	72.1	E
9	Harding Blvd @ Estates Drive	Signal	AM	16.7	B	16.7	B
			School PM	15.4	B	15.4	B
			PM	18.7	B	18.7	B
10	Harding Blvd @ Roseville Square	Signal	AM	10.9	B	10.9	B
			School PM	19.2	B	19.2	B
			PM	19.9	B	19.9	B
11	Harding Blvd @ Douglas Blvd	Signal	AM	20.4	C	20.5	C
			School PM	27.8	C	27.9	C
			PM	36.9	D	37.1	D
12	Douglas Blvd @ I-80 WB Ramps	Signal	AM	8.3	A	8.3	A
			School PM	9.2	A	9.2	A
			PM	11.6	B	11.6	B
13	Douglas Blvd @ I-80 EB Ramps	Signal	AM	6.9	A	6.9	A
			School PM	10.1	B	10.1	B
			PM	10.7	B	10.8	B
14	Douglas Blvd @ Sunrise Avenue	Signal	AM	23.3	C	23.3	C
			School PM	33.6	C	33.7	C
			PM	41.0	D	41.2	D

Notes:

Bold represents substandard operations.

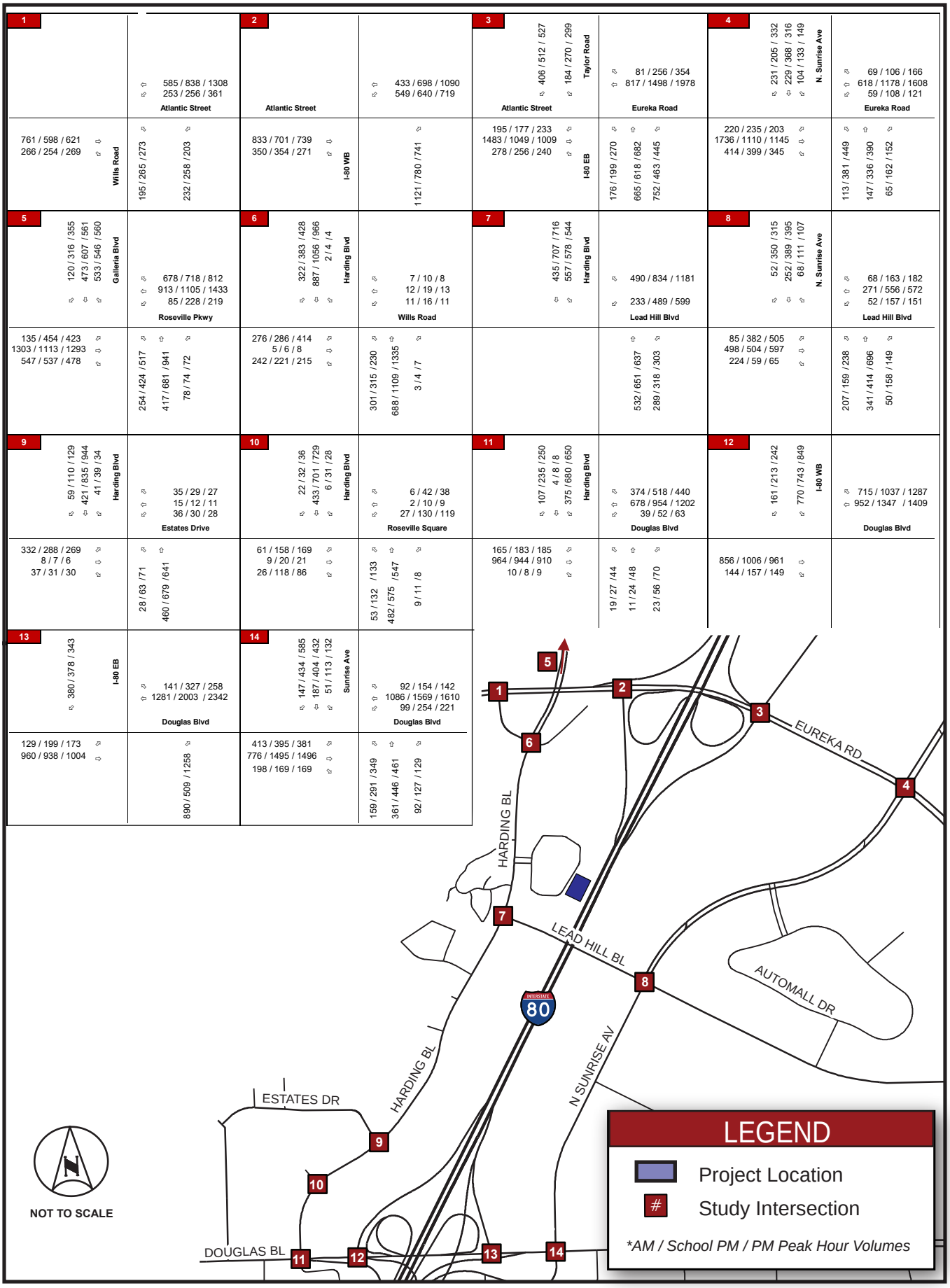

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Figure 7

Existing (2017) plus Proposed Project Peak Hour Volumes

CIP CUMULATIVE (2035) CONDITIONS

This analysis scenario represents conditions anticipated to be realized based on reasonably foreseeable land developments and roadway improvements by 2035, including vehicle trips from the currently projected build-out of the JAA campus at 1,608 students. The 2035 AM and PM peak-hour traffic volumes were provided by the City. The forecast school-PM peak-hour volumes were developed for use in the study by applying the Existing (2017) relationship between school-PM and PM peak-hours. Cumulative (2035) lane geometries and peak-hour turn movement volumes are presented in **Figure 8** and **Figure 9**, respectively. Analysis worksheets for this scenario are provided in **Appendix D**. **Table 5** presents the intersection operating conditions. As indicated in **Table 5**, the study intersections operate from LOS A to LOS F.

Table 5 – CIP Cumulative (2035) Intersection Levels of Service

ID	Intersection	Control	Peak Hour	CIP Cumulative (2035)	
				Delay (sec)	LOS
1	Atlantic Street @ Wills Road	Signal	AM	12.7	B
			School PM	16.8	B
			PM	12.1	B
2	Atlantic Street @ I-80 WB Ramps	Signal	AM	74.4	E
			School PM	101.4	F
			PM	70.5	E
3	Atlantic Street/Eureka Road @ US-80 EB Ramps/Taylor Road	Signal	AM	15.9	B
			School PM	16.3	B
			PM	37.6	D
4	N. Sunrise Avenue @ Eureka Road	Signal	AM	19.0	B
			School PM	22.7	C
			PM	26.4	C
5	Galleria Blvd @ Roseville Pkwy	Signal	AM	47.1	D
			School PM	40.8	D
			PM	54.9	D
6	Harding Blvd @ Wills Road	Signal	AM	16.1	B
			School PM	24.0	C
			PM	20.7	C
7	Harding Blvd @ Lead Hill Blvd	Signal	AM	15.0	B
			School PM	29.5	C
			PM	42.5	D
8	N. Sunrise Aveue @ Lead Hill Blvd	Signal	AM	23.2	C
			School PM	24.3	C
			PM	35.2	D
9	Harding Blvd @ Estates Drive	Signal	AM	16.5	B
			School PM	23.5	C
			PM	22.1	C
10	Harding Blvd @ Roseville Square	Signal	AM	9.6	A
			School PM	29.9	C
			PM	25.6	C
11	Harding Blvd @ Douglas Blvd	Signal	AM	34.5	C
			School PM	75.1	E
			PM	84.9	F
12	Douglas Blvd @ I-80 WB Ramps	Signal	AM	9.8	A
			School PM	13.7	B
			PM	24.1	C
13	Douglas Blvd @ I-80 EB Ramps	Signal	AM	15.0	B
			School PM	18.8	B
			PM	15.7	B
14	Douglas Blvd @ Sunrise Avenue	Signal	AM	21.5	C
			School PM	33.7	C
			PM	39.3	D

Notes:
Bold represents substandard operations.

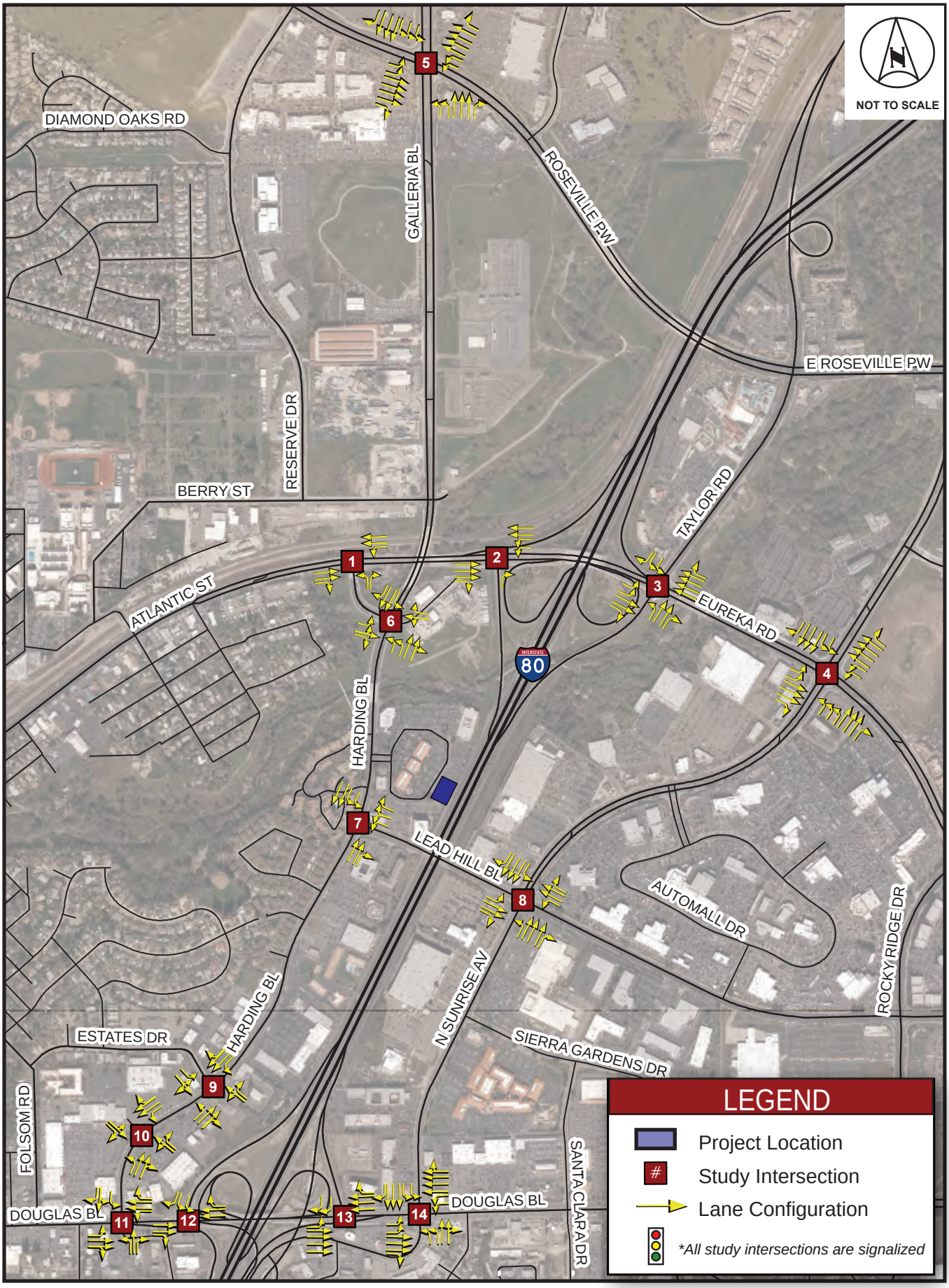

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Figure 8
CIP Cumulative (2035) Conditions Lane Geometries

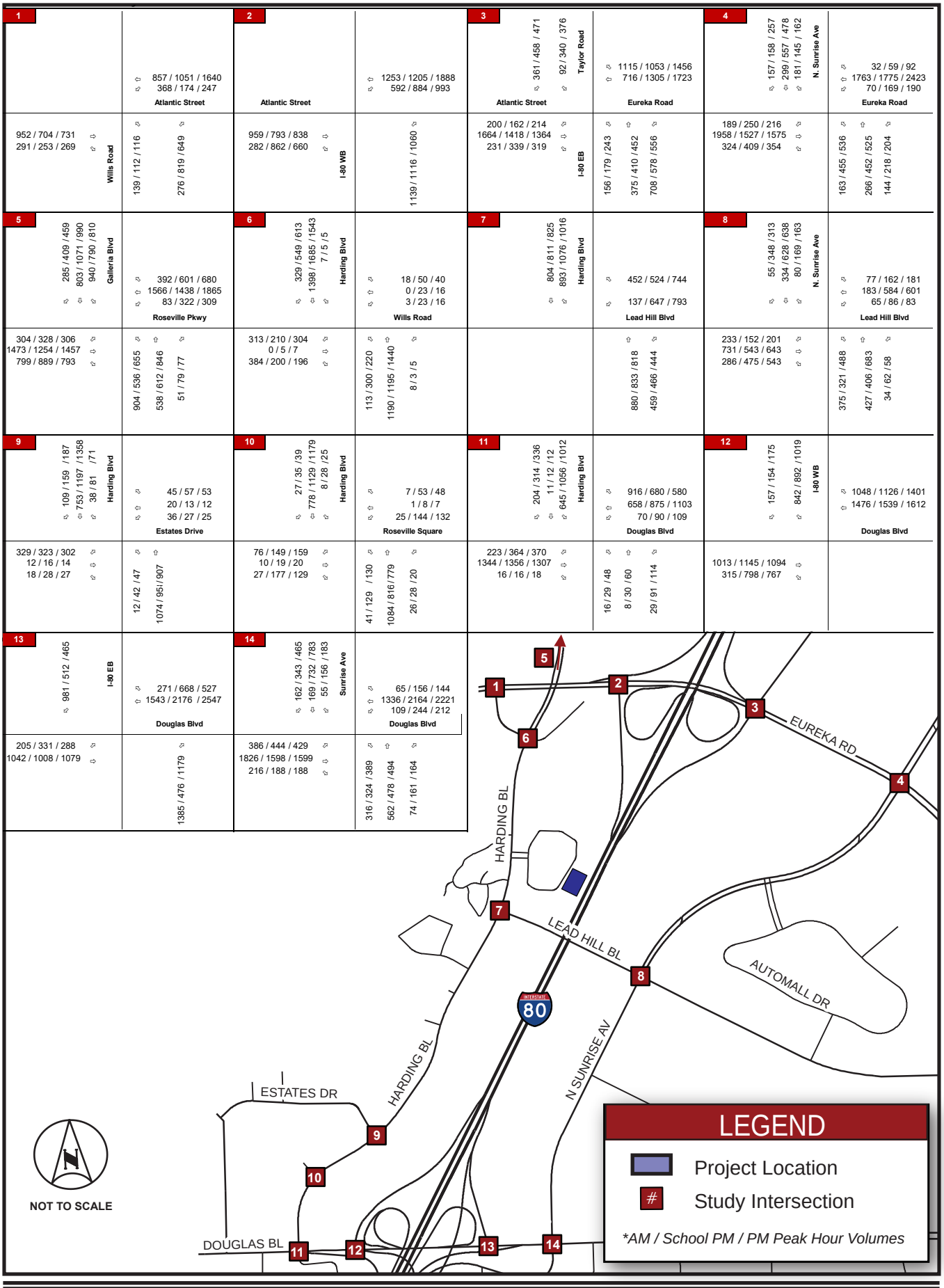

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Figure 9
CIP Cumulative (2035) Peak-Hour Traffic Volumes

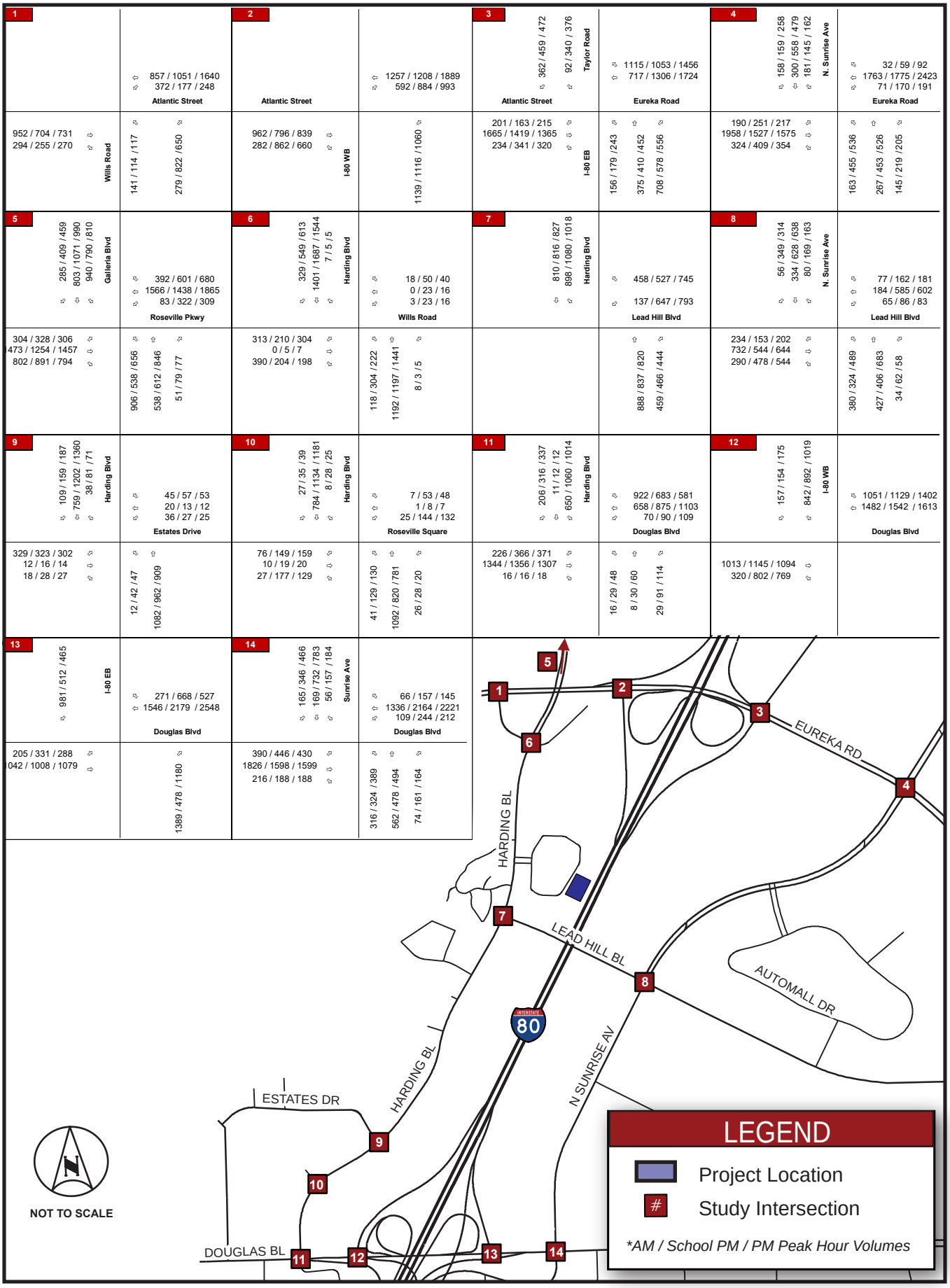
CIP CUMULATIVE (2035) PLUS PROPOSED PROJECT CONDITIONS

The number of trips estimated to be generated by the proposed project were determined using the ITE *Trip Generation Manual* and were then assigned to the roadway network based on existing traffic volumes, output from the City's travel demand model, and professional judgment. Using these volumes, levels of service were determined at the study facilities. Cumulative (2035) plus Proposed Project peak-hour turn movement volumes are presented in **Figure 10**. Analysis worksheets for this scenario are provided in **Appendix E**. **Table 6** presents the intersection operating conditions for this analysis scenario. As indicated in **Table 6**, the addition of the proposed project results in a significant impact at the Harding Boulevard intersection with Douglas Boulevard (Intersection #11).

Table 6 – CIP Cumulative (2035) plus Proposed Project Intersection Levels of Service

vv	Intersection	Control	Peak Hour	CIP Cumulative (2035)		CIP Cumulative (2035) plus Project	
				Delay (sec)	LOS	Delay (sec)	LOS
1	Atlantic Street @ Wills Road	Signal	AM	12.7	B	12.9	B
			School PM	16.8	B	17.2	B
			PM	12.1	B	12.2	B
2	Atlantic Street @ I-80 WB Ramps	Signal	AM	74.4	E	74.4	E
			School PM	101.4	F	101.4	F
			PM	70.5	E	70.6	E
3	Atlantic Street/Eureka Road @ US-80 EB Ramps/Taylor Road	Signal	AM	15.9	B	15.9	B
			School PM	16.3	B	16.4	B
			PM	37.6	D	37.8	D
4	N. Sunrise Avenue @ Eureka Road	Signal	AM	19.0	B	19.1	B
			School PM	22.7	C	22.7	C
			PM	26.4	C	26.4	C
5	Galleria Blvd @ Roseville Pkwy	Signal	AM	47.1	D	47.1	D
			School PM	40.8	D	40.9	D
			PM	54.9	D	55.0	D
6	Harding Blvd @ Wills Road	Signal	AM	16.1	B	16.2	B
			School PM	24.0	C	24.1	C
			PM	20.7	C	20.7	C
7	Harding Blvd @ Lead Hill Blvd	Signal	AM	15.0	B	15.2	B
			School PM	29.5	C	29.8	C
			PM	42.5	D	42.7	D
8	N. Sunrise Aveue @ Lead Hill Blvd	Signal	AM	23.2	C	23.4	C
			School PM	24.3	C	24.4	C
			PM	35.2	D	35.3	D
9	Harding Blvd @ Estates Drive	Signal	AM	16.5	B	16.5	B
			School PM	23.5	C	23.5	C
			PM	22.1	C	22.2	C
10	Harding Blvd @ Roseville Square	Signal	AM	9.6	A	9.6	A
			School PM	29.9	C	30.0	C
			PM	25.6	C	25.6	C
11	Harding Blvd @ Douglas Blvd	Signal	AM	34.5	C	35.2	D
			School PM	75.1	E	75.7	E
			PM	84.9	F	85.2	F
12	Douglas Blvd @ I-80 WB Ramps	Signal	AM	9.8	A	9.8	A
			School PM	13.7	B	13.8	B
			PM	24.1	C	24.1	C
13	Douglas Blvd @ I-80 EB Ramps	Signal	AM	15.0	B	15.1	B
			School PM	18.8	B	18.8	B
			PM	15.7	B	15.7	B
14	Douglas Blvd @ Sunrise Avenue	Signal	AM	21.5	C	21.6	C
			School PM	33.7	C	33.7	C
			PM	39.3	D	39.4	D

Notes:
Bold represents substandard operations. Shaded represents significant impact.



Kimley»Horn

Figure 10

CIP Cumulative (2035) plus Proposed Project Peak-Hour Traffic Vols

IMPACTS AND MITIGATION

Standards of Significance

Project impacts were determined by comparing conditions with the proposed project to those without the project. Impacts for intersections are created when traffic from the proposed project forces the LOS to fall below a specific threshold. The City's *General Plan*[4] specifies the following:

> "*Level of Service (LOS) expresses the City's targeted level of mobility during the life of the General Plan. Its policies and implementation measures reflect the City's desire to maintain uncongested traffic operations (LOS "C" or better at 70% of the signalized intersections during the a.m. and p.m. peak periods) on its roadway system for all hours of the day. The level of service implementation measures provide criteria to be evaluated where the City may consider a modification to the level of service "C" policy."*

Based on this guidance and in a manner consistent with other traffic studies completed in the City, the project would have a significant impact if it would:

1. Cause a signalized intersection to be degraded as follows under Existing or CIP Cumulative (2035) conditions during the AM or PM peak hours:
    - For intersections currently operating at LOS C or better: worsen operations to LOS D or worse.
    - For intersections currently operating at LOS D, E, or F: cause operations to further worsen by one or more service levels.
2. Cause the overall percentage of signalized intersections operating at LOS C or better during the AM and PM peak hours to fall below 70 percent.

Impacts and Mitigation

As reflected in **Table 4**, under Existing (2017) plus Proposed Project conditions, the addition of the proposed project does not result in a significant impact, as defined by the City. As reflected in **Table 6**, under Cumulative (2035) plus Proposed Project conditions, the addition of the proposed project results in a significant impact in the AM peak-hour at the Harding Boulevard intersection with Douglas Boulevard (Intersection #11), as defined by the City. The following mitigation is recommended:

> *M1. Intersection #11, Harding Boulevard @ Douglas Boulevard*
> The significant impact at this intersection during the AM peak-hour can be mitigated by the addition of a westbound right-turn overlap signal phase. As shown in **Table 7**, this mitigation measure results in the intersection operating at LOS C during the AM peak-hour. Therefore, ***this impact is less than significant***. Analysis worksheets are provided in **Appendix E**.

Table 7 – CIP Cumulative (2035) plus Proposed Project Mitigated Intersection Level of Service

ID	Intersection	Control	Peak Hour	CIP Cumulative (2035)		CIP Cumulative (2035) plus Project - Mitigated	
				Delay (sec)	LOS	Delay (sec)	LOS
11	Harding Blvd @ Douglas Blvd	Signal	AM	34.5	C	30.5	C
			School PM	75.1	E	63.1	E
			PM	84.9	F	81.8	F

Notes:

Bold represents substandard operations.

[4] *Roseville General Plan 2035, Circulation Element*, City of Roseville, August 17, 2016.

CONCLUSIONS

Significant findings of this study include:

- The proposed project is estimated to generate 38 new trips during the AM peak-hour, 24 new trips during the School PM peak-hour, and 8 new trips during the traditional PM peak-hour.
- The proposed project is located in Traffic Analysis Zone (TAZ) (#78). This study considered the City's CIP Cumulative Travel Demand Model (TDM) land uses for the project site and adjusted the forecasts to reflect 1,608 students. Therefore, the CIP Cumulative (2035) scenario incorporates vehicle trips from the currently projected build-out of the JAA campus at 1,608 students. The effect of the project under CIP Cumulative (2035) conditions adds traffic associated with 42 new students.
- As defined by the City, the addition of the proposed project to the Cumulative (2035) scenario results in an impact at the Harding Boulevard intersection with Douglas Boulevard (Intersection #11) during the AM peak-hour. However, this impact can be mitigated to be ***less than significant***.

Appendix A

Traffic Count Data Sheets

Turning Movement Volume Report

Report Date: 4/28/2017 8:03:18 AM

From 4/27/2017 to 4/27/2017

Intersection: 71

	N				S				E				W				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	6		5	11				0		8	2	10	2	17		19	40
27/04/17 00:15-00:30	2		4	6				0		12	4	16	4	13		17	39
27/04/17 00:30-00:45	3		1	4				0		9	2	11	4	15		19	34
27/04/17 00:45-01:00	2		2	4				0		1	2	3	4	11		15	22
27/04/17 01:00-01:15	2		1	3				0		10	4	14	3	9		12	29
27/04/17 01:15-01:30	1		2	3				0		5	1	6	2	12		14	23
27/04/17 01:30-01:45	1		1	2				0		3	0	3	0	4		4	9
27/04/17 01:45-02:00	2		2	4				0		2	0	2	0	5		5	11
27/04/17 02:00-02:15	3		4	7				0		1	2	3	1	7		8	18
27/04/17 02:15-02:30	1		1	2				0		0	0	0	1	2		3	5
27/04/17 02:30-02:45	2		1	3				0		7	0	7	0	3		3	13
27/04/17 02:45-03:00	0		0	0				0		3	2	5	1	4		5	10
27/04/17 03:00-03:15	0		0	0				0		1	1	2	1	2		3	5
27/04/17 03:15-03:30	0		1	1				0		2	2	4	0	2		2	7
27/04/17 03:30-03:45	0		0	0				0		5	1	6	1	5		6	12
27/04/17 03:45-04:00	1		1	2				0		2	1	3	1	3		4	9
27/04/17 04:00-04:15	1		1	2				0		13	2	15	4	1		5	22
27/04/17 04:15-04:30	1		1	2				0		5	0	5	1	3		4	11
27/04/17 04:30-04:45	0		0	0				0		5	0	5	1	4		5	10
27/04/17 04:45-05:00	1		4	5				0		19	1	20	2	10		12	37
27/04/17 05:00-05:15	0		4	4				0		23	4	27	5	9		14	45
27/04/17 05:15-05:30	3		2	5				0		27	2	29	2	9		11	45
27/04/17 05:30-05:45	1		1	2				0		18	0	18	4	23		27	47
27/04/17 05:45-06:00	3		6	9				0		27	8	35	5	29		34	78
27/04/17 06:00-06:15	0		10	10				0		60	13	73	16	32		48	131
27/04/17 06:15-06:30	7		12	19				0		68	13	81	11	52		63	163
27/04/17 06:30-06:45	9		10	19				0		66	15	81	10	63		73	173
27/04/17 06:45-07:00	13		26	39				0		112	12	124	19	91		110	273
27/04/17 07:00-07:15	10		20	30				0		117	16	133	27	102		129	292
27/04/17 07:15-07:30	14		32	46				0		131	29	160	42	124		166	372
27/04/17 07:30-07:45	30		48	78				0		133	57	190	52	138		190	458
27/04/17 07:45-08:00	62		71	133				0		220	72	292	60	135		195	620
27/04/17 08:00-08:15	56		63	119				0		227	75	302	89	182		271	692
27/04/17 08:15-08:30	45		47	92				0		181	59	240	48	130		178	510
27/04/17 08:30-08:45	28		28	56				0		198	37	235	44	127		171	462
27/04/17 08:45-09:00	21		35	56				0		145	39	184	34	131		165	405
27/04/17 09:00-09:15	32		48	80				0		308	98	406	104	282		386	872
27/04/17 09:15-09:30	28		29	57				0		130	38	168	34	114		148	373
27/04/17 09:30-09:45	30		23	53				0		110	26	136	46	82		128	317
27/04/17 09:45-10:00	36		32	68				0		108	35	143	37	122		159	370
27/04/17 10:00-10:15	36		24	60				0		109	32	141	55	99		154	355
27/04/17 10:15-10:30	30		18	48				0		104	52	156	41	93		134	338
27/04/17 10:30-10:45	38		19	57				0		104	46	150	40	94		134	341
27/04/17 10:45-11:00	24		25	49				0		89	48	137	48	96		144	330
27/04/17 11:00-11:15	28		33	61				0		96	41	137	46	123		169	367
27/04/17 11:15-11:30	46		33	79				0		105	42	147	35	135		170	396
27/04/17 11:30-11:45	35		37	72				0		99	56	155	51	125		176	403
27/04/17 11:45-12:00	60		50	110				0		131	51	182	65	136		201	493
27/04/17 12:00-12:15	46		40	86				0		124	48	172	46	158		204	462
27/04/17 12:15-12:30	55		44	99				0		136	62	198	45	158		203	500
27/04/17 12:30-12:45	37		43	80				0		92	45	137	45	120		165	382
27/04/17 12:45-13:00	48		52	100				0		109	60	169	54	159		213	482
27/04/17 13:00-13:15	60		37	97				0		125	46	171	60	144		204	472
27/04/17 13:15-13:30	57		45	102				0		129	33	162	51	126		177	441
27/04/17 13:30-13:45	42		48	90				0		124	37	161	56	143		199	450
27/04/17 13:45-14:00	48		44	92				0		139	57	196	55	132		187	475
27/04/17 14:00-14:15	46		47	93				0		121	59	180	42	147		189	462
27/04/17 14:15-14:30	44		36	80				0		124	36	160	54	165		219	459
27/04/17 14:30-14:45	66		45	111				0		130	46	176	50	199		249	536
27/04/17 14:45-15:00	83		53	136				0		140	64	204	53	177		230	570
27/04/17 15:00-15:15	56		51	107				0		152	76	228	57	184		241	576
27/04/17 15:15-15:30	63		66	129				0		158	65	223	61	173		234	586
27/04/17 15:30-15:45	67		74	141				0		144	54	198	60	227		287	626
27/04/17 15:45-16:00	77		64	141				0		144	57	201	75	254		329	671
27/04/17 16:00-16:15	65		48	113				0		135	57	192	73	235		308	613
27/04/17 16:15-16:30	83		38	121				0		178	54	232	70	239		309	662
27/04/17 16:30-16:45	69		57	126				0		152	59	211	71	285		356	693
27/04/17 16:45-17:00	66		58	124				0		156	73	229	83	266		349	702
27/04/17 17:00-17:15	67		47	114				0		144	68	212	90	315		405	731
27/04/17 17:15-17:30	80		54	134				0		168	68	236	83	347		430	800
27/04/17 17:30-17:45	75		50	125				0		152	77	229	93	349		442	796
27/04/17 17:45-18:00	50		51	101				0		157	55	212	94	297		391	704
27/04/17 18:00-18:15	64		47	111				0		149	57	206	92	260		352	669
27/04/17 18:15-18:30	51		39	90				0		143	55	198	65	206		271	559
27/04/17 18:30-18:45	49		36	85				0		127	41	168	46	185		231	484
27/04/17 18:45-19:00	44		34	78				0		152	38	190	55	199		254	522
27/04/17 19:00-19:15	42		30	72				0		147	37	184	27	139		166	422
27/04/17 19:15-19:30	42		38	80				0		120	35	155	40	144		184	419
27/04/17 19:30-19:45	30		29	59				0		102	33	135	41	112		153	347
27/04/17 19:45-20:00	37		28	65				0		68	31	99	25	122		147	311
27/04/17 20:00-20:15	30		31	61				0		88	25	113	22	120		142	316
27/04/17 20:15-20:30	41		27	68				0		66	34	100	17	114		131	299
27/04/17 20:30-20:45	33		17	50				0		78	24	102	24	96		120	272
27/04/17 20:45-21:00	35		28	63				0		83	24	107	18	85		103	273
27/04/17 21:00-21:15	33		28	61				0		60	36	96	11	82		93	250
27/04/17 21:15-21:30	38		30	68				0		59	19	78	14	105		119	265
27/04/17 21:30-21:45	34		34	68				0		71	13	84	14	81		95	247
27/04/17 21:45-22:00	31		23	54				0		56	17	73	14	71		85	212
27/04/17 22:00-22:15	29		17	46				0		42	3	45	7	46		53	144
27/04/17 22:15-22:30	9		18	27				0		62	10	72	10	58		68	167
27/04/17 22:30-22:45	16		12	28				0		19	12	31	12	46		58	117
27/04/17 22:45-23:00	10		6	16				0		30	4	34	5	41		46	96
27/04/17 23:00-23:15	7		5	12				0		27	6	33	3	27		30	75
27/04/17 23:15-23:30	4		3	7				0		25	5	30	2	31		33	70
27/04/17 23:30-23:45	7		13	20				0		23	1	24	3	32		35	79
27/04/17 23:45-00:00	8		4	12				0		13	1	14	4	28		32	58
Summary	2928	0	2587	5515	0	0	0	0	0	8502	2960	11462	3195	10439	0	13634	30611

Turning Movement Volume Report

Report Date: 4/28/2017 8:04:02 AM

From 4/27/2017 to 4/27/2017

Intersection: 130

	N				S				E				W				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15				0				0		8	10	18	32	13		45	63
27/04/17 00:15-00:30				0				0		10	9	19	32	12		44	63
27/04/17 00:30-00:45				0				0		12	8	20	24	9		33	53
27/04/17 00:45-01:00				0				0		2	7	9	18	8		26	35
27/04/17 01:00-01:15				0				0		8	1	9	19	5		24	33
27/04/17 01:15-01:30				0				0		8	5	13	18	10		28	41
27/04/17 01:30-01:45				0				0		2	3	5	9	2		11	16
27/04/17 01:45-02:00				0				0		1	3	4	7	5		12	16
27/04/17 02:00-02:15				0				0		2	9	11	4	5		9	20
27/04/17 02:15-02:30				0				0		1	3	4	6	1		7	11
27/04/17 02:30-02:45				0				0		6	2	8	5	1		6	14
27/04/17 02:45-03:00				0				0		3	0	3	4	4		8	11
27/04/17 03:00-03:15				0				0		1	0	1	3	0		3	4
27/04/17 03:15-03:30				0				0		0	4	4	5	1		6	10
27/04/17 03:30-03:45				0				0		5	3	8	5	5		10	18
27/04/17 03:45-04:00				0				0		2	5	7	8	4		12	19
27/04/17 04:00-04:15				0				0		13	8	21	10	2		12	33
27/04/17 04:15-04:30				0				0		4	5	9	15	2		17	26
27/04/17 04:30-04:45				0				0		6	5	11	15	3		18	29
27/04/17 04:45-05:00				0				0		16	8	24	20	10		30	54
27/04/17 05:00-05:15				0				0		24	7	31	22	5		27	58
27/04/17 05:15-05:30				0				0		23	12	35	22	4		26	61
27/04/17 05:30-05:45				0				0		14	11	25	21	17		38	63
27/04/17 05:45-06:00				0				0		22	23	45	39	21		60	105
27/04/17 06:00-06:15				0				0		60	30	90	49	28		77	167
27/04/17 06:15-06:30				0				0		52	42	94	70	30		100	194
27/04/17 06:30-06:45				0				0		60	38	98	99	37		136	234
27/04/17 06:45-07:00				0				0		104	60	164	107	58		165	329
27/04/17 07:00-07:15				0				0		108	54	162	103	63		166	328
27/04/17 07:15-07:30				0				0		142	73	215	122	98		220	435
27/04/17 07:30-07:45				0				0		148	80	228	131	92		223	451
27/04/17 07:45-08:00				0				0		238	98	336	146	110		256	592
27/04/17 08:00-08:15				0				0		247	92	339	127	137		264	603
27/04/17 08:15-08:30				0				0		197	80	277	145	90		235	512
27/04/17 08:30-08:45				0				0		196	62	258	106	95		201	459
27/04/17 08:45-09:00				0				0		161	60	221	119	97		216	437
27/04/17 09:00-09:15				0				0		308	114	422	242	216		458	880
27/04/17 09:15-09:30				0				0		139	44	183	91	91		182	365
27/04/17 09:30-09:45				0				0		116	35	151	106	71		177	328
27/04/17 09:45-10:00				0				0		117	68	185	104	84		188	373
27/04/17 10:00-10:15				0				0		112	53	165	146	90		236	401
27/04/17 10:15-10:30				0				0		119	44	163	105	79		184	347
27/04/17 10:30-10:45				0				0		104	38	142	123	71		194	336
27/04/17 10:45-11:00				0				0		95	39	134	105	86		191	325
27/04/17 11:00-11:15				0				0		109	39	148	109	91		200	348
27/04/17 11:15-11:30				0				0		132	52	184	134	96		230	414
27/04/17 11:30-11:45				0				0		114	52	166	122	101		223	389
27/04/17 11:45-12:00				0				0		150	71	221	126	125		251	472
27/04/17 12:00-12:15				0				0		146	45	191	111	107		218	409
27/04/17 12:15-12:30				0				0		161	68	229	150	133		283	512
27/04/17 12:30-12:45				0				0		106	62	168	137	104		241	409
27/04/17 12:45-13:00				0				0		124	68	192	152	136		288	480
27/04/17 13:00-13:15				0				0		149	57	206	146	127		273	479
27/04/17 13:15-13:30				0				0		159	70	229	143	108		251	480
27/04/17 13:30-13:45				0				0		133	74	207	127	131		258	465
27/04/17 13:45-14:00				0				0		143	66	209	147	127		274	483
27/04/17 14:00-14:15				0				0		146	62	208	159	111		270	478
27/04/17 14:15-14:30				0				0		128	77	205	151	122		273	478
27/04/17 14:30-14:45				0				0		141	75	216	156	165		321	537
27/04/17 14:45-15:00				0				0		141	90	231	173	154		327	558
27/04/17 15:00-15:15				0				0		177	90	267	159	159		318	585
27/04/17 15:15-15:30				0				0		166	103	269	160	151		311	580
27/04/17 15:30-15:45				0				0		177	87	264	163	189		352	616
27/04/17 15:45-16:00				0				0		178	74	252	158	196		354	606
27/04/17 16:00-16:15				0				0		152	63	215	189	181		370	585
27/04/17 16:15-16:30				0				0		185	74	259	188	198		386	645
27/04/17 16:30-16:45				0				0		183	71	254	172	224		396	650
27/04/17 16:45-17:00				0				0		189	64	253	178	236		414	667
27/04/17 17:00-17:15				0				0		172	67	239	170	254		424	663
27/04/17 17:15-17:30				0				0		195	71	266	196	294		490	756
27/04/17 17:30-17:45				0				0		182	69	251	175	305		480	731
27/04/17 17:45-18:00				0				0		178	60	238	178	242		420	658
27/04/17 18:00-18:15				0				0		172	67	239	137	225		362	601
27/04/17 18:15-18:30				0				0		160	65	225	171	185		356	581
27/04/17 18:30-18:45				0				0		135	67	202	145	139		284	486
27/04/17 18:45-19:00				0				0		162	82	244	142	177		319	563
27/04/17 19:00-19:15				0				0		154	53	207	135	104		239	446
27/04/17 19:15-19:30				0				0		131	72	203	123	113		236	439
27/04/17 19:30-19:45				0				0		106	62	168	141	102		243	411
27/04/17 19:45-20:00				0				0		75	53	128	108	101		209	337
27/04/17 20:00-20:15				0				0		90	81	171	115	88		203	374
27/04/17 20:15-20:30				0				0		59	65	124	129	75		204	328
27/04/17 20:30-20:45				0				0		79	63	142	95	66		161	303
27/04/17 20:45-21:00				0				0		95	70	165	104	61		165	330
27/04/17 21:00-21:15				0				0		68	59	127	130	60		190	317
27/04/17 21:15-21:30				0				0		61	79	140	112	78		190	330
27/04/17 21:30-21:45				0				0		74	61	135	110	59		169	304
27/04/17 21:45-22:00				0				0		47	57	104	116	59		175	279
27/04/17 22:00-22:15				0				0		43	43	86	85	40		125	211
27/04/17 22:15-22:30				0				0		55	55	110	89	36		125	235
27/04/17 22:30-22:45				0				0		19	21	40	65	37		102	142
27/04/17 22:45-23:00				0				0		28	21	49	61	31		92	141
27/04/17 23:00-23:15				0				0		31	17	48	57	25		82	130
27/04/17 23:15-23:30				0				0		24	17	41	58	24		82	123
27/04/17 23:30-23:45				0				0		22	22	44	42	28		70	114
27/04/17 23:45-00:00				0				0		14	10	24	81	26		107	131
Summary	0	0	0	0	0	0	0	0	0	9236	4538	13774	9589	8378	0	17967	31741

Turning Movement Volume Report

Report Date: 4/28/2017 8:04:50 AM

From 4/27/2017 to 4/27/2017

Intersection: 131

	NW				SE				NE				SW				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15		49	7	56	4	12	3	19	0	14	8	22	4		23	27	124
27/04/17 00:15-00:30		34	11	45	3	12	5	20	4	17	5	26	6		34	40	131
27/04/17 00:30-00:45		35	4	39	2	11	5	18	4	12	12	28	3		18	21	106
27/04/17 00:45-01:00		29	2	31	2	7	2	11	4	11	7	22	2		12	14	78
27/04/17 01:00-01:15		21	5	26	2	10	4	16	1	9	3	13	3		13	16	71
27/04/17 01:15-01:30		17	3	20	5	9	2	16	4	4	3	11	3		16	19	66
27/04/17 01:30-01:45		14	1	15	2	4	1	7	1	8	5	14	0		9	9	45
27/04/17 01:45-02:00		5	1	6	0	6	0	6	2	6	5	13	1		14	15	40
27/04/17 02:00-02:15		7	0	7	1	6	1	8	3	3	3	9	3		1	4	28
27/04/17 02:15-02:30		10	0	10	1	4	0	5	0	7	3	10	1		5	6	31
27/04/17 02:30-02:45		7	1	8	1	6	3	10	1	7	2	10	2		6	8	36
27/04/17 02:45-03:00		11	0	11	2	3	1	6	1	1	3	5	2		4	6	28
27/04/17 03:00-03:15		9	1	10	2	7	1	10	1	4	3	8	0		4	4	32
27/04/17 03:15-03:30		5	0	5	2	5	0	7	0	5	2	7	2		3	5	24
27/04/17 03:30-03:45		10	3	13	1	8	2	11	4	4	4	12	1		5	6	42
27/04/17 03:45-04:00		4	1	5	1	11	0	12	3	3	6	12	0		9	9	38
27/04/17 04:00-04:15		7	2	9	4	11	6	21	2	8	3	13	3		6	9	52
27/04/17 04:15-04:30		12	2	14	3	11	3	17	2	5	3	10	1		10	11	52
27/04/17 04:30-04:45		16	4	20	3	13	3	19	2	10	5	17	0		10	10	66
27/04/17 04:45-05:00		22	2	24	5	26	5	36	4	18	11	33	5		10	15	108
27/04/17 05:00-05:15		16	1	17	12	44	8	64	4	22	14	40	5		16	21	142
27/04/17 05:15-05:30		25	2	27	10	41	9	60	0	23	10	33	6		16	22	142
27/04/17 05:30-05:45		37	5	42	5	53	3	61	6	36	22	64	2		19	21	188
27/04/17 05:45-06:00		45	4	49	10	69	5	84	13	31	24	68	7		26	33	234
27/04/17 06:00-06:15		63	8	71	14	116	18	148	19	51	42	112	6		28	34	365
27/04/17 06:15-06:30		72	10	82	19	103	19	141	13	48	49	110	9		46	55	388
27/04/17 06:30-06:45		92	17	109	25	175	20	220	20	70	77	167	14		76	90	586
27/04/17 06:45-07:00		122	12	134	39	214	26	279	21	88	104	213	18		71	89	715
27/04/17 07:00-07:15		167	14	181	35	222	38	295	31	140	139	310	25		61	86	872
27/04/17 07:15-07:30		180	12	192	34	243	48	325	46	108	120	274	23		78	101	892
27/04/17 07:30-07:45		231	19	250	37	326	49	412	34	109	154	297	34		95	129	1088
27/04/17 07:45-08:00		202	17	219	43	330	93	466	54	181	168	403	36		106	142	1230
27/04/17 08:00-08:15		213	21	234	70	460	70	600	47	199	209	455	46		109	155	1444
27/04/17 08:15-08:30		170	24	194	44	366	63	473	41	176	221	438	68		95	163	1268
27/04/17 08:30-08:45		178	33	211	56	448	58	562	44	143	221	408	60		73	133	1314
27/04/17 08:45-09:00		202	23	225	50	320	46	416	45	155	208	408	46		76	122	1171
27/04/17 09:00-09:15		502	70	572	74	736	78	888	76	230	334	640	102		172	274	2374
27/04/17 09:15-09:30		211	19	230	22	246	46	314	35	112	143	290	38		56	94	928
27/04/17 09:30-09:45		213	27	240	27	271	47	345	33	117	127	277	27		58	85	947
27/04/17 09:45-10:00		215	33	248	36	256	37	329	31	121	128	280	46		81	127	984
27/04/17 10:00-10:15		251	40	291	35	268	36	339	35	108	135	278	33		87	120	1028
27/04/17 10:15-10:30		213	31	244	29	225	43	297	38	109	118	265	30		72	102	908
27/04/17 10:30-10:45		252	35	287	33	261	42	336	20	98	93	211	42		71	113	947
27/04/17 10:45-11:00		212	36	248	34	190	37	261	40	131	117	288	39		86	125	922
27/04/17 11:00-11:15		262	51	313	40	237	44	321	37	124	112	273	31		62	93	1000
27/04/17 11:15-11:30		255	47	302	36	240	52	328	36	96	106	238	51		88	139	1007
27/04/17 11:30-11:45		279	58	337	40	267	39	346	35	129	117	281	58		84	142	1106
27/04/17 11:45-12:00		313	68	381	37	258	60	355	37	133	104	274	40		69	109	1119
27/04/17 12:00-12:15		303	65	368	40	296	55	391	34	105	126	265	57		86	143	1167
27/04/17 12:15-12:30		306	53	359	39	216	81	336	36	129	110	275	61		114	175	1145
27/04/17 12:30-12:45		309	67	376	32	230	40	302	31	142	113	286	60		99	159	1123
27/04/17 12:45-13:00		292	65	357	26	243	34	303	46	131	105	282	63		94	157	1099
27/04/17 13:00-13:15		305	65	370	54	262	53	369	44	117	105	266	75		101	176	1181
27/04/17 13:15-13:30		288	58	346	52	267	47	366	38	116	102	256	65		98	163	1131
27/04/17 13:30-13:45		325	48	373	44	252	49	345	41	123	111	275	54		106	160	1153
27/04/17 13:45-14:00		295	59	354	47	211	47	305	42	138	106	286	72		116	188	1133
27/04/17 14:00-14:15		343	52	395	38	243	60	341	31	138	120	289	58		116	174	1199
27/04/17 14:15-14:30		278	52	330	33	258	47	338	45	126	102	273	54		121	175	1116
27/04/17 14:30-14:45		354	48	402	31	264	48	343	59	128	111	298	49		97	146	1189
27/04/17 14:45-15:00		315	60	375	37	222	52	311	59	152	95	306	54		145	199	1191
27/04/17 15:00-15:15		347	67	414	45	290	60	395	58	142	118	318	59		98	157	1284
27/04/17 15:15-15:30		347	74	421	36	248	57	341	44	144	117	305	62		134	196	1263
27/04/17 15:30-15:45		411	71	482	54	250	62	366	52	152	122	326	81		137	218	1392
27/04/17 15:45-16:00		392	44	436	41	260	75	376	45	180	106	331	68		142	210	1353
27/04/17 16:00-16:15		426	60	486	44	287	52	383	43	158	116	317	67		96	163	1349
27/04/17 16:15-16:30		447	74	521	55	230	75	360	48	176	90	314	81		136	217	1412
27/04/17 16:30-16:45		501	72	573	50	279	60	389	45	146	95	286	51		108	159	1407
27/04/17 16:45-17:00		419	77	496	46	259	64	369	60	177	99	336	63		137	200	1401
27/04/17 17:00-17:15		467	89	556	63	236	51	350	73	157	106	336	72		112	184	1426
27/04/17 17:15-17:30		561	96	657	57	245	54	356	75	187	132	394	74		153	227	1634
27/04/17 17:30-17:45		530	92	622	66	268	70	404	62	161	108	331	90		124	214	1571
27/04/17 17:45-18:00		406	74	480	60	241	57	358	57	150	92	299	81		124	205	1342
27/04/17 18:00-18:15		381	73	454	51	251	59	361	64	180	118	362	62		105	167	1344
27/04/17 18:15-18:30		355	57	412	45	211	60	316	51	183	96	330	50		126	176	1234
27/04/17 18:30-18:45		322	57	379	38	211	61	310	37	150	111	298	45		100	145	1132
27/04/17 18:45-19:00		324	65	389	40	223	49	312	56	172	92	320	56		104	160	1181
27/04/17 19:00-19:15		282	65	347	43	217	50	310	35	121	104	260	43		95	138	1055
27/04/17 19:15-19:30		245	47	292	39	150	44	233	25	135	59	219	40		112	152	896
27/04/17 19:30-19:45		252	39	291	37	162	44	243	29	103	59	191	53		110	163	888
27/04/17 19:45-20:00		226	44	270	24	107	29	160	25	97	55	177	45		93	138	745
27/04/17 20:00-20:15		212	40	252	30	129	23	182	19	103	45	167	35		110	145	746
27/04/17 20:15-20:30		214	41	255	19	94	31	144	23	92	61	176	36		91	127	702
27/04/17 20:30-20:45		188	28	216	25	109	26	160	21	99	45	165	38		76	114	655
27/04/17 20:45-21:00		150	33	183	22	110	42	174	24	75	44	143	27		95	122	622
27/04/17 21:00-21:15		177	32	209	31	91	23	145	14	84	41	139	32		102	134	627
27/04/17 21:15-21:30		180	32	212	16	90	28	134	24	88	39	151	23		98	121	618
27/04/17 21:30-21:45		181	34	215	27	98	24	149	18	80	32	130	33		82	115	609
27/04/17 21:45-22:00		158	31	189	16	83	11	110	21	78	29	128	14		83	97	524
27/04/17 22:00-22:15		120	35	155	16	49	27	92	12	82	34	128	18		69	87	462
27/04/17 22:15-22:30		130	22	152	17	67	19	103	10	51	31	92	19		69	88	435
27/04/17 22:30-22:45		90	19	109	6	43	8	57	8	57	29	94	11		50	61	321
27/04/17 22:45-23:00		89	21	110	12	53	7	72	7	44	20	71	17		45	62	315
27/04/17 23:00-23:15		65	14	79	7	45	8	60	3	38	25	66	14		44	58	263
27/04/17 23:15-23:30		67	14	81	11	27	14	52	9	31	20	60	10		57	67	260
27/04/17 23:30-23:45		101	17	118	4	29	6	39	4	43	19	66	11		31	42	265
27/04/17 23:45-00:00		79	10	89	2	23	7	32	12	33	21	66	5		70	75	262
Summary	0	19072	3239	22311	2660	15896	3231	21787	2653	8938	7348	18939	3292	0	7000	10292	73329

Turning Movement Volume Report

Report Date: 4/28/2017 8:05:28 AM

From 4/27/2017 to 4/27/2017

Intersection: 36

	NW				SE				NE				SW				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	1	37	0	38	0	20	3	23	9	4	9	22	1	5	11	17	100
27/04/17 00:15-00:30	1	29	0	30	3	15	3	21	15	2	2	19	2	4	1	7	77
27/04/17 00:30-00:45	0	29	2	31	3	19	1	23	4	2	2	8	2	2	10	14	76
27/04/17 00:45-01:00	0	17	0	17	5	6	5	16	4	1	1	6	0	0	10	10	49
27/04/17 01:00-01:15	0	17	0	17	1	13	0	14	4	0	1	5	3	7	8	18	54
27/04/17 01:15-01:30	0	16	2	18	7	8	1	16	2	0	1	3	1	4	2	7	44
27/04/17 01:30-01:45	0	9	0	9	2	7	1	10	5	0	0	5	0	0	2	2	26
27/04/17 01:45-02:00	1	4	1	6	1	8	2	11	0	1	1	2	1	0	1	2	21
27/04/17 02:00-02:15	0	3	0	3	1	5	3	9	3	1	0	4	2	1	2	5	21
27/04/17 02:15-02:30	0	7	0	7	0	6	3	9	2	2	0	4	0	1	2	3	23
27/04/17 02:30-02:45	0	6	0	6	3	6	1	10	3	2	1	6	1	1	2	4	26
27/04/17 02:45-03:00	0	8	4	12	3	3	0	6	3	3	1	7	0	0	0	0	25
27/04/17 03:00-03:15	0	8	0	8	3	5	3	11	2	1	0	3	0	4	2	6	28
27/04/17 03:15-03:30	1	1	2	4	0	8	1	9	3	1	0	4	0	2	0	2	19
27/04/17 03:30-03:45	1	8	1	10	3	8	1	12	4	2	0	6	0	3	0	3	31
27/04/17 03:45-04:00	2	4	0	6	2	10	4	16	0	0	0	0	0	2	2	4	26
27/04/17 04:00-04:15	1	6	0	7	3	8	4	15	0	0	1	1	1	2	4	7	30
27/04/17 04:15-04:30	2	5	0	7	0	11	4	15	5	2	0	7	0	1	8	9	38
27/04/17 04:30-04:45	2	16	1	19	1	10	6	17	4	3	1	8	0	4	0	4	48
27/04/17 04:45-05:00	1	17	0	18	5	23	9	37	1	3	2	6	0	1	5	6	67
27/04/17 05:00-05:15	5	14	0	19	10	36	17	63	1	5	2	8	3	3	3	9	99
27/04/17 05:15-05:30	1	25	0	26	4	37	16	57	4	2	1	7	1	5	2	8	98
27/04/17 05:30-05:45	3	33	0	36	12	47	13	72	2	7	2	11	1	5	6	12	131
27/04/17 05:45-06:00	2	42	5	49	9	78	9	96	4	6	1	11	2	3	10	15	171
27/04/17 06:00-06:15	3	56	2	61	10	128	25	163	5	5	0	10	3	13	13	29	263
27/04/17 06:15-06:30	3	56	2	61	21	111	27	159	11	8	2	21	2	13	20	35	276
27/04/17 06:30-06:45	6	80	6	92	28	183	30	241	14	18	5	37	4	22	25	51	421
27/04/17 06:45-07:00	11	100	5	116	34	219	64	317	8	21	6	35	10	21	45	76	544
27/04/17 07:00-07:15	10	133	8	151	49	268	77	394	27	17	8	52	9	36	45	90	687
27/04/17 07:15-07:30	11	130	9	150	34	240	82	356	19	20	11	50	19	32	46	97	653
27/04/17 07:30-07:45	8	183	14	205	44	376	90	510	28	21	8	57	21	42	59	122	894
27/04/17 07:45-08:00	13	157	12	182	62	361	98	521	25	39	18	82	34	60	43	137	922
27/04/17 08:00-08:15	18	156	25	199	59	532	102	693	23	42	14	79	23	59	70	152	1123
27/04/17 08:15-08:30	19	122	18	159	54	467	124	645	37	44	24	105	26	67	58	151	1060
27/04/17 08:30-08:45	21	116	25	162	61	505	116	682	44	51	25	120	24	66	60	150	1114
27/04/17 08:45-09:00	31	159	14	204	64	420	97	581	42	52	22	116	24	95	53	172	1073
27/04/17 09:00-09:15	58	344	58	460	122	794	200	1116	124	112	54	290	68	148	118	334	2200
27/04/17 09:15-09:30	29	145	18	192	51	279	85	415	62	63	24	149	19	71	32	122	878
27/04/17 09:30-09:45	22	154	18	194	47	263	101	411	50	71	23	144	19	60	50	129	878
27/04/17 09:45-10:00	23	168	17	208	42	268	104	414	57	55	32	144	27	56	53	136	902
27/04/17 10:00-10:15	25	174	23	222	49	265	92	406	61	63	34	158	21	67	44	132	918
27/04/17 10:15-10:30	23	138	21	182	60	214	87	361	79	60	34	173	16	67	41	124	840
27/04/17 10:30-10:45	32	171	21	224	44	232	110	386	69	63	41	173	20	89	43	152	935
27/04/17 10:45-11:00	27	138	24	189	47	202	89	338	83	56	34	173	29	85	59	173	873
27/04/17 11:00-11:15	20	167	25	212	54	219	85	358	95	75	37	207	36	55	51	142	919
27/04/17 11:15-11:30	34	166	26	226	51	244	93	388	103	70	50	223	30	76	65	171	1008
27/04/17 11:30-11:45	27	219	12	258	43	271	106	420	68	73	41	182	26	84	49	159	1019
27/04/17 11:45-12:00	29	240	31	300	48	260	85	393	109	87	37	233	43	80	68	191	1117
27/04/17 12:00-12:15	38	227	33	298	50	300	106	456	91	77	55	223	31	65	61	157	1134
27/04/17 12:15-12:30	42	230	20	292	47	229	98	374	110	69	46	225	35	102	39	176	1067
27/04/17 12:30-12:45	34	204	25	263	55	237	82	374	108	76	42	226	27	94	65	186	1049
27/04/17 12:45-13:00	42	224	39	305	64	239	97	400	103	88	49	240	36	105	58	199	1144
27/04/17 13:00-13:15	33	216	32	281	37	293	110	440	95	78	43	216	33	83	53	169	1106
27/04/17 13:15-13:30	31	226	31	288	49	272	96	417	90	84	45	219	38	72	42	152	1076
27/04/17 13:30-13:45	41	234	29	304	52	269	96	417	88	77	49	214	28	87	50	165	1100
27/04/17 13:45-14:00	34	210	31	275	53	216	97	366	110	95	50	255	32	86	50	168	1064
27/04/17 14:00-14:15	41	249	39	329	52	285	89	426	88	78	37	203	29	64	51	144	1102
27/04/17 14:15-14:30	26	215	25	266	52	240	97	389	96	92	45	233	23	95	52	170	1058
27/04/17 14:30-14:45	25	250	37	312	66	291	73	430	91	85	37	213	27	82	51	160	1115
27/04/17 14:45-15:00	28	246	28	302	54	223	82	359	94	106	50	250	33	98	60	191	1102
27/04/17 15:00-15:15	22	263	37	322	56	297	108	461	92	88	36	216	32	79	38	149	1148
27/04/17 15:15-15:30	34	288	24	346	60	265	90	415	105	86	40	231	27	83	51	161	1153
27/04/17 15:30-15:45	22	330	24	376	60	286	102	448	87	76	41	204	44	87	55	186	1214
27/04/17 15:45-16:00	29	297	21	347	58	262	99	419	97	85	44	226	30	118	60	208	1200
27/04/17 16:00-16:15	31	309	25	365	58	312	93	463	103	75	45	223	29	70	73	172	1223
27/04/17 16:15-16:30	33	370	33	436	55	243	89	387	118	97	44	259	37	88	78	203	1285
27/04/17 16:30-16:45	30	386	35	451	50	265	94	409	91	80	56	227	39	85	70	194	1281
27/04/17 16:45-17:00	31	353	30	414	41	257	91	389	102	123	45	270	38	74	96	208	1281
27/04/17 17:00-17:15	28	368	42	438	55	278	78	411	105	102	32	239	21	77	70	168	1256
27/04/17 17:15-17:30	34	483	50	567	57	284	93	434	110	83	37	230	47	101	99	247	1478
27/04/17 17:30-17:45	27	404	44	475	49	326	83	458	132	81	37	250	43	63	66	172	1355
27/04/17 17:45-18:00	27	349	33	409	59	254	83	396	93	75	56	224	41	67	53	161	1190
27/04/17 18:00-18:15	19	317	32	368	59	295	72	426	90	65	56	211	38	59	31	128	1133
27/04/17 18:15-18:30	22	264	19	305	44	233	67	344	117	76	38	231	27	71	50	148	1028
27/04/17 18:30-18:45	26	223	22	271	57	233	63	353	87	58	33	178	28	45	50	123	925
27/04/17 18:45-19:00	21	280	20	321	48	248	62	358	87	71	36	194	20	40	47	107	980
27/04/17 19:00-19:15	20	230	22	272	46	262	60	368	78	56	21	155	34	49	36	119	914
27/04/17 19:15-19:30	12	191	12	215	36	148	50	234	64	40	23	127	22	48	40	110	686
27/04/17 19:30-19:45	14	197	16	227	35	170	58	263	58	43	17	118	15	51	46	112	720
27/04/17 19:45-20:00	16	171	14	201	28	144	40	212	67	27	22	116	21	36	44	101	630
27/04/17 20:00-20:15	14	170	22	206	28	134	35	197	53	40	11	104	22	39	32	93	600
27/04/17 20:15-20:30	16	172	15	203	33	114	40	187	49	31	15	95	11	35	35	81	566
27/04/17 20:30-20:45	22	130	20	172	30	120	40	190	49	22	13	84	17	30	33	80	526
27/04/17 20:45-21:00	10	121	15	146	23	120	32	175	49	25	11	85	16	27	24	67	473
27/04/17 21:00-21:15	13	135	12	160	22	125	24	171	45	21	8	74	14	17	29	60	465
27/04/17 21:15-21:30	7	142	12	161	21	96	22	139	53	29	12	94	13	31	25	69	463
27/04/17 21:30-21:45	8	149	8	165	17	117	28	162	23	19	6	48	17	24	15	56	431
27/04/17 21:45-22:00	7	130	15	152	19	90	13	122	43	14	8	65	11	21	29	61	400
27/04/17 22:00-22:15	7	104	6	117	21	66	10	97	22	15	10	47	10	14	15	39	300
27/04/17 22:15-22:30	8	105	10	123	23	72	17	112	34	10	3	47	2	13	19	34	316
27/04/17 22:30-22:45	6	69	6	81	23	59	6	88	26	12	15	53	8	10	14	32	254
27/04/17 22:45-23:00	3	67	5	75	15	61	8	84	29	10	14	53	4	8	13	25	237
27/04/17 23:00-23:15	4	54	8	66	14	49	16	79	13	16	4	33	5	6	6	17	195
27/04/17 23:15-23:30	4	49	2	55	13	36	9	58	24	9	5	38	2	8	10	20	171
27/04/17 23:30-23:45	2	86	1	89	10	36	10	56	21	3	3	27	0	6	13	19	191
27/04/17 23:45-00:00	2	54	4	60	8	38	3	49	15	3	3	21	3	11	24	38	168
Summary	1573	14574	1537	17684	3221	17207	5290	25718	4922	4007	2061	10990	1734	4248	3424	9406	63798

Turning Movement Volume Report

Report Date: 4/28/2017 8:01:31 AM

From 4/27/2017 to 4/27/2017

Intersection: 73

	N				S				E				W				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	4	10	0	14	5	8	8	21	12	16	2	30	2	19	18	39	104
27/04/17 00:15-00:30	8	9	0	17	5	2	7	14	7	16	7	30	4	21	9	34	95
27/04/17 00:30-00:45	4	4	1	9	15	4	2	21	4	9	3	16	1	18	11	30	76
27/04/17 00:45-01:00	3	3	0	6	4	5	5	14	6	7	5	18	3	8	6	17	55
27/04/17 01:00-01:15	7	4	1	12	7	4	3	14	5	5	2	12	2	11	6	19	57
27/04/17 01:15-01:30	2	8	0	10	5	1	4	10	1	6	0	7	3	8	4	15	42
27/04/17 01:30-01:45	0	1	1	2	6	2	0	8	1	9	2	12	0	13	5	18	40
27/04/17 01:45-02:00	2	4	0	6	2	7	1	10	3	4	0	7	0	9	6	15	38
27/04/17 02:00-02:15	3	3	0	6	2	3	1	6	2	1	5	8	0	6	7	13	33
27/04/17 02:15-02:30	4	2	0	6	0	2	3	5	0	2	0	2	0	7	4	11	24
27/04/17 02:30-02:45	0	1	0	1	6	0	2	8	1	7	0	8	0	9	4	13	30
27/04/17 02:45-03:00	1	3	0	4	3	2	1	6	1	5	2	8	0	3	3	6	24
27/04/17 03:00-03:15	0	1	0	1	2	3	3	8	1	4	2	7	0	6	3	9	25
27/04/17 03:15-03:30	3	5	0	8	1	1	1	3	3	4	0	7	2	5	2	9	27
27/04/17 03:30-03:45	0	1	1	2	2	3	0	5	0	7	0	7	0	9	2	11	25
27/04/17 03:45-04:00	3	4	0	7	6	0	0	6	6	4	1	11	0	3	5	8	32
27/04/17 04:00-04:15	0	6	0	6	1	4	1	6	3	9	4	16	0	7	6	13	41
27/04/17 04:15-04:30	0	2	1	3	1	7	0	8	2	2	1	5	1	6	9	16	32
27/04/17 04:30-04:45	2	2	0	4	8	4	2	14	1	12	6	19	1	15	10	26	63
27/04/17 04:45-05:00	1	6	0	7	15	5	3	23	3	15	7	25	1	15	13	29	84
27/04/17 05:00-05:15	4	15	0	19	15	7	1	23	4	34	9	47	3	12	12	27	116
27/04/17 05:15-05:30	1	8	0	9	22	7	1	30	2	30	5	37	3	19	25	47	123
27/04/17 05:30-05:45	3	8	1	12	39	10	6	55	2	32	7	41	4	29	23	56	164
27/04/17 05:45-06:00	7	11	0	18	45	19	4	68	7	43	21	71	6	28	47	81	238
27/04/17 06:00-06:15	12	18	0	30	35	28	3	66	16	71	25	112	6	38	50	94	302
27/04/17 06:15-06:30	3	22	2	27	66	34	7	107	7	86	34	127	8	51	46	105	366
27/04/17 06:30-06:45	10	15	3	28	116	48	11	175	17	107	59	183	4	55	40	99	485
27/04/17 06:45-07:00	16	24	4	44	104	47	12	163	20	163	73	256	10	59	61	130	593
27/04/17 07:00-07:15	22	34	7	63	125	63	9	197	22	233	102	357	11	103	84	198	815
27/04/17 07:15-07:30	23	40	3	66	109	67	21	197	26	218	93	337	5	122	117	244	844
27/04/17 07:30-07:45	38	71	16	125	118	125	28	271	29	271	109	409	16	173	123	312	1117
27/04/17 07:45-08:00	58	105	22	185	125	105	27	257	35	334	142	511	21	237	158	416	1369
27/04/17 08:00-08:15	80	147	26	253	153	135	26	314	41	374	162	577	25	238	202	465	1609
27/04/17 08:15-08:30	76	94	14	184	137	108	39	284	30	324	131	485	23	265	195	483	1436
27/04/17 08:30-08:45	48	54	9	111	173	125	57	355	40	304	115	459	27	191	154	372	1297
27/04/17 08:45-09:00	39	66	9	114	135	120	28	283	45	300	145	490	22	225	146	393	1280
27/04/17 09:00-09:15	108	142	14	264	262	204	60	526	88	486	232	806	66	466	280	812	2408
27/04/17 09:15-09:30	44	59	6	109	91	89	33	213	56	243	102	401	28	170	133	331	1054
27/04/17 09:30-09:45	50	82	6	138	101	89	36	226	51	200	105	356	24	170	142	336	1056
27/04/17 09:45-10:00	46	86	11	143	92	76	24	192	55	196	85	336	35	185	145	365	1036
27/04/17 10:00-10:15	56	87	8	151	104	93	47	244	58	208	96	362	38	182	151	371	1128
27/04/17 10:15-10:30	47	105	5	157	97	83	46	226	65	177	77	319	35	185	144	364	1066
27/04/17 10:30-10:45	62	131	9	202	112	133	53	298	61	154	63	278	44	175	193	412	1190
27/04/17 10:45-11:00	66	100	9	175	113	90	50	253	70	174	62	306	51	184	140	375	1109
27/04/17 11:00-11:15	63	122	13	198	120	126	53	299	77	184	76	337	40	184	163	387	1221
27/04/17 11:15-11:30	64	110	18	192	104	107	52	263	91	189	75	355	55	227	156	438	1248
27/04/17 11:30-11:45	78	132	22	232	130	140	73	343	86	152	79	317	53	195	168	416	1308
27/04/17 11:45-12:00	76	133	20	229	117	161	59	337	104	204	97	405	81	224	164	469	1440
27/04/17 12:00-12:15	85	139	26	250	130	160	79	369	109	183	96	388	72	241	131	444	1451
27/04/17 12:15-12:30	96	141	20	257	123	148	75	346	101	210	98	409	83	293	169	545	1557
27/04/17 12:30-12:45	83	140	29	252	136	155	83	374	111	194	75	380	72	198	130	400	1406
27/04/17 12:45-13:00	79	128	16	223	132	135	76	343	107	228	108	443	67	278	188	533	1542
27/04/17 13:00-13:15	88	159	19	266	149	174	81	404	99	193	96	388	55	227	192	474	1532
27/04/17 13:15-13:30	76	128	18	222	139	131	88	358	118	243	106	467	60	250	155	465	1512
27/04/17 13:30-13:45	69	132	18	219	148	155	86	389	111	209	89	409	56	237	157	450	1467
27/04/17 13:45-14:00	74	109	19	202	146	137	75	358	117	252	85	454	57	234	166	457	1471
27/04/17 14:00-14:15	77	141	13	231	168	164	80	412	103	228	96	427	54	244	165	463	1533
27/04/17 14:15-14:30	65	130	17	212	155	176	72	403	113	236	112	461	69	266	193	528	1604
27/04/17 14:30-14:45	70	145	14	229	144	166	79	389	105	238	112	455	61	216	157	434	1507
27/04/17 14:45-15:00	93	164	21	278	102	139	67	308	105	274	143	522	50	304	175	529	1637
27/04/17 15:00-15:15	124	172	20	316	144	164	80	388	122	250	141	513	51	249	140	440	1657
27/04/17 15:15-15:30	98	154	20	272	114	145	78	337	122	292	128	542	50	268	190	508	1659
27/04/17 15:30-15:45	85	189	18	292	162	147	80	389	102	279	134	515	52	267	189	508	1704
27/04/17 15:45-16:00	115	166	16	297	126	151	78	355	108	292	132	532	75	321	199	595	1779
27/04/17 16:00-16:15	123	200	21	344	143	160	85	388	106	244	112	462	56	326	186	568	1762
27/04/17 16:15-16:30	97	193	23	313	135	133	73	341	117	298	119	534	61	361	216	638	1826
27/04/17 16:30-16:45	128	173	18	319	145	166	79	390	101	269	133	503	47	315	203	565	1777
27/04/17 16:45-17:00	102	182	23	307	132	150	75	357	107	314	121	542	66	353	200	619	1825
27/04/17 17:00-17:15	112	239	21	372	150	140	83	373	107	319	132	558	49	323	207	579	1882
27/04/17 17:15-17:30	123	241	18	382	94	116	97	307	104	294	111	509	52	371	233	656	1854
27/04/17 17:30-17:45	150	256	16	422	171	173	92	436	104	341	125	570	65	338	179	582	2010
27/04/17 17:45-18:00	131	205	17	353	145	132	83	360	108	339	109	556	53	401	193	647	1916
27/04/17 18:00-18:15	142	216	18	376	124	172	87	383	109	248	105	462	59	343	188	590	1811
27/04/17 18:15-18:30	109	162	15	286	128	127	70	325	119	231	102	452	65	324	173	562	1625
27/04/17 18:30-18:45	110	158	19	287	111	148	92	351	89	216	94	399	51	285	162	498	1535
27/04/17 18:45-19:00	80	132	13	225	118	146	68	332	101	183	83	367	66	315	154	535	1459
27/04/17 19:00-19:15	54	145	8	207	127	133	77	337	101	158	57	316	50	221	141	412	1272
27/04/17 19:15-19:30	69	108	12	189	93	110	68	271	114	162	59	335	50	242	153	445	1240
27/04/17 19:30-19:45	59	98	8	165	121	128	75	324	103	155	67	325	47	220	104	371	1185
27/04/17 19:45-20:00	46	93	16	155	73	88	69	230	119	142	65	326	37	210	149	396	1107
27/04/17 20:00-20:15	49	95	9	153	102	105	72	279	96	164	65	325	48	158	121	327	1084
27/04/17 20:15-20:30	49	84	14	147	93	99	63	255	89	116	71	276	33	160	118	311	989
27/04/17 20:30-20:45	58	72	4	134	84	84	69	237	87	139	54	280	39	157	76	272	923
27/04/17 20:45-21:00	45	67	6	118	80	84	66	230	78	162	60	300	29	125	73	227	875
27/04/17 21:00-21:15	35	53	12	100	95	81	60	236	85	153	46	284	28	106	88	222	842
27/04/17 21:15-21:30	33	47	5	85	115	70	56	241	54	136	73	263	29	114	81	224	813
27/04/17 21:30-21:45	28	43	11	82	74	61	50	185	58	114	56	228	30	115	49	194	689
27/04/17 21:45-22:00	28	30	5	63	55	61	26	142	33	81	42	156	14	120	63	197	558
27/04/17 22:00-22:15	15	24	13	52	47	36	24	107	30	86	37	153	18	84	55	157	469
27/04/17 22:15-22:30	18	26	4	48	30	32	29	91	27	36	35	98	9	75	57	141	378
27/04/17 22:30-22:45	11	15	1	27	37	36	10	83	22	47	25	94	8	71	46	125	329
27/04/17 22:45-23:00	13	21	3	37	19	26	17	62	18	34	20	72	9	50	42	101	272
27/04/17 23:00-23:15	7	13	1	21	26	17	13	56	15	33	12	60	9	51	26	86	223
27/04/17 23:15-23:30	16	11	3	30	27	19	12	58	18	28	16	62	5	42	20	67	217
27/04/17 23:30-23:45	16	15	3	34	19	17	14	50	11	25	15	51	2	40	18	60	195
27/04/17 23:45-00:00	11	16	0	27	13	5	5	23	12	22	3	37	3	50	42	95	182
Summary	4691	7870	926	13487	8200	8008	4029	20237	5462	14725	6405	26592	2935	15149	10107	28191	88507

Turning Movement Volume Report

Report Date: 4/28/2017 8:06:16 AM

From 4/27/2017 to 4/27/2017

Intersection: 75

	N				S				E				W				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	6	14	0	20	0	16	11	27	4	0	1	5	0	0	0	0	52
27/04/17 00:15-00:30	2	11	0	13	0	14	8	22	7	0	1	8	0	0	0	0	43
27/04/17 00:30-00:45	5	8	0	13	0	17	7	24	4	0	1	5	0	0	0	0	42
27/04/17 00:45-01:00	2	3	0	5	0	15	8	23	3	0	2	5	0	0	0	0	33
27/04/17 01:00-01:15	2	6	0	8	0	7	2	9	3	0	4	7	0	0	0	0	24
27/04/17 01:15-01:30	2	5	0	7	0	4	3	7	2	0	0	2	0	0	0	0	16
27/04/17 01:30-01:45	0	3	0	3	0	3	4	7	0	0	0	0	0	0	0	0	10
27/04/17 01:45-02:00	0	4	0	4	0	11	3	14	0	0	0	0	0	0	0	0	18
27/04/17 02:00-02:15	2	3	0	5	0	10	11	21	2	0	1	3	0	0	0	0	29
27/04/17 02:15-02:30	1	6	0	7	0	3	2	5	1	0	0	1	0	0	0	0	13
27/04/17 02:30-02:45	2	1	0	3	0	0	2	2	0	0	0	0	0	0	0	0	5
27/04/17 02:45-03:00	0	2	0	2	0	2	0	2	1	0	2	3	0	0	0	0	7
27/04/17 03:00-03:15	0	1	0	1	0	6	0	6	1	0	1	2	0	0	0	0	9
27/04/17 03:15-03:30	0	4	0	4	0	3	2	5	2	0	0	2	0	0	0	0	11
27/04/17 03:30-03:45	1	2	0	3	0	3	0	3	2	0	0	2	0	0	0	0	8
27/04/17 03:45-04:00	0	4	0	4	0	3	5	8	2	0	0	2	0	0	0	0	14
27/04/17 04:00-04:15	3	6	0	9	0	5	6	11	3	0	3	6	0	0	0	0	26
27/04/17 04:15-04:30	0	4	0	4	0	11	5	16	1	0	0	1	0	0	0	0	21
27/04/17 04:30-04:45	1	4	0	5	0	9	5	14	1	0	0	1	0	0	0	0	20
27/04/17 04:45-05:00	0	6	0	6	0	8	5	13	2	0	1	3	0	0	0	0	22
27/04/17 05:00-05:15	0	17	0	17	0	14	8	22	6	0	3	9	0	0	0	0	48
27/04/17 05:15-05:30	1	10	0	11	0	13	8	21	2	0	2	4	0	0	0	0	36
27/04/17 05:30-05:45	1	9	0	10	1	15	7	23	3	0	0	3	0	1	0	1	37
27/04/17 05:45-06:00	1	20	0	21	0	32	23	55	9	0	4	13	0	0	0	0	89
27/04/17 06:00-06:15	5	25	0	30	1	42	21	64	26	0	6	32	0	1	0	1	127
27/04/17 06:15-06:30	3	25	0	28	0	48	27	75	10	0	13	23	0	0	0	0	126
27/04/17 06:30-06:45	9	33	0	42	1	97	38	136	11	0	15	26	0	0	0	0	204
27/04/17 06:45-07:00	11	39	0	50	0	104	47	151	23	0	10	33	0	0	0	0	234
27/04/17 07:00-07:15	8	52	0	60	1	130	56	187	24	0	19	43	0	0	0	0	290
27/04/17 07:15-07:30	24	69	0	93	0	143	66	209	42	1	35	78	0	0	0	0	380
27/04/17 07:30-07:45	46	118	0	164	0	158	86	244	64	1	45	110	1	1	0	2	520
27/04/17 07:45-08:00	105	167	1	273	2	248	104	354	65	1	70	136	3	3	2	8	771
27/04/17 08:00-08:15	88	229	1	318	0	251	68	319	81	2	81	164	4	5	3	12	813
27/04/17 08:15-08:30	57	172	1	230	0	227	64	291	66	1	40	107	3	3	2	8	636
27/04/17 08:30-08:45	25	106	0	131	2	190	63	255	46	1	38	85	2	3	2	7	478
27/04/17 08:45-09:00	18	113	0	131	2	223	67	292	46	1	29	76	4	6	6	16	515
27/04/17 09:00-09:15	20	249	1	270	2	448	112	562	106	2	88	196	1	1	0	2	1030
27/04/17 09:15-09:30	20	117	0	137	2	172	59	233	48	1	26	75	2	2	1	5	450
27/04/17 09:30-09:45	26	123	0	149	1	159	47	207	40	1	32	73	3	4	3	10	439
27/04/17 09:45-10:00	31	126	1	158	2	132	80	214	43	1	32	76	3	3	1	7	455
27/04/17 10:00-10:15	29	150	0	179	3	158	66	227	54	1	33	88	3	4	3	10	504
27/04/17 10:15-10:30	39	151	1	191	2	144	49	195	48	1	38	87	2	3	2	7	480
27/04/17 10:30-10:45	24	165	1	190	3	166	48	217	55	1	33	89	0	1	1	2	498
27/04/17 10:45-11:00	21	170	1	192	2	149	50	201	65	1	35	101	0	1	1	2	496
27/04/17 11:00-11:15	31	153	0	184	3	161	57	221	62	1	27	90	4	4	7	15	510
27/04/17 11:15-11:30	47	188	1	236	1	134	68	203	44	1	29	74	4	5	7	16	529
27/04/17 11:30-11:45	40	203	1	244	4	189	73	266	69	1	43	113	4	4	5	13	636
27/04/17 11:45-12:00	67	214	1	282	2	248	72	322	72	1	43	116	2	2	1	5	725
27/04/17 12:00-12:15	38	238	1	277	1	194	75	270	56	1	39	96	4	4	3	11	654
27/04/17 12:15-12:30	52	220	1	273	0	182	90	272	65	1	43	109	3	3	4	10	664
27/04/17 12:30-12:45	51	176	1	228	0	193	67	260	54	1	34	89	1	2	1	4	581
27/04/17 12:45-13:00	40	224	1	265	1	207	97	305	72	1	45	118	1	1	0	2	690
27/04/17 13:00-13:15	43	220	1	264	1	203	98	302	77	2	28	107	3	3	2	8	681
27/04/17 13:15-13:30	46	200	1	247	2	202	94	298	50	1	29	80	0	1	1	2	627
27/04/17 13:30-13:45	30	185	1	216	3	210	89	302	57	1	42	100	3	4	4	11	629
27/04/17 13:45-14:00	45	196	1	242	3	227	81	311	70	1	45	116	2	2	2	6	675
27/04/17 14:00-14:15	44	190	1	235	2	218	83	303	60	1	37	98	2	3	4	9	645
27/04/17 14:15-14:30	34	182	1	217	0	248	90	338	59	1	34	94	2	2	1	5	654
27/04/17 14:30-14:45	52	202	1	255	3	212	106	321	58	1	37	96	0	1	0	1	673
27/04/17 14:45-15:00	45	237	1	283	0	232	129	361	66	1	50	117	4	4	4	12	773
27/04/17 15:00-15:15	48	269	1	318	1	295	112	408	75	2	54	131	2	3	2	7	864
27/04/17 15:15-15:30	77	250	1	328	1	276	94	371	57	1	70	128	5	6	2	13	840
27/04/17 15:30-15:45	99	280	1	380	2	262	89	353	68	1	48	117	6	7	4	17	867
27/04/17 15:45-16:00	87	308	1	396	0	221	88	309	86	2	45	133	3	3	2	8	846
27/04/17 16:00-16:15	46	275	1	322	3	235	98	336	88	2	43	133	1	1	2	4	795
27/04/17 16:15-16:30	61	300	1	362	0	236	111	347	77	2	40	119	3	4	1	8	836
27/04/17 16:30-16:45	54	260	1	315	3	238	112	353	90	2	42	134	4	4	3	11	813
27/04/17 16:45-17:00	57	289	1	347	1	235	102	338	104	2	52	158	4	4	2	10	853
27/04/17 17:00-17:15	54	346	2	402	2	260	99	361	97	2	55	154	3	4	2	9	926
27/04/17 17:15-17:30	56	342	2	400	1	221	131	353	103	2	49	154	3	3	3	9	916
27/04/17 17:30-17:45	61	357	2	420	0	249	96	345	110	2	57	169	1	2	1	4	938
27/04/17 17:45-18:00	37	305	1	343	1	212	84	297	106	2	51	159	0	1	0	1	800
27/04/17 18:00-18:15	44	289	1	334	2	206	116	324	108	2	38	148	0	1	0	1	807
27/04/17 18:15-18:30	40	255	1	296	0	197	79	276	84	2	38	124	4	4	5	13	709
27/04/17 18:30-18:45	35	213	1	249	1	183	91	275	63	1	25	89	3	3	4	10	623
27/04/17 18:45-19:00	28	201	1	230	0	157	110	267	52	1	37	90	1	2	0	3	590
27/04/17 19:00-19:15	31	165	1	197	2	150	68	220	46	1	24	71	1	2	2	5	493
27/04/17 19:15-19:30	29	157	1	187	1	130	88	219	40	1	33	74	3	4	4	11	491
27/04/17 19:30-19:45	24	122	1	147	0	139	73	212	41	1	33	75	1	1	0	2	436
27/04/17 19:45-20:00	25	125	0	150	0	153	76	229	39	1	16	56	2	3	3	8	443
27/04/17 20:00-20:15	24	110	0	134	0	137	79	216	34	1	9	44	1	2	0	3	397
27/04/17 20:15-20:30	37	121	1	159	2	128	69	199	35	1	16	52	0	1	0	1	411
27/04/17 20:30-20:45	34	108	0	142	0	128	61	189	32	1	14	47	0	1	0	1	379
27/04/17 20:45-21:00	24	93	0	117	0	117	84	201	26	1	16	43	0	0	0	0	361
27/04/17 21:00-21:15	29	82	0	111	0	106	78	184	30	1	17	48	0	0	0	0	343
27/04/17 21:15-21:30	29	69	0	98	1	139	86	226	19	0	13	32	0	1	0	1	357
27/04/17 21:30-21:45	22	66	0	88	0	89	76	165	13	0	12	25	0	0	0	0	278
27/04/17 21:45-22:00	17	42	0	59	0	91	66	157	22	0	10	32	0	1	0	1	249
27/04/17 22:00-22:15	20	37	0	57	0	68	53	121	4	0	6	10	0	0	0	0	188
27/04/17 22:15-22:30	6	39	0	45	0	58	45	103	10	0	10	20	0	0	0	0	168
27/04/17 22:30-22:45	8	19	0	27	0	56	27	83	9	0	12	21	0	0	0	0	131
27/04/17 22:45-23:00	5	27	0	32	1	56	29	86	6	0	2	8	0	0	0	0	126
27/04/17 23:00-23:15	6	17	0	23	0	33	17	50	5	0	4	9	0	1	0	1	83
27/04/17 23:15-23:30	2	24	0	26	0	25	16	41	5	0	2	7	0	0	0	0	74
27/04/17 23:30-23:45	7	34	0	41	0	19	21	40	2	0	1	3	1	1	0	2	86
27/04/17 23:45-00:00	7	19	0	26	0	9	11	20	3	0	2	5	0	0	0	0	51
Summary	2616	11795	46	14457	78	12387	5457	17922	3804	71	2345	6220	122	157	115	394	38993

Turning Movement Volume Report

Report Date: 4/28/2017 8:06:56 AM

From 4/27/2017 to 4/27/2017

Intersection: 76

	NW				SE				NE				SW				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	6		15	21				0		10	4	14	6	9		15	50
27/04/17 00:15-00:30	4		6	10				0		9	4	13	5	10		15	38
27/04/17 00:30-00:45	0		4	4				0		7	4	11	11	10		21	36
27/04/17 00:45-01:00	1		3	4				0		4	0	4	5	13		18	26
27/04/17 01:00-01:15	2		5	7				0		6	1	7	5	5		10	24
27/04/17 01:15-01:30	3		4	7				0		4	2	6	3	2		5	18
27/04/17 01:30-01:45	2		2	4				0		1	0	1	2	0		2	7
27/04/17 01:45-02:00	0		3	3				0		1	1	2	2	11		13	18
27/04/17 02:00-02:15	2		2	4				0		4	3	7	3	6		9	20
27/04/17 02:15-02:30	1		6	7				0		3	1	4	1	4		5	16
27/04/17 02:30-02:45	0		1	1				0		2	1	3	0	1		1	5
27/04/17 02:45-03:00	2		2	4				0		1	0	1	3	0		3	8
27/04/17 03:00-03:15	1		1	2				0		2	2	4	3	4		7	13
27/04/17 03:15-03:30	0		1	1				0		3	1	4	0	2		2	7
27/04/17 03:30-03:45	2		2	4				0		2	1	3	0	4		4	11
27/04/17 03:45-04:00	2		3	5				0		2	1	3	1	1		2	10
27/04/17 04:00-04:15	1		5	6				0		7	0	7	6	5		11	24
27/04/17 04:15-04:30	0		1	1				0		2	2	4	1	7		8	13
27/04/17 04:30-04:45	2		5	7				0		2	2	4	3	5		8	19
27/04/17 04:45-05:00	1		3	4				0		3	2	5	2	5		7	16
27/04/17 05:00-05:15	4		6	10				0		11	5	16	8	11		19	45
27/04/17 05:15-05:30	6		6	12				0		5	5	10	6	7		13	35
27/04/17 05:30-05:45	3		6	9				0		5	3	8	5	10		15	32
27/04/17 05:45-06:00	2		13	15				0		10	6	16	12	21		33	64
27/04/17 06:00-06:15	5		16	21				0		13	9	22	27	22		49	92
27/04/17 06:15-06:30	4		16	20				0		17	9	26	29	25		54	100
27/04/17 06:30-06:45	6		27	33				0		26	9	35	42	51		93	161
27/04/17 06:45-07:00	10		28	38				0		31	35	66	54	69		123	227
27/04/17 07:00-07:15	13		52	65				0		36	40	76	72	61		133	274
27/04/17 07:15-07:30	25		67	92				0		57	39	96	68	71		139	327
27/04/17 07:30-07:45	51		109	160				0		119	51	170	94	67		161	491
27/04/17 07:45-08:00	54		138	192				0		139	64	203	109	125		234	629
27/04/17 08:00-08:15	78		149	227				0		175	80	255	166	107		273	755
27/04/17 08:15-08:30	40		88	128				0		91	94	185	183	130		313	626
27/04/17 08:30-08:45	32		86	118				0		78	101	179	125	100		225	522
27/04/17 08:45-09:00	38		90	128				0		62	65	127	139	123		262	517
27/04/17 09:00-09:15	84		212	296				0		118	144	262	290	242		532	1090
27/04/17 09:15-09:30	44		105	149				0		55	46	101	99	90		189	439
27/04/17 09:30-09:45	47		105	152				0		79	61	140	97	100		197	489
27/04/17 09:45-10:00	37		95	132				0		92	44	136	74	99		173	441
27/04/17 10:00-10:15	50		123	173				0		87	53	140	102	98		200	513
27/04/17 10:15-10:30	60		125	185				0		110	60	170	85	83		168	523
27/04/17 10:30-10:45	73		149	222				0		92	66	158	88	115		203	583
27/04/17 10:45-11:00	71		142	213				0		98	66	164	86	104		190	567
27/04/17 11:00-11:15	68		132	200				0		108	56	164	88	108		196	560
27/04/17 11:15-11:30	79		172	251				0		127	58	185	69	99		168	604
27/04/17 11:30-11:45	65		161	226				0		148	66	214	95	118		213	653
27/04/17 11:45-12:00	79		178	257				0		122	72	194	147	157		304	755
27/04/17 12:00-12:15	66		171	237				0		152	95	247	104	123		227	711
27/04/17 12:15-12:30	98		173	271				0		135	86	221	101	141		242	734
27/04/17 12:30-12:45	73		168	241				0		111	66	177	93	132		225	643
27/04/17 12:45-13:00	84		174	258				0		137	71	208	131	135		266	732
27/04/17 13:00-13:15	95		181	276				0		133	73	206	100	121		221	703
27/04/17 13:15-13:30	76		172	248				0		145	73	218	108	126		234	700
27/04/17 13:30-13:45	66		155	221				0		108	85	193	123	124		247	661
27/04/17 13:45-14:00	76		170	246				0		127	90	217	148	148		296	759
27/04/17 14:00-14:15	72		170	242				0		119	60	179	108	131		239	660
27/04/17 14:15-14:30	80		160	240				0		111	70	181	145	153		298	719
27/04/17 14:30-14:45	79		199	278				0		126	64	190	100	134		234	702
27/04/17 14:45-15:00	76		221	297				0		157	72	229	126	144		270	796
27/04/17 15:00-15:15	94		190	284				0		172	87	259	144	171		315	858
27/04/17 15:15-15:30	123		192	315				0		183	60	243	139	174		313	871
27/04/17 15:30-15:45	133		221	354				0		148	96	244	146	185		331	929
27/04/17 15:45-16:00	139		228	367				0		144	75	219	145	172		317	903
27/04/17 16:00-16:15	99		227	326				0		146	68	214	136	150		286	826
27/04/17 16:15-16:30	109		238	347				0		151	78	229	158	157		315	891
27/04/17 16:30-16:45	134		271	405				0		134	87	221	129	151		280	906
27/04/17 16:45-17:00	129		270	399				0		133	69	202	121	194		315	916
27/04/17 17:00-17:15	126		279	405				0		166	87	253	158	172		330	988
27/04/17 17:15-17:30	188		329	517				0		157	85	242	124	170		294	1053
27/04/17 17:30-17:45	156		302	458				0		179	62	241	139	178		317	1016
27/04/17 17:45-18:00	141		253	394				0		140	83	223	121	139		260	877
27/04/17 18:00-18:15	100		248	348				0		142	69	211	104	150		254	813
27/04/17 18:15-18:30	108		232	340				0		140	51	191	100	135		235	766
27/04/17 18:30-18:45	72		167	239				0		135	63	198	93	127		220	657
27/04/17 18:45-19:00	68		176	244				0		97	43	140	78	122		200	584
27/04/17 19:00-19:15	62		150	212				0		103	26	129	67	110		177	518
27/04/17 19:15-19:30	58		118	176				0		91	34	125	62	92		154	455
27/04/17 19:30-19:45	53		121	174				0		61	32	93	66	113		179	446
27/04/17 19:45-20:00	39		107	146				0		74	31	105	72	95		167	418
27/04/17 20:00-20:15	43		95	138				0		73	31	104	52	92		144	386
27/04/17 20:15-20:30	55		122	177				0		62	34	96	57	99		156	429
27/04/17 20:30-20:45	37		90	127				0		75	32	107	54	90		144	378
27/04/17 20:45-21:00	46		87	133				0		59	23	82	58	73		131	346
27/04/17 21:00-21:15	34		90	124				0		47	29	76	54	65		119	319
27/04/17 21:15-21:30	25		64	89				0		50	18	68	60	87		147	304
27/04/17 21:30-21:45	35		69	104				0		36	28	64	44	59		103	271
27/04/17 21:45-22:00	20		51	71				0		26	17	43	34	70		104	218
27/04/17 22:00-22:15	20		43	63				0		24	14	38	27	37		64	165
27/04/17 22:15-22:30	15		33	48				0		25	6	31	21	47		68	147
27/04/17 22:30-22:45	6		14	20				0		13	9	22	34	30		64	106
27/04/17 22:45-23:00	13		25	38				0		14	11	25	32	18		50	113
27/04/17 23:00-23:15	9		24	33				0		10	12	22	10	28		38	93
27/04/17 23:15-23:30	15		26	41				0		14	7	21	9	18		27	89
27/04/17 23:30-23:45	9		34	43				0		12	3	15	14	8		22	80
27/04/17 23:45-00:00	12		28	40				0		6	5	11	8	7		15	66
Summary	4626	0	9998	14624	0	0	0	0	0	6989	3909	10898	6778	7914	0	14692	40214

Turning Movement Volume Report

Report Date: 4/28/2017 8:07:44 AM

From 4/27/2017 to 4/27/2017

Intersection: 34

	NW				SE				NE				SW				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	5	6	2	13	2	5	1	8	5	8	1	14	1	14	0	15	50
27/04/17 00:15-00:30	4	5	0	9	2	5	2	9	0	8	0	8	3	9	2	14	40
27/04/17 00:30-00:45	5	2	1	8	2	8	2	12	3	4	0	7	0	7	1	8	35
27/04/17 00:45-01:00	5	2	1	8	0	3	2	5	1	3	0	4	0	6	0	6	23
27/04/17 01:00-01:15	3	6	0	9	0	2	2	4	2	4	0	6	1	11	1	13	32
27/04/17 01:15-01:30	0	3	0	3	0	2	2	4	3	3	1	7	0	12	1	13	27
27/04/17 01:30-01:45	0	0	2	2	1	2	1	4	0	2	0	2	1	7	2	10	18
27/04/17 01:45-02:00	0	0	0	0	0	1	0	1	2	2	0	4	0	3	0	3	8
27/04/17 02:00-02:15	1	0	0	1	1	3	1	5	1	1	0	2	0	4	2	6	14
27/04/17 02:15-02:30	2	2	0	4	1	1	1	3	1	3	0	4	0	4	4	8	19
27/04/17 02:30-02:45	1	1	0	2	0	0	1	1	2	0	0	2	1	1	1	3	8
27/04/17 02:45-03:00	0	3	1	4	0	3	0	3	1	3	1	5	0	0	0	0	12
27/04/17 03:00-03:15	0	0	0	0	1	3	2	6	1	1	0	2	0	5	1	6	14
27/04/17 03:15-03:30	1	0	0	1	0	1	0	1	0	2	0	2	0	2	1	3	7
27/04/17 03:30-03:45	1	2	0	3	1	0	1	2	2	6	1	9	0	3	1	4	18
27/04/17 03:45-04:00	1	1	1	3	0	2	0	2	2	1	0	3	0	2	2	4	12
27/04/17 04:00-04:15	1	2	0	3	3	3	3	9	2	4	1	7	0	2	0	2	21
27/04/17 04:15-04:30	0	1	0	1	1	0	2	3	0	1	0	1	0	3	0	3	8
27/04/17 04:30-04:45	0	1	0	1	1	3	1	5	3	6	0	9	1	4	1	6	21
27/04/17 04:45-05:00	1	3	1	5	2	3	0	5	3	7	1	11	1	5	0	6	27
27/04/17 05:00-05:15	2	6	4	12	2	10	0	12	4	15	2	21	1	6	1	8	53
27/04/17 05:15-05:30	0	5	2	7	3	2	3	8	1	9	1	11	1	6	3	10	36
27/04/17 05:30-05:45	2	3	3	8	3	2	0	5	3	9	1	13	2	7	2	11	37
27/04/17 05:45-06:00	1	7	1	9	4	8	4	16	6	8	2	16	2	5	2	9	50
27/04/17 06:00-06:15	2	8	11	21	6	21	7	34	6	22	4	32	4	6	3	13	100
27/04/17 06:15-06:30	1	4	8	13	3	22	16	41	10	23	4	37	7	22	6	35	126
27/04/17 06:30-06:45	3	13	7	23	5	32	10	47	19	38	6	63	7	20	4	31	164
27/04/17 06:45-07:00	10	23	10	43	14	55	16	85	10	47	8	65	13	16	4	33	226
27/04/17 07:00-07:15	9	30	12	51	15	71	25	111	18	61	8	87	12	29	7	48	297
27/04/17 07:15-07:30	13	36	12	61	18	52	26	96	23	58	9	90	9	30	8	47	294
27/04/17 07:30-07:45	9	59	11	79	10	93	39	142	60	79	12	151	12	57	10	79	451
27/04/17 07:45-08:00	15	76	21	112	23	98	54	175	45	75	10	130	19	59	15	93	510
27/04/17 08:00-08:15	15	85	16	116	27	139	65	231	64	93	15	172	20	70	11	101	620
27/04/17 08:15-08:30	13	50	20	83	24	167	62	253	33	94	13	140	17	66	15	98	574
27/04/17 08:30-08:45	7	46	30	83	19	145	57	221	39	84	11	134	27	82	13	122	560
27/04/17 08:45-09:00	16	48	31	95	20	88	77	185	44	105	13	162	15	106	23	144	586
27/04/17 09:00-09:15	26	96	86	208	66	218	148	432	124	209	27	360	52	204	34	290	1290
27/04/17 09:15-09:30	19	39	32	90	26	60	54	140	63	88	12	163	22	79	25	126	519
27/04/17 09:30-09:45	15	44	30	89	18	80	59	157	53	83	10	146	27	83	23	133	525
27/04/17 09:45-10:00	31	52	36	119	24	53	32	109	47	111	14	172	21	89	23	133	533
27/04/17 10:00-10:15	21	63	38	122	28	62	51	141	58	100	12	170	32	106	25	163	596
27/04/17 10:15-10:30	22	60	22	104	26	57	51	134	56	85	10	151	23	91	31	145	534
27/04/17 10:30-10:45	26	60	41	127	31	62	59	152	76	108	14	198	21	133	39	193	670
27/04/17 10:45-11:00	28	56	36	120	16	73	60	149	68	139	16	223	36	121	35	192	684
27/04/17 11:00-11:15	31	65	42	138	27	67	47	141	55	119	12	186	46	111	21	178	643
27/04/17 11:15-11:30	22	66	41	129	20	59	42	121	84	123	15	222	37	134	33	204	676
27/04/17 11:30-11:45	30	78	35	143	25	76	46	147	87	123	14	224	38	135	37	210	724
27/04/17 11:45-12:00	35	69	30	134	31	89	80	200	91	129	12	232	35	131	47	213	779
27/04/17 12:00-12:15	42	83	39	164	35	71	82	188	79	131	14	224	29	117	31	177	753
27/04/17 12:15-12:30	34	76	38	148	37	79	71	187	87	156	17	260	35	147	37	219	814
27/04/17 12:30-12:45	47	85	31	163	37	64	63	164	82	163	18	263	49	142	34	225	815
27/04/17 12:45-13:00	44	95	52	191	36	95	61	192	86	135	17	238	52	105	40	197	818
27/04/17 13:00-13:15	29	95	40	164	31	82	56	169	77	139	17	233	46	171	46	263	829
27/04/17 13:15-13:30	46	83	40	169	22	82	80	184	70	147	18	235	48	135	36	219	807
27/04/17 13:30-13:45	28	79	28	135	32	99	69	200	72	136	18	226	43	136	39	218	779
27/04/17 13:45-14:00	29	77	41	147	36	112	73	221	89	159	19	267	43	128	31	202	837
27/04/17 14:00-14:15	23	69	34	126	26	81	64	171	87	146	17	250	37	122	31	190	737
27/04/17 14:15-14:30	33	78	44	155	36	93	65	194	79	142	15	236	32	125	33	190	775
27/04/17 14:30-14:45	27	87	42	156	31	87	55	173	93	147	18	258	36	128	50	214	801
27/04/17 14:45-15:00	47	99	48	194	25	80	69	174	97	151	17	265	35	131	28	194	827
27/04/17 15:00-15:15	29	90	50	169	37	94	91	222	94	118	14	226	40	131	35	206	823
27/04/17 15:15-15:30	38	108	31	177	36	84	83	203	98	136	14	248	38	136	36	210	838
27/04/17 15:30-15:45	47	110	32	189	19	112	88	219	102	135	16	253	33	123	38	194	855
27/04/17 15:45-16:00	42	106	45	193	19	99	87	205	87	114	12	213	46	165	54	265	876
27/04/17 16:00-16:15	50	120	32	202	27	100	69	196	94	139	15	248	26	135	43	204	850
27/04/17 16:15-16:30	71	133	39	243	29	113	80	222	106	140	15	261	27	139	38	204	930
27/04/17 16:30-16:45	39	136	36	211	29	99	93	221	123	127	13	263	40	155	42	237	932
27/04/17 16:45-17:00	63	145	51	259	24	86	73	183	121	146	15	282	29	140	36	205	929
27/04/17 17:00-17:15	55	154	28	237	25	112	97	234	138	164	17	319	38	134	58	230	1020
27/04/17 17:15-17:30	70	222	39	331	28	114	69	211	116	121	14	251	48	149	40	237	1030
27/04/17 17:30-17:45	49	175	31	255	30	83	75	188	129	165	18	312	36	148	48	232	987
27/04/17 17:45-18:00	53	158	22	233	15	111	60	186	94	116	13	223	38	134	46	218	860
27/04/17 18:00-18:15	33	106	29	168	25	88	53	166	114	108	12	234	39	138	42	219	787
27/04/17 18:15-18:30	49	124	29	202	22	69	60	151	93	103	11	207	29	117	39	185	745
27/04/17 18:30-18:45	34	78	20	132	26	71	57	154	69	100	11	180	18	114	34	166	632
27/04/17 18:45-19:00	21	90	27	138	22	55	37	114	76	103	12	191	31	94	27	152	595
27/04/17 19:00-19:15	18	79	19	116	18	43	24	85	61	86	10	157	25	84	31	140	498
27/04/17 19:15-19:30	27	64	27	118	12	49	32	93	48	71	7	126	32	83	23	138	475
27/04/17 19:30-19:45	19	52	21	92	18	49	34	101	49	71	6	126	31	107	22	160	479
27/04/17 19:45-20:00	10	59	14	83	17	51	32	100	42	49	6	97	24	72	16	112	392
27/04/17 20:00-20:15	20	53	22	95	7	45	32	84	42	55	6	103	25	69	14	108	390
27/04/17 20:15-20:30	23	59	15	97	10	53	32	95	43	55	6	104	13	73	22	108	404
27/04/17 20:30-20:45	19	43	14	76	11	37	30	78	31	51	5	87	20	68	15	103	344
27/04/17 20:45-21:00	17	46	15	78	17	47	23	87	28	56	6	90	9	69	20	98	353
27/04/17 21:00-21:15	12	46	12	70	14	37	27	78	37	45	5	87	16	53	13	82	317
27/04/17 21:15-21:30	22	26	6	54	13	33	28	74	22	39	4	65	14	65	18	97	290
27/04/17 21:30-21:45	12	33	6	51	11	41	21	73	25	37	6	68	10	43	15	68	260
27/04/17 21:45-22:00	13	22	10	45	11	30	13	54	23	28	3	54	10	42	13	65	218
27/04/17 22:00-22:15	12	26	7	45	6	24	7	37	14	25	3	42	7	43	12	62	186
27/04/17 22:15-22:30	5	10	6	21	8	17	12	37	13	24	3	40	9	47	9	65	163
27/04/17 22:30-22:45	7	8	11	26	8	24	5	37	6	18	3	27	7	27	7	41	131
27/04/17 22:45-23:00	8	11	4	23	8	38	7	53	10	18	2	30	5	36	9	50	156
27/04/17 23:00-23:15	8	16	5	29	6	9	6	21	6	9	2	17	4	23	3	30	97
27/04/17 23:15-23:30	9	16	5	30	4	10	2	16	5	13	2	20	9	32	9	50	116
27/04/17 23:30-23:45	12	29	7	48	2	8	4	14	6	10	1	17	3	13	7	23	102
27/04/17 23:45-00:00	9	18	1	28	4	10	2	16	5	5	0	10	7	19	4	30	84
Summary	1909	5064	1922	8895	1554	5181	3567	10302	4449	6858	806	12113	1888	6915	1894	10697	42007

Turning Movement Volume Report

Report Date: 4/28/2017 8:08:30 AM

From 4/27/2017 to 4/27/2017

Intersection: 77

	NW				SE				NE				SW				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	0	0	0	0	3	0	1	4	2	11		13	0	12	1	13	30
27/04/17 00:15-00:30	0	0	0	0	0	0	0	0	1	9		10	0	15	2	17	27
27/04/17 00:30-00:45	0	0	0	0	8	0	1	9	0	1		1	1	13	1	15	25
27/04/17 00:45-01:00	0	0	0	0	0	0	0	0	0	6		6	3	15	1	19	25
27/04/17 01:00-01:15	0	0	0	0	4	0	1	5	0	5		5	0	6	1	7	17
27/04/17 01:15-01:30	0	0	0	0	3	0	0	3	1	7		8	1	4	1	6	17
27/04/17 01:30-01:45	0	0	0	0	3	0	0	3	1	5		6	0	6	1	7	16
27/04/17 01:45-02:00	0	0	0	0	2	0	0	2	1	4		5	0	7	1	8	15
27/04/17 02:00-02:15	0	0	0	0	0	0	0	0	1	7		8	1	6	1	8	16
27/04/17 02:15-02:30	0	0	0	0	2	0	1	3	0	6		6	0	6	1	7	16
27/04/17 02:30-02:45	0	0	0	0	0	0	0	0	0	4		4	0	3	0	3	7
27/04/17 02:45-03:00	0	0	0	0	0	0	0	0	0	1		1	0	2	0	2	3
27/04/17 03:00-03:15	0	0	0	0	1	0	0	1	1	3		4	0	5	1	6	11
27/04/17 03:15-03:30	0	0	0	0	0	0	0	0	1	5		6	0	4	1	5	11
27/04/17 03:30-03:45	0	0	0	0	0	0	0	0	0	2		2	0	6	1	7	9
27/04/17 03:45-04:00	0	0	0	0	3	0	0	3	0	3		3	1	3	1	5	11
27/04/17 04:00-04:15	0	0	0	0	2	0	0	2	1	2		3	0	5	1	6	11
27/04/17 04:15-04:30	0	0	0	0	0	0	0	0	0	7		7	0	5	1	6	13
27/04/17 04:30-04:45	0	0	0	0	1	0	0	1	0	7		7	0	6	1	7	15
27/04/17 04:45-05:00	0	0	0	0	5	0	0	5	0	7		7	0	10	1	11	23
27/04/17 05:00-05:15	0	0	0	0	4	0	1	5	0	10		10	1	10	2	13	28
27/04/17 05:15-05:30	1	1	1	3	6	0	1	7	2	9		11	1	10	1	12	33
27/04/17 05:30-05:45	1	1	1	3	5	0	0	5	3	6		9	0	12	2	14	31
27/04/17 05:45-06:00	1	0	1	2	8	0	1	9	1	8		9	2	27	4	33	53
27/04/17 06:00-06:15	3	1	3	7	11	0	1	12	1	14		15	0	27	5	32	66
27/04/17 06:15-06:30	2	1	2	5	20	0	2	22	5	18		23	3	33	4	40	90
27/04/17 06:30-06:45	4	2	4	10	34	1	3	38	10	24		34	4	49	8	61	143
27/04/17 06:45-07:00	4	2	4	10	37	1	5	43	8	29		37	3	81	12	96	186
27/04/17 07:00-07:15	4	2	4	10	48	1	6	55	5	38		43	3	65	9	77	185
27/04/17 07:15-07:30	6	2	6	14	55	1	6	62	2	46		48	9	86	12	107	231
27/04/17 07:30-07:45	5	2	5	12	81	2	9	92	3	91		94	8	70	11	89	287
27/04/17 07:45-08:00	9	4	9	22	98	2	11	111	7	102		109	13	114	16	143	385
27/04/17 08:00-08:15	13	5	12	30	77	2	9	88	5	161		166	7	106	16	129	413
27/04/17 08:15-08:30	9	4	9	22	76	2	8	86	13	98		111	13	125	16	154	373
27/04/17 08:30-08:45	11	4	11	26	67	2	8	77	9	113		122	6	95	14	115	340
27/04/17 08:45-09:00	8	3	7	18	57	1	6	64	9	82		91	8	115	17	140	313
27/04/17 09:00-09:15	13	5	13	31	128	3	15	146	22	178		200	12	221	29	262	639
27/04/17 09:15-09:30	8	3	8	19	51	1	6	58	9	81		90	11	95	13	119	286
27/04/17 09:30-09:45	8	3	7	18	62	1	7	70	3	98		101	4	118	18	140	329
27/04/17 09:45-10:00	8	3	8	19	35	1	4	40	6	97		103	9	123	15	147	309
27/04/17 10:00-10:15	8	3	8	19	52	1	7	60	11	112		123	9	107	14	130	332
27/04/17 10:15-10:30	5	2	5	12	49	1	6	56	16	112		128	10	108	15	133	329
27/04/17 10:30-10:45	10	4	10	24	53	1	6	60	12	124		136	7	130	16	153	373
27/04/17 10:45-11:00	7	3	7	17	67	1	6	74	9	121		130	11	139	18	168	389
27/04/17 11:00-11:15	7	3	7	17	44	1	5	50	18	136		154	10	168	22	200	421
27/04/17 11:15-11:30	6	3	6	15	57	1	7	65	16	123		139	19	143	19	181	400
27/04/17 11:30-11:45	10	4	9	23	75	2	9	86	12	155		167	17	143	17	177	453
27/04/17 11:45-12:00	7	3	7	17	67	1	7	75	19	142		161	18	174	21	213	466
27/04/17 12:00-12:15	13	5	13	31	77	2	8	87	18	162		180	10	144	20	174	472
27/04/17 12:15-12:30	12	5	11	28	70	1	7	78	12	125		137	11	167	22	200	443
27/04/17 12:30-12:45	10	4	9	23	45	1	5	51	18	129		147	15	155	22	192	413
27/04/17 12:45-13:00	8	3	8	19	48	1	6	55	20	144		164	19	168	23	210	448
27/04/17 13:00-13:15	9	4	9	22	51	1	6	58	16	151		167	18	154	22	194	441
27/04/17 13:15-13:30	9	4	9	22	42	1	5	48	10	149		159	10	182	22	214	443
27/04/17 13:30-13:45	8	3	8	19	58	1	5	64	16	137		153	8	158	21	187	423
27/04/17 13:45-14:00	10	4	9	23	66	1	6	73	10	133		143	13	169	20	202	441
27/04/17 14:00-14:15	7	3	7	17	44	1	4	49	6	128		134	10	177	24	211	411
27/04/17 14:15-14:30	8	3	8	19	39	1	4	44	18	144		162	15	167	21	203	428
27/04/17 14:30-14:45	7	3	7	17	49	1	6	56	20	132		152	3	197	27	227	452
27/04/17 14:45-15:00	4	2	4	10	70	2	10	82	16	173		189	9	177	26	212	493
27/04/17 15:00-15:15	8	3	7	18	77	1	7	85	17	158		175	9	203	27	239	517
27/04/17 15:15-15:30	6	3	6	15	75	2	8	85	12	179		191	7	210	28	245	536
27/04/17 15:30-15:45	8	3	8	19	68	2	8	78	14	179		193	6	206	26	238	528
27/04/17 15:45-16:00	8	3	8	19	68	2	8	78	20	159		179	17	211	29	257	533
27/04/17 16:00-16:15	7	3	7	17	58	1	7	66	16	179		195	12	192	27	231	509
27/04/17 16:15-16:30	7	3	7	17	65	1	7	73	16	148		164	7	200	26	233	487
27/04/17 16:30-16:45	7	3	7	17	65	1	7	73	16	126		142	11	202	27	240	472
27/04/17 16:45-17:00	8	3	7	18	53	1	5	59	20	159		179	5	219	31	255	511
27/04/17 17:00-17:15	6	2	6	14	79	2	10	91	19	158		177	10	207	28	245	527
27/04/17 17:15-17:30	5	2	5	12	65	1	6	72	16	155		171	8	266	36	310	565
27/04/17 17:30-17:45	9	4	9	22	72	2	9	83	16	167		183	11	250	34	295	583
27/04/17 17:45-18:00	4	2	4	10	52	1	5	58	14	169		183	12	214	28	254	505
27/04/17 18:00-18:15	5	2	5	12	58	1	6	65	10	139		149	5	176	25	206	432
27/04/17 18:15-18:30	6	2	6	14	44	1	7	52	11	114		125	7	209	29	245	436
27/04/17 18:30-18:45	4	2	4	10	51	1	7	59	15	113		128	2	168	23	193	390
27/04/17 18:45-19:00	4	2	4	10	45	1	6	52	15	115		130	6	165	24	195	387
27/04/17 19:00-19:15	5	2	5	12	44	1	5	50	14	81		95	10	137	19	166	323
27/04/17 19:15-19:30	4	2	4	10	33	1	5	39	13	88		101	2	144	21	167	317
27/04/17 19:30-19:45	2	1	2	5	44	1	6	51	16	72		88	6	127	19	152	296
27/04/17 19:45-20:00	3	1	2	6	24	1	3	28	14	77		91	4	121	15	140	265
27/04/17 20:00-20:15	3	1	3	7	30	1	4	35	8	75		83	6	114	17	137	262
27/04/17 20:15-20:30	4	2	4	10	25	1	4	30	8	70		78	9	133	17	159	277
27/04/17 20:30-20:45	3	1	3	7	25	1	4	30	9	76		85	4	115	15	134	256
27/04/17 20:45-21:00	3	1	2	6	32	1	4	37	6	61		67	2	112	15	129	239
27/04/17 21:00-21:15	3	1	3	7	25	1	3	29	7	69		76	4	75	10	89	201
27/04/17 21:15-21:30	3	1	3	7	12	0	1	13	9	43		52	3	95	13	111	183
27/04/17 21:30-21:45	1	1	1	3	13	0	2	15	6	43		49	1	77	11	89	156
27/04/17 21:45-22:00	2	1	2	5	16	0	2	18	3	34		37	3	79	11	93	153
27/04/17 22:00-22:15	2	1	2	5	14	0	2	16	5	37		42	2	50	7	59	122
27/04/17 22:15-22:30	2	1	2	5	10	0	1	11	4	25		29	2	54	7	63	108
27/04/17 22:30-22:45	2	1	2	5	7	0	1	8	1	27		28	1	34	4	39	80
27/04/17 22:45-23:00	2	1	2	5	19	0	2	21	1	19		20	4	29	4	37	83
27/04/17 23:00-23:15	2	1	2	5	4	0	1	5	2	9		11	2	29	4	35	56
27/04/17 23:15-23:30	0	0	0	0	7	0	1	8	2	22		24	0	30	4	34	66
27/04/17 23:30-23:45	1	0	1	2	8	0	1	9	4	20		24	2	19	2	23	58
27/04/17 23:45-00:00	0	0	0	0	5	0	0	5	1	17		18	0	20	3	23	46
Summary	432	178	421	1031	3512	74	403	3989	806	7519	0	8325	568	9740	1321	11629	24974

Turning Movement Volume Report

Report Date: 5/12/2017 5:21:06 PM

From 4/27/2017 to 4/27/2017

Intersection: 78

	NW				SE				NE				SW				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	3	0	0	3	0	0	0	0	0	11	0	11	0	13	0	13	27
27/04/17 00:15-00:30	0	0	0	0	4	0	2	6	1	7	0	8	1	12	0	13	27
27/04/17 00:30-00:45	0	0	0	0	0	0	0	0	1	1	0	2	0	14	1	15	17
27/04/17 00:45-01:00	3	0	0	3	0	0	0	0	2	6	0	8	0	16	1	17	28
27/04/17 01:00-01:15	2	0	0	2	0	0	0	0	0	5	0	5	0	5	0	5	12
27/04/17 01:15-01:30	1	0	0	1	1	0	2	3	3	8	0	11	0	5	0	5	20
27/04/17 01:30-01:45	0	0	0	0	0	0	0	0	1	6	0	7	0	7	0	7	14
27/04/17 01:45-02:00	0	0	0	0	1	0	1	2	1	5	0	6	0	9	0	9	17
27/04/17 02:00-02:15	0	0	0	0	0	0	0	0	0	8	0	8	0	7	0	7	15
27/04/17 02:15-02:30	1	0	0	1	0	0	0	0	0	5	0	5	0	6	0	6	12
27/04/17 02:30-02:45	0	0	0	0	1	0	1	2	1	4	0	5	0	2	0	2	9
27/04/17 02:45-03:00	0	0	0	0	0	0	0	0	2	1	0	3	0	4	0	4	7
27/04/17 03:00-03:15	0	0	0	0	2	0	0	2	1	5	0	6	0	6	0	6	14
27/04/17 03:15-03:30	0	0	0	0	1	0	0	1	1	5	0	6	0	3	0	3	10
27/04/17 03:30-03:45	0	0	0	0	0	0	0	0	2	2	0	4	1	7	0	8	12
27/04/17 03:45-04:00	0	0	0	0	0	0	0	0	1	3	0	4	0	4	0	4	8
27/04/17 04:00-04:15	1	0	0	1	0	0	0	0	0	4	0	4	0	4	0	4	9
27/04/17 04:15-04:30	1	0	0	1	0	0	0	0	1	9	0	10	0	6	0	6	17
27/04/17 04:30-04:45	2	0	0	2	0	0	0	0	0	10	0	10	0	8	1	9	21
27/04/17 04:45-05:00	2	0	0	2	4	0	0	4	2	5	0	7	0	11	0	11	24
27/04/17 05:00-05:15	0	0	0	0	1	0	1	2	2	11	0	13	0	11	0	11	26
27/04/17 05:15-05:30	3	0	0	3	1	0	0	1	0	12	0	12	0	12	1	13	29
27/04/17 05:30-05:45	0	0	0	0	3	0	1	4	1	11	0	12	0	15	1	16	32
27/04/17 05:45-06:00	0	0	0	0	2	0	2	4	3	10	0	13	0	30	2	32	49
27/04/17 06:00-06:15	2	0	0	2	5	1	3	9	6	22	0	28	1	32	2	35	74
27/04/17 06:15-06:30	1	0	0	1	9	1	6	16	0	23	0	23	1	39	2	42	82
27/04/17 06:30-06:45	4	0	0	4	8	1	3	12	2	37	1	40	2	56	3	61	117
27/04/17 06:45-07:00	8	1	1	10	4	0	2	6	2	37	1	40	1	73	4	78	134
27/04/17 07:00-07:15	6	0	0	6	4	0	0	4	4	43	1	48	1	72	3	76	134
27/04/17 07:15-07:30	2	0	0	2	6	1	8	15	4	56	1	61	4	88	5	97	175
27/04/17 07:30-07:45	5	0	1	6	13	2	4	19	12	91	2	105	2	75	4	81	211
27/04/17 07:45-08:00	3	0	1	4	13	2	7	22	13	115	2	130	1	111	6	118	274
27/04/17 08:00-08:15	10	1	0	11	14	2	5	21	16	168	3	187	1	106	5	112	331
27/04/17 08:15-08:30	9	1	4	14	21	3	10	34	12	100	2	114	2	135	7	144	306
27/04/17 08:30-08:45	11	1	5	17	27	3	11	41	19	112	2	133	4	97	5	106	297
27/04/17 08:45-09:00	19	1	0	20	18	2	10	30	25	90	2	117	5	103	5	113	280
27/04/17 09:00-09:15	50	4	8	62	64	8	20	92	30	178	4	212	14	184	8	206	572
27/04/17 09:15-09:30	16	1	4	21	26	3	15	44	25	86	1	112	7	93	5	105	282
27/04/17 09:30-09:45	23	2	5	30	27	3	19	49	32	83	2	117	5	108	6	119	315
27/04/17 09:45-10:00	23	2	6	31	27	3	16	46	28	89	2	119	8	94	4	106	302
27/04/17 10:00-10:15	24	2	9	35	34	4	16	54	26	98	2	126	10	90	4	104	319
27/04/17 10:15-10:30	27	2	16	45	36	4	23	63	32	86	1	119	5	90	5	100	327
27/04/17 10:30-10:45	24	2	9	35	36	4	22	62	35	110	2	147	7	117	5	129	373
27/04/17 10:45-11:00	23	2	11	36	26	3	17	46	31	97	2	130	11	116	5	132	344
27/04/17 11:00-11:15	20	2	13	35	34	4	14	52	41	117	2	160	12	143	7	162	409
27/04/17 11:15-11:30	33	3	7	43	40	5	21	66	36	111	2	149	7	104	6	117	375
27/04/17 11:30-11:45	26	2	19	47	46	6	21	73	36	118	2	156	7	120	5	132	408
27/04/17 11:45-12:00	34	3	15	52	44	5	27	76	37	132	2	171	10	151	7	168	467
27/04/17 12:00-12:15	31	2	22	55	46	6	23	75	37	122	2	161	9	126	6	141	432
27/04/17 12:15-12:30	31	2	9	42	45	6	22	73	40	109	2	151	12	137	7	156	422
27/04/17 12:30-12:45	21	2	14	37	42	5	33	80	48	116	2	166	4	153	8	165	448
27/04/17 12:45-13:00	33	3	9	45	44	5	37	86	31	119	2	152	3	128	6	137	420
27/04/17 13:00-13:15	22	2	13	37	35	4	24	63	36	132	2	170	5	147	7	159	429
27/04/17 13:15-13:30	31	2	12	45	44	5	36	85	25	126	2	153	4	152	7	163	446
27/04/17 13:30-13:45	34	3	15	52	39	5	30	74	31	133	2	166	11	128	6	145	437
27/04/17 13:45-14:00	28	2	12	42	42	5	29	76	37	100	2	139	11	154	7	172	429
27/04/17 14:00-14:15	31	2	12	45	37	5	32	74	34	109	2	145	8	134	6	148	412
27/04/17 14:15-14:30	32	2	17	51	40	5	22	67	31	103	2	136	9	151	7	167	421
27/04/17 14:30-14:45	33	3	8	44	36	5	21	62	38	123	2	163	13	149	7	169	438
27/04/17 14:45-15:00	36	3	9	48	48	6	31	85	29	145	3	177	5	153	8	166	476
27/04/17 15:00-15:15	34	3	15	52	44	5	35	84	32	119	2	153	7	173	8	188	477
27/04/17 15:15-15:30	28	2	6	36	38	5	29	72	28	158	3	189	9	169	8	186	483
27/04/17 15:30-15:45	36	3	11	50	39	5	22	66	37	149	3	189	9	185	8	202	507
27/04/17 15:45-16:00	32	2	10	44	37	5	32	74	35	145	3	183	6	169	8	183	484
27/04/17 16:00-16:15	26	2	5	33	49	6	30	85	39	146	2	187	8	144	7	159	464
27/04/17 16:15-16:30	28	2	6	36	37	5	14	56	34	117	2	153	6	167	7	180	425
27/04/17 16:30-16:45	20	2	8	30	32	4	19	55	31	110	2	143	3	173	8	184	412
27/04/17 16:45-17:00	32	2	8	42	38	5	18	61	31	139	2	172	5	173	9	187	462
27/04/17 17:00-17:15	29	2	11	42	39	5	21	65	23	144	2	169	8	155	8	171	447
27/04/17 17:15-17:30	33	3	11	47	40	5	24	69	53	132	2	187	6	211	10	227	530
27/04/17 17:30-17:45	25	2	8	35	52	6	23	81	26	130	2	158	9	188	9	206	480
27/04/17 17:45-18:00	35	3	4	42	45	6	25	76	28	132	2	162	12	158	8	178	458
27/04/17 18:00-18:15	18	1	8	27	40	5	28	73	33	122	2	157	8	136	7	151	408
27/04/17 18:15-18:30	24	2	12	38	28	3	19	50	20	92	2	114	5	168	8	181	383
27/04/17 18:30-18:45	20	1	4	25	36	5	20	61	36	96	2	134	6	130	6	142	362
27/04/17 18:45-19:00	29	2	6	37	32	4	37	73	28	95	2	125	7	146	7	160	395
27/04/17 19:00-19:15	19	1	4	24	27	3	12	42	23	71	1	95	7	126	6	139	300
27/04/17 19:15-19:30	22	2	7	31	29	4	17	50	17	70	1	88	3	119	6	128	297
27/04/17 19:30-19:45	21	2	9	32	21	3	16	40	28	75	1	104	4	106	6	116	292
27/04/17 19:45-20:00	16	1	3	20	29	4	17	50	15	71	1	87	4	105	5	114	271
27/04/17 20:00-20:15	18	1	5	24	30	4	8	42	19	52	1	72	6	101	5	112	250
27/04/17 20:15-20:30	17	1	4	22	20	3	19	42	12	76	1	89	8	122	6	136	289
27/04/17 20:30-20:45	15	1	3	19	26	3	10	39	15	63	1	79	5	108	5	118	255
27/04/17 20:45-21:00	14	1	5	20	28	3	15	46	16	46	1	63	3	109	5	117	246
27/04/17 21:00-21:15	11	1	5	17	23	3	12	38	17	58	1	76	1	70	3	74	205
27/04/17 21:15-21:30	19	1	5	25	22	3	11	36	6	39	1	46	2	89	5	96	203
27/04/17 21:30-21:45	11	1	3	15	7	1	8	16	10	35	1	46	1	69	3	73	150
27/04/17 21:45-22:00	6	0	2	8	12	1	9	22	10	33	1	44	4	74	4	82	156
27/04/17 22:00-22:15	2	0	0	2	6	1	6	13	3	35	1	39	2	41	2	45	99
27/04/17 22:15-22:30	7	0	1	8	6	1	3	10	3	27	0	30	0	49	2	51	99
27/04/17 22:30-22:45	3	0	0	3	2	0	0	2	3	27	0	30	1	34	1	36	71
27/04/17 22:45-23:00	3	0	0	3	2	0	1	3	2	19	0	21	3	31	2	36	63
27/04/17 23:00-23:15	0	0	0	0	1	0	1	2	1	12	0	13	1	33	2	36	51
27/04/17 23:15-23:30	3	0	0	3	4	0	1	5	0	19	0	19	1	27	1	29	56
27/04/17 23:30-23:45	5	0	0	5	1	0	0	1	1	23	0	24	0	16	1	17	47
27/04/17 23:45-00:00	2	0	0	2	0	0	0	0	1	18	0	19	1	15	0	16	37
Summary	1448	107	475	2030	2023	248	1212	3483	1663	6685	114	8462	395	8415	403	9213	23188

Turning Movement Volume Report

Report Date: 4/28/2017 8:10:03 AM

From 4/27/2017 to 4/27/2017

Intersection: 62

Time	N				S				E				W				
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	0	0	1	1	13	0	4	17	5	23	0	28	0	19	7	26	72
27/04/17 00:15-00:30	1	0	0	1	22	0	4	26	0	14	0	14	1	20	6	27	68
27/04/17 00:30-00:45	1	0	3	4	16	0	4	20	2	14	0	16	2	11	1	14	54
27/04/17 00:45-01:00	1	0	2	3	16	0	4	20	4	8	0	12	2	13	4	19	54
27/04/17 01:00-01:15	0	0	0	0	5	0	2	7	3	14	0	17	0	10	4	14	38
27/04/17 01:15-01:30	0	0	1	1	8	0	3	11	2	17	0	19	1	15	7	23	54
27/04/17 01:30-01:45	0	0	2	2	6	0	1	7	2	11	0	13	1	16	4	21	43
27/04/17 01:45-02:00	0	1	1	2	13	0	0	13	0	6	0	6	1	10	6	17	38
27/04/17 02:00-02:15	0	0	0	0	3	0	3	6	2	15	0	17	1	5	6	12	35
27/04/17 02:15-02:30	0	0	0	0	5	0	3	8	1	13	0	14	0	16	2	18	40
27/04/17 02:30-02:45	0	0	0	0	4	0	0	4	4	10	0	14	0	7	1	8	26
27/04/17 02:45-03:00	0	0	0	0	3	0	0	3	0	7	0	7	0	7	1	8	18
27/04/17 03:00-03:15	0	0	0	0	8	0	1	9	1	7	0	8	0	8	4	12	29
27/04/17 03:15-03:30	0	0	0	0	3	0	1	4	3	8	0	11	0	12	1	13	28
27/04/17 03:30-03:45	0	0	0	0	5	0	1	6	0	4	0	4	0	6	0	6	16
27/04/17 03:45-04:00	0	0	0	0	9	0	0	9	1	10	0	11	0	7	3	10	30
27/04/17 04:00-04:15	0	0	0	0	8	0	2	10	0	8	0	8	1	7	4	12	30
27/04/17 04:15-04:30	0	0	1	1	6	0	1	7	1	23	0	24	0	9	7	16	48
27/04/17 04:30-04:45	0	0	1	1	15	0	1	16	5	17	0	22	0	8	5	13	52
27/04/17 04:45-05:00	0	0	3	3	16	0	0	16	2	30	0	32	1	19	6	26	77
27/04/17 05:00-05:15	0	0	0	0	14	0	0	14	5	26	0	31	0	21	5	26	71
27/04/17 05:15-05:30	0	0	0	0	19	0	3	22	5	20	0	25	2	22	5	29	76
27/04/17 05:30-05:45	0	0	0	0	22	0	3	25	4	39	0	43	1	26	6	33	101
27/04/17 05:45-06:00	0	0	1	1	33	1	5	39	7	62	1	70	1	41	8	50	160
27/04/17 06:00-06:15	3	5	4	12	33	1	4	38	14	58	1	73	4	43	16	63	186
27/04/17 06:15-06:30	1	2	1	4	45	1	3	49	7	83	1	91	2	50	13	65	209
27/04/17 06:30-06:45	0	0	0	0	57	1	12	70	14	129	1	144	1	58	29	88	302
27/04/17 06:45-07:00	0	0	1	1	72	1	10	83	12	123	1	136	2	71	21	94	314
27/04/17 07:00-07:15	3	1	5	9	70	1	15	86	19	143	1	163	6	75	30	111	369
27/04/17 07:15-07:30	2	1	5	8	89	1	18	108	20	179	2	201	10	114	37	161	478
27/04/17 07:30-07:45	5	2	3	10	87	1	17	105	27	244	2	273	8	134	73	215	603
27/04/17 07:45-08:00	3	1	5	9	91	1	32	124	45	216	2	263	10	171	88	269	665
27/04/17 08:00-08:15	3	4	6	13	88	1	24	113	56	264	3	323	9	212	127	348	797
27/04/17 08:15-08:30	8	4	9	21	104	1	32	137	34	240	3	277	12	161	80	253	688
27/04/17 08:30-08:45	4	3	9	16	97	1	30	128	45	270	3	318	16	154	79	249	711
27/04/17 08:45-09:00	6	4	15	25	106	2	22	130	27	226	2	255	14	164	84	262	672
27/04/17 09:00-09:15	18	4	18	40	194	2	56	252	54	471	5	530	34	430	160	624	1446
27/04/17 09:15-09:30	10	9	7	26	106	1	21	128	35	208	2	245	15	178	74	267	666
27/04/17 09:30-09:45	10	5	7	22	123	2	30	155	28	170	2	200	16	152	83	251	628
27/04/17 09:45-10:00	8	3	9	20	100	1	21	122	23	189	2	214	15	169	91	275	631
27/04/17 10:00-10:15	18	12	7	37	106	1	23	130	28	177	2	207	13	175	97	285	659
27/04/17 10:15-10:30	10	5	14	29	98	1	34	133	37	161	2	200	9	164	85	258	620
27/04/17 10:30-10:45	3	8	13	24	103	1	40	144	41	203	2	246	19	151	90	260	674
27/04/17 10:45-11:00	7	4	14	25	129	1	27	157	36	176	2	214	16	159	80	255	651
27/04/17 11:00-11:15	12	5	13	30	130	2	45	177	36	158	2	196	19	204	124	347	750
27/04/17 11:15-11:30	6	13	19	38	118	2	30	150	32	190	2	224	15	191	97	303	715
27/04/17 11:30-11:45	5	14	13	32	141	2	36	179	48	177	2	227	18	188	111	317	755
27/04/17 11:45-12:00	7	6	9	22	141	2	38	181	42	205	2	249	9	192	112	313	765
27/04/17 12:00-12:15	10	10	22	42	141	2	48	191	53	209	2	264	22	206	108	336	833
27/04/17 12:15-12:30	9	9	18	36	127	1	40	168	43	197	2	242	16	196	84	296	742
27/04/17 12:30-12:45	5	11	21	37	146	2	47	195	40	166	2	208	17	235	117	369	809
27/04/17 12:45-13:00	11	15	22	48	137	2	48	187	44	184	2	230	24	204	94	322	787
27/04/17 13:00-13:15	10	8	21	39	155	2	45	202	38	196	2	236	25	232	106	363	840
27/04/17 13:15-13:30	10	11	14	35	150	2	54	206	41	197	2	240	15	201	107	323	804
27/04/17 13:30-13:45	13	4	16	33	147	2	54	203	38	192	2	232	20	196	110	326	794
27/04/17 13:45-14:00	10	10	16	36	136	2	42	180	49	183	2	234	21	205	93	319	769
27/04/17 14:00-14:15	7	9	14	30	159	2	42	203	34	192	2	228	12	207	97	316	777
27/04/17 14:15-14:30	6	8	18	32	149	2	45	196	40	196	2	238	13	220	90	323	789
27/04/17 14:30-14:45	6	9	15	30	147	2	53	202	51	214	2	267	17	228	104	349	848
27/04/17 14:45-15:00	9	9	18	36	161	2	42	205	53	201	2	256	15	248	102	365	862
27/04/17 15:00-15:15	5	7	18	30	163	2	67	232	45	223	2	270	10	246	109	365	897
27/04/17 15:15-15:30	8	7	15	30	166	2	54	222	54	252	2	308	14	220	134	368	928
27/04/17 15:30-15:45	9	5	10	24	162	2	60	224	47	248	2	297	15	228	140	383	928
27/04/17 15:45-16:00	5	5	13	23	185	2	52	239	35	221	2	258	13	260	132	405	925
27/04/17 16:00-16:15	9	9	11	29	136	2	48	186	52	246	2	300	15	270	134	419	934
27/04/17 16:15-16:30	5	3	14	22	164	2	52	218	45	221	2	268	16	249	106	371	879
27/04/17 16:30-16:45	11	7	24	42	162	2	52	216	38	235	2	275	9	262	85	356	889
27/04/17 16:45-17:00	9	12	20	41	156	2	65	223	46	222	2	270	18	307	116	441	975
27/04/17 17:00-17:15	14	14	18	46	149	2	55	206	45	211	2	258	17	311	105	433	943
27/04/17 17:15-17:30	17	14	21	52	178	2	67	247	48	263	3	314	17	280	118	415	1028
27/04/17 17:30-17:45	4	8	11	23	165	2	62	229	45	214	2	261	11	304	100	415	928
27/04/17 17:45-18:00	4	10	14	28	164	2	53	219	52	218	2	272	16	282	96	394	913
27/04/17 18:00-18:15	9	5	6	20	135	2	69	206	41	197	2	240	9	264	99	372	838
27/04/17 18:15-18:30	7	4	13	24	145	2	46	193	33	173	2	208	12	220	78	310	735
27/04/17 18:30-18:45	10	10	10	30	138	2	55	195	42	193	2	237	17	242	90	349	811
27/04/17 18:45-19:00	6	9	18	33	166	2	36	204	32	168	2	202	8	200	79	287	726
27/04/17 19:00-19:15	6	3	12	21	121	2	37	160	27	161	2	190	5	177	62	244	615
27/04/17 19:15-19:30	5	3	3	11	112	1	40	153	26	125	1	152	8	152	61	221	537
27/04/17 19:30-19:45	3	3	8	14	104	1	46	151	22	129	1	152	10	166	71	247	564
27/04/17 19:45-20:00	5	2	6	13	118	1	43	162	29	149	2	180	4	150	47	201	556
27/04/17 20:00-20:15	5	3	9	17	98	1	32	131	23	130	1	154	7	136	50	193	495
27/04/17 20:15-20:30	3	4	6	13	118	1	49	168	25	122	1	148	5	134	54	193	522
27/04/17 20:30-20:45	4	5	10	19	110	1	35	146	17	117	1	135	7	143	48	198	498
27/04/17 20:45-21:00	2	2	10	14	114	2	24	140	17	110	1	128	4	114	43	161	443
27/04/17 21:00-21:15	5	1	12	18	94	1	27	122	21	117	1	139	6	130	46	182	461
27/04/17 21:15-21:30	2	1	7	10	98	2	27	127	12	117	1	130	7	106	30	143	410
27/04/17 21:30-21:45	2	3	4	9	80	1	22	103	21	100	1	122	0	105	18	123	357
27/04/17 21:45-22:00	0	2	9	11	72	1	25	98	7	72	1	80	3	74	31	108	297
27/04/17 22:00-22:15	2	3	5	10	45	1	11	57	13	66	1	80	9	101	17	127	274
27/04/17 22:15-22:30	3	5	11	19	60	1	12	73	7	51	0	58	6	59	14	79	229
27/04/17 22:30-22:45	1	4	10	15	34	0	11	45	10	45	0	55	7	44	15	66	181
27/04/17 22:45-23:00	2	1	6	9	26	1	14	41	11	42	0	53	6	47	7	60	163
27/04/17 23:00-23:15	2	1	5	8	27	0	12	39	4	34	0	38	4	60	7	71	156
27/04/17 23:15-23:30	1	4	2	7	22	0	14	36	6	36	0	42	4	53	11	68	153
27/04/17 23:30-23:45	0	2	2	4	23	0	7	30	4	20	0	24	1	48	16	65	123
27/04/17 23:45-00:00	0	1	0	1	19	0	3	22	3	25	0	28	0	47	11	58	109
Summary	446	411	810	1667	8484	105	2610	11199	2348	12666	122	15136	844	12864	5576	19284	47286

Turning Movement Volume Report

Report Date: 4/28/2017 8:11:19 AM

From 4/27/2017 to 4/27/2017

Intersection: 135

	N				S				E				W				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15				0	30		4	34		19	4	23		21		21	78
27/04/17 00:15-00:30				0	26		4	30		21	3	24		24		24	78
27/04/17 00:30-00:45				0	21		3	24		16	3	19		12		12	55
27/04/17 00:45-01:00				0	17		3	20		11	3	14		12		12	46
27/04/17 01:00-01:15				0	27		5	32		10	1	11		10		10	53
27/04/17 01:15-01:30				0	18		4	22		12	2	14		19		19	55
27/04/17 01:30-01:45				0	14		4	18		8	2	10		19		19	47
27/04/17 01:45-02:00				0	14		1	15		9	1	10		14		14	39
27/04/17 02:00-02:15				0	9		1	10		5	2	7		11		11	28
27/04/17 02:15-02:30				0	9		5	14		4	1	5		18		18	37
27/04/17 02:30-02:45				0	7		0	7		6	0	6		10		10	23
27/04/17 02:45-03:00				0	8		3	11		6	1	7		7		7	25
27/04/17 03:00-03:15				0	8		1	9		5	1	6		10		10	25
27/04/17 03:15-03:30				0	19		0	19		3	1	4		14		14	37
27/04/17 03:30-03:45				0	13		3	16		2	0	2		6		6	24
27/04/17 03:45-04:00				0	6		5	11		5	1	6		6		6	23
27/04/17 04:00-04:15				0	11		1	12		10	1	11		10		10	33
27/04/17 04:15-04:30				0	13		5	18		12	1	13		10		10	41
27/04/17 04:30-04:45				0	14		7	21		8	2	10		9		9	40
27/04/17 04:45-05:00				0	35		6	41		23	3	26		25		25	92
27/04/17 05:00-05:15				0	45		9	54		19	2	21		25		25	100
27/04/17 05:15-05:30				0	31		7	38		11	3	14		30		30	82
27/04/17 05:30-05:45				0	55		4	59		27	4	31		38		38	128
27/04/17 05:45-06:00				0	73		10	83		45	7	52		44		44	179
27/04/17 06:00-06:15				0	104		13	117		46	6	52		55		55	224
27/04/17 06:15-06:30				0	130		10	140		61	11	72		58		58	270
27/04/17 06:30-06:45				0	153		24	177		84	16	100		74		74	351
27/04/17 06:45-07:00				0	119		22	141		103	17	120		79		79	340
27/04/17 07:00-07:15				0	143		18	161		114	21	135		101		101	397
27/04/17 07:15-07:30				0	165		30	195		146	23	169		149		149	513
27/04/17 07:30-07:45				0	197		33	230		212	38	250		187		187	667
27/04/17 07:45-08:00				0	194		31	225		196	30	226		250		250	701
27/04/17 08:00-08:15				0	192		55	247		223	34	257		283		283	787
27/04/17 08:15-08:30				0	187		42	229		225	37	262		226		226	717
27/04/17 08:30-08:45				0	207		31	238		246	34	280		227		227	745
27/04/17 08:45-09:00				0	216		44	260		223	40	263		239		239	762
27/04/17 09:00-09:15				0	432		104	536		425	65	490		550		550	1576
27/04/17 09:15-09:30				0	195		47	242		194	27	221		233		233	696
27/04/17 09:30-09:45				0	177		46	223		185	24	209		202		202	634
27/04/17 09:45-10:00				0	170		41	211		173	27	200		246		246	657
27/04/17 10:00-10:15				0	197		53	250		189	27	216		230		230	696
27/04/17 10:15-10:30				0	180		54	234		168	27	195		223		223	652
27/04/17 10:30-10:45				0	175		43	218		190	28	218		223		223	659
27/04/17 10:45-11:00				0	193		48	241		211	27	238		223		223	702
27/04/17 11:00-11:15				0	211		61	272		189	26	215		289		289	776
27/04/17 11:15-11:30				0	176		46	222		203	33	236		265		265	723
27/04/17 11:30-11:45				0	180		60	240		204	26	230		270		270	740
27/04/17 11:45-12:00				0	166		57	223		214	29	243		271		271	737
27/04/17 12:00-12:15				0	167		51	218		234	34	268		283		283	769
27/04/17 12:15-12:30				0	182		50	232		215	31	246		260		260	738
27/04/17 12:30-12:45				0	193		54	247		205	31	236		322		322	805
27/04/17 12:45-13:00				0	185		46	231		218	29	247		277		277	755
27/04/17 13:00-13:15				0	183		64	247		242	36	278		309		309	834
27/04/17 13:15-13:30				0	180		40	220		236	33	269		285		285	774
27/04/17 13:30-13:45				0	182		61	243		220	30	250		267		267	760
27/04/17 13:45-14:00				0	187		44	231		201	30	231		284		284	746
27/04/17 14:00-14:15				0	190		58	248		236	34	270		273		273	791
27/04/17 14:15-14:30				0	207		45	252		232	30	262		289		289	803
27/04/17 14:30-14:45				0	158		48	206		231	35	266		326		326	798
27/04/17 14:45-15:00				0	153		48	201		235	32	267		341		341	809
27/04/17 15:00-15:15				0	196		48	244		243	37	280		306		306	830
27/04/17 15:15-15:30				0	175		61	236		268	43	311		332		332	879
27/04/17 15:30-15:45				0	170		59	229		260	39	299		332		332	860
27/04/17 15:45-16:00				0	202		45	247		235	34	269		374		374	890
27/04/17 16:00-16:15				0	199		66	265		237	36	273		348		348	886
27/04/17 16:15-16:30				0	211		52	263		229	34	263		347		347	873
27/04/17 16:30-16:45				0	224		63	287		244	40	284		325		325	896
27/04/17 16:45-17:00				0	215		61	276		251	37	288		388		388	952
27/04/17 17:00-17:15				0	180		66	246		207	30	237		360		360	843
27/04/17 17:15-17:30				0	177		58	235		269	39	308		369		369	912
27/04/17 17:30-17:45				0	201		65	266		234	37	271		353		353	890
27/04/17 17:45-18:00				0	198		43	241		230	34	264		360		360	865
27/04/17 18:00-18:15				0	198		43	241		195	30	225		334		334	800
27/04/17 18:15-18:30				0	177		41	218		201	31	232		285		285	735
27/04/17 18:30-18:45				0	183		37	220		199	31	230		316		316	766
27/04/17 18:45-19:00				0	164		34	198		201	31	232		280		280	710
27/04/17 19:00-19:15				0	144		34	178		184	28	212		214		214	604
27/04/17 19:15-19:30				0	134		34	168		145	20	165		198		198	531
27/04/17 19:30-19:45				0	123		39	162		140	21	161		209		209	532
27/04/17 19:45-20:00				0	132		37	169		160	23	183		173		173	525
27/04/17 20:00-20:15				0	130		28	158		134	22	156		171		171	485
27/04/17 20:15-20:30				0	127		25	152		129	19	148		182		182	482
27/04/17 20:30-20:45				0	143		24	167		135	22	157		173		173	497
27/04/17 20:45-21:00				0	106		28	134		115	20	135		142		142	411
27/04/17 21:00-21:15				0	120		25	145		120	20	140		166		166	451
27/04/17 21:15-21:30				0	118		22	140		107	17	124		122		122	386
27/04/17 21:30-21:45				0	125		23	148		97	17	114		113		113	375
27/04/17 21:45-22:00				0	106		16	122		75	12	87		99		99	308
27/04/17 22:00-22:15				0	71		16	87		64	13	77		118		118	282
27/04/17 22:15-22:30				0	85		14	99		53	11	64		65		65	228
27/04/17 22:30-22:45				0	70		13	83		48	8	56		55		55	194
27/04/17 22:45-23:00				0	50		7	57		39	7	46		56		56	159
27/04/17 23:00-23:15				0	54		9	63		33	5	38		57		57	158
27/04/17 23:15-23:30				0	49		15	64		32	6	38		53		53	155
27/04/17 23:30-23:45				0	41		3	44		21	4	25		65		65	134
27/04/17 23:45-00:00				0	34		6	40		20	3	23		55		55	118
Summary	0	0	0	0	12181	0	2977	15158	0	12980	1968	14948	0	16968	0	16968	47074

Turning Movement Volume Report

Report Date: 4/28/2017 8:10:37 AM

From 4/27/2017 to 4/27/2017

Intersection: 148

	N				S				E				W				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15				0			11	11	3			3		46	3	49	63
27/04/17 00:15-00:30				0			10	10	5			5		58	3	61	76
27/04/17 00:30-00:45				0			2	2	1			1		43	3	46	49
27/04/17 00:45-01:00				0			5	5	2			2		38	5	43	50
27/04/17 01:00-01:15				0			1	1	1			1		31	4	35	37
27/04/17 01:15-01:30				0			5	5	1			1		30	1	31	37
27/04/17 01:30-01:45				0			5	5	1			1		30	3	33	39
27/04/17 01:45-02:00				0			7	7	1			1		30	4	34	42
27/04/17 02:00-02:15				0			4	4	0			0		24	1	25	29
27/04/17 02:15-02:30				0			4	4	0			0		29	6	35	39
27/04/17 02:30-02:45				0			5	5	1			1		26	2	28	34
27/04/17 02:45-03:00				0			2	2	1			1		23	2	25	28
27/04/17 03:00-03:15				0			5	5	2			2		20	0	20	27
27/04/17 03:15-03:30				0			4	4	0			0		20	4	24	28
27/04/17 03:30-03:45				0			1	1	0			0		18	3	21	22
27/04/17 03:45-04:00				0			4	4	0			0		22	2	24	28
27/04/17 04:00-04:15				0			3	3	6			6		22	2	24	33
27/04/17 04:15-04:30				0			5	5	1			1		29	4	33	39
27/04/17 04:30-04:45				0			6	6	3			3		23	4	27	36
27/04/17 04:45-05:00				0			13	13	3			3		43	6	49	65
27/04/17 05:00-05:15				0			15	15	3			3		42	6	48	66
27/04/17 05:15-05:30				0			10	10	1			1		66	2	68	79
27/04/17 05:30-05:45				0			17	17	6			6		65	6	71	94
27/04/17 05:45-06:00				0			17	17	8			8		103	10	113	138
27/04/17 06:00-06:15				0			30	30	12			12		99	8	107	149
27/04/17 06:15-06:30				0			19	19	9			9		161	15	176	204
27/04/17 06:30-06:45				0			30	30	13			13		172	20	192	235
27/04/17 06:45-07:00				0			29	29	14			14		185	31	216	259
27/04/17 07:00-07:15				0			44	44	17			17		197	19	216	277
27/04/17 07:15-07:30				0			63	63	26			26		274	21	295	384
27/04/17 07:30-07:45				0			83	83	34			34		292	37	329	446
27/04/17 07:45-08:00				0			100	100	21			21		329	44	373	494
27/04/17 08:00-08:15				0			107	107	44			44		332	37	369	520
27/04/17 08:15-08:30				0			90	90	30			30		325	23	348	468
27/04/17 08:30-08:45				0			96	96	38			38		280	42	322	456
27/04/17 08:45-09:00				0			78	78	32			32		359	44	403	513
27/04/17 09:00-09:15				0			190	190	90			90		724	92	816	1096
27/04/17 09:15-09:30				0			65	65	37			37		370	58	428	530
27/04/17 09:30-09:45				0			61	61	41			41		338	59	397	499
27/04/17 09:45-10:00				0			67	67	32			32		395	61	456	555
27/04/17 10:00-10:15				0			62	62	28			28		361	65	426	516
27/04/17 10:15-10:30				0			57	57	24			24		355	69	424	505
27/04/17 10:30-10:45				0			60	60	41			41		364	78	442	543
27/04/17 10:45-11:00				0			67	67	37			37		368	75	443	547
27/04/17 11:00-11:15				0			69	69	36			36		418	83	501	606
27/04/17 11:15-11:30				0			63	63	38			38		416	71	487	588
27/04/17 11:30-11:45				0			79	79	41			41		457	84	541	661
27/04/17 11:45-12:00				0			76	76	49			49		408	83	491	616
27/04/17 12:00-12:15				0			77	77	57			57		447	90	537	671
27/04/17 12:15-12:30				0			60	60	43			43		398	97	495	598
27/04/17 12:30-12:45				0			61	61	44			44		486	102	588	693
27/04/17 12:45-13:00				0			58	58	50			50		458	102	560	668
27/04/17 13:00-13:15				0			68	68	57			57		494	91	585	710
27/04/17 13:15-13:30				0			64	64	51			51		434	79	513	628
27/04/17 13:30-13:45				0			71	71	50			50		430	91	521	642
27/04/17 13:45-14:00				0			76	76	33			33		431	98	529	638
27/04/17 14:00-14:15				0			81	81	54			54		414	99	513	648
27/04/17 14:15-14:30				0			86	86	50			50		429	81	510	646
27/04/17 14:30-14:45				0			91	91	33			33		456	77	533	657
27/04/17 14:45-15:00				0			70	70	57			57		508	93	601	728
27/04/17 15:00-15:15				0			91	91	45			45		450	84	534	670
27/04/17 15:15-15:30				0			102	102	60			60		516	77	593	755
27/04/17 15:30-15:45				0			95	95	50			50		482	89	571	716
27/04/17 15:45-16:00				0			90	90	44			44		552	77	629	763
27/04/17 16:00-16:15				0			85	85	34			34		553	63	616	735
27/04/17 16:15-16:30				0			89	89	38			38		553	84	637	764
27/04/17 16:30-16:45				0			85	85	46			46		522	49	571	702
27/04/17 16:45-17:00				0			91	91	50			50		606	86	692	833
27/04/17 17:00-17:15				0			101	101	38			38		551	70	621	760
27/04/17 17:15-17:30				0			67	67	44			44		561	50	611	722
27/04/17 17:30-17:45				0			84	84	41			41		623	52	675	800
27/04/17 17:45-18:00				0			96	96	42			42		552	58	610	748
27/04/17 18:00-18:15				0			75	75	38			38		505	72	577	690
27/04/17 18:15-18:30				0			83	83	39			39		446	79	525	647
27/04/17 18:30-18:45				0			81	81	39			39		492	66	558	678
27/04/17 18:45-19:00				0			83	83	51			51		420	80	500	634
27/04/17 19:00-19:15				0			75	75	44			44		338	56	394	513
27/04/17 19:15-19:30				0			35	35	42			42		372	54	426	503
27/04/17 19:30-19:45				0			62	62	43			43		368	74	442	547
27/04/17 19:45-20:00				0			26	26	34			34		303	55	358	418
27/04/17 20:00-20:15				0			48	48	25			25		305	49	354	427
27/04/17 20:15-20:30				0			45	45	26			26		284	49	333	404
27/04/17 20:30-20:45				0			44	44	34			34		261	46	307	385
27/04/17 20:45-21:00				0			48	48	23			23		246	29	275	346
27/04/17 21:00-21:15				0			35	35	35			35		277	37	314	384
27/04/17 21:15-21:30				0			31	31	34			34		260	43	303	368
27/04/17 21:30-21:45				0			33	33	25			25		206	29	235	293
27/04/17 21:45-22:00				0			33	33	13			13		188	35	223	269
27/04/17 22:00-22:15				0			27	27	8			8		213	20	233	268
27/04/17 22:15-22:30				0			22	22	14			14		165	13	178	214
27/04/17 22:30-22:45				0			15	15	11			11		120	22	142	168
27/04/17 22:45-23:00				0			21	21	10			10		109	15	124	155
27/04/17 23:00-23:15				0			17	17	9			9		121	8	129	155
27/04/17 23:15-23:30				0			18	18	5			5		117	17	134	157
27/04/17 23:30-23:45				0			17	17	4			4		122	21	143	164
27/04/17 23:45-00:00				0			21	21	1			1		118	13	131	153
Summary	0	0	0	0	0	0	4780	4780	2552	0	0	2552	0	27122	4226	31348	38680

Turning Movement Volume Report

Report Date: 4/28/2017 8:11:47 AM

From 4/27/2017 to 4/27/2017

Intersection: 33

Time	N				S				E				W				
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int Total
27/04/17 00:00-00:15	4	8	2	14	1	12	5	18	3	39	6	48	0	36	5	41	121
27/04/17 00:15-00:30	4	3	2	9	1	8	11	20	5	35	5	45	7	43	5	55	129
27/04/17 00:30-00:45	5	4	1	10	2	4	8	14	4	35	4	43	6	32	4	42	109
27/04/17 00:45-01:00	6	3	1	10	1	5	5	11	1	23	1	25	4	33	2	39	85
27/04/17 01:00-01:15	5	0	0	5	4	8	6	18	6	24	1	31	6	23	1	30	84
27/04/17 01:15-01:30	3	4	0	7	4	4	2	10	1	24	1	26	1	22	1	24	67
27/04/17 01:30-01:45	3	2	0	5	2	1	6	9	1	13	3	17	6	23	1	30	61
27/04/17 01:45-02:00	6	1	1	8	0	2	2	4	2	20	3	25	1	25	2	28	65
27/04/17 02:00-02:15	5	1	0	6	1	0	2	3	3	19	2	24	2	16	1	19	52
27/04/17 02:15-02:30	4	3	1	8	2	3	8	13	5	10	2	17	2	23	1	26	64
27/04/17 02:30-02:45	2	1	0	3	2	1	4	7	2	13	0	15	1	22	2	25	50
27/04/17 02:45-03:00	2	5	1	8	0	1	2	3	2	9	1	12	0	20	1	21	44
27/04/17 03:00-03:15	2	5	1	8	1	3	1	5	5	10	1	16	0	16	0	16	45
27/04/17 03:15-03:30	1	2	0	3	0	0	5	5	3	15	1	19	2	18	1	21	48
27/04/17 03:30-03:45	1	2	0	3	3	3	0	6	2	15	0	17	0	22	3	25	51
27/04/17 03:45-04:00	1	4	1	6	0	2	7	9	1	13	0	14	0	16	1	17	46
27/04/17 04:00-04:15	5	4	2	11	0	0	5	5	4	22	0	26	1	16	1	18	60
27/04/17 04:15-04:30	3	3	0	6	0	5	1	6	5	23	1	29	0	26	0	26	67
27/04/17 04:30-04:45	2	6	1	9	0	3	5	8	1	14	3	18	3	23	2	28	63
27/04/17 04:45-05:00	1	3	2	6	1	0	10	11	11	40	4	55	4	35	1	40	112
27/04/17 05:00-05:15	4	9	3	16	1	4	4	9	25	46	15	86	2	36	3	41	152
27/04/17 05:15-05:30	10	5	1	16	2	5	4	11	7	24	4	35	2	52	1	55	117
27/04/17 05:30-05:45	13	8	3	24	1	2	3	6	9	50	3	62	4	58	1	63	155
27/04/17 05:45-06:00	14	11	4	29	1	7	5	13	14	64	6	84	4	88	3	95	221
27/04/17 06:00-06:15	13	15	5	33	3	6	13	22	20	135	18	173	8	85	2	95	323
27/04/17 06:15-06:30	15	16	5	36	2	22	11	35	26	130	9	165	2	138	5	145	381
27/04/17 06:30-06:45	25	30	7	62	1	17	15	33	36	173	17	226	5	155	8	168	489
27/04/17 06:45-07:00	21	34	10	65	2	20	29	51	51	237	13	301	13	160	6	179	596
27/04/17 07:00-07:15	25	51	11	87	3	33	18	54	64	327	17	408	10	187	11	208	757
27/04/17 07:15-07:30	26	61	14	101	10	28	30	68	63	288	24	375	10	224	11	245	789
27/04/17 07:30-07:45	25	65	16	106	9	38	32	79	105	405	42	552	15	263	16	294	1031
27/04/17 07:45-08:00	47	89	23	159	19	43	37	99	87	409	49	545	23	279	20	322	1125
27/04/17 08:00-08:15	40	110	26	176	9	52	34	95	114	515	64	693	34	306	31	371	1335
27/04/17 08:15-08:30	47	97	27	171	13	54	41	108	103	447	43	593	27	238	24	289	1161
27/04/17 08:30-08:45	46	82	24	152	17	45	49	111	106	517	58	681	37	235	22	294	1238
27/04/17 08:45-09:00	74	92	26	192	13	69	38	120	98	426	78	602	28	276	24	328	1242
27/04/17 09:00-09:15	122	189	49	360	30	132	104	266	226	946	148	1320	78	586	70	734	2680
27/04/17 09:15-09:30	56	95	31	182	20	53	74	147	101	315	46	462	43	291	23	357	1148
27/04/17 09:30-09:45	41	77	24	142	16	54	63	133	98	403	30	531	52	299	31	382	1188
27/04/17 09:45-10:00	63	111	31	205	24	55	87	166	82	292	46	420	35	281	34	350	1141
27/04/17 10:00-10:15	56	92	28	176	16	61	69	146	93	395	47	535	34	299	32	365	1222
27/04/17 10:15-10:30	51	88	25	164	21	49	90	160	86	282	31	399	42	268	30	340	1063
27/04/17 10:30-10:45	65	98	28	191	24	63	73	160	94	334	43	471	52	310	34	396	1218
27/04/17 10:45-11:00	51	107	32	190	31	78	91	200	96	327	48	471	50	284	41	375	1236
27/04/17 11:00-11:15	74	94	29	197	25	62	101	188	107	423	55	585	58	320	43	421	1391
27/04/17 11:15-11:30	64	127	41	232	24	76	84	184	78	270	45	393	59	310	38	407	1216
27/04/17 11:30-11:45	65	118	35	218	25	65	87	177	98	318	45	461	61	386	46	493	1349
27/04/17 11:45-12:00	70	104	39	213	40	84	81	205	79	301	41	421	58	316	36	410	1249
27/04/17 12:00-12:15	73	112	35	220	30	73	102	205	90	346	48	484	59	374	52	485	1394
27/04/17 12:15-12:30	73	122	39	234	41	99	116	256	104	309	53	466	54	294	47	395	1351
27/04/17 12:30-12:45	76	111	36	223	33	74	113	220	94	351	47	492	62	405	38	505	1440
27/04/17 12:45-13:00	81	114	32	227	47	86	93	226	79	313	49	441	72	368	40	480	1374
27/04/17 13:00-13:15	77	106	32	215	34	84	100	218	103	361	51	515	66	404	33	503	1451
27/04/17 13:15-13:30	67	118	36	221	29	92	98	219	78	293	51	422	72	328	43	443	1305
27/04/17 13:30-13:45	58	100	33	191	42	75	85	202	108	373	42	523	73	392	49	514	1430
27/04/17 13:45-14:00	72	135	39	246	37	74	104	215	111	308	38	457	60	315	35	410	1328
27/04/17 14:00-14:15	67	103	31	201	31	74	85	190	100	368	37	505	75	365	44	484	1380
27/04/17 14:15-14:30	97	130	37	264	27	70	93	190	100	317	46	463	58	304	41	403	1320
27/04/17 14:30-14:45	66	97	25	188	32	76	101	209	96	389	50	535	66	373	43	482	1414
27/04/17 14:45-15:00	90	142	40	272	30	86	115	231	91	306	28	425	44	379	37	460	1388
27/04/17 15:00-15:15	62	93	27	182	25	80	91	196	122	410	44	576	69	388	34	491	1445
27/04/17 15:15-15:30	81	125	36	242	27	100	108	235	79	352	43	474	57	377	43	477	1428
27/04/17 15:30-15:45	67	132	34	233	26	104	109	239	114	404	36	554	71	401	36	508	1534
27/04/17 15:45-16:00	81	96	30	207	34	120	123	277	78	329	46	453	57	403	40	500	1437
27/04/17 16:00-16:15	85	120	35	240	27	93	133	253	122	423	38	583	46	403	40	489	1565
27/04/17 16:15-16:30	70	127	36	233	28	94	144	266	85	349	36	470	58	405	43	506	1475
27/04/17 16:30-16:45	74	102	31	207	35	127	119	281	97	407	48	552	62	405	30	497	1537
27/04/17 16:45-17:00	116	116	35	267	32	108	139	279	88	342	53	483	50	402	33	485	1514
27/04/17 17:00-17:15	61	120	31	212	35	89	135	259	119	376	44	539	57	429	41	527	1537
27/04/17 17:15-17:30	109	129	36	274	30	119	151	300	85	384	33	502	59	322	32	413	1489
27/04/17 17:30-17:45	63	96	27	186	34	116	159	309	88	394	39	521	55	457	35	547	1563
27/04/17 17:45-18:00	76	115	30	221	25	85	115	225	83	334	44	461	60	390	21	471	1378
27/04/17 18:00-18:15	60	94	23	177	37	95	101	233	61	393	64	518	57	421	38	516	1444
27/04/17 18:15-18:30	67	105	28	200	28	85	132	245	77	334	36	447	42	315	31	388	1280
27/04/17 18:30-18:45	66	103	28	197	28	66	115	209	62	322	39	423	46	392	25	463	1292
27/04/17 18:45-19:00	59	96	27	182	23	58	81	162	72	310	31	413	54	329	20	403	1160
27/04/17 19:00-19:15	32	62	18	112	18	56	73	147	66	315	31	412	56	286	26	368	1039
27/04/17 19:15-19:30	49	78	21	148	17	67	73	157	36	195	22	253	37	297	21	355	913
27/04/17 19:30-19:45	54	66	20	140	24	62	75	161	32	206	25	263	46	310	22	378	942
27/04/17 19:45-20:00	39	50	14	103	20	54	63	137	56	197	19	272	28	243	25	296	808
27/04/17 20:00-20:15	34	52	14	100	11	40	75	126	44	223	15	282	37	237	20	294	802
27/04/17 20:15-20:30	47	52	14	113	17	50	64	131	36	195	16	247	27	232	26	285	776
27/04/17 20:30-20:45	33	41	11	85	17	58	49	124	55	182	18	255	30	206	23	259	723
27/04/17 20:45-21:00	19	34	11	64	22	38	51	111	46	156	11	213	29	198	18	245	633
27/04/17 21:00-21:15	44	45	12	101	11	49	47	107	25	157	13	195	31	221	12	264	667
27/04/17 21:15-21:30	29	35	11	75	11	51	63	125	26	140	9	175	29	206	22	257	632
27/04/17 21:30-21:45	23	29	10	62	10	39	44	93	25	147	10	182	22	165	24	211	548
27/04/17 21:45-22:00	20	31	5	56	3	35	38	76	26	126	14	166	13	159	9	181	479
27/04/17 22:00-22:15	25	24	8	57	6	25	43	74	18	120	10	148	21	155	10	186	465
27/04/17 22:15-22:30	21	20	5	46	8	32	33	73	22	80	6	108	19	125	7	151	378
27/04/17 22:30-22:45	11	20	7	38	4	15	28	47	15	109	7	131	12	100	5	117	333
27/04/17 22:45-23:00	11	14	5	30	9	28	29	66	18	76	9	103	13	76	6	95	294
27/04/17 23:00-23:15	12	6	3	21	3	23	21	47	13	70	2	85	12	91	7	110	263
27/04/17 23:15-23:30	24	11	5	40	0	13	33	46	17	68	5	90	7	74	3	84	260
27/04/17 23:30-23:45	37	8	4	49	3	12	28	43	13	65	6	84	10	86	6	102	278
27/04/17 23:45-00:00	19	4	0	23	3	9	20	32	10	82	6	98	4	80	5	89	242
Summary	3965	5980	1720	11665	1531	4600	5572	11703	5418	22021	2592	30031	3036	21307	2022	26365	79764

Appendix B

Analysis Worksheets for
Existing (2017) Conditions

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	761	263	249	585	193	229
Future Volume (veh/h)	761	263	249	585	193	229
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	895	309	323	760	244	290
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.85	0.85	0.77	0.77	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1145	534	461	2356	391	846
Arrive On Green	0.34	0.31	0.26	0.67	0.22	0.22
Sat Flow, veh/h	3487	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	895	309	323	760	244	290
Grp Sat Flow(s),veh/h/ln	1699	1583	1774	1770	1774	1583
Q Serve(g_s), s	10.4	7.0	7.2	4.0	5.4	4.6
Cycle Q Clear(g_c), s	10.4	7.0	7.2	4.0	5.4	4.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1145	534	461	2356	391	846
V/C Ratio(X)	0.78	0.58	0.70	0.32	0.62	0.34
Avail Cap(c_a), veh/h	1163	542	527	2505	567	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	12.0	14.7	3.1	15.4	5.8
Incr Delay (d2), s/veh	3.5	1.5	3.5	0.1	1.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	3.4	3.9	1.9	2.8	3.4
LnGrp Delay(d),s/veh	16.5	13.5	18.2	3.2	17.1	6.0
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	1204			1083	534	
Approach Delay, s/veh	15.7			7.7	11.1	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.4	16.8		12.6		31.2		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	12.0	13.0		13.0		29.0		
Max Q Clear Time (g_c+I1), s	9.2	12.4		7.4		6.0		
Green Ext Time (p_c), s	1.4	0.4		1.2		4.8		

Intersection Summary	
HCM 2010 Ctrl Delay	11.8
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	830	350	549	429	0	1121
Future Volume (vph)	830	350	549	429	0	1121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.87	0.87	0.93	0.93	0.90	0.90
Adj. Flow (vph)	954	402	590	461	0	1246
RTOR Reduction (vph)	0	288	0	0	0	412
Lane Group Flow (vph)	954	114	590	461	0	834
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	14.5	14.5	14.5	33.0		16.1
Effective Green, g (s)	16.5	16.5	15.5	35.0		17.1
Actuated g/C Ratio	0.28	0.28	0.27	0.60		0.29
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1444	449	915	2131		474
v/s Ratio Prot	c0.19		c0.17	0.13		
v/s Ratio Perm		0.07				c0.52
v/c Ratio	0.66	0.25	0.64	0.22		1.76
Uniform Delay, d1	18.3	16.1	18.9	5.3		20.5
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.1	0.3	1.6	0.1		350.2
Delay (s)	19.5	16.4	20.4	5.3		370.7
Level of Service	B	B	C	A		F
Approach Delay (s)	18.6			13.8	370.7	
Approach LOS	B			B	F	

Intersection Summary			
HCM 2000 Control Delay	137.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	58.1	Sum of lost time (s)	10.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	194	1482	275	0	816	81	176	665	752	184	0	405
Future Volume (vph)	194	1482	275	0	816	81	176	665	752	184	0	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.81	0.81	0.81	0.90	0.90	0.90	0.88	0.88	0.88	0.90	0.90	0.90
Adj. Flow (vph)	240	1830	340	0	907	90	200	756	855	204	0	450
RTOR Reduction (vph)	0	0	127	0	0	0	0	0	0	0	0	50
Lane Group Flow (vph)	240	1830	213	0	907	90	200	756	855	204	0	400
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	11.2	59.3	59.3		44.1	105.6	12.1	23.6	105.6	10.7		37.4
Effective Green, g (s)	12.7	60.8	60.3		45.6	105.6	13.6	25.1	105.6	12.2		38.9
Actuated g/C Ratio	0.12	0.58	0.57		0.43	1.00	0.13	0.24	1.00	0.12		0.37
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	412	2037	903		2767	1583	227	841	1583	396		583
v/s Ratio Prot	0.07	c0.52			0.14		c0.11	c0.21		0.06		0.25
v/s Ratio Perm			0.13			0.06			c0.54			
v/c Ratio	0.58	0.90	0.24		0.33	0.06	0.88	0.90	0.54	0.52		0.69
Uniform Delay, d1	43.9	19.7	11.2		19.9	0.0	45.2	39.0	0.0	43.9		28.2
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.1	5.7	0.1		0.1	0.1	30.3	12.3	1.3	1.1		3.4
Delay (s)	46.0	25.4	11.4		19.9	0.1	75.5	51.4	1.3	45.1		31.5
Level of Service	D	C	B		B	A	E	D	A	D		C
Approach Delay (s)		25.5			18.1			30.4			35.8	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	105.6	Sum of lost time (s)	10.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	219	1736	414	58	618	69	113	146	64	104	228	230
Future Volume (vph)	219	1736	414	58	618	69	113	146	64	104	228	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.77	0.77	0.77	0.92	0.92	0.92
Adj. Flow (vph)	258	2042	487	64	679	76	147	190	83	113	248	250
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	258	2042	487	64	679	76	147	190	83	113	248	250
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	9.4	20.0	53.6	3.7	14.3	53.6	5.8	8.3	53.6	5.6	8.1	53.6
Effective Green, g (s)	10.4	22.5	53.6	4.7	16.8	53.6	6.8	10.8	53.6	6.6	10.6	53.6
Actuated g/C Ratio	0.19	0.42	1.00	0.09	0.31	1.00	0.13	0.20	1.00	0.12	0.20	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	666	2134	1583	301	2008	1583	633	713	1583	422	1005	1583
v/s Ratio Prot	0.08	c0.40		0.02	0.11		0.03	0.05		0.03	0.05	
v/s Ratio Perm			c0.31			0.05			0.05			0.16
v/c Ratio	0.39	0.96	0.31	0.21	0.34	0.05	0.23	0.27	0.05	0.27	0.25	0.16
Uniform Delay, d1	18.8	15.1	0.0	22.7	14.1	0.0	21.1	18.1	0.0	21.3	18.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	11.0	0.5	0.4	0.1	0.1	0.2	0.2	0.1	0.3	0.1	0.2
Delay (s)	19.2	26.1	0.5	23.1	14.2	0.1	21.2	18.3	0.1	21.7	18.3	0.2
Level of Service	B	C	A	C	B	A	C	B	A	C	B	A
Approach Delay (s)		21.0			13.6			15.7			11.5	
Approach LOS		C			B			B			B	

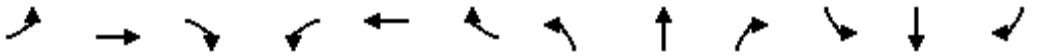
Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	53.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	1303	544	85	913	678	252	417	78	533	473	120
Future Volume (veh/h)	135	1303	544	85	913	678	252	417	78	533	473	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	157	1515	0	98	1049	0	341	564	0	592	526	0
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	3	2	1
Peak Hour Factor	0.86	0.86	0.86	0.87	0.87	0.87	0.74	0.74	0.74	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	369	1919	543	306	1803	507	652	1158	320	973	823	328
Arrive On Green	0.11	0.38	0.00	0.09	0.35	0.00	0.19	0.23	0.00	0.19	0.23	0.00
Sat Flow, veh/h	3304	5085	1583	3442	5085	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	157	1515	0	98	1049	0	341	564	0	592	526	0
Grp Sat Flow(s),veh/h/ln	1652	1695	1583	1721	1695	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	2.6	15.4	0.0	1.6	9.8	0.0	5.2	5.6	0.0	6.3	7.8	0.0
Cycle Q Clear(g_c), s	2.6	15.4	0.0	1.6	9.8	0.0	5.2	5.6	0.0	6.3	7.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	369	1919	543	306	1803	507	652	1158	320	973	823	328
V/C Ratio(X)	0.43	0.79	0.00	0.32	0.58	0.00	0.52	0.49	0.00	0.61	0.64	0.00
Avail Cap(c_a), veh/h	794	1921	544	827	1921	544	827	1615	462	1203	1124	462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.1	16.1	0.0	24.9	15.3	0.0	21.2	19.5	0.0	21.4	20.1	0.0
Incr Delay (d2), s/veh	0.8	2.3	0.0	0.6	0.4	0.0	0.7	0.3	0.0	0.6	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.6	0.0	0.8	4.6	0.0	2.5	2.6	0.0	3.0	3.9	0.0
LnGrp Delay(d),s/veh	24.9	18.4	0.0	25.5	15.7	0.0	21.9	19.9	0.0	22.0	21.0	0.0
LnGrp LOS	C	B		C	B		C	B		C	C	
Approach Vol, veh/h		1672			1147			905			1118	
Approach Delay, s/veh		19.0			16.5			20.6			21.5	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	14.8	7.2	23.0	13.0	15.1	8.5	21.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	16.0	12.0	19.0	12.0	16.0	12.0	19.0
Max Q Clear Time (g_c+I1), s	8.3	7.6	3.6	17.4	7.2	9.8	4.6	11.8
Green Ext Time (p_c), s	1.0	2.7	0.2	1.4	1.9	1.2	0.3	5.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B



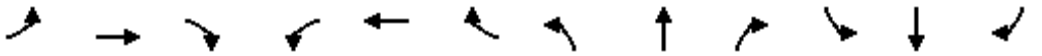
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	276	5	236	11	12	7	296	686	3	2	884	322
Future Volume (vph)	276	5	236	11	12	7	296	686	3	2	884	322
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1688	1583		1819	1583	3433	3537		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1688	1583		1819	1583	3433	3537		1770	3539	1583
Peak-hour factor, PHF	0.79	0.79	0.79	0.70	0.70	1.00	0.77	0.77	0.77	0.85	0.85	0.85
Adj. Flow (vph)	349	6	299	16	17	7	384	891	4	2	1040	379
RTOR Reduction (vph)	0	0	196	0	0	7	0	0	0	0	0	188
Lane Group Flow (vph)	178	177	103	0	33	0	384	895	0	2	1040	191
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	10.8	10.8	22.1		3.9	3.9	11.3	38.3		1.0	28.0	28.0
Effective Green, g (s)	11.8	11.8	24.1		4.9	4.9	12.3	40.8		2.0	30.5	30.5
Actuated g/C Ratio	0.17	0.17	0.34		0.07	0.07	0.18	0.58		0.03	0.44	0.44
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	283	284	612		127	110	603	2061		50	1541	689
v/s Ratio Prot	c0.11	0.10	0.03		c0.02		c0.11	0.25		0.00	c0.29	
v/s Ratio Perm			0.04			0.00						0.12
v/c Ratio	0.63	0.62	0.17		0.26	0.00	0.64	0.43		0.04	0.67	0.28
Uniform Delay, d1	27.1	27.0	16.0		30.8	30.3	26.8	8.2		33.1	15.8	12.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	4.3	4.2	0.1		1.1	0.0	2.2	0.1		0.3	1.2	0.2
Delay (s)	31.4	31.2	16.1		31.9	30.3	29.0	8.3		33.4	17.0	12.9
Level of Service	C	C	B		C	C	C	A		C	B	B
Approach Delay (s)		24.4			31.6			14.5			15.9	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	233	484	524	289	552	429
Future Volume (vph)	233	484	524	289	552	429
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.92	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3258	1441	3539	1583	3433	3539
Flt Permitted	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3258	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.78	0.78	0.80	0.80	0.78	0.78
Adj. Flow (vph)	299	621	655	361	708	550
RTOR Reduction (vph)	237	228	0	254	0	0
Lane Group Flow (vph)	373	82	655	107	708	550
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	10.0	10.0	11.5	11.5	12.9	28.4
Effective Green, g (s)	11.0	12.3	13.8	13.8	15.2	29.4
Actuated g/C Ratio	0.24	0.27	0.30	0.30	0.33	0.63
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	772	381	1052	470	1124	2242
v/s Ratio Prot	c0.11		c0.19		c0.21	0.16
v/s Ratio Perm		0.06		0.07		
v/c Ratio	0.48	0.22	0.62	0.23	0.63	0.25
Uniform Delay, d1	15.2	13.3	14.1	12.3	13.2	3.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.3	1.2	0.2	1.1	0.1
Delay (s)	15.7	13.6	15.2	12.5	14.3	3.7
Level of Service	B	B	B	B	B	A
Approach Delay (s)	15.0		14.3			9.7
Approach LOS	B		B			A

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	46.4	Sum of lost time (s)	6.4
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	497	220	52	270	68	202	341	50	68	252	51
Future Volume (vph)	84	497	220	52	270	68	202	341	50	68	252	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7		3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3471		1832	3663	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3471		1832	3663	1639
Peak-hour factor, PHF	0.86	0.86	0.86	0.92	0.92	0.92	0.84	0.84	0.84	0.79	0.79	0.79
Adj. Flow (vph)	98	578	256	57	293	74	240	406	60	86	319	65
RTOR Reduction (vph)	0	0	189	0	0	57	0	14	0	0	0	50
Lane Group Flow (vph)	98	578	67	57	293	17	240	452	0	86	319	15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	6.8	13.0	13.0	4.3	10.5	10.5	13.2	18.9		4.9	10.6	10.6
Effective Green, g (s)	7.8	15.0	15.0	5.3	13.2	13.2	14.2	21.2		5.9	12.9	12.9
Actuated g/C Ratio	0.14	0.26	0.26	0.09	0.23	0.23	0.25	0.37		0.10	0.23	0.23
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	241	929	415	164	818	365	440	1288		189	827	370
v/s Ratio Prot	c0.06	c0.16		0.03	0.08		c0.14	c0.13		0.05	0.09	
v/s Ratio Perm			0.04			0.01						0.01
v/c Ratio	0.41	0.62	0.16	0.35	0.36	0.05	0.55	0.35		0.46	0.39	0.04
Uniform Delay, d1	22.5	18.6	16.2	24.3	18.4	17.1	18.6	13.0		24.1	18.7	17.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.1	1.3	0.2	1.3	0.3	0.1	1.4	0.2		1.7	0.3	0.0
Delay (s)	23.7	19.9	16.4	25.6	18.7	17.1	20.0	13.1		25.8	19.0	17.3
Level of Service	C	B	B	C	B	B	C	B		C	B	B
Approach Delay (s)		19.3			19.3			15.5			20.0	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	57.1	Sum of lost time (s)	9.7
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	332	8	37	36	15	35	28	452	0	41	415	59
Future Volume (vph)	332	8	37	36	15	35	28	452	0	41	415	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.97			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1654			1799	1583	1770	3539		1770	3473	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1654			1799	1583	1770	3539		1770	3473	
Peak-hour factor, PHF	0.85	0.85	0.85	0.72	0.72	0.72	0.72	0.72	0.72	0.84	0.84	0.84
Adj. Flow (vph)	391	9	44	50	21	49	39	628	0	49	494	70
RTOR Reduction (vph)	0	10	0	0	0	43	0	0	0	0	14	0
Lane Group Flow (vph)	223	211	0	0	71	6	39	628	0	49	550	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	11.9	11.9			6.2	6.2	2.6	17.8		4.1	19.3	
Effective Green, g (s)	12.9	12.9			7.2	7.2	3.6	19.8		5.1	21.3	
Actuated g/C Ratio	0.23	0.23			0.13	0.13	0.06	0.35		0.09	0.38	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	387	381			231	203	113	1251		161	1320	
v/s Ratio Prot	c0.13	0.13			c0.04		0.02	c0.18		c0.03	0.16	
v/s Ratio Perm						0.00						
v/c Ratio	0.58	0.55			0.31	0.03	0.35	0.50		0.30	0.42	
Uniform Delay, d1	19.1	19.0			22.1	21.3	25.1	14.2		23.8	12.8	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	1.7			0.8	0.1	1.8	0.3		1.1	0.2	
Delay (s)	21.2	20.8			22.9	21.4	26.9	14.5		24.9	13.0	
Level of Service	C	C			C	C	C	B		C	B	
Approach Delay (s)		21.0			22.3			15.3			13.9	
Approach LOS		C			C			B			B	

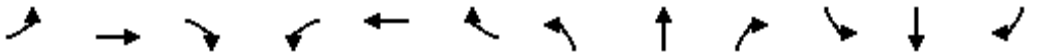
Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	56.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	61	9	26	27	2	6	53	474	9	6	427	22
Future Volume (vph)	61	9	26	27	2	6	53	474	9	6	427	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583		1780	1583	1770	3529		1770	3513	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583		1780	1583	1770	3529		1770	3513	
Peak-hour factor, PHF	0.71	0.71	0.71	0.70	0.70	0.70	0.72	0.72	0.72	0.79	0.79	0.79
Adj. Flow (vph)	86	13	37	39	3	9	74	658	12	8	541	28
RTOR Reduction (vph)	0	0	32	0	0	8	0	1	0	0	4	0
Lane Group Flow (vph)	0	99	5	0	42	1	74	670	0	8	565	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		6.7	6.7		3.7	3.7	4.3	25.4		1.0	22.1	
Effective Green, g (s)		7.7	7.7		4.7	4.7	5.3	27.4		2.0	24.1	
Actuated g/C Ratio		0.15	0.15		0.09	0.09	0.10	0.52		0.04	0.46	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		260	230		158	140	177	1831		67	1603	
v/s Ratio Prot		c0.06			c0.02		c0.04	c0.19		0.00	0.16	
v/s Ratio Perm			0.00			0.00						
v/c Ratio		0.38	0.02		0.27	0.01	0.42	0.37		0.12	0.35	
Uniform Delay, d1		20.4	19.3		22.4	21.9	22.3	7.5		24.5	9.3	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9	0.0		0.9	0.0	1.6	0.1		0.8	0.1	
Delay (s)		21.3	19.4		23.3	21.9	23.9	7.7		25.3	9.4	
Level of Service		C	B		C	C	C	A		C	A	
Approach Delay (s)		20.8			23.1			9.3			9.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	52.8	Sum of lost time (s)	11.0
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	964	10	39	678	368	19	11	23	370	4	105
Future Volume (vph)	162	964	10	39	678	368	19	11	23	370	4	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3534		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3534		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.78	0.78	0.78	0.70	0.70	0.70	0.87	0.87	0.87
Adj. Flow (vph)	184	1095	11	50	869	472	27	16	33	425	5	121
RTOR Reduction (vph)	0	1	0	0	0	244	0	0	31	0	0	95
Lane Group Flow (vph)	184	1105	0	50	869	228	27	16	2	217	213	26
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	11.5	36.4		4.7	29.6	29.6	4.0	4.0	4.0	15.2	15.2	15.2
Effective Green, g (s)	12.5	37.4		5.7	30.6	30.6	5.0	5.0	5.0	16.2	16.2	16.2
Actuated g/C Ratio	0.16	0.49		0.07	0.40	0.40	0.07	0.07	0.07	0.21	0.21	0.21
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	289	1732		132	1419	634	115	122	103	356	358	336
v/s Ratio Prot	c0.10	c0.31		0.03	0.25		c0.02	0.01		c0.13	0.13	
v/s Ratio Perm						0.14			0.00			0.02
v/c Ratio	0.64	0.64		0.38	0.61	0.36	0.23	0.13	0.02	0.61	0.59	0.08
Uniform Delay, d1	29.8	14.4		33.6	18.1	16.0	33.8	33.6	33.4	27.2	27.1	24.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.5	0.8		1.8	0.8	0.3	1.1	0.5	0.1	2.9	2.6	0.1
Delay (s)	34.3	15.2		35.4	18.9	16.3	34.9	34.1	33.4	30.1	29.7	24.2
Level of Service	C	B		D	B	B	C	C	C	C	C	C
Approach Delay (s)		17.9			18.6			34.1			28.7	
Approach LOS		B			B			C			C	

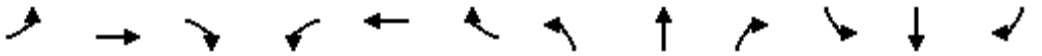
Intersection Summary			
HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	76.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	856	139	0	946	712	0	0	0	770	0	161
Future Volume (veh/h)	0	856	139	0	946	712	0	0	0	770	0	161
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	901	0	0	1126	0				819	0	171
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.84	0.84	0.84				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	1973	859	0	2008	859				1110	0	510
Arrive On Green	0.00	0.56	0.00	0.00	0.57	0.00				0.32	0.00	0.32
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	901	0	0	1126	0				819	0	171
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	6.0	0.0	0.0	8.1	0.0				8.5	0.0	3.3
Cycle Q Clear(g_c), s	0.0	6.0	0.0	0.0	8.1	0.0				8.5	0.0	3.3
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1973	859	0	2008	859				1110	0	510
V/C Ratio(X)	0.00	0.46	0.00	0.00	0.56	0.00				0.74	0.00	0.33
Avail Cap(c_a), veh/h	0	2799	1228	0	2834	1228				1171	0	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.2	0.0	0.0	5.5	0.0				12.0	0.0	10.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.2	0.0				2.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	0.0	0.0	3.8	0.0				4.3	0.0	1.5
LnGrp Delay(d),s/veh	0.0	5.4	0.0	0.0	5.7	0.0				14.4	0.0	10.7
LnGrp LOS		A			A					B		B
Approach Vol, veh/h		901			1126						990	
Approach Delay, s/veh		5.4			5.7						13.8	
Approach LOS		A			A						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		24.7		15.3		24.7		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		30.0		12.0		30.0		
Max Q Clear Time (g_c+I1), s		8.0		10.5		10.1		
Green Ext Time (p_c), s		11.2		0.8		10.6		

Intersection Summary	
HCM 2010 Ctrl Delay	8.3
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	960	0	0	1278	141	0	0	886	0	0	380
Future Volume (vph)	129	960	0	0	1278	141	0	0	886	0	0	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.95			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	3539			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	3539			5085	1583			1611			2787
Peak-hour factor, PHF	0.73	0.73	0.73	0.95	0.95	0.95	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	177	1315	0	0	1345	148	0	0	984	0	0	427
RTOR Reduction (vph)	0	0	0	0	0	74	0	0	0	0	0	357
Lane Group Flow (vph)	177	1315	0	0	1345	74	0	0	984	0	0	70
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	8.0	34.3			23.3	23.3			50.6			6.3
Effective Green, g (s)	10.0	36.3			25.3	25.3			50.6			8.3
Actuated g/C Ratio	0.20	0.72			0.50	0.50			1.00			0.16
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	349	2538			2542	791			1611			457
v/s Ratio Prot	0.10	0.37			0.26							
v/s Ratio Perm						0.05			c0.61			0.03
v/c Ratio	0.51	0.52			0.53	0.09			0.61			0.15
Uniform Delay, d1	18.1	3.2			8.6	6.6			0.0			18.1
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	1.2	0.2			0.2	0.1			1.7			0.2
Delay (s)	19.3	3.4			8.8	6.7			1.7			18.3
Level of Service	B	A			A	A			A			B
Approach Delay (s)		5.3			8.6			1.7			18.3	
Approach LOS		A			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	50.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	409	1776	198	99	1086	91	159	361	92	50	187	144
Future Volume (veh/h)	409	1776	198	99	1086	91	159	361	92	50	187	144
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	476	2065	230	115	1263	106	183	415	106	57	212	164
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	2	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	621	2781	986	223	2194	683	299	640	162	153	659	572
Arrive On Green	0.18	0.55	0.54	0.06	0.43	0.43	0.09	0.23	0.22	0.04	0.19	0.18
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	2799	708	3442	3539	1583
Grp Volume(v), veh/h	476	2065	230	115	1263	106	183	261	260	57	212	164
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1738	1721	1770	1583
Q Serve(g_s), s	12.0	28.3	5.8	2.9	17.1	3.7	4.7	12.2	12.4	1.5	4.7	6.7
Cycle Q Clear(g_c), s	12.0	28.3	5.8	2.9	17.1	3.7	4.7	12.2	12.4	1.5	4.7	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	621	2781	986	223	2194	683	299	405	397	153	659	572
V/C Ratio(X)	0.77	0.74	0.23	0.51	0.58	0.16	0.61	0.64	0.65	0.37	0.32	0.29
Avail Cap(c_a), veh/h	868	2781	986	566	2286	712	491	437	429	491	873	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	15.8	7.6	41.3	19.6	15.8	40.2	31.8	32.0	42.3	32.1	20.8
Incr Delay (d2), s/veh	2.7	1.1	0.1	1.8	0.3	0.1	2.0	2.9	3.2	1.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	13.5	2.6	1.5	8.0	1.6	2.3	6.3	6.3	0.7	2.3	3.0
LnGrp Delay(d),s/veh	38.3	16.9	7.7	43.1	19.9	15.9	42.2	34.8	35.2	43.8	32.4	21.0
LnGrp LOS	D	B	A	D	B	B	D	C	D	D	C	C
Approach Vol, veh/h		2771			1484			704			433	
Approach Delay, s/veh		19.8			21.5			36.9			29.6	
Approach LOS		B			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	51.9	10.9	19.5	19.4	41.4	7.1	23.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	47.0	12.0	21.0	22.0	39.0	12.0	21.0
Max Q Clear Time (g_c+I1), s	4.9	30.3	6.7	8.7	14.0	19.1	3.5	14.4
Green Ext Time (p_c), s	0.3	16.7	0.3	6.8	1.4	18.2	0.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	598	252	253	838	263	255
Future Volume (veh/h)	598	252	253	838	263	255
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	643	271	305	1010	286	277
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.93	0.93	0.83	0.83	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1045	467	474	2245	435	818
Arrive On Green	0.30	0.27	0.27	0.63	0.25	0.25
Sat Flow, veh/h	3632	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	643	271	305	1010	286	277
Grp Sat Flow(s),veh/h/ln	1770	1583	1774	1770	1774	1583
Q Serve(g_s), s	6.5	6.1	6.3	6.1	6.0	4.3
Cycle Q Clear(g_c), s	6.5	6.1	6.3	6.1	6.0	4.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1045	467	474	2245	435	818
V/C Ratio(X)	0.62	0.58	0.64	0.45	0.66	0.34
Avail Cap(c_a), veh/h	1276	571	554	2638	597	962
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	12.5	13.5	3.9	14.1	5.9
Incr Delay (d2), s/veh	0.6	1.1	2.0	0.1	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	2.9	3.3	3.0	3.1	2.9
LnGrp Delay(d),s/veh	13.2	13.6	15.5	4.0	15.8	6.1
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	914			1315	563	
Approach Delay, s/veh	13.3			6.7	11.1	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.1	14.3		13.2		28.4		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	12.0	13.0		13.0		29.0		
Max Q Clear Time (g_c+I1), s	8.3	8.5		8.0		8.1		
Green Ext Time (p_c), s	2.1	1.8		1.2		6.1		

Intersection Summary	
HCM 2010 Ctrl Delay	9.7
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	698	354	640	695	0	780
Future Volume (vph)	698	354	640	695	0	780
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.98	0.98	0.94	0.94	0.90	0.90
Adj. Flow (vph)	712	361	681	739	0	867
RTOR Reduction (vph)	0	265	0	0	0	420
Lane Group Flow (vph)	712	96	681	739	0	447
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	13.4	13.4	15.3	32.7		16.1
Effective Green, g (s)	15.4	15.4	16.3	34.7		17.1
Actuated g/C Ratio	0.27	0.27	0.28	0.60		0.30
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1354	421	968	2124		476
v/s Ratio Prot	c0.14		c0.20	0.21		
v/s Ratio Perm		0.06				c0.28
v/c Ratio	0.53	0.23	0.70	0.35		0.94
Uniform Delay, d1	18.1	16.6	18.6	5.8		19.8
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	2.3	0.1		26.5
Delay (s)	18.5	16.8	20.9	5.9		46.3
Level of Service	B	B	C	A		D
Approach Delay (s)	17.9			13.1	46.3	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	57.8	Sum of lost time (s)	10.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	176	1048	254	0	1497	256	199	618	463	270	0	511
Future Volume (vph)	176	1048	254	0	1497	256	199	618	463	270	0	511
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.97	0.97	0.97	0.90	0.90	0.90
Adj. Flow (vph)	187	1115	270	0	1645	281	205	637	477	300	0	568
RTOR Reduction (vph)	0	0	125	0	0	0	0	0	0	0	0	30
Lane Group Flow (vph)	187	1115	145	0	1645	281	205	637	477	300	0	538
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	11.5	49.5	49.5		34.0	94.1	12.2	21.1	94.1	11.5		35.9
Effective Green, g (s)	13.0	51.0	50.5		35.5	94.1	13.7	22.6	94.1	13.0		37.4
Actuated g/C Ratio	0.14	0.54	0.54		0.38	1.00	0.15	0.24	1.00	0.14		0.40
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	474	1918	849		2417	1583	257	849	1583	474		629
v/s Ratio Prot	0.05	0.32			c0.26		c0.12	0.18		0.09		c0.34
v/s Ratio Perm			0.09			0.18			c0.30			
v/c Ratio	0.39	0.58	0.17		0.68	0.18	0.80	0.75	0.30	0.63		0.86
Uniform Delay, d1	37.0	14.4	11.1		24.5	0.0	38.9	33.1	0.0	38.3		25.9
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.5	0.5	0.1		0.8	0.2	15.7	3.8	0.5	2.8		11.0
Delay (s)	37.5	14.9	11.2		25.4	0.2	54.5	36.9	0.5	41.1		36.9
Level of Service	D	B	B		C	A	D	D	A	D		D
Approach Delay (s)		16.9			21.7			26.5			38.3	
Approach LOS		B			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	94.1	Sum of lost time (s)	10.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	234	1110	399	107	1178	106	381	335	161	133	367	204
Future Volume (vph)	234	1110	399	107	1178	106	381	335	161	133	367	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.95	0.85	0.85	0.85
Adj. Flow (vph)	246	1168	420	116	1280	115	401	353	169	156	432	240
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	246	1168	420	116	1280	115	401	353	169	156	432	240
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	9.7	21.9	65.5	6.1	18.3	65.5	11.1	14.7	65.5	6.8	10.4	65.5
Effective Green, g (s)	10.7	24.4	65.5	7.1	20.8	65.5	12.1	17.2	65.5	7.8	12.9	65.5
Actuated g/C Ratio	0.16	0.37	1.00	0.11	0.32	1.00	0.18	0.26	1.00	0.12	0.20	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	560	1894	1583	372	2034	1583	921	929	1583	408	1001	1583
v/s Ratio Prot	c0.07	c0.23		0.03	0.20		0.08	c0.10		0.05	c0.08	
v/s Ratio Perm			0.27			0.07			0.11			0.15
v/c Ratio	0.44	0.62	0.27	0.31	0.63	0.07	0.44	0.38	0.11	0.38	0.43	0.15
Uniform Delay, d1	24.7	16.7	0.0	26.9	19.1	0.0	23.7	19.8	0.0	26.6	23.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.6	0.4	0.5	0.6	0.1	0.3	0.3	0.1	0.6	0.3	0.2
Delay (s)	25.2	17.3	0.4	27.4	19.7	0.1	24.0	20.0	0.1	27.2	23.4	0.2
Level of Service	C	B	A	C	B	A	C	C	A	C	C	A
Approach Delay (s)		14.5			18.8			18.1			17.4	
Approach LOS		B			B			B			B	

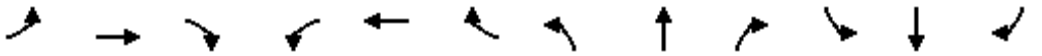
Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.5	Sum of lost time (s)	9.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	454	1113	535	228	1105	718	422	681	74	546	607	316
Future Volume (veh/h)	454	1113	535	228	1105	718	422	681	74	546	607	316
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	468	1147	0	265	1285	0	454	732	0	581	646	0
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	3	2	1
Peak Hour Factor	0.97	0.97	0.97	0.86	0.86	0.86	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	637	1797	516	457	1531	433	641	1287	368	860	845	345
Arrive On Green	0.19	0.35	0.00	0.13	0.30	0.00	0.19	0.25	0.00	0.17	0.24	0.00
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	468	1147	0	265	1285	0	454	732	0	581	646	0
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	9.4	13.8	0.0	5.3	17.3	0.0	9.0	9.2	0.0	8.0	12.4	0.0
Cycle Q Clear(g_c), s	9.4	13.8	0.0	5.3	17.3	0.0	9.0	9.2	0.0	8.0	12.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	637	1797	516	457	1531	433	641	1287	368	860	845	345
V/C Ratio(X)	0.73	0.64	0.00	0.58	0.84	0.00	0.71	0.57	0.00	0.68	0.76	0.00
Avail Cap(c_a), veh/h	659	1797	516	659	1531	433	659	1287	368	958	896	368
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.1	19.7	0.0	29.8	23.9	0.0	27.9	23.8	0.0	28.4	25.9	0.0
Incr Delay (d2), s/veh	4.1	0.8	0.0	1.2	4.3	0.0	3.4	0.6	0.0	1.7	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	6.5	0.0	2.6	8.7	0.0	4.6	4.3	0.0	3.8	6.5	0.0
LnGrp Delay(d),s/veh	32.2	20.5	0.0	30.9	28.2	0.0	31.3	24.4	0.0	30.0	29.7	0.0
LnGrp LOS	C	C		C	C		C	C		C	C	
Approach Vol, veh/h		1615			1550			1186			1227	
Approach Delay, s/veh		23.9			28.7			27.0			29.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	20.0	11.7	26.8	15.6	18.9	15.5	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	16.0	12.0	19.0	12.0	16.0	12.0	19.0
Max Q Clear Time (g_c+I1), s	10.0	11.2	7.3	15.8	11.0	14.4	11.4	19.3
Green Ext Time (p_c), s	0.6	2.4	0.4	2.8	0.6	0.5	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.2
HCM 2010 LOS	C



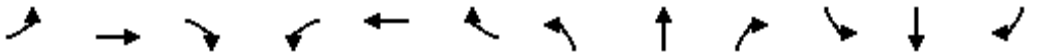
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	6	217	16	19	10	311	1107	4	4	1054	383
Future Volume (vph)	286	6	217	16	19	10	311	1107	4	4	1054	383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1689	1583		1821	1583	3433	3537		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1689	1583		1821	1583	3433	3537		1770	3539	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.70	0.70	0.70	0.90	0.90	0.90	0.88	0.88	0.88
Adj. Flow (vph)	298	6	226	23	27	14	346	1230	4	5	1198	435
RTOR Reduction (vph)	0	0	153	0	0	13	0	0	0	0	0	180
Lane Group Flow (vph)	152	152	73	0	50	1	346	1234	0	5	1198	255
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	10.3	10.3	21.2		4.5	4.5	10.9	40.1		1.1	30.3	30.3
Effective Green, g (s)	11.3	11.3	23.2		5.5	5.5	11.9	42.6		2.1	32.8	32.8
Actuated g/C Ratio	0.16	0.16	0.32		0.08	0.08	0.17	0.59		0.03	0.46	0.46
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	263	265	576		139	120	567	2092		51	1612	721
v/s Ratio Prot	c0.09	0.09	0.02		c0.03		c0.10	0.35		0.00	c0.34	
v/s Ratio Perm			0.03			0.00						0.16
v/c Ratio	0.58	0.57	0.13		0.36	0.01	0.61	0.59		0.10	0.74	0.35
Uniform Delay, d1	28.1	28.1	17.2		31.6	30.7	27.9	9.2		34.0	16.1	12.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.1	3.0	0.1		1.6	0.0	1.9	0.4		0.8	1.9	0.3
Delay (s)	31.2	31.1	17.3		33.2	30.8	29.8	9.7		34.9	18.0	13.0
Level of Service	C	C	B		C	C	C	A		C	B	B
Approach Delay (s)		25.3			32.6			14.1			16.7	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	489	831	647	318	574	702
Future Volume (vph)	489	831	647	318	574	702
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.93	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.97	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3278	1441	3539	1583	3433	3539
Flt Permitted	0.97	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3278	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.90	0.90	0.93	0.93	0.96	0.96
Adj. Flow (vph)	543	923	696	342	598	731
RTOR Reduction (vph)	297	331	0	243	0	0
Lane Group Flow (vph)	698	140	696	99	598	731
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	12.0	12.0	11.6	11.6	12.5	28.1
Effective Green, g (s)	13.0	14.3	13.9	13.9	14.8	29.1
Actuated g/C Ratio	0.27	0.30	0.29	0.29	0.31	0.60
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	885	428	1022	457	1056	2141
v/s Ratio Prot	c0.21		c0.20		c0.17	0.21
v/s Ratio Perm		0.10		0.06		
v/c Ratio	0.79	0.33	0.68	0.22	0.57	0.34
Uniform Delay, d1	16.3	13.2	15.1	13.0	14.0	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.7	0.4	1.9	0.2	0.7	0.1
Delay (s)	21.0	13.6	17.0	13.2	14.7	4.8
Level of Service	C	B	B	B	B	A
Approach Delay (s)	18.6		15.8			9.3
Approach LOS	B		B			A

Intersection Summary			
HCM 2000 Control Delay	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	48.1	Sum of lost time (s)	6.4
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



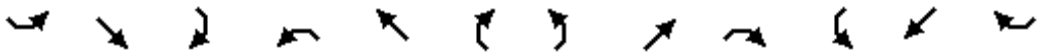
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	381	503	56	157	555	163	156	414	158	111	389	349
Future Volume (vph)	381	503	56	157	555	163	156	414	158	111	389	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7		3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3393		1832	3663	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3393		1832	3663	1639
Peak-hour factor, PHF	0.93	0.93	0.93	0.83	0.83	0.83	0.94	0.94	0.94	0.96	0.96	0.96
Adj. Flow (vph)	410	541	60	189	669	196	166	440	168	116	405	364
RTOR Reduction (vph)	0	0	45	0	0	148	0	57	0	0	0	284
Lane Group Flow (vph)	410	541	15	189	669	48	166	551	0	116	405	80
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	12.1	14.4	14.4	10.7	13.0	13.0	11.3	15.3		7.7	11.7	11.7
Effective Green, g (s)	13.1	16.4	16.4	11.7	15.7	15.7	12.3	17.6		8.7	14.0	14.0
Actuated g/C Ratio	0.20	0.26	0.26	0.18	0.24	0.24	0.19	0.27		0.14	0.22	0.22
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	361	905	405	323	866	387	339	931		248	800	357
v/s Ratio Prot	c0.23	0.15		0.11	c0.19		c0.09	c0.16		0.06	0.11	
v/s Ratio Perm			0.01			0.03						0.05
v/c Ratio	1.14	0.60	0.04	0.59	0.77	0.12	0.49	0.59		0.47	0.51	0.22
Uniform Delay, d1	25.5	21.0	17.9	24.0	22.5	18.8	23.1	20.1		25.6	22.0	20.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	89.5	1.1	0.0	2.7	4.3	0.1	1.1	1.0		1.4	0.5	0.3
Delay (s)	115.0	22.0	18.0	26.7	26.9	19.0	24.2	21.2		27.0	22.5	20.9
Level of Service	F	C	B	C	C	B	C	C		C	C	C
Approach Delay (s)		59.5			25.4			21.8			22.4	
Approach LOS		E			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	64.1	Sum of lost time (s)	9.7
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	288	7	31	30	12	29	63	675	0	39	830	110
Future Volume (vph)	288	7	31	30	12	29	63	675	0	39	830	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.97			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1655			1799	1583	1770	3539		1770	3477	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1655			1799	1583	1770	3539		1770	3477	
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96	0.95	0.95	0.95
Adj. Flow (vph)	300	7	32	32	13	31	66	703	0	41	874	116
RTOR Reduction (vph)	0	10	0	0	0	28	0	0	0	0	11	0
Lane Group Flow (vph)	171	158	0	0	45	3	66	703	0	41	979	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	11.0	11.0			4.0	4.0	4.5	26.8		3.9	26.2	
Effective Green, g (s)	12.0	12.0			5.0	5.0	5.5	28.8		4.9	28.2	
Actuated g/C Ratio	0.19	0.19			0.08	0.08	0.09	0.47		0.08	0.46	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	326	321			145	128	157	1651		140	1589	
v/s Ratio Prot	c0.10	0.10			c0.03		c0.04	0.20		0.02	c0.28	
v/s Ratio Perm						0.00						
v/c Ratio	0.52	0.49			0.31	0.02	0.42	0.43		0.29	0.62	
Uniform Delay, d1	22.3	22.1			26.7	26.1	26.6	10.9		26.8	12.7	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	1.2			1.2	0.1	1.8	0.2		1.2	0.7	
Delay (s)	23.8	23.3			27.9	26.2	28.4	11.1		27.9	13.4	
Level of Service	C	C			C	C	C	B		C	B	
Approach Delay (s)		23.6			27.2			12.6			14.0	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	61.7	Sum of lost time (s)	11.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

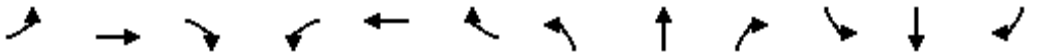
c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	158	20	118	130	10	42	132	571	11	31	696	32
Future Volume (vph)	158	20	118	130	10	42	132	571	11	31	696	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1780	1583	1770	3529		1770	3516	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1780	1583	1770	3529		1770	3516	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	180	23	134	148	11	48	140	607	12	33	740	34
RTOR Reduction (vph)	0	0	108	0	0	41	0	2	0	0	5	0
Lane Group Flow (vph)	0	203	26	0	159	7	140	617	0	33	769	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		11.1	11.1		7.8	7.8	7.6	24.8		2.8	20.0	
Effective Green, g (s)		12.1	12.1		8.8	8.8	8.6	26.8		3.8	22.0	
Actuated g/C Ratio		0.19	0.19		0.14	0.14	0.14	0.43		0.06	0.35	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		345	306		250	222	243	1513		107	1237	
v/s Ratio Prot		c0.11			c0.09		c0.08	0.17		0.02	c0.22	
v/s Ratio Perm			0.02			0.00						
v/c Ratio		0.59	0.08		0.64	0.03	0.58	0.41		0.31	0.62	
Uniform Delay, d1		22.9	20.7		25.3	23.2	25.2	12.4		28.1	16.8	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.6	0.1		5.2	0.1	3.3	0.2		1.6	1.0	
Delay (s)		25.5	20.8		30.6	23.2	28.5	12.5		29.7	17.8	
Level of Service		C	C		C	C	C	B		C	B	
Approach Delay (s)		23.6			28.9			15.5			18.3	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	62.5	Sum of lost time (s)	11.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	944	8	52	954	515	27	24	56	676	8	233
Future Volume (vph)	181	944	8	52	954	515	27	24	56	676	8	233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3535		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3535		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.89	0.89	0.89	0.96	0.96	0.96
Adj. Flow (vph)	197	1026	9	55	1015	548	30	27	63	704	8	243
RTOR Reduction (vph)	0	1	0	0	0	259	0	0	58	0	0	180
Lane Group Flow (vph)	197	1034	0	55	1015	289	30	27	5	359	353	63
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	12.1	36.0		5.3	29.2	29.2	5.6	5.6	5.6	20.6	20.6	20.6
Effective Green, g (s)	13.1	37.0		6.3	30.2	30.2	6.6	6.6	6.6	21.6	21.6	21.6
Actuated g/C Ratio	0.16	0.44		0.08	0.36	0.36	0.08	0.08	0.08	0.26	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	277	1566		133	1279	572	139	147	125	434	436	409
v/s Ratio Prot	c0.11	0.29		0.03	c0.29		c0.02	0.01		c0.21	0.21	
v/s Ratio Perm						0.18			0.00			0.04
v/c Ratio	0.71	0.66		0.41	0.79	0.51	0.22	0.18	0.04	0.83	0.81	0.15
Uniform Delay, d1	33.4	18.3		36.8	23.9	20.8	36.0	35.9	35.5	29.2	29.0	23.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.3	1.1		2.1	3.5	0.7	0.8	0.6	0.1	12.2	10.6	0.2
Delay (s)	41.7	19.4		38.9	27.3	21.5	36.8	36.5	35.7	41.4	39.6	24.1
Level of Service	D	B		D	C	C	D	D	D	D	D	C
Approach Delay (s)		22.9			25.8			36.1			36.3	
Approach LOS		C			C			D			D	

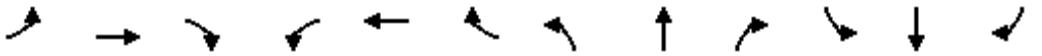
Intersection Summary			
HCM 2000 Control Delay	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	83.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1006	153	0	1344	1034	0	0	0	743	0	213
Future Volume (veh/h)	0	1006	153	0	1344	1034	0	0	0	743	0	213
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1082	0	0	1493	0				766	0	220
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90				0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2141	937	0	2172	937				999	0	460
Arrive On Green	0.00	0.60	0.00	0.00	0.61	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1082	0	0	1493	0				766	0	220
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	8.0	0.0	0.0	12.9	0.0				9.3	0.0	5.2
Cycle Q Clear(g_c), s	0.0	8.0	0.0	0.0	12.9	0.0				9.3	0.0	5.2
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2141	937	0	2172	937				999	0	460
V/C Ratio(X)	0.00	0.51	0.00	0.00	0.69	0.00				0.77	0.00	0.48
Avail Cap(c_a), veh/h	0	2442	1072	0	2473	1072				1022	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.1	0.0	0.0	5.9	0.0				14.8	0.0	13.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.7	0.0				3.5	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.8	0.0	0.0	6.2	0.0				4.8	0.0	2.4
LnGrp Delay(d),s/veh	0.0	5.3	0.0	0.0	6.6	0.0				18.3	0.0	14.2
LnGrp LOS		A			A					B		B
Approach Vol, veh/h		1082			1493						986	
Approach Delay, s/veh		5.3			6.6						17.4	
Approach LOS		A			A						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		30.1		15.7		30.1		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		30.0		12.0		30.0		
Max Q Clear Time (g_c+I1), s		10.0		11.3		14.9		
Green Ext Time (p_c), s		13.8		0.4		11.2		

Intersection Summary	
HCM 2010 Ctrl Delay	9.2
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	199	938	0	0	2000	327	0	0	507	0	0	378
Future Volume (vph)	199	938	0	0	2000	327	0	0	507	0	0	378
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.95			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	3539			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	3539			5085	1583			1611			2787
Peak-hour factor, PHF	0.83	0.83	0.83	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Adj. Flow (vph)	240	1130	0	0	2174	355	0	0	563	0	0	406
RTOR Reduction (vph)	0	0	0	0	0	149	0	0	0	0	0	357
Lane Group Flow (vph)	240	1130	0	0	2174	206	0	0	563	0	0	49
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	11.6	52.3			37.7	37.7			68.5			6.2
Effective Green, g (s)	13.6	54.3			39.7	39.7			68.5			8.2
Actuated g/C Ratio	0.20	0.79			0.58	0.58			1.00			0.12
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	351	2805			2947	917			1611			333
v/s Ratio Prot	c0.14	0.32			c0.43							
v/s Ratio Perm						0.13			c0.35			0.02
v/c Ratio	0.68	0.40			0.74	0.22			0.35			0.15
Uniform Delay, d1	25.5	2.2			10.6	7.0			0.0			27.0
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	5.4	0.1			1.0	0.1			0.6			0.2
Delay (s)	30.9	2.3			11.6	7.1			0.6			27.2
Level of Service	C	A			B	A			A			C
Approach Delay (s)		7.3			10.9			0.6			27.2	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	9.0
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	393	1495	169	254	1569	153	291	446	127	112	404	431
Future Volume (veh/h)	393	1495	169	254	1569	153	291	446	127	112	404	431
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	442	1680	190	262	1618	158	327	501	143	132	475	507
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.97	0.97	0.97	0.89	0.89	0.89	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	563	2327	901	366	2036	634	418	733	208	230	759	591
Arrive On Green	0.16	0.46	0.45	0.11	0.40	0.40	0.12	0.27	0.26	0.07	0.21	0.21
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	2723	773	3442	3539	1583
Grp Volume(v), veh/h	442	1680	190	262	1618	158	327	325	319	132	475	507
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1726	1721	1770	1583
Q Serve(g_s), s	12.9	28.1	6.2	7.7	29.3	7.0	9.7	17.2	17.4	3.9	12.8	22.0
Cycle Q Clear(g_c), s	12.9	28.1	6.2	7.7	29.3	7.0	9.7	17.2	17.4	3.9	12.8	22.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	563	2327	901	366	2036	634	418	476	465	230	759	591
V/C Ratio(X)	0.79	0.72	0.21	0.72	0.79	0.25	0.78	0.68	0.69	0.58	0.63	0.86
Avail Cap(c_a), veh/h	755	2376	917	492	2036	634	427	476	465	427	759	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	23.0	11.0	45.3	27.6	20.9	44.7	34.3	34.5	47.5	37.4	30.3
Incr Delay (d2), s/veh	3.9	1.1	0.1	3.2	2.3	0.2	9.0	3.9	4.2	2.3	1.6	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	13.3	2.7	3.8	14.1	3.1	5.1	8.9	8.8	1.9	6.4	15.5
LnGrp Delay(d),s/veh	46.0	24.1	11.2	48.5	29.9	21.1	53.7	38.2	38.7	49.8	39.0	42.3
LnGrp LOS	D	C	B	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h		2312			2038			971			1114	
Approach Delay, s/veh		27.2			31.6			43.6			41.8	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	50.0	15.7	25.0	20.1	44.0	10.0	30.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	47.0	12.0	21.0	22.0	39.0	12.0	21.0
Max Q Clear Time (g_c+I1), s	9.7	30.1	11.7	24.0	14.9	31.3	5.9	19.4
Green Ext Time (p_c), s	0.4	15.9	0.1	0.0	1.2	7.6	0.2	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	621	268	360	1308	272	202
Future Volume (veh/h)	621	268	360	1308	272	202
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	661	285	383	1391	309	230
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1023	457	504	2267	438	813
Arrive On Green	0.29	0.27	0.28	0.64	0.25	0.25
Sat Flow, veh/h	3632	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	661	285	383	1391	309	230
Grp Sat Flow(s),veh/h/ln	1770	1583	1774	1770	1774	1583
Q Serve(g_s), s	7.3	6.9	8.8	10.4	7.1	3.7
Cycle Q Clear(g_c), s	7.3	6.9	8.8	10.4	7.1	3.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1023	457	504	2267	438	813
V/C Ratio(X)	0.65	0.62	0.76	0.61	0.70	0.28
Avail Cap(c_a), veh/h	1194	534	519	2468	559	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	13.7	14.5	4.7	15.3	6.2
Incr Delay (d2), s/veh	1.0	1.7	6.3	0.4	2.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.3	5.1	5.0	3.8	2.5
LnGrp Delay(d),s/veh	14.8	15.4	20.8	5.1	18.1	6.3
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	946			1774	539	
Approach Delay, s/veh	15.0			8.5	13.1	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.6	14.8		14.0		30.5		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	12.0	13.0		13.0		29.0		
Max Q Clear Time (g_c+I1), s	10.8	9.3		9.1		12.4		
Green Ext Time (p_c), s	1.0	1.6		0.9		8.1		

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	738	271	719	1089	0	741
Future Volume (vph)	738	271	719	1089	0	741
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.95	0.95	0.92	0.92	0.90	0.90
Adj. Flow (vph)	777	285	782	1184	0	823
RTOR Reduction (vph)	0	208	0	0	0	425
Lane Group Flow (vph)	777	77	782	1184	0	398
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	13.7	13.7	16.0	33.7		15.3
Effective Green, g (s)	15.7	15.7	17.0	35.7		16.3
Actuated g/C Ratio	0.27	0.27	0.29	0.62		0.28
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1376	428	1006	2178		452
v/s Ratio Prot	c0.15		c0.23	0.33		
v/s Ratio Perm		0.05				c0.25
v/c Ratio	0.56	0.18	0.78	0.54		0.88
Uniform Delay, d1	18.2	16.2	18.8	6.4		19.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.5	0.2	3.8	0.3		17.8
Delay (s)	18.7	16.4	22.6	6.7		37.8
Level of Service	B	B	C	A		D
Approach Delay (s)	18.1			13.0	37.8	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	58.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	232	1008	239	0	1977	354	270	682	445	299	0	526
Future Volume (vph)	232	1008	239	0	1977	354	270	682	445	299	0	526
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.89	0.89	0.89	0.91	0.91	0.91
Adj. Flow (vph)	252	1096	260	0	2221	398	303	766	500	329	0	578
RTOR Reduction (vph)	0	0	112	0	0	0	0	0	0	0	0	31
Lane Group Flow (vph)	252	1096	148	0	2221	398	303	766	500	329	0	547
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	11.8	60.7	60.7		44.9	108.5	12.0	23.9	108.5	11.9		39.6
Effective Green, g (s)	13.3	62.2	61.7		46.4	108.5	13.5	25.4	108.5	13.4		41.1
Actuated g/C Ratio	0.12	0.57	0.57		0.43	1.00	0.12	0.23	1.00	0.12		0.38
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	420	2028	900		2740	1583	220	828	1583	423		599
v/s Ratio Prot	0.07	0.31			c0.35		c0.17	c0.22		0.10		c0.35
v/s Ratio Perm			0.09			0.25			c0.32			
v/c Ratio	0.60	0.54	0.16		0.81	0.25	1.38	0.93	0.32	0.78		0.91
Uniform Delay, d1	45.1	14.3	11.1		27.2	0.0	47.5	40.6	0.0	46.1		32.0
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.3	0.3	0.1		1.9	0.4	195.7	15.9	0.5	8.7		18.4
Delay (s)	47.4	14.6	11.2		29.1	0.4	243.2	56.5	0.5	54.8		50.4
Level of Service	D	B	B		C	A	F	E	A	D		D
Approach Delay (s)		19.2			24.7			74.7			52.0	
Approach LOS		B			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	38.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	108.5	Sum of lost time (s)	10.0
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	202	1145	345	120	1608	166	449	389	151	149	315	331
Future Volume (vph)	202	1145	345	120	1608	166	449	389	151	149	315	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.84	0.84	0.84	0.92	0.92	0.92	0.80	0.80	0.80
Adj. Flow (vph)	220	1245	375	143	1914	198	488	423	164	186	394	414
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	220	1245	375	143	1914	198	488	423	164	186	394	414
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	9.4	21.7	65.1	6.6	18.9	65.1	10.8	12.1	65.1	8.7	10.0	65.1
Effective Green, g (s)	10.4	24.2	65.1	7.6	21.4	65.1	11.8	14.6	65.1	9.7	12.5	65.1
Actuated g/C Ratio	0.16	0.37	1.00	0.12	0.33	1.00	0.18	0.22	1.00	0.15	0.19	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	548	1890	1583	400	2106	1583	904	793	1583	511	976	1583
v/s Ratio Prot	c0.06	0.24		0.04	c0.30		0.10	c0.12		0.05	c0.08	
v/s Ratio Perm			0.24			0.13			0.10			c0.26
v/c Ratio	0.40	0.66	0.24	0.36	0.91	0.13	0.54	0.53	0.10	0.36	0.40	0.26
Uniform Delay, d1	24.6	17.0	0.0	26.5	20.9	0.0	24.2	22.2	0.0	24.9	23.0	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.8	0.4	0.5	6.2	0.2	0.6	0.7	0.1	0.4	0.3	0.4
Delay (s)	25.0	17.9	0.4	27.0	27.1	0.2	24.8	22.9	0.1	25.4	23.3	0.4
Level of Service	C	B	A	C	C	A	C	C	A	C	C	A
Approach Delay (s)		15.1			24.8			20.3			14.2	
Approach LOS		B			C			C			B	

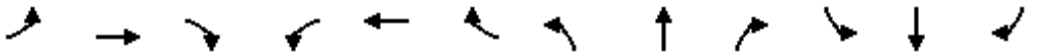
Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.1	Sum of lost time (s)	9.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	423	1293	477	219	1433	812	516	941	72	560	561	355
Future Volume (veh/h)	423	1293	477	219	1433	812	516	941	72	560	561	355
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	441	1347	0	233	1524	0	567	1034	0	659	660	0
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	3	2	1
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.91	0.91	0.91	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	614	1803	518	423	1521	430	665	1279	366	914	852	349
Arrive On Green	0.18	0.35	0.00	0.12	0.30	0.00	0.19	0.25	0.00	0.18	0.24	0.00
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	441	1347	0	233	1524	0	567	1034	0	659	660	0
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	8.9	17.1	0.0	4.7	22.0	0.0	11.7	14.1	0.0	9.1	12.8	0.0
Cycle Q Clear(g_c), s	8.9	17.1	0.0	4.7	22.0	0.0	11.7	14.1	0.0	9.1	12.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	614	1803	518	423	1521	430	665	1279	366	914	852	349
V/C Ratio(X)	0.72	0.75	0.00	0.55	1.00	0.00	0.85	0.81	0.00	0.72	0.77	0.00
Avail Cap(c_a), veh/h	655	1803	518	655	1521	430	665	1279	366	952	890	366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.5	20.8	0.0	30.4	25.8	0.0	28.7	25.9	0.0	28.3	26.1	0.0
Incr Delay (d2), s/veh	3.5	1.8	0.0	1.1	23.6	0.0	10.4	4.0	0.0	2.6	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	8.3	0.0	2.3	13.5	0.0	6.5	7.0	0.0	4.4	6.7	0.0
LnGrp Delay(d),s/veh	32.0	22.6	0.0	31.5	49.4	0.0	39.0	29.9	0.0	30.9	30.2	0.0
LnGrp LOS	C	C		C	F		D	C		C	C	
Approach Vol, veh/h		1788			1757			1601			1319	
Approach Delay, s/veh		24.9			47.0			33.1			30.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	20.0	11.0	27.1	16.2	19.2	15.1	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	16.0	12.0	19.0	12.0	16.0	12.0	19.0
Max Q Clear Time (g_c+I1), s	11.1	16.1	6.7	19.1	13.7	14.8	10.9	24.0
Green Ext Time (p_c), s	0.3	0.0	0.4	0.0	0.0	0.4	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	414	8	213	11	13	8	228	1334	7	4	965	428
Future Volume (vph)	414	8	213	11	13	8	228	1334	7	4	965	428
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1689	1583		1820	1583	3433	3536		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1689	1583		1820	1583	3433	3536		1770	3539	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.97	0.97	0.97
Adj. Flow (vph)	440	9	227	14	16	10	245	1434	8	4	995	441
RTOR Reduction (vph)	0	0	149	0	0	9	0	0	0	0	0	228
Lane Group Flow (vph)	224	225	78	0	30	1	245	1442	0	4	995	213
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	11.8	11.8	21.8		3.8	3.8	10.0	36.7		1.0	27.7	27.7
Effective Green, g (s)	12.8	12.8	23.8		4.8	4.8	11.0	39.2		2.0	30.2	30.2
Actuated g/C Ratio	0.18	0.18	0.34		0.07	0.07	0.16	0.57		0.03	0.44	0.44
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	310	311	612		126	109	544	2000		51	1542	689
v/s Ratio Prot	c0.13	0.13	0.02		c0.02		c0.07	c0.41		0.00	0.28	
v/s Ratio Perm			0.03			0.00						0.13
v/c Ratio	0.72	0.72	0.13		0.24	0.01	0.45	0.72		0.08	0.65	0.31
Uniform Delay, d1	26.6	26.6	15.6		30.5	30.0	26.4	11.0		32.8	15.3	12.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.1	8.1	0.1		1.0	0.0	0.6	1.3		0.7	0.9	0.3
Delay (s)	34.6	34.7	15.7		31.5	30.1	27.0	12.3		33.4	16.3	13.0
Level of Service	C	C	B		C	C	C	B		C	B	B
Approach Delay (s)		28.3			31.1			14.5			15.3	
Approach LOS		C			C			B			B	

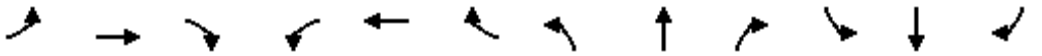
Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	69.3	Sum of lost time (s)	10.5
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	599	1180	635	303	542	714
Future Volume (vph)	599	1180	635	303	542	714
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.93	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3263	1441	3539	1583	3433	3539
Flt Permitted	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3263	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	697	1372	683	326	571	752
RTOR Reduction (vph)	350	426	0	231	0	0
Lane Group Flow (vph)	1033	260	683	95	571	752
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	12.0	12.0	11.6	11.6	12.3	27.9
Effective Green, g (s)	13.0	14.3	13.9	13.9	14.6	28.9
Actuated g/C Ratio	0.27	0.30	0.29	0.29	0.30	0.60
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	885	430	1026	459	1046	2135
v/s Ratio Prot	c0.32		c0.19		c0.17	0.21
v/s Ratio Perm		0.18		0.06		
v/c Ratio	1.17	0.60	0.67	0.21	0.55	0.35
Uniform Delay, d1	17.4	14.4	15.0	12.8	13.9	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	87.6	2.4	1.6	0.2	0.6	0.1
Delay (s)	105.0	16.8	16.6	13.1	14.5	4.9
Level of Service	F	B	B	B	B	A
Approach Delay (s)	75.8		15.5			9.0
Approach LOS	E		B			A

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	47.9	Sum of lost time (s)	6.4
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	504	596	64	151	571	182	237	696	149	107	395	314
Future Volume (vph)	504	596	64	151	571	182	237	696	149	107	395	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7		3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3446		1832	3663	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3446		1832	3663	1639
Peak-hour factor, PHF	0.91	0.91	0.91	0.95	0.95	0.95	0.82	0.82	0.82	0.87	0.87	0.87
Adj. Flow (vph)	554	655	70	159	601	192	289	849	182	123	454	361
RTOR Reduction (vph)	0	0	55	0	0	153	0	23	0	0	0	273
Lane Group Flow (vph)	554	655	15	159	601	39	289	1008	0	123	454	88
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	12.3	14.1	14.1	10.5	12.3	12.3	17.2	24.7		8.1	15.6	15.6
Effective Green, g (s)	13.3	16.1	16.1	11.5	15.0	15.0	18.2	27.0		9.1	17.9	17.9
Actuated g/C Ratio	0.18	0.22	0.22	0.16	0.20	0.20	0.25	0.37		0.12	0.24	0.24
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	320	776	347	277	723	323	438	1267		227	893	399
v/s Ratio Prot	c0.31	c0.19		0.09	0.17		c0.16	c0.29		0.07	0.12	
v/s Ratio Perm			0.01			0.02						0.05
v/c Ratio	1.73	0.84	0.04	0.57	0.83	0.12	0.66	0.80		0.54	0.51	0.22
Uniform Delay, d1	30.1	27.4	22.6	28.7	28.0	23.8	24.8	20.7		30.2	24.0	22.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	341.9	8.3	0.1	2.9	8.1	0.2	3.6	3.5		2.6	0.5	0.3
Delay (s)	371.9	35.8	22.6	31.5	36.1	24.0	28.4	24.3		32.8	24.4	22.5
Level of Service	F	D	C	C	D	C	C	C		C	C	C
Approach Delay (s)		180.7			32.9			25.2			24.8	
Approach LOS		F			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	71.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	73.4	Sum of lost time (s)	9.7
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	269	6	30	28	11	27	71	639	0	34	942	129
Future Volume (vph)	269	6	30	28	11	27	71	639	0	34	942	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.97			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1654			1799	1583	1770	3539		1770	3475	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1654			1799	1583	1770	3539		1770	3475	
Peak-hour factor, PHF	0.84	0.84	0.84	0.75	0.75	0.75	0.97	0.97	0.97	0.89	0.89	0.89
Adj. Flow (vph)	320	7	36	37	15	36	73	659	0	38	1058	145
RTOR Reduction (vph)	0	11	0	0	0	32	0	0	0	0	11	0
Lane Group Flow (vph)	182	170	0	0	52	4	73	659	0	38	1192	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	11.1	11.1			5.9	5.9	6.6	31.9		4.3	29.6	
Effective Green, g (s)	12.1	12.1			6.9	6.9	7.6	33.9		5.3	31.6	
Actuated g/C Ratio	0.17	0.17			0.10	0.10	0.11	0.49		0.08	0.46	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	293	289			179	157	194	1733		135	1586	
v/s Ratio Prot	c0.11	0.10			c0.03		c0.04	0.19		0.02	c0.34	
v/s Ratio Perm						0.00						
v/c Ratio	0.62	0.59			0.29	0.02	0.38	0.38		0.28	0.75	
Uniform Delay, d1	26.4	26.3			28.9	28.1	28.6	11.1		30.2	15.6	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.1	3.1			0.9	0.1	1.2	0.1		1.1	2.1	
Delay (s)	30.5	29.3			29.8	28.2	29.8	11.2		31.3	17.6	
Level of Service	C	C			C	C	C	B		C	B	
Approach Delay (s)		29.9			29.1			13.1			18.0	
Approach LOS		C			C			B			B	

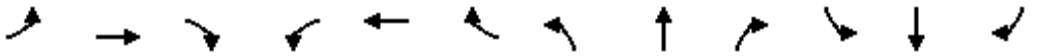
Intersection Summary			
HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	11.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	169	21	86	119	9	38	133	545	8	28	727	36
Future Volume (vph)	169	21	86	119	9	38	133	545	8	28	727	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1780	1583	1770	3531		1770	3514	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1780	1583	1770	3531		1770	3514	
Peak-hour factor, PHF	0.85	0.85	0.85	0.88	0.88	0.88	0.92	0.92	0.92	0.87	0.87	0.87
Adj. Flow (vph)	199	25	101	135	10	43	145	592	9	32	836	41
RTOR Reduction (vph)	0	0	81	0	0	37	0	1	0	0	5	0
Lane Group Flow (vph)	0	224	20	0	145	6	145	600	0	32	872	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		11.3	11.3		7.7	7.7	7.7	25.2		2.8	20.3	
Effective Green, g (s)		12.3	12.3		8.7	8.7	8.7	27.2		3.8	22.3	
Actuated g/C Ratio		0.20	0.20		0.14	0.14	0.14	0.43		0.06	0.35	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		348	309		245	218	244	1524		106	1243	
v/s Ratio Prot		c0.13			c0.08		c0.08	0.17		0.02	c0.25	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.64	0.06		0.59	0.03	0.59	0.39		0.30	0.70	
Uniform Delay, d1		23.3	20.7		25.5	23.5	25.5	12.3		28.3	17.5	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.0	0.1		3.8	0.1	3.9	0.2		1.6	1.8	
Delay (s)		27.4	20.7		29.3	23.5	29.3	12.4		29.9	19.3	
Level of Service		C	C		C	C	C	B		C	B	
Approach Delay (s)		25.3			28.0			15.7			19.7	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	63.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	184	910	9	63	1202	439	44	48	70	648	8	249
Future Volume (vph)	184	910	9	63	1202	439	44	48	70	648	8	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3534		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3534		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.97	0.97	0.97	0.78	0.78	0.78	0.92	0.92	0.92
Adj. Flow (vph)	209	1034	10	65	1239	453	56	62	90	704	9	271
RTOR Reduction (vph)	0	1	0	0	0	178	0	0	82	0	0	201
Lane Group Flow (vph)	209	1043	0	65	1239	275	56	62	8	359	354	70
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	12.3	33.7		7.0	28.4	28.4	6.8	6.8	6.8	20.6	20.6	20.6
Effective Green, g (s)	13.3	34.7		8.0	29.4	29.4	7.8	7.8	7.8	21.6	21.6	21.6
Actuated g/C Ratio	0.16	0.41		0.10	0.35	0.35	0.09	0.09	0.09	0.26	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	279	1458		168	1237	553	164	172	146	431	433	406
v/s Ratio Prot	c0.12	0.30		0.04	c0.35		0.03	c0.03		c0.21	0.21	
v/s Ratio Perm						0.17			0.01			0.04
v/c Ratio	0.75	0.72		0.39	1.00	0.50	0.34	0.36	0.06	0.83	0.82	0.17
Uniform Delay, d1	33.8	20.6		35.7	27.3	21.5	35.7	35.8	34.8	29.5	29.4	24.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5	1.7		1.5	26.0	0.7	1.2	1.3	0.2	12.9	11.4	0.2
Delay (s)	44.3	22.3		37.2	53.3	22.2	37.0	37.1	35.0	42.5	40.8	24.5
Level of Service	D	C		D	D	C	D	D	C	D	D	C
Approach Delay (s)		26.0			44.7			36.1			36.9	
Approach LOS		C			D			D			D	

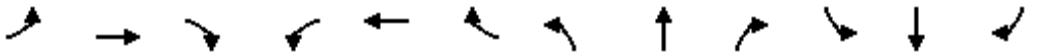
Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	84.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	961	147	0	1408	1286	0	0	0	849	0	242
Future Volume (veh/h)	0	961	147	0	1408	1286	0	0	0	849	0	242
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1001	0	0	1547	0				894	0	255
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.96	0.96	0.96	0.91	0.91	0.91				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2138	936	0	2169	936				1007	0	463
Arrive On Green	0.00	0.60	0.00	0.00	0.61	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1001	0	0	1547	0				894	0	255
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	7.3	0.0	0.0	14.0	0.0				11.5	0.0	6.3
Cycle Q Clear(g_c), s	0.0	7.3	0.0	0.0	14.0	0.0				11.5	0.0	6.3
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2138	936	0	2169	936				1007	0	463
V/C Ratio(X)	0.00	0.47	0.00	0.00	0.71	0.00				0.89	0.00	0.55
Avail Cap(c_a), veh/h	0	2406	1056	0	2436	1056				1007	0	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.1	0.0	0.0	6.2	0.0				15.7	0.0	13.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.9	0.0				9.8	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	0.0	0.0	6.9	0.0				6.8	0.0	2.9
LnGrp Delay(d),s/veh	0.0	5.2	0.0	0.0	7.1	0.0				25.5	0.0	15.3
LnGrp LOS		A			A					C		B
Approach Vol, veh/h		1001			1547						1149	
Approach Delay, s/veh		5.2			7.1						23.2	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		30.5		16.0		30.5		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		30.0		12.0		30.0		
Max Q Clear Time (g_c+I1), s		9.3		13.5		16.0		
Green Ext Time (p_c), s		14.1		0.0		10.5		

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	1004	0	0	2341	258	0	0	1257	0	0	343
Future Volume (vph)	173	1004	0	0	2341	258	0	0	1257	0	0	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.95			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	3539			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	3539			5085	1583			1611			2787
Peak-hour factor, PHF	0.87	0.87	0.87	0.94	0.94	0.94	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	199	1154	0	0	2490	274	0	0	1397	0	0	404
RTOR Reduction (vph)	0	0	0	0	0	107	0	0	0	0	0	356
Lane Group Flow (vph)	199	1154	0	0	2490	167	0	0	1397	0	0	48
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	11.1	53.1			39.0	39.0			69.3			6.2
Effective Green, g (s)	13.1	55.1			41.0	41.0			69.3			8.2
Actuated g/C Ratio	0.19	0.80			0.59	0.59			1.00			0.12
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	334	2813			3008	936			1611			329
v/s Ratio Prot	0.11	0.33			0.49							
v/s Ratio Perm						0.11			c0.87			0.02
v/c Ratio	0.60	0.41			0.83	0.18			0.87			0.15
Uniform Delay, d1	25.7	2.2			11.3	6.5			0.0			27.4
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	2.8	0.1			2.0	0.1			6.6			0.2
Delay (s)	28.5	2.3			13.3	6.6			6.6			27.6
Level of Service	C	A			B	A			A			C
Approach Delay (s)		6.1			12.7			6.6			27.6	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	69.3	Sum of lost time (s)	9.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	380	1496	169	221	1610	141	349	461	129	131	432	584
Future Volume (veh/h)	380	1496	169	221	1610	141	349	461	129	131	432	584
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	400	1575	178	246	1789	157	406	536	150	141	465	628
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	523	2319	904	352	2065	643	430	742	207	240	765	575
Arrive On Green	0.15	0.46	0.45	0.10	0.41	0.41	0.12	0.27	0.27	0.07	0.22	0.21
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	2735	762	3442	3539	1583
Grp Volume(v), veh/h	400	1575	178	246	1789	157	406	346	340	141	465	628
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1728	1721	1770	1583
Q Serve(g_s), s	11.6	25.4	5.7	7.2	33.6	6.8	12.2	18.4	18.6	4.1	12.3	22.0
Cycle Q Clear(g_c), s	11.6	25.4	5.7	7.2	33.6	6.8	12.2	18.4	18.6	4.1	12.3	22.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	523	2319	904	352	2065	643	430	480	469	240	765	575
V/C Ratio(X)	0.76	0.68	0.20	0.70	0.87	0.24	0.94	0.72	0.73	0.59	0.61	1.09
Avail Cap(c_a), veh/h	760	2394	928	496	2065	643	430	480	469	430	765	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	22.3	10.8	45.2	28.3	20.4	45.2	34.4	34.5	47.0	36.8	33.1
Incr Delay (d2), s/veh	2.8	0.8	0.1	2.5	4.2	0.2	29.7	5.2	5.5	2.3	1.4	65.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	12.0	2.5	3.5	16.4	3.0	7.6	9.7	9.6	2.0	6.2	26.9
LnGrp Delay(d),s/veh	45.2	23.1	10.9	47.7	32.5	20.6	74.9	39.6	40.0	49.2	38.2	98.1
LnGrp LOS	D	C	B	D	C	C	E	D	D	D	D	F
Approach Vol, veh/h		2153			2192			1092			1234	
Approach Delay, s/veh		26.2			33.3			52.9			69.9	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	49.5	16.0	25.0	18.8	44.3	10.3	30.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	47.0	12.0	21.0	22.0	39.0	12.0	21.0
Max Q Clear Time (g_c+I1), s	9.2	27.4	14.2	24.0	13.6	35.6	6.1	20.6
Green Ext Time (p_c), s	0.4	18.1	0.0	0.0	1.2	3.4	0.2	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	41.0
HCM 2010 LOS	D

Appendix C

Analysis Worksheets for
Existing (2017) plus Proposed Project Conditions

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	761	266	253	585	195	232
Future Volume (veh/h)	761	266	253	585	195	232
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	895	313	329	760	247	294
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.85	0.85	0.77	0.77	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1141	532	464	2355	393	846
Arrive On Green	0.34	0.31	0.26	0.67	0.22	0.22
Sat Flow, veh/h	3487	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	895	313	329	760	247	294
Grp Sat Flow(s),veh/h/ln	1699	1583	1774	1770	1774	1583
Q Serve(g_s), s	10.5	7.2	7.4	4.0	5.6	4.7
Cycle Q Clear(g_c), s	10.5	7.2	7.4	4.0	5.6	4.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1141	532	464	2355	393	846
V/C Ratio(X)	0.78	0.59	0.71	0.32	0.63	0.35
Avail Cap(c_a), veh/h	1156	539	523	2489	563	998
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.2	12.1	14.8	3.1	15.5	5.9
Incr Delay (d2), s/veh	3.6	1.6	3.8	0.1	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	3.5	4.1	1.9	2.9	3.5
LnGrp Delay(d),s/veh	16.8	13.8	18.6	3.2	17.2	6.1
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	1208			1089	541	
Approach Delay, s/veh	16.0			7.9	11.2	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.5	16.8		12.8		31.3		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	12.0	13.0		13.0		29.0		
Max Q Clear Time (g_c+I1), s	9.4	12.5		7.6		6.0		
Green Ext Time (p_c), s	1.3	0.3		1.2		4.9		

Intersection Summary	
HCM 2010 Ctrl Delay	12.0
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	833	350	549	433	0	1121
Future Volume (vph)	833	350	549	433	0	1121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.87	0.87	0.93	0.93	0.90	0.90
Adj. Flow (vph)	957	402	590	466	0	1246
RTOR Reduction (vph)	0	288	0	0	0	412
Lane Group Flow (vph)	957	114	590	466	0	834
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	14.5	14.5	14.5	33.0		16.1
Effective Green, g (s)	16.5	16.5	15.5	35.0		17.1
Actuated g/C Ratio	0.28	0.28	0.27	0.60		0.29
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1444	449	915	2131		474
v/s Ratio Prot	c0.19		c0.17	0.13		
v/s Ratio Perm		0.07				c0.52
v/c Ratio	0.66	0.25	0.64	0.22		1.76
Uniform Delay, d1	18.3	16.1	18.9	5.3		20.5
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.2	0.3	1.6	0.1		350.2
Delay (s)	19.5	16.4	20.4	5.3		370.7
Level of Service	B	B	C	A		F
Approach Delay (s)	18.6			13.8	370.7	
Approach LOS	B			B	F	

Intersection Summary			
HCM 2000 Control Delay	137.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	58.1	Sum of lost time (s)	10.0
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	195	1483	278	0	817	81	176	665	752	184	0	406
Future Volume (vph)	195	1483	278	0	817	81	176	665	752	184	0	406
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.81	0.81	0.81	0.90	0.90	0.90	0.88	0.88	0.88	0.90	0.90	0.90
Adj. Flow (vph)	241	1831	343	0	908	90	200	756	855	204	0	451
RTOR Reduction (vph)	0	0	129	0	0	0	0	0	0	0	0	49
Lane Group Flow (vph)	241	1831	214	0	908	90	200	756	855	204	0	402
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	11.2	59.3	59.3		44.1	105.6	12.1	23.6	105.6	10.7		37.4
Effective Green, g (s)	12.7	60.8	60.3		45.6	105.6	13.6	25.1	105.6	12.2		38.9
Actuated g/C Ratio	0.12	0.58	0.57		0.43	1.00	0.13	0.24	1.00	0.12		0.37
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	412	2037	903		2767	1583	227	841	1583	396		583
v/s Ratio Prot	0.07	c0.52			0.14		c0.11	c0.21		0.06		0.25
v/s Ratio Perm			0.14			0.06			c0.54			
v/c Ratio	0.58	0.90	0.24		0.33	0.06	0.88	0.90	0.54	0.52		0.69
Uniform Delay, d1	44.0	19.7	11.2		19.9	0.0	45.2	39.0	0.0	43.9		28.2
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.1	5.7	0.1		0.1	0.1	30.3	12.3	1.3	1.1		3.4
Delay (s)	46.1	25.4	11.4		19.9	0.1	75.5	51.4	1.3	45.1		31.6
Level of Service	D	C	B		B	A	E	D	A	D		C
Approach Delay (s)		25.5			18.1			30.4			35.8	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	105.6	Sum of lost time (s)	10.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	220	1736	414	59	618	69	113	147	65	104	229	231
Future Volume (vph)	220	1736	414	59	618	69	113	147	65	104	229	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.77	0.77	0.77	0.92	0.92	0.92
Adj. Flow (vph)	259	2042	487	65	679	76	147	191	84	113	249	251
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	259	2042	487	65	679	76	147	191	84	113	249	251
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	9.4	20.0	53.6	3.7	14.3	53.6	5.8	8.3	53.6	5.6	8.1	53.6
Effective Green, g (s)	10.4	22.5	53.6	4.7	16.8	53.6	6.8	10.8	53.6	6.6	10.6	53.6
Actuated g/C Ratio	0.19	0.42	1.00	0.09	0.31	1.00	0.13	0.20	1.00	0.12	0.20	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	666	2134	1583	301	2008	1583	633	713	1583	422	1005	1583
v/s Ratio Prot	0.08	c0.40		0.02	0.11		0.03	0.05		0.03	0.05	
v/s Ratio Perm			c0.31			0.05			0.05			0.16
v/c Ratio	0.39	0.96	0.31	0.22	0.34	0.05	0.23	0.27	0.05	0.27	0.25	0.16
Uniform Delay, d1	18.8	15.1	0.0	22.7	14.1	0.0	21.1	18.1	0.0	21.3	18.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	11.0	0.5	0.4	0.1	0.1	0.2	0.2	0.1	0.3	0.1	0.2
Delay (s)	19.2	26.1	0.5	23.1	14.2	0.1	21.2	18.3	0.1	21.7	18.3	0.2
Level of Service	B	C	A	C	B	A	C	B	A	C	B	A
Approach Delay (s)		21.0			13.6			15.7			11.5	
Approach LOS		C			B			B			B	

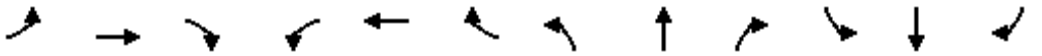
Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	53.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	1303	547	85	913	678	254	417	78	533	473	120
Future Volume (veh/h)	135	1303	547	85	913	678	254	417	78	533	473	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	157	1515	0	98	1049	0	343	564	0	592	526	0
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	3	2	1
Peak Hour Factor	0.86	0.86	0.86	0.87	0.87	0.87	0.74	0.74	0.74	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	369	1918	543	306	1802	507	653	1160	320	973	823	328
Arrive On Green	0.11	0.38	0.00	0.09	0.35	0.00	0.19	0.23	0.00	0.19	0.23	0.00
Sat Flow, veh/h	3304	5085	1583	3442	5085	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	157	1515	0	98	1049	0	343	564	0	592	526	0
Grp Sat Flow(s),veh/h/ln	1652	1695	1583	1721	1695	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	2.6	15.4	0.0	1.6	9.8	0.0	5.2	5.6	0.0	6.3	7.8	0.0
Cycle Q Clear(g_c), s	2.6	15.4	0.0	1.6	9.8	0.0	5.2	5.6	0.0	6.3	7.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	369	1918	543	306	1802	507	653	1160	320	973	823	328
V/C Ratio(X)	0.43	0.79	0.00	0.32	0.58	0.00	0.52	0.49	0.00	0.61	0.64	0.00
Avail Cap(c_a), veh/h	794	1920	543	827	1920	543	827	1614	462	1202	1123	462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.1	16.1	0.0	24.9	15.3	0.0	21.2	19.5	0.0	21.4	20.2	0.0
Incr Delay (d2), s/veh	0.8	2.3	0.0	0.6	0.4	0.0	0.7	0.3	0.0	0.6	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.6	0.0	0.8	4.6	0.0	2.5	2.6	0.0	3.0	3.9	0.0
LnGrp Delay(d),s/veh	24.9	18.4	0.0	25.5	15.7	0.0	21.9	19.8	0.0	22.1	21.0	0.0
LnGrp LOS	C	B		C	B		C	B		C	C	
Approach Vol, veh/h		1672			1147			907			1118	
Approach Delay, s/veh		19.0			16.5			20.6			21.6	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	14.8	7.2	23.0	13.1	15.1	8.5	21.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	16.0	12.0	19.0	12.0	16.0	12.0	19.0
Max Q Clear Time (g_c+I1), s	8.3	7.6	3.6	17.4	7.2	9.8	4.6	11.8
Green Ext Time (p_c), s	1.0	2.8	0.2	1.4	1.9	1.2	0.3	5.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B



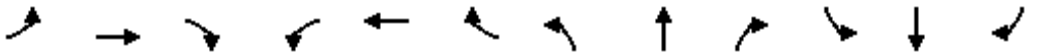
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	276	5	242	11	12	7	301	688	3	2	887	322
Future Volume (vph)	276	5	242	11	12	7	301	688	3	2	887	322
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1688	1583		1819	1583	3433	3537		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1688	1583		1819	1583	3433	3537		1770	3539	1583
Peak-hour factor, PHF	0.79	0.79	0.79	0.70	0.70	1.00	0.77	0.77	0.77	0.85	0.85	0.85
Adj. Flow (vph)	349	6	306	16	17	7	391	894	4	2	1044	379
RTOR Reduction (vph)	0	0	201	0	0	7	0	0	0	0	0	187
Lane Group Flow (vph)	178	177	105	0	33	0	391	898	0	2	1044	192
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	10.8	10.8	22.1		3.9	3.9	11.3	38.4		1.0	28.1	28.1
Effective Green, g (s)	11.8	11.8	24.1		4.9	4.9	12.3	40.9		2.0	30.6	30.6
Actuated g/C Ratio	0.17	0.17	0.34		0.07	0.07	0.18	0.58		0.03	0.44	0.44
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	282	284	611		127	110	602	2063		50	1544	691
v/s Ratio Prot	c0.11	0.10	0.03		c0.02		c0.11	0.25		0.00	c0.29	
v/s Ratio Perm			0.04			0.00						0.12
v/c Ratio	0.63	0.62	0.17		0.26	0.00	0.65	0.44		0.04	0.68	0.28
Uniform Delay, d1	27.1	27.1	16.0		30.9	30.3	26.9	8.2		33.1	15.8	12.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	4.6	4.2	0.1		1.1	0.0	2.4	0.1		0.3	1.2	0.2
Delay (s)	31.7	31.3	16.2		32.0	30.3	29.3	8.3		33.4	17.0	12.9
Level of Service	C	C	B		C	C	C	A		C	B	B
Approach Delay (s)		24.4			31.7			14.7			15.9	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	70.1	Sum of lost time (s)	10.5
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	233	490	532	289	557	435
Future Volume (vph)	233	490	532	289	557	435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.92	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3257	1441	3539	1583	3433	3539
Flt Permitted	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3257	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.78	0.78	0.80	0.80	0.78	0.78
Adj. Flow (vph)	299	628	665	361	714	558
RTOR Reduction (vph)	240	231	0	253	0	0
Lane Group Flow (vph)	373	83	665	108	714	558
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	10.0	10.0	11.6	11.6	12.9	28.5
Effective Green, g (s)	11.0	12.3	13.9	13.9	15.2	29.5
Actuated g/C Ratio	0.24	0.26	0.30	0.30	0.33	0.63
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	770	381	1057	473	1122	2245
v/s Ratio Prot	c0.11		c0.19		c0.21	0.16
v/s Ratio Perm		0.06		0.07		
v/c Ratio	0.48	0.22	0.63	0.23	0.64	0.25
Uniform Delay, d1	15.3	13.3	14.1	12.3	13.3	3.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.3	1.2	0.2	1.2	0.1
Delay (s)	15.8	13.6	15.3	12.5	14.5	3.7
Level of Service	B	B	B	B	B	A
Approach Delay (s)	15.1		14.3			9.8
Approach LOS	B		B			A

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	46.5	Sum of lost time (s)	6.4
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



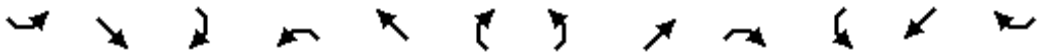
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	498	224	52	271	68	207	341	50	68	252	52
Future Volume (vph)	85	498	224	52	271	68	207	341	50	68	252	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7		3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3471		1832	3663	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3471		1832	3663	1639
Peak-hour factor, PHF	0.86	0.86	0.86	0.92	0.92	0.92	0.84	0.84	0.84	0.79	0.79	0.79
Adj. Flow (vph)	99	579	260	57	295	74	246	406	60	86	319	66
RTOR Reduction (vph)	0	0	192	0	0	57	0	14	0	0	0	51
Lane Group Flow (vph)	99	579	68	57	295	17	246	452	0	86	319	15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	6.8	13.0	13.0	4.3	10.5	10.5	13.5	19.1		4.9	10.5	10.5
Effective Green, g (s)	7.8	15.0	15.0	5.3	13.2	13.2	14.5	21.4		5.9	12.8	12.8
Actuated g/C Ratio	0.14	0.26	0.26	0.09	0.23	0.23	0.25	0.37		0.10	0.22	0.22
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	240	926	414	163	815	364	447	1296		188	818	366
v/s Ratio Prot	c0.06	c0.16		0.03	0.08		c0.14	c0.13		0.05	0.09	
v/s Ratio Perm			0.04			0.01						0.01
v/c Ratio	0.41	0.63	0.16	0.35	0.36	0.05	0.55	0.35		0.46	0.39	0.04
Uniform Delay, d1	22.7	18.7	16.3	24.4	18.5	17.2	18.6	12.9		24.2	18.9	17.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.2	1.3	0.2	1.3	0.3	0.1	1.5	0.2		1.8	0.3	0.0
Delay (s)	23.8	20.0	16.5	25.7	18.8	17.2	20.0	13.1		26.0	19.2	17.5
Level of Service	C	B	B	C	B	B	C	B		C	B	B
Approach Delay (s)		19.4			19.4			15.5			20.2	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	57.3	Sum of lost time (s)	9.7
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	332	8	37	36	15	35	28	460	0	41	421	59
Future Volume (vph)	332	8	37	36	15	35	28	460	0	41	421	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.97			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1654			1799	1583	1770	3539		1770	3474	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1654			1799	1583	1770	3539		1770	3474	
Peak-hour factor, PHF	0.85	0.85	0.85	0.72	0.72	0.72	0.72	0.72	0.72	0.84	0.84	0.84
Adj. Flow (vph)	391	9	44	50	21	49	39	639	0	49	501	70
RTOR Reduction (vph)	0	10	0	0	0	43	0	0	0	0	14	0
Lane Group Flow (vph)	223	211	0	0	71	6	39	639	0	49	557	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	11.9	11.9			6.2	6.2	2.6	17.9		4.1	19.4	
Effective Green, g (s)	12.9	12.9			7.2	7.2	3.6	19.9		5.1	21.4	
Actuated g/C Ratio	0.23	0.23			0.13	0.13	0.06	0.35		0.09	0.38	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	386	380			230	203	113	1255		160	1325	
v/s Ratio Prot	c0.13	0.13			c0.04		0.02	c0.18		c0.03	0.16	
v/s Ratio Perm						0.00						
v/c Ratio	0.58	0.56			0.31	0.03	0.35	0.51		0.31	0.42	
Uniform Delay, d1	19.2	19.1			22.2	21.4	25.1	14.3		23.8	12.8	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	1.8			0.8	0.1	1.8	0.3		1.1	0.2	
Delay (s)	21.3	20.8			23.0	21.5	27.0	14.6		24.9	13.0	
Level of Service	C	C			C	C	C	B		C	B	
Approach Delay (s)		21.1			22.3			15.3			13.9	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	56.1	Sum of lost time (s)	11.0
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		

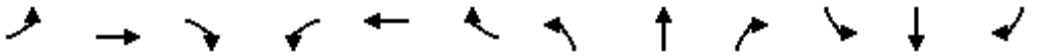
c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	61	9	26	27	2	6	53	482	9	6	433	22
Future Volume (vph)	61	9	26	27	2	6	53	482	9	6	433	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583		1780	1583	1770	3529		1770	3513	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583		1780	1583	1770	3529		1770	3513	
Peak-hour factor, PHF	0.71	0.71	0.71	0.70	0.70	0.70	0.72	0.72	0.72	0.79	0.79	0.79
Adj. Flow (vph)	86	13	37	39	3	9	74	669	12	8	548	28
RTOR Reduction (vph)	0	0	32	0	0	8	0	1	0	0	4	0
Lane Group Flow (vph)	0	99	5	0	42	1	74	681	0	8	572	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		6.7	6.7		3.7	3.7	4.3	25.5		1.0	22.2	
Effective Green, g (s)		7.7	7.7		4.7	4.7	5.3	27.5		2.0	24.2	
Actuated g/C Ratio		0.15	0.15		0.09	0.09	0.10	0.52		0.04	0.46	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		259	230		158	140	177	1834		66	1607	
v/s Ratio Prot		c0.06			c0.02		c0.04	c0.19		0.00	0.16	
v/s Ratio Perm			0.00			0.00						
v/c Ratio		0.38	0.02		0.27	0.01	0.42	0.37		0.12	0.36	
Uniform Delay, d1		20.4	19.4		22.5	22.0	22.4	7.6		24.6	9.3	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9	0.0		0.9	0.0	1.6	0.1		0.8	0.1	
Delay (s)		21.4	19.4		23.4	22.0	23.9	7.7		25.4	9.4	
Level of Service		C	B		C	C	C	A		C	A	
Approach Delay (s)		20.9			23.1			9.3			9.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	52.9	Sum of lost time (s)	11.0
Intersection Capacity Utilization	37.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	964	10	39	678	374	19	11	23	375	4	107
Future Volume (vph)	165	964	10	39	678	374	19	11	23	375	4	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3534		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3534		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.78	0.78	0.78	0.70	0.70	0.70	0.87	0.87	0.87
Adj. Flow (vph)	188	1095	11	50	869	479	27	16	33	431	5	123
RTOR Reduction (vph)	0	1	0	0	0	248	0	0	31	0	0	97
Lane Group Flow (vph)	188	1105	0	50	869	231	27	16	2	220	216	26
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	11.6	36.5		4.7	29.6	29.6	4.0	4.0	4.0	15.3	15.3	15.3
Effective Green, g (s)	12.6	37.5		5.7	30.6	30.6	5.0	5.0	5.0	16.3	16.3	16.3
Actuated g/C Ratio	0.16	0.49		0.07	0.40	0.40	0.07	0.07	0.07	0.21	0.21	0.21
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	291	1732		131	1415	633	115	121	103	358	359	337
v/s Ratio Prot	c0.11	c0.31		0.03	0.25		c0.02	0.01		c0.13	0.13	
v/s Ratio Perm						0.15			0.00			0.02
v/c Ratio	0.65	0.64		0.38	0.61	0.36	0.23	0.13	0.02	0.61	0.60	0.08
Uniform Delay, d1	29.9	14.5		33.7	18.3	16.1	33.9	33.7	33.5	27.3	27.2	24.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9	0.8		1.9	0.8	0.4	1.1	0.5	0.1	3.1	2.8	0.1
Delay (s)	34.7	15.2		35.6	19.1	16.5	35.0	34.2	33.5	30.4	30.0	24.2
Level of Service	C	B		D	B	B	C	C	C	C	C	C
Approach Delay (s)		18.1			18.8			34.2			28.9	
Approach LOS		B			B			C			C	

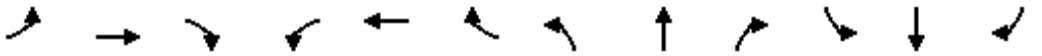
Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	76.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	856	144	0	952	715	0	0	0	770	0	161
Future Volume (veh/h)	0	856	144	0	952	715	0	0	0	770	0	161
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	901	0	0	1133	0				819	0	171
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.84	0.84	0.84				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	1976	860	0	2011	860				1108	0	510
Arrive On Green	0.00	0.56	0.00	0.00	0.57	0.00				0.32	0.00	0.32
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	901	0	0	1133	0				819	0	171
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	6.0	0.0	0.0	8.1	0.0				8.5	0.0	3.3
Cycle Q Clear(g_c), s	0.0	6.0	0.0	0.0	8.1	0.0				8.5	0.0	3.3
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1976	860	0	2011	860				1108	0	510
V/C Ratio(X)	0.00	0.46	0.00	0.00	0.56	0.00				0.74	0.00	0.34
Avail Cap(c_a), veh/h	0	2791	1225	0	2826	1225				1168	0	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.2	0.0	0.0	5.5	0.0				12.1	0.0	10.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.2	0.0				2.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	0.0	0.0	3.8	0.0				4.4	0.0	1.5
LnGrp Delay(d),s/veh	0.0	5.4	0.0	0.0	5.7	0.0				14.5	0.0	10.7
LnGrp LOS		A			A					B		B
Approach Vol, veh/h		901			1133						990	
Approach Delay, s/veh		5.4			5.7						13.8	
Approach LOS		A			A						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		24.8		15.3		24.8		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		30.0		12.0		30.0		
Max Q Clear Time (g_c+I1), s		8.0		10.5		10.1		
Green Ext Time (p_c), s		11.2		0.8		10.6		

Intersection Summary	
HCM 2010 Ctrl Delay	8.3
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	129	960	0	0	1281	141	0	0	890	0	0	380
Future Volume (vph)	129	960	0	0	1281	141	0	0	890	0	0	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.95			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	3539			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	3539			5085	1583			1611			2787
Peak-hour factor, PHF	0.73	0.73	0.73	0.95	0.95	0.95	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	177	1315	0	0	1348	148	0	0	989	0	0	427
RTOR Reduction (vph)	0	0	0	0	0	74	0	0	0	0	0	356
Lane Group Flow (vph)	177	1315	0	0	1348	74	0	0	989	0	0	71
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	8.0	34.4			23.4	23.4			50.8			6.4
Effective Green, g (s)	10.0	36.4			25.4	25.4			50.8			8.4
Actuated g/C Ratio	0.20	0.72			0.50	0.50			1.00			0.17
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	348	2535			2542	791			1611			460
v/s Ratio Prot	0.10	0.37			0.27							
v/s Ratio Perm						0.05			c0.61			0.03
v/c Ratio	0.51	0.52			0.53	0.09			0.61			0.15
Uniform Delay, d1	18.2	3.2			8.6	6.7			0.0			18.2
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	1.2	0.2			0.2	0.1			1.8			0.2
Delay (s)	19.4	3.4			8.9	6.7			1.8			18.3
Level of Service	B	A			A	A			A			B
Approach Delay (s)		5.3			8.6			1.8			18.3	
Approach LOS		A			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	50.8	Sum of lost time (s)	9.0
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	413	1776	198	99	1086	92	159	361	92	51	187	147
Future Volume (veh/h)	413	1776	198	99	1086	92	159	361	92	51	187	147
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	480	2065	230	115	1263	107	183	415	106	58	212	167
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	2	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	624	2779	985	223	2186	681	299	641	162	154	662	574
Arrive On Green	0.18	0.55	0.54	0.06	0.43	0.43	0.09	0.23	0.22	0.04	0.19	0.18
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	2799	708	3442	3539	1583
Grp Volume(v), veh/h	480	2065	230	115	1263	107	183	261	260	58	212	167
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1738	1721	1770	1583
Q Serve(g_s), s	12.1	28.3	5.9	3.0	17.2	3.8	4.7	12.2	12.4	1.5	4.7	6.9
Cycle Q Clear(g_c), s	12.1	28.3	5.9	3.0	17.2	3.8	4.7	12.2	12.4	1.5	4.7	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	624	2779	985	223	2186	681	299	405	398	154	662	574
V/C Ratio(X)	0.77	0.74	0.23	0.52	0.58	0.16	0.61	0.64	0.65	0.38	0.32	0.29
Avail Cap(c_a), veh/h	866	2779	985	565	2282	711	490	436	428	490	872	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	15.8	7.6	41.3	19.7	15.9	40.2	31.8	32.0	42.4	32.1	20.7
Incr Delay (d2), s/veh	2.8	1.1	0.1	1.8	0.3	0.1	2.0	2.9	3.2	1.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	13.5	2.6	1.5	8.0	1.7	2.3	6.3	6.3	0.7	2.3	3.0
LnGrp Delay(d),s/veh	38.4	16.9	7.7	43.2	20.1	16.0	42.3	34.8	35.2	43.9	32.4	21.0
LnGrp LOS	D	B	A	D	C	B	D	C	D	D	C	C
Approach Vol, veh/h		2775			1485			704			437	
Approach Delay, s/veh		19.9			21.6			36.9			29.6	
Approach LOS		B			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	51.9	10.9	19.6	19.6	41.3	7.1	23.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	47.0	12.0	21.0	22.0	39.0	12.0	21.0
Max Q Clear Time (g_c+I1), s	5.0	30.3	6.7	8.9	14.1	19.2	3.5	14.4
Green Ext Time (p_c), s	0.3	16.6	0.3	6.7	1.4	18.1	0.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	598	254	256	838	265	258
Future Volume (veh/h)	598	254	256	838	265	258
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	643	273	308	1010	288	280
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.93	0.93	0.83	0.83	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1043	467	475	2245	437	818
Arrive On Green	0.29	0.27	0.27	0.63	0.25	0.25
Sat Flow, veh/h	3632	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	643	273	308	1010	288	280
Grp Sat Flow(s),veh/h/ln	1770	1583	1774	1770	1774	1583
Q Serve(g_s), s	6.5	6.1	6.4	6.1	6.1	4.3
Cycle Q Clear(g_c), s	6.5	6.1	6.4	6.1	6.1	4.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1043	467	475	2245	437	818
V/C Ratio(X)	0.62	0.59	0.65	0.45	0.66	0.34
Avail Cap(c_a), veh/h	1271	569	552	2628	595	959
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.7	12.6	13.5	3.9	14.2	5.9
Incr Delay (d2), s/veh	0.6	1.2	2.1	0.1	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	2.9	3.4	3.0	3.2	3.0
LnGrp Delay(d),s/veh	13.3	13.7	15.7	4.1	15.9	6.2
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	916			1318	568	
Approach Delay, s/veh	13.4			6.8	11.1	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.2	14.3		13.3		28.5		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	12.0	13.0		13.0		29.0		
Max Q Clear Time (g_c+I1), s	8.4	8.5		8.1		8.1		
Green Ext Time (p_c), s	2.0	1.8		1.2		6.1		

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	701	354	640	698	0	780
Future Volume (vph)	701	354	640	698	0	780
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.98	0.98	0.94	0.94	0.90	0.90
Adj. Flow (vph)	715	361	681	743	0	867
RTOR Reduction (vph)	0	265	0	0	0	420
Lane Group Flow (vph)	715	96	681	743	0	447
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	13.4	13.4	15.3	32.7		16.1
Effective Green, g (s)	15.4	15.4	16.3	34.7		17.1
Actuated g/C Ratio	0.27	0.27	0.28	0.60		0.30
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1354	421	968	2124		476
v/s Ratio Prot	c0.14		c0.20	0.21		
v/s Ratio Perm		0.06				c0.28
v/c Ratio	0.53	0.23	0.70	0.35		0.94
Uniform Delay, d1	18.1	16.6	18.6	5.8		19.8
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	2.3	0.1		26.5
Delay (s)	18.5	16.8	20.9	5.9		46.3
Level of Service	B	B	C	A		D
Approach Delay (s)	17.9			13.1	46.3	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	57.8	Sum of lost time (s)	10.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	177	1049	256	0	1498	256	199	618	463	270	0	512
Future Volume (vph)	177	1049	256	0	1498	256	199	618	463	270	0	512
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.97	0.97	0.97	0.90	0.90	0.90
Adj. Flow (vph)	188	1116	272	0	1646	281	205	637	477	300	0	569
RTOR Reduction (vph)	0	0	126	0	0	0	0	0	0	0	0	30
Lane Group Flow (vph)	188	1116	146	0	1646	281	205	637	477	300	0	539
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	11.5	49.5	49.5		34.0	94.1	12.2	21.1	94.1	11.5		35.9
Effective Green, g (s)	13.0	51.0	50.5		35.5	94.1	13.7	22.6	94.1	13.0		37.4
Actuated g/C Ratio	0.14	0.54	0.54		0.38	1.00	0.15	0.24	1.00	0.14		0.40
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	474	1918	849		2417	1583	257	849	1583	474		629
v/s Ratio Prot	0.05	0.32			c0.26		c0.12	0.18		0.09		c0.34
v/s Ratio Perm			0.09			0.18			c0.30			
v/c Ratio	0.40	0.58	0.17		0.68	0.18	0.80	0.75	0.30	0.63		0.86
Uniform Delay, d1	37.0	14.4	11.1		24.6	0.0	38.9	33.1	0.0	38.3		25.9
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.5	0.5	0.1		0.8	0.2	15.7	3.8	0.5	2.8		11.1
Delay (s)	37.5	14.9	11.2		25.4	0.2	54.5	36.9	0.5	41.1		37.0
Level of Service	D	B	B		C	A	D	D	A	D		D
Approach Delay (s)		16.9			21.7			26.5			38.4	
Approach LOS		B			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	94.1	Sum of lost time (s)	10.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	235	1110	399	108	1178	106	381	336	162	133	368	205
Future Volume (vph)	235	1110	399	108	1178	106	381	336	162	133	368	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.95	0.85	0.85	0.85
Adj. Flow (vph)	247	1168	420	117	1280	115	401	354	171	156	433	241
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	247	1168	420	117	1280	115	401	354	171	156	433	241
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	9.7	21.9	65.6	6.2	18.4	65.6	11.1	14.7	65.6	6.8	10.4	65.6
Effective Green, g (s)	10.7	24.4	65.6	7.2	20.9	65.6	12.1	17.2	65.6	7.8	12.9	65.6
Actuated g/C Ratio	0.16	0.37	1.00	0.11	0.32	1.00	0.18	0.26	1.00	0.12	0.20	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	559	1891	1583	376	2041	1583	920	927	1583	408	999	1583
v/s Ratio Prot	c0.07	c0.23		0.03	0.20		0.08	c0.10		0.05	c0.09	
v/s Ratio Perm			0.27			0.07			0.11			0.15
v/c Ratio	0.44	0.62	0.27	0.31	0.63	0.07	0.44	0.38	0.11	0.38	0.43	0.15
Uniform Delay, d1	24.8	16.8	0.0	26.9	19.0	0.0	23.7	19.8	0.0	26.7	23.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.6	0.4	0.5	0.6	0.1	0.3	0.3	0.1	0.6	0.3	0.2
Delay (s)	25.3	17.4	0.4	27.4	19.6	0.1	24.1	20.1	0.1	27.3	23.4	0.2
Level of Service	C	B	A	C	B	A	C	C	A	C	C	A
Approach Delay (s)		14.6			18.8			18.1			17.4	
Approach LOS		B			B			B			B	

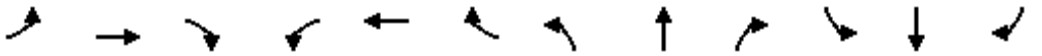
Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	454	1113	537	228	1105	718	424	681	74	546	607	316
Future Volume (veh/h)	454	1113	537	228	1105	718	424	681	74	546	607	316
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	468	1147	0	265	1285	0	456	732	0	581	646	0
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	3	2	1
Peak Hour Factor	0.97	0.97	0.97	0.86	0.86	0.86	0.93	0.93	0.93	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	637	1797	516	457	1530	433	642	1288	368	860	845	345
Arrive On Green	0.19	0.35	0.00	0.13	0.30	0.00	0.19	0.25	0.00	0.17	0.24	0.00
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	468	1147	0	265	1285	0	456	732	0	581	646	0
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	9.4	13.8	0.0	5.3	17.3	0.0	9.1	9.2	0.0	8.0	12.4	0.0
Cycle Q Clear(g_c), s	9.4	13.8	0.0	5.3	17.3	0.0	9.1	9.2	0.0	8.0	12.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	637	1797	516	457	1530	433	642	1288	368	860	845	345
V/C Ratio(X)	0.73	0.64	0.00	0.58	0.84	0.00	0.71	0.57	0.00	0.68	0.76	0.00
Avail Cap(c_a), veh/h	659	1797	516	659	1530	433	659	1288	368	958	896	368
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.1	19.7	0.0	29.8	23.9	0.0	27.9	23.8	0.0	28.4	25.9	0.0
Incr Delay (d2), s/veh	4.1	0.8	0.0	1.2	4.3	0.0	3.5	0.6	0.0	1.7	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	6.5	0.0	2.6	8.7	0.0	4.6	4.3	0.0	3.8	6.5	0.0
LnGrp Delay(d),s/veh	32.2	20.5	0.0	31.0	28.2	0.0	31.4	24.4	0.0	30.0	29.7	0.0
LnGrp LOS	C	C		C	C		C	C		C	C	
Approach Vol, veh/h		1615			1550			1188			1227	
Approach Delay, s/veh		23.9			28.7			27.1			29.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	20.0	11.7	26.8	15.6	18.9	15.5	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	16.0	12.0	19.0	12.0	16.0	12.0	19.0
Max Q Clear Time (g_c+I1), s	10.0	11.2	7.3	15.8	11.1	14.4	11.4	19.3
Green Ext Time (p_c), s	0.6	2.4	0.4	2.8	0.5	0.5	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	6	221	16	19	10	316	1109	4	4	1056	383
Future Volume (vph)	286	6	221	16	19	10	316	1109	4	4	1056	383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1689	1583		1821	1583	3433	3537		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1689	1583		1821	1583	3433	3537		1770	3539	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.70	0.70	0.70	0.90	0.90	0.90	0.88	0.88	0.88
Adj. Flow (vph)	298	6	230	23	27	14	351	1232	4	5	1200	435
RTOR Reduction (vph)	0	0	156	0	0	13	0	0	0	0	0	180
Lane Group Flow (vph)	152	152	74	0	50	1	351	1236	0	5	1200	255
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	10.3	10.3	21.3		4.5	4.5	11.0	40.1		1.1	30.2	30.2
Effective Green, g (s)	11.3	11.3	23.3		5.5	5.5	12.0	42.6		2.1	32.7	32.7
Actuated g/C Ratio	0.16	0.16	0.32		0.08	0.08	0.17	0.59		0.03	0.45	0.45
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	263	265	578		139	120	572	2092		51	1607	718
v/s Ratio Prot	c0.09	0.09	0.02		c0.03		c0.10	0.35		0.00	c0.34	
v/s Ratio Perm			0.03			0.00						0.16
v/c Ratio	0.58	0.57	0.13		0.36	0.01	0.61	0.59		0.10	0.75	0.35
Uniform Delay, d1	28.1	28.1	17.2		31.6	30.7	27.8	9.2		34.0	16.2	12.8
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.1	3.0	0.1		1.6	0.0	2.0	0.5		0.8	1.9	0.3
Delay (s)	31.2	31.1	17.3		33.2	30.8	29.8	9.7		34.9	18.2	13.1
Level of Service	C	C	B		C	C	C	A		C	B	B
Approach Delay (s)		25.2			32.6			14.1			16.9	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	489	834	651	318	578	707
Future Volume (vph)	489	834	651	318	578	707
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.93	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.97	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3278	1441	3539	1583	3433	3539
Flt Permitted	0.97	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3278	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.90	0.90	0.93	0.93	0.96	0.96
Adj. Flow (vph)	543	927	700	342	602	736
RTOR Reduction (vph)	299	333	0	243	0	0
Lane Group Flow (vph)	698	140	700	99	602	736
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	12.0	12.0	11.7	11.7	12.5	28.2
Effective Green, g (s)	13.0	14.3	14.0	14.0	14.8	29.2
Actuated g/C Ratio	0.27	0.30	0.29	0.29	0.31	0.61
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	884	427	1027	459	1054	2143
v/s Ratio Prot	c0.21		c0.20		c0.18	0.21
v/s Ratio Perm		0.10		0.06		
v/c Ratio	0.79	0.33	0.68	0.22	0.57	0.34
Uniform Delay, d1	16.3	13.2	15.1	12.9	14.0	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	0.5	1.9	0.2	0.8	0.1
Delay (s)	21.1	13.7	17.0	13.2	14.8	4.8
Level of Service	C	B	B	B	B	A
Approach Delay (s)	18.7		15.8			9.3
Approach LOS	B		B			A

Intersection Summary			
HCM 2000 Control Delay	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	48.2	Sum of lost time (s)	6.4
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	382	504	59	157	556	163	159	414	158	111	389	350
Future Volume (vph)	382	504	59	157	556	163	159	414	158	111	389	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7		3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3393		1832	3663	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3393		1832	3663	1639
Peak-hour factor, PHF	0.93	0.93	0.93	0.83	0.83	0.83	0.94	0.94	0.94	0.96	0.96	0.96
Adj. Flow (vph)	411	542	63	189	670	196	169	440	168	116	405	365
RTOR Reduction (vph)	0	0	47	0	0	148	0	56	0	0	0	285
Lane Group Flow (vph)	411	542	16	189	670	48	169	552	0	116	405	80
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	12.1	14.4	14.4	10.7	13.0	13.0	11.4	15.4		7.7	11.7	11.7
Effective Green, g (s)	13.1	16.4	16.4	11.7	15.7	15.7	12.4	17.7		8.7	14.0	14.0
Actuated g/C Ratio	0.20	0.26	0.26	0.18	0.24	0.24	0.19	0.28		0.14	0.22	0.22
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	361	904	404	322	865	387	341	935		248	798	357
v/s Ratio Prot	c0.23	0.15		0.11	c0.19		c0.10	c0.16		0.06	0.11	
v/s Ratio Perm			0.01			0.03						0.05
v/c Ratio	1.14	0.60	0.04	0.59	0.77	0.12	0.50	0.59		0.47	0.51	0.22
Uniform Delay, d1	25.6	21.0	18.0	24.0	22.6	18.9	23.1	20.1		25.6	22.1	20.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	90.5	1.1	0.0	2.7	4.4	0.1	1.1	1.0		1.4	0.5	0.3
Delay (s)	116.1	22.1	18.0	26.8	27.0	19.0	24.2	21.1		27.0	22.6	20.9
Level of Service	F	C	B	C	C	B	C	C		C	C	C
Approach Delay (s)		59.9			25.5			21.8			22.5	
Approach LOS		E			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	64.2	Sum of lost time (s)	9.7
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	288	7	31	30	12	29	63	679	0	39	835	110
Future Volume (vph)	288	7	31	30	12	29	63	679	0	39	835	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.97			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1655			1799	1583	1770	3539		1770	3477	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1655			1799	1583	1770	3539		1770	3477	
Peak-hour factor, PHF	0.96	0.96	0.96	0.93	0.93	0.93	0.96	0.96	0.96	0.95	0.95	0.95
Adj. Flow (vph)	300	7	32	32	13	31	66	707	0	41	879	116
RTOR Reduction (vph)	0	10	0	0	0	28	0	0	0	0	11	0
Lane Group Flow (vph)	171	158	0	0	45	3	66	707	0	41	984	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	11.0	11.0			4.0	4.0	4.5	26.9		3.9	26.3	
Effective Green, g (s)	12.0	12.0			5.0	5.0	5.5	28.9		4.9	28.3	
Actuated g/C Ratio	0.19	0.19			0.08	0.08	0.09	0.47		0.08	0.46	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	326	321			145	128	157	1654		140	1592	
v/s Ratio Prot	c0.10	0.10			c0.03		c0.04	0.20		0.02	c0.28	
v/s Ratio Perm						0.00						
v/c Ratio	0.52	0.49			0.31	0.02	0.42	0.43		0.29	0.62	
Uniform Delay, d1	22.3	22.2			26.8	26.1	26.6	10.9		26.8	12.7	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	1.2			1.2	0.1	1.8	0.2		1.2	0.7	
Delay (s)	23.9	23.4			28.0	26.2	28.5	11.1		28.0	13.4	
Level of Service	C	C			C	C	C	B		C	B	
Approach Delay (s)		23.6			27.3			12.6			14.0	
Approach LOS		C			C			B			B	

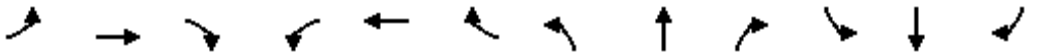
Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	11.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	158	20	118	130	10	42	132	575	11	31	701	32
Future Volume (vph)	158	20	118	130	10	42	132	575	11	31	701	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1780	1583	1770	3529		1770	3516	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1780	1583	1770	3529		1770	3516	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	180	23	134	148	11	48	140	612	12	33	746	34
RTOR Reduction (vph)	0	0	108	0	0	41	0	2	0	0	4	0
Lane Group Flow (vph)	0	203	26	0	159	7	140	622	0	33	776	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		11.1	11.1		7.8	7.8	7.6	24.8		2.8	20.0	
Effective Green, g (s)		12.1	12.1		8.8	8.8	8.6	26.8		3.8	22.0	
Actuated g/C Ratio		0.19	0.19		0.14	0.14	0.14	0.43		0.06	0.35	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		345	306		250	222	243	1513		107	1237	
v/s Ratio Prot		c0.11			c0.09		c0.08	0.18		0.02	c0.22	
v/s Ratio Perm			0.02			0.00						
v/c Ratio		0.59	0.08		0.64	0.03	0.58	0.41		0.31	0.63	
Uniform Delay, d1		22.9	20.7		25.3	23.2	25.2	12.4		28.1	16.8	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.6	0.1		5.2	0.1	3.3	0.2		1.6	1.0	
Delay (s)		25.5	20.8		30.6	23.2	28.5	12.6		29.7	17.8	
Level of Service		C	C		C	C	C	B		C	B	
Approach Delay (s)		23.6			28.9			15.5			18.3	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	62.5	Sum of lost time (s)	11.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

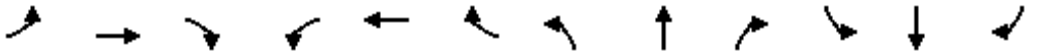
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	183	944	8	52	954	518	27	24	56	681	8	235
Future Volume (vph)	183	944	8	52	954	518	27	24	56	681	8	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3535		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3535		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.89	0.89	0.89	0.96	0.96	0.96
Adj. Flow (vph)	199	1026	9	55	1015	551	30	27	63	709	8	245
RTOR Reduction (vph)	0	1	0	0	0	260	0	0	58	0	0	182
Lane Group Flow (vph)	199	1034	0	55	1015	291	30	27	5	362	355	63
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	12.1	36.0		5.3	29.2	29.2	5.6	5.6	5.6	20.6	20.6	20.6
Effective Green, g (s)	13.1	37.0		6.3	30.2	30.2	6.6	6.6	6.6	21.6	21.6	21.6
Actuated g/C Ratio	0.16	0.44		0.08	0.36	0.36	0.08	0.08	0.08	0.26	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	277	1566		133	1279	572	139	147	125	434	436	409
v/s Ratio Prot	c0.11	0.29		0.03	c0.29		c0.02	0.01		c0.22	0.21	
v/s Ratio Perm						0.18			0.00			0.04
v/c Ratio	0.72	0.66		0.41	0.79	0.51	0.22	0.18	0.04	0.83	0.81	0.15
Uniform Delay, d1	33.4	18.3		36.8	23.9	20.9	36.0	35.9	35.5	29.3	29.1	23.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.6	1.1		2.1	3.5	0.7	0.8	0.6	0.1	12.9	11.1	0.2
Delay (s)	42.0	19.4		38.9	27.3	21.6	36.8	36.5	35.7	42.2	40.2	24.1
Level of Service	D	B		D	C	C	D	D	D	D	D	C
Approach Delay (s)		23.0			25.8			36.1			36.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	83.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

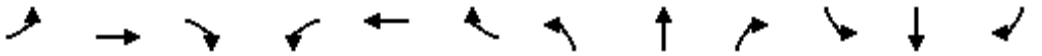
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1006	157	0	1347	1037	0	0	0	743	0	213
Future Volume (veh/h)	0	1006	157	0	1347	1037	0	0	0	743	0	213
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1082	0	0	1497	0				766	0	220
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90				0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2142	938	0	2173	938				998	0	459
Arrive On Green	0.00	0.61	0.00	0.00	0.61	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1082	0	0	1497	0				766	0	220
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	8.0	0.0	0.0	13.0	0.0				9.3	0.0	5.3
Cycle Q Clear(g_c), s	0.0	8.0	0.0	0.0	13.0	0.0				9.3	0.0	5.3
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2142	938	0	2173	938				998	0	459
V/C Ratio(X)	0.00	0.51	0.00	0.00	0.69	0.00				0.77	0.00	0.48
Avail Cap(c_a), veh/h	0	2440	1071	0	2470	1071				1021	0	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.1	0.0	0.0	5.9	0.0				14.9	0.0	13.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.7	0.0				3.5	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.8	0.0	0.0	6.2	0.0				4.8	0.0	2.4
LnGrp Delay(d),s/veh	0.0	5.3	0.0	0.0	6.6	0.0				18.4	0.0	14.2
LnGrp LOS		A			A					B		B
Approach Vol, veh/h		1082			1497						986	
Approach Delay, s/veh		5.3			6.6						17.4	
Approach LOS		A			A						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		30.1		15.7		30.1		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		30.0		12.0		30.0		
Max Q Clear Time (g_c+I1), s		10.0		11.3		15.0		
Green Ext Time (p_c), s		13.9		0.4		11.2		

Intersection Summary	
HCM 2010 Ctrl Delay	9.2
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	199	938	0	0	2003	327	0	0	509	0	0	378
Future Volume (vph)	199	938	0	0	2003	327	0	0	509	0	0	378
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.95			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	3539			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	3539			5085	1583			1611			2787
Peak-hour factor, PHF	0.83	0.83	0.83	0.92	0.92	0.92	0.90	0.90	0.90	0.93	0.93	0.93
Adj. Flow (vph)	240	1130	0	0	2177	355	0	0	566	0	0	406
RTOR Reduction (vph)	0	0	0	0	0	149	0	0	0	0	0	357
Lane Group Flow (vph)	240	1130	0	0	2177	206	0	0	566	0	0	49
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	11.6	52.3			37.7	37.7			68.5			6.2
Effective Green, g (s)	13.6	54.3			39.7	39.7			68.5			8.2
Actuated g/C Ratio	0.20	0.79			0.58	0.58			1.00			0.12
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	351	2805			2947	917			1611			333
v/s Ratio Prot	c0.14	0.32			c0.43							
v/s Ratio Perm						0.13			c0.35			0.02
v/c Ratio	0.68	0.40			0.74	0.22			0.35			0.15
Uniform Delay, d1	25.5	2.2			10.6	7.0			0.0			27.0
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	5.4	0.1			1.0	0.1			0.6			0.2
Delay (s)	30.9	2.3			11.6	7.1			0.6			27.2
Level of Service	C	A			B	A			A			C
Approach Delay (s)		7.3			11.0			0.6			27.2	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	9.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	395	1495	169	254	1569	154	291	446	127	113	404	434
Future Volume (veh/h)	395	1495	169	254	1569	154	291	446	127	113	404	434
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	444	1680	190	262	1618	159	327	501	143	133	475	511
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.97	0.97	0.97	0.89	0.89	0.89	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	565	2327	902	366	2034	633	418	732	208	231	759	592
Arrive On Green	0.16	0.46	0.45	0.11	0.40	0.40	0.12	0.27	0.26	0.07	0.21	0.21
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	2723	773	3442	3539	1583
Grp Volume(v), veh/h	444	1680	190	262	1618	159	327	325	319	133	475	511
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1726	1721	1770	1583
Q Serve(g_s), s	13.0	28.1	6.2	7.7	29.4	7.0	9.7	17.2	17.4	3.9	12.8	22.0
Cycle Q Clear(g_c), s	13.0	28.1	6.2	7.7	29.4	7.0	9.7	17.2	17.4	3.9	12.8	22.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	565	2327	902	366	2034	633	418	476	464	231	759	592
V/C Ratio(X)	0.79	0.72	0.21	0.72	0.80	0.25	0.78	0.68	0.69	0.58	0.63	0.86
Avail Cap(c_a), veh/h	755	2375	917	492	2034	633	427	476	464	427	759	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	23.0	11.0	45.3	27.7	21.0	44.7	34.3	34.5	47.5	37.4	30.4
Incr Delay (d2), s/veh	4.0	1.1	0.1	3.2	2.3	0.2	9.0	4.0	4.2	2.3	1.6	12.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	13.3	2.7	3.8	14.1	3.1	5.1	8.9	8.9	1.9	6.4	15.6
LnGrp Delay(d),s/veh	46.1	24.1	11.2	48.5	30.0	21.2	53.8	38.3	38.8	49.8	39.0	42.9
LnGrp LOS	D	C	B	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h		2314			2039			971			1119	
Approach Delay, s/veh		27.3			31.7			43.7			42.1	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	50.0	15.7	25.0	20.2	44.0	10.0	30.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	47.0	12.0	21.0	22.0	39.0	12.0	21.0
Max Q Clear Time (g_c+I1), s	9.7	30.1	11.7	24.0	15.0	31.4	5.9	19.4
Green Ext Time (p_c), s	0.4	15.9	0.1	0.0	1.2	7.6	0.2	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	33.7
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	621	269	361	1308	273	203
Future Volume (veh/h)	621	269	361	1308	273	203
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	661	286	384	1391	310	231
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1022	457	504	2266	439	814
Arrive On Green	0.29	0.27	0.28	0.64	0.25	0.25
Sat Flow, veh/h	3632	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	661	286	384	1391	310	231
Grp Sat Flow(s),veh/h/ln	1770	1583	1774	1770	1774	1583
Q Serve(g_s), s	7.3	7.0	8.8	10.4	7.1	3.7
Cycle Q Clear(g_c), s	7.3	7.0	8.8	10.4	7.1	3.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1022	457	504	2266	439	814
V/C Ratio(X)	0.65	0.63	0.76	0.61	0.71	0.28
Avail Cap(c_a), veh/h	1193	534	518	2465	558	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	13.7	14.6	4.7	15.3	6.2
Incr Delay (d2), s/veh	1.0	1.8	6.4	0.4	2.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.3	5.2	5.0	3.8	2.5
LnGrp Delay(d),s/veh	14.8	15.5	21.0	5.1	18.2	6.3
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	947			1775	541	
Approach Delay, s/veh	15.0			8.6	13.1	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.6	14.9		14.0		30.5		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	12.0	13.0		13.0		29.0		
Max Q Clear Time (g_c+I1), s	10.8	9.3		9.1		12.4		
Green Ext Time (p_c), s	0.9	1.6		0.9		8.1		

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	739	271	719	1090	0	741
Future Volume (vph)	739	271	719	1090	0	741
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.95	0.95	0.92	0.92	0.90	0.90
Adj. Flow (vph)	778	285	782	1185	0	823
RTOR Reduction (vph)	0	208	0	0	0	425
Lane Group Flow (vph)	778	77	782	1185	0	398
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	13.7	13.7	16.1	33.8		15.3
Effective Green, g (s)	15.7	15.7	17.1	35.8		16.3
Actuated g/C Ratio	0.27	0.27	0.29	0.62		0.28
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1374	427	1010	2180		451
v/s Ratio Prot	c0.15		c0.23	0.33		
v/s Ratio Perm		0.05				c0.25
v/c Ratio	0.57	0.18	0.77	0.54		0.88
Uniform Delay, d1	18.3	16.3	18.7	6.4		20.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.5	0.2	3.8	0.3		18.0
Delay (s)	18.8	16.5	22.5	6.7		38.0
Level of Service	B	B	C	A		D
Approach Delay (s)	18.2			13.0	38.0	
Approach LOS	B			B	D	

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	58.1	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	233	1009	240	0	1978	354	270	682	445	299	0	527
Future Volume (vph)	233	1009	240	0	1978	354	270	682	445	299	0	527
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.89	0.89	0.89	0.91	0.91	0.91
Adj. Flow (vph)	253	1097	261	0	2222	398	303	766	500	329	0	579
RTOR Reduction (vph)	0	0	113	0	0	0	0	0	0	0	0	31
Lane Group Flow (vph)	253	1097	148	0	2222	398	303	766	500	329	0	548
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	11.8	60.7	60.7		44.9	108.5	12.0	23.9	108.5	11.9		39.6
Effective Green, g (s)	13.3	62.2	61.7		46.4	108.5	13.5	25.4	108.5	13.4		41.1
Actuated g/C Ratio	0.12	0.57	0.57		0.43	1.00	0.12	0.23	1.00	0.12		0.38
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	420	2028	900		2740	1583	220	828	1583	423		599
v/s Ratio Prot	0.07	0.31			c0.35		c0.17	c0.22		0.10		c0.35
v/s Ratio Perm			0.09			0.25			c0.32			
v/c Ratio	0.60	0.54	0.16		0.81	0.25	1.38	0.93	0.32	0.78		0.91
Uniform Delay, d1	45.1	14.3	11.1		27.2	0.0	47.5	40.6	0.0	46.1		32.0
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.4	0.3	0.1		1.9	0.4	195.7	15.9	0.5	8.7		18.6
Delay (s)	47.5	14.6	11.2		29.1	0.4	243.2	56.5	0.5	54.8		50.6
Level of Service	D	B	B		C	A	F	E	A	D		D
Approach Delay (s)		19.2			24.8			74.7			52.2	
Approach LOS		B			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	38.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	108.5	Sum of lost time (s)	10.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	203	1145	345	121	1608	166	449	390	152	149	316	332
Future Volume (vph)	203	1145	345	121	1608	166	449	390	152	149	316	332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.84	0.84	0.84	0.92	0.92	0.92	0.80	0.80	0.80
Adj. Flow (vph)	221	1245	375	144	1914	198	488	424	165	186	395	415
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	221	1245	375	144	1914	198	488	424	165	186	395	415
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	9.4	21.7	65.2	6.7	19.0	65.2	10.8	12.1	65.2	8.7	10.0	65.2
Effective Green, g (s)	10.4	24.2	65.2	7.7	21.5	65.2	11.8	14.6	65.2	9.7	12.5	65.2
Actuated g/C Ratio	0.16	0.37	1.00	0.12	0.33	1.00	0.18	0.22	1.00	0.15	0.19	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	547	1887	1583	405	2113	1583	903	792	1583	510	974	1583
v/s Ratio Prot	c0.06	0.24		0.04	c0.30		0.10	c0.12		0.05	c0.08	
v/s Ratio Perm			0.24			0.13			0.10			c0.26
v/c Ratio	0.40	0.66	0.24	0.36	0.91	0.13	0.54	0.54	0.10	0.36	0.41	0.26
Uniform Delay, d1	24.6	17.1	0.0	26.5	20.9	0.0	24.2	22.3	0.0	25.0	23.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.8	0.4	0.5	6.0	0.2	0.7	0.7	0.1	0.4	0.3	0.4
Delay (s)	25.1	17.9	0.4	27.0	26.9	0.2	24.9	23.0	0.1	25.4	23.4	0.4
Level of Service	C	B	A	C	C	A	C	C	A	C	C	A
Approach Delay (s)		15.2			24.6			20.4			14.2	
Approach LOS		B			C			C			B	

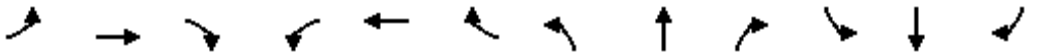
Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.2	Sum of lost time (s)	9.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	423	1293	478	219	1433	812	517	941	72	560	561	355
Future Volume (veh/h)	423	1293	478	219	1433	812	517	941	72	560	561	355
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	441	1347	0	233	1524	0	568	1034	0	659	660	0
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	3	2	1
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.91	0.91	0.91	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	614	1803	518	423	1521	430	665	1279	366	914	852	349
Arrive On Green	0.18	0.35	0.00	0.12	0.30	0.00	0.19	0.25	0.00	0.18	0.24	0.00
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	441	1347	0	233	1524	0	568	1034	0	659	660	0
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	8.9	17.1	0.0	4.7	22.0	0.0	11.7	14.1	0.0	9.1	12.8	0.0
Cycle Q Clear(g_c), s	8.9	17.1	0.0	4.7	22.0	0.0	11.7	14.1	0.0	9.1	12.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	614	1803	518	423	1521	430	665	1279	366	914	852	349
V/C Ratio(X)	0.72	0.75	0.00	0.55	1.00	0.00	0.85	0.81	0.00	0.72	0.77	0.00
Avail Cap(c_a), veh/h	655	1803	518	655	1521	430	665	1279	366	952	890	366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.5	20.8	0.0	30.4	25.8	0.0	28.7	25.9	0.0	28.3	26.1	0.0
Incr Delay (d2), s/veh	3.5	1.8	0.0	1.1	23.6	0.0	10.5	4.0	0.0	2.6	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	8.3	0.0	2.3	13.5	0.0	6.5	7.0	0.0	4.4	6.7	0.0
LnGrp Delay(d),s/veh	32.0	22.6	0.0	31.5	49.4	0.0	39.1	29.9	0.0	30.9	30.2	0.0
LnGrp LOS	C	C		C	F		D	C		C	C	
Approach Vol, veh/h		1788			1757			1602			1319	
Approach Delay, s/veh		24.9			47.0			33.1			30.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	20.0	11.0	27.1	16.2	19.2	15.1	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	16.0	12.0	19.0	12.0	16.0	12.0	19.0
Max Q Clear Time (g_c+I1), s	11.1	16.1	6.7	19.1	13.7	14.8	10.9	24.0
Green Ext Time (p_c), s	0.3	0.0	0.4	0.0	0.0	0.4	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	414	8	215	11	13	8	230	1335	7	4	966	428
Future Volume (vph)	414	8	215	11	13	8	230	1335	7	4	966	428
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1689	1583		1820	1583	3433	3536		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1689	1583		1820	1583	3433	3536		1770	3539	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.80	0.80	0.80	0.93	0.93	0.93	0.97	0.97	0.97
Adj. Flow (vph)	440	9	229	14	16	10	247	1435	8	4	996	441
RTOR Reduction (vph)	0	0	150	0	0	9	0	0	0	0	0	228
Lane Group Flow (vph)	224	225	79	0	30	1	247	1443	0	4	996	213
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	11.8	11.8	21.8		3.8	3.8	10.0	36.8		1.0	27.8	27.8
Effective Green, g (s)	12.8	12.8	23.8		4.8	4.8	11.0	39.3		2.0	30.3	30.3
Actuated g/C Ratio	0.18	0.18	0.34		0.07	0.07	0.16	0.57		0.03	0.44	0.44
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	310	311	611		125	109	544	2002		51	1545	691
v/s Ratio Prot	c0.13	0.13	0.02		c0.02		c0.07	c0.41		0.00	0.28	
v/s Ratio Perm			0.03			0.00						0.13
v/c Ratio	0.72	0.72	0.13		0.24	0.01	0.45	0.72		0.08	0.64	0.31
Uniform Delay, d1	26.6	26.6	15.7		30.6	30.1	26.5	11.0		32.8	15.3	12.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.1	8.1	0.1		1.0	0.0	0.6	1.3		0.7	0.9	0.3
Delay (s)	34.7	34.7	15.8		31.6	30.1	27.1	12.3		33.5	16.3	13.0
Level of Service	C	C	B		C	C	C	B		C	B	B
Approach Delay (s)		28.3			31.2			14.5			15.3	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	69.4	Sum of lost time (s)	10.5
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	599	1181	637	303	544	716
Future Volume (vph)	599	1181	637	303	544	716
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.93	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3263	1441	3539	1583	3433	3539
Flt Permitted	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3263	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.95	0.95
Adj. Flow (vph)	697	1373	685	326	573	754
RTOR Reduction (vph)	350	426	0	231	0	0
Lane Group Flow (vph)	1034	260	685	95	573	754
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	12.0	12.0	11.6	11.6	12.3	27.9
Effective Green, g (s)	13.0	14.3	13.9	13.9	14.6	28.9
Actuated g/C Ratio	0.27	0.30	0.29	0.29	0.30	0.60
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	885	430	1026	459	1046	2135
v/s Ratio Prot	c0.32		c0.19		c0.17	0.21
v/s Ratio Perm		0.18		0.06		
v/c Ratio	1.17	0.60	0.67	0.21	0.55	0.35
Uniform Delay, d1	17.4	14.4	15.0	12.8	13.9	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	87.7	2.4	1.7	0.2	0.6	0.1
Delay (s)	105.2	16.8	16.6	13.1	14.5	4.9
Level of Service	F	B	B	B	B	A
Approach Delay (s)	75.9		15.5			9.0
Approach LOS	E		B			A

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	47.9	Sum of lost time (s)	6.4
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	505	597	65	151	572	182	238	696	149	107	395	315
Future Volume (vph)	505	597	65	151	572	182	238	696	149	107	395	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7		3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3446		1832	3663	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	3446		1832	3663	1639
Peak-hour factor, PHF	0.91	0.91	0.91	0.95	0.95	0.95	0.82	0.82	0.82	0.87	0.87	0.87
Adj. Flow (vph)	555	656	71	159	602	192	290	849	182	123	454	362
RTOR Reduction (vph)	0	0	55	0	0	153	0	23	0	0	0	274
Lane Group Flow (vph)	555	656	16	159	602	39	290	1008	0	123	454	88
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6						4
Actuated Green, G (s)	12.2	14.1	14.1	10.5	12.4	12.4	17.3	24.8		8.1	15.6	15.6
Effective Green, g (s)	13.2	16.1	16.1	11.5	15.1	15.1	18.3	27.1		9.1	17.9	17.9
Actuated g/C Ratio	0.18	0.22	0.22	0.16	0.21	0.21	0.25	0.37		0.12	0.24	0.24
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	317	775	346	276	727	325	440	1270		226	892	399
v/s Ratio Prot	c0.31	c0.19		0.09	0.17		c0.16	c0.29		0.07	0.12	
v/s Ratio Perm			0.01			0.02						0.05
v/c Ratio	1.75	0.85	0.04	0.58	0.83	0.12	0.66	0.79		0.54	0.51	0.22
Uniform Delay, d1	30.1	27.5	22.6	28.7	28.0	23.8	24.8	20.7		30.3	24.0	22.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	350.6	8.5	0.1	2.9	7.7	0.2	3.6	3.5		2.7	0.5	0.3
Delay (s)	380.8	36.0	22.7	31.6	35.7	24.0	28.4	24.2		32.9	24.5	22.5
Level of Service	F	D	C	C	D	C	C	C		C	C	C
Approach Delay (s)		184.5			32.6			25.1			24.8	
Approach LOS		F			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	72.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	73.5	Sum of lost time (s)	9.7
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	269	6	30	28	11	27	71	641	0	34	944	129
Future Volume (vph)	269	6	30	28	11	27	71	641	0	34	944	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.97			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1654			1799	1583	1770	3539		1770	3475	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1654			1799	1583	1770	3539		1770	3475	
Peak-hour factor, PHF	0.84	0.84	0.84	0.75	0.75	0.75	0.97	0.97	0.97	0.89	0.89	0.89
Adj. Flow (vph)	320	7	36	37	15	36	73	661	0	38	1061	145
RTOR Reduction (vph)	0	11	0	0	0	32	0	0	0	0	11	0
Lane Group Flow (vph)	182	170	0	0	52	4	73	661	0	38	1195	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	11.1	11.1			5.9	5.9	6.6	32.0		4.3	29.7	
Effective Green, g (s)	12.1	12.1			6.9	6.9	7.6	34.0		5.3	31.7	
Actuated g/C Ratio	0.17	0.17			0.10	0.10	0.11	0.49		0.08	0.46	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	293	288			179	157	194	1736		135	1589	
v/s Ratio Prot	c0.11	0.10			c0.03		c0.04	0.19		0.02	c0.34	
v/s Ratio Perm						0.00						
v/c Ratio	0.62	0.59			0.29	0.02	0.38	0.38		0.28	0.75	
Uniform Delay, d1	26.5	26.3			28.9	28.2	28.6	11.1		30.2	15.5	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.1	3.2			0.9	0.1	1.2	0.1		1.1	2.1	
Delay (s)	30.5	29.6			29.8	28.2	29.9	11.2		31.3	17.6	
Level of Service	C	C			C	C	C	B		C	B	
Approach Delay (s)		30.0			29.2			13.1			18.0	
Approach LOS		C			C			B			B	

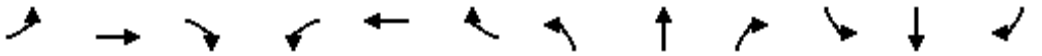
Intersection Summary			
HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	69.3	Sum of lost time (s)	11.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	169	21	86	119	9	38	133	547	8	28	729	36
Future Volume (vph)	169	21	86	119	9	38	133	547	8	28	729	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1780	1583	1770	3531		1770	3514	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1780	1583	1770	3531		1770	3514	
Peak-hour factor, PHF	0.85	0.85	0.85	0.88	0.88	0.88	0.92	0.92	0.92	0.87	0.87	0.87
Adj. Flow (vph)	199	25	101	135	10	43	145	595	9	32	838	41
RTOR Reduction (vph)	0	0	81	0	0	37	0	1	0	0	5	0
Lane Group Flow (vph)	0	224	20	0	145	6	145	603	0	32	874	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		11.3	11.3		7.7	7.7	7.8	25.5		2.8	20.5	
Effective Green, g (s)		12.3	12.3		8.7	8.7	8.8	27.5		3.8	22.5	
Actuated g/C Ratio		0.19	0.19		0.14	0.14	0.14	0.43		0.06	0.36	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		346	307		244	217	246	1534		106	1249	
v/s Ratio Prot		c0.13			c0.08		c0.08	0.17		0.02	c0.25	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.65	0.06		0.59	0.03	0.59	0.39		0.30	0.70	
Uniform Delay, d1		23.5	20.8		25.6	23.6	25.6	12.2		28.5	17.5	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.1	0.1		3.9	0.1	3.6	0.2		1.6	1.8	
Delay (s)		27.6	20.9		29.5	23.7	29.1	12.4		30.1	19.3	
Level of Service		C	C		C	C	C	B		C	B	
Approach Delay (s)		25.5			28.2			15.6			19.7	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	63.3	Sum of lost time (s)	11.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	910	9	63	1202	440	44	48	70	653	8	251
Future Volume (vph)	185	910	9	63	1202	440	44	48	70	653	8	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3534		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3534		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.97	0.97	0.97	0.78	0.78	0.78	0.92	0.92	0.92
Adj. Flow (vph)	210	1034	10	65	1239	454	56	62	90	710	9	273
RTOR Reduction (vph)	0	1	0	0	0	179	0	0	82	0	0	203
Lane Group Flow (vph)	210	1043	0	65	1239	275	56	62	8	362	357	70
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	12.3	33.7		7.0	28.4	28.4	6.8	6.8	6.8	20.7	20.7	20.7
Effective Green, g (s)	13.3	34.7		8.0	29.4	29.4	7.8	7.8	7.8	21.7	21.7	21.7
Actuated g/C Ratio	0.16	0.41		0.10	0.35	0.35	0.09	0.09	0.09	0.26	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	279	1456		168	1235	552	163	172	146	433	434	407
v/s Ratio Prot	c0.12	0.30		0.04	c0.35		0.03	c0.03		c0.22	0.21	
v/s Ratio Perm						0.17			0.01			0.04
v/c Ratio	0.75	0.72		0.39	1.00	0.50	0.34	0.36	0.06	0.84	0.82	0.17
Uniform Delay, d1	33.9	20.6		35.8	27.4	21.6	35.8	35.9	34.8	29.6	29.4	24.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.9	1.7		1.5	26.4	0.7	1.3	1.3	0.2	13.1	11.9	0.2
Delay (s)	44.8	22.4		37.3	53.8	22.3	37.1	37.2	35.0	42.7	41.4	24.5
Level of Service	D	C		D	D	C	D	D	D	D	D	C
Approach Delay (s)		26.1			45.0			36.2			37.2	
Approach LOS		C			D			D			D	

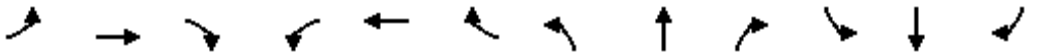
Intersection Summary			
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	84.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	961	149	0	1409	1289	0	0	0	849	0	242
Future Volume (veh/h)	0	961	149	0	1409	1289	0	0	0	849	0	242
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1001	0	0	1548	0				894	0	255
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.96	0.96	0.96	0.91	0.91	0.91				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2139	936	0	2169	936				1007	0	463
Arrive On Green	0.00	0.60	0.00	0.00	0.61	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1001	0	0	1548	0				894	0	255
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	7.3	0.0	0.0	14.0	0.0				11.5	0.0	6.3
Cycle Q Clear(g_c), s	0.0	7.3	0.0	0.0	14.0	0.0				11.5	0.0	6.3
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2139	936	0	2169	936				1007	0	463
V/C Ratio(X)	0.00	0.47	0.00	0.00	0.71	0.00				0.89	0.00	0.55
Avail Cap(c_a), veh/h	0	2405	1056	0	2436	1056				1007	0	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.1	0.0	0.0	6.2	0.0				15.7	0.0	13.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.9	0.0				9.8	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	0.0	0.0	6.9	0.0				6.8	0.0	2.9
LnGrp Delay(d),s/veh	0.0	5.2	0.0	0.0	7.1	0.0				25.5	0.0	15.3
LnGrp LOS		A			A					C		B
Approach Vol, veh/h		1001			1548						1149	
Approach Delay, s/veh		5.2			7.1						23.2	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		30.5		16.0		30.5		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		30.0		12.0		30.0		
Max Q Clear Time (g_c+I1), s		9.3		13.5		16.0		
Green Ext Time (p_c), s		14.1		0.0		10.5		

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	1004	0	0	2342	258	0	0	1258	0	0	343
Future Volume (vph)	173	1004	0	0	2342	258	0	0	1258	0	0	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.95			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	3539			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	3539			5085	1583			1611			2787
Peak-hour factor, PHF	0.87	0.87	0.87	0.94	0.94	0.94	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	199	1154	0	0	2491	274	0	0	1398	0	0	404
RTOR Reduction (vph)	0	0	0	0	0	107	0	0	0	0	0	356
Lane Group Flow (vph)	199	1154	0	0	2491	167	0	0	1398	0	0	48
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	11.1	53.1			39.0	39.0			69.3			6.2
Effective Green, g (s)	13.1	55.1			41.0	41.0			69.3			8.2
Actuated g/C Ratio	0.19	0.80			0.59	0.59			1.00			0.12
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	334	2813			3008	936			1611			329
v/s Ratio Prot	0.11	0.33			0.49							
v/s Ratio Perm						0.11			c0.87			0.02
v/c Ratio	0.60	0.41			0.83	0.18			0.87			0.15
Uniform Delay, d1	25.7	2.2			11.3	6.5			0.0			27.4
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	2.8	0.1			2.0	0.1			6.6			0.2
Delay (s)	28.5	2.3			13.3	6.6			6.6			27.6
Level of Service	C	A			B	A			A			C
Approach Delay (s)		6.1			12.7			6.6			27.6	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	69.3	Sum of lost time (s)	9.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	381	1496	169	221	1610	142	349	461	129	132	432	587
Future Volume (veh/h)	381	1496	169	221	1610	142	349	461	129	132	432	587
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	401	1575	178	246	1789	158	406	536	150	142	465	631
Adj No. of Lanes	2	3	1	2	3	1	2	2	0	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	524	2319	905	352	2064	643	430	741	207	241	765	576
Arrive On Green	0.15	0.46	0.45	0.10	0.41	0.41	0.12	0.27	0.27	0.07	0.22	0.21
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	2735	762	3442	3539	1583
Grp Volume(v), veh/h	401	1575	178	246	1789	158	406	346	340	142	465	631
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1770	1728	1721	1770	1583
Q Serve(g_s), s	11.6	25.4	5.7	7.2	33.6	6.9	12.2	18.4	18.6	4.2	12.3	22.0
Cycle Q Clear(g_c), s	11.6	25.4	5.7	7.2	33.6	6.9	12.2	18.4	18.6	4.2	12.3	22.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	524	2319	905	352	2064	643	430	479	468	241	765	576
V/C Ratio(X)	0.77	0.68	0.20	0.70	0.87	0.25	0.94	0.72	0.73	0.59	0.61	1.10
Avail Cap(c_a), veh/h	760	2393	928	496	2064	643	430	479	468	430	765	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	22.3	10.8	45.2	28.3	20.4	45.2	34.4	34.6	47.0	36.8	33.1
Incr Delay (d2), s/veh	2.8	0.8	0.1	2.5	4.2	0.2	29.8	5.3	5.6	2.3	1.4	66.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	12.0	2.5	3.5	16.4	3.0	7.6	9.7	9.6	2.1	6.2	27.1
LnGrp Delay(d),s/veh	45.2	23.1	10.9	47.7	32.5	20.6	75.0	39.7	40.1	49.2	38.2	99.6
LnGrp LOS	D	C	B	D	C	C	E	D	D	D	D	F
Approach Vol, veh/h		2154			2193			1092			1238	
Approach Delay, s/veh		26.2			33.4			52.9			70.8	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	49.5	16.0	25.0	18.9	44.3	10.3	30.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	47.0	12.0	21.0	22.0	39.0	12.0	21.0
Max Q Clear Time (g_c+I1), s	9.2	27.4	14.2	24.0	13.6	35.6	6.2	20.6
Green Ext Time (p_c), s	0.4	18.1	0.0	0.0	1.2	3.4	0.2	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	41.2
HCM 2010 LOS	D

Appendix D

Analysis Worksheets for
CIP Cumulative (2035) Conditions

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	952	291	368	857	139	276
Future Volume (veh/h)	952	291	368	857	139	276
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1035	316	400	932	151	300
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1326	618	504	2585	314	868
Arrive On Green	0.39	0.37	0.28	0.73	0.18	0.18
Sat Flow, veh/h	3487	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	1035	316	400	932	151	300
Grp Sat Flow(s),veh/h/ln	1699	1583	1774	1770	1774	1583
Q Serve(g_s), s	14.4	8.2	11.2	5.2	4.1	5.7
Cycle Q Clear(g_c), s	14.4	8.2	11.2	5.2	4.1	5.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1326	618	504	2585	314	868
V/C Ratio(X)	0.78	0.51	0.79	0.36	0.48	0.35
Avail Cap(c_a), veh/h	1453	677	528	2764	429	971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	12.5	17.8	2.7	19.9	6.8
Incr Delay (d2), s/veh	2.6	0.7	7.8	0.1	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	3.7	6.5	2.5	2.1	4.4
LnGrp Delay(d),s/veh	17.0	13.1	25.6	2.7	21.1	7.0
LnGrp LOS	B	B	C	A	C	A
Approach Vol, veh/h	1351			1332	451	
Approach Delay, s/veh	16.1			9.6	11.7	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.3	23.0		12.5		41.3		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	15.0	21.0		12.0		40.0		
Max Q Clear Time (g_c+I1), s	13.2	16.4		7.7		7.2		
Green Ext Time (p_c), s	1.1	2.6		0.8		6.8		

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	959	282	592	1253	0	1139
Future Volume (vph)	959	282	592	1253	0	1139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1042	307	643	1362	0	1238
RTOR Reduction (vph)	0	235	0	0	0	328
Lane Group Flow (vph)	1042	72	643	1362	0	910
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	12.0	12.0	12.0	28.0		23.0
Effective Green, g (s)	14.0	14.0	13.0	30.0		24.0
Actuated g/C Ratio	0.23	0.23	0.22	0.50		0.40
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1186	369	743	1769		644
v/s Ratio Prot	c0.20		0.19	c0.38		
v/s Ratio Perm		0.05				c0.57
v/c Ratio	0.88	0.19	0.87	0.77		1.41
Uniform Delay, d1	22.2	18.5	22.7	12.2		18.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	7.6	0.3	10.3	2.1		195.3
Delay (s)	29.8	18.7	33.0	14.3		213.3
Level of Service	C	B	C	B		F
Approach Delay (s)	27.3			20.3	213.3	
Approach LOS	C			C	F	

Intersection Summary			
HCM 2000 Control Delay	74.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	200	1664	231	0	716	1115	156	375	708	92	0	361
Future Volume (vph)	200	1664	231	0	716	1115	156	375	708	92	0	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	1809	251	0	778	1212	170	408	770	100	0	392
RTOR Reduction (vph)	0	0	116	0	0	0	0	0	0	0	0	87
Lane Group Flow (vph)	217	1809	135	0	778	1212	170	408	770	100	0	305
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	9.9	38.2	38.2		24.3	72.8	10.7	16.5	72.8	6.1		25.8
Effective Green, g (s)	11.4	39.7	39.2		25.8	72.8	12.2	18.0	72.8	7.6		27.3
Actuated g/C Ratio	0.16	0.55	0.54		0.35	1.00	0.17	0.25	1.00	0.10		0.38
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	537	1929	852		2270	1583	296	875	1583	358		593
v/s Ratio Prot	0.06	c0.51			0.12		0.10	0.12		0.03		0.19
v/s Ratio Perm			0.09			c0.77			0.49			
v/c Ratio	0.40	0.94	0.16		0.34	0.77	0.57	0.47	0.49	0.28		0.51
Uniform Delay, d1	27.6	15.4	8.5		17.3	0.0	27.9	23.3	0.0	30.1		17.6
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.5	9.4	0.1		0.1	3.6	2.7	0.4	1.1	0.4		0.8
Delay (s)	28.1	24.8	8.6		17.4	3.6	30.6	23.7	1.1	30.5		18.4
Level of Service	C	C	A		B	A	C	C	A	C		B
Approach Delay (s)		23.3			9.0			11.6			20.8	
Approach LOS		C			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	72.8	Sum of lost time (s)	10.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	189	1958	324	70	1763	32	163	266	144	181	299	157
Future Volume (vph)	189	1958	324	70	1763	32	163	266	144	181	299	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	205	2128	352	76	1916	35	177	289	157	197	325	171
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	205	2128	352	76	1916	35	177	289	157	197	325	171
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	9.5	31.9	72.2	5.6	28.0	72.2	9.0	9.4	72.2	9.3	9.7	72.2
Effective Green, g (s)	10.5	34.4	72.2	6.6	30.5	72.2	10.0	11.9	72.2	10.3	12.2	72.2
Actuated g/C Ratio	0.15	0.48	1.00	0.09	0.42	1.00	0.14	0.16	1.00	0.14	0.17	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	499	2422	1583	313	2706	1583	691	838	1583	489	859	1583
v/s Ratio Prot	c0.06	c0.42		0.02	0.30		0.04	c0.06		c0.06	0.06	
v/s Ratio Perm			c0.22			0.02			0.10			0.11
v/c Ratio	0.41	0.88	0.22	0.24	0.71	0.02	0.26	0.34	0.10	0.40	0.38	0.11
Uniform Delay, d1	28.0	17.0	0.0	30.5	17.2	0.0	27.8	26.7	0.0	28.2	26.6	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	4.0	0.3	0.4	0.9	0.0	0.2	0.2	0.1	0.5	0.3	0.1
Delay (s)	28.6	21.0	0.3	30.9	18.0	0.0	28.0	26.9	0.1	28.7	26.9	0.1
Level of Service	C	C	A	C	B	A	C	C	A	C	C	A
Approach Delay (s)		18.9			18.2			20.5			20.8	
Approach LOS		B			B			C			C	

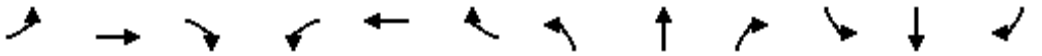
Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	72.2	Sum of lost time (s)	9.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	304	1473	799	83	1566	392	904	538	51	940	803	285
Future Volume (veh/h)	304	1473	799	83	1566	392	904	538	51	940	803	285
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	330	1601	0	90	1702	0	983	585	0	1022	873	0
Adj No. of Lanes	2	4	1	2	4	1	2	3	1	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	472	2152	496	229	1662	375	970	1356	396	1289	858	357
Arrive On Green	0.14	0.34	0.00	0.07	0.26	0.00	0.28	0.27	0.00	0.26	0.24	0.00
Sat Flow, veh/h	3304	6408	1583	3442	6408	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	330	1601	0	90	1702	0	983	585	0	1022	873	0
Grp Sat Flow(s),veh/h/ln	1652	1602	1583	1721	1602	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	8.4	19.6	0.0	2.2	23.0	0.0	25.0	8.5	0.0	16.9	21.5	0.0
Cycle Q Clear(g_c), s	8.4	19.6	0.0	2.2	23.0	0.0	25.0	8.5	0.0	16.9	21.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	472	2152	496	229	1662	375	970	1356	396	1289	858	357
V/C Ratio(X)	0.70	0.74	0.00	0.39	1.02	0.00	1.01	0.43	0.00	0.79	1.02	0.00
Avail Cap(c_a), veh/h	522	2152	496	543	1662	375	970	1356	396	1411	858	357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	26.1	0.0	39.7	32.8	0.0	31.8	26.9	0.0	30.7	33.6	0.0
Incr Delay (d2), s/veh	3.7	1.4	0.0	1.1	28.4	0.0	32.1	0.2	0.0	2.9	35.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.9	0.0	1.1	13.3	0.0	16.1	4.0	0.0	8.1	14.6	0.0
LnGrp Delay(d),s/veh	39.8	27.5	0.0	40.8	61.2	0.0	64.0	27.2	0.0	33.6	68.7	0.0
LnGrp LOS	D	C		D	F		F	C		C	F	
Approach Vol, veh/h		1931			1792			1568			1895	
Approach Delay, s/veh		29.6			60.2			50.2			49.8	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.8	25.2	7.9	30.8	27.0	23.0	14.7	24.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	19.0	12.0	20.0	23.0	19.0	12.0	20.0
Max Q Clear Time (g_c+I1), s	18.9	10.5	4.2	21.6	27.0	23.5	10.4	25.0
Green Ext Time (p_c), s	2.0	4.8	0.1	0.0	0.0	0.0	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.1
HCM 2010 LOS	D



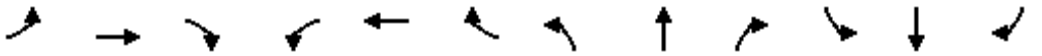
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	313	0	384	3	0	18	113	1190	8	7	1398	329
Future Volume (vph)	313	0	384	3	0	18	113	1190	8	7	1398	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.95	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1770	1583	3433	3536		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.95	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1770	1583	3433	3536		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	340	0	417	3	0	20	123	1293	9	8	1520	358
RTOR Reduction (vph)	0	0	190	0	0	19	0	0	0	0	0	97
Lane Group Flow (vph)	170	170	227	0	3	1	123	1302	0	8	1520	261
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	11.0	11.0	19.4		2.1	2.1	8.4	47.2		1.2	40.0	40.0
Effective Green, g (s)	12.0	12.0	21.4		3.1	3.1	9.4	49.7		2.2	42.5	42.5
Actuated g/C Ratio	0.15	0.15	0.28		0.04	0.04	0.12	0.64		0.03	0.55	0.55
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	260	260	498		70	63	416	2267		50	1940	868
v/s Ratio Prot	c0.10	0.10	c0.06		c0.00		0.04	0.37		0.00	c0.43	
v/s Ratio Perm			0.09			0.00						0.16
v/c Ratio	0.65	0.65	0.46		0.04	0.01	0.30	0.57		0.16	0.78	0.30
Uniform Delay, d1	30.8	30.8	23.2		35.8	35.7	31.0	7.9		36.7	13.9	9.5
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.8	5.8	0.7		0.3	0.1	0.4	0.4		1.5	2.1	0.2
Delay (s)	36.6	36.6	23.9		36.0	35.8	31.4	8.2		38.3	16.0	9.7
Level of Service	D	D	C		D	D	C	A		D	B	A
Approach Delay (s)		29.6			35.8			10.2			14.9	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	77.5	Sum of lost time (s)	10.5
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	137	452	880	459	893	804
Future Volume (vph)	137	452	880	459	893	804
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.91	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3215	1441	3539	1583	3433	3539
Flt Permitted	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3215	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	149	491	957	499	971	874
RTOR Reduction (vph)	202	196	0	306	0	0
Lane Group Flow (vph)	193	49	957	193	971	874
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	8.8	8.8	17.0	17.0	17.6	38.6
Effective Green, g (s)	9.8	11.1	19.3	19.3	19.9	39.6
Actuated g/C Ratio	0.18	0.20	0.35	0.35	0.36	0.71
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	568	288	1232	551	1233	2529
v/s Ratio Prot	c0.06		c0.27		c0.28	0.25
v/s Ratio Perm		0.03		0.12		
v/c Ratio	0.34	0.17	0.78	0.35	0.79	0.35
Uniform Delay, d1	20.0	18.3	16.1	13.4	15.9	3.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.3	3.1	0.4	3.4	0.1
Delay (s)	20.3	18.6	19.3	13.8	19.3	3.1
Level of Service	C	B	B	B	B	A
Approach Delay (s)	19.7		17.4			11.6
Approach LOS	B		B			B

Intersection Summary			
HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	55.4	Sum of lost time (s)	6.4
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



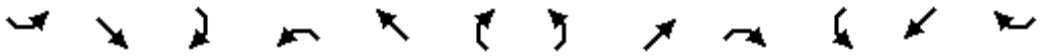
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	731	286	65	183	77	375	427	34	80	334	55
Future Volume (vph)	233	731	286	65	183	77	375	427	34	80	334	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7	3.0	3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	253	795	311	71	199	84	408	464	37	87	363	60
RTOR Reduction (vph)	0	0	214	0	0	66	0	0	25	0	0	50
Lane Group Flow (vph)	253	795	97	71	199	18	408	464	12	87	363	10
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	12.3	18.4	18.4	5.1	11.2	11.2	17.5	20.6	20.6	5.6	8.7	8.7
Effective Green, g (s)	13.3	20.4	20.4	6.1	13.9	13.9	18.5	22.9	21.6	6.6	11.0	11.0
Actuated g/C Ratio	0.20	0.31	0.31	0.09	0.21	0.21	0.28	0.35	0.33	0.10	0.17	0.17
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	358	1098	491	164	748	334	498	1772	520	356	881	274
v/s Ratio Prot	c0.14	c0.22		0.04	0.06		c0.23	0.09		0.02	c0.07	
v/s Ratio Perm			0.06			0.01			0.01			0.01
v/c Ratio	0.71	0.72	0.20	0.43	0.27	0.05	0.82	0.26	0.02	0.24	0.41	0.04
Uniform Delay, d1	24.4	20.1	16.6	28.2	21.6	20.7	22.0	15.3	14.9	27.3	24.5	22.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	2.4	0.2	1.8	0.2	0.1	10.1	0.1	0.0	0.4	0.3	0.1
Delay (s)	30.6	22.5	16.8	30.0	21.8	20.7	32.2	15.4	14.9	27.6	24.8	23.0
Level of Service	C	C	B	C	C	C	C	B	B	C	C	C
Approach Delay (s)		22.7			23.2			22.9			25.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	65.7	Sum of lost time (s)	9.7
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	329	12	18	36	20	45	12	1074	0	38	753	109
Future Volume (vph)	329	12	18	36	20	45	12	1074	0	38	753	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1673			1805	1583	1770	3539		1770	3472	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1673			1805	1583	1770	3539		1770	3472	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	358	13	20	39	22	49	13	1167	0	41	818	118
RTOR Reduction (vph)	0	6	0	0	0	43	0	0	0	0	12	0
Lane Group Flow (vph)	197	188	0	0	61	6	13	1167	0	41	924	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	10.8	10.8			6.2	6.2	1.2	26.0		2.8	27.6	
Effective Green, g (s)	11.8	11.8			7.2	7.2	2.2	28.0		3.8	29.6	
Actuated g/C Ratio	0.19	0.19			0.12	0.12	0.04	0.45		0.06	0.48	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	320	319			210	184	63	1603		108	1662	
v/s Ratio Prot	c0.12	0.11			c0.03		0.01	c0.33		c0.02	0.27	
v/s Ratio Perm						0.00						
v/c Ratio	0.62	0.59			0.29	0.03	0.21	0.73		0.38	0.56	
Uniform Delay, d1	22.9	22.8			25.0	24.2	29.0	13.8		27.9	11.4	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.5	2.9			0.8	0.1	1.6	1.7		2.2	0.4	
Delay (s)	26.4	25.7			25.7	24.3	30.6	15.5		30.1	11.8	
Level of Service	C	C			C	C	C	B		C	B	
Approach Delay (s)		26.1			25.1			15.6			12.6	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	11.0
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

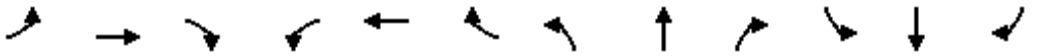
c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	76	10	27	25	1	7	41	1084	26	8	778	27
Future Volume (vph)	76	10	27	25	1	7	41	1084	26	8	778	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1777	1583	1770	3527		1770	3522	
Flt Permitted		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1777	1583	1770	3527		1770	3522	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	83	11	29	27	1	8	45	1178	28	9	846	29
RTOR Reduction (vph)	0	0	25	0	0	8	0	1	0	0	2	0
Lane Group Flow (vph)	0	94	4	0	28	0	45	1205	0	9	873	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		7.0	7.0		2.4	2.4	2.8	33.5		1.1	31.8	
Effective Green, g (s)		8.0	8.0		3.4	3.4	3.8	35.5		2.1	33.8	
Actuated g/C Ratio		0.13	0.13		0.06	0.06	0.06	0.59		0.04	0.56	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		237	211		100	89	112	2086		61	1984	
v/s Ratio Prot		c0.05			c0.02		c0.03	c0.34		0.01	0.25	
v/s Ratio Perm			0.00			0.00						
v/c Ratio		0.40	0.02		0.28	0.01	0.40	0.58		0.15	0.44	
Uniform Delay, d1		23.8	22.6		27.1	26.7	27.0	7.6		28.1	7.6	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.1	0.0		1.5	0.0	2.4	0.4		1.1	0.2	
Delay (s)		24.9	22.6		28.7	26.7	29.4	8.0		29.2	7.8	
Level of Service		C	C		C	C	C	A		C	A	
Approach Delay (s)		24.4			28.2			8.8			8.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	1344	16	70	658	916	16	8	29	645	11	204
Future Volume (vph)	223	1344	16	70	658	916	16	8	29	645	11	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1688	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1688	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	242	1461	17	76	715	996	17	9	32	701	12	222
RTOR Reduction (vph)	0	1	0	0	0	453	0	0	30	0	0	174
Lane Group Flow (vph)	242	1477	0	76	715	543	17	9	2	358	355	48
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	12.1	38.6		7.5	34.0	34.0	4.0	4.0	4.0	17.1	17.1	17.1
Effective Green, g (s)	13.1	39.6		8.5	35.0	35.0	5.0	5.0	5.0	18.1	18.1	18.1
Actuated g/C Ratio	0.16	0.48		0.10	0.42	0.42	0.06	0.06	0.06	0.22	0.22	0.22
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	278	1681		180	1488	665	106	111	95	365	367	344
v/s Ratio Prot	c0.14	c0.42		0.04	0.20		c0.01	0.00		c0.21	0.21	
v/s Ratio Perm						0.34			0.00			0.03
v/c Ratio	0.87	0.88		0.42	0.48	0.82	0.16	0.08	0.02	0.98	0.97	0.14
Uniform Delay, d1	34.2	19.6		35.0	17.5	21.3	37.1	36.9	36.8	32.4	32.3	26.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	24.3	5.6		1.6	0.2	7.7	0.7	0.3	0.1	41.8	37.9	0.2
Delay (s)	58.5	25.2		36.6	17.7	28.9	37.8	37.2	36.9	74.2	70.2	26.5
Level of Service	E	C		D	B	C	D	D	D	E	E	C
Approach Delay (s)		29.9			24.8			37.2			61.3	
Approach LOS		C			C			D			E	

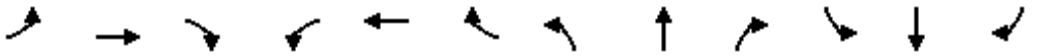
Intersection Summary			
HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	83.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1013	315	0	1476	1048	0	0	0	842	0	157
Future Volume (veh/h)	0	1013	315	0	1476	1048	0	0	0	842	0	157
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1101	0	0	1604	0				915	0	171
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2159	950	0	2183	950				1067	0	491
Arrive On Green	0.00	0.61	0.00	0.00	1.00	0.00				0.31	0.00	0.31
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1101	0	0	1604	0				915	0	171
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	10.6	0.0	0.0	0.0	0.0				15.0	0.0	5.0
Cycle Q Clear(g_c), s	0.0	10.6	0.0	0.0	0.0	0.0				15.0	0.0	5.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2159	950	0	2183	950				1067	0	491
V/C Ratio(X)	0.00	0.51	0.00	0.00	0.73	0.00				0.86	0.00	0.35
Avail Cap(c_a), veh/h	0	2159	950	0	2183	950				1067	0	491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.48	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.6	0.0	0.0	0.0	0.0				19.5	0.0	16.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	1.1	0.0				7.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	0.0	0.0	0.3	0.0				8.2	0.0	2.2
LnGrp Delay(d),s/veh	0.0	7.5	0.0	0.0	1.1	0.0				26.6	0.0	16.4
LnGrp LOS		A			A					C		B
Approach Vol, veh/h		1101			1604						1086	
Approach Delay, s/veh		7.5			1.1						25.0	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		39.0		21.0		39.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		35.0		17.0		35.0		
Max Q Clear Time (g_c+I1), s		12.6		17.0		2.0		
Green Ext Time (p_c), s		15.8		0.0		20.4		

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	1042	0	0	1543	271	0	0	1385	0	0	981
Future Volume (vph)	205	1042	0	0	1543	271	0	0	1385	0	0	981
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.86			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			5085	1583			1611			2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	223	1133	0	0	1677	295	0	0	1505	0	0	1066
RTOR Reduction (vph)	0	0	0	0	0	173	0	0	0	0	0	573
Lane Group Flow (vph)	223	1133	0	0	1677	122	0	0	1505	0	0	493
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	10.9	36.7			22.8	22.8			60.0			13.3
Effective Green, g (s)	12.9	38.7			24.8	24.8			60.0			15.3
Actuated g/C Ratio	0.22	0.65			0.41	0.41			1.00			0.26
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	380	4133			2101	654			1611			710
v/s Ratio Prot	0.13	0.18			0.33							
v/s Ratio Perm						0.08			c0.93			0.18
v/c Ratio	0.59	0.27			0.80	0.19			0.93			0.69
Uniform Delay, d1	21.2	4.6			15.4	11.2			0.0			20.2
Progression Factor	1.15	1.13			1.00	1.00			1.00			1.00
Incremental Delay, d2	1.7	0.0			3.3	0.6			11.4			3.0
Delay (s)	26.1	5.2			18.7	11.8			11.4			23.2
Level of Service	C	A			B	B			B			C
Approach Delay (s)		8.7			17.7			11.4			23.2	
Approach LOS		A			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	386	1826	216	109	1336	65	316	562	74	55	169	162
Future Volume (veh/h)	386	1826	216	109	1336	65	316	562	74	55	169	162
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	420	1985	235	118	1452	71	343	611	80	60	184	176
Adj No. of Lanes	2	3	1	2	4	0	2	2	1	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	575	2556	1001	242	2558	125	492	844	367	175	745	486
Arrive On Green	0.17	0.50	0.49	0.07	0.41	0.41	0.14	0.24	0.23	0.05	0.15	0.14
Sat Flow, veh/h	3442	5085	1583	3442	6306	308	3442	3539	1583	3442	5085	1583
Grp Volume(v), veh/h	420	1985	235	118	1106	417	343	611	80	60	184	176
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1602	1808	1721	1770	1583	1721	1695	1583
Q Serve(g_s), s	8.8	24.3	4.9	2.5	13.6	13.6	7.2	12.1	3.1	1.3	2.4	6.6
Cycle Q Clear(g_c), s	8.8	24.3	4.9	2.5	13.6	13.6	7.2	12.1	3.1	1.3	2.4	6.6
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	575	2556	1001	242	1950	734	492	844	367	175	745	486
V/C Ratio(X)	0.73	0.78	0.23	0.49	0.57	0.57	0.70	0.72	0.22	0.34	0.25	0.36
Avail Cap(c_a), veh/h	767	2556	1001	587	2080	783	677	844	367	587	967	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	15.5	6.0	34.1	17.5	17.5	31.1	26.7	23.7	35.0	28.8	20.6
Incr Delay (d2), s/veh	2.4	1.6	0.1	1.5	0.3	0.9	1.9	3.1	0.3	1.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	11.6	2.1	1.2	6.0	6.9	3.6	6.3	1.4	0.6	1.2	2.9
LnGrp Delay(d),s/veh	32.5	17.0	6.2	35.7	17.8	18.4	33.0	29.8	24.0	36.1	29.0	21.0
LnGrp LOS	C	B	A	D	B	B	C	C	C	D	C	C
Approach Vol, veh/h		2640			1641			1034			420	
Approach Delay, s/veh		18.5			19.2			30.4			26.7	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	40.3	13.9	13.7	15.7	32.9	6.9	20.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	35.0	14.0	13.0	16.0	31.0	12.0	15.0
Max Q Clear Time (g_c+I1), s	4.5	26.3	9.2	8.6	10.8	15.6	3.3	14.1
Green Ext Time (p_c), s	0.2	8.7	0.7	1.1	0.9	13.4	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.5
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	704	255	177	1051	114	822
Future Volume (veh/h)	704	255	177	1051	114	822
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	765	277	192	1142	124	893
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1091	508	435	2224	476	901
Arrive On Green	0.32	0.30	0.25	0.63	0.27	0.27
Sat Flow, veh/h	3487	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	765	277	192	1142	124	893
Grp Sat Flow(s),veh/h/ln	1699	1583	1774	1770	1774	1583
Q Serve(g_s), s	9.6	7.0	4.4	8.6	2.7	13.0
Cycle Q Clear(g_c), s	9.6	7.0	4.4	8.6	2.7	13.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1091	508	435	2224	476	901
V/C Ratio(X)	0.70	0.54	0.44	0.51	0.26	0.99
Avail Cap(c_a), veh/h	1262	588	769	3068	476	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	13.5	15.5	4.9	13.9	7.3
Incr Delay (d2), s/veh	1.5	0.9	0.7	0.2	0.3	27.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	3.2	2.2	4.2	1.3	18.6
LnGrp Delay(d),s/veh	15.9	14.4	16.2	5.1	14.2	35.1
LnGrp LOS	B	B	B	A	B	D
Approach Vol, veh/h	1042			1334	1017	
Approach Delay, s/veh	15.5			6.7	32.6	
Approach LOS	B			A	C	

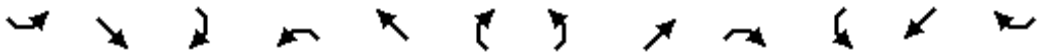
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.9	17.6		16.0		32.4		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	20.0	16.0		12.0		40.0		
Max Q Clear Time (g_c+I1), s	6.4	11.6		15.0		10.6		
Green Ext Time (p_c), s	5.3	2.0		0.0		7.0		

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	796	862	884	1208	0	1116
Future Volume (vph)	796	862	884	1208	0	1116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	865	937	961	1313	0	1213
RTOR Reduction (vph)	0	526	0	0	0	300
Lane Group Flow (vph)	865	411	961	1313	0	913
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	37.0	37.0	35.0	76.0		65.0
Effective Green, g (s)	39.0	39.0	36.0	78.0		66.0
Actuated g/C Ratio	0.26	0.26	0.24	0.52		0.44
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1322	411	823	1840		708
v/s Ratio Prot	0.17		c0.28	0.37		
v/s Ratio Perm		c0.26				c0.57
v/c Ratio	0.65	1.00	1.17	0.71		1.29
Uniform Delay, d1	49.5	55.5	57.0	27.5		42.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.2	44.0	88.4	1.3		140.7
Delay (s)	50.7	99.4	145.4	28.8		182.7
Level of Service	D	F	F	C		F
Approach Delay (s)	76.0			78.1	182.7	
Approach LOS	E			E	F	

Intersection Summary			
HCM 2000 Control Delay	101.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	163	1419	341	0	1306	1053	179	410	578	340	0	459
Future Volume (vph)	163	1419	341	0	1306	1053	179	410	578	340	0	459
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	177	1542	371	0	1420	1145	195	446	628	370	0	499
RTOR Reduction (vph)	0	0	180	0	0	0	0	0	0	0	0	58
Lane Group Flow (vph)	177	1542	191	0	1420	1145	195	446	628	370	0	441
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	9.9	35.7	35.7		21.8	71.4	11.0	12.5	71.4	11.2		26.6
Effective Green, g (s)	11.4	37.2	36.7		23.3	71.4	12.5	14.0	71.4	12.7		28.1
Actuated g/C Ratio	0.16	0.52	0.51		0.33	1.00	0.18	0.20	1.00	0.18		0.39
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	548	1843	813		2091	1583	309	693	1583	610		623
v/s Ratio Prot	0.05	c0.44			0.22		0.11	0.13		0.11		0.28
v/s Ratio Perm			0.12			c0.72			0.40			
v/c Ratio	0.32	0.84	0.23		0.68	0.72	0.63	0.64	0.40	0.61		0.71
Uniform Delay, d1	26.6	14.5	9.6		20.8	0.0	27.3	26.4	0.0	27.0		18.2
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	3.5	0.1		0.9	2.9	4.2	2.1	0.7	1.7		3.7
Delay (s)	26.9	18.0	9.7		21.7	2.9	31.5	28.5	0.7	28.8		21.9
Level of Service	C	B	A		C	A	C	C	A	C		C
Approach Delay (s)		17.3			13.3			15.2			24.8	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	71.4	Sum of lost time (s)	10.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	251	1527	409	170	1775	59	455	453	219	145	558	159
Future Volume (vph)	251	1527	409	170	1775	59	455	453	219	145	558	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	273	1660	445	185	1929	64	495	492	238	158	607	173
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	273	1660	445	185	1929	64	495	492	238	158	607	173
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	10.5	24.5	72.4	9.1	23.1	72.4	11.2	14.3	72.4	8.5	11.6	72.4
Effective Green, g (s)	11.5	27.0	72.4	10.1	25.6	72.4	12.2	16.8	72.4	9.5	14.1	72.4
Actuated g/C Ratio	0.16	0.37	1.00	0.14	0.35	1.00	0.17	0.23	1.00	0.13	0.19	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	545	1896	1583	478	2265	1583	840	1179	1583	450	990	1583
v/s Ratio Prot	c0.08	c0.33		0.05	0.30		c0.10	0.10		0.05	c0.12	
v/s Ratio Perm			c0.28			0.04			0.15			0.11
v/c Ratio	0.50	0.88	0.28	0.39	0.85	0.04	0.59	0.42	0.15	0.35	0.61	0.11
Uniform Delay, d1	27.8	21.1	0.0	28.3	21.6	0.0	27.8	23.6	0.0	28.6	26.7	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	4.9	0.4	0.5	3.3	0.0	1.1	0.2	0.2	0.5	1.1	0.1
Delay (s)	28.6	26.0	0.4	28.9	24.9	0.0	28.9	23.9	0.2	29.1	27.8	0.1
Level of Service	C	C	A	C	C	A	C	C	A	C	C	A
Approach Delay (s)		21.5			24.5			21.3			22.9	
Approach LOS		C			C			C			C	

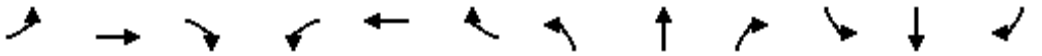
Intersection Summary			
HCM 2000 Control Delay	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	72.4	Sum of lost time (s)	9.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	328	1254	891	322	1438	601	538	612	79	790	1071	409
Future Volume (veh/h)	328	1254	891	322	1438	601	538	612	79	790	1071	409
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	357	1363	0	350	1563	0	585	665	0	859	1164	0
Adj No. of Lanes	2	4	1	2	4	1	2	3	1	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	1683	380	496	1650	372	616	1533	451	1096	1208	514
Arrive On Green	0.15	0.26	0.00	0.14	0.26	0.00	0.18	0.30	0.00	0.22	0.34	0.00
Sat Flow, veh/h	3304	6408	1583	3442	6408	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	357	1363	0	350	1563	0	585	665	0	859	1164	0
Grp Sat Flow(s),veh/h/ln	1652	1602	1583	1721	1602	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	9.2	17.8	0.0	8.7	21.4	0.0	15.0	9.4	0.0	14.5	28.8	0.0
Cycle Q Clear(g_c), s	9.2	17.8	0.0	8.7	21.4	0.0	15.0	9.4	0.0	14.5	28.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	493	1683	380	496	1650	372	616	1533	451	1096	1208	514
V/C Ratio(X)	0.72	0.81	0.00	0.71	0.95	0.00	0.95	0.43	0.00	0.78	0.96	0.00
Avail Cap(c_a), veh/h	518	1683	380	539	1650	372	616	1533	451	1176	1208	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	30.8	0.0	36.4	32.6	0.0	36.3	25.1	0.0	32.9	28.9	0.0
Incr Delay (d2), s/veh	4.7	3.1	0.0	3.8	12.0	0.0	24.3	0.2	0.0	3.3	17.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	8.2	0.0	4.4	10.8	0.0	9.2	4.4	0.0	7.0	17.0	0.0
LnGrp Delay(d),s/veh	41.0	33.9	0.0	40.2	44.6	0.0	60.6	25.3	0.0	36.2	46.6	0.0
LnGrp LOS	D	C		D	D		E	C		D	D	
Approach Vol, veh/h		1720			1913			1250			2023	
Approach Delay, s/veh		35.4			43.8			41.8			42.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	28.4	14.9	24.5	18.0	32.0	15.3	24.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	23.0	12.0	20.0	14.0	28.0	12.0	20.0
Max Q Clear Time (g_c+I1), s	16.5	11.4	10.7	19.8	17.0	30.8	11.2	23.4
Green Ext Time (p_c), s	1.1	4.6	0.2	0.2	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.9
HCM 2010 LOS	D



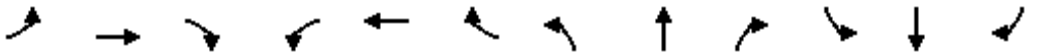
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	5	204	23	23	50	304	1197	3	5	1687	549
Future Volume (vph)	210	5	204	23	23	50	304	1197	3	5	1687	549
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1689	1583		1817	1583	3433	3538		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1689	1583		1817	1583	3433	3538		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	5	222	25	25	54	330	1301	3	5	1834	597
RTOR Reduction (vph)	0	0	81	0	0	51	0	0	0	0	0	95
Lane Group Flow (vph)	116	117	141	0	50	3	330	1304	0	5	1834	502
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	13.2	13.2	29.8		7.2	7.2	16.6	96.0		1.2	80.6	80.6
Effective Green, g (s)	14.2	14.2	31.8		8.2	8.2	17.6	98.5		2.2	83.1	83.1
Actuated g/C Ratio	0.11	0.11	0.24		0.06	0.06	0.13	0.74		0.02	0.62	0.62
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	178	179	412		111	97	452	2608		29	2201	984
v/s Ratio Prot	0.07	c0.07	0.05		c0.03		c0.10	0.37		0.00	c0.52	
v/s Ratio Perm			0.04			0.00						0.32
v/c Ratio	0.65	0.65	0.34		0.45	0.03	0.73	0.50		0.17	0.83	0.51
Uniform Delay, d1	57.3	57.3	42.2		60.5	59.0	55.7	7.3		64.8	19.8	14.0
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.3	8.3	0.5		2.9	0.1	6.0	0.2		2.8	2.9	0.4
Delay (s)	65.6	65.6	42.7		63.4	59.1	61.7	7.5		67.6	22.7	14.4
Level of Service	E	E	D		E	E	E	A		E	C	B
Approach Delay (s)		54.4			61.2			18.4			20.8	
Approach LOS		D			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	133.6	Sum of lost time (s)	10.5
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	647	527	837	466	1080	816
Future Volume (vph)	647	527	837	466	1080	816
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.97	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.96	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3372	1441	3539	1583	3433	3539
Flt Permitted	0.96	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3372	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	703	573	910	507	1174	887
RTOR Reduction (vph)	30	282	0	359	0	0
Lane Group Flow (vph)	845	119	910	148	1174	887
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	20.0	20.0	18.0	18.0	25.0	47.0
Effective Green, g (s)	21.0	22.3	20.3	20.3	27.3	48.0
Actuated g/C Ratio	0.28	0.30	0.27	0.27	0.36	0.64
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	944	428	957	428	1249	2264
v/s Ratio Prot	c0.25		c0.26		c0.34	0.25
v/s Ratio Perm		0.08		0.09		
v/c Ratio	0.90	0.28	0.95	0.35	0.94	0.39
Uniform Delay, d1	25.9	20.2	26.9	22.0	23.1	6.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.9	0.4	18.3	0.5	13.4	0.1
Delay (s)	36.9	20.5	45.2	22.5	36.5	6.6
Level of Service	D	C	D	C	D	A
Approach Delay (s)	31.7		37.1			23.6
Approach LOS	C		D			C

Intersection Summary			
HCM 2000 Control Delay	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	6.4
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



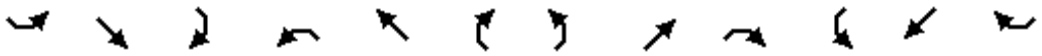
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	544	478	86	585	162	324	406	62	169	628	349
Future Volume (vph)	153	544	478	86	585	162	324	406	62	169	628	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7	3.0	3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	166	591	520	93	636	176	352	441	67	184	683	379
RTOR Reduction (vph)	0	0	370	0	0	131	0	0	48	0	0	305
Lane Group Flow (vph)	166	591	150	93	636	45	352	441	19	184	683	74
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	10.4	18.1	18.1	7.4	15.1	15.1	16.9	19.2	19.2	9.0	11.3	11.3
Effective Green, g (s)	11.4	20.1	20.1	8.4	17.8	17.8	17.9	21.5	20.2	10.0	13.6	13.6
Actuated g/C Ratio	0.16	0.29	0.29	0.12	0.26	0.26	0.26	0.31	0.29	0.14	0.20	0.20
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	289	1020	456	213	903	404	454	1568	458	509	1026	319
v/s Ratio Prot	c0.09	c0.17		0.05	c0.18		c0.20	0.09		0.05	c0.13	
v/s Ratio Perm			0.09			0.03			0.01			0.05
v/c Ratio	0.57	0.58	0.33	0.44	0.70	0.11	0.78	0.28	0.04	0.36	0.67	0.23
Uniform Delay, d1	26.9	21.2	19.5	28.5	23.6	19.9	24.0	18.2	17.8	27.0	25.9	23.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.8	0.4	1.4	2.5	0.1	8.1	0.1	0.0	0.4	1.6	0.4
Delay (s)	29.7	22.0	19.9	29.9	26.1	20.0	32.1	18.3	17.8	27.4	27.6	24.0
Level of Service	C	C	B	C	C	C	C	B	B	C	C	C
Approach Delay (s)		22.1			25.3			23.9			26.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	69.7	Sum of lost time (s)	9.7
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	323	16	28	27	13	57	42	962	0	81	1202	159
Future Volume (vph)	323	16	28	27	13	57	42	962	0	81	1202	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1666			1802	1583	1770	3539		1770	3477	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1666			1802	1583	1770	3539		1770	3477	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	351	17	30	29	14	62	46	1046	0	88	1307	173
RTOR Reduction (vph)	0	4	0	0	0	58	0	0	0	0	7	0
Lane Group Flow (vph)	200	194	0	0	43	4	46	1046	0	88	1473	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	19.6	19.6			6.4	6.4	6.5	52.6		8.4	54.5	
Effective Green, g (s)	20.6	20.6			7.4	7.4	7.5	54.6		9.4	56.5	
Actuated g/C Ratio	0.20	0.20			0.07	0.07	0.07	0.53		0.09	0.55	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	336	333			129	113	128	1876		161	1907	
v/s Ratio Prot	c0.12	0.12			c0.02		0.03	0.30		c0.05	c0.42	
v/s Ratio Perm						0.00						
v/c Ratio	0.60	0.58			0.33	0.04	0.36	0.56		0.55	0.77	
Uniform Delay, d1	37.4	37.3			45.5	44.5	45.5	16.1		44.8	18.2	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	2.6			1.5	0.1	1.7	0.4		3.8	2.0	
Delay (s)	40.2	39.9			47.0	44.6	47.2	16.5		48.5	20.2	
Level of Service	D	D			D	D	D	B		D	C	
Approach Delay (s)		40.1			45.6			17.8			21.8	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	103.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

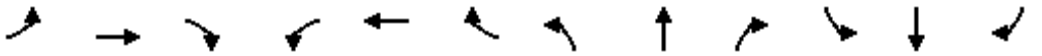
c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	149	19	177	144	8	53	129	820	28	28	1134	35
Future Volume (vph)	149	19	177	144	8	53	129	820	28	28	1134	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1779	1583	1770	3522		1770	3523	
Flt Permitted		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1779	1583	1770	3522		1770	3523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	162	21	192	157	9	58	140	891	30	30	1233	38
RTOR Reduction (vph)	0	0	162	0	0	49	0	1	0	0	2	0
Lane Group Flow (vph)	0	183	30	0	166	9	140	920	0	30	1269	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		17.6	17.6		16.4	16.4	14.7	62.8		4.7	52.8	
Effective Green, g (s)		18.6	18.6		17.4	17.4	15.7	64.8		5.7	54.8	
Actuated g/C Ratio		0.16	0.16		0.15	0.15	0.13	0.55		0.05	0.47	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		282	250		263	234	236	1942		85	1643	
v/s Ratio Prot		c0.10			c0.09		c0.08	0.26		0.02	c0.36	
v/s Ratio Perm			0.02			0.01						
v/c Ratio		0.65	0.12		0.63	0.04	0.59	0.47		0.35	0.77	
Uniform Delay, d1		46.4	42.4		47.0	42.9	47.9	16.0		54.1	26.2	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.1	0.2		4.9	0.1	4.0	0.2		2.5	2.3	
Delay (s)		51.5	42.7		51.9	42.9	51.9	16.2		56.6	28.5	
Level of Service		D	D		D	D	D	B		E	C	
Approach Delay (s)		47.0			49.6			20.9			29.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	117.5	Sum of lost time (s)	11.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	1356	16	90	875	683	29	30	91	1060	12	316
Future Volume (vph)	366	1356	16	90	875	683	29	30	91	1060	12	316
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	398	1474	17	98	951	742	32	33	99	1152	13	343
RTOR Reduction (vph)	0	1	0	0	0	239	0	0	93	0	0	158
Lane Group Flow (vph)	398	1490	0	98	951	503	32	33	6	588	577	185
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	31.0	62.8		11.2	43.0	43.0	8.2	8.2	8.2	48.0	48.0	48.0
Effective Green, g (s)	32.0	63.8		12.2	44.0	44.0	9.2	9.2	9.2	49.0	49.0	49.0
Actuated g/C Ratio	0.22	0.44		0.08	0.30	0.30	0.06	0.06	0.06	0.34	0.34	0.34
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	387	1541		147	1065	476	111	117	99	563	565	530
v/s Ratio Prot	c0.22	0.42		0.06	0.27		c0.02	0.02		c0.35	0.34	
v/s Ratio Perm						c0.32			0.00			0.12
v/c Ratio	1.03	0.97		0.67	0.89	1.06	0.29	0.28	0.06	1.04	1.02	0.35
Uniform Delay, d1	57.1	40.2		65.0	48.8	51.1	65.4	65.3	64.4	48.6	48.6	36.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	53.2	15.6		10.9	9.7	57.0	1.4	1.3	0.3	50.0	43.3	0.4
Delay (s)	110.3	55.8		75.9	58.5	108.1	66.8	66.7	64.7	98.6	91.9	37.0
Level of Service	F	E		E	E	F	E	E	E	F	F	D
Approach Delay (s)		67.3			80.0			65.5			82.0	
Approach LOS		E			F			E			F	

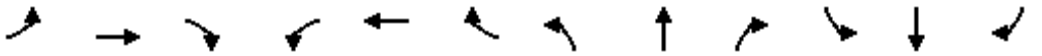
Intersection Summary			
HCM 2000 Control Delay	75.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	146.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1145	802	0	1542	1129	0	0	0	892	0	154
Future Volume (veh/h)	0	1145	802	0	1542	1129	0	0	0	892	0	154
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1245	0	0	1676	0				970	0	167
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2112	928	0	2136	928				1103	0	508
Arrive On Green	0.00	0.60	0.00	0.00	0.60	0.00				0.32	0.00	0.32
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1245	0	0	1676	0				970	0	167
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	12.7	0.0	0.0	20.7	0.0				15.5	0.0	4.6
Cycle Q Clear(g_c), s	0.0	12.7	0.0	0.0	20.7	0.0				15.5	0.0	4.6
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2112	928	0	2136	928				1103	0	508
V/C Ratio(X)	0.00	0.59	0.00	0.00	0.78	0.00				0.88	0.00	0.33
Avail Cap(c_a), veh/h	0	2232	982	0	2257	982				1103	0	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.3	0.0	0.0	8.7	0.0				18.7	0.0	15.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	1.8	0.0				8.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.2	0.0	0.0	10.3	0.0				8.6	0.0	2.1
LnGrp Delay(d),s/veh	0.0	7.7	0.0	0.0	10.5	0.0				27.0	0.0	15.3
LnGrp LOS		A			B					C		B
Approach Vol, veh/h		1245			1676						1137	
Approach Delay, s/veh		7.7			10.5						25.3	
Approach LOS		A			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		37.0		21.0		37.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		35.0		17.0		35.0		
Max Q Clear Time (g_c+I1), s		14.7		17.5		22.7		
Green Ext Time (p_c), s		15.7		0.0		10.3		

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	331	1008	0	0	2179	668	0	0	478	0	0	512
Future Volume (vph)	331	1008	0	0	2179	668	0	0	478	0	0	512
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.86			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			5085	1583			1611			2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	360	1096	0	0	2368	726	0	0	520	0	0	557
RTOR Reduction (vph)	0	0	0	0	0	161	0	0	0	0	0	519
Lane Group Flow (vph)	360	1096	0	0	2368	565	0	0	520	0	0	38
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	30.9	109.2			75.3	75.3			125.7			6.5
Effective Green, g (s)	32.9	111.2			77.3	77.3			125.7			8.5
Actuated g/C Ratio	0.26	0.88			0.61	0.61			1.00			0.07
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	463	5668			3127	973			1611			188
v/s Ratio Prot	c0.20	0.17			c0.47							
v/s Ratio Perm						0.36			c0.32			0.01
v/c Ratio	0.78	0.19			0.76	0.58			0.32			0.20
Uniform Delay, d1	43.0	1.0			17.4	14.5			0.0			55.4
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	8.0	0.0			1.1	0.9			0.5			0.5
Delay (s)	51.0	1.0			18.5	15.4			0.5			55.9
Level of Service	D	A			B	B			A			E
Approach Delay (s)		13.4			17.8			0.5			55.9	
Approach LOS		B			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	125.7	Sum of lost time (s)	9.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	446	1598	188	244	2164	157	324	478	161	157	732	346
Future Volume (veh/h)	446	1598	188	244	2164	157	324	478	161	157	732	346
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	485	1737	204	265	2352	171	352	520	175	171	796	376
Adj No. of Lanes	2	3	1	2	4	0	2	2	1	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	548	2380	937	387	2588	188	465	764	333	290	839	504
Arrive On Green	0.16	0.47	0.46	0.11	0.42	0.42	0.14	0.22	0.21	0.08	0.16	0.16
Sat Flow, veh/h	3442	5085	1583	3442	6145	445	3442	3539	1583	3442	5085	1583
Grp Volume(v), veh/h	485	1737	204	265	1838	685	352	520	175	171	796	376
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1602	1784	1721	1770	1583	1721	1695	1583
Q Serve(g_s), s	12.1	24.3	5.3	6.5	31.5	31.7	8.7	11.9	8.6	4.2	13.6	14.0
Cycle Q Clear(g_c), s	12.1	24.3	5.3	6.5	31.5	31.7	8.7	11.9	8.6	4.2	13.6	14.0
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	2380	937	387	2024	751	465	764	333	290	839	504
V/C Ratio(X)	0.88	0.73	0.22	0.69	0.91	0.91	0.76	0.68	0.53	0.59	0.95	0.75
Avail Cap(c_a), veh/h	548	2380	937	509	2077	771	509	764	333	509	839	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	18.9	8.4	37.5	23.9	23.9	36.6	31.7	30.8	38.8	36.3	26.8
Incr Delay (d2), s/veh	15.8	1.2	0.1	2.5	6.3	14.8	5.9	2.5	1.5	1.9	19.8	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	11.5	2.3	3.2	15.0	18.5	4.5	6.0	3.9	2.1	7.9	9.0
LnGrp Delay(d),s/veh	52.0	20.1	8.5	40.0	30.1	38.7	42.5	34.2	32.4	40.7	56.1	32.7
LnGrp LOS	D	C	A	D	C	D	D	C	C	D	E	C
Approach Vol, veh/h		2426			2788			1047			1343	
Approach Delay, s/veh		25.5			33.2			36.7			47.6	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	43.1	14.9	17.0	17.0	39.0	10.4	21.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	37.0	12.0	13.0	13.0	36.0	12.0	13.0
Max Q Clear Time (g_c+I1), s	8.5	26.3	10.7	16.0	14.1	33.7	6.2	13.9
Green Ext Time (p_c), s	0.4	10.7	0.2	0.0	0.0	1.3	0.3	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.7
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	731	269	247	1640	116	649
Future Volume (veh/h)	731	269	247	1640	116	649
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	795	292	268	1783	126	705
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1110	517	507	2363	426	868
Arrive On Green	0.33	0.31	0.29	0.67	0.24	0.24
Sat Flow, veh/h	3487	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	795	292	268	1783	126	705
Grp Sat Flow(s),veh/h/ln	1699	1583	1774	1770	1774	1583
Q Serve(g_s), s	11.1	8.2	6.9	18.3	3.1	13.0
Cycle Q Clear(g_c), s	11.1	8.2	6.9	18.3	3.1	13.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1110	517	507	2363	426	868
V/C Ratio(X)	0.72	0.56	0.53	0.75	0.30	0.81
Avail Cap(c_a), veh/h	1317	614	589	2744	426	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	15.1	16.3	6.0	16.8	8.5
Incr Delay (d2), s/veh	1.5	1.0	0.9	1.0	0.4	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	3.8	3.5	9.0	1.6	11.8
LnGrp Delay(d),s/veh	17.6	16.0	17.1	7.1	17.2	14.4
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	1087			2051	831	
Approach Delay, s/veh	17.1			8.4	14.8	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.5	19.7		16.0		38.2		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	17.0	19.0		12.0		40.0		
Max Q Clear Time (g_c+I1), s	8.9	13.1		15.0		20.3		
Green Ext Time (p_c), s	5.8	2.6		0.0		11.0		

Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	838	660	993	1888	0	1060
Future Volume (vph)	838	660	993	1888	0	1060
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	911	717	1079	2052	0	1152
RTOR Reduction (vph)	0	478	0	0	0	405
Lane Group Flow (vph)	911	239	1079	2052	0	747
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	21.0	21.0	32.0	57.0		40.0
Effective Green, g (s)	23.0	23.0	33.0	59.0		41.0
Actuated g/C Ratio	0.22	0.22	0.31	0.56		0.39
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1103	343	1068	1969		623
v/s Ratio Prot	0.18		0.31	c0.58		
v/s Ratio Perm		0.15				c0.46
v/c Ratio	0.83	0.70	1.01	1.04		1.20
Uniform Delay, d1	39.6	38.3	36.5	23.5		32.5
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	5.2	6.1	30.1	32.3		104.7
Delay (s)	44.8	44.4	66.6	55.8		137.2
Level of Service	D	D	E	E		F
Approach Delay (s)	44.6			59.5	137.2	
Approach LOS	D			E	F	

Intersection Summary			
HCM 2000 Control Delay	70.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	214	1364	319	0	1723	1456	243	452	556	376	0	462
Future Volume (vph)	214	1364	319	0	1723	1456	243	452	556	376	0	462
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	233	1483	347	0	1873	1583	264	491	604	409	0	502
RTOR Reduction (vph)	0	0	164	0	0	0	0	0	0	0	0	42
Lane Group Flow (vph)	233	1483	183	0	1873	1583	264	491	604	409	0	460
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	11.0	49.0	49.0		34.0	100.8	18.0	23.7	100.8	16.1		36.8
Effective Green, g (s)	12.5	50.5	50.0		35.5	100.8	19.5	25.2	100.8	17.6		38.3
Actuated g/C Ratio	0.12	0.50	0.50		0.35	1.00	0.19	0.25	1.00	0.17		0.38
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	425	1773	785		2256	1583	342	884	1583	599		601
v/s Ratio Prot	0.07	0.42			0.29		0.15	0.14		0.12		0.29
v/s Ratio Perm			0.12			c1.00			0.38			
v/c Ratio	0.55	0.84	0.23		0.83	1.00	0.77	0.56	0.38	0.68		0.77
Uniform Delay, d1	41.5	21.6	14.5		29.9	50.4	38.5	32.9	0.0	39.0		27.3
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.4	3.6	0.2		2.7	22.6	10.3	0.8	0.7	3.2		5.8
Delay (s)	42.9	25.2	14.6		32.6	73.0	48.9	33.7	0.7	42.2		33.1
Level of Service	D	C	B		C	E	D	C	A	D		C
Approach Delay (s)		25.4			51.1			22.0			37.2	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	100.8	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	216	1575	354	190	2423	92	536	525	204	162	478	257
Future Volume (vph)	216	1575	354	190	2423	92	536	525	204	162	478	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	235	1712	385	207	2634	100	583	571	222	176	520	279
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	235	1712	385	207	2634	100	583	571	222	176	520	279
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	11.1	49.0	104.0	10.8	48.7	104.0	15.4	18.0	104.0	10.2	12.8	104.0
Effective Green, g (s)	12.1	51.5	104.0	11.8	51.2	104.0	16.4	20.5	104.0	11.2	15.3	104.0
Actuated g/C Ratio	0.12	0.50	1.00	0.11	0.49	1.00	0.16	0.20	1.00	0.11	0.15	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	399	2518	1583	389	3154	1583	786	1002	1583	369	748	1583
v/s Ratio Prot	c0.07	0.34		0.06	c0.41		c0.12	0.11		0.05	c0.10	
v/s Ratio Perm			c0.24			0.06			0.14			0.18
v/c Ratio	0.59	0.68	0.24	0.53	0.84	0.06	0.74	0.57	0.14	0.48	0.70	0.18
Uniform Delay, d1	43.6	20.0	0.0	43.5	22.8	0.0	41.8	37.8	0.0	43.6	42.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.2	0.7	0.4	1.4	2.0	0.1	3.8	0.7	0.2	1.0	2.8	0.2
Delay (s)	45.8	20.7	0.4	44.9	24.8	0.1	45.6	38.5	0.2	44.6	45.0	0.2
Level of Service	D	C	A	D	C	A	D	D	A	D	D	A
Approach Delay (s)		19.9			25.4			35.3			32.1	
Approach LOS		B			C			D			C	

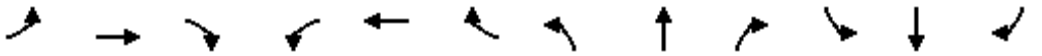
Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	104.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1457	793	309	1865	680	655	846	77	810	990	459
Future Volume (veh/h)	306	1457	793	309	1865	680	655	846	77	810	990	459
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	333	1584	0	336	2027	0	712	920	0	880	1076	0
Adj No. of Lanes	2	4	1	2	4	1	2	3	1	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	454	1945	449	464	1928	445	656	1418	418	1089	1083	461
Arrive On Green	0.14	0.30	0.00	0.13	0.30	0.00	0.19	0.28	0.00	0.22	0.31	0.00
Sat Flow, veh/h	3304	6408	1583	3442	6408	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	333	1584	0	336	2027	0	712	920	0	880	1076	0
Grp Sat Flow(s),veh/h/ln	1652	1602	1583	1721	1602	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	9.6	22.8	0.0	9.3	30.0	0.0	19.0	15.9	0.0	16.6	30.2	0.0
Cycle Q Clear(g_c), s	9.6	22.8	0.0	9.3	30.0	0.0	19.0	15.9	0.0	16.6	30.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	454	1945	449	464	1928	445	656	1418	418	1089	1083	461
V/C Ratio(X)	0.73	0.81	0.00	0.72	1.05	0.00	1.09	0.65	0.00	0.81	0.99	0.00
Avail Cap(c_a), veh/h	464	1945	449	483	1928	445	656	1418	418	1154	1083	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	32.1	0.0	41.4	34.8	0.0	40.3	31.7	0.0	37.0	34.5	0.0
Incr Delay (d2), s/veh	5.8	2.8	0.0	5.1	35.5	0.0	60.6	1.0	0.0	4.2	25.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	10.4	0.0	4.8	17.9	0.0	14.4	7.5	0.0	8.1	18.5	0.0
LnGrp Delay(d),s/veh	47.1	34.9	0.0	46.5	70.3	0.0	101.0	32.7	0.0	41.2	60.3	0.0
LnGrp LOS	D	C		D	F		F	C		D	E	
Approach Vol, veh/h		1917			2363			1632			1956	
Approach Delay, s/veh		37.0			66.9			62.5			51.7	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	29.3	15.4	31.3	21.0	32.0	15.7	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	24.0	12.0	27.0	17.0	28.0	12.0	27.0
Max Q Clear Time (g_c+I1), s	18.6	17.9	11.3	24.8	21.0	32.2	11.6	32.0
Green Ext Time (p_c), s	1.1	3.8	0.1	2.1	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.9
HCM 2010 LOS	D



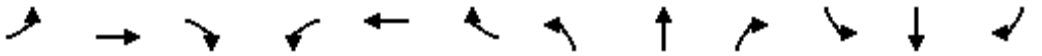
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	304	7	196	16	16	40	220	1440	5	5	1543	613
Future Volume (vph)	304	7	196	16	16	40	220	1440	5	5	1543	613
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1689	1583		1817	1583	3433	3538		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1689	1583		1817	1583	3433	3538		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	330	8	213	17	17	43	239	1565	5	5	1677	666
RTOR Reduction (vph)	0	0	134	0	0	40	0	0	0	0	0	154
Lane Group Flow (vph)	168	170	79	0	34	3	239	1570	0	5	1677	512
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	12.4	12.4	23.4		5.8	5.8	11.0	63.0		1.2	53.2	53.2
Effective Green, g (s)	13.4	13.4	25.4		6.8	6.8	12.0	65.5		2.2	55.7	55.7
Actuated g/C Ratio	0.14	0.14	0.26		0.07	0.07	0.12	0.67		0.02	0.57	0.57
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	228	230	456		125	109	418	2355		39	2003	896
v/s Ratio Prot	0.10	c0.10	0.02		c0.02		c0.07	0.44		0.00	c0.47	
v/s Ratio Perm			0.03			0.00						0.32
v/c Ratio	0.74	0.74	0.17		0.27	0.03	0.57	0.67		0.13	0.84	0.57
Uniform Delay, d1	40.8	40.8	28.4		43.5	42.7	40.8	9.9		47.2	17.6	13.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	11.7	11.7	0.2		1.2	0.1	1.9	0.7		1.5	3.2	0.9
Delay (s)	52.5	52.6	28.5		44.6	42.8	42.7	10.6		48.6	20.8	14.6
Level of Service	D	D	C		D	D	D	B		D	C	B
Approach Delay (s)		43.3			43.6			14.8			19.1	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	98.4	Sum of lost time (s)	10.5
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	793	744	818	444	1016	825
Future Volume (vph)	793	744	818	444	1016	825
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.96	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.96	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3354	1441	3539	1583	3433	3539
Flt Permitted	0.96	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3354	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	862	809	889	483	1104	897
RTOR Reduction (vph)	31	331	0	344	0	0
Lane Group Flow (vph)	1114	195	889	139	1104	897
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	36.9	36.9	25.0	25.0	32.0	61.0
Effective Green, g (s)	37.9	39.2	27.3	27.3	34.3	62.0
Actuated g/C Ratio	0.36	0.37	0.26	0.26	0.32	0.59
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1200	533	912	408	1111	2071
v/s Ratio Prot	c0.33		c0.25		c0.32	0.25
v/s Ratio Perm		0.14		0.09		
v/c Ratio	0.93	0.37	0.97	0.34	0.99	0.43
Uniform Delay, d1	32.7	24.3	39.0	32.0	35.7	12.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.2	0.4	23.6	0.5	25.3	0.1
Delay (s)	44.9	24.7	62.5	32.5	61.0	12.3
Level of Service	D	C	E	C	E	B
Approach Delay (s)	38.6		52.0			39.2
Approach LOS	D		D			D

Intersection Summary			
HCM 2000 Control Delay	42.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	105.9	Sum of lost time (s)	6.4
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	643	543	83	601	181	488	683	58	163	638	313
Future Volume (vph)	201	643	543	83	601	181	488	683	58	163	638	313
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7	3.0	3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	218	699	590	90	653	197	530	742	63	177	693	340
RTOR Reduction (vph)	0	0	411	0	0	149	0	0	39	0	0	233
Lane Group Flow (vph)	218	699	179	90	653	48	530	742	24	177	693	107
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	14.8	27.7	27.7	8.1	21.0	21.0	32.5	36.1	36.1	10.1	13.7	13.7
Effective Green, g (s)	15.8	29.7	29.7	9.1	23.7	23.7	33.5	38.4	37.1	11.1	16.0	16.0
Actuated g/C Ratio	0.16	0.30	0.30	0.09	0.24	0.24	0.34	0.39	0.38	0.11	0.16	0.16
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	285	1072	479	164	855	382	605	1992	599	402	859	267
v/s Ratio Prot	c0.12	0.20		0.05	c0.18		c0.30	0.15		0.05	c0.13	
v/s Ratio Perm			0.11			0.03			0.02			0.07
v/c Ratio	0.76	0.65	0.37	0.55	0.76	0.12	0.88	0.37	0.04	0.44	0.81	0.40
Uniform Delay, d1	39.3	29.7	26.8	42.5	34.5	29.0	30.3	21.2	19.2	40.6	39.5	36.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.6	1.4	0.5	3.7	4.1	0.1	13.4	0.1	0.0	0.8	5.6	1.0
Delay (s)	50.9	31.1	27.3	46.2	38.6	29.2	43.7	21.3	19.2	41.3	45.1	37.7
Level of Service	D	C	C	D	D	C	D	C	B	D	D	D
Approach Delay (s)		32.5			37.4			30.1			42.5	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	98.0	Sum of lost time (s)	9.7
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	302	14	27	25	12	53	47	907	0	71	1358	187
Future Volume (vph)	302	14	27	25	12	53	47	907	0	71	1358	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1665			1802	1583	1770	3539		1770	3475	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1665			1802	1583	1770	3539		1770	3475	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	328	15	29	27	13	58	51	986	0	77	1476	203
RTOR Reduction (vph)	0	6	0	0	0	54	0	0	0	0	9	0
Lane Group Flow (vph)	187	179	0	0	40	4	51	986	0	77	1670	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	13.1	13.1			5.9	5.9	6.5	48.7		7.3	49.5	
Effective Green, g (s)	14.1	14.1			6.9	6.9	7.5	50.7		8.3	51.5	
Actuated g/C Ratio	0.15	0.15			0.08	0.08	0.08	0.56		0.09	0.57	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	260	257			136	120	145	1971		161	1966	
v/s Ratio Prot	c0.11	0.11			c0.02		0.03	0.28		c0.04	c0.48	
v/s Ratio Perm						0.00						
v/c Ratio	0.72	0.70			0.29	0.04	0.35	0.50		0.48	0.85	
Uniform Delay, d1	36.6	36.4			39.7	39.0	39.5	12.4		39.3	16.5	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.2	8.0			1.2	0.1	1.5	0.2		2.2	3.6	
Delay (s)	45.7	44.4			41.0	39.1	40.9	12.6		41.5	20.2	
Level of Service	D	D			D	D	D	B		D	C	
Approach Delay (s)		45.1			39.9			14.0			21.1	
Approach LOS		D			D			B			C	

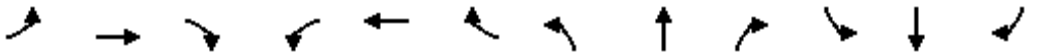
Intersection Summary			
HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	91.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	159	20	129	132	7	48	130	779	20	25	1179	39
Future Volume (vph)	159	20	129	132	7	48	130	779	20	25	1179	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1779	1583	1770	3526		1770	3522	
Flt Permitted		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1779	1583	1770	3526		1770	3522	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	173	22	140	143	8	52	141	847	22	27	1282	42
RTOR Reduction (vph)	0	0	118	0	0	45	0	1	0	0	2	0
Lane Group Flow (vph)	0	195	22	0	151	7	141	868	0	27	1322	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		14.0	14.0		11.6	11.6	11.4	50.7		4.4	43.7	
Effective Green, g (s)		15.0	15.0		12.6	12.6	12.4	52.7		5.4	45.7	
Actuated g/C Ratio		0.16	0.16		0.13	0.13	0.13	0.54		0.06	0.47	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		276	245		231	206	226	1921		98	1664	
v/s Ratio Prot		c0.11			c0.08		c0.08	0.25		0.02	c0.38	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.71	0.09		0.65	0.03	0.62	0.45		0.28	0.79	
Uniform Delay, d1		38.8	35.0		40.0	36.7	39.9	13.3		43.8	21.5	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		8.0	0.2		6.5	0.1	5.3	0.2		1.5	2.7	
Delay (s)		46.8	35.2		46.5	36.8	45.2	13.4		45.3	24.2	
Level of Service		D	D		D	D	D	B		D	C	
Approach Delay (s)		41.9			44.0			17.9			24.7	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	96.7	Sum of lost time (s)	11.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	370	1307	18	109	1103	580	48	60	114	1012	12	336
Future Volume (vph)	370	1307	18	109	1103	580	48	60	114	1012	12	336
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3532		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3532		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	402	1421	20	118	1199	630	52	65	124	1100	13	365
RTOR Reduction (vph)	0	1	0	0	0	227	0	0	112	0	0	248
Lane Group Flow (vph)	402	1440	0	118	1199	403	52	65	12	561	552	117
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	19.0	39.3		10.7	31.0	31.0	8.9	8.9	8.9	28.0	28.0	28.0
Effective Green, g (s)	20.0	40.3		11.7	32.0	32.0	9.9	9.9	9.9	29.0	29.0	29.0
Actuated g/C Ratio	0.19	0.39		0.11	0.31	0.31	0.10	0.10	0.10	0.28	0.28	0.28
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	344	1383		201	1100	492	170	179	152	473	475	446
v/s Ratio Prot	c0.23	c0.41		0.07	0.34		0.03	c0.03		c0.33	0.33	
v/s Ratio Perm						0.25			0.01			0.07
v/c Ratio	1.17	1.04		0.59	1.09	0.82	0.31	0.36	0.08	1.19	1.16	0.26
Uniform Delay, d1	41.5	31.3		43.3	35.5	32.8	43.3	43.5	42.3	37.0	37.0	28.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	102.7	35.7		4.3	55.1	10.2	1.0	1.3	0.2	103.4	94.0	0.3
Delay (s)	144.1	67.0		47.6	90.5	43.0	44.3	44.8	42.6	140.3	131.0	29.0
Level of Service	F	E		D	F	D	D	D	D	F	F	C
Approach Delay (s)		83.9			72.5			43.5			109.3	
Approach LOS		F			E			D			F	

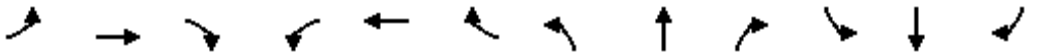
Intersection Summary			
HCM 2000 Control Delay	84.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	102.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1094	767	0	1612	1401	0	0	0	1019	0	175
Future Volume (veh/h)	0	1094	767	0	1612	1401	0	0	0	1019	0	175
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1189	0	0	1752	0				1108	0	190
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2174	956	0	2198	956				1043	0	480
Arrive On Green	0.00	0.61	0.00	0.00	0.62	0.00				0.30	0.00	0.30
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1189	0	0	1752	0				1108	0	190
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	11.3	0.0	0.0	21.6	0.0				17.6	0.0	5.5
Cycle Q Clear(g_c), s	0.0	11.3	0.0	0.0	21.6	0.0				17.6	0.0	5.5
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2174	956	0	2198	956				1043	0	480
V/C Ratio(X)	0.00	0.55	0.00	0.00	0.80	0.00				1.06	0.00	0.40
Avail Cap(c_a), veh/h	0	2292	1009	0	2317	1009				1043	0	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.5	0.0	0.0	8.3	0.0				20.2	0.0	16.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	1.9	0.0				45.8	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	0.0	0.0	10.8	0.0				14.9	0.0	2.4
LnGrp Delay(d),s/veh	0.0	6.8	0.0	0.0	10.2	0.0				66.1	0.0	16.5
LnGrp LOS		A			B					F		B
Approach Vol, veh/h		1189			1752						1298	
Approach Delay, s/veh		6.8			10.2						58.8	
Approach LOS		A			B						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		38.1		20.0		38.1		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		36.0		16.0		36.0		
Max Q Clear Time (g_c+I1), s		13.3		19.6		23.6		
Green Ext Time (p_c), s		17.2		0.0		10.5		

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	288	1079	0	0	2547	527	0	0	1179	0	0	465
Future Volume (vph)	288	1079	0	0	2547	527	0	0	1179	0	0	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.86			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			5085	1583			1611			2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	313	1173	0	0	2768	573	0	0	1282	0	0	505
RTOR Reduction (vph)	0	0	0	0	0	161	0	0	0	0	0	431
Lane Group Flow (vph)	313	1173	0	0	2768	412	0	0	1282	0	0	74
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	18.6	79.7			58.1	58.1			97.9			8.2
Effective Green, g (s)	20.6	81.7			60.1	60.1			97.9			10.2
Actuated g/C Ratio	0.21	0.83			0.61	0.61			1.00			0.10
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	372	5347			3121	971			1611			290
v/s Ratio Prot	0.18	0.18			c0.54							
v/s Ratio Perm						0.26			c0.80			0.03
v/c Ratio	0.84	0.22			0.89	0.42			0.80			0.26
Uniform Delay, d1	37.1	1.6			16.0	9.9			0.0			40.4
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	15.7	0.0			3.4	0.3			4.2			0.5
Delay (s)	52.7	1.7			19.4	10.2			4.2			40.8
Level of Service	D	A			B	B			A			D
Approach Delay (s)		12.4			17.9			4.2			40.8	
Approach LOS		B			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	97.9	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	429	1599	188	212	2221	144	389	494	164	183	783	465
Future Volume (veh/h)	429	1599	188	212	2221	144	389	494	164	183	783	465
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	466	1738	204	230	2414	157	423	537	178	199	851	505
Adj No. of Lanes	2	3	1	2	4	0	2	2	1	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	499	2358	946	350	2605	169	499	797	348	318	878	494
Arrive On Green	0.14	0.46	0.45	0.10	0.42	0.42	0.14	0.23	0.22	0.09	0.17	0.17
Sat Flow, veh/h	3442	5085	1583	3442	6196	402	3442	3539	1583	3442	5085	1583
Grp Volume(v), veh/h	466	1738	204	230	1871	700	423	537	178	199	851	505
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1602	1792	1721	1770	1583	1721	1695	1583
Q Serve(g_s), s	12.0	25.0	5.3	5.8	33.1	33.4	10.8	12.4	8.9	5.0	14.9	15.0
Cycle Q Clear(g_c), s	12.0	25.0	5.3	5.8	33.1	33.4	10.8	12.4	8.9	5.0	14.9	15.0
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	499	2358	946	350	2021	753	499	797	348	318	878	494
V/C Ratio(X)	0.93	0.74	0.22	0.66	0.93	0.93	0.85	0.67	0.51	0.63	0.97	1.02
Avail Cap(c_a), veh/h	499	2358	946	499	2035	759	499	797	348	499	878	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	19.6	8.3	38.8	24.7	24.7	37.4	31.7	30.8	39.2	36.9	30.9
Incr Delay (d2), s/veh	25.0	1.2	0.1	2.1	7.9	17.7	12.9	2.2	1.3	2.0	23.0	46.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	11.9	2.4	2.8	16.0	20.1	6.0	6.3	4.0	2.5	8.8	18.5
LnGrp Delay(d),s/veh	63.0	20.8	8.5	40.9	32.5	42.5	50.3	34.0	32.0	41.3	59.8	77.1
LnGrp LOS	E	C	A	D	C	D	D	C	C	D	E	F
Approach Vol, veh/h		2408			2801			1138			1555	
Approach Delay, s/veh		27.9			35.7			39.8			63.1	
Approach LOS		C			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	43.6	16.0	18.0	16.0	39.7	11.3	22.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	36.0	12.0	14.0	12.0	36.0	12.0	14.0
Max Q Clear Time (g_c+I1), s	7.8	27.0	12.8	17.0	14.0	35.4	7.0	14.4
Green Ext Time (p_c), s	0.4	9.0	0.0	0.0	0.0	0.4	0.3	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	39.3
HCM 2010 LOS	D

Appendix E

Analysis Worksheets for
CIP Cumulative (2035) plus Proposed Project Conditions

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	952	294	372	857	141	279
Future Volume (veh/h)	952	294	372	857	141	279
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1035	320	404	932	153	303
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1324	617	505	2583	315	869
Arrive On Green	0.39	0.37	0.28	0.73	0.18	0.18
Sat Flow, veh/h	3487	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	1035	320	404	932	153	303
Grp Sat Flow(s),veh/h/ln	1699	1583	1774	1770	1774	1583
Q Serve(g_s), s	14.4	8.3	11.4	5.2	4.2	5.8
Cycle Q Clear(g_c), s	14.4	8.3	11.4	5.2	4.2	5.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1324	617	505	2583	315	869
V/C Ratio(X)	0.78	0.52	0.80	0.36	0.49	0.35
Avail Cap(c_a), veh/h	1447	674	526	2753	427	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	12.6	17.9	2.7	20.0	6.8
Incr Delay (d2), s/veh	2.6	0.7	8.3	0.1	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	3.8	6.7	2.5	2.1	4.5
LnGrp Delay(d),s/veh	17.1	13.3	26.2	2.8	21.1	7.0
LnGrp LOS	B	B	C	A	C	A
Approach Vol, veh/h	1355			1336	456	
Approach Delay, s/veh	16.2			9.9	11.8	
Approach LOS	B			A	B	

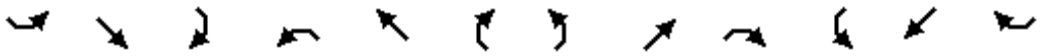
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.4	23.0		12.6		41.4		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	15.0	21.0		12.0		40.0		
Max Q Clear Time (g_c+I1), s	13.4	16.4		7.8		7.2		
Green Ext Time (p_c), s	1.0	2.6		0.8		6.8		

Intersection Summary	
HCM 2010 Ctrl Delay	12.9
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	962	282	592	1257	0	1139
Future Volume (vph)	962	282	592	1257	0	1139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1046	307	643	1366	0	1238
RTOR Reduction (vph)	0	235	0	0	0	328
Lane Group Flow (vph)	1046	72	643	1366	0	910
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	12.0	12.0	12.0	28.0		23.0
Effective Green, g (s)	14.0	14.0	13.0	30.0		24.0
Actuated g/C Ratio	0.23	0.23	0.22	0.50		0.40
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1186	369	743	1769		644
v/s Ratio Prot	c0.21		0.19	c0.39		
v/s Ratio Perm		0.05				c0.57
v/c Ratio	0.88	0.19	0.87	0.77		1.41
Uniform Delay, d1	22.2	18.5	22.7	12.2		18.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	8.0	0.3	10.3	2.2		195.3
Delay (s)	30.2	18.7	33.0	14.4		213.3
Level of Service	C	B	C	B		F
Approach Delay (s)	27.6			20.3	213.3	
Approach LOS	C			C	F	

Intersection Summary			
HCM 2000 Control Delay	74.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	95.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	201	1665	234	0	717	1115	156	375	708	92	0	362
Future Volume (vph)	201	1665	234	0	717	1115	156	375	708	92	0	362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	218	1810	254	0	779	1212	170	408	770	100	0	393
RTOR Reduction (vph)	0	0	117	0	0	0	0	0	0	0	0	87
Lane Group Flow (vph)	218	1810	137	0	779	1212	170	408	770	100	0	306
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	9.9	38.2	38.2		24.3	72.8	10.7	16.5	72.8	6.1		25.8
Effective Green, g (s)	11.4	39.7	39.2		25.8	72.8	12.2	18.0	72.8	7.6		27.3
Actuated g/C Ratio	0.16	0.55	0.54		0.35	1.00	0.17	0.25	1.00	0.10		0.38
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	537	1929	852		2270	1583	296	875	1583	358		593
v/s Ratio Prot	0.06	c0.51			0.12		0.10	0.12		0.03		0.19
v/s Ratio Perm			0.09			c0.77			0.49			
v/c Ratio	0.41	0.94	0.16		0.34	0.77	0.57	0.47	0.49	0.28		0.52
Uniform Delay, d1	27.7	15.4	8.5		17.3	0.0	27.9	23.3	0.0	30.1		17.6
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.5	9.4	0.1		0.1	3.6	2.7	0.4	1.1	0.4		0.8
Delay (s)	28.2	24.8	8.6		17.4	3.6	30.6	23.7	1.1	30.5		18.4
Level of Service	C	C	A		B	A	C	C	A	C		B
Approach Delay (s)		23.3			9.0			11.6			20.8	
Approach LOS		C			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	72.8	Sum of lost time (s)	10.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	190	1958	324	71	1763	32	163	267	145	181	300	158
Future Volume (vph)	190	1958	324	71	1763	32	163	267	145	181	300	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	2128	352	77	1916	35	177	290	158	197	326	172
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	207	2128	352	77	1916	35	177	290	158	197	326	172
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	9.5	31.9	72.3	5.7	28.1	72.3	9.0	9.4	72.3	9.3	9.7	72.3
Effective Green, g (s)	10.5	34.4	72.3	6.7	30.6	72.3	10.0	11.9	72.3	10.3	12.2	72.3
Actuated g/C Ratio	0.15	0.48	1.00	0.09	0.42	1.00	0.14	0.16	1.00	0.14	0.17	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	498	2419	1583	318	2712	1583	690	836	1583	489	858	1583
v/s Ratio Prot	c0.06	c0.42		0.02	0.30		0.04	c0.06		c0.06	0.06	
v/s Ratio Perm			c0.22			0.02			0.10			0.11
v/c Ratio	0.42	0.88	0.22	0.24	0.71	0.02	0.26	0.35	0.10	0.40	0.38	0.11
Uniform Delay, d1	28.1	17.1	0.0	30.4	17.2	0.0	27.8	26.8	0.0	28.2	26.7	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	4.0	0.3	0.4	0.9	0.0	0.2	0.3	0.1	0.5	0.3	0.1
Delay (s)	28.7	21.1	0.3	30.8	18.0	0.0	28.0	27.0	0.1	28.7	27.0	0.1
Level of Service	C	C	A	C	B	A	C	C	A	C	C	A
Approach Delay (s)		19.0			18.2			20.5			20.8	
Approach LOS		B			B			C			C	

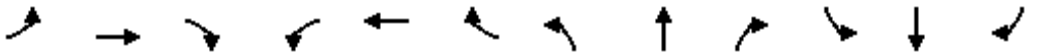
Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	72.3	Sum of lost time (s)	9.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	304	1473	802	83	1566	392	906	538	51	940	803	285
Future Volume (veh/h)	304	1473	802	83	1566	392	906	538	51	940	803	285
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	330	1601	0	90	1702	0	985	585	0	1022	873	0
Adj No. of Lanes	2	4	1	2	4	1	2	3	1	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	472	2152	496	229	1662	375	970	1356	396	1289	858	357
Arrive On Green	0.14	0.34	0.00	0.07	0.26	0.00	0.28	0.27	0.00	0.26	0.24	0.00
Sat Flow, veh/h	3304	6408	1583	3442	6408	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	330	1601	0	90	1702	0	985	585	0	1022	873	0
Grp Sat Flow(s),veh/h/ln	1652	1602	1583	1721	1602	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	8.4	19.6	0.0	2.2	23.0	0.0	25.0	8.5	0.0	16.9	21.5	0.0
Cycle Q Clear(g_c), s	8.4	19.6	0.0	2.2	23.0	0.0	25.0	8.5	0.0	16.9	21.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	472	2152	496	229	1662	375	970	1356	396	1289	858	357
V/C Ratio(X)	0.70	0.74	0.00	0.39	1.02	0.00	1.02	0.43	0.00	0.79	1.02	0.00
Avail Cap(c_a), veh/h	522	2152	496	543	1662	375	970	1356	396	1411	858	357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	26.1	0.0	39.7	32.8	0.0	31.8	26.9	0.0	30.7	33.6	0.0
Incr Delay (d2), s/veh	3.7	1.4	0.0	1.1	28.4	0.0	32.7	0.2	0.0	2.9	35.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.9	0.0	1.1	13.3	0.0	16.1	4.0	0.0	8.1	14.6	0.0
LnGrp Delay(d),s/veh	39.8	27.5	0.0	40.8	61.2	0.0	64.5	27.2	0.0	33.6	68.7	0.0
LnGrp LOS	D	C		D	F		F	C		C	F	
Approach Vol, veh/h		1931			1792			1570			1895	
Approach Delay, s/veh		29.6			60.2			50.6			49.8	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.8	25.2	7.9	30.8	27.0	23.0	14.7	24.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	19.0	12.0	20.0	23.0	19.0	12.0	20.0
Max Q Clear Time (g_c+I1), s	18.9	10.5	4.2	21.6	27.0	23.5	10.4	25.0
Green Ext Time (p_c), s	2.0	4.8	0.1	0.0	0.0	0.0	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.1
HCM 2010 LOS	D



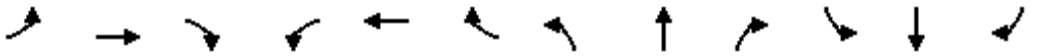
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	313	0	390	3	0	18	118	1192	8	7	1401	329
Future Volume (vph)	313	0	390	3	0	18	118	1192	8	7	1401	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.95	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1770	1583	3433	3536		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.95	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1770	1583	3433	3536		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	340	0	424	3	0	20	128	1296	9	8	1523	358
RTOR Reduction (vph)	0	0	190	0	0	19	0	0	0	0	0	97
Lane Group Flow (vph)	170	170	234	0	3	1	128	1305	0	8	1523	261
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	11.0	11.0	19.5		2.1	2.1	8.5	47.3		1.2	40.0	40.0
Effective Green, g (s)	12.0	12.0	21.5		3.1	3.1	9.5	49.8		2.2	42.5	42.5
Actuated g/C Ratio	0.15	0.15	0.28		0.04	0.04	0.12	0.64		0.03	0.55	0.55
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	259	259	499		70	63	420	2269		50	1938	866
v/s Ratio Prot	c0.10	0.10	c0.06		c0.00		0.04	0.37		0.00	c0.43	
v/s Ratio Perm			0.09			0.00						0.16
v/c Ratio	0.66	0.66	0.47		0.04	0.01	0.30	0.57		0.16	0.79	0.30
Uniform Delay, d1	30.9	30.9	23.3		35.8	35.8	31.0	7.9		36.8	13.9	9.5
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.9	5.9	0.7		0.3	0.1	0.4	0.4		1.5	2.2	0.2
Delay (s)	36.7	36.7	24.0		36.1	35.9	31.5	8.2		38.3	16.1	9.7
Level of Service	D	D	C		D	D	C	A		D	B	A
Approach Delay (s)		29.7			35.9			10.3			15.0	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	77.6	Sum of lost time (s)	10.5
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	137	458	888	459	898	810
Future Volume (vph)	137	458	888	459	898	810
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.91	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3214	1441	3539	1583	3433	3539
Flt Permitted	0.98	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3214	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	149	498	965	499	976	880
RTOR Reduction (vph)	205	199	0	306	0	0
Lane Group Flow (vph)	193	50	965	193	976	880
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	8.8	8.8	17.1	17.1	17.6	38.7
Effective Green, g (s)	9.8	11.1	19.4	19.4	19.9	39.7
Actuated g/C Ratio	0.18	0.20	0.35	0.35	0.36	0.72
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	567	288	1237	553	1230	2531
v/s Ratio Prot	c0.06		c0.27		c0.28	0.25
v/s Ratio Perm		0.03		0.12		
v/c Ratio	0.34	0.17	0.78	0.35	0.79	0.35
Uniform Delay, d1	20.0	18.4	16.1	13.4	16.0	3.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.3	3.3	0.4	3.6	0.1
Delay (s)	20.4	18.7	19.4	13.8	19.6	3.1
Level of Service	C	B	B	B	B	A
Approach Delay (s)	19.7		17.5			11.7
Approach LOS	B		B			B

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	55.5	Sum of lost time (s)	6.4
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



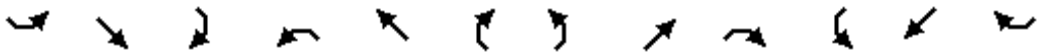
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	732	290	65	184	77	380	427	34	80	334	56
Future Volume (vph)	234	732	290	65	184	77	380	427	34	80	334	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7	3.0	3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	254	796	315	71	200	84	413	464	37	87	363	61
RTOR Reduction (vph)	0	0	217	0	0	66	0	0	25	0	0	51
Lane Group Flow (vph)	254	796	98	71	200	18	413	464	12	87	363	10
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	12.3	18.4	18.4	5.1	11.2	11.2	17.6	20.7	20.7	5.6	8.7	8.7
Effective Green, g (s)	13.3	20.4	20.4	6.1	13.9	13.9	18.6	23.0	21.7	6.6	11.0	11.0
Actuated g/C Ratio	0.20	0.31	0.31	0.09	0.21	0.21	0.28	0.35	0.33	0.10	0.17	0.17
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	357	1097	490	164	747	334	500	1777	522	356	879	273
v/s Ratio Prot	c0.14	c0.22		0.04	0.06		c0.23	0.09		0.02	c0.07	
v/s Ratio Perm			0.06			0.01			0.01			0.01
v/c Ratio	0.71	0.73	0.20	0.43	0.27	0.05	0.83	0.26	0.02	0.24	0.41	0.04
Uniform Delay, d1	24.5	20.2	16.7	28.2	21.7	20.7	22.1	15.3	14.9	27.3	24.5	23.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.6	2.4	0.2	1.8	0.2	0.1	10.7	0.1	0.0	0.4	0.3	0.1
Delay (s)	31.0	22.6	16.9	30.0	21.9	20.8	32.8	15.4	14.9	27.7	24.8	23.0
Level of Service	C	C	B	C	C	C	C	B	B	C	C	C
Approach Delay (s)		22.9			23.3			23.2			25.1	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	65.8	Sum of lost time (s)	9.7
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	329	12	18	36	20	45	12	1082	0	38	759	109
Future Volume (vph)	329	12	18	36	20	45	12	1082	0	38	759	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1673			1805	1583	1770	3539		1770	3473	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1673			1805	1583	1770	3539		1770	3473	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	358	13	20	39	22	49	13	1176	0	41	825	118
RTOR Reduction (vph)	0	6	0	0	0	43	0	0	0	0	11	0
Lane Group Flow (vph)	197	188	0	0	61	6	13	1176	0	41	932	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	10.8	10.8			6.2	6.2	1.2	26.1		2.9	27.8	
Effective Green, g (s)	11.8	11.8			7.2	7.2	2.2	28.1		3.9	29.8	
Actuated g/C Ratio	0.19	0.19			0.12	0.12	0.04	0.45		0.06	0.48	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	319	318			209	183	62	1603		111	1669	
v/s Ratio Prot	c0.12	0.11			c0.03		0.01	c0.33		c0.02	0.27	
v/s Ratio Perm						0.00						
v/c Ratio	0.62	0.59			0.29	0.03	0.21	0.73		0.37	0.56	
Uniform Delay, d1	23.0	22.9			25.1	24.3	29.1	13.9		27.9	11.4	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.5	2.9			0.8	0.1	1.7	1.8		2.1	0.4	
Delay (s)	26.6	25.8			25.8	24.4	30.7	15.7		29.9	11.8	
Level of Service	C	C			C	C	C	B		C	B	
Approach Delay (s)		26.2			25.2			15.8			12.6	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	62.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

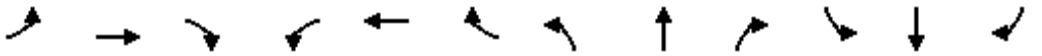
c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	76	10	27	25	1	7	41	1092	26	8	784	27
Future Volume (vph)	76	10	27	25	1	7	41	1092	26	8	784	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1777	1583	1770	3527		1770	3522	
Flt Permitted		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1777	1583	1770	3527		1770	3522	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	83	11	29	27	1	8	45	1187	28	9	852	29
RTOR Reduction (vph)	0	0	25	0	0	8	0	1	0	0	2	0
Lane Group Flow (vph)	0	94	4	0	28	0	45	1214	0	9	879	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		7.0	7.0		2.4	2.4	2.8	33.6		1.1	31.9	
Effective Green, g (s)		8.0	8.0		3.4	3.4	3.8	35.6		2.1	33.9	
Actuated g/C Ratio		0.13	0.13		0.06	0.06	0.06	0.59		0.03	0.56	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		237	210		100	89	111	2089		61	1986	
v/s Ratio Prot		c0.05			c0.02		c0.03	c0.34		0.01	0.25	
v/s Ratio Perm			0.00			0.00						
v/c Ratio		0.40	0.02		0.28	0.01	0.41	0.58		0.15	0.44	
Uniform Delay, d1		23.8	22.6		27.2	26.8	27.1	7.6		28.1	7.6	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.1	0.0		1.5	0.0	2.4	0.4		1.1	0.2	
Delay (s)		24.9	22.7		28.7	26.8	29.5	8.0		29.3	7.8	
Level of Service		C	C		C	C	C	A		C	A	
Approach Delay (s)		24.4			28.3			8.8			8.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	60.1	Sum of lost time (s)	11.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	1344	16	70	658	922	16	8	29	650	11	206
Future Volume (vph)	226	1344	16	70	658	922	16	8	29	650	11	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1688	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1688	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	246	1461	17	76	715	1002	17	9	32	707	12	224
RTOR Reduction (vph)	0	1	0	0	0	452	0	0	30	0	0	175
Lane Group Flow (vph)	246	1477	0	76	715	550	17	9	2	361	358	49
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	12.1	38.6		7.5	34.0	34.0	4.0	4.0	4.0	17.1	17.1	17.1
Effective Green, g (s)	13.1	39.6		8.5	35.0	35.0	5.0	5.0	5.0	18.1	18.1	18.1
Actuated g/C Ratio	0.16	0.48		0.10	0.42	0.42	0.06	0.06	0.06	0.22	0.22	0.22
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	278	1681		180	1488	665	106	111	95	365	367	344
v/s Ratio Prot	c0.14	c0.42		0.04	0.20		c0.01	0.00		c0.21	0.21	
v/s Ratio Perm						0.35			0.00			0.03
v/c Ratio	0.88	0.88		0.42	0.48	0.83	0.16	0.08	0.02	0.99	0.98	0.14
Uniform Delay, d1	34.3	19.6		35.0	17.5	21.4	37.1	36.9	36.8	32.5	32.3	26.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	26.6	5.6		1.6	0.2	8.3	0.7	0.3	0.1	43.7	40.1	0.2
Delay (s)	60.9	25.2		36.6	17.7	29.7	37.8	37.2	36.9	76.1	72.4	26.5
Level of Service	E	C		D	B	C	D	D	D	E	E	C
Approach Delay (s)		30.3			25.2			37.2			62.9	
Approach LOS		C			C			D			E	

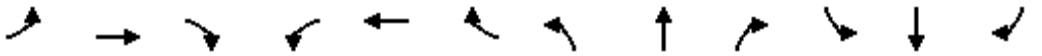
Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	83.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1013	320	0	1482	1051	0	0	0	842	0	157
Future Volume (veh/h)	0	1013	320	0	1482	1051	0	0	0	842	0	157
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1101	0	0	1611	0				915	0	171
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2159	950	0	2183	950				1067	0	491
Arrive On Green	0.00	0.61	0.00	0.00	1.00	0.00				0.31	0.00	0.31
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1101	0	0	1611	0				915	0	171
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	10.6	0.0	0.0	0.0	0.0				15.0	0.0	5.0
Cycle Q Clear(g_c), s	0.0	10.6	0.0	0.0	0.0	0.0				15.0	0.0	5.0
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2159	950	0	2183	950				1067	0	491
V/C Ratio(X)	0.00	0.51	0.00	0.00	0.74	0.00				0.86	0.00	0.35
Avail Cap(c_a), veh/h	0	2159	950	0	2183	950				1067	0	491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.48	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.6	0.0	0.0	0.0	0.0				19.5	0.0	16.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	1.1	0.0				7.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	0.0	0.0	0.3	0.0				8.2	0.0	2.2
LnGrp Delay(d),s/veh	0.0	7.5	0.0	0.0	1.1	0.0				26.6	0.0	16.4
LnGrp LOS		A			A					C		B
Approach Vol, veh/h		1101			1611						1086	
Approach Delay, s/veh		7.5			1.1						25.0	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		39.0		21.0		39.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		35.0		17.0		35.0		
Max Q Clear Time (g_c+I1), s		12.6		17.0		2.0		
Green Ext Time (p_c), s		15.8		0.0		20.5		

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	1042	0	0	1546	271	0	0	1389	0	0	981
Future Volume (vph)	205	1042	0	0	1546	271	0	0	1389	0	0	981
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.86			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			5085	1583			1611			2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	223	1133	0	0	1680	295	0	0	1510	0	0	1066
RTOR Reduction (vph)	0	0	0	0	0	173	0	0	0	0	0	573
Lane Group Flow (vph)	223	1133	0	0	1680	122	0	0	1510	0	0	493
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	10.9	36.7			22.8	22.8			60.0			13.3
Effective Green, g (s)	12.9	38.7			24.8	24.8			60.0			15.3
Actuated g/C Ratio	0.22	0.65			0.41	0.41			1.00			0.26
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	380	4133			2101	654			1611			710
v/s Ratio Prot	0.13	0.18			0.33							
v/s Ratio Perm						0.08			c0.94			0.18
v/c Ratio	0.59	0.27			0.80	0.19			0.94			0.69
Uniform Delay, d1	21.2	4.6			15.4	11.2			0.0			20.2
Progression Factor	1.15	1.13			1.00	1.00			1.00			1.00
Incremental Delay, d2	1.7	0.0			3.3	0.6			11.8			3.0
Delay (s)	26.1	5.2			18.7	11.8			11.8			23.2
Level of Service	C	A			B	B			B			C
Approach Delay (s)		8.7			17.7			11.8			23.2	
Approach LOS		A			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	1826	216	109	1336	66	316	562	74	56	169	165
Future Volume (veh/h)	390	1826	216	109	1336	66	316	562	74	56	169	165
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	424	1985	235	118	1452	72	343	611	80	61	184	179
Adj No. of Lanes	2	3	1	2	4	0	2	2	1	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	579	2553	1000	241	2546	126	491	847	368	176	750	490
Arrive On Green	0.17	0.50	0.49	0.07	0.40	0.40	0.14	0.24	0.23	0.05	0.15	0.14
Sat Flow, veh/h	3442	5085	1583	3442	6301	312	3442	3539	1583	3442	5085	1583
Grp Volume(v), veh/h	424	1985	235	118	1107	417	343	611	80	61	184	179
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1602	1808	1721	1770	1583	1721	1695	1583
Q Serve(g_s), s	8.9	24.4	4.9	2.5	13.6	13.7	7.3	12.1	3.1	1.3	2.4	6.7
Cycle Q Clear(g_c), s	8.9	24.4	4.9	2.5	13.6	13.7	7.3	12.1	3.1	1.3	2.4	6.7
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	579	2553	1000	241	1942	730	491	847	368	176	750	490
V/C Ratio(X)	0.73	0.78	0.23	0.49	0.57	0.57	0.70	0.72	0.22	0.35	0.25	0.37
Avail Cap(c_a), veh/h	766	2553	1000	585	2075	781	676	847	368	585	965	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	15.5	6.1	34.2	17.6	17.6	31.2	26.7	23.7	35.0	28.8	20.6
Incr Delay (d2), s/veh	2.5	1.6	0.1	1.5	0.3	0.9	1.9	3.0	0.3	1.2	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	11.6	2.1	1.2	6.0	6.9	3.6	6.3	1.4	0.6	1.2	3.0
LnGrp Delay(d),s/veh	32.7	17.1	6.2	35.7	18.0	18.5	33.1	29.8	24.0	36.2	29.0	21.0
LnGrp LOS	C	B	A	D	B	B	C	C	C	D	C	C
Approach Vol, veh/h		2644			1642			1034			424	
Approach Delay, s/veh		18.6			19.4			30.4			26.7	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	40.4	13.9	13.8	15.9	32.9	6.9	20.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	35.0	14.0	13.0	16.0	31.0	12.0	15.0
Max Q Clear Time (g_c+I1), s	4.5	26.4	9.3	8.7	10.9	15.7	3.3	14.1
Green Ext Time (p_c), s	0.2	8.6	0.7	1.1	0.9	13.2	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.6
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	704	255	177	1051	114	822
Future Volume (veh/h)	704	255	177	1051	114	822
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	765	277	192	1142	124	893
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1091	508	435	2224	476	901
Arrive On Green	0.32	0.30	0.25	0.63	0.27	0.27
Sat Flow, veh/h	3487	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	765	277	192	1142	124	893
Grp Sat Flow(s),veh/h/ln	1699	1583	1774	1770	1774	1583
Q Serve(g_s), s	9.6	7.0	4.4	8.6	2.7	13.0
Cycle Q Clear(g_c), s	9.6	7.0	4.4	8.6	2.7	13.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1091	508	435	2224	476	901
V/C Ratio(X)	0.70	0.54	0.44	0.51	0.26	0.99
Avail Cap(c_a), veh/h	1262	588	769	3068	476	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	13.5	15.5	4.9	13.9	7.3
Incr Delay (d2), s/veh	1.5	0.9	0.7	0.2	0.3	27.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	3.2	2.2	4.2	1.3	18.6
LnGrp Delay(d),s/veh	15.9	14.4	16.2	5.1	14.2	35.1
LnGrp LOS	B	B	B	A	B	D
Approach Vol, veh/h	1042			1334	1017	
Approach Delay, s/veh	15.5			6.7	32.6	
Approach LOS	B			A	C	

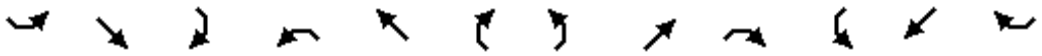
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.9	17.6		16.0		32.4		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	20.0	16.0		12.0		40.0		
Max Q Clear Time (g_c+I1), s	6.4	11.6		15.0		10.6		
Green Ext Time (p_c), s	5.3	2.0		0.0		7.0		

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	796	862	884	1208	0	1116
Future Volume (vph)	796	862	884	1208	0	1116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	865	937	961	1313	0	1213
RTOR Reduction (vph)	0	526	0	0	0	300
Lane Group Flow (vph)	865	411	961	1313	0	913
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	37.0	37.0	35.0	76.0		65.0
Effective Green, g (s)	39.0	39.0	36.0	78.0		66.0
Actuated g/C Ratio	0.26	0.26	0.24	0.52		0.44
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1322	411	823	1840		708
v/s Ratio Prot	0.17		c0.28	0.37		
v/s Ratio Perm		c0.26				c0.57
v/c Ratio	0.65	1.00	1.17	0.71		1.29
Uniform Delay, d1	49.5	55.5	57.0	27.5		42.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.2	44.0	88.4	1.3		140.7
Delay (s)	50.7	99.4	145.4	28.8		182.7
Level of Service	D	F	F	C		F
Approach Delay (s)	76.0			78.1	182.7	
Approach LOS	E			E	F	

Intersection Summary			
HCM 2000 Control Delay	101.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	163	1419	341	0	1306	1053	179	410	578	340	0	459
Future Volume (vph)	163	1419	341	0	1306	1053	179	410	578	340	0	459
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	177	1542	371	0	1420	1145	195	446	628	370	0	499
RTOR Reduction (vph)	0	0	180	0	0	0	0	0	0	0	0	58
Lane Group Flow (vph)	177	1542	191	0	1420	1145	195	446	628	370	0	441
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	9.9	35.7	35.7		21.8	71.4	11.0	12.5	71.4	11.2		26.6
Effective Green, g (s)	11.4	37.2	36.7		23.3	71.4	12.5	14.0	71.4	12.7		28.1
Actuated g/C Ratio	0.16	0.52	0.51		0.33	1.00	0.18	0.20	1.00	0.18		0.39
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	548	1843	813		2091	1583	309	693	1583	610		623
v/s Ratio Prot	0.05	c0.44			0.22		0.11	0.13		0.11		0.28
v/s Ratio Perm			0.12			c0.72			0.40			
v/c Ratio	0.32	0.84	0.23		0.68	0.72	0.63	0.64	0.40	0.61		0.71
Uniform Delay, d1	26.6	14.5	9.6		20.8	0.0	27.3	26.4	0.0	27.0		18.2
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	3.5	0.1		0.9	2.9	4.2	2.1	0.7	1.7		3.7
Delay (s)	26.9	18.0	9.7		21.7	2.9	31.5	28.5	0.7	28.8		21.9
Level of Service	C	B	A		C	A	C	C	A	C		C
Approach Delay (s)		17.3			13.3			15.2			24.8	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	71.4	Sum of lost time (s)	10.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	251	1527	409	170	1775	59	455	453	219	145	558	159
Future Volume (vph)	251	1527	409	170	1775	59	455	453	219	145	558	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	273	1660	445	185	1929	64	495	492	238	158	607	173
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	273	1660	445	185	1929	64	495	492	238	158	607	173
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	10.5	24.5	72.4	9.1	23.1	72.4	11.2	14.3	72.4	8.5	11.6	72.4
Effective Green, g (s)	11.5	27.0	72.4	10.1	25.6	72.4	12.2	16.8	72.4	9.5	14.1	72.4
Actuated g/C Ratio	0.16	0.37	1.00	0.14	0.35	1.00	0.17	0.23	1.00	0.13	0.19	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	545	1896	1583	478	2265	1583	840	1179	1583	450	990	1583
v/s Ratio Prot	c0.08	c0.33		0.05	0.30		c0.10	0.10		0.05	c0.12	
v/s Ratio Perm			c0.28			0.04			0.15			0.11
v/c Ratio	0.50	0.88	0.28	0.39	0.85	0.04	0.59	0.42	0.15	0.35	0.61	0.11
Uniform Delay, d1	27.8	21.1	0.0	28.3	21.6	0.0	27.8	23.6	0.0	28.6	26.7	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	4.9	0.4	0.5	3.3	0.0	1.1	0.2	0.2	0.5	1.1	0.1
Delay (s)	28.6	26.0	0.4	28.9	24.9	0.0	28.9	23.9	0.2	29.1	27.8	0.1
Level of Service	C	C	A	C	C	A	C	C	A	C	C	A
Approach Delay (s)		21.5			24.5			21.3			22.9	
Approach LOS		C			C			C			C	

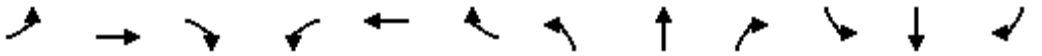
Intersection Summary			
HCM 2000 Control Delay	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	72.4	Sum of lost time (s)	9.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	328	1254	891	322	1438	601	538	612	79	790	1071	409
Future Volume (veh/h)	328	1254	891	322	1438	601	538	612	79	790	1071	409
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	357	1363	0	350	1563	0	585	665	0	859	1164	0
Adj No. of Lanes	2	4	1	2	4	1	2	3	1	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	1683	380	496	1650	372	616	1533	451	1096	1208	514
Arrive On Green	0.15	0.26	0.00	0.14	0.26	0.00	0.18	0.30	0.00	0.22	0.34	0.00
Sat Flow, veh/h	3304	6408	1583	3442	6408	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	357	1363	0	350	1563	0	585	665	0	859	1164	0
Grp Sat Flow(s),veh/h/ln	1652	1602	1583	1721	1602	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	9.2	17.8	0.0	8.7	21.4	0.0	15.0	9.4	0.0	14.5	28.8	0.0
Cycle Q Clear(g_c), s	9.2	17.8	0.0	8.7	21.4	0.0	15.0	9.4	0.0	14.5	28.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	493	1683	380	496	1650	372	616	1533	451	1096	1208	514
V/C Ratio(X)	0.72	0.81	0.00	0.71	0.95	0.00	0.95	0.43	0.00	0.78	0.96	0.00
Avail Cap(c_a), veh/h	518	1683	380	539	1650	372	616	1533	451	1176	1208	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	30.8	0.0	36.4	32.6	0.0	36.3	25.1	0.0	32.9	28.9	0.0
Incr Delay (d2), s/veh	4.7	3.1	0.0	3.8	12.0	0.0	24.3	0.2	0.0	3.3	17.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	8.2	0.0	4.4	10.8	0.0	9.2	4.4	0.0	7.0	17.0	0.0
LnGrp Delay(d),s/veh	41.0	33.9	0.0	40.2	44.6	0.0	60.6	25.3	0.0	36.2	46.6	0.0
LnGrp LOS	D	C		D	D		E	C		D	D	
Approach Vol, veh/h		1720			1913			1250			2023	
Approach Delay, s/veh		35.4			43.8			41.8			42.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	28.4	14.9	24.5	18.0	32.0	15.3	24.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	23.0	12.0	20.0	14.0	28.0	12.0	20.0
Max Q Clear Time (g_c+I1), s	16.5	11.4	10.7	19.8	17.0	30.8	11.2	23.4
Green Ext Time (p_c), s	1.1	4.6	0.2	0.2	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.9
HCM 2010 LOS	D



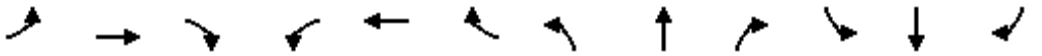
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	5	204	23	23	50	304	1197	3	5	1687	549
Future Volume (vph)	210	5	204	23	23	50	304	1197	3	5	1687	549
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1689	1583		1817	1583	3433	3538		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1689	1583		1817	1583	3433	3538		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	5	222	25	25	54	330	1301	3	5	1834	597
RTOR Reduction (vph)	0	0	81	0	0	51	0	0	0	0	0	95
Lane Group Flow (vph)	116	117	141	0	50	3	330	1304	0	5	1834	502
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	13.2	13.2	29.8		7.2	7.2	16.6	96.0		1.2	80.6	80.6
Effective Green, g (s)	14.2	14.2	31.8		8.2	8.2	17.6	98.5		2.2	83.1	83.1
Actuated g/C Ratio	0.11	0.11	0.24		0.06	0.06	0.13	0.74		0.02	0.62	0.62
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	178	179	412		111	97	452	2608		29	2201	984
v/s Ratio Prot	0.07	c0.07	0.05		c0.03		c0.10	0.37		0.00	c0.52	
v/s Ratio Perm			0.04			0.00						0.32
v/c Ratio	0.65	0.65	0.34		0.45	0.03	0.73	0.50		0.17	0.83	0.51
Uniform Delay, d1	57.3	57.3	42.2		60.5	59.0	55.7	7.3		64.8	19.8	14.0
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.3	8.3	0.5		2.9	0.1	6.0	0.2		2.8	2.9	0.4
Delay (s)	65.6	65.6	42.7		63.4	59.1	61.7	7.5		67.6	22.7	14.4
Level of Service	E	E	D		E	E	E	A		E	C	B
Approach Delay (s)		54.4			61.2			18.4			20.8	
Approach LOS		D			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	133.6	Sum of lost time (s)	10.5
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	647	527	837	466	1080	816
Future Volume (vph)	647	527	837	466	1080	816
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.97	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.96	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3372	1441	3539	1583	3433	3539
Flt Permitted	0.96	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3372	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	703	573	910	507	1174	887
RTOR Reduction (vph)	30	282	0	359	0	0
Lane Group Flow (vph)	845	119	910	148	1174	887
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	20.0	20.0	18.0	18.0	25.0	47.0
Effective Green, g (s)	21.0	22.3	20.3	20.3	27.3	48.0
Actuated g/C Ratio	0.28	0.30	0.27	0.27	0.36	0.64
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	944	428	957	428	1249	2264
v/s Ratio Prot	c0.25		c0.26		c0.34	0.25
v/s Ratio Perm		0.08		0.09		
v/c Ratio	0.90	0.28	0.95	0.35	0.94	0.39
Uniform Delay, d1	25.9	20.2	26.9	22.0	23.1	6.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.9	0.4	18.3	0.5	13.4	0.1
Delay (s)	36.9	20.5	45.2	22.5	36.5	6.6
Level of Service	D	C	D	C	D	A
Approach Delay (s)	31.7		37.1			23.6
Approach LOS	C		D			C

Intersection Summary			
HCM 2000 Control Delay	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	6.4
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



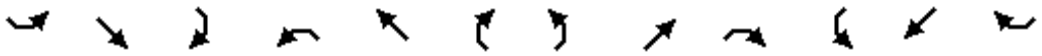
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	544	478	86	585	162	324	406	62	169	628	349
Future Volume (vph)	153	544	478	86	585	162	324	406	62	169	628	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7	3.0	3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	166	591	520	93	636	176	352	441	67	184	683	379
RTOR Reduction (vph)	0	0	370	0	0	131	0	0	48	0	0	305
Lane Group Flow (vph)	166	591	150	93	636	45	352	441	19	184	683	74
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	10.4	18.1	18.1	7.4	15.1	15.1	16.9	19.2	19.2	9.0	11.3	11.3
Effective Green, g (s)	11.4	20.1	20.1	8.4	17.8	17.8	17.9	21.5	20.2	10.0	13.6	13.6
Actuated g/C Ratio	0.16	0.29	0.29	0.12	0.26	0.26	0.26	0.31	0.29	0.14	0.20	0.20
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	289	1020	456	213	903	404	454	1568	458	509	1026	319
v/s Ratio Prot	c0.09	c0.17		0.05	c0.18		c0.20	0.09		0.05	c0.13	
v/s Ratio Perm			0.09			0.03			0.01			0.05
v/c Ratio	0.57	0.58	0.33	0.44	0.70	0.11	0.78	0.28	0.04	0.36	0.67	0.23
Uniform Delay, d1	26.9	21.2	19.5	28.5	23.6	19.9	24.0	18.2	17.8	27.0	25.9	23.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.8	0.4	1.4	2.5	0.1	8.1	0.1	0.0	0.4	1.6	0.4
Delay (s)	29.7	22.0	19.9	29.9	26.1	20.0	32.1	18.3	17.8	27.4	27.6	24.0
Level of Service	C	C	B	C	C	C	C	B	B	C	C	C
Approach Delay (s)		22.1			25.3			23.9			26.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	69.7	Sum of lost time (s)	9.7
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	323	16	28	27	13	57	42	962	0	81	1202	159
Future Volume (vph)	323	16	28	27	13	57	42	962	0	81	1202	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1666			1802	1583	1770	3539		1770	3477	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1666			1802	1583	1770	3539		1770	3477	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	351	17	30	29	14	62	46	1046	0	88	1307	173
RTOR Reduction (vph)	0	4	0	0	0	58	0	0	0	0	7	0
Lane Group Flow (vph)	200	194	0	0	43	4	46	1046	0	88	1473	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	19.6	19.6			6.4	6.4	6.5	52.6		8.4	54.5	
Effective Green, g (s)	20.6	20.6			7.4	7.4	7.5	54.6		9.4	56.5	
Actuated g/C Ratio	0.20	0.20			0.07	0.07	0.07	0.53		0.09	0.55	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	336	333			129	113	128	1876		161	1907	
v/s Ratio Prot	c0.12	0.12			c0.02		0.03	0.30		c0.05	c0.42	
v/s Ratio Perm						0.00						
v/c Ratio	0.60	0.58			0.33	0.04	0.36	0.56		0.55	0.77	
Uniform Delay, d1	37.4	37.3			45.5	44.5	45.5	16.1		44.8	18.2	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	2.6			1.5	0.1	1.7	0.4		3.8	2.0	
Delay (s)	40.2	39.9			47.0	44.6	47.2	16.5		48.5	20.2	
Level of Service	D	D			D	D	D	B		D	C	
Approach Delay (s)		40.1			45.6			17.8			21.8	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	103.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

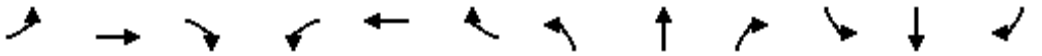
c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	149	19	177	144	8	53	129	820	28	28	1134	35
Future Volume (vph)	149	19	177	144	8	53	129	820	28	28	1134	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1779	1583	1770	3522		1770	3523	
Flt Permitted		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1779	1583	1770	3522		1770	3523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	162	21	192	157	9	58	140	891	30	30	1233	38
RTOR Reduction (vph)	0	0	162	0	0	49	0	1	0	0	2	0
Lane Group Flow (vph)	0	183	30	0	166	9	140	920	0	30	1269	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		17.6	17.6		16.4	16.4	14.7	62.8		4.7	52.8	
Effective Green, g (s)		18.6	18.6		17.4	17.4	15.7	64.8		5.7	54.8	
Actuated g/C Ratio		0.16	0.16		0.15	0.15	0.13	0.55		0.05	0.47	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		282	250		263	234	236	1942		85	1643	
v/s Ratio Prot		c0.10			c0.09		c0.08	0.26		0.02	c0.36	
v/s Ratio Perm			0.02			0.01						
v/c Ratio		0.65	0.12		0.63	0.04	0.59	0.47		0.35	0.77	
Uniform Delay, d1		46.4	42.4		47.0	42.9	47.9	16.0		54.1	26.2	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.1	0.2		4.9	0.1	4.0	0.2		2.5	2.3	
Delay (s)		51.5	42.7		51.9	42.9	51.9	16.2		56.6	28.5	
Level of Service		D	D		D	D	D	B		E	C	
Approach Delay (s)		47.0			49.6			20.9			29.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	117.5	Sum of lost time (s)	11.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	1356	16	90	875	683	29	30	91	1060	12	316
Future Volume (vph)	366	1356	16	90	875	683	29	30	91	1060	12	316
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	398	1474	17	98	951	742	32	33	99	1152	13	343
RTOR Reduction (vph)	0	1	0	0	0	239	0	0	93	0	0	158
Lane Group Flow (vph)	398	1490	0	98	951	503	32	33	6	588	577	185
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	31.0	62.8		11.2	43.0	43.0	8.2	8.2	8.2	48.0	48.0	48.0
Effective Green, g (s)	32.0	63.8		12.2	44.0	44.0	9.2	9.2	9.2	49.0	49.0	49.0
Actuated g/C Ratio	0.22	0.44		0.08	0.30	0.30	0.06	0.06	0.06	0.34	0.34	0.34
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	387	1541		147	1065	476	111	117	99	563	565	530
v/s Ratio Prot	c0.22	0.42		0.06	0.27		c0.02	0.02		c0.35	0.34	
v/s Ratio Perm						c0.32			0.00			0.12
v/c Ratio	1.03	0.97		0.67	0.89	1.06	0.29	0.28	0.06	1.04	1.02	0.35
Uniform Delay, d1	57.1	40.2		65.0	48.8	51.1	65.4	65.3	64.4	48.6	48.6	36.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	53.2	15.6		10.9	9.7	57.0	1.4	1.3	0.3	50.0	43.3	0.4
Delay (s)	110.3	55.8		75.9	58.5	108.1	66.8	66.7	64.7	98.6	91.9	37.0
Level of Service	F	E		E	E	F	E	E	E	F	F	D
Approach Delay (s)		67.3			80.0			65.5			82.0	
Approach LOS		E			F			E			F	

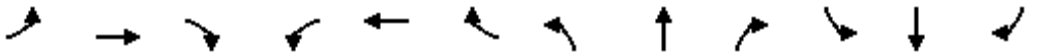
Intersection Summary			
HCM 2000 Control Delay	75.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	146.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1145	802	0	1542	1129	0	0	0	892	0	154
Future Volume (veh/h)	0	1145	802	0	1542	1129	0	0	0	892	0	154
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1245	0	0	1676	0				970	0	167
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2112	928	0	2136	928				1103	0	508
Arrive On Green	0.00	0.60	0.00	0.00	0.60	0.00				0.32	0.00	0.32
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1245	0	0	1676	0				970	0	167
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	12.7	0.0	0.0	20.7	0.0				15.5	0.0	4.6
Cycle Q Clear(g_c), s	0.0	12.7	0.0	0.0	20.7	0.0				15.5	0.0	4.6
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2112	928	0	2136	928				1103	0	508
V/C Ratio(X)	0.00	0.59	0.00	0.00	0.78	0.00				0.88	0.00	0.33
Avail Cap(c_a), veh/h	0	2232	982	0	2257	982				1103	0	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.3	0.0	0.0	8.7	0.0				18.7	0.0	15.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	1.8	0.0				8.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.2	0.0	0.0	10.3	0.0				8.6	0.0	2.1
LnGrp Delay(d),s/veh	0.0	7.7	0.0	0.0	10.5	0.0				27.0	0.0	15.3
LnGrp LOS		A			B					C		B
Approach Vol, veh/h		1245			1676						1137	
Approach Delay, s/veh		7.7			10.5						25.3	
Approach LOS		A			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		37.0		21.0		37.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		35.0		17.0		35.0		
Max Q Clear Time (g_c+I1), s		14.7		17.5		22.7		
Green Ext Time (p_c), s		15.7		0.0		10.3		

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	331	1008	0	0	2179	668	0	0	478	0	0	512
Future Volume (vph)	331	1008	0	0	2179	668	0	0	478	0	0	512
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.86			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			5085	1583			1611			2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	360	1096	0	0	2368	726	0	0	520	0	0	557
RTOR Reduction (vph)	0	0	0	0	0	161	0	0	0	0	0	519
Lane Group Flow (vph)	360	1096	0	0	2368	565	0	0	520	0	0	38
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	30.9	109.2			75.3	75.3			125.7			6.5
Effective Green, g (s)	32.9	111.2			77.3	77.3			125.7			8.5
Actuated g/C Ratio	0.26	0.88			0.61	0.61			1.00			0.07
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	463	5668			3127	973			1611			188
v/s Ratio Prot	c0.20	0.17			c0.47							
v/s Ratio Perm						0.36			c0.32			0.01
v/c Ratio	0.78	0.19			0.76	0.58			0.32			0.20
Uniform Delay, d1	43.0	1.0			17.4	14.5			0.0			55.4
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	8.0	0.0			1.1	0.9			0.5			0.5
Delay (s)	51.0	1.0			18.5	15.4			0.5			55.9
Level of Service	D	A			B	B			A			E
Approach Delay (s)		13.4			17.8			0.5			55.9	
Approach LOS		B			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	125.7	Sum of lost time (s)	9.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	446	1598	188	244	2164	157	324	478	161	157	732	346
Future Volume (veh/h)	446	1598	188	244	2164	157	324	478	161	157	732	346
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	485	1737	204	265	2352	171	352	520	175	171	796	376
Adj No. of Lanes	2	3	1	2	4	0	2	2	1	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	548	2380	937	387	2588	188	465	764	333	290	839	504
Arrive On Green	0.16	0.47	0.46	0.11	0.42	0.42	0.14	0.22	0.21	0.08	0.16	0.16
Sat Flow, veh/h	3442	5085	1583	3442	6145	445	3442	3539	1583	3442	5085	1583
Grp Volume(v), veh/h	485	1737	204	265	1838	685	352	520	175	171	796	376
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1602	1784	1721	1770	1583	1721	1695	1583
Q Serve(g_s), s	12.1	24.3	5.3	6.5	31.5	31.7	8.7	11.9	8.6	4.2	13.6	14.0
Cycle Q Clear(g_c), s	12.1	24.3	5.3	6.5	31.5	31.7	8.7	11.9	8.6	4.2	13.6	14.0
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	2380	937	387	2024	751	465	764	333	290	839	504
V/C Ratio(X)	0.88	0.73	0.22	0.69	0.91	0.91	0.76	0.68	0.53	0.59	0.95	0.75
Avail Cap(c_a), veh/h	548	2380	937	509	2077	771	509	764	333	509	839	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	18.9	8.4	37.5	23.9	23.9	36.6	31.7	30.8	38.8	36.3	26.8
Incr Delay (d2), s/veh	15.8	1.2	0.1	2.5	6.3	14.8	5.9	2.5	1.5	1.9	19.8	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	11.5	2.3	3.2	15.0	18.5	4.5	6.0	3.9	2.1	7.9	9.0
LnGrp Delay(d),s/veh	52.0	20.1	8.5	40.0	30.1	38.7	42.5	34.2	32.4	40.7	56.1	32.7
LnGrp LOS	D	C	A	D	C	D	D	C	C	D	E	C
Approach Vol, veh/h		2426			2788			1047			1343	
Approach Delay, s/veh		25.5			33.2			36.7			47.6	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	43.1	14.9	17.0	17.0	39.0	10.4	21.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	37.0	12.0	13.0	13.0	36.0	12.0	13.0
Max Q Clear Time (g_c+I1), s	8.5	26.3	10.7	16.0	14.1	33.7	6.2	13.9
Green Ext Time (p_c), s	0.4	10.7	0.2	0.0	0.0	1.3	0.3	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.7
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	731	270	248	1640	117	650
Future Volume (veh/h)	731	270	248	1640	117	650
Number	2	12	1	6	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	795	293	270	1783	127	707
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1110	517	507	2364	425	868
Arrive On Green	0.33	0.31	0.29	0.67	0.24	0.24
Sat Flow, veh/h	3487	1583	1774	3632	1774	1583
Grp Volume(v), veh/h	795	293	270	1783	127	707
Grp Sat Flow(s),veh/h/ln	1699	1583	1774	1770	1774	1583
Q Serve(g_s), s	11.2	8.3	6.9	18.3	3.2	13.0
Cycle Q Clear(g_c), s	11.2	8.3	6.9	18.3	3.2	13.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1110	517	507	2364	425	868
V/C Ratio(X)	0.72	0.57	0.53	0.75	0.30	0.81
Avail Cap(c_a), veh/h	1316	613	589	2742	425	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	15.1	16.3	6.0	16.9	8.5
Incr Delay (d2), s/veh	1.5	1.0	0.9	1.0	0.4	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	3.8	3.5	9.0	1.6	11.9
LnGrp Delay(d),s/veh	17.6	16.1	17.2	7.1	17.3	14.5
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	1088			2053	834	
Approach Delay, s/veh	17.2			8.4	14.9	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.5	19.7		16.0		38.2		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	17.0	19.0		12.0		40.0		
Max Q Clear Time (g_c+I1), s	8.9	13.2		15.0		20.3		
Green Ext Time (p_c), s	5.8	2.6		0.0		11.0		

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	839	660	993	1889	0	1060
Future Volume (vph)	839	660	993	1889	0	1060
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	2.0	3.0	2.0		4.0
Lane Util. Factor	0.91	1.00	0.97	0.95		1.00
Frt	1.00	0.85	1.00	1.00		0.86
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5085	1583	3433	3539		1611
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5085	1583	3433	3539		1611
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	912	717	1079	2053	0	1152
RTOR Reduction (vph)	0	478	0	0	0	405
Lane Group Flow (vph)	912	239	1079	2053	0	747
Turn Type	NA	Perm	Prot	NA		Perm
Protected Phases	2		1	6		
Permitted Phases		2				8
Actuated Green, G (s)	21.0	21.0	32.0	57.0		40.0
Effective Green, g (s)	23.0	23.0	33.0	59.0		41.0
Actuated g/C Ratio	0.22	0.22	0.31	0.56		0.39
Clearance Time (s)	4.0	4.0	4.0	4.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	1103	343	1068	1969		623
v/s Ratio Prot	0.18		0.31	c0.58		
v/s Ratio Perm		0.15				c0.46
v/c Ratio	0.83	0.70	1.01	1.04		1.20
Uniform Delay, d1	39.6	38.3	36.5	23.5		32.5
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	5.2	6.1	30.1	32.4		104.7
Delay (s)	44.8	44.4	66.6	55.9		137.2
Level of Service	D	D	E	E		F
Approach Delay (s)	44.6			59.6	137.2	
Approach LOS	D			E	F	

Intersection Summary			
HCM 2000 Control Delay	70.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	215	1365	320	0	1724	1456	243	452	556	376	0	472
Future Volume (vph)	215	1365	320	0	1724	1456	243	452	556	376	0	472
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.5	2.5	3.0		2.5	2.5	2.5	2.5	3.0	2.5		2.5
Lane Util. Factor	0.97	0.95	1.00		0.86	1.00	1.00	0.95	1.00	0.97		1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Flt Permitted	0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583		6408	1583	1770	3539	1583	3433		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	234	1484	348	0	1874	1583	264	491	604	409	0	513
RTOR Reduction (vph)	0	0	165	0	0	0	0	0	0	0	0	42
Lane Group Flow (vph)	234	1484	183	0	1874	1583	264	491	604	409	0	471
Turn Type	Prot	NA	Perm		NA	Free	Prot	NA	Free	Prot		pt+ov
Protected Phases	5	2			6		3	8		7		4 5
Permitted Phases			2		6	Free		8	Free			
Actuated Green, G (s)	11.0	49.0	49.0		34.0	101.0	18.0	23.9	101.0	16.1		37.0
Effective Green, g (s)	12.5	50.5	50.0		35.5	101.0	19.5	25.4	101.0	17.6		38.5
Actuated g/C Ratio	0.12	0.50	0.50		0.35	1.00	0.19	0.25	1.00	0.17		0.38
Clearance Time (s)	4.0	4.0	4.0		4.0		4.0	4.0		4.0		
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	424	1769	783		2252	1583	341	890	1583	598		603
v/s Ratio Prot	0.07	0.42			0.29		0.15	0.14		0.12		0.30
v/s Ratio Perm			0.12			c1.00			0.38			
v/c Ratio	0.55	0.84	0.23		0.83	1.00	0.77	0.55	0.38	0.68		0.78
Uniform Delay, d1	41.6	21.7	14.6		30.0	50.5	38.7	32.9	0.0	39.1		27.5
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.6	3.7	0.2		2.8	22.6	10.5	0.7	0.7	3.2		6.5
Delay (s)	43.2	25.4	14.7		32.8	73.1	49.1	33.6	0.7	42.3		34.0
Level of Service	D	C	B		C	E	D	C	A	D		C
Approach Delay (s)		25.6			51.3			22.0			37.7	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	37.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	101.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	217	1575	354	191	2423	92	536	526	205	162	479	258
Future Volume (vph)	217	1575	354	191	2423	92	536	526	205	162	479	258
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0	3.0	1.5	3.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	1.00	0.94	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	6408	1583	4990	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	236	1712	385	208	2634	100	583	572	223	176	521	280
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	236	1712	385	208	2634	100	583	572	223	176	521	280
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases		4	Free			Free			Free		6	Free
Actuated Green, G (s)	11.2	49.1	104.1	10.8	48.7	104.1	15.4	18.0	104.1	10.2	12.8	104.1
Effective Green, g (s)	12.2	51.6	104.1	11.8	51.2	104.1	16.4	20.5	104.1	11.2	15.3	104.1
Actuated g/C Ratio	0.12	0.50	1.00	0.11	0.49	1.00	0.16	0.20	1.00	0.11	0.15	1.00
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	402	2520	1583	389	3151	1583	786	1001	1583	369	747	1583
v/s Ratio Prot	c0.07	0.34		0.06	c0.41		c0.12	0.11		0.05	c0.10	
v/s Ratio Perm			c0.24			0.06			0.14			0.18
v/c Ratio	0.59	0.68	0.24	0.53	0.84	0.06	0.74	0.57	0.14	0.48	0.70	0.18
Uniform Delay, d1	43.6	20.0	0.0	43.6	22.8	0.0	41.8	37.8	0.0	43.7	42.2	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.2	0.7	0.4	1.4	2.1	0.1	3.8	0.8	0.2	1.0	2.9	0.2
Delay (s)	45.8	20.7	0.4	45.0	24.9	0.1	45.6	38.6	0.2	44.7	45.1	0.2
Level of Service	D	C	A	D	C	A	D	D	A	D	D	A
Approach Delay (s)		19.9			25.5			35.4			32.1	
Approach LOS		B			C			D			C	

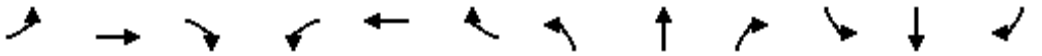
Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	104.1	Sum of lost time (s)	9.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1457	794	309	1865	680	656	846	77	810	990	459
Future Volume (veh/h)	306	1457	794	309	1865	680	656	846	77	810	990	459
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	333	1584	0	336	2027	0	713	920	0	880	1076	0
Adj No. of Lanes	2	4	1	2	4	1	2	3	1	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	454	1945	449	464	1928	445	656	1418	418	1089	1083	461
Arrive On Green	0.14	0.30	0.00	0.13	0.30	0.00	0.19	0.28	0.00	0.22	0.31	0.00
Sat Flow, veh/h	3304	6408	1583	3442	6408	1583	3442	5085	1583	5003	3539	1583
Grp Volume(v), veh/h	333	1584	0	336	2027	0	713	920	0	880	1076	0
Grp Sat Flow(s),veh/h/ln	1652	1602	1583	1721	1602	1583	1721	1695	1583	1668	1770	1583
Q Serve(g_s), s	9.6	22.8	0.0	9.3	30.0	0.0	19.0	15.9	0.0	16.6	30.2	0.0
Cycle Q Clear(g_c), s	9.6	22.8	0.0	9.3	30.0	0.0	19.0	15.9	0.0	16.6	30.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	454	1945	449	464	1928	445	656	1418	418	1089	1083	461
V/C Ratio(X)	0.73	0.81	0.00	0.72	1.05	0.00	1.09	0.65	0.00	0.81	0.99	0.00
Avail Cap(c_a), veh/h	464	1945	449	483	1928	445	656	1418	418	1154	1083	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	32.1	0.0	41.4	34.8	0.0	40.3	31.7	0.0	37.0	34.5	0.0
Incr Delay (d2), s/veh	5.8	2.8	0.0	5.1	35.5	0.0	61.1	1.0	0.0	4.2	25.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	10.4	0.0	4.8	17.9	0.0	14.5	7.5	0.0	8.1	18.5	0.0
LnGrp Delay(d),s/veh	47.1	34.9	0.0	46.5	70.3	0.0	101.5	32.7	0.0	41.2	60.3	0.0
LnGrp LOS	D	C		D	F		F	C		D	E	
Approach Vol, veh/h		1917			2363			1633			1956	
Approach Delay, s/veh		37.0			66.9			62.7			51.7	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	29.3	15.4	31.3	21.0	32.0	15.7	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	24.0	12.0	27.0	17.0	28.0	12.0	27.0
Max Q Clear Time (g_c+I1), s	18.6	17.9	11.3	24.8	21.0	32.2	11.6	32.0
Green Ext Time (p_c), s	1.1	3.8	0.1	2.1	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.0
HCM 2010 LOS	D



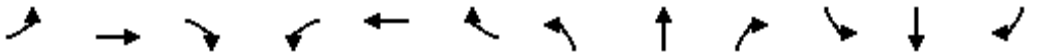
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	304	7	198	16	16	40	222	1441	5	5	1544	613
Future Volume (vph)	304	7	198	16	16	40	222	1441	5	5	1544	613
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0	3.0		3.0	3.0	3.0	1.5		3.0	1.5	1.5
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1689	1583		1817	1583	3433	3538		1770	3539	1583
Flt Permitted	0.95	0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1689	1583		1817	1583	3433	3538		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	330	8	215	17	17	43	241	1566	5	5	1678	666
RTOR Reduction (vph)	0	0	134	0	0	40	0	0	0	0	0	154
Lane Group Flow (vph)	168	170	81	0	34	3	241	1571	0	5	1678	512
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3						6
Actuated Green, G (s)	12.4	12.4	23.4		5.8	5.8	11.0	63.1		1.2	53.3	53.3
Effective Green, g (s)	13.4	13.4	25.4		6.8	6.8	12.0	65.6		2.2	55.8	55.8
Actuated g/C Ratio	0.14	0.14	0.26		0.07	0.07	0.12	0.67		0.02	0.57	0.57
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	228	229	456		125	109	418	2356		39	2004	896
v/s Ratio Prot	0.10	c0.10	0.02		c0.02		c0.07	0.44		0.00	c0.47	
v/s Ratio Perm			0.03			0.00						0.32
v/c Ratio	0.74	0.74	0.18		0.27	0.03	0.58	0.67		0.13	0.84	0.57
Uniform Delay, d1	40.9	40.9	28.4		43.5	42.8	40.9	9.9		47.2	17.6	13.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	11.7	12.2	0.2		1.2	0.1	1.9	0.7		1.5	3.2	0.9
Delay (s)	52.6	53.1	28.6		44.7	42.9	42.8	10.6		48.7	20.8	14.6
Level of Service	D	D	C		D	D	D	B		D	C	B
Approach Delay (s)		43.4			43.7			14.9			19.1	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	98.5	Sum of lost time (s)	10.5
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	793	745	820	444	1018	827
Future Volume (vph)	793	745	820	444	1018	827
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	1.7	1.7	1.7	1.7	3.0
Lane Util. Factor	0.97	0.91	0.95	1.00	0.97	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.96	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.96	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3353	1441	3539	1583	3433	3539
Flt Permitted	0.96	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3353	1441	3539	1583	3433	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	862	810	891	483	1107	899
RTOR Reduction (vph)	31	331	0	343	0	0
Lane Group Flow (vph)	1115	195	891	140	1107	899
Confl. Peds. (#/hr)	484					
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	6		8		7	4
Permitted Phases		6		8		
Actuated Green, G (s)	36.9	36.9	25.0	25.0	32.0	61.0
Effective Green, g (s)	37.9	39.2	27.3	27.3	34.3	62.0
Actuated g/C Ratio	0.36	0.37	0.26	0.26	0.32	0.59
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1199	533	912	408	1111	2071
v/s Ratio Prot	c0.33		c0.25		c0.32	0.25
v/s Ratio Perm		0.14		0.09		
v/c Ratio	0.93	0.37	0.98	0.34	1.00	0.43
Uniform Delay, d1	32.7	24.3	39.0	32.0	35.7	12.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.4	0.4	24.0	0.5	25.9	0.1
Delay (s)	45.1	24.7	63.0	32.5	61.7	12.3
Level of Service	D	C	E	C	E	B
Approach Delay (s)	38.7		52.3			39.6
Approach LOS	D		D			D

Intersection Summary			
HCM 2000 Control Delay	42.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	105.9	Sum of lost time (s)	6.4
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



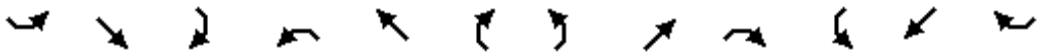
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	644	544	83	602	181	489	683	58	163	638	314
Future Volume (vph)	202	644	544	83	602	181	489	683	58	163	638	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-7%	
Total Lost time (s)	3.0	2.0	2.0	3.0	1.3	1.3	3.0	1.7	3.0	3.0	1.7	1.7
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583	1770	5085	1583	3553	5263	1639
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	220	700	591	90	654	197	532	742	63	177	693	341
RTOR Reduction (vph)	0	0	412	0	0	149	0	0	39	0	0	232
Lane Group Flow (vph)	220	700	179	90	654	48	532	742	24	177	693	109
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	14.8	27.7	27.7	8.1	21.0	21.0	32.6	36.2	36.2	10.1	13.7	13.7
Effective Green, g (s)	15.8	29.7	29.7	9.1	23.7	23.7	33.6	38.5	37.2	11.1	16.0	16.0
Actuated g/C Ratio	0.16	0.30	0.30	0.09	0.24	0.24	0.34	0.39	0.38	0.11	0.16	0.16
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	285	1071	479	164	854	382	606	1995	600	402	858	267
v/s Ratio Prot	c0.12	0.20		0.05	c0.18		c0.30	0.15		0.05	c0.13	
v/s Ratio Perm			0.11			0.03			0.02			0.07
v/c Ratio	0.77	0.65	0.37	0.55	0.77	0.12	0.88	0.37	0.04	0.44	0.81	0.41
Uniform Delay, d1	39.4	29.7	26.9	42.5	34.6	29.1	30.3	21.2	19.2	40.6	39.6	36.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.2	1.4	0.5	3.7	4.1	0.1	13.6	0.1	0.0	0.8	5.6	1.0
Delay (s)	51.6	31.2	27.4	46.3	38.8	29.2	43.9	21.3	19.2	41.4	45.2	37.8
Level of Service	D	C	C	D	D	C	D	C	B	D	D	D
Approach Delay (s)		32.7			37.5			30.2			42.6	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	35.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	98.1	Sum of lost time (s)	9.7
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	302	14	27	25	12	53	47	909	0	71	1360	187
Future Volume (vph)	302	14	27	25	12	53	47	909	0	71	1360	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98			1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1665			1802	1583	1770	3539		1770	3475	
Flt Permitted	0.95	0.96			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1665			1802	1583	1770	3539		1770	3475	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	328	15	29	27	13	58	51	988	0	77	1478	203
RTOR Reduction (vph)	0	6	0	0	0	54	0	0	0	0	9	0
Lane Group Flow (vph)	187	179	0	0	40	4	51	988	0	77	1672	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	13.1	13.1			5.9	5.9	6.5	48.7		7.3	49.5	
Effective Green, g (s)	14.1	14.1			6.9	6.9	7.5	50.7		8.3	51.5	
Actuated g/C Ratio	0.15	0.15			0.08	0.08	0.08	0.56		0.09	0.57	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	260	257			136	120	145	1971		161	1966	
v/s Ratio Prot	c0.11	0.11			c0.02		0.03	0.28		c0.04	c0.48	
v/s Ratio Perm						0.00						
v/c Ratio	0.72	0.70			0.29	0.04	0.35	0.50		0.48	0.85	
Uniform Delay, d1	36.6	36.4			39.7	39.0	39.5	12.4		39.3	16.5	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.2	8.0			1.2	0.1	1.5	0.2		2.2	3.7	
Delay (s)	45.7	44.4			41.0	39.1	40.9	12.6		41.5	20.3	
Level of Service	D	D			D	D	D	B		D	C	
Approach Delay (s)		45.1			39.9			14.0			21.2	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	91.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

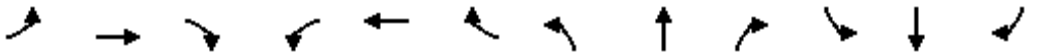
c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	159	20	129	132	7	48	130	781	20	25	1181	39
Future Volume (vph)	159	20	129	132	7	48	130	781	20	25	1181	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0	3.0		3.0	3.0	3.0	2.0		3.0	2.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1779	1583	1770	3526		1770	3522	
Flt Permitted		0.96	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1784	1583		1779	1583	1770	3526		1770	3522	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	173	22	140	143	8	52	141	849	22	27	1284	42
RTOR Reduction (vph)	0	0	118	0	0	45	0	1	0	0	2	0
Lane Group Flow (vph)	0	195	22	0	151	7	141	870	0	27	1324	0
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		14.0	14.0		11.6	11.6	11.4	50.8		4.4	43.8	
Effective Green, g (s)		15.0	15.0		12.6	12.6	12.4	52.8		5.4	45.8	
Actuated g/C Ratio		0.15	0.15		0.13	0.13	0.13	0.55		0.06	0.47	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		276	245		231	206	226	1923		98	1666	
v/s Ratio Prot		c0.11			c0.08		c0.08	0.25		0.02	c0.38	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.71	0.09		0.65	0.03	0.62	0.45		0.28	0.79	
Uniform Delay, d1		38.8	35.0		40.0	36.8	40.0	13.3		43.8	21.5	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		8.0	0.2		6.5	0.1	5.3	0.2		1.5	2.7	
Delay (s)		46.8	35.2		46.5	36.8	45.3	13.4		45.4	24.2	
Level of Service		D	D		D	D	D	B		D	C	
Approach Delay (s)		42.0			44.0			17.9			24.7	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	96.8	Sum of lost time (s)	11.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	371	1307	18	109	1103	581	48	60	114	1014	12	337
Future Volume (vph)	371	1307	18	109	1103	581	48	60	114	1014	12	337
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3532		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3532		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	403	1421	20	118	1199	632	52	65	124	1102	13	366
RTOR Reduction (vph)	0	1	0	0	0	228	0	0	112	0	0	249
Lane Group Flow (vph)	403	1440	0	118	1199	404	52	65	12	562	553	117
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	19.0	39.3		10.7	31.0	31.0	8.9	8.9	8.9	28.0	28.0	28.0
Effective Green, g (s)	20.0	40.3		11.7	32.0	32.0	9.9	9.9	9.9	29.0	29.0	29.0
Actuated g/C Ratio	0.19	0.39		0.11	0.31	0.31	0.10	0.10	0.10	0.28	0.28	0.28
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	344	1383		201	1100	492	170	179	152	473	475	446
v/s Ratio Prot	c0.23	c0.41		0.07	0.34		0.03	c0.03		c0.33	0.33	
v/s Ratio Perm						0.26			0.01			0.07
v/c Ratio	1.17	1.04		0.59	1.09	0.82	0.31	0.36	0.08	1.19	1.16	0.26
Uniform Delay, d1	41.5	31.3		43.3	35.5	32.8	43.3	43.5	42.3	37.0	37.0	28.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	103.8	35.7		4.3	55.1	10.6	1.0	1.3	0.2	104.2	94.8	0.3
Delay (s)	145.2	67.0		47.6	90.5	43.4	44.3	44.8	42.6	141.1	131.8	29.0
Level of Service	F	E		D	F	D	D	D	D	F	F	C
Approach Delay (s)		84.1			72.6			43.5			109.9	
Approach LOS		F			E			D			F	

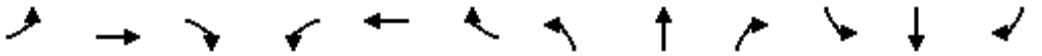
Intersection Summary			
HCM 2000 Control Delay	85.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	102.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1094	769	0	1613	1402	0	0	0	1019	0	175
Future Volume (veh/h)	0	1094	769	0	1613	1402	0	0	0	1019	0	175
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1863	1863				1863	0	1863
Adj Flow Rate, veh/h	0	1189	0	0	1753	0				1108	0	190
Adj No. of Lanes	0	2	1	0	2	1				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2				2	0	2
Cap, veh/h	0	2174	956	0	2198	956				1043	0	480
Arrive On Green	0.00	0.61	0.00	0.00	0.62	0.00				0.30	0.00	0.30
Sat Flow, veh/h	0	3632	1583	0	3632	1583				3442	0	1583
Grp Volume(v), veh/h	0	1189	0	0	1753	0				1108	0	190
Grp Sat Flow(s),veh/h/ln	0	1770	1583	0	1770	1583				1721	0	1583
Q Serve(g_s), s	0.0	11.3	0.0	0.0	21.6	0.0				17.6	0.0	5.5
Cycle Q Clear(g_c), s	0.0	11.3	0.0	0.0	21.6	0.0				17.6	0.0	5.5
Prop In Lane	0.00		1.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2174	956	0	2198	956				1043	0	480
V/C Ratio(X)	0.00	0.55	0.00	0.00	0.80	0.00				1.06	0.00	0.40
Avail Cap(c_a), veh/h	0	2292	1009	0	2316	1009				1043	0	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.5	0.0	0.0	8.3	0.0				20.2	0.0	16.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	2.0	0.0				45.9	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	0.0	0.0	10.8	0.0				14.9	0.0	2.4
LnGrp Delay(d),s/veh	0.0	6.8	0.0	0.0	10.2	0.0				66.1	0.0	16.6
LnGrp LOS		A			B					F		B
Approach Vol, veh/h		1189			1753						1298	
Approach Delay, s/veh		6.8			10.2						58.9	
Approach LOS		A			B						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		38.1		20.0		38.1		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		36.0		16.0		36.0		
Max Q Clear Time (g_c+I1), s		13.3		19.6		23.6		
Green Ext Time (p_c), s		17.2		0.0		10.5		

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	288	1079	0	0	2548	527	0	0	1180	0	0	465
Future Volume (vph)	288	1079	0	0	2548	527	0	0	1180	0	0	465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.0	3.0			2.0	2.0			3.0			3.0
Lane Util. Factor	1.00	0.86			0.91	1.00			1.00			0.88
Frt	1.00	1.00			1.00	0.85			0.86			0.85
Flt Protected	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (prot)	1770	6408			5085	1583			1611			2787
Flt Permitted	0.95	1.00			1.00	1.00			1.00			1.00
Satd. Flow (perm)	1770	6408			5085	1583			1611			2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	313	1173	0	0	2770	573	0	0	1283	0	0	505
RTOR Reduction (vph)	0	0	0	0	0	160	0	0	0	0	0	431
Lane Group Flow (vph)	313	1173	0	0	2770	413	0	0	1283	0	0	74
Turn Type	Prot	NA			NA	Perm			Free			Perm
Protected Phases	5	2			6							
Permitted Phases						6			Free			4
Actuated Green, G (s)	18.6	79.7			58.1	58.1			97.9			8.2
Effective Green, g (s)	20.6	81.7			60.1	60.1			97.9			10.2
Actuated g/C Ratio	0.21	0.83			0.61	0.61			1.00			0.10
Clearance Time (s)	4.0	5.0			4.0	4.0						5.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0						3.0
Lane Grp Cap (vph)	372	5347			3121	971			1611			290
v/s Ratio Prot	0.18	0.18			c0.54							
v/s Ratio Perm						0.26			c0.80			0.03
v/c Ratio	0.84	0.22			0.89	0.43			0.80			0.26
Uniform Delay, d1	37.1	1.6			16.0	9.9			0.0			40.4
Progression Factor	1.00	1.00			1.00	1.00			1.00			1.00
Incremental Delay, d2	15.7	0.0			3.4	0.3			4.2			0.5
Delay (s)	52.7	1.7			19.5	10.2			4.2			40.8
Level of Service	D	A			B	B			A			D
Approach Delay (s)		12.4			17.9			4.2			40.8	
Approach LOS		B			B			A			D	

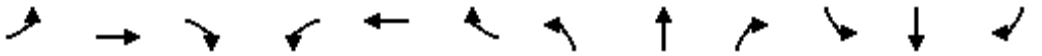
Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	97.9	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	430	1599	188	212	2221	145	389	494	164	184	783	466
Future Volume (veh/h)	430	1599	188	212	2221	145	389	494	164	184	783	466
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	467	1738	204	230	2414	158	423	537	178	200	851	507
Adj No. of Lanes	2	3	1	2	4	0	2	2	1	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	499	2359	946	350	2605	170	499	796	347	319	878	494
Arrive On Green	0.14	0.46	0.45	0.10	0.42	0.42	0.14	0.22	0.22	0.09	0.17	0.17
Sat Flow, veh/h	3442	5085	1583	3442	6193	404	3442	3539	1583	3442	5085	1583
Grp Volume(v), veh/h	467	1738	204	230	1872	700	423	537	178	200	851	507
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1602	1791	1721	1770	1583	1721	1695	1583
Q Serve(g_s), s	12.0	25.0	5.3	5.8	33.2	33.4	10.8	12.4	8.9	5.0	14.9	15.0
Cycle Q Clear(g_c), s	12.0	25.0	5.3	5.8	33.2	33.4	10.8	12.4	8.9	5.0	14.9	15.0
Prop In Lane	1.00		1.00	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	499	2359	946	350	2021	753	499	796	347	319	878	494
V/C Ratio(X)	0.94	0.74	0.22	0.66	0.93	0.93	0.85	0.67	0.51	0.63	0.97	1.03
Avail Cap(c_a), veh/h	499	2359	946	499	2035	759	499	796	347	499	878	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	19.6	8.3	38.8	24.7	24.7	37.4	31.8	30.8	39.2	36.9	30.9
Incr Delay (d2), s/veh	25.4	1.2	0.1	2.1	7.9	17.8	12.9	2.3	1.3	2.0	23.0	47.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	11.9	2.4	2.8	16.0	20.1	6.0	6.3	4.0	2.5	8.8	18.7
LnGrp Delay(d),s/veh	63.4	20.8	8.5	40.9	32.6	42.5	50.4	34.0	32.1	41.3	59.9	78.2
LnGrp LOS	E	C	A	D	C	D	D	C	C	D	E	F
Approach Vol, veh/h		2409			2802			1138			1558	
Approach Delay, s/veh		28.0			35.7			39.8			63.4	
Approach LOS		C			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	43.6	16.0	18.0	16.0	39.7	11.3	22.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	36.0	12.0	14.0	12.0	36.0	12.0	14.0
Max Q Clear Time (g_c+I1), s	7.8	27.0	12.8	17.0	14.0	35.4	7.0	14.4
Green Ext Time (p_c), s	0.4	9.0	0.0	0.0	0.0	0.4	0.3	0.0

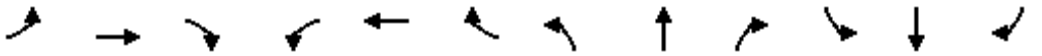
Intersection Summary	
HCM 2010 Ctrl Delay	39.4
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	1344	16	70	658	922	16	8	29	650	11	206
Future Volume (vph)	226	1344	16	70	658	922	16	8	29	650	11	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1688	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1688	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	246	1461	17	76	715	1002	17	9	32	707	12	224
RTOR Reduction (vph)	0	1	0	0	0	216	0	0	30	0	0	171
Lane Group Flow (vph)	246	1477	0	76	715	786	17	9	2	361	358	53
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6	4	3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	12.3	33.7		7.2	28.6	46.0	3.8	3.8	3.8	17.4	17.4	17.4
Effective Green, g (s)	13.3	34.7		8.2	29.6	48.0	4.8	4.8	4.8	18.4	18.4	18.4
Actuated g/C Ratio	0.17	0.44		0.10	0.38	0.61	0.06	0.06	0.06	0.24	0.24	0.24
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	301	1569		185	1341	972	108	114	97	396	397	372
v/s Ratio Prot	c0.14	c0.42		0.04	0.20	0.19	c0.01	0.00		c0.21	0.21	
v/s Ratio Perm						0.31			0.00			0.03
v/c Ratio	0.82	0.94		0.41	0.53	0.81	0.16	0.08	0.02	0.91	0.90	0.14
Uniform Delay, d1	31.2	20.7		32.7	18.9	11.5	34.7	34.6	34.4	29.1	29.0	23.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.6	11.6		1.5	0.4	5.0	0.7	0.3	0.1	24.7	23.0	0.2
Delay (s)	46.9	32.3		34.2	19.3	16.5	35.4	34.9	34.5	53.8	52.0	23.8
Level of Service	D	C		C	B	B	D	C	C	D	D	C
Approach Delay (s)		34.4			18.4			34.8			46.0	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	78.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

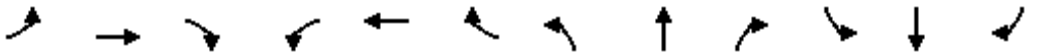
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	1356	16	90	875	683	29	30	91	1060	12	316
Future Volume (vph)	366	1356	16	90	875	683	29	30	91	1060	12	316
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3533		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	398	1474	17	98	951	742	32	33	99	1152	13	343
RTOR Reduction (vph)	0	1	0	0	0	98	0	0	93	0	0	158
Lane Group Flow (vph)	398	1490	0	98	951	644	32	33	6	588	577	185
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6	4	3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	31.0	62.8		11.2	43.0	91.0	8.2	8.2	8.2	48.0	48.0	48.0
Effective Green, g (s)	32.0	63.8		12.2	44.0	93.0	9.2	9.2	9.2	49.0	49.0	49.0
Actuated g/C Ratio	0.22	0.44		0.08	0.30	0.64	0.06	0.06	0.06	0.34	0.34	0.34
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	387	1541		147	1065	1006	111	117	99	563	565	530
v/s Ratio Prot	c0.22	c0.42		0.06	0.27	0.21	c0.02	0.02		c0.35	0.34	
v/s Ratio Perm						0.19			0.00			0.12
v/c Ratio	1.03	0.97		0.67	0.89	0.64	0.29	0.28	0.06	1.04	1.02	0.35
Uniform Delay, d1	57.1	40.2		65.0	48.8	16.3	65.4	65.3	64.4	48.6	48.6	36.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	53.2	15.6		10.9	9.7	1.4	1.4	1.3	0.3	50.0	43.3	0.4
Delay (s)	110.3	55.8		75.9	58.5	17.7	66.8	66.7	64.7	98.6	91.9	37.0
Level of Service	F	E		E	E	B	E	E	E	F	F	D
Approach Delay (s)		67.3			42.6			65.5			82.0	
Approach LOS		E			D			E			F	

Intersection Summary			
HCM 2000 Control Delay	63.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	146.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	371	1307	18	109	1103	581	48	60	114	1014	12	337
Future Volume (vph)	371	1307	18	109	1103	581	48	60	114	1014	12	337
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (prot)	1770	3532		1770	3539	1583	1770	1863	1583	1681	1687	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Satd. Flow (perm)	1770	3532		1770	3539	1583	1770	1863	1583	1681	1687	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	403	1421	20	118	1199	632	52	65	124	1102	13	366
RTOR Reduction (vph)	0	1	0	0	0	114	0	0	112	0	0	249
Lane Group Flow (vph)	403	1440	0	118	1199	518	52	65	12	562	553	117
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6	4	3	3		4	4	
Permitted Phases						6			3			4
Actuated Green, G (s)	19.0	39.3		10.7	31.0	59.0	8.9	8.9	8.9	28.0	28.0	28.0
Effective Green, g (s)	20.0	40.3		11.7	32.0	61.0	9.9	9.9	9.9	29.0	29.0	29.0
Actuated g/C Ratio	0.19	0.39		0.11	0.31	0.59	0.10	0.10	0.10	0.28	0.28	0.28
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	344	1383		201	1100	938	170	179	152	473	475	446
v/s Ratio Prot	c0.23	c0.41		0.07	0.34	0.16	0.03	c0.03		c0.33	0.33	
v/s Ratio Perm						0.17			0.01			0.07
v/c Ratio	1.17	1.04		0.59	1.09	0.55	0.31	0.36	0.08	1.19	1.16	0.26
Uniform Delay, d1	41.5	31.3		43.3	35.5	12.7	43.3	43.5	42.3	37.0	37.0	28.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	103.8	35.7		4.3	55.1	0.7	1.0	1.3	0.2	104.2	94.8	0.3
Delay (s)	145.2	67.0		47.6	90.5	13.4	44.3	44.8	42.6	141.1	131.8	29.0
Level of Service	F	E		D	F	B	D	D	D	F	F	C
Approach Delay (s)		84.1			62.9			43.5			109.9	
Approach LOS		F			E			D			F	

Intersection Summary			
HCM 2000 Control Delay	81.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	102.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group