Kimley»Horn

Memorandum

To: Jack Varozza, P.E., QSD/P
Senior Engineer, City of Roseville

From: Pedro Cortes
Stephen Dillon, P.E.

Re: ***Traffic Evaluation***
Cirby Pacific Charter School
Roseville, California

Date: September 19, 2024

The purpose of this memorandum is to document the transportation analysis completed for the Cirby Pacific Charter School (the "proposed project" or "project") located in the existing building at 1515 Cirby Way, east of Meadow Oaks Drive, in Roseville, California. This memorandum evaluates the weekday AM, Project School-PM, and PM peak-hours under Existing (2024) and Existing (2024) plus Project conditions.

Project Understanding

Kimley-Horn understands that the Pacific Charter Institute (PCI) is proposing to operate a new school in the existing building located at 1515 Cirby Way (see **Exhibit 1**). The existing 5,908-square foot (sf) building would accommodate five classrooms, an outdoor playground, and other supporting facilities (i.e., restrooms, storage, etc.)[1]. Access to the project site would be accomplished via the two existing driveways, one along Cirby Way and one along Meadow Oaks Drive. The project site plan is shown in **Exhibit 2**. This traffic evaluation was understood to be required primarily due to the following characteristics of the project site and surrounding area:

- The proposed project's proximity to Oakmont High School warrants a thoughtful examination of the potential overlap between the two uses' traffic operations.
- The proposed project originally indicated[2] the following typical traffic patterns:
  - Morning Drop-Off: 6:30 – 8:00 am
  - Afternoon Pick-Up: 12:00 – 12:30 pm (TK), 2:15 – 3:15 pm (K-5)
  - Overall Operating Hours: 6:30 am – 6:00 pm
- The Proposed Project indicates it can serve up to 144 children with 15 employees[2].

Subsequent coordination with the City[3] has resulted in the following proposed typical project traffic pattern:

- Morning Drop-Off:
  - 7:00 – 7:30 am (TK-1)
  - 7:30 – 8:00 am (1-4)
- Afternoon Pick-Up:
  - 12:10 – 12:40 pm (TK)
  - 1:20 – 1:50 pm (K-1)
  - 1:50 – 2:20 pm (2-4)

[1] *Cirby Way Building Permit Submittal – Sheet A1*, WMB Architects, June 13, 2024.
[2] *New Pacific Charter Roseville – Application for Conditional Use Permit*, Paul Keefer, Pacific Charter Institute, August 1, 2024.
[3] Email correspondence with Marc Stout, City of Roseville, September 12, 2024.

At the direction of the City, a "Short-Term Traffic Impact Study"[4] has been prepared. The primary purposes of this analysis are to evaluate the effects of the proposed project on traffic operations at the Cirby Way intersections with Oak Ridge Drive and Meadow Oaks Drive, and its drop-off/pick-up operations relative to Meadow Oaks Drive while accounting for peak period traffic interaction with the nearby Oakmont High School.

Data Collection

Kimley-Horn manually collected (via traffic count subconsultant) weekday AM, School-PM, and PM peak-period traffic counts on Wednesday, August 14, 2024, to establish weekday intersection turning movement traffic volumes, including bicycle and pedestrian counts, at the following study intersections:

1. Cirby Way at Oak Ridge Drive
2. Cirby Way at Meadow Oaks Drive

After reviewing the collected turning movement data, it was established that the School-PM peak-hour associated with Oakmont High School occurs from 3:00 – 4:00 pm, nearly 40 minutes after the anticipated end of 2-4 grade pickup at the project. Turning movements at the study facilities during the project's School-PM peak-hour (1:15 – 2:15 pm) were subsequently used to complete the traffic evaluation.

Data collection also included maximum observed vehicle queue lengths for the westbound approach to Intersection #1 (Cirby Way at Oak Ridge Drive).

The following data was collected from the City to aid in completing this evaluation:

- Existing signal timing parameters for the Cirby Way intersection with Oak Ridge Drive (Intersection #1)

Kimley-Horn completed a field visit to observe study intersection lane configurations, vehicle storage lengths, existing traffic control, speed limits, lane utilization, adjacent land uses, and other readily apparent features relevant to the Scope of Services.

Kimley-Horn performed a field visit to the existing PCI school located at 143 Clinton Avenue in Roseville on Tuesday, August 20, 2024, and collected unique local site trip generation data. Drop-off and pick-up operations, average vehicle dwell times, vehicle occupancy, parking behavior, and standard employee operational practices that could be anticipated to translate to the proposed project were also observed.

Assessment of Proposed Project

Trip Generation

The number of trips anticipated to be generated by the proposed project was derived using locally collected data at the existing PCI school located on 143 Clinton Avenue. Data collected at the site is included in Attachment A. The average student occupancy of each vehicle arriving to the school during the AM drop-off was observed to be 1.26 students per vehicle. This calculated rate was applied to the total number of students the school will serve[1] (144 students) to obtain the number of vehicle trips anticipated to be generated by the proposed project.

Field observations of drop-off and pick-up operations, including discussion with the principal of the existing site regarding students enrolled in pre-care and after-school programs, indicate that approximately 85% of the student project trips will occur during the AM and School-PM peak-hours and

[4] *Section 4 Traffic Impact Studies, City of Roseville Design Standards,* City of Roseville, January 2020.

approximately 15% will occur during the PM peak-hour. Approximately 15% of students will arrive prior to the AM peak-hour for pre-care programming. Field observations indicate that approximately 85% of employees will arrive during the AM peak-hour, approximately 15% will depart during the School-PM peak, and the remaining 85% will depart during the PM peak-hour. Approximately 15% of school employees are anticipated to arrive before the AM peak-hour to staff pre-care programming. As the TK student school day will end at 12:30 pm every day during the week[3], trips associated with picking up those 24 students have been omitted from the School-PM and PM peak-hour evaluations.

The anticipated trip generation characteristics for the proposed project are depicted in **Table 1**. As shown in **Table 1**, the proposed project is anticipated to generate 207 new AM, 164 School-PM, and 41 PM weekday peak-hour trips.

Table 1 – Proposed Project Trip Generation

Land Use	# of People	Weekday AM Peak-Hour			School-PM Peak-Hour			Weekday PM Peak-Hour		
		Total Trips	In Trips	Out Trips	Total Trips	In Trips	Out Trips	Total Trips	In Trips	Out Trips
School Students	144	194	97	97	162	81	81	28	14	14
School Employees	15	13	13	0	2	0	2	13	0	13
Net New Primary Trips		207	110	97	164	81	83	41	14	27

Source: 1.26 student per vehicle occupancy from field observations at 143 Clinton Avenue location on August 20, 2024.

Project Trip Distribution and Assignment

The project trips were distributed to the adjacent transportation network based on existing traffic patterns and engineering judgement. Project trip distribution is provided in **Exhibit 3**. The project trip assignment at the study intersections is depicted in **Exhibit 4**.

Study Facilities and Analysis Methodology

A peak-hour intersection operations analysis (delay and queuing) was conducted for the weekday AM, School-PM, and PM peak-hour for the following scenarios:

A. Existing (2024) Conditions
B. Existing (2024) plus Project Conditions

The peak hour operations analysis was completed for the following intersections:

1. Cirby Way at Oak Ridge Drive
2. Cirby Way at Meadow Oaks Drive

Peak-hour operations analyses were determined for the weekday, PM peak-hour for the scenarios listed above. Operations for each scenario were determined using methods defined in the *Highway Capacity Manual* using micro-simulation (SimTraffic® traffic analysis software). Microsimulation (SimTraffic®) was used to enable the quantification of vehicular delay and queuing at the study intersections due to their relatively close spacing. Peak-hour operations were determined for the weekday AM, School-PM, and PM peak-hours for the scenarios listed above. **Exhibit 5** details the study intersections' traffic control and lane geometry. **Exhibit 6** and **Exhibit 7** detail the weekday peak-hour volumes both without (Existing (2024) Conditions) and with the addition of the project (Existing (2024) plus Project Conditions), respectively. Study facility traffic count data sheets are provided in **Attachment B**.

Analysis Results

The purpose of this analysis was to evaluate the effects of the proposed project on traffic operations at the adjacent Cirby Way study intersections and the effects of the project's drop-off/pick-up operations relative to Meadow Oaks Drive while accounting for peak-period traffic interaction with the nearby Oakmont High School. As previously stated, the proposed project's afternoon pick-up operations are scheduled from 1:20-2:20 pm. The Oakmont High School School-PM peak-hour at the study intersections occurs from 3:00-4:00 pm. Due to the 40 minute offset between anticipated project and high school School-PM peak-hours, traffic data from 1:15-2:15 pm was used at the study facilities to evaluate the project's effects.

Signalized Intersection Delay and Queuing

Table 2 summarizes intersection delay and Table 3 summarizes queuing at the study intersections, both without the project (Existing (2024) Conditions) and with the addition of the project (Existing (2024) plus Project Conditions). All technical analysis worksheets are provided in Attachment C.

Table 2 – Signalized Intersection Delay

ID	Intersection	Peak Hour	Control	Existing (2024)	Existing (2024) plus Project
				Delay (sec)	Delay (sec)
1	Cirby Way at Oak Ridge Drive	Weekday AM	Signal	17.4	18.4
		Project School PM		6.6	7.3
		Weekday PM		11.3	11.0
2	Cirby Way at Meadow Oaks Drive	Weekday AM	SSSC	1.3(27.6 SB)	2.1(43.7 SB)
		Project School PM		0.7(5.4 EB)	1.1(8.6 EB)
		Weekday PM		1.4(38.0 SB)	1.4(43.5 SB)

Note: Side Street Stop Control (SSSC) reported as intersection delay followed by worst approach delay.

As shown in Table 2, both study intersections see a nominal increase in delay with the addition of the project.

The 95th percentile queueing results presented in Table 3 show nominal increases in queue length on select movements with project trips assigned. All movements are anticipated to be contained within the available storage provided, including with the addition of the project.

Table 3 – Intersection Queuing

Intersection / Analysis Scenario	Movement	Available Storage (ft)	Weekday AM Peak-Hour	Project School PM Peak-Hour	Weekday PM Peak-Hour
			95th % Queue (ft)	95th % Queue (ft)	95th % Queue (ft)
#1, Cirby Way at Oak Ridge Drive	EBL				
Existing (2024)		160	85	50	65
Existing (2024) plus Project			95	50	60
	WBL				
Existing (2024)		60	45	55	70
Existing (2024) plus Project			50	65	70
#2, Cirby Way at Meadow Oaks Drive	EBL				
Existing (2024)		130	20	30	40
Existing (2024) plus Project			75	65	50
	SBLR				
Existing (2024)		-	45	35	40
Existing (2024) plus Project			45	35	40

Maximum queueing per lane data was collected concurrently with the study intersection traffic counts for the westbound approach at Intersection #1 (Cirby Way at Oak Ridge Drive). The maximum observed westbound queue during the weekday AM peak-hour was 20 vehicles, or approximately 500-feet. The maximum observed queue during the weekday Oakmont High School School-PM peak-hour was 29 vehicles, or 725-feet. The maximum observed queue during the weekday PM peak-hour was 14 vehicles, or 350-feet. All lengths provided assume an average vehicle length of 25-feet. The maximum queue is observed between the hours of 3:00-4:00 pm, extending well beyond the existing project driveway along Cirby Way. This dynamic would conceivably result in issues for vehicles both entering and exiting the project site. However, the maximum observed queue between 1:20-2:20 pm, when the project proposes to stage student pick-up, is only 10 vehicles, or 250-feet, which would not interfere with vehicles attempting enter the project via Meadow Oaks Drive or leave the site via the driveway onto Cirby Way. This information is summarized in Table 4.

Table 4 – Intersection #1 Maximum Observed Westbound Queue Length

Intersection / Analysis Scenario	Movement	Available Storage (ft)*	Weekday AM Peak-Hour	Project School PM Peak-Hour	High School School-PM Peak-Hour	Weekday PM Peak-Hour
			Max Queue (ft)	Max Queue (ft)	Max Queue (ft)	Max Queue (ft)
#1, Cirby Way at Oak Ridge Drive	WBT					
Existing (2024)		240	500	250	725	350

Shaded cell indicates queue exceeds available storage by >1 vehicle length (25-feet)

*Storage measured from Intersection #1 westbound stop bar back to near curb return at Meadow Oaks Drive

Internal Vehicle Circulation Review

A queuing analysis was conducted to determine if the lane capacity for student drop-off and pick-up is adequate for the anticipated demand. The queue length was determined using queuing analysis formulas published in the Institute of Transportation Engineers (ITE) *Transportation Planning Handbook, 3rd Edition* and is based on the M/M/1 single service model.

The M/M/1 single service model is a commonly used method to estimate vehicle queues in drive-through facilities, similar to the operations proposed by the project applicant. This model is based on queuing theory and estimates the average queue length based on a Poisson distribution for arrival rate (λ), exponential distribution for the service rate (μ), and average wait time. The model also estimates the probability that a specific queue (i.e. drive-through storage length) would be exceeded. This model is equation-based and allows for the estimation of queues without running a simulation. The following summary provides definitions of the terms used in the M/M/1 model:

Arrival Rate, λ

Based on the observed operations at the existing PCI 143 Clinton Avenue location, it is understood that inbound vehicles generally arrive within a 15-minute period around release time. The project proposes to operate pick-up in two waves, with K-1 students being released at 1:50 and 2-4 students being released at 2:20. 80% of vehicles are expected to arrive within 15-minutes of the respective release time. The project will have 65 students in 2-4 grade and 55 in K-1 during the project pick-up period. Therefore, the arrival rate, λ, was calculated to be the 80% of the number of inbound 2-4 grade School-PM trips generated by the project multiplied by four to quantify the vehicles per hour rate used in the queueing calculation.

Service Rate, μ

The average service rate, μ, was based on the average wait time for the loading operations at the existing location, and the average arrival rate, λ, as developed previously. To allow for potential variations in wait time due to inefficiency or loading times, additional scenarios were developed assuming service rates of two and three minutes. For M/M/1, the average wait time is calculated by the following equation:

$$W = \frac{1}{\mu - \lambda}$$

Where:

W = Average total wait time (i.e. in queue & being served), hr
μ = Average service rate, veh/hr
λ = Average arrival rate, veh/hr

Average Queue, Q

The average queue length was determined by the following equation:

$$Q = \frac{\lambda}{\mu - \lambda}$$

Where:

Q = Average queue length, veh
λ = Average arrival rate, veh/hr
μ = Average service rate, veh/hr

Probability queue exceeds available site storage, p(Q>n)

The queue capacity, n, was obtained by measuring the amount of available storage where vehicles can queue within the site. While the original project CUP application planned for double-stacked vehicles throughout the project parking area[2], City staff raised concerns regarding the ability of larger vehicles to successfully corner within the reduced space[5]. As such, it is suggested that the project implement a modified version of their original plan with two rows of queueing along the Cirby Way building frontage and one lane of queueing back to the Meadow Oaks Drive driveway. The configuration described results in 390 feet of storage, approximately 16 vehicles of queueing capacity (assuming 25 feet per vehicle). This configuration is illustrated in **Exhibit 8**. The probability the queue will exceed the storage capacity was determined by the following equation:

$$p(Q > n) = \left(\frac{\lambda}{\mu}\right)^{n+1}$$

Where:

Q = Average queue length, veh
n = Queuing capacity, veh
λ = Average arrival rate, veh/hr
μ = Average service rate, veh/hr

The results of the analysis using the M/M/1 model for the project's on-site operations are summarized in **Table 5**.

Table 5 – On-Site Queuing Analysis Summary

Variable	Total Wait Time		
	1.53 min*	2 min	3 min
Avg. arrival rate, λ (veh/hr)	140	140	140
Avg. service rate, μ (veh/hr)	179.2	170.0	160.0
Avg. total wait time, W (min)	1.53	2.00	3.00
Avg. total wait time, W (hr)	0.03	0.03	0.05
Avg. queue length, Q (veh)	3.6	4.7	7.0
Queue capacity, n (veh)	16	16	16
Probability Queue exceeds n, p(Q>n)	0.02	0.04	0.11

*Average Total Wait Time at 143 Clinton Ave location

As shown in **Table 5**, the probability that the on-site queue will exceed the available queuing capacity of 16-vehicles ranges from 2-11% depending on the service rate. The average queue length ranges from 3.6-7.0 vehicles depending on the scenario. If the queue is to exceed the available capacity, it could potentially block traffic on Meadow Oaks Drive. Although Meadow Oaks Drive is shown to experience minimal traffic during the project's School-PM peak-hour, inefficiencies in internal project vehicle circulation could still result in queueing onto Cirby Way without proper on-site mitigation measures.

Internal Pedestrian Circulation Review

The project anticipates drop-off and pick-up processes will mirror the existing 143 Clinton Avenue location. Due to the setting of the proposed project and its anticipated operations, vehicles will generally not have the availability to park in the existing lot proximate to the building as those spaces are anticipated to be blocked by queueing vehicles during regular drop-off and pick-up times. As a result, it is

[5] Email correspondence with Marc Stout, City of Roseville, September 6, 2024.

assumed that all student vehicles would be using the "drive-through" facility operated by school staff. The project plans to assign "4-5" staff members to manage the flow of vehicles and students within the facility[2]. Drawing from practices observed at the existing location, staff members should be equipped with safety vests and appropriate signage/flagging to guide vehicles and ensure pedestrian safety around the site.

Site Parking Review

The project proposes to maintain the 33 existing on-site parking spaces. As the project proposes to operate drop-off and pick-up using a drive-through system, these spaces will not be used by student vehicles. The 33 spaces are sufficient to accommodate the anticipated 13 full-time and 2 part-time employees at the school. Given the nature of the drive-through drop-off/pick-up operation and the orientation of the parking lot, it is highly likely that staff will be unable to efficiently access these parking spaces during drop-off/pick-up times due to blocking from queued vehicles. To alleviate this inherent conflict, it is recommended that school staff be scheduled to arrive 30 minutes before the start of school and depart 30 minutes after students are released at the end of the day. The school should have all employees using available spaces on-site to avoid on-street parking in the adjacent residential communities.

Conclusions

The following are the primary conclusions based on the analyses discussed herein:

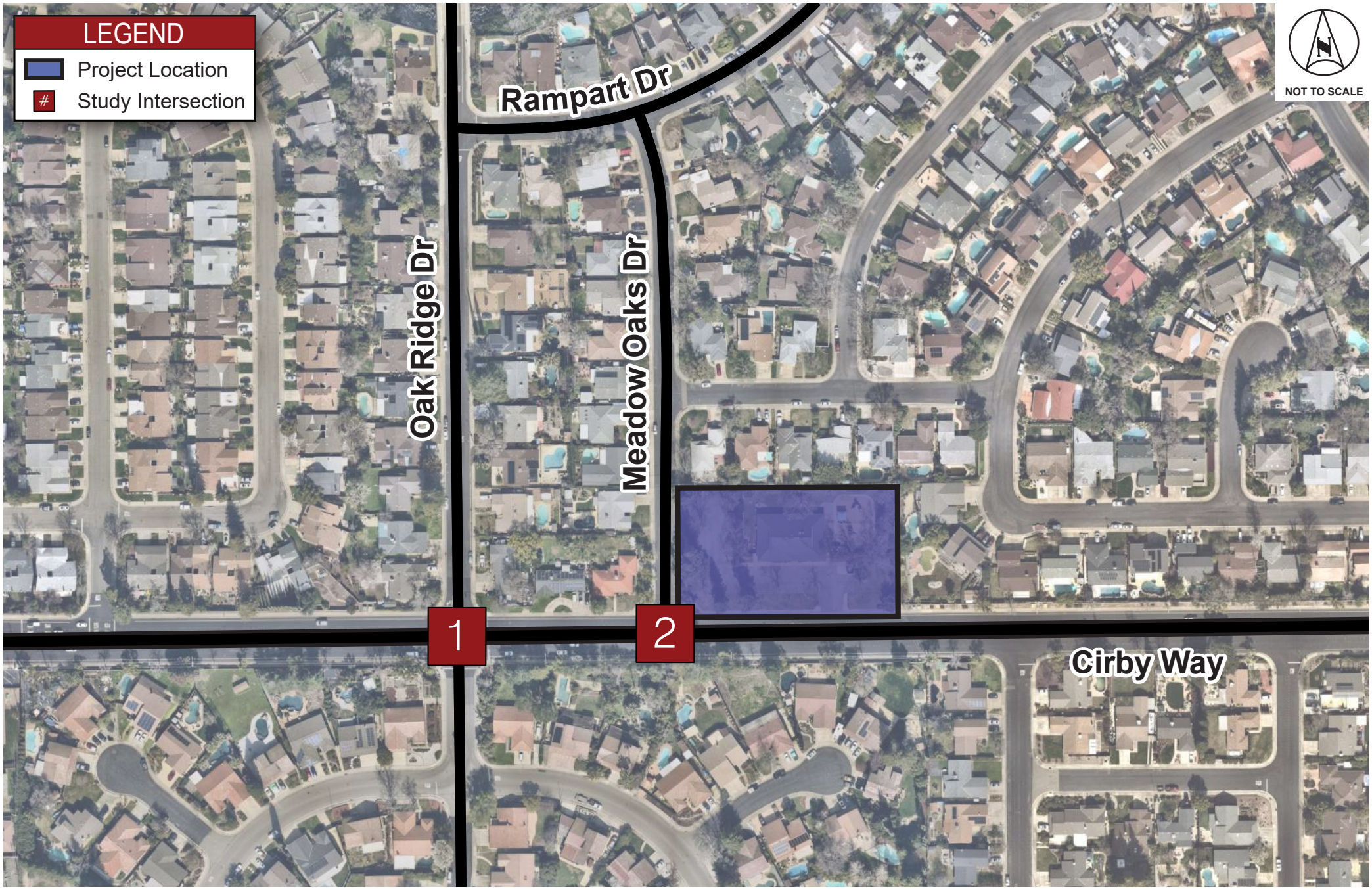
- *City of Roseville operational standards are achieved at all study intersections* – A nominal increase in delay is observed with the addition of the project. However, both intersections operate at acceptable levels of delay with the addition of the project.
- *The Intersection #1 (Cirby Way at Oak Ridge Drive) westbound through movement's 95th percentile queue extends beyond Intersection #2 (Cirby Way at Meadow Oaks Drive) during the observed Oakmont High School School-PM peak-hour* – The existing project driveway along Cirby Way is approximately 490 feet east of Intersection #1. This extended queue could affect traffic going into and out of the proposed project. The maximum observed westbound queue during the proposed project student pick-up window (1:20 – 2:20 pm) is approximately 250 feet, which would not be expected to significantly impact on-site operations.
- *If the school "drive-through" queue exceeds the available capacity it could block traffic on Meadow Oaks Drive* – Although Meadow Oaks Drive currently has minimal traffic during the weekday School-PM peak-hour, inefficiencies in internal vehicle circulation could result in vehicle queues extending onto Cirby Way. To ensure orderly operations on and proximate to the project, PCI should stage at least two (2) staff members along Meadow Oaks Drive with appropriate equipment to direct vehicles and maximize operational efficiency. PCI should reinforce with those picking up students to only arrive after school is dismissed to minimize the probability of vehicles queueing up prior to school dismissal and obstructing Meadow Oaks Drive.
- *The project plans to assign four to five staff members to manage the flow of vehicles and students within the facility* – Drawing from the practices observed at the existing location, staff members will be equipped with safety vests as well as signs to guide vehicles and ensure pedestrian safety around the site.
- *Project staff should be directed to arrive on site at least 30 minutes before the start of school and depart at least 30 minutes after the release of school* – These buffers before and after school opening and closing will allow for staff to safely utilize the existing parking spots on-site without interfering with drop-off/pick-up operations and resorting to parking in proximate residential neighborhoods.

A graphic showing relevant summary information and recommendations is provided in **Exhibit 9**.

Attachments

Exhibit 1 – Project Vicinity Map
Exhibit 2 – Project Site Plan
Exhibit 3 – Project Trip Distribution
Exhibit 4 – Project Trip Assignment
Exhibit 5 – Study Intersections, Traffic Control, and Lane Geometry
Exhibit 6 – Existing (2024) Peak-Hour Traffic Volumes
Exhibit 7 – Existing (2024) plus Project Peak-Hour Traffic Volumes
Exhibit 8 – Recommended Internal Pick-Up Circulation
Exhibit 9 – Summary Information and Recommendations

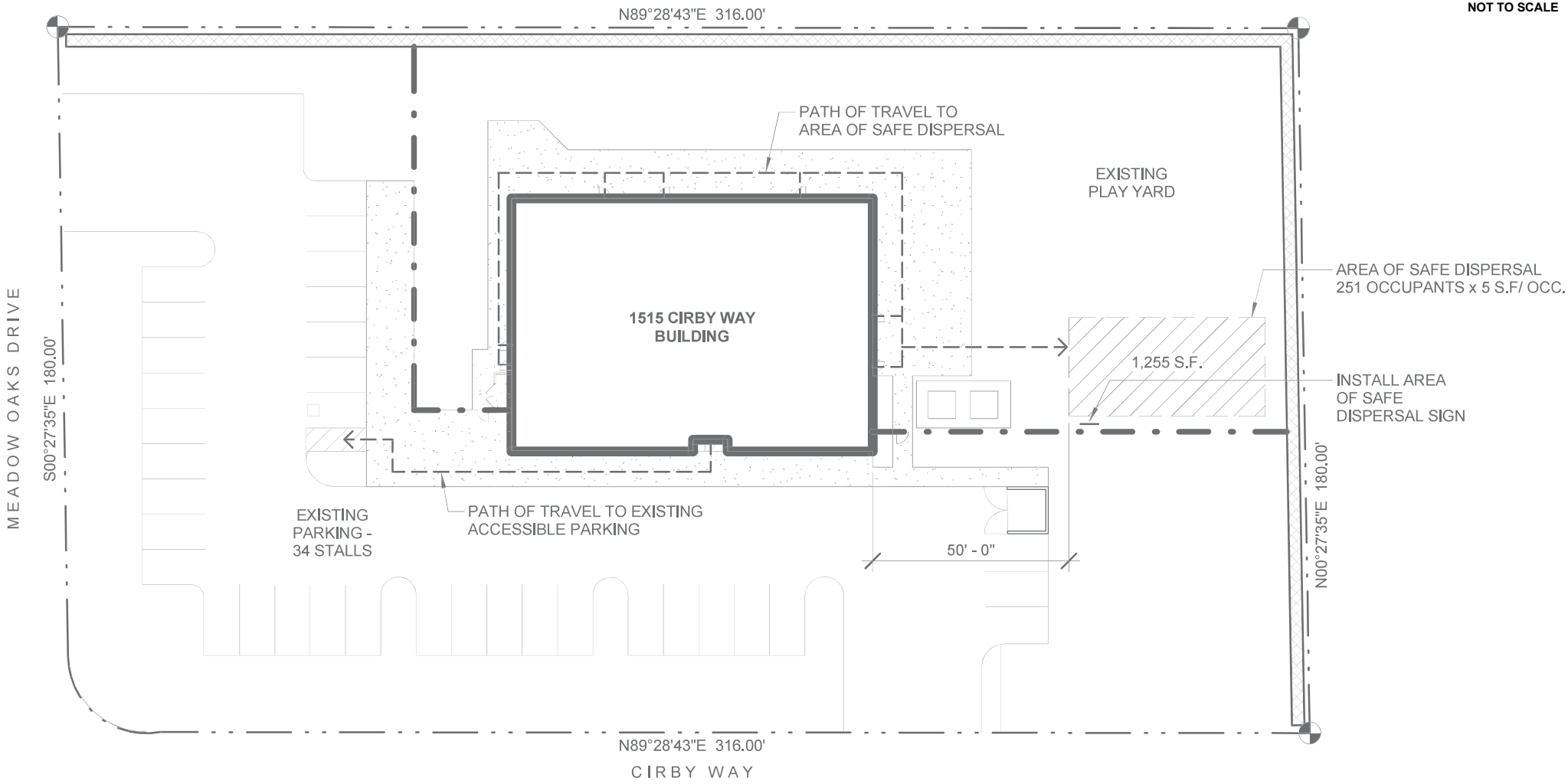
Attachment A – Local Site Data
Attachment B – Traffic Count Data Sheets
Attachment C – Analysis Worksheets



Kimley»Horn

Exhibit 1
Project Vicinity Map

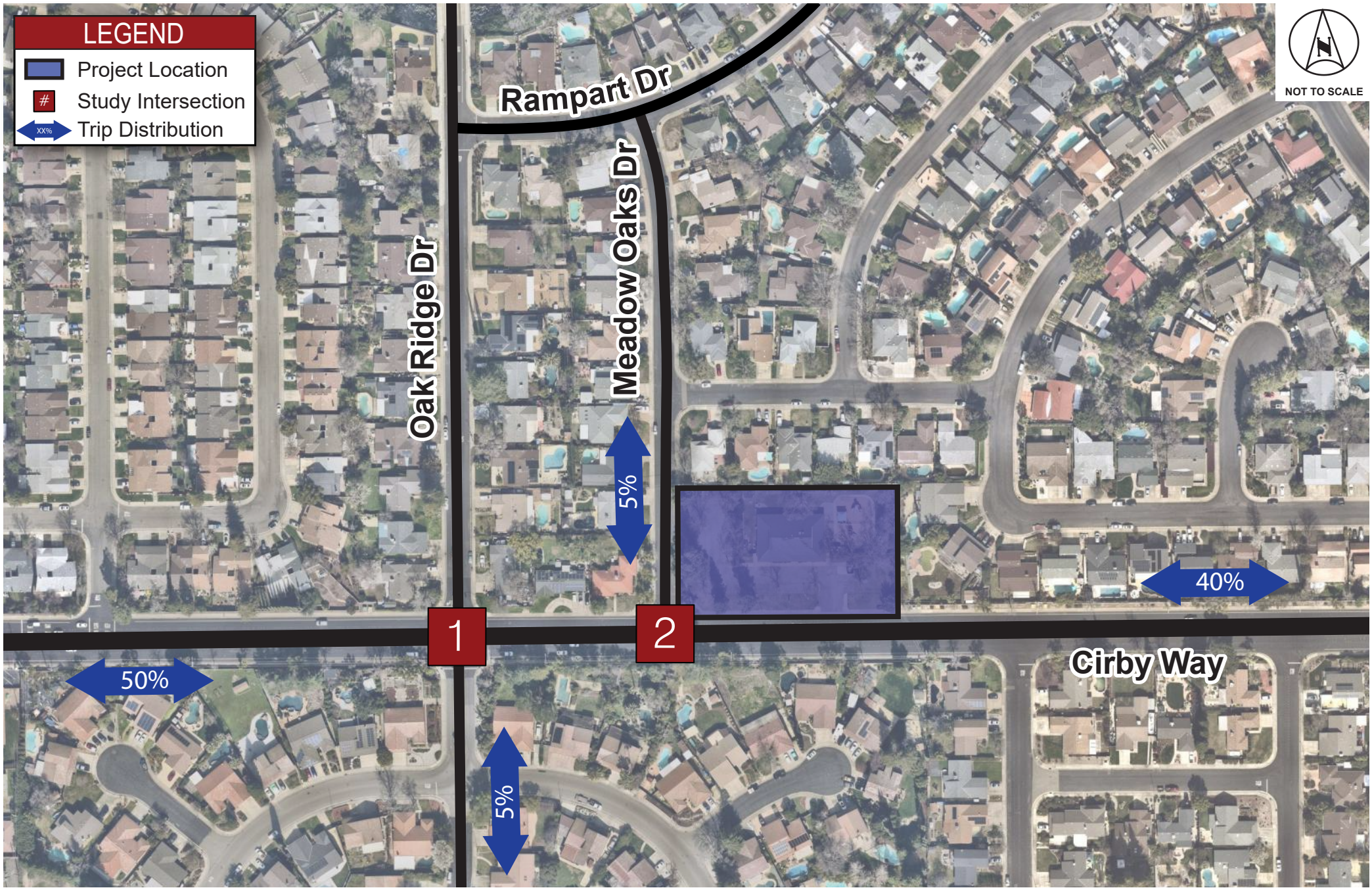
NOT TO SCALE



Site Plan Source: WMB Architects, 6/13/2024

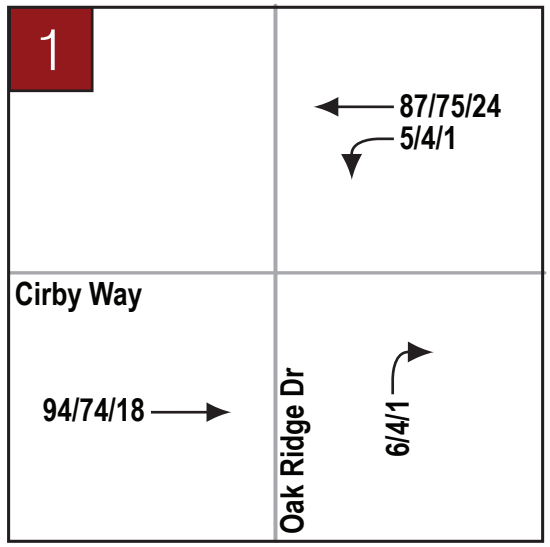
Kimley»Horn

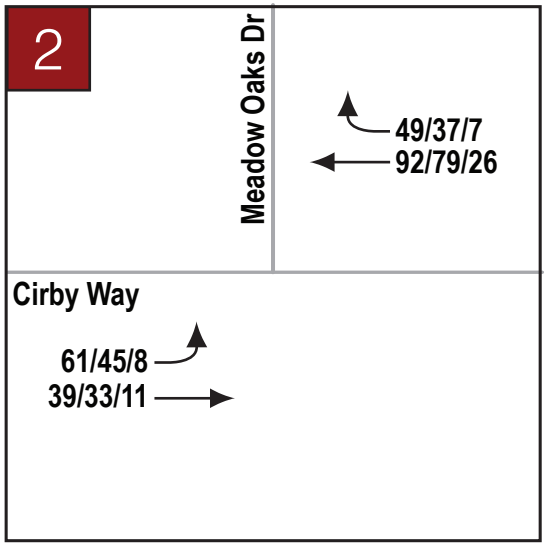
Exhibit 2
Project Site Plan

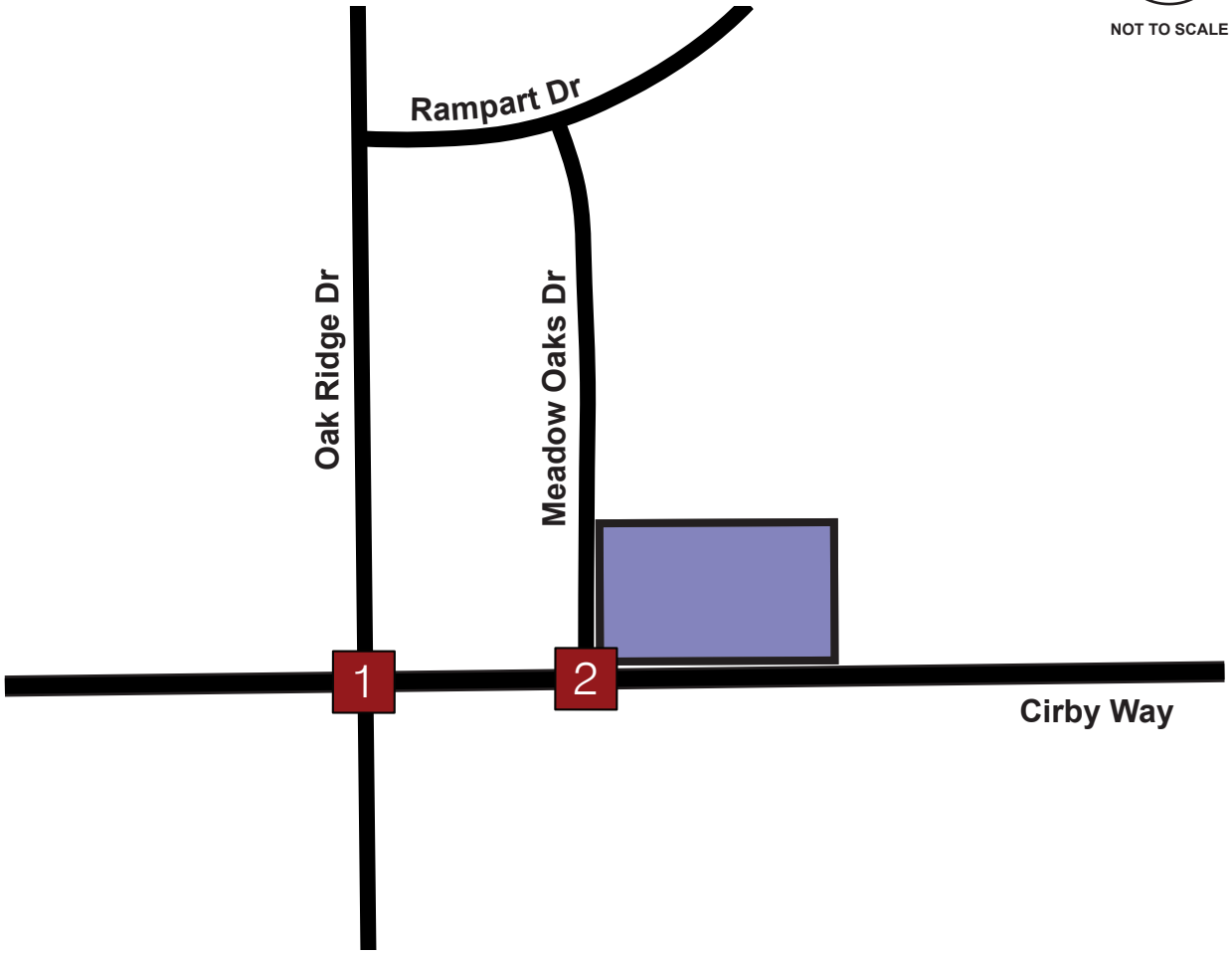


Kimley»Horn

Exhibit 3
Project Trip Distribution







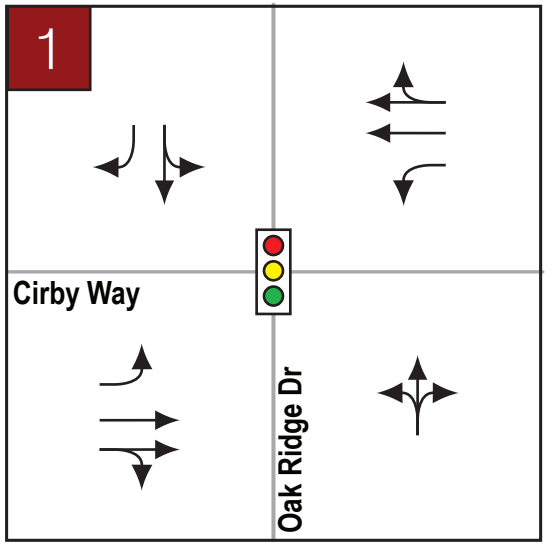
NOT TO SCALE

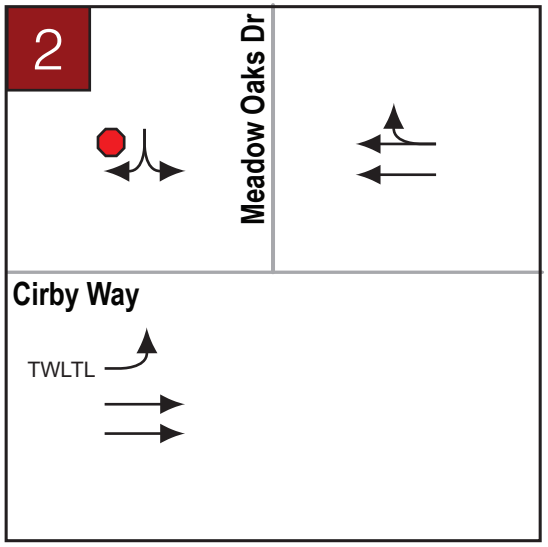
LEGEND

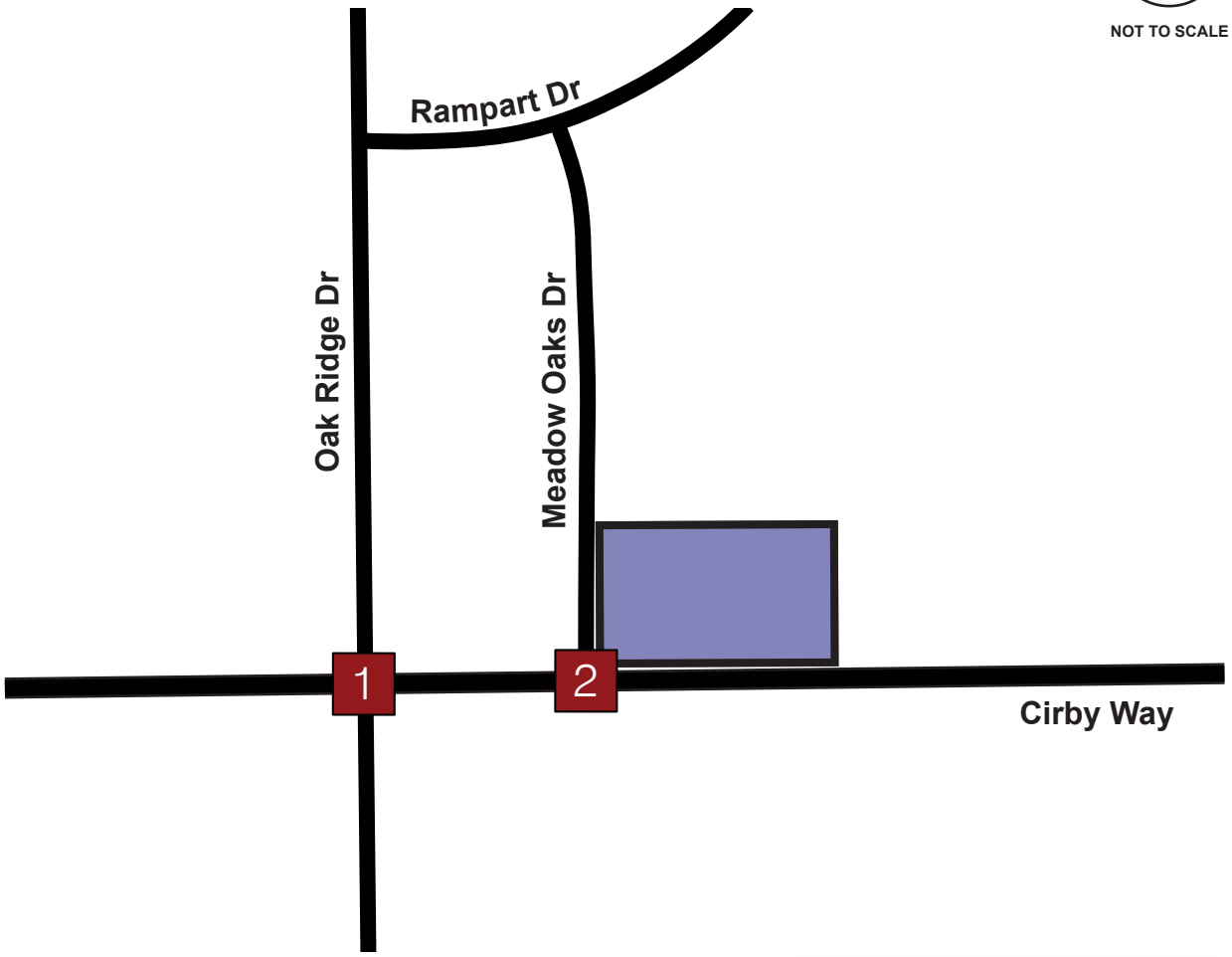
- Project Location
- # Study Intersection
- XX/YY/ZZ AM/School-PM/PM Peak-Hour Project Trips

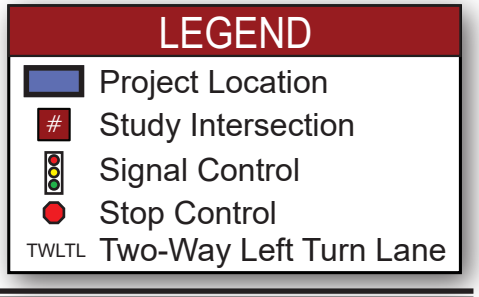
Kimley»Horn

Exhibit 4
Project Trip Assignment





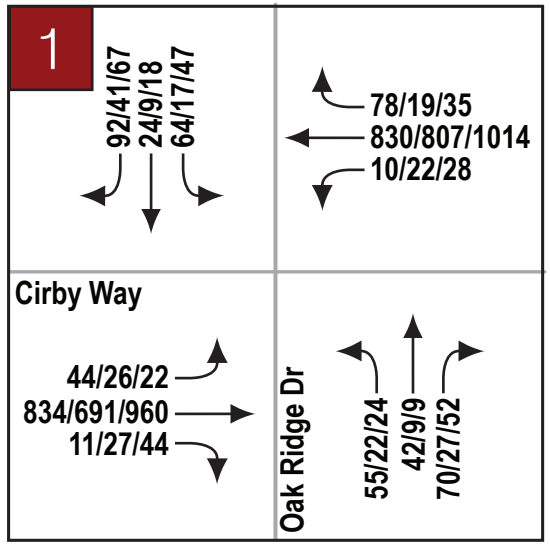


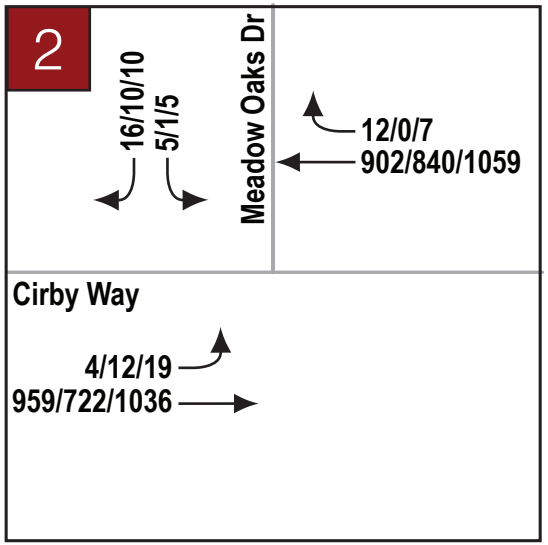


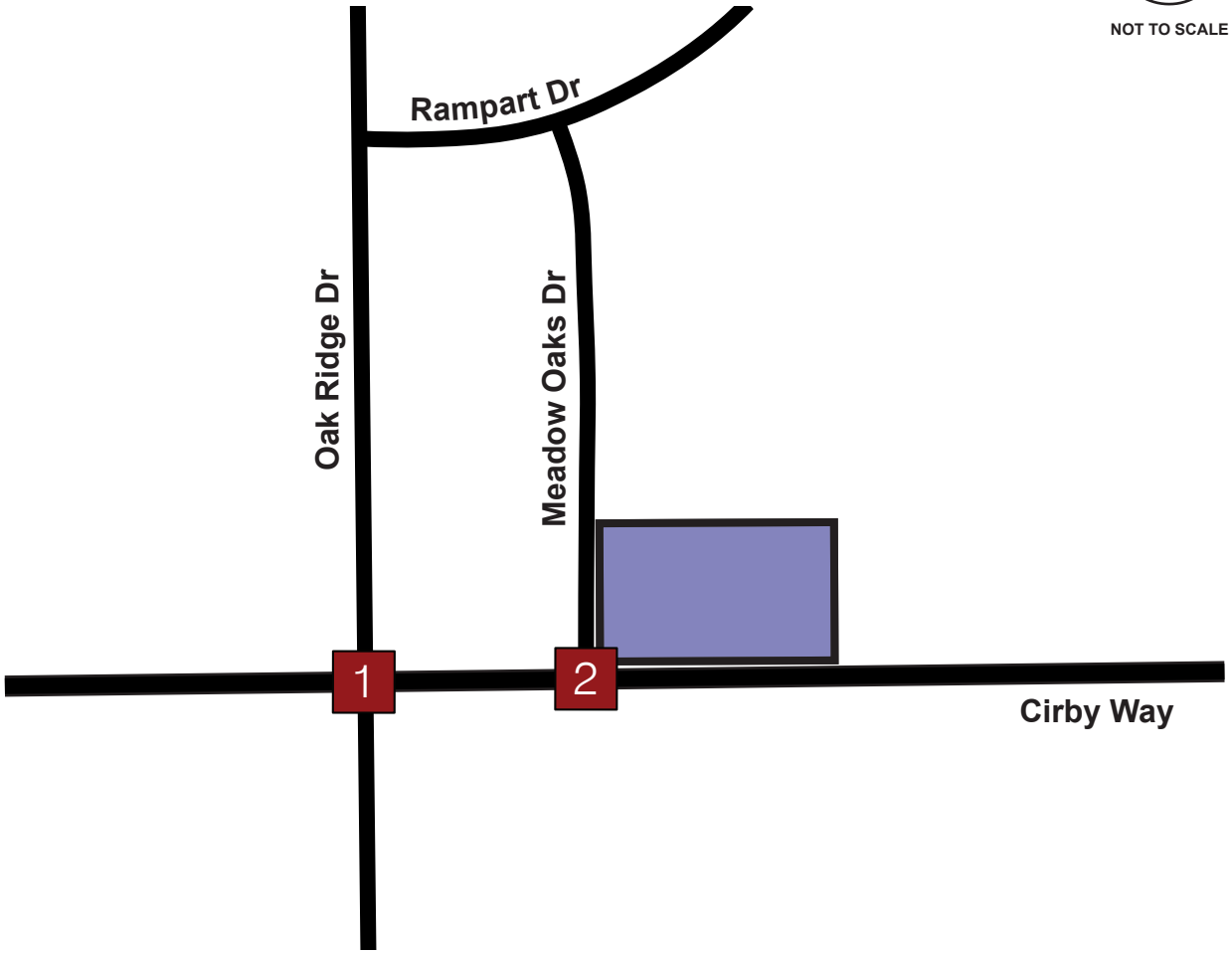
Kimley»Horn

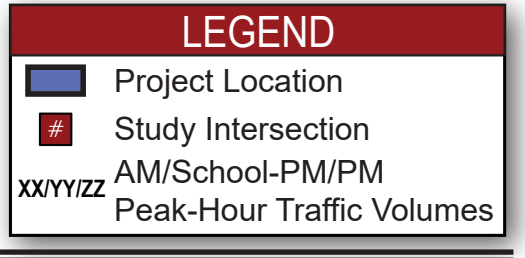
Exhibit 5

Study Intersections, Traffic Control, and Lane Geometry



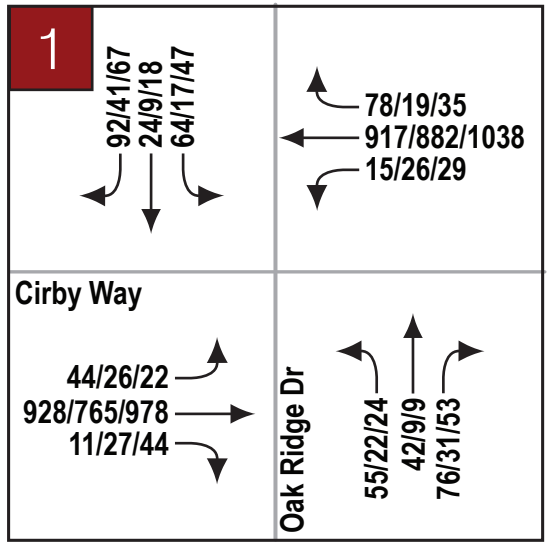


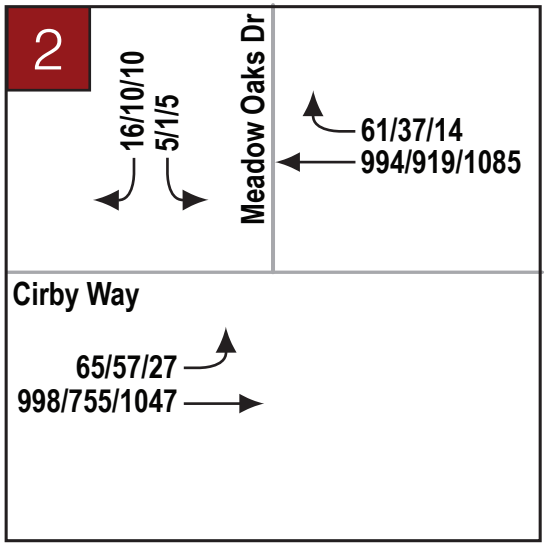


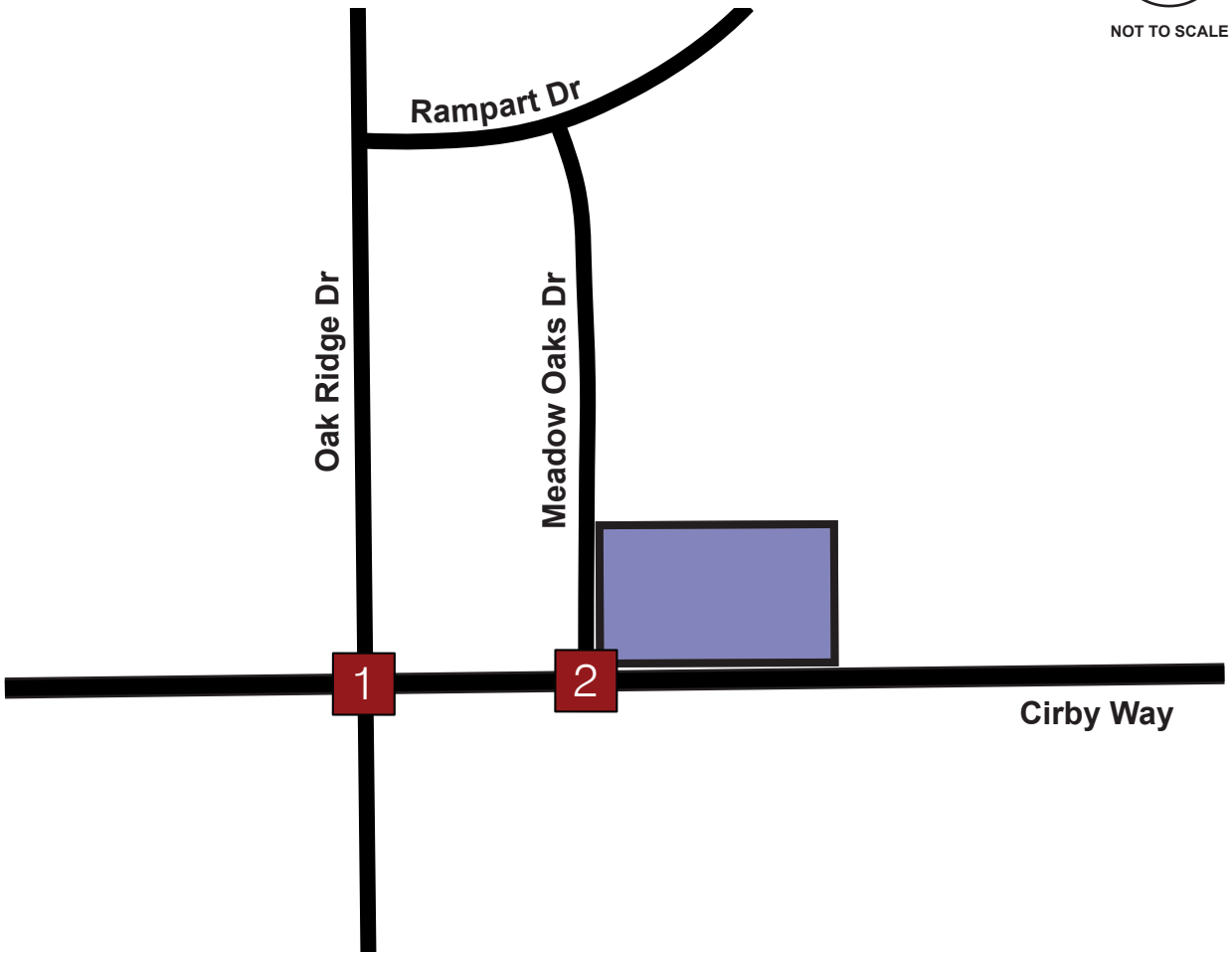


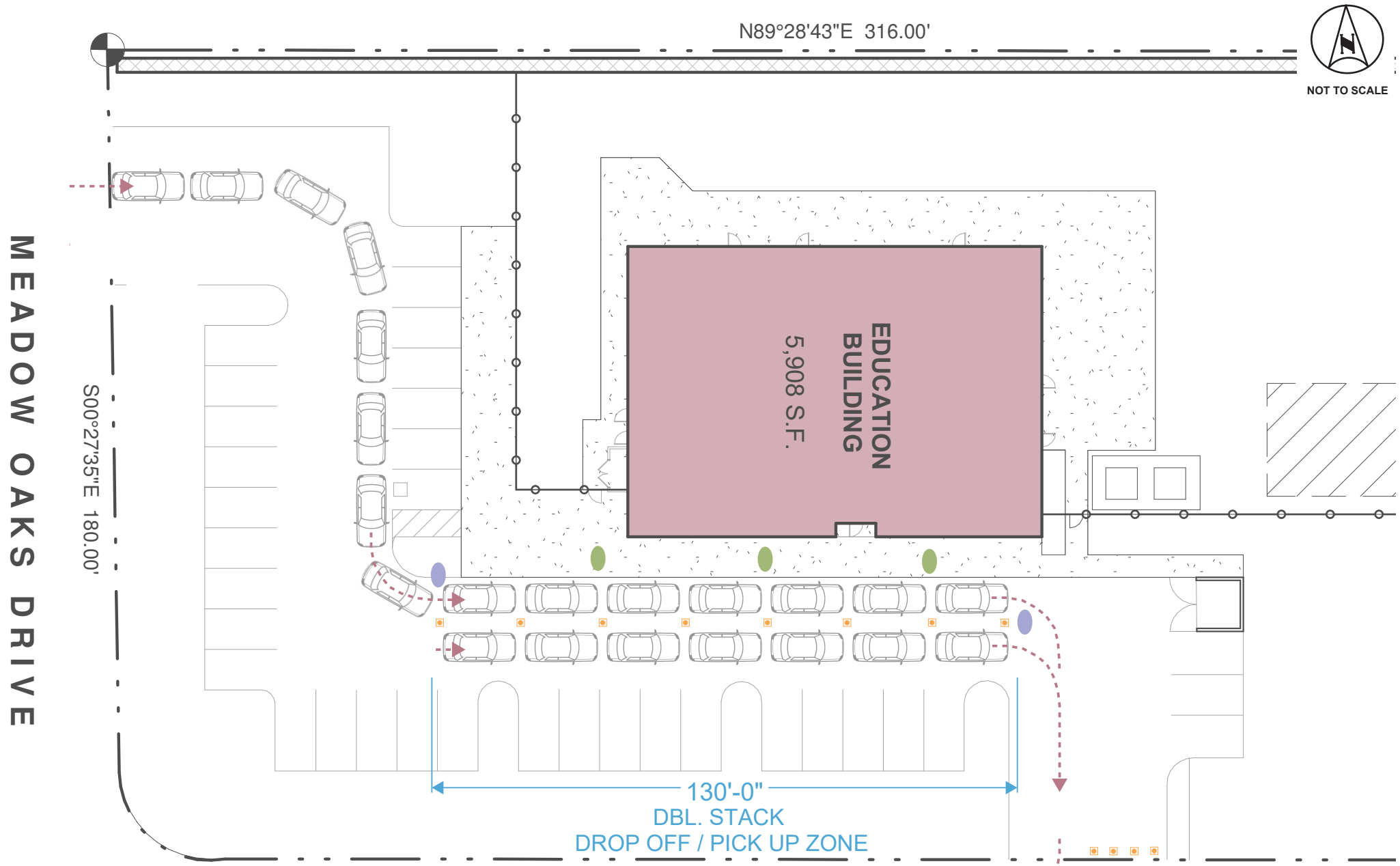
Kimley»Horn

Exhibit 6
Existing (2024) Peak-Hour Traffic Volumes


1
92/41/67
24/9/18
64/17/47
78/19/35
917/882/1038
15/26/29
Cirby Way
44/26/22
928/765/978
11/27/44
Oak Ridge Dr
55/22/24
42/9/9
76/31/53

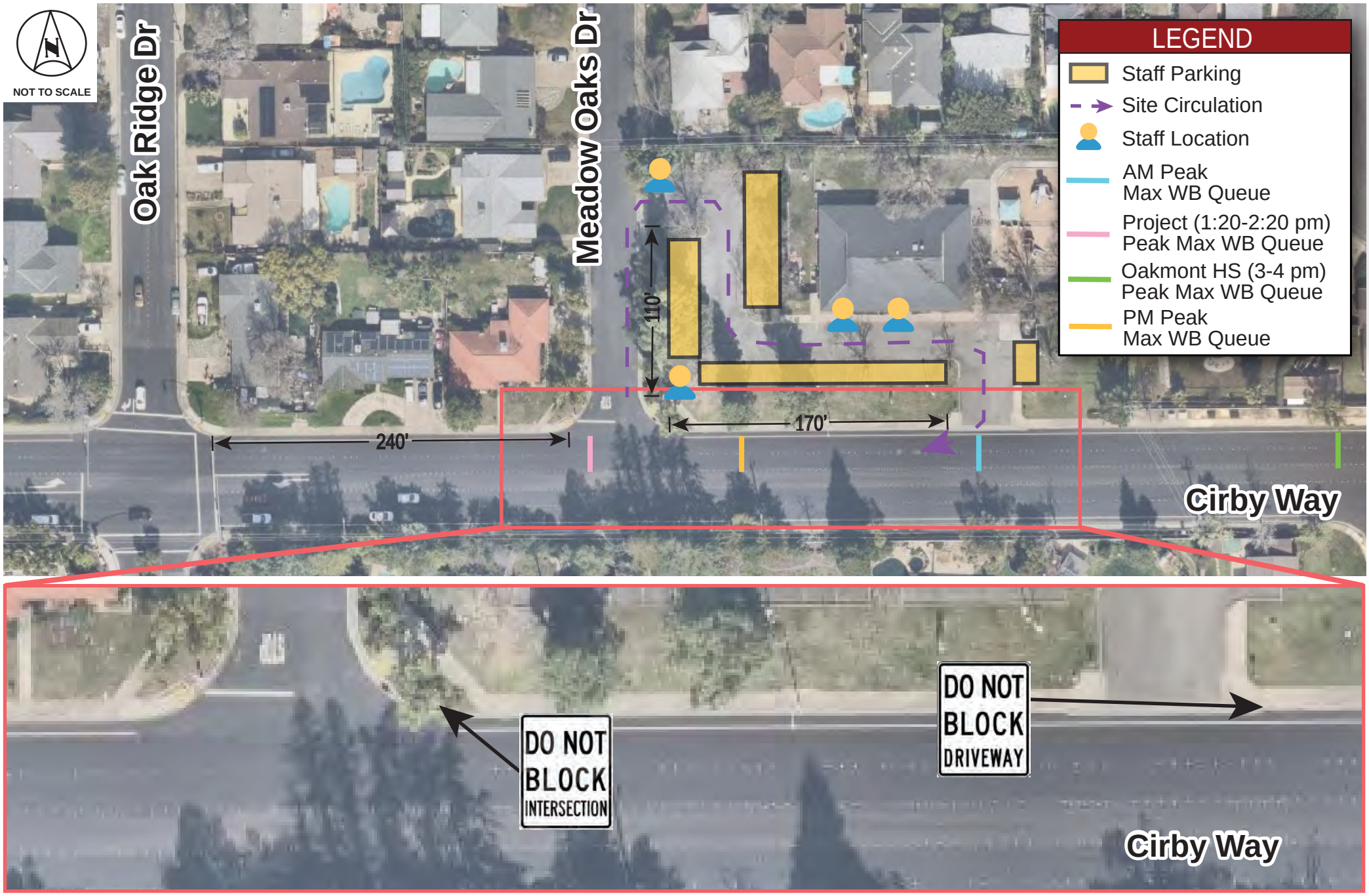

2
16/10/10
5/1/5
Meadow Oaks Dr
61/37/14
994/919/1085
Cirby Way
65/57/27
998/755/1047


NOT TO SCALE
Rampart Dr
Oak Ridge Dr
Meadow Oaks Dr
1
2
Cirby Way
LEGEND
Project Location
Study Intersection
XX/YY/ZZ AM/School-PM/PM Peak-Hour Traffic Volumes



Kimley»Horn

Exhibit 8
Recommended Internal Pick-Up Circulation


NOT TO SCALE
Oak Ridge Dr
Meadow Oaks Dr
LEGEND
Staff Parking
Site Circulation
Staff Location
AM Peak
Max WB Queue
Project (1:20-2:20 pm)
Peak Max WB Queue
Oakmont HS (3-4 pm)
Peak Max WB Queue
PM Peak
Max WB Queue
110'
240'
170'
Cirby Way
DO NOT
BLOCK
INTERSECTION
DO NOT
BLOCK
DRIVEWAY
Cirby Way

Kimley»Horn

Attachment A

Local Site Data

8/20/2024

143 Clinton Avenue Drop Off Operations

Vehicles	Time Arrived	Students in vehicle	Students Per vehicle Rate
1	7:20:00 AM	1	1.26
2	7:22:00 AM	2	
3	7:25:00 AM	1	
4	7:28:00 AM	1	
5	7:40:00 AM	1	
6	7:52:00 AM	1	
7	7:55:00 AM	1	
8	8:03:00 AM	1	
9	8:06:00 AM	2	
10	8:07:00 AM	1	
11	8:09:00 AM	2	
12	8:14:00 AM	1	
13	8:15:00 AM	1	
14	8:15:00 AM	1	
15	8:15:00 AM	1	
16	8:17:00 AM	1	
17	8:18:00 AM	1	
18	8:21:00 AM	2	
19	8:21:00 AM	2	
20	8:22:00 AM	1	
21	8:23:00 AM	2	
22	8:24:00 AM	1	
23	8:25:00 AM	1	
24	8:25:00 AM	1	
25	8:25:00 AM	1	
26	8:25:00 AM	1	
27	8:26:00 AM	1	
28	8:26:00 AM	1	
29	8:27:00 AM	1	
30	8:26:00 AM	2	
31	8:26:00 AM	1	
32	8:26:00 AM	1	
33	8:29:00 AM	2	
34	8:29:00 AM	1	
35	8:29:00 AM	2	
36	8:31:00 AM	1	
37	8:33:00 AM	2	
38	8:33:00 AM	1	
39	8:34:00 AM	1	
40	8:35:00 AM	1	
41	8:35:00 AM	1	
42	8:35:00 AM	2	

43	8:35:00 AM	1
44	8:36:00 AM	1
45	8:36:00 AM	1
46	8:37:00 AM	2
47	8:37:00 AM	1
48	8:37:00 AM	1
49	8:38:00 AM	2
50	8:38:00 AM	1
51	8:38:00 AM	2
52	8:38:00 AM	1
53	8:39:00 AM	2
54	8:40:00 AM	1
55	8:40:00 AM	2
56	8:41:00 AM	1
57	8:41:00 AM	2
58	8:43:00 AM	1
59	8:43:00 AM	1
60	8:43:00 AM	1
61	8:43:00 AM	1
62	8:17:00 AM	1
63	8:19:00 AM	2
64	8:19:00 AM	1
65	8:20:00 AM	1
66	8:23:00 AM	1
67	8:24:00 AM	1
68	8:30:00 AM	2
69	8:29:00 AM	2
70	8:33:00 AM	1
71	8:33:00 AM	1
72	8:33:00 AM	1
73	8:34:00 AM	1
74	8:34:00 AM	1
75	8:36:00 AM	1
76	8:36:00 AM	1
77	8:37:00 AM	1
78	8:39:00 AM	2
79	8:40:00 AM	1
80	8:41:00 AM	1
81	8:41:00 AM	1

8/20/2024

Drop-Off & Pick-Up Drive-Through Faciltiy Operations

Time Arrived	Time Departed	Time in Drive-Through
8:18:00 AM	8:19:00 AM	0:01:00
8:21:00 AM	8:22:00 AM	0:01:00
8:21:00 AM	8:22:00 AM	0:01:00
8:22:00 AM	8:23:00 AM	0:01:00
8:25:00 AM	8:26:00 AM	0:01:00
8:25:00 AM	8:26:00 AM	0:01:00
8:25:00 AM	8:26:00 AM	0:01:00
8:25:00 AM	8:26:00 AM	0:01:00
8:26:00 AM	8:27:00 AM	0:01:00
8:26:00 AM	8:27:00 AM	0:01:00
8:26:00 AM	8:27:00 AM	0:01:00
8:26:00 AM	8:27:00 AM	0:01:00
8:29:00 AM	8:30:00 AM	0:01:00
8:29:00 AM	8:30:00 AM	0:01:00
8:29:00 AM	8:31:00 AM	0:02:00
8:33:00 AM	8:34:00 AM	0:01:00
8:34:00 AM	8:35:00 AM	0:01:00
8:35:00 AM	8:35:00 AM	0:00:30
8:35:00 AM	8:36:00 AM	0:01:00
8:36:00 AM	8:36:00 AM	0:00:30
8:36:00 AM	8:37:00 AM	0:01:00
8:37:00 AM	8:38:00 AM	0:01:00
8:38:00 AM	8:39:00 AM	0:01:00
8:38:00 AM	8:39:00 AM	0:01:00
8:38:00 AM	8:39:00 AM	0:01:00
8:39:00 AM	8:39:00 AM	0:00:30
8:40:00 AM	8:40:00 AM	0:00:30
8:40:00 AM	8:41:00 AM	0:01:00
8:41:00 AM	8:42:00 AM	0:01:00
8:41:00 AM	8:42:00 AM	0:01:00
8:43:00 AM	8:43:00 AM	0:00:30
8:45:00 AM	8:45:00 AM	0:00:30
2:52:00 PM	2:55:00 PM	0:03:00
2:52:00 PM	2:55:00 PM	0:03:00
2:52:00 PM	2:56:00 PM	0:04:00
2:52:00 PM	2:56:00 PM	0:04:00
2:52:00 PM	2:56:00 PM	0:04:00
2:52:00 PM	2:57:00 PM	0:05:00
2:52:00 PM	2:57:00 PM	0:05:00
2:52:00 PM	2:57:00 PM	0:05:00
2:53:00 PM	2:58:00 PM	0:05:00

2:56:00 PM	2:59:00 PM	0:03:00
2:58:00 PM	2:59:00 PM	0:01:00
2:58:00 PM	2:59:00 PM	0:01:00
2:58:00 PM	2:59:00 PM	0:01:00
2:58:00 PM	3:00:00 PM	0:02:00
2:58:00 PM	3:00:00 PM	0:02:00
3:01:00 PM	3:01:00 PM	0:00:30
3:01:00 PM	3:01:00 PM	0:00:30
3:02:00 PM	3:04:00 PM	0:02:00
3:03:00 PM	3:04:00 PM	0:01:00
3:03:00 PM	3:05:00 PM	0:02:00
3:03:00 PM	3:05:00 PM	0:02:00
3:04:00 PM	3:05:00 PM	0:01:00
3:04:00 PM	3:05:00 PM	0:01:00
3:04:00 PM	3:05:00 PM	0:01:00
3:05:00 PM	3:06:00 PM	0:01:00
3:08:00 PM	3:09:00 PM	0:01:00
3:09:00 PM	3:09:00 PM	0:00:30
3:11:00 PM	3:11:00 PM	0:00:30
	AVG Wait Time	0:01:32

Kimley»Horn

Attachment B

Traffic Count Data Sheets

National Data & Surveying Services Intersection Turning Movement Count

Location: Oak Ridge Dr & Cirby Way
City: Roseville
Control: Signalized

Project ID: 24-070138-002
Date: 8/14/2024

Data - Total

NS/EW Streets:	Oak Ridge Dr				Oak Ridge Dr				Cirby Way				Cirby Way				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	1	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	5	0	1	0	2	0	11	0	7	68	0	0	0	92	0	0	186
6:15 AM	14	0	1	0	1	0	11	0	2	84	4	0	0	112	0	0	229
6:30 AM	9	2	2	0	3	0	9	0	2	95	0	0	1	131	0	0	254
6:45 AM	14	1	4	0	2	0	6	0	2	98	2	0	0	161	2	0	292
7:00 AM	7	2	5	0	2	0	7	0	0	141	1	0	1	152	2	0	320
7:15 AM	16	4	16	0	8	4	13	0	4	206	2	0	0	155	6	0	434
7:30 AM	10	14	25	0	9	1	16	0	13	249	1	0	1	219	44	0	602
7:45 AM	21	20	7	0	38	15	43	0	16	160	5	0	7	248	21	0	601
8:00 AM	8	4	22	0	9	4	20	0	11	219	3	0	2	208	7	0	517
8:15 AM	9	4	6	0	4	0	6	0	3	151	5	1	3	187	4	0	383
8:30 AM	7	0	12	0	4	1	16	0	2	156	5	0	2	194	4	0	403
8:45 AM	9	1	17	0	8	2	5	0	10	213	6	0	3	182	5	0	461
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	129	52	118	0	90	27	163	0	72	1840	34	1	20	2041	95	0	4682
APPROACH %'s :	43.14%	17.39%	39.46%	0.00%	32.14%	9.64%	58.21%	0.00%	3.70%	94.50%	1.75%	0.05%	0.93%	94.67%	4.41%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	55	42	70	0	64	24	92	0	44	834	11	0	10	830	78	0	2154
PEAK HR FACTOR :	0.655	0.525	0.700	0.000	0.421	0.400	0.535	0.000	0.688	0.837	0.550	0.000	0.357	0.837	0.443	0.000	0.895
	0.852				0.469				0.845				0.832				

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	1	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
1:00 PM	10	8	8	0	36	13	45	0	10	186	7	0	12	260	21	1	617
1:15 PM	4	3	6	0	4	5	14	0	5	189	4	0	1	224	4	0	463
1:30 PM	8	4	10	0	5	1	11	0	5	148	10	0	8	192	8	0	410
1:45 PM	6	0	5	0	5	0	9	0	11	197	5	0	7	167	5	0	417
2:00 PM	4	2	6	0	3	3	7	0	5	157	8	0	6	224	2	0	427
2:15 PM	3	6	8	0	8	6	10	0	7	188	10	0	6	206	2	0	460
2:30 PM	7	3	12	0	5	7	15	0	5	150	6	0	3	237	7	0	457
2:45 PM	6	2	7	0	3	3	15	0	4	208	6	0	3	197	3	0	457
3:00 PM	6	1	6	0	9	2	15	0	4	206	9	0	10	201	5	0	474
3:15 PM	7	5	6	0	12	3	15	0	3	238	11	0	7	273	11	0	591
3:30 PM	4	7	10	0	13	4	19	0	11	195	6	0	10	279	14	1	573
3:45 PM	3	6	7	0	7	2	15	0	10	206	11	0	11	235	11	0	524
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	68	47	91	0	110	49	190	0	80	2268	93	0	84	2695	93	2	5870
APPROACH %'s :	33.01%	22.82%	44.17%	0.00%	31.52%	14.04%	54.44%	0.00%	3.28%	92.91%	3.81%	0.00%	2.92%	93.77%	3.24%	0.07%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	20	19	29	0	41	11	64	0	28	845	37	0	38	988	41	1	2162
PEAK HR FACTOR :	0.714	0.679	0.725	0.000	0.788	0.688	0.842	0.000	0.636	0.888	0.841	0.000	0.864	0.885	0.732	0.250	0.915
	0.810				0.806				0.903				0.878				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	1	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	7	6	5	0	8	11	17	0	8	211	7	0	6	249	9	0	544
4:15 PM	5	3	11	0	10	5	17	0	7	201	10	0	11	233	4	0	517
4:30 PM	7	2	9	0	17	9	17	0	4	203	5	0	6	284	4	0	567
4:45 PM	6	7	8	0	6	6	29	0	8	210	7	1	12	201	3	0	504
5:00 PM	8	6	10	0	6	9	21	0	12	238	9	0	10	308	9	0	646
5:15 PM	1	1	11	0	14	7	18	0	3	237	10	0	12	207	7	0	528
5:30 PM	7	2	9	0	12	1	14	0	3	228	8	0	2	260	9	0	555
5:45 PM	8	0	22	0	15	1	14	0	4	257	17	0	4	239	10	0	591
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	49	27	85	0	88	49	147	0	49	1785	73	1	63	1981	55	0	4452
APPROACH %'s :	30.43%	16.77%	52.80%	0.00%	30.99%	17.25%	51.76%	0.00%	2.57%	93.55%	3.83%	0.05%	3.00%	94.38%	2.62%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	24	9	52	0	47	18	67	0	22	960	44	0	28	1014	35	0	2320
PEAK HR FACTOR :	0.750	0.375	0.591	0.000	0.783	0.500	0.798	0.000	0.458	0.934	0.647	0.000	0.583	0.823	0.875	0.000	0.898
	0.708				0.846				0.923				0.823				

National Data & Surveying Services Intersection Turning Movement Count

Location: Meadow Oaks Dr & Cirby Way
City: Roseville
Control: 1-Way Stop(SB)

Project ID: 24-070138-001
Date: 8/14/2024

Data - Total

AM

NS/EW Streets:	Meadow Oaks Dr				Meadow Oaks Dr				Cirby Way				Cirby Way				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
6:00 AM	0	0	0	0	2	0	1	0	1	70	0	1	0	89	0	0	164
6:15 AM	0	0	0	0	0	0	2	0	0	84	0	0	0	111	0	0	197
6:30 AM	0	0	0	0	0	0	2	0	1	101	0	0	0	129	0	0	233
6:45 AM	0	0	0	0	1	0	2	0	1	100	0	0	0	164	1	0	269
7:00 AM	0	0	0	0	1	0	2	0	1	150	0	0	0	150	0	0	304
7:15 AM	0	0	0	0	2	0	4	0	1	225	0	0	0	158	1	0	391
7:30 AM	0	0	0	0	2	0	5	0	2	285	0	0	0	258	4	0	556
7:45 AM	0	0	0	0	1	0	4	0	1	201	0	0	0	287	6	0	500
8:00 AM	0	0	0	0	0	0	3	0	0	248	0	0	0	199	1	0	451
8:15 AM	0	0	0	0	0	0	2	0	2	164	0	0	0	195	0	0	363
8:30 AM	0	0	0	0	0	0	1	0	3	169	0	0	0	196	1	1	371
8:45 AM	0	0	0	0	0	0	2	1	1	235	0	0	0	195	1	0	435
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	9	0	30	1	14	2032	0	1	0	2131	15	1	4234
APPROACH %'s :					22.50%	0.00%	75.00%	2.50%	0.68%	99.27%	0.00%	0.05%	0.00%	99.25%	0.70%	0.05%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	5	0	16	0	4	959	0	0	0	902	12	0	1898
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.000	0.800	0.000	0.500	0.841	0.000	0.000	0.000	0.786	0.500	0.000	0.853
							0.750				0.839				0.780		

NOON

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
1:00 PM	0	0	0	0	0	0	2	0	4	224	0	0	0	289	5	0	524
1:15 PM	0	0	0	0	0	0	2	0	5	193	0	0	0	229	0	0	429
1:30 PM	0	0	0	0	0	0	4	0	3	164	0	0	0	202	0	0	373
1:45 PM	0	0	0	0	0	0	1	0	1	206	0	0	0	181	0	0	389
2:00 PM	0	0	0	0	1	0	3	0	3	159	0	0	0	228	0	0	394
2:15 PM	0	0	0	0	1	0	1	0	3	196	0	0	0	213	0	0	414
2:30 PM	0	0	0	0	0	0	4	0	2	169	0	0	0	241	2	0	418
2:45 PM	0	0	0	0	0	0	2	0	4	211	0	0	0	201	0	0	418
3:00 PM	0	0	0	0	0	0	1	0	7	216	0	0	0	224	1	0	449
3:15 PM	0	0	0	0	0	0	8	0	4	246	0	0	0	276	2	0	536
3:30 PM	0	0	0	0	0	0	6	0	2	226	0	0	0	310	5	0	549
3:45 PM	0	0	0	0	0	0	4	0	4	218	0	0	0	241	6	0	473
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	38	0	42	2428	0	0	0	2835	21	0	5366
APPROACH %'s :					5.00%	0.00%	95.00%	0.00%	1.70%	98.30%	0.00%	0.00%	0.00%	99.26%	0.74%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	19	0	17	906	0	0	0	1051	14	0	2007
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.594	0.000	0.607	0.921	0.000	0.000	0.000	0.848	0.583	0.000	0.914
							0.594				0.923				0.845		

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	0	3	0	4	223	0	0	0	269	3	0	503
4:15 PM	0	0	0	0	1	0	5	0	6	216	0	0	0	235	2	0	465
4:30 PM	0	0	0	0	0	0	0	0	4	220	0	0	0	294	2	0	520
4:45 PM	0	0	0	0	0	0	2	0	5	224	0	0	0	222	1	0	454
5:00 PM	0	0	0	0	1	0	1	0	4	246	0	0	0	318	1	0	571
5:15 PM	0	0	0	0	0	0	2	0	8	257	0	0	0	224	1	0	492
5:30 PM	0	0	0	0	3	0	4	0	4	245	0	0	0	277	3	0	536
5:45 PM	0	0	0	0	1	0	3	0	3	288	0	0	0	240	2	0	537
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	7	0	20	0	38	1919	0	0	0	2079	15	0	4078
APPROACH %'s :					25.93%	0.00%	74.07%	0.00%	1.94%	98.06%	0.00%	0.00%	0.00%	99.28%	0.72%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	5	0	10	0	19	1036	0	0	0	1059	7	0	2136
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.417	0.000	0.625	0.000	0.594	0.899	0.000	0.000	0.000	0.833	0.583	0.000	0.935
							0.536				0.906				0.835		

Prepared by National Data & Surveying Services

Max Queue

Location: Oak Ridge Dr (NS) & Cirby Way (EW)
City: Roseville, CA

Date: 8/14/2024 (Wed)

Time (AM)	Max Queue Length (# of Vehicles)		
	Westbound		
	WBL	WBT 2	WBT 1
6:00 AM	0	0	0
6:01 AM	0	0	0
6:02 AM	0	0	0
6:03 AM	0	1	0
6:04 AM	0	0	0
6:05 AM	0	0	0
6:06 AM	0	2	1
6:07 AM	0	0	0
6:08 AM	0	0	0
6:09 AM	0	0	0
6:10 AM	0	2	1
6:11 AM	0	0	0
6:12 AM	0	0	0
6:13 AM	0	1	0
6:14 AM	0	0	0
6:15 AM	0	0	0
6:16 AM	0	1	2
6:17 AM	0	0	0
6:18 AM	0	2	1
6:19 AM	0	2	0
6:20 AM	0	1	0
6:21 AM	0	0	0
6:22 AM	0	0	0
6:23 AM	0	2	0
6:24 AM	0	2	1
6:25 AM	0	0	0
6:26 AM	0	0	0
6:27 AM	0	0	0
6:28 AM	0	2	2
6:29 AM	0	0	0
6:30 AM	0	0	0
6:31 AM	0	0	0
6:32 AM	0	0	0
6:33 AM	0	1	0
6:34 AM	0	2	3
6:35 AM	0	4	3
6:36 AM	0	0	2
6:37 AM	0	0	1
6:38 AM	0	2	3
6:39 AM	0	0	0
6:40 AM	1	1	0
6:41 AM	0	0	0
6:42 AM	0	1	2
6:43 AM	0	1	1
6:44 AM	0	0	0
6:45 AM	0	0	0
6:46 AM	0	2	1
6:47 AM	0	1	0
6:48 AM	0	0	0
6:49 AM	0	0	0
6:50 AM	0	1	0
6:51 AM	0	2	4
6:52 AM	0	1	1
6:53 AM	0	0	1
6:54 AM	0	0	0
6:55 AM	0	0	0
6:56 AM	0	0	0
6:57 AM	0	0	0
6:58 AM	0	3	2
6:59 AM	0	0	0
7:00 AM	0	0	0
7:01 AM	0	0	0

Time (NOON)	Max Queue Length (# of Vehicles)		
	Westbound		
	WBL	WBT 2	WBT 1
1:00 PM	0	0	0
1:01 PM	0	0	0
1:02 PM	0	0	0
1:03 PM	0	0	0
1:04 PM	0	0	0
1:05 PM	0	0	0
1:06 PM	0	0	0
1:07 PM	0	0	0
1:08 PM	0	0	0
1:09 PM	0	0	0
1:10 PM	0	0	0
1:11 PM	0	0	0
1:12 PM	0	0	0
1:13 PM	2	3	2
1:14 PM	2	3	3
1:15 PM	0	4	3
1:16 PM	0	7	4
1:17 PM	1	2	2
1:18 PM	1	8	5
1:19 PM	0	0	0
1:20 PM	0	12	7
1:21 PM	0	10	5
1:22 PM	0	0	0
1:23 PM	0	7	10
1:24 PM	0	9	9
1:25 PM	0	0	0
1:26 PM	0	2	1
1:27 PM	0	0	0
1:28 PM	0	2	1
1:29 PM	2	0	0
1:30 PM	2	6	6
1:31 PM	0	0	0
1:32 PM	1	6	6
1:33 PM	1	3	2
1:34 PM	2	0	0
1:35 PM	1	0	0
1:36 PM	1	0	0
1:37 PM	0	1	0
1:38 PM	1	3	3
1:39 PM	0	0	0
1:40 PM	0	3	1
1:41 PM	0	0	0
1:42 PM	0	1	1
1:43 PM	0	1	0
1:44 PM	0	0	0
1:45 PM	0	0	0
1:46 PM	2	4	4
1:47 PM	2	0	1
1:48 PM	1	2	0
1:49 PM	1	0	0
1:50 PM	1	0	0
1:51 PM	1	3	2
1:52 PM	0	0	2
1:53 PM	0	1	1
1:54 PM	1	2	3
1:55 PM	0	0	0
1:56 PM	1	1	1
1:57 PM	0	1	3
1:58 PM	0	2	2
1:59 PM	0	3	4
2:00 PM	0	0	0
2:01 PM	0	1	1

Time (PM)	Max Queue Length (# of Vehicles)		
	Westbound		
	WBL	WBT 2	WBT 1
4:00 PM	1	4	2
4:01 PM	1	0	0
4:02 PM	1	5	3
4:03 PM	0	0	0
4:04 PM	0	4	4
4:05 PM	0	2	2
4:06 PM	0	2	2
4:07 PM	1	3	2
4:08 PM	1	8	8
4:09 PM	0	0	0
4:10 PM	1	4	3
4:11 PM	1	5	3
4:12 PM	0	0	0
4:13 PM	1	1	1
4:14 PM	1	11	6
4:15 PM	0	1	1
4:16 PM	2	4	2
4:17 PM	1	0	0
4:18 PM	1	4	5
4:19 PM	0	6	5
4:20 PM	2	2	3
4:21 PM	1	5	6
4:22 PM	2	9	7
4:23 PM	0	0	0
4:24 PM	0	3	1
4:25 PM	2	0	0
4:26 PM	2	8	5
4:27 PM	0	3	1
4:28 PM	1	0	0
4:29 PM	2	0	1
4:30 PM	3	5	1
4:31 PM	0	9	7
4:32 PM	0	0	0
4:33 PM	1	3	2
4:34 PM	0	0	0
4:35 PM	0	10	7
4:36 PM	0	0	0
4:37 PM	0	6	2
4:38 PM	0	14	8
4:39 PM	0	3	1
4:40 PM	1	0	0
4:41 PM	1	12	8
4:42 PM	0	0	0
4:43 PM	1	1	1
4:44 PM	1	0	0
4:45 PM	1	2	2
4:46 PM	1	0	0
4:47 PM	1	5	7
4:48 PM	0	8	12
4:49 PM	0	5	2
4:50 PM	0	0	0
4:51 PM	0	0	0
4:52 PM	1	5	3
4:53 PM	2	5	2
4:54 PM	2	0	0
4:55 PM	3	2	2
4:56 PM	0	0	0
4:57 PM	2	2	1
4:58 PM	0	0	0
4:59 PM	4	4	3
5:00 PM	0	7	8
5:01 PM	2	1	3

7:02 AM	0	0	0
7:03 AM	1	0	0
7:04 AM	0	0	0
7:05 AM	0	1	0
7:06 AM	0	0	0
7:07 AM	0	0	0
7:08 AM	0	0	0
7:09 AM	0	1	1
7:10 AM	0	0	0
7:11 AM	0	0	0
7:12 AM	0	0	1
7:13 AM	0	6	4
7:14 AM	0	0	0
7:15 AM	0	4	3
7:16 AM	0	0	0
7:17 AM	0	6	8
7:18 AM	0	0	0
7:19 AM	0	1	2
7:20 AM	0	0	0
7:21 AM	0	7	5
7:22 AM	0	0	0
7:23 AM	0	4	3
7:24 AM	0	0	0
7:25 AM	0	3	4
7:26 AM	0	0	0
7:27 AM	0	13	8
7:28 AM	0	0	0
7:29 AM	0	1	2
7:30 AM	0	0	0
7:31 AM	0	10	4
7:32 AM	0	0	0
7:33 AM	0	6	10
7:34 AM	0	0	0
7:35 AM	0	17	17
7:36 AM	0	11	18
7:37 AM	0	0	0
7:38 AM	0	8	6
7:39 AM	0	12	5
7:40 AM	0	0	0
7:41 AM	0	9	5
7:42 AM	1	0	0
7:43 AM	1	3	6
7:44 AM	0	0	0
7:45 AM	1	0	0
7:46 AM	1	14	7
7:47 AM	2	10	8
7:48 AM	3	16	17
7:49 AM	1	7	8
7:50 AM	1	7	8
7:51 AM	1	8	10
7:52 AM	1	15	20
7:53 AM	1	4	7
7:54 AM	0	0	0
7:55 AM	0	6	6
7:56 AM	0	0	0
7:57 AM	0	11	6
7:58 AM	0	0	0
7:59 AM	0	8	7
8:00 AM	0	0	0
8:01 AM	0	3	3
8:02 AM	0	0	0
8:03 AM	0	2	3
8:04 AM	0	0	0
8:05 AM	0	5	4
8:06 AM	1	0	0
8:07 AM	1	5	2
8:08 AM	0	0	0
8:09 AM	0	9	6
8:10 AM	0	0	0
8:11 AM	0	0	0
8:12 AM	1	0	0

2:02 PM	0	1	1
2:03 PM	0	0	0
2:04 PM	0	1	1
2:05 PM	0	0	0
2:06 PM	0	0	0
2:07 PM	2	1	0
2:08 PM	2	6	8
2:09 PM	0	0	0
2:10 PM	0	1	1
2:11 PM	0	0	0
2:12 PM	3	0	1
2:13 PM	3	1	1
2:14 PM	1	0	0
2:15 PM	0	0	0
2:16 PM	0	8	3
2:17 PM	0	0	0
2:18 PM	1	4	4
2:19 PM	0	0	0
2:20 PM	0	1	1
2:21 PM	1	0	0
2:22 PM	2	5	3
2:23 PM	0	0	0
2:24 PM	0	4	2
2:25 PM	1	7	5
2:26 PM	1	1	2
2:27 PM	1	0	0
2:28 PM	2	0	0
2:29 PM	0	3	5
2:30 PM	1	7	8
2:31 PM	0	0	0
2:32 PM	0	10	7
2:33 PM	0	9	5
2:34 PM	0	5	2
2:35 PM	0	0	0
2:36 PM	4	0	0
2:37 PM	0	0	0
2:38 PM	1	2	4
2:39 PM	1	0	0
2:40 PM	0	5	6
2:41 PM	0	6	3
2:42 PM	1	2	0
2:43 PM	0	0	0
2:44 PM	0	1	4
2:45 PM	1	0	0
2:46 PM	1	2	2
2:47 PM	0	0	0
2:48 PM	0	0	0
2:49 PM	0	0	0
2:50 PM	1	0	0
2:51 PM	0	0	0
2:52 PM	0	6	4
2:53 PM	0	0	0
2:54 PM	0	0	0
2:55 PM	1	1	0
2:56 PM	0	0	0
2:57 PM	0	0	0
2:58 PM	0	0	0
2:59 PM	0	0	0
3:00 PM	0	2	4
3:01 PM	1	6	5
3:02 PM	0	7	3
3:03 PM	0	0	0
3:04 PM	1	0	0
3:05 PM	2	0	1
3:06 PM	1	0	0
3:07 PM	2	9	10
3:08 PM	0	4	4
3:09 PM	0	0	1
3:10 PM	2	8	6
3:11 PM	0	4	2
3:12 PM	2	0	0

5:02 PM	3	5	7
5:03 PM	4	6	3
5:04 PM	0	13	9
5:05 PM	0	2	4
5:06 PM	0	3	4
5:07 PM	1	8	6
5:08 PM	1	13	11
5:09 PM	2	5	4
5:10 PM	1	0	0
5:11 PM	1	14	11
5:12 PM	0	0	0
5:13 PM	0	0	0
5:14 PM	0	9	7
5:15 PM	1	13	9
5:16 PM	1	0	0
5:17 PM	2	8	1
5:18 PM	1	0	0
5:19 PM	1	0	0
5:20 PM	3	0	0
5:21 PM	3	11	9
5:22 PM	1	0	0
5:23 PM	2	5	6
5:24 PM	2	0	0
5:25 PM	2	9	2
5:26 PM	1	0	0
5:27 PM	1	2	0
5:28 PM	0	0	0
5:29 PM	0	0	0
5:30 PM	0	0	0
5:31 PM	0	7	5
5:32 PM	0	12	7
5:33 PM	1	1	0
5:34 PM	0	0	0
5:35 PM	0	0	0
5:36 PM	0	0	0
5:37 PM	0	10	9
5:38 PM	1	9	6
5:39 PM	0	0	0
5:40 PM	0	9	2
5:41 PM	0	0	0
5:42 PM	0	7	5
5:43 PM	0	0	0
5:44 PM	0	0	0
5:45 PM	1	1	2
5:46 PM	0	0	0
5:47 PM	0	0	0
5:48 PM	0	2	4
5:49 PM	1	12	7
5:50 PM	0	0	2
5:51 PM	0	0	0
5:52 PM	0	0	0
5:53 PM	0	8	4
5:54 PM	0	0	0
5:55 PM	0	2	1
5:56 PM	0	0	0
5:57 PM	1	2	2
5:58 PM	0	0	0
5:59 PM	0	3	4
Totals	91	414	308

8:13 AM	1	8	7
8:14 AM	1	0	0
8:15 AM	1	4	4
8:16 AM	1	0	0
8:17 AM	1	4	1
8:18 AM	0	0	0
8:19 AM	0	1	1
8:20 AM	0	0	0
8:21 AM	0	5	3
8:22 AM	1	1	0
8:23 AM	1	1	2
8:24 AM	0	0	0
8:25 AM	0	5	6
8:26 AM	0	0	0
8:27 AM	0	0	0
8:28 AM	0	0	0
8:29 AM	0	0	0
8:30 AM	0	0	0
8:31 AM	0	0	1
8:32 AM	0	0	0
8:33 AM	1	7	6
8:34 AM	0	0	0
8:35 AM	0	0	0
8:36 AM	0	0	0
8:37 AM	0	0	0
8:38 AM	0	0	0
8:39 AM	0	1	1
8:40 AM	0	0	0
8:41 AM	0	0	0
8:42 AM	1	0	0
8:43 AM	2	3	3
8:44 AM	0	0	0
8:45 AM	0	10	9
8:46 AM	0	10	10
8:47 AM	1	3	2
8:48 AM	0	0	0
8:49 AM	0	8	4
8:50 AM	0	16	13
8:51 AM	0	7	7
8:52 AM	0	0	0
8:53 AM	0	5	3
8:54 AM	1	7	5
8:55 AM	1	6	5
8:56 AM	0	0	0
8:57 AM	1	13	12
8:58 AM	1	16	13
8:59 AM	0	12	14
Totals	35	446	398

3:13 PM	1	0	1
3:14 PM	2	0	0
3:15 PM	0	6	4
3:16 PM	0	0	1
3:17 PM	1	0	0
3:18 PM	2	3	0
3:19 PM	0	0	0
3:20 PM	1	5	5
3:21 PM	0	0	0
3:22 PM	1	5	4
3:23 PM	0	0	0
3:24 PM	0	8	6
3:25 PM	0	0	0
3:26 PM	0	3	4
3:27 PM	2	0	0
3:28 PM	2	8	9
3:29 PM	2	0	0
3:30 PM	3	0	0
3:31 PM	3	17	23
3:32 PM	0	22	29
3:33 PM	0	13	17
3:34 PM	0	16	23
3:35 PM	1	14	18
3:36 PM	1	16	21
3:37 PM	1	19	25
3:38 PM	1	20	22
3:39 PM	0	21	23
3:40 PM	1	18	17
3:41 PM	1	13	15
3:42 PM	0	18	20
3:43 PM	0	20	14
3:44 PM	1	23	15
3:45 PM	1	24	22
3:46 PM	1	26	21
3:47 PM	0	23	20
3:48 PM	0	22	19
3:49 PM	4	20	18
3:50 PM	4	21	16
3:51 PM	0	22	12
3:52 PM	2	15	9
3:53 PM	0	12	9
3:54 PM	0	7	4
3:55 PM	1	4	5
3:56 PM	1	3	0
3:57 PM	0	0	0
3:58 PM	1	4	1
3:59 PM	0	0	0
Totals	112	744	686

Kimley»Horn

Attachment C

Analysis Worksheets

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2354	2328	2256	2224	2218	2350	2279
Vehs Exited	2344	2321	2253	2253	2202	2343	2290
Starting Vehs	23	33	27	51	27	32	44
Ending Vehs	33	40	30	22	43	39	33
Travel Distance (mi)	784	781	758	746	742	782	765
Travel Time (hr)	40.1	41.3	38.8	38.2	36.6	42.5	38.6
Total Delay (hr)	13.0	14.3	12.5	12.4	10.9	15.5	12.1
Total Stops	1367	1368	1288	1314	1209	1469	1300
Fuel Used (gal)	29.4	29.8	28.7	28.0	27.4	30.1	28.2

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	2323	2357	2304	2298
Vehs Exited	2312	2351	2288	2296
Starting Vehs	30	31	27	32
Ending Vehs	41	37	43	34
Travel Distance (mi)	774	792	773	770
Travel Time (hr)	39.8	41.3	38.7	39.6
Total Delay (hr)	13.0	14.0	12.0	13.0
Total Stops	1329	1380	1242	1327
Fuel Used (gal)	29.2	30.0	28.6	28.9

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	576	555	542	508	476	551	532
Vehs Exited	558	551	532	528	482	539	550
Starting Vehs	23	33	27	51	27	32	44
Ending Vehs	41	37	37	31	21	44	26
Travel Distance (mi)	189	186	182	173	162	182	182
Travel Time (hr)	9.3	9.3	9.5	8.2	7.7	9.9	8.3
Total Delay (hr)	2.7	2.9	3.2	2.2	2.1	3.5	2.0
Total Stops	319	308	307	254	259	356	248
Fuel Used (gal)	7.0	7.0	6.9	6.3	5.8	7.0	6.5

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	562	550	553	541
Vehs Exited	531	545	544	535
Starting Vehs	30	31	27	32
Ending Vehs	61	36	36	35
Travel Distance (mi)	184	187	185	181
Travel Time (hr)	9.3	9.3	8.8	9.0
Total Delay (hr)	2.9	2.9	2.5	2.7
Total Stops	328	313	286	297
Fuel Used (gal)	6.9	7.0	6.6	6.7

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	648	666	640	655	670	664	667
Vehs Exited	637	635	633	645	656	665	650
Starting Vehs	41	37	37	31	21	44	26
Ending Vehs	52	68	44	41	35	43	43
Travel Distance (mi)	214	215	215	213	220	218	219
Travel Time (hr)	11.9	12.0	11.4	11.6	11.3	12.9	12.3
Total Delay (hr)	4.5	4.6	3.9	4.2	3.6	5.4	4.6
Total Stops	409	430	371	386	352	440	439
Fuel Used (gal)	8.3	8.3	8.2	8.2	8.3	8.7	8.4

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	663	729	692	671
Vehs Exited	664	714	685	658
Starting Vehs	61	36	36	35
Ending Vehs	60	51	43	47
Travel Distance (mi)	218	240	229	220
Travel Time (hr)	11.8	13.9	12.3	12.1
Total Delay (hr)	4.3	5.6	4.4	4.5
Total Stops	396	457	417	408
Fuel Used (gal)	8.3	9.5	8.8	8.5

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	573	555	553	540	521	558	520
Vehs Exited	593	566	558	549	512	573	520
Starting Vehs	52	68	44	41	35	43	43
Ending Vehs	32	57	39	32	44	28	43
Travel Distance (mi)	192	190	182	185	174	190	174
Travel Time (hr)	9.8	9.6	9.0	9.4	8.7	9.8	8.5
Total Delay (hr)	3.2	3.1	2.7	3.0	2.7	3.2	2.5
Total Stops	343	297	316	356	317	327	306
Fuel Used (gal)	7.3	7.1	6.8	7.0	6.6	7.2	6.4

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	560	522	505	541
Vehs Exited	588	526	504	548
Starting Vehs	60	51	43	47
Ending Vehs	32	47	44	40
Travel Distance (mi)	191	177	171	183
Travel Time (hr)	9.9	8.8	8.1	9.2
Total Delay (hr)	3.3	2.6	2.2	2.8
Total Stops	331	295	240	312
Fuel Used (gal)	7.3	6.5	6.3	6.8

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	557	552	521	521	551	577	560
Vehs Exited	556	569	530	531	552	566	570
Starting Vehs	32	57	39	32	44	28	43
Ending Vehs	33	40	30	22	43	39	33
Travel Distance (mi)	188	190	179	175	186	192	191
Travel Time (hr)	9.0	10.3	8.9	9.0	8.9	10.0	9.5
Total Delay (hr)	2.5	3.7	2.7	2.9	2.5	3.4	3.0
Total Stops	296	333	294	318	281	346	307
Fuel Used (gal)	6.8	7.3	6.8	6.6	6.7	7.3	7.0

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	538	556	554	549
Vehs Exited	529	566	555	551
Starting Vehs	32	47	44	40
Ending Vehs	41	37	43	34
Travel Distance (mi)	181	189	188	186
Travel Time (hr)	8.7	9.3	9.4	9.3
Total Delay (hr)	2.4	2.8	3.0	2.9
Total Stops	274	315	299	307
Fuel Used (gal)	6.6	7.1	6.9	6.9

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	2.7	0.2	0.2	0.0	0.0	0.0	0.3	0.3	0.3	0.5	0.4	3.9
Total Delay (hr)	0.5	3.0	0.0	0.2	3.7	0.3	0.7	0.6	0.7	0.7	0.2	0.5
Total Del/Veh (s)	39.8	12.1	9.6	54.3	14.8	11.5	44.8	50.2	32.3	35.2	35.7	18.9
Stop Delay (hr)	0.5	2.1	0.0	0.1	2.8	0.2	0.7	0.5	0.6	0.6	0.2	0.5
Stop Del/Veh (s)	37.0	8.7	7.4	50.9	11.1	9.2	41.1	45.2	29.8	31.4	30.8	16.9

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.3
Total Delay (hr)	11.1
Total Del/Veh (s)	17.4
Stop Delay (hr)	8.9
Stop Del/Veh (s)	13.9

2: Cirby Way & Meadow Oaks Dr Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.2	0.1	0.1	0.1
Total Delay (hr)	0.0	0.4	0.2	0.0	0.0	0.0	0.7
Total Del/Veh (s)	8.1	1.5	0.8	0.6	27.6	7.6	1.3
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	5.7	0.1	0.1	0.1	25.8	7.3	0.2

Total Network Performance

Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.4
Total Delay (hr)	12.7
Total Del/Veh (s)	19.6
Stop Delay (hr)	9.1
Stop Del/Veh (s)	14.0

Intersection: 1: Cirby Way & Oak Ridge Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	134	239	244	68	266	274	245	235	62
Average Queue (ft)	35	115	122	12	152	159	107	102	33
95th Queue (ft)	85	197	205	43	250	258	207	189	51
Link Distance (ft)		820	820		261	261	332	677	
Upstream Blk Time (%)					0	1			
Queuing Penalty (veh)					2	4			
Storage Bay Dist (ft)	160			60					10
Storage Blk Time (%)		2		0	25			42	10
Queuing Penalty (veh)		1		0	3			43	10

Intersection: 2: Cirby Way & Meadow Oaks Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	31	29	49	75	66	46
Average Queue (ft)	3	1	2	6	5	16
95th Queue (ft)	17	13	18	37	33	43
Link Distance (ft)		261	261	674	674	422
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	130					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 63

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	1:05	1:05	1:05	1:05	1:05	1:05	1:05
End Time	2:15	2:15	2:15	2:15	2:15	2:15	2:15
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	1878	1831	1701	1696	1755	1818	1823
Vehs Exited	1877	1841	1707	1698	1750	1816	1815
Starting Vehs	29	30	25	24	23	20	21
Ending Vehs	30	20	19	22	28	22	29
Travel Distance (mi)	645	629	583	583	600	624	627
Travel Time (hr)	26.5	25.7	24.0	24.1	24.9	26.1	25.7
Total Delay (hr)	4.4	4.2	4.1	4.1	4.3	4.8	4.2
Total Stops	668	603	644	600	619	668	630
Fuel Used (gal)	21.5	21.0	19.4	19.4	20.1	21.0	20.9

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	1:05	1:05	1:05	1:05
End Time	2:15	2:15	2:15	2:15
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	1745	1832	1712	1778
Vehs Exited	1745	1830	1711	1779
Starting Vehs	19	26	23	21
Ending Vehs	19	28	24	22
Travel Distance (mi)	598	627	588	610
Travel Time (hr)	24.1	26.3	24.2	25.1
Total Delay (hr)	3.7	4.8	4.0	4.3
Total Stops	583	687	600	631
Fuel Used (gal)	19.9	21.3	19.6	20.4

Interval #0 Information Seeding

Start Time	1:05
End Time	1:15
Total Time (min)	10

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information

Start Time	1:15
End Time	1:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	453	432	388	425	423	432	452
Vehs Exited	454	424	399	424	425	429	450
Starting Vehs	29	30	25	24	23	20	21
Ending Vehs	28	38	14	25	21	23	23
Travel Distance (mi)	156	146	135	148	146	150	156
Travel Time (hr)	6.3	6.1	5.5	6.1	5.9	6.2	6.3
Total Delay (hr)	0.9	1.1	0.8	1.0	0.9	1.1	1.0
Total Stops	150	158	138	150	133	157	148
Fuel Used (gal)	5.2	4.9	4.5	4.9	4.9	5.0	5.2

Interval #1 Information

Start Time	1:15
End Time	1:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	428	430	406	427
Vehs Exited	421	433	401	425
Starting Vehs	19	26	23	21
Ending Vehs	26	23	28	22
Travel Distance (mi)	146	149	140	147
Travel Time (hr)	5.9	6.0	5.7	6.0
Total Delay (hr)	1.0	0.9	1.0	1.0
Total Stops	146	140	142	147
Fuel Used (gal)	5.0	4.9	4.7	4.9

Interval #2 Information

Start Time	1:30
End Time	1:45
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	515	478	451	468	512	512	496
Vehs Exited	515	487	443	476	509	503	495
Starting Vehs	28	38	14	25	21	23	23
Ending Vehs	28	29	22	17	24	32	24
Travel Distance (mi)	175	162	151	160	173	172	169
Travel Time (hr)	7.5	6.8	6.2	6.9	7.6	7.5	7.3
Total Delay (hr)	1.5	1.2	1.0	1.4	1.7	1.6	1.5
Total Stops	212	182	163	189	211	218	209
Fuel Used (gal)	5.9	5.5	5.1	5.5	6.0	5.9	5.7

Interval #2 Information

Start Time	1:30
End Time	1:45
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	491	504	517	494
Vehs Exited	487	504	507	493
Starting Vehs	26	23	28	22
Ending Vehs	30	23	38	27
Travel Distance (mi)	166	170	176	167
Travel Time (hr)	6.8	7.8	7.5	7.2
Total Delay (hr)	1.2	1.9	1.4	1.4
Total Stops	174	234	193	200
Fuel Used (gal)	5.6	6.0	6.0	5.7

Interval #3 Information

Start Time	1:45
End Time	2:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	480	445	450	399	422	422	452
Vehs Exited	478	454	444	401	424	428	434
Starting Vehs	28	29	22	17	24	32	24
Ending Vehs	30	20	28	15	22	26	42
Travel Distance (mi)	165	155	154	138	147	145	154
Travel Time (hr)	6.9	6.2	6.6	5.5	5.9	5.9	6.2
Total Delay (hr)	1.2	0.8	1.4	0.8	0.9	0.9	0.9
Total Stops	183	121	209	116	140	130	148
Fuel Used (gal)	5.5	5.1	5.2	4.5	4.8	4.7	5.2

Interval #3 Information

Start Time	1:45
End Time	2:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	387	455	397	429
Vehs Exited	395	456	410	432
Starting Vehs	30	23	38	27
Ending Vehs	22	22	25	24
Travel Distance (mi)	133	157	139	149
Travel Time (hr)	5.3	6.5	5.7	6.1
Total Delay (hr)	0.8	1.2	0.9	1.0
Total Stops	140	176	150	151
Fuel Used (gal)	4.4	5.4	4.6	4.9

Interval #4 Information

Start Time	2:00
End Time	2:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	430	476	412	404	398	452	423
Vehs Exited	430	476	421	397	392	456	436
Starting Vehs	30	20	28	15	22	26	42
Ending Vehs	30	20	19	22	28	22	29
Travel Distance (mi)	149	165	144	138	135	157	147
Travel Time (hr)	5.9	6.7	5.7	5.6	5.4	6.5	5.9
Total Delay (hr)	0.8	1.1	0.8	0.9	0.8	1.2	0.8
Total Stops	123	142	134	145	135	163	125
Fuel Used (gal)	4.8	5.5	4.6	4.5	4.4	5.3	4.9

Interval #4 Information

Start Time	2:00
End Time	2:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	439	443	392	427
Vehs Exited	442	437	393	427
Starting Vehs	22	22	25	24
Ending Vehs	19	28	24	22
Travel Distance (mi)	153	151	134	147
Travel Time (hr)	6.0	6.0	5.3	5.9
Total Delay (hr)	0.8	0.8	0.7	0.9
Total Stops	123	137	115	133
Fuel Used (gal)	5.0	5.0	4.3	4.8

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	2.9	0.2	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	4.1
Total Delay (hr)	0.2	1.0	0.0	0.2	1.2	0.0	0.2	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	25.9	5.1	3.0	27.2	5.1	2.6	28.2	26.6	9.6	31.1	28.9	9.5
Stop Delay (hr)	0.2	0.6	0.0	0.2	0.7	0.0	0.2	0.1	0.1	0.1	0.1	0.1
Stop Del/Veh (s)	23.9	3.0	2.0	24.8	3.1	1.7	25.9	23.1	8.7	28.6	25.4	8.7

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.2
Total Delay (hr)	3.3
Total Del/Veh (s)	6.6
Stop Delay (hr)	2.3
Stop Del/Veh (s)	4.6

2: Cirby Way & Meadow Oaks Dr Performance by movement

Movement	EBL	EBT	WBT	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2		0.1	0.1
Total Delay (hr)	0.0	0.2	0.1	0.0	0.0	0.3
Total Del/Veh (s)	5.4	1.0	0.4		4.0	0.7
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	3.0	0.1	0.0		3.9	0.1

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	4.1
Total Del/Veh (s)	8.3
Stop Delay (hr)	2.4
Stop Del/Veh (s)	4.7

Intersection: 1: Cirby Way & Oak Ridge Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	59	147	160	72	157	172	97	105	40
Average Queue (ft)	18	53	58	19	69	74	36	31	24
95th Queue (ft)	48	109	125	53	131	139	76	78	47
Link Distance (ft)		820	820		261	261	332	677	
Upstream Blk Time (%)						0			
Queuing Penalty (veh)						0			
Storage Bay Dist (ft)	160			60					10
Storage Blk Time (%)		0		0	6			17	5
Queuing Penalty (veh)		0		1	1			8	1

Intersection: 2: Cirby Way & Meadow Oaks Dr

Movement	EB	WB	SB
Directions Served	L	TR	LR
Maximum Queue (ft)	33	3	31
Average Queue (ft)	7	0	10
95th Queue (ft)	28	3	33
Link Distance (ft)		674	422
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	130		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 12

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2481	2493	2424	2320	2385	2496	2450
Vehs Exited	2477	2530	2405	2337	2383	2480	2463
Starting Vehs	26	62	23	45	28	25	37
Ending Vehs	30	25	42	28	30	41	24
Travel Distance (mi)	847	859	820	796	813	849	841
Travel Time (hr)	39.3	39.6	36.5	37.4	37.6	39.8	37.8
Total Delay (hr)	10.2	10.2	8.3	10.0	9.6	10.6	8.9
Total Stops	1136	1124	1039	1128	1124	1189	1059
Fuel Used (gal)	30.1	30.8	28.7	28.8	28.9	30.5	29.4

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	2442	2491	2407	2439
Vehs Exited	2431	2501	2402	2441
Starting Vehs	25	37	32	32
Ending Vehs	36	27	37	30
Travel Distance (mi)	832	851	820	833
Travel Time (hr)	38.1	39.3	37.3	38.3
Total Delay (hr)	9.5	10.0	9.3	9.7
Total Stops	1099	1136	1074	1111
Fuel Used (gal)	29.9	30.2	29.1	29.6

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	626	644	656	570	576	576	584
Vehs Exited	594	655	628	581	563	556	595
Starting Vehs	26	62	23	45	28	25	37
Ending Vehs	58	51	51	34	41	45	26
Travel Distance (mi)	208	221	218	199	195	197	203
Travel Time (hr)	9.5	10.7	10.4	9.7	8.9	8.6	9.4
Total Delay (hr)	2.4	3.1	2.9	2.9	2.2	1.8	2.5
Total Stops	290	318	333	282	275	227	283
Fuel Used (gal)	7.3	8.0	7.9	7.4	6.9	6.8	7.2

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	567	606	612	602
Vehs Exited	557	606	601	593
Starting Vehs	25	37	32	32
Ending Vehs	35	37	43	40
Travel Distance (mi)	193	207	210	205
Travel Time (hr)	8.8	9.5	9.6	9.5
Total Delay (hr)	2.1	2.4	2.5	2.5
Total Stops	250	269	263	280
Fuel Used (gal)	6.9	7.3	7.5	7.3

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	699	704	636	647	655	704	654
Vehs Exited	718	714	655	654	660	704	647
Starting Vehs	58	51	51	34	41	45	26
Ending Vehs	39	41	32	27	36	45	33
Travel Distance (mi)	240	242	220	220	222	236	221
Travel Time (hr)	12.5	10.9	9.7	10.9	10.8	11.8	9.6
Total Delay (hr)	4.3	2.7	2.2	3.3	3.2	3.7	2.0
Total Stops	414	293	279	361	340	369	266
Fuel Used (gal)	9.1	8.6	7.7	8.1	8.1	8.7	7.6

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	691	703	619	672
Vehs Exited	693	705	612	675
Starting Vehs	35	37	43	40
Ending Vehs	33	35	50	33
Travel Distance (mi)	235	238	208	228
Travel Time (hr)	11.1	11.4	9.7	10.8
Total Delay (hr)	3.0	3.2	2.6	3.0
Total Stops	322	333	291	329
Fuel Used (gal)	8.5	8.6	7.4	8.2

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	581	563	579	545	584	621	581
Vehs Exited	580	558	581	540	595	630	579
Starting Vehs	39	41	32	27	36	45	33
Ending Vehs	40	46	30	32	25	36	35
Travel Distance (mi)	199	194	197	183	203	213	200
Travel Time (hr)	8.7	8.6	8.6	7.9	9.3	10.1	8.9
Total Delay (hr)	1.9	2.0	1.8	1.6	2.4	2.8	2.0
Total Stops	235	237	242	217	260	313	236
Fuel Used (gal)	6.9	6.9	6.8	6.4	7.2	7.6	7.0

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	591	584	565	578
Vehs Exited	592	580	578	580
Starting Vehs	33	35	50	33
Ending Vehs	32	39	37	31
Travel Distance (mi)	203	200	194	199
Travel Time (hr)	9.1	8.9	9.3	8.9
Total Delay (hr)	2.1	2.0	2.6	2.1
Total Stops	248	247	301	253
Fuel Used (gal)	7.2	6.9	7.1	7.0

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	575	582	553	558	570	595	631
Vehs Exited	585	603	541	562	565	590	642
Starting Vehs	40	46	30	32	25	36	35
Ending Vehs	30	25	42	28	30	41	24
Travel Distance (mi)	200	203	186	193	194	204	217
Travel Time (hr)	8.6	9.3	7.8	8.9	8.6	9.3	9.9
Total Delay (hr)	1.7	2.4	1.4	2.2	1.9	2.3	2.3
Total Stops	197	276	185	268	249	280	274
Fuel Used (gal)	6.8	7.3	6.3	6.9	6.7	7.3	7.6

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	593	598	611	586
Vehs Exited	589	610	611	589
Starting Vehs	32	39	37	31
Ending Vehs	36	27	37	30
Travel Distance (mi)	201	206	208	201
Travel Time (hr)	9.2	9.5	8.8	9.0
Total Delay (hr)	2.3	2.4	1.6	2.1
Total Stops	279	287	219	253
Fuel Used (gal)	7.3	7.4	7.1	7.1

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	2.7	0.2	0.3	0.1	0.0	0.1	0.2	0.2	0.2	0.4	0.3	3.9
Total Delay (hr)	0.2	2.7	0.1	0.3	2.7	0.1	0.3	0.1	0.2	0.5	0.2	0.3
Total Del/Veh (s)	38.4	9.7	8.2	39.2	9.0	7.3	33.8	33.9	15.5	33.2	36.0	15.8
Stop Delay (hr)	0.2	1.7	0.1	0.3	1.8	0.1	0.2	0.1	0.2	0.4	0.2	0.3
Stop Del/Veh (s)	35.8	6.3	5.8	36.1	5.9	5.5	31.3	30.0	14.2	30.2	31.4	14.4

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.2
Total Delay (hr)	7.7
Total Del/Veh (s)	11.3
Stop Delay (hr)	5.6
Stop Del/Veh (s)	8.2

2: Cirby Way & Meadow Oaks Dr Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.2	0.2	0.1	0.1	0.1
Total Delay (hr)	0.1	0.4	0.3	0.0	0.0	0.0	0.9
Total Del/Veh (s)	9.1	1.5	0.9	0.5	38.0	10.3	1.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	6.6	0.1	0.1	0.0	36.1	10.0	0.3

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.3
Total Delay (hr)	9.4
Total Del/Veh (s)	13.7
Stop Delay (hr)	5.8
Stop Del/Veh (s)	8.4

Intersection: 1: Cirby Way & Oak Ridge Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	91	246	256	84	262	271	121	163	49
Average Queue (ft)	20	111	119	27	127	134	49	66	30
95th Queue (ft)	62	208	217	69	231	240	92	130	48
Link Distance (ft)		820	820		261	261	332	677	
Upstream Blk Time (%)					0	1			
Queuing Penalty (veh)					2	3			
Storage Bay Dist (ft)	160			60					10
Storage Blk Time (%)		2		1	16			37	9
Queuing Penalty (veh)		1		8	5			26	6

Intersection: 2: Cirby Way & Meadow Oaks Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	44	46	56	61	75	48
Average Queue (ft)	12	2	3	5	7	13
95th Queue (ft)	38	20	25	33	40	40
Link Distance (ft)		261	261	674	674	422
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	130					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 50

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2611	2539	2573	2526	2532	2601	2482
Vehs Exited	2608	2545	2605	2525	2525	2596	2482
Starting Vehs	38	41	65	36	34	35	40
Ending Vehs	41	35	33	37	41	40	40
Travel Distance (mi)	868	844	855	840	840	863	824
Travel Time (hr)	46.0	43.8	44.7	44.1	43.9	46.6	42.7
Total Delay (hr)	15.8	14.4	15.0	15.0	14.8	16.7	14.1
Total Stops	1543	1516	1557	1454	1444	1594	1461
Fuel Used (gal)	32.9	32.0	32.8	31.9	32.3	33.2	31.1

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	2560	2583	2492	2548
Vehs Exited	2543	2577	2522	2552
Starting Vehs	29	39	53	39
Ending Vehs	46	45	23	36
Travel Distance (mi)	845	854	833	847
Travel Time (hr)	45.5	48.1	42.5	44.8
Total Delay (hr)	16.2	18.4	13.5	15.4
Total Stops	1595	1582	1379	1511
Fuel Used (gal)	32.6	33.6	31.3	32.4

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	604	615	607	589	563	605	555
Vehs Exited	605	625	635	582	539	589	569
Starting Vehs	38	41	65	36	34	35	40
Ending Vehs	37	31	37	43	58	51	26
Travel Distance (mi)	203	208	207	195	184	201	189
Travel Time (hr)	9.7	10.3	10.9	9.2	8.7	10.1	8.7
Total Delay (hr)	2.7	3.0	3.7	2.5	2.3	3.2	2.2
Total Stops	321	331	368	296	291	361	296
Fuel Used (gal)	7.4	7.6	8.0	7.2	6.8	7.6	6.9

Interval #1 Information

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	633	565	586	591
Vehs Exited	598	573	602	591
Starting Vehs	29	39	53	39
Ending Vehs	64	31	37	42
Travel Distance (mi)	203	189	202	198
Travel Time (hr)	11.0	9.7	9.6	9.8
Total Delay (hr)	4.0	3.1	2.6	2.9
Total Stops	427	335	281	331
Fuel Used (gal)	7.8	7.2	7.4	7.4

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	795	743	751	715	767	775	757
Vehs Exited	791	705	725	701	779	752	712
Starting Vehs	37	31	37	43	58	51	26
Ending Vehs	41	69	63	57	46	74	71
Travel Distance (mi)	260	239	240	231	255	248	238
Travel Time (hr)	16.1	13.5	12.9	13.7	15.9	14.6	13.4
Total Delay (hr)	7.1	5.1	4.5	5.7	7.0	6.0	5.1
Total Stops	535	507	468	465	529	514	487
Fuel Used (gal)	10.6	9.3	9.3	9.2	10.7	9.8	9.3

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	746	776	715	753
Vehs Exited	762	750	672	735
Starting Vehs	64	31	37	42
Ending Vehs	48	57	80	59
Travel Distance (mi)	244	246	226	243
Travel Time (hr)	14.4	15.9	12.1	14.2
Total Delay (hr)	6.0	7.3	4.3	5.8
Total Stops	516	495	419	492
Fuel Used (gal)	9.8	10.1	8.6	9.7

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	600	568	605	605	582	599	562
Vehs Exited	610	603	627	623	603	636	596
Starting Vehs	41	69	63	57	46	74	71
Ending Vehs	31	34	41	39	25	37	37
Travel Distance (mi)	204	191	204	207	198	207	197
Travel Time (hr)	9.8	9.2	10.5	10.6	9.4	10.8	10.0
Total Delay (hr)	2.7	2.6	3.4	3.4	2.5	3.6	3.2
Total Stops	322	326	349	342	294	341	321
Fuel Used (gal)	7.4	7.1	7.8	7.8	7.3	7.8	7.3

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	563	608	602	591
Vehs Exited	563	629	638	613
Starting Vehs	48	57	80	59
Ending Vehs	48	36	44	39
Travel Distance (mi)	191	209	207	202
Travel Time (hr)	9.4	11.1	10.8	10.2
Total Delay (hr)	2.8	3.9	3.6	3.2
Total Stops	299	350	353	330
Fuel Used (gal)	7.2	8.1	8.0	7.6

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	612	613	610	617	620	622	608
Vehs Exited	602	612	618	619	604	619	605
Starting Vehs	31	34	41	39	25	37	37
Ending Vehs	41	35	33	37	41	40	40
Travel Distance (mi)	201	206	204	207	203	207	200
Travel Time (hr)	10.3	10.9	10.5	10.5	9.9	11.1	10.5
Total Delay (hr)	3.4	3.7	3.4	3.4	2.9	3.9	3.5
Total Stops	365	352	372	351	330	378	357
Fuel Used (gal)	7.5	7.9	7.7	7.7	7.6	7.9	7.6

Interval #4 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	618	634	589	615
Vehs Exited	620	625	610	614
Starting Vehs	48	36	44	39
Ending Vehs	46	45	23	36
Travel Distance (mi)	206	210	199	204
Travel Time (hr)	10.7	11.4	9.9	10.6
Total Delay (hr)	3.5	4.1	3.0	3.5
Total Stops	353	402	326	359
Fuel Used (gal)	7.8	8.1	7.3	7.7

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	2.6	0.2	0.3	0.0	0.0	0.0	0.5	0.5	0.8	0.5	0.5	3.8
Total Delay (hr)	0.5	3.5	0.0	0.2	4.3	0.3	0.9	0.6	0.8	0.7	0.3	0.6
Total Del/Veh (s)	42.9	12.8	12.6	54.5	15.7	13.2	52.1	50.1	35.6	36.5	38.0	20.8
Stop Delay (hr)	0.5	2.4	0.0	0.2	3.2	0.2	0.8	0.6	0.8	0.6	0.3	0.5
Stop Del/Veh (s)	39.9	9.1	9.9	50.9	11.6	10.4	48.2	44.9	33.2	32.7	32.9	18.9

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.3
Total Delay (hr)	12.7
Total Del/Veh (s)	18.4
Stop Delay (hr)	10.1
Stop Del/Veh (s)	14.6

2: Cirby Way & Meadow Oaks Dr Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.2	0.3	0.1	0.1	0.1
Total Delay (hr)	0.3	0.5	0.5	0.0	0.1	0.0	1.3
Total Del/Veh (s)	13.4	1.6	1.6	1.4	43.7	10.1	2.1
Stop Delay (hr)	0.2	0.0	0.1	0.0	0.1	0.0	0.5
Stop Del/Veh (s)	10.6	0.1	0.3	0.3	41.9	9.8	0.7

Total Network Performance

Denied Delay (hr)	0.3
Denied Del/Veh (s)	0.4
Total Delay (hr)	15.1
Total Del/Veh (s)	21.0
Stop Delay (hr)	10.6
Stop Del/Veh (s)	14.8

Intersection: 1: Cirby Way & Oak Ridge Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	149	277	288	74	270	281	262	236	56
Average Queue (ft)	36	130	138	15	169	174	114	103	33
95th Queue (ft)	91	228	236	49	268	274	222	191	50
Link Distance (ft)		820	820		261	261	332	677	
Upstream Blk Time (%)					1	1	1		
Queuing Penalty (veh)					8	9	0		
Storage Bay Dist (ft)	160			60					10
Storage Blk Time (%)	0	4		0	28			43	10
Queuing Penalty (veh)	0	2		1	4			45	10

Intersection: 2: Cirby Way & Meadow Oaks Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	93	43	43	120	139	50
Average Queue (ft)	37	2	2	13	15	17
95th Queue (ft)	73	20	21	67	76	45
Link Distance (ft)		261	261	674	674	422
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	130					
Storage Blk Time (%)	0					
Queuing Penalty (veh)	0					

Network Summary

Network wide Queuing Penalty: 79

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	1:05	1:05	1:05	1:05	1:05	1:05	1:05
End Time	2:15	2:15	2:15	2:15	2:15	2:15	2:15
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2045	2043	1926	1899	1965	2035	1958
Vehs Exited	2036	2051	1931	1892	1961	2030	1951
Starting Vehs	26	35	28	17	18	27	27
Ending Vehs	35	27	23	24	22	32	34
Travel Distance (mi)	694	696	657	644	669	691	663
Travel Time (hr)	29.9	29.8	27.1	27.0	27.5	29.1	27.7
Total Delay (hr)	6.1	5.9	4.6	4.9	4.6	5.4	4.8
Total Stops	824	792	684	704	646	762	727
Fuel Used (gal)	23.9	23.8	22.2	22.0	22.6	23.6	22.5

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	1:05	1:05	1:05	1:05
End Time	2:15	2:15	2:15	2:15
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	2067	2037	1945	1989
Vehs Exited	2062	2027	1941	1988
Starting Vehs	23	24	24	22
Ending Vehs	28	34	28	25
Travel Distance (mi)	701	688	664	676
Travel Time (hr)	29.2	29.8	28.3	28.5
Total Delay (hr)	5.3	6.2	5.5	5.3
Total Stops	741	842	749	745
Fuel Used (gal)	24.0	23.7	22.7	23.1

Interval #0 Information Seeding

Start Time	1:05
End Time	1:15
Total Time (min)	10

Volumes adjusted by Growth Factors.
No data recorded this interval.

Interval #1 Information

Start Time	1:15
End Time	1:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	478	494	482	460	487	442	470
Vehs Exited	476	483	471	452	484	446	475
Starting Vehs	26	35	28	17	18	27	27
Ending Vehs	28	46	39	25	21	23	22
Travel Distance (mi)	162	167	163	155	165	152	162
Travel Time (hr)	6.8	7.2	6.7	6.4	7.0	6.1	6.6
Total Delay (hr)	1.3	1.5	1.1	1.1	1.3	0.9	1.1
Total Stops	193	202	186	165	189	136	171
Fuel Used (gal)	5.6	5.8	5.5	5.3	5.7	5.1	5.4

Interval #1 Information

Start Time	1:15
End Time	1:30
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	508	479	458	475
Vehs Exited	504	478	459	473
Starting Vehs	23	24	24	22
Ending Vehs	27	25	23	26
Travel Distance (mi)	172	163	156	162
Travel Time (hr)	7.0	6.7	6.4	6.7
Total Delay (hr)	1.1	1.1	1.1	1.2
Total Stops	166	180	148	175
Fuel Used (gal)	5.8	5.4	5.3	5.5

Interval #2 Information

Start Time	1:30
End Time	1:45
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	544	545	524	519	569	553	512
Vehs Exited	546	565	526	511	564	543	492
Starting Vehs	28	46	39	25	21	23	22
Ending Vehs	26	26	37	33	26	33	42
Travel Distance (mi)	182	186	178	173	193	184	169
Travel Time (hr)	8.5	8.6	7.7	7.5	8.1	8.1	7.1
Total Delay (hr)	2.2	2.1	1.6	1.5	1.5	1.8	1.3
Total Stops	277	254	223	223	196	231	201
Fuel Used (gal)	6.6	6.6	6.2	6.0	6.6	6.5	5.6

Interval #2 Information

Start Time	1:30
End Time	1:45
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	580	579	564	549
Vehs Exited	564	565	542	543
Starting Vehs	27	25	23	26
Ending Vehs	43	39	45	32
Travel Distance (mi)	190	192	192	184
Travel Time (hr)	8.7	9.1	8.4	8.2
Total Delay (hr)	2.2	2.4	1.8	1.8
Total Stops	275	295	235	241
Fuel Used (gal)	6.9	7.0	6.7	6.5

Interval #3 Information

Start Time	1:45
End Time	2:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	496	474	447	429	464	532	504
Vehs Exited	490	471	456	437	465	533	516
Starting Vehs	26	26	37	33	26	33	42
Ending Vehs	32	29	28	25	25	32	30
Travel Distance (mi)	169	160	154	148	159	182	174
Travel Time (hr)	7.0	6.4	6.3	6.1	6.5	7.6	7.4
Total Delay (hr)	1.2	0.9	1.0	1.0	1.0	1.3	1.4
Total Stops	154	147	143	138	155	185	178
Fuel Used (gal)	5.6	5.3	5.1	5.0	5.4	6.1	6.0

Interval #3 Information

Start Time	1:45
End Time	2:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	495	488	473	481
Vehs Exited	513	501	492	488
Starting Vehs	43	39	45	32
Ending Vehs	25	26	26	25
Travel Distance (mi)	175	168	163	165
Travel Time (hr)	7.0	7.0	7.2	6.9
Total Delay (hr)	1.1	1.3	1.6	1.2
Total Stops	158	176	213	164
Fuel Used (gal)	5.9	5.8	5.7	5.6

Interval #4 Information Recording

Start Time	2:00
End Time	2:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	527	530	473	491	445	508	472
Vehs Exited	524	532	478	492	448	508	468
Starting Vehs	32	29	28	25	25	32	30
Ending Vehs	35	27	23	24	22	32	34
Travel Distance (mi)	180	182	162	167	151	173	158
Travel Time (hr)	7.6	7.6	6.5	6.9	5.8	7.4	6.5
Total Delay (hr)	1.5	1.4	0.9	1.2	0.7	1.5	1.1
Total Stops	200	189	132	178	106	210	177
Fuel Used (gal)	6.2	6.2	5.4	5.7	4.9	5.9	5.5

Interval #4 Information Recording

Start Time	2:00
End Time	2:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	484	491	450	485
Vehs Exited	481	483	448	486
Starting Vehs	25	26	26	25
Ending Vehs	28	34	28	25
Travel Distance (mi)	164	166	153	166
Travel Time (hr)	6.5	7.0	6.3	6.8
Total Delay (hr)	0.9	1.3	1.0	1.1
Total Stops	142	191	153	167
Fuel Used (gal)	5.4	5.6	5.1	5.6

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	2.8	0.2	0.2	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	4.1
Total Delay (hr)	0.2	1.3	0.0	0.2	1.5	0.0	0.2	0.1	0.1	0.2	0.1	0.1
Total Del/Veh (s)	27.2	5.7	3.6	31.5	5.8	4.0	29.1	29.2	9.5	28.8	31.5	10.0
Stop Delay (hr)	0.2	0.7	0.0	0.2	0.9	0.0	0.2	0.1	0.1	0.1	0.1	0.1
Stop Del/Veh (s)	25.2	3.4	2.5	28.9	3.6	2.7	26.7	25.3	8.6	26.6	28.0	9.3

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	All
Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.2
Total Delay (hr)	4.0
Total Del/Veh (s)	7.3
Stop Delay (hr)	2.8
Stop Del/Veh (s)	5.1

2: Cirby Way & Meadow Oaks Dr Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.2		0.1	0.1
Total Delay (hr)	0.2	0.2	0.2	0.0	0.0	0.0	0.6
Total Del/Veh (s)	8.6	1.0	0.6	0.5		4.5	1.1
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Stop Del/Veh (s)	6.0	0.1	0.0	0.0		4.3	0.3

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.3
Total Delay (hr)	5.1
Total Del/Veh (s)	9.2
Stop Delay (hr)	3.0
Stop Del/Veh (s)	5.3

Intersection: 1: Cirby Way & Oak Ridge Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	55	161	163	82	192	204	97	93	48
Average Queue (ft)	19	64	64	23	82	89	41	34	26
95th Queue (ft)	46	127	135	61	155	164	81	77	49
Link Distance (ft)		820	820		261	261	332	677	
Upstream Blk Time (%)					0	0			
Queuing Penalty (veh)					0	0			
Storage Bay Dist (ft)	160			60					10
Storage Blk Time (%)		0		0	8			20	6
Queuing Penalty (veh)		0		2	2			9	2

Intersection: 2: Cirby Way & Meadow Oaks Dr

Movement	EB	WB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	78	4	20	33
Average Queue (ft)	29	0	1	10
95th Queue (ft)	62	3	9	33
Link Distance (ft)		674	674	422
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	130			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 15

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	2518	2505	2478	2367	2524	2458	2518
Vehs Exited	2540	2512	2489	2358	2535	2456	2533
Starting Vehs	49	35	62	34	44	30	41
Ending Vehs	27	28	51	43	33	32	26
Travel Distance (mi)	862	855	847	810	860	839	866
Travel Time (hr)	40.9	38.1	37.9	36.0	39.7	38.5	39.2
Total Delay (hr)	11.3	8.7	8.8	8.2	10.2	9.8	9.5
Total Stops	1194	1066	1056	991	1115	1115	1087
Fuel Used (gal)	31.2	29.8	29.9	28.4	30.8	29.9	30.4

Summary of All Intervals

Run Number	8	9	10	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	2459	2538	2425	2477
Vehs Exited	2462	2535	2431	2485
Starting Vehs	26	30	32	37
Ending Vehs	23	33	26	30
Travel Distance (mi)	836	862	826	846
Travel Time (hr)	38.2	39.4	38.7	38.7
Total Delay (hr)	9.4	9.7	10.4	9.6
Total Stops	1088	1166	1175	1106
Fuel Used (gal)	29.8	30.6	29.8	30.1

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	634	618	567	587	606	581	602
Vehs Exited	634	596	603	592	605	589	614
Starting Vehs	49	35	62	34	44	30	41
Ending Vehs	49	57	26	29	45	22	29
Travel Distance (mi)	219	207	202	202	207	201	211
Travel Time (hr)	10.4	9.6	8.8	9.0	8.9	9.1	9.1
Total Delay (hr)	2.9	2.5	1.9	2.0	1.8	2.2	1.9
Total Stops	313	297	209	254	222	249	221
Fuel Used (gal)	8.0	7.4	7.1	7.1	7.1	7.1	7.2

Interval #1 Information

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	567	578	569	592
Vehs Exited	559	571	576	595
Starting Vehs	26	30	32	37
Ending Vehs	34	37	25	33
Travel Distance (mi)	191	194	195	203
Travel Time (hr)	8.2	9.1	9.4	9.1
Total Delay (hr)	1.6	2.4	2.7	2.2
Total Stops	212	279	290	253
Fuel Used (gal)	6.5	6.9	7.1	7.2

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	704	683	699	622	714	697	700
Vehs Exited	694	704	686	626	717	672	666
Starting Vehs	49	57	26	29	45	22	29
Ending Vehs	59	36	39	25	42	47	63
Travel Distance (mi)	232	234	235	215	240	234	234
Travel Time (hr)	11.8	10.2	10.6	9.6	12.3	11.2	11.5
Total Delay (hr)	3.8	2.2	2.6	2.2	4.0	3.2	3.5
Total Stops	379	289	313	258	394	342	354
Fuel Used (gal)	8.6	8.1	8.4	7.6	9.0	8.5	8.6

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	668	734	687	690
Vehs Exited	660	716	643	678
Starting Vehs	34	37	25	33
Ending Vehs	42	55	69	45
Travel Distance (mi)	223	246	225	232
Travel Time (hr)	10.8	11.9	10.8	11.1
Total Delay (hr)	3.2	3.4	3.1	3.1
Total Stops	348	373	343	338
Fuel Used (gal)	8.2	9.0	8.3	8.4

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	594	570	572	547	595	585	591
Vehs Exited	616	568	583	533	609	604	620
Starting Vehs	59	36	39	25	42	47	63
Ending Vehs	37	38	28	39	28	28	34
Travel Distance (mi)	210	194	196	182	208	202	206
Travel Time (hr)	9.6	8.1	8.4	7.9	9.5	9.1	8.9
Total Delay (hr)	2.4	1.4	1.8	1.6	2.4	2.2	1.8
Total Stops	265	191	235	210	261	256	240
Fuel Used (gal)	7.5	6.6	6.8	6.3	7.4	7.1	7.1

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	590	575	582	581
Vehs Exited	597	593	606	593
Starting Vehs	42	55	69	45
Ending Vehs	35	37	45	30
Travel Distance (mi)	205	201	203	201
Travel Time (hr)	9.1	9.0	9.6	8.9
Total Delay (hr)	2.1	2.0	2.7	2.0
Total Stops	249	265	296	246
Fuel Used (gal)	7.3	7.0	7.3	7.0

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	6	7
Vehs Entered	586	634	640	611	609	595	625
Vehs Exited	596	644	617	607	604	591	633
Starting Vehs	37	38	28	39	28	28	34
Ending Vehs	27	28	51	43	33	32	26
Travel Distance (mi)	201	219	214	211	206	203	215
Travel Time (hr)	9.1	10.2	10.0	9.6	9.0	9.1	9.7
Total Delay (hr)	2.2	2.6	2.6	2.3	1.9	2.1	2.3
Total Stops	237	289	299	269	238	268	272
Fuel Used (gal)	7.1	7.7	7.6	7.5	7.2	7.1	7.5

Interval #4 Information Recording

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	8	9	10	Avg
Vehs Entered	634	651	587	616
Vehs Exited	646	655	606	619
Starting Vehs	35	37	45	30
Ending Vehs	23	33	26	30
Travel Distance (mi)	217	222	203	211
Travel Time (hr)	10.1	9.5	8.9	9.5
Total Delay (hr)	2.6	1.9	2.0	2.3
Total Stops	279	249	246	264
Fuel Used (gal)	7.7	7.7	7.1	7.4

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	2.4	0.2	0.3	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.4	3.9
Total Delay (hr)	0.2	2.7	0.1	0.3	2.6	0.1	0.3	0.1	0.2	0.4	0.2	0.3
Total Del/Veh (s)	36.7	9.5	7.0	41.7	8.6	6.6	33.5	33.8	14.8	32.6	34.8	15.9
Stop Delay (hr)	0.2	1.7	0.1	0.3	1.7	0.0	0.2	0.1	0.2	0.4	0.2	0.3
Stop Del/Veh (s)	34.0	6.1	4.8	38.7	5.6	4.8	30.9	29.8	13.5	29.4	30.1	14.6

1: Cirby Way & Oak Ridge Dr Performance by movement

Movement	All
Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.3
Total Delay (hr)	7.5
Total Del/Veh (s)	11.0
Stop Delay (hr)	5.4
Stop Del/Veh (s)	7.9

2: Cirby Way & Meadow Oaks Dr Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.2	0.2	0.1	0.1	0.1
Total Delay (hr)	0.1	0.4	0.3	0.0	0.0	0.0	0.9
Total Del/Veh (s)	9.9	1.5	0.9	0.7	43.5	7.4	1.4
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.2
Stop Del/Veh (s)	7.3	0.1	0.0	0.0	41.5	7.1	0.3

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.3
Total Delay (hr)	9.4
Total Del/Veh (s)	13.4
Stop Delay (hr)	5.6
Stop Del/Veh (s)	8.1

Intersection: 1: Cirby Way & Oak Ridge Dr

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	88	236	247	84	266	264	114	158	51
Average Queue (ft)	19	110	119	29	129	133	50	67	30
95th Queue (ft)	57	206	216	69	226	230	95	130	49
Link Distance (ft)		820	820		261	261	332	677	
Upstream Blk Time (%)					0	0			
Queuing Penalty (veh)					2	2			
Storage Bay Dist (ft)	160			60					10
Storage Blk Time (%)		2		1	16			33	9
Queuing Penalty (veh)		1		6	5			23	6

Intersection: 2: Cirby Way & Meadow Oaks Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	52	53	42	61	59	45
Average Queue (ft)	17	3	2	4	3	12
95th Queue (ft)	46	25	23	31	23	39
Link Distance (ft)		261	261	674	674	422
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	130					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 44