ATTACHMENT J

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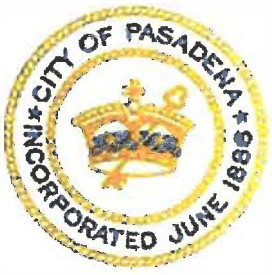
505 S Oak Knoll Avenue Residential Local Mobility Analysis

Final Report

March 28, 2025

Submitted to:



12700.25 | Prepared by **Iteris, Inc.**

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1 INTRODUCTION

This report summarizes the results of a local mobility analysis for the proposed residential development, hereinafter referred to as the "project", located at 505 South Oak Knoll Avenue in the City of Pasadena. This report provides detailed information on the existing and future transportation conditions in the vicinity of the project site. Five (5) existing intersections and one (1) street segment in the vicinity of the project site were analyzed. Additionally, an Active Transportation Review was prepared to identify potential effects of the proposed project on the bicycle, pedestrian, and transit network. This report is prepared based on requirements within the City of Pasadena *Transportation Impact Analysis Guidelines* (April 2022).

1.1 Project Description

The proposed project is the construction of a four-story multi-family residential building for 46 dwelling units with one level of subterranean parking garage. The project site is located at 505 S Oak Knoll Avenue and 511 S Oak Knoll Avenue, with a combined lot size of 28,350 SF, which is currently vacant with no standing structures. The vehicle access to the project site's parking garage would be provided at a full access driveway on Oak Knoll Avenue, and the main pedestrian access will also be located on Oak Knoll Avenue. **Figure 1** shows the project site plan.

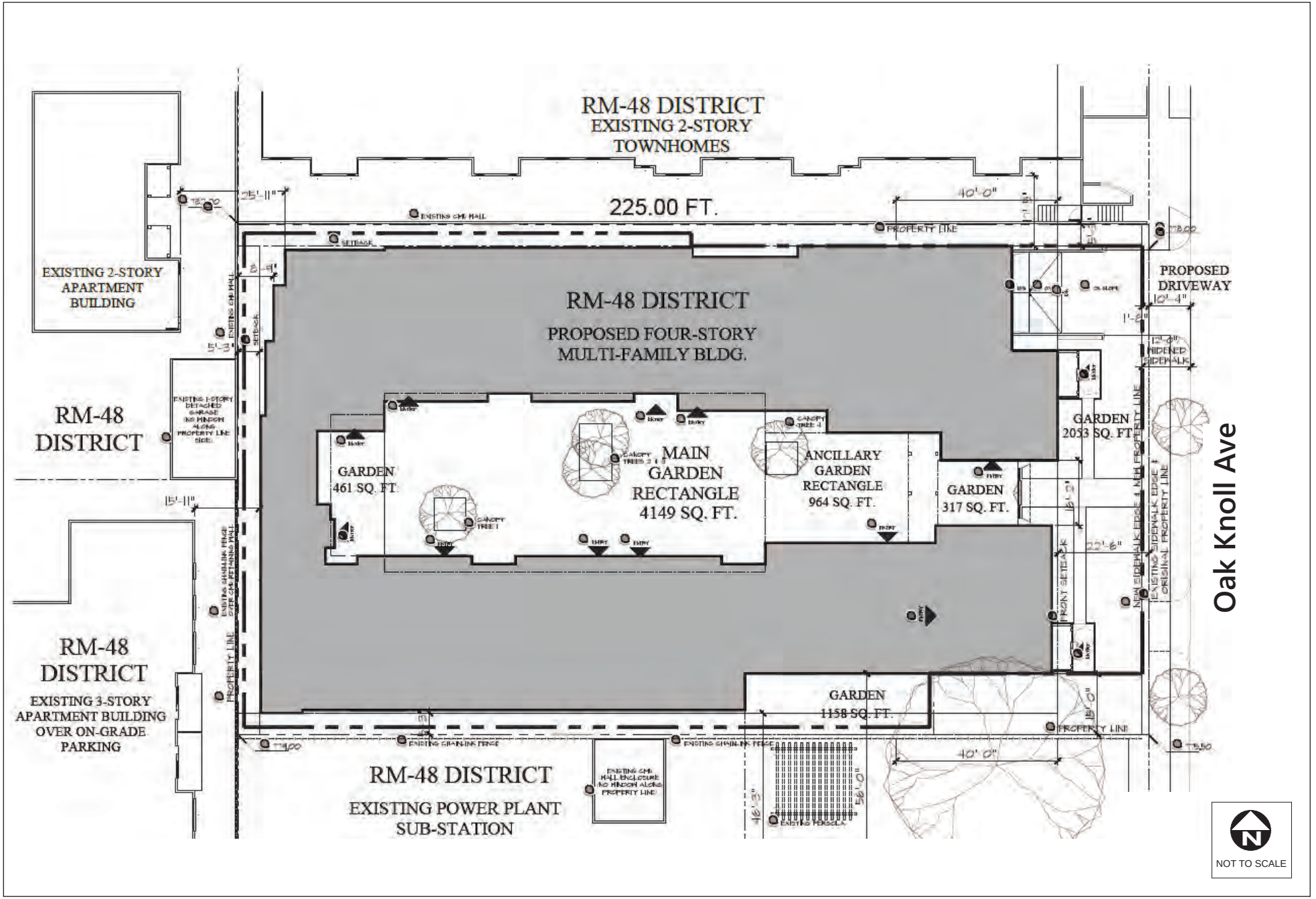

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Figure 1
Project Site Plan

2 EXISTING TRANSPORTATION NETWORK

This section describes the roadway system within the project vicinity. The existing configurations of the transportation network, within the study area, are described below:

Del Mar Boulevard, oriented in an east-west direction, is designated as a City Connector. The roadway consists of two lanes in each direction with no median. The roadway has a posted speed limit of 35 mph. On-street parking is sparsely provided on both sides of the street with peak hour restrictions.

California Boulevard, oriented in an east-west direction, is designated as a City Connector. The roadway consists of two lanes in each direction with no median. The roadway has a posted speed limit of 30 mph. On-street parking is prohibited on both sides of the street.

El Molino Avenue, oriented in a north-south direction, is designated as a Neighborhood Connector. The roadway consists of one lane in each direction with no median. The roadway has a posted speed limit of 25 mph. On-street parking is provided with school hour restrictions in the northbound direction, and prohibited in the southbound direction.

Oak Knoll Avenue, oriented in a north-south direction, is designated as an Access Roadway. The roadway consists of one lane in each direction with no median. The roadway has a posted speed limit of 25 mph. On-street parking is provided on both sides of the street.

Hudson Avenue, oriented in a north-south direction, is designated as a neighborhood Connector. The roadway is a two-lane northbound one-way street north of California Boulevard, and a two-lane two-way street south of California Boulevard. The roadway has a posted speed limit of 25 mph. On-street parking is provided on both sides of the street, except for the segment between Del Mar Boulevard and California Boulevard, where on-street parking is provided only on the left side of the street.

Lake Avenue, oriented in a north-south direction, is designated as a City Connector. The roadway consists of two lanes in each direction with a median in the form of either a raised median or a two-way left turn lane. The roadway has a posted speed limit of 25 mph. On-street parking is provided on both sides of the street with parking meters.

Figure 2 shows the existing street network and classifications in the study area.

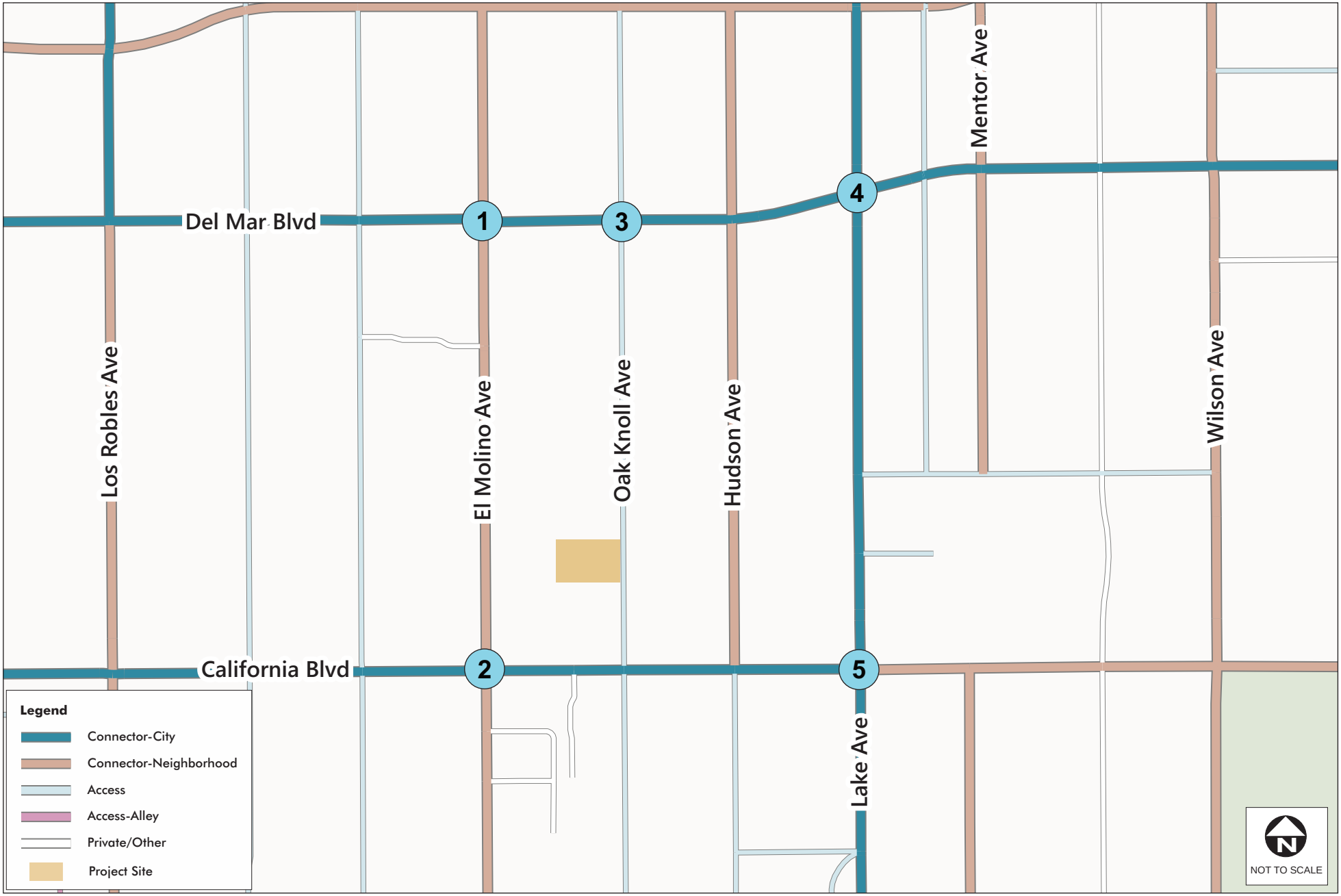

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Figure 2
Roadway Classifications

3 PROPOSED PROJECT TRAFFIC

This section describes the methodology used to determine project trip generation. The first step in analyzing traffic conditions with the project is to estimate the number of new trips expected to be generated by the proposed project. The proposed project consists of a residential development with 46 multi-family residential units.

The net trip generation for the proposed project was calculated based on rates published in the Institute of Transportation Engineers (ITE), *Trip Generation, 11th Edition*. The land use categories applied in this analysis is:

- Proposed Project
    - Multifamily Housing Mid Rise (Land Use code 221 in ITE)

As previously mentioned, the existing site is currently vacant with no standing structures. Thus, no trip generation credit for the existing land use was calculated to reduce the project trip generation. **Table 1** summarizes the net trip generation calculation for the project.

Table 1: Project Trip Generation

Land Use (ITE Code)	Size	Units	Trip Generation Rates							Trip Generation						
			AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total	
Proposed Project																
Multifamily Housing Mid Rise (221)[1]	46	du	23%	77%	0.37	61%	39%	0.39	4.54	4	14	18	11	7	18	209
PROJECT NET TOTAL TRIPS										**4**	**14**	**18**	**11**	**7**	**18**	**209**

1 = Source: *ITE Trip Generation, 11th Edition*
du = dwelling units

As shown in **Table 1**, the proposed project is forecast to generate 18 (4 ingress, 14 egress) a.m. peak hour trips, 18 (11 ingress, 7 egress) p.m. peak hour trips, and 209 daily trips.

4 INTERSECTION OPERATIONAL ANALYSIS

This section presents the operational analysis of intersections in the vicinity of the proposed project. This section includes a discussion of analysis methodology, study area, data collection, and existing and future traffic operations.

4.1 Analysis Methodology

This section discusses the methodologies and thresholds used in the intersection operational analysis. The quality of traffic operations is characterized using the concept of level of service (LOS). Level of service is defined by a range of grades from A (best) to F (worst). At intersections, LOS "A" represents relatively free flow operating conditions with little or no delay. LOS "F" is characterized by extremely unstable flow conditions, severe congestion, and delays with traffic volumes at or near the intersection's design capacity. This typically results in long vehicular queues extending from all approaches of an intersection.

Per the City's guidelines, LOS analysis is performed using the Highway Capacity Manual (HCM) 6th Edition methodology, which uses vehicular delay criteria to determine LOS. The LOS was calculated by utilizing Synchro 11 software. **Table 2** presents a brief description of each level of service letter grade.

Table 2: Intersection Level of Service Definitions – HCM Methodology

Level Of Service	Description	HCM Average Delay (sec) - Signalized Intersections
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10-20
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20-35
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35-55
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55-80
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	>80

4.1.1 Intersection Thresholds of Significance/Caps

After the performance measures are calculated, the values are compared to the City's thresholds/caps for intersection LOS, which are shown in **Table 3**.

Table 3: Intersection Level of Service Caps

Study Intersections	Existing with Project LOS Cap
Citywide	D
Transit Oriented District (TOD)	E

4.2 Study Area, Analysis Scenarios, and Existing Volumes

The study area for analysis includes the following five (5) intersections in the vicinity of the project site:

1. El Molino Avenue/Del Mar Boulevard;
2. El Molino Avenue/California Boulevard;
3. Oak Knoll Avenue/Del Mar Boulevard;
4. Lake Avenue/Del Mar Boulevard; and,
5. Lake Avenue/California Boulevard.

The project site location and study intersections are illustrated in **Figure 3**.

Traffic operations were evaluated for each of the following scenarios during the weekday morning (7:00 – 9:00 a.m.) and evening (4:00 – 6:00 p.m.) peak periods during typical weekday conditions (during the school year):

- Existing (2024) Conditions;
- Existing (2024) with Project Conditions;
- Future (2026) Baseline Conditions; and
- Future (2026) with Project Conditions.

4.2.1 Existing Traffic Volumes

Existing traffic counts at study intersections were collected in December 2024 on a typical weekday, with local schools in session. All counts were conducted during the a.m. peak period (7:00 – 9:00 a.m.) and evening peak period (4:00 – 6:00 p.m.). The traffic impact analysis is based on the highest single hour of traffic during each time period at each location. Detailed vehicle turning movement data is included in **Appendix A. Figure 4** illustrates the existing peak hour volumes at the study intersections.

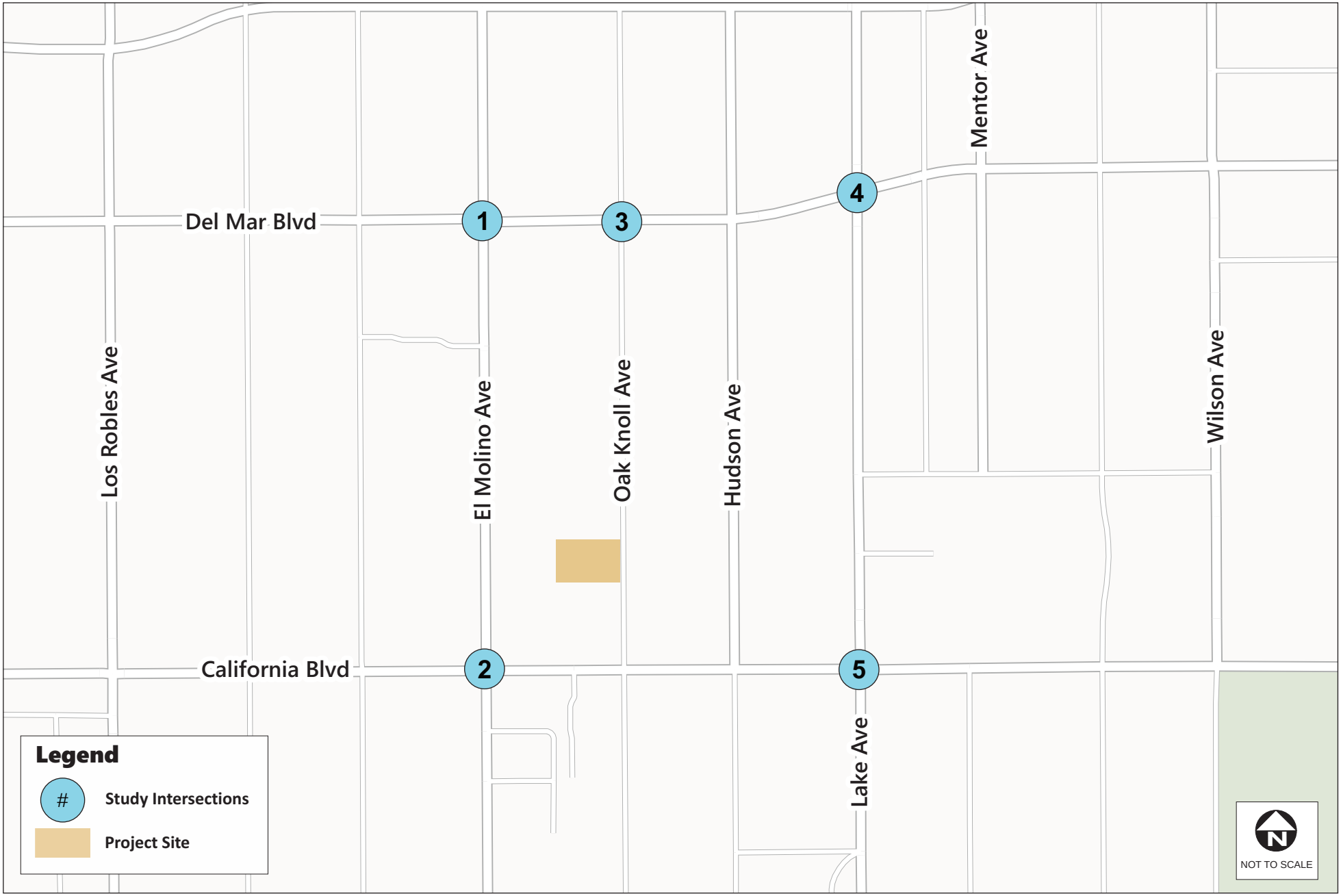

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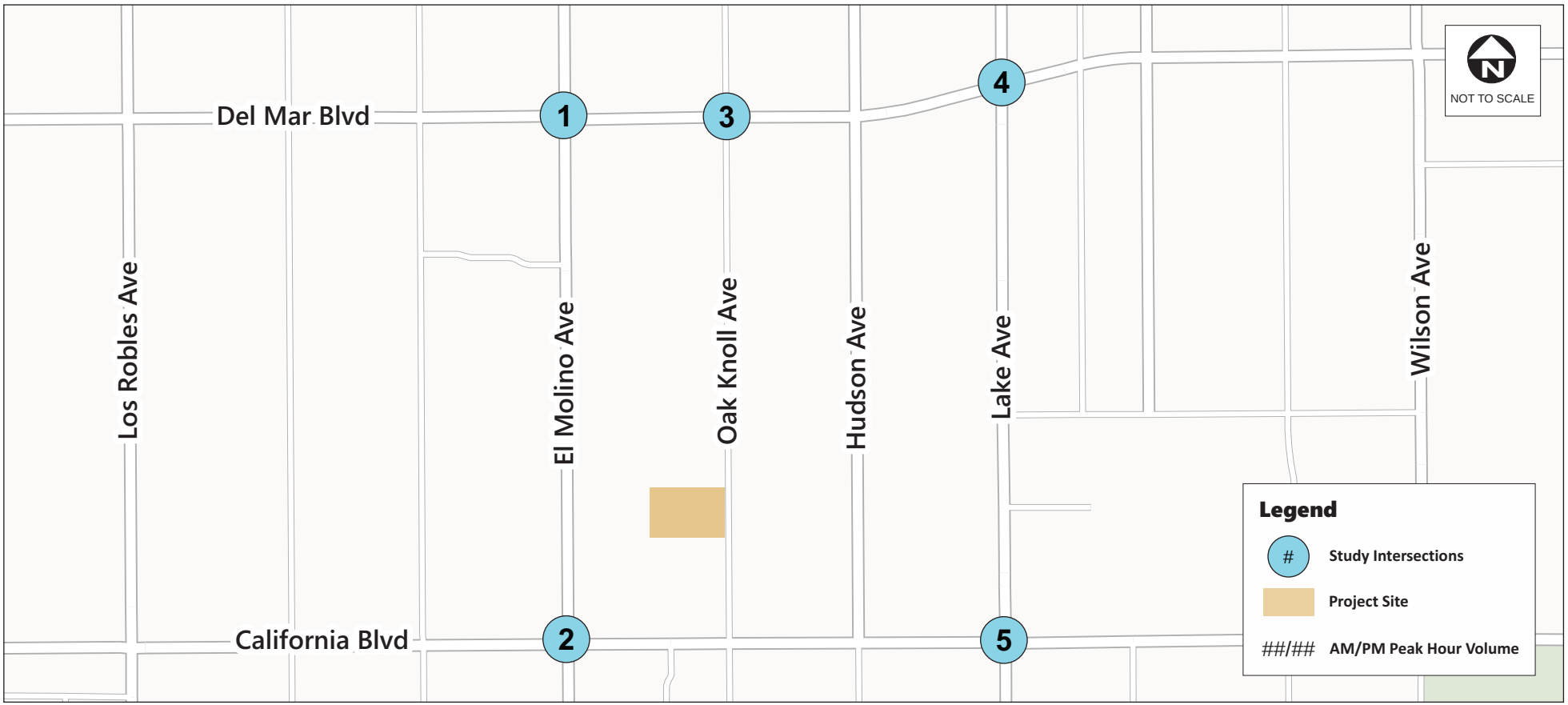
Figure 3
Project Location and Study Intersections



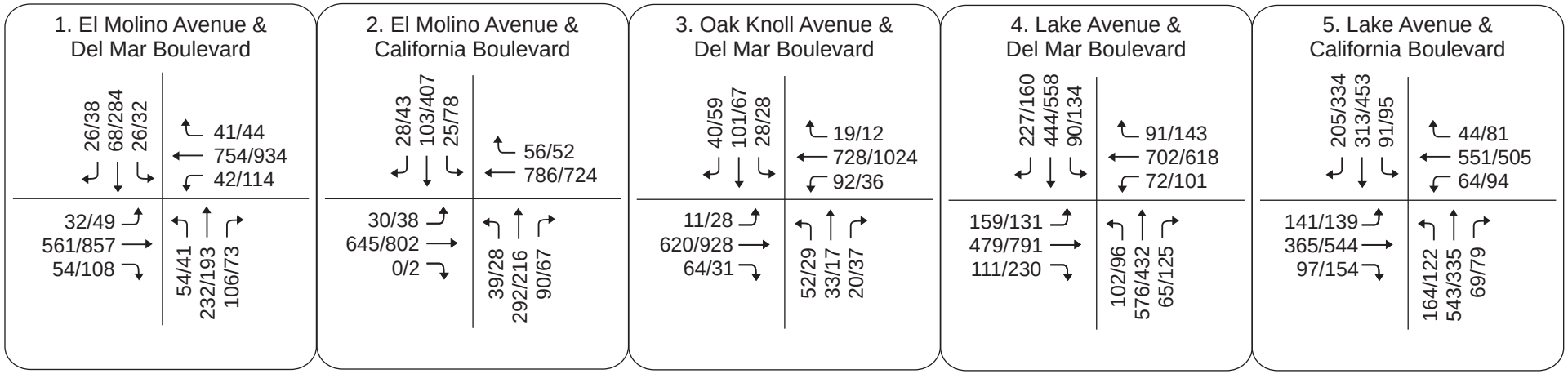


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Figure 4
Existing (2024) Peak Hour Intersection Volumes

4.3 Intersection Level of Service Analysis

This section includes the LOS analysis of the study intersections in existing and future year conditions. **Figure 5** shows the existing intersection lane configurations.

4.3.1 Existing Conditions

Existing intersection operations were evaluated during the a.m. and p.m. peak hours at study intersections using HCM 6th methodology. Per City of Pasadena DOT guidelines, the following Synchro model inputs for saturation flow rates and peak hour factors were included in the analysis:

Saturation Flow Rates:

- 1,800 vehicles per hour per lane (vphpl) for exclusive through and right-turn lanes, and shared thru/right-turn or left-turn lanes
- 1,700 vphpl for exclusive left-turn lanes
- 1,600 for exclusive dual left-turn lanes

Peak Hour Factors:

- Utilization for PHF is based on the traffic volumes for the entire intersection as a whole, using the traffic volumes collected in the field.

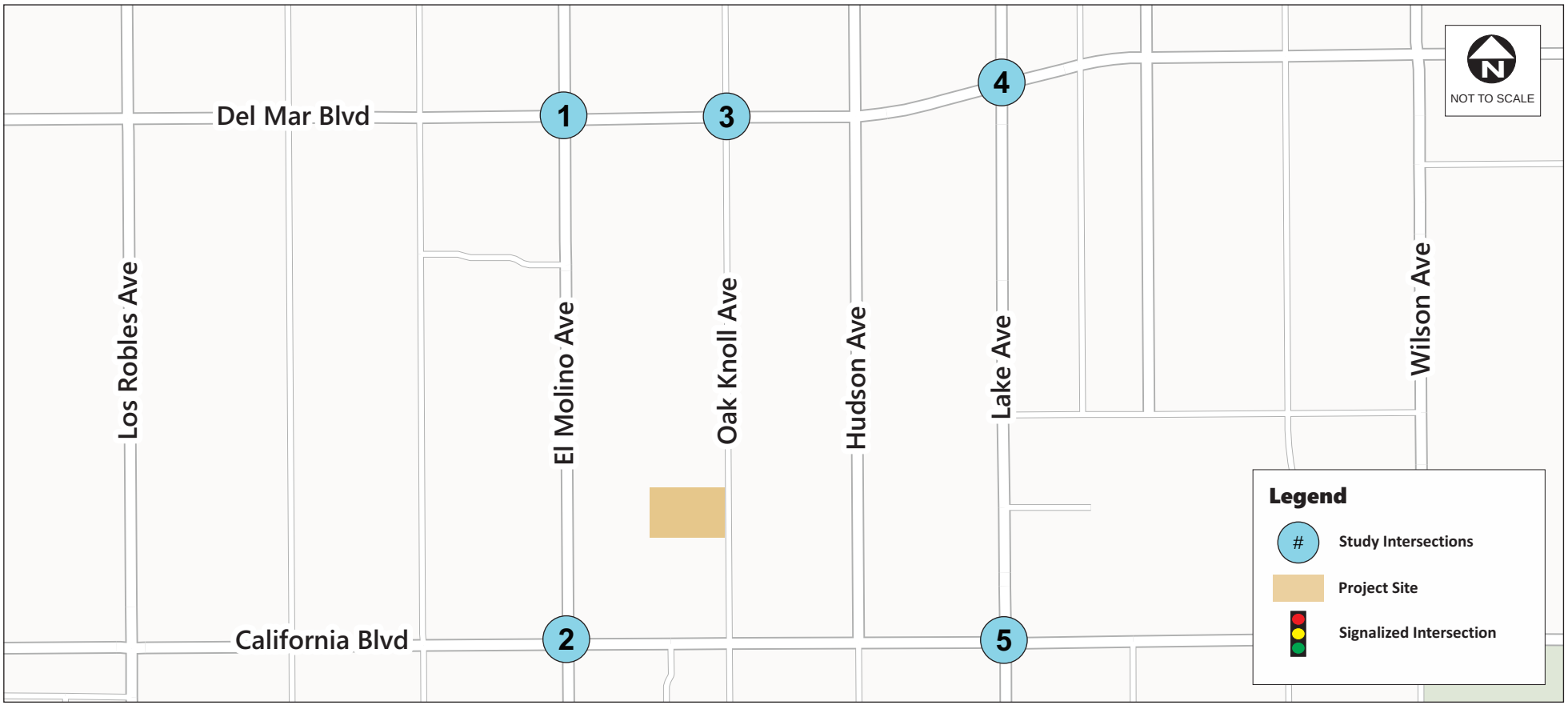
Table 4 summarizes the existing LOS at the study intersections. LOS calculation sheets are provided in **Appendix B**.

Table 4: Existing (2024) Intersection Peak Hour Level of Service

Intersection		Control Type	AM Peak Hour		PM Peak Hour	
			Delay (s)	LOS	Delay (s)	LOS
1	El Molino Ave/Del Mar Blvd	Signalized	10.1	B	11.0	B
2	El Molino Ave/California Blvd	Signalized	10.6	B	12.8	B
3	Oak Knoll Ave/Del Mar Blvd*	Signalized	12.2	B	12.2	B
4	Lake Ave/Del Mar Blvd	Signalized	26.5	C	25.7	C
5	Lake Ave/California Blvd	Signalized	24.2	C	36.7	D

Notes:
s = seconds, LOS = Level of Service.
* HCM 6th methodology is not applicable due to non-NEMA phasing sequence. HCM 2000 delay presented.

As shown in **Table 4**, all study intersections currently operate at LOS D or better during both a.m. and p.m. peak hours. The Lake Avenue/California Boulevard intersection experiences the highest delays, with LOS C during the a.m. peak hour and LOS D during the p.m. peak hour under the existing conditions.



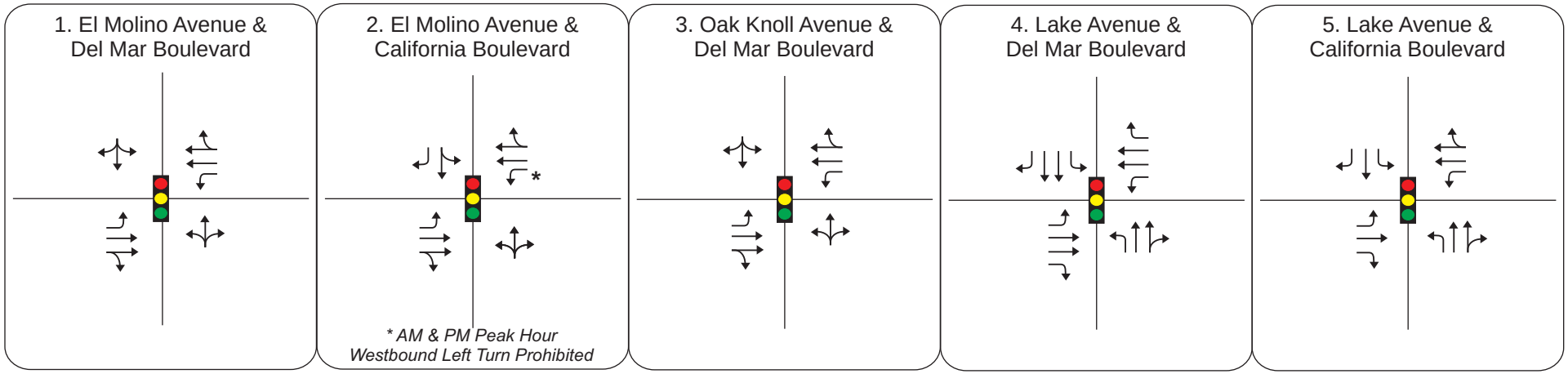


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Figure 5
Existing Intersection Lane Configurations

4.3.2 Existing with Project Conditions

This section presents the analysis of existing with project conditions. Existing with project conditions were developed by adding trips forecast to be generated by the proposed project to existing volumes.

As a first step, trip distribution assumptions were developed to determine the origin and destination of new vehicle trips associated with the proposed project. Project trip distribution is based on the land use, the circulation network in the vicinity of the project, and project access locations, and was derived by utilizing the City of Pasadena Travel Demand Model (via a select zone model run). The general project trip distribution is shown in **Figure 6**.

As a second step, the new trips generated by the project, as shown in **Table 1**, were then assigned to the surrounding roadway system based on the distribution pattern to estimate the project-related peak-hour traffic at each of the study intersections. **Figure 7** illustrates the proposed project trip assignment onto the roadway network during the a.m. and p.m. peak hours.

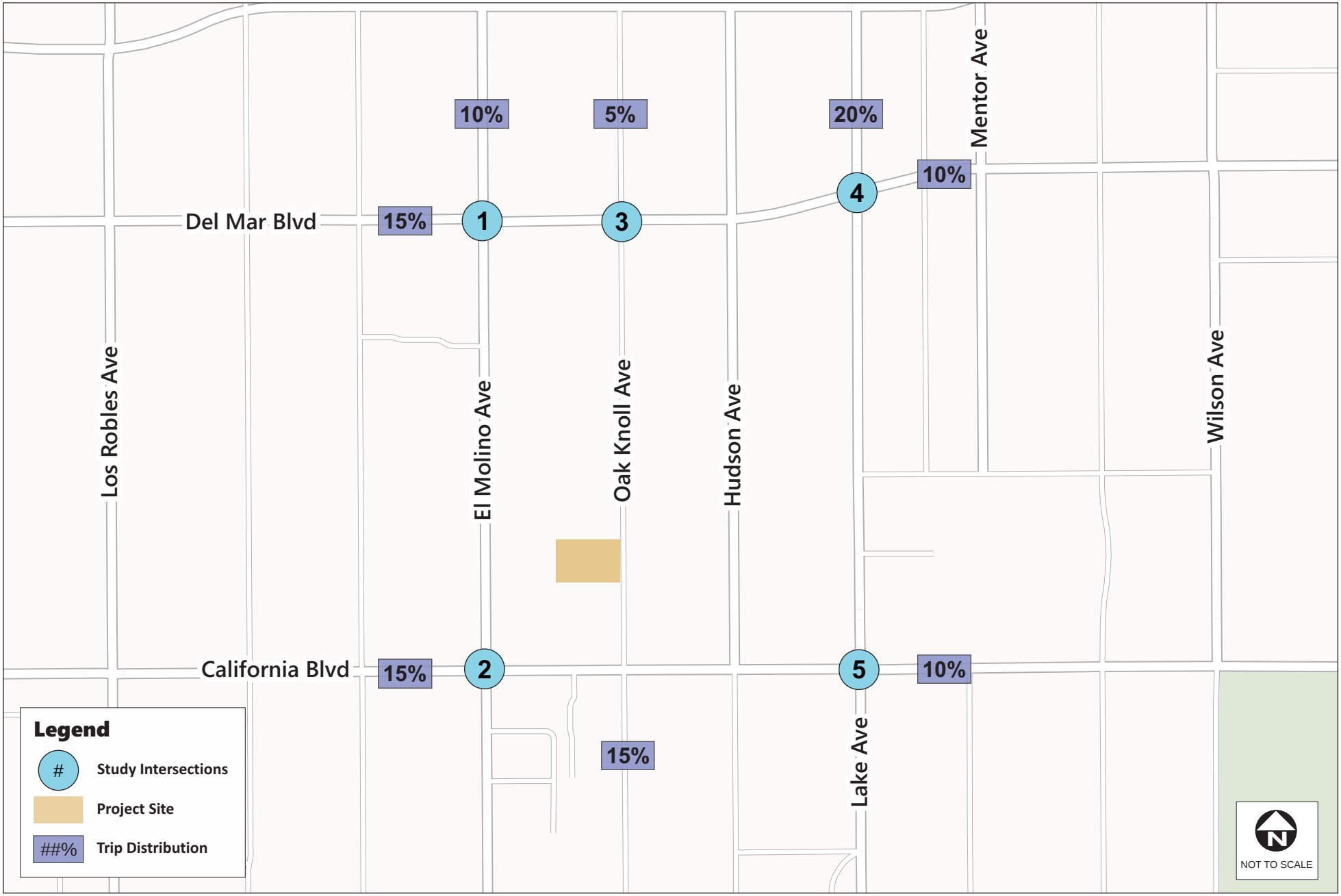

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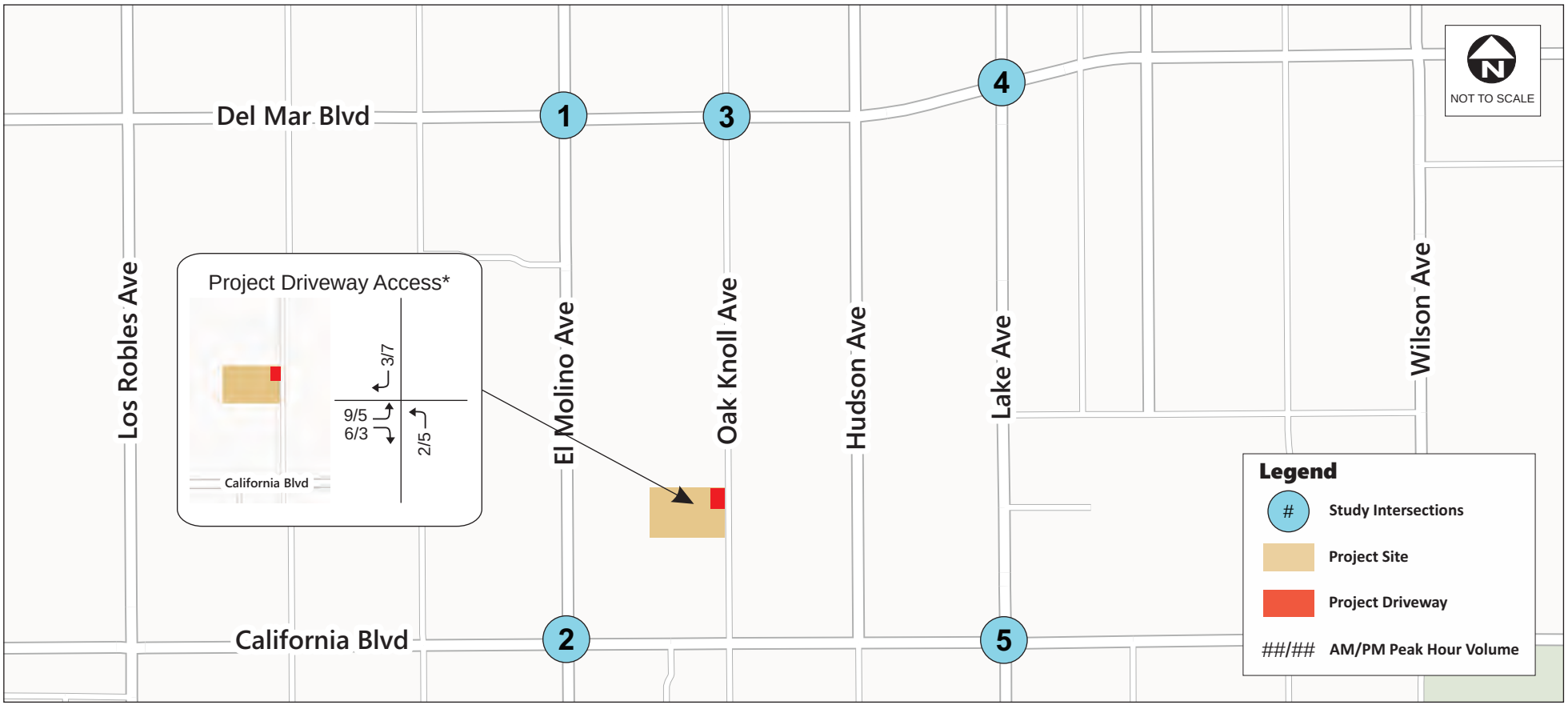
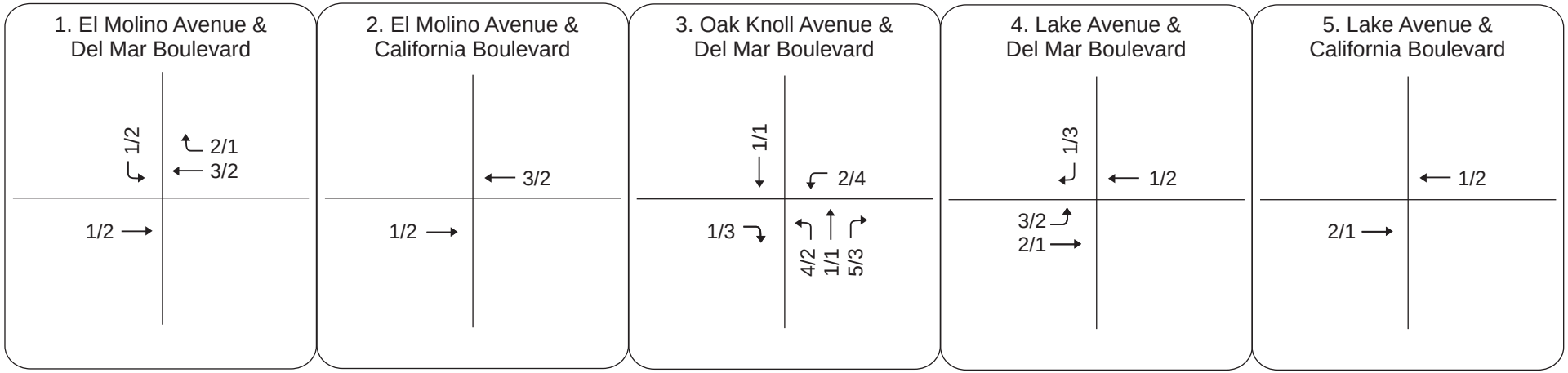
Figure 6
Project Trip Distribution





*All turning movements are rounded up, and trip assignments may exceed trip generation.

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Figure 7
Project Trip Assignment

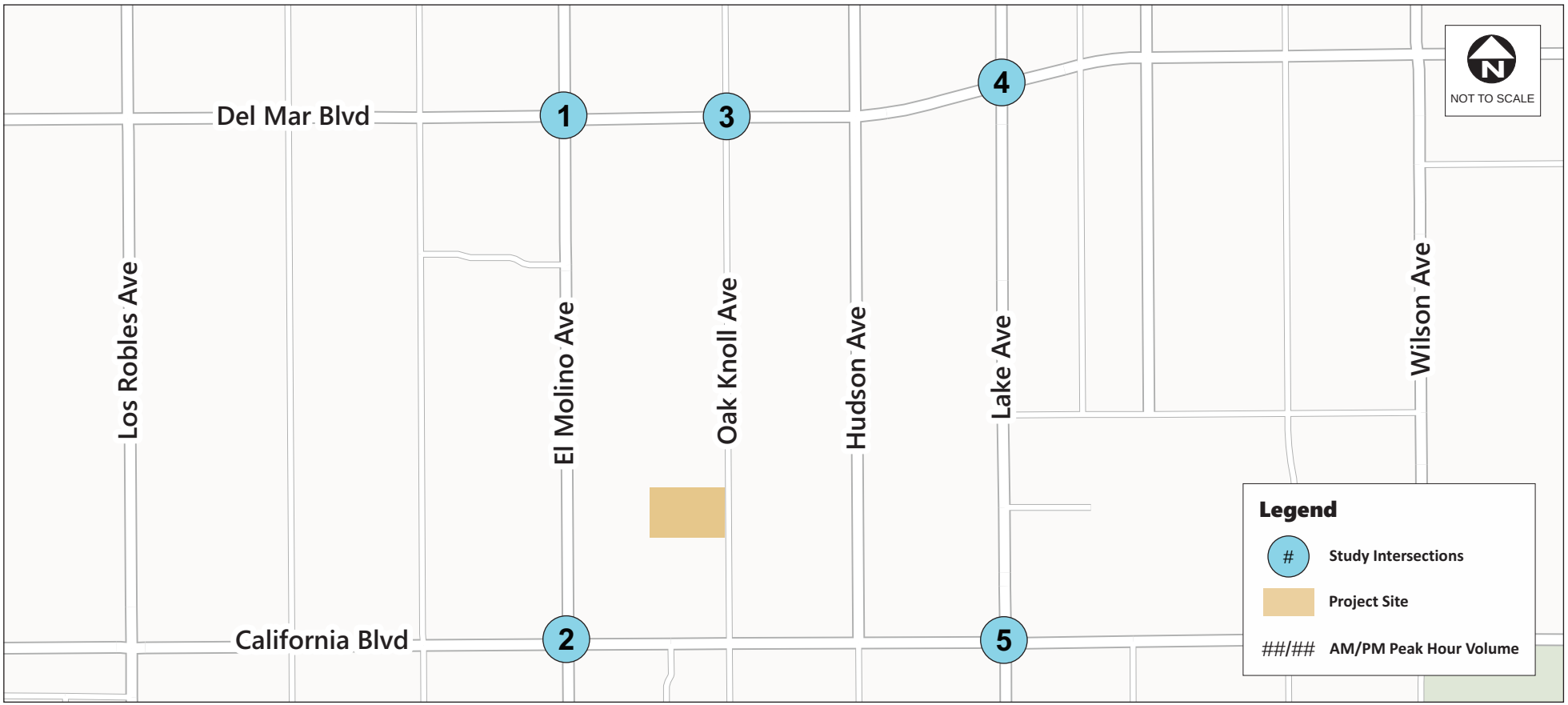
Existing with project traffic volumes are illustrated in **Figure 8.** Existing with project levels of service at the study intersections are summarized in **Table 5**. Level of service calculation worksheets are included in **Appendix B.**

Table 5: Existing (2024) with Project Intersection Peak Hour Level of Service

Intersection		Existing (2024) Conditions				Existing (2024) with Project Conditions				Exceeds LOS Cap?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	
1	El Molino Ave/Del Mar Blvd	10.1	B	11.0	B	10.1	B	11.1	B	No
2	El Molino Ave/California Blvd	10.6	B	12.8	B	10.7	B	12.8	B	No
3	Oak Knoll Ave/Del Mar Blvd*	12.2	B	12.2	B	12.4	B	12.4	B	No
4	Lake Ave/Del Mar Blvd	26.5	C	25.7	C	26.5	C	25.8	C	No
5	Lake Ave/California Blvd	24.2	C	36.7	D	24.3	C	36.8	D	No

Notes:
s = seconds, LOS = Level of Service.
* HCM 2000 delay results due to non-NEMA phasing sequence

As shown in **Table 5**, the study intersections would experience marginal or no increases in delays with the proposed project. All intersections would continue to operate at LOS D or better during both a.m. and p.m. peak hours under the existing with project conditions, and the LOS cap would not be exceeded as a result of the proposed project.



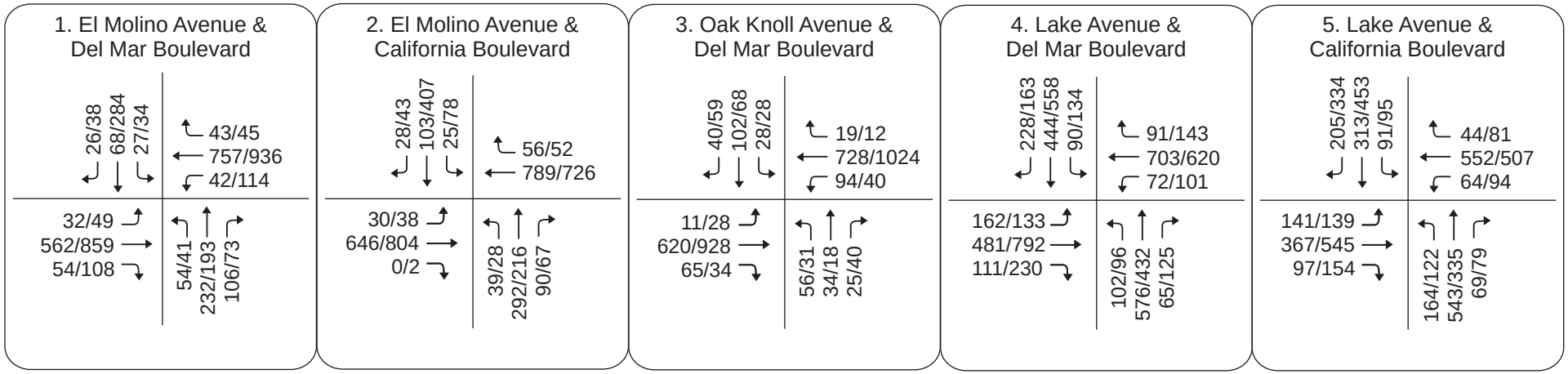


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Figure 8
Existing (2024) with Project Peak Hour Intersection Volumes

4.3.3 Future Baseline Conditions

This section presents the analysis of future baseline conditions (without the proposed project), evaluating the study area in the project's opening year of 2026. Future baseline conditions traffic volumes were developed by utilizing the City of Pasadena Travel Demand Model to evaluate projected growth in traffic within the study area. Based on a review of the roadway links in the study area within the model's base year and future year scenarios, the following growth rates were applied to existing volumes to derive future baseline (2026) volumes:

- 1.0% annual growth rate in a.m. and p.m. peak hours.

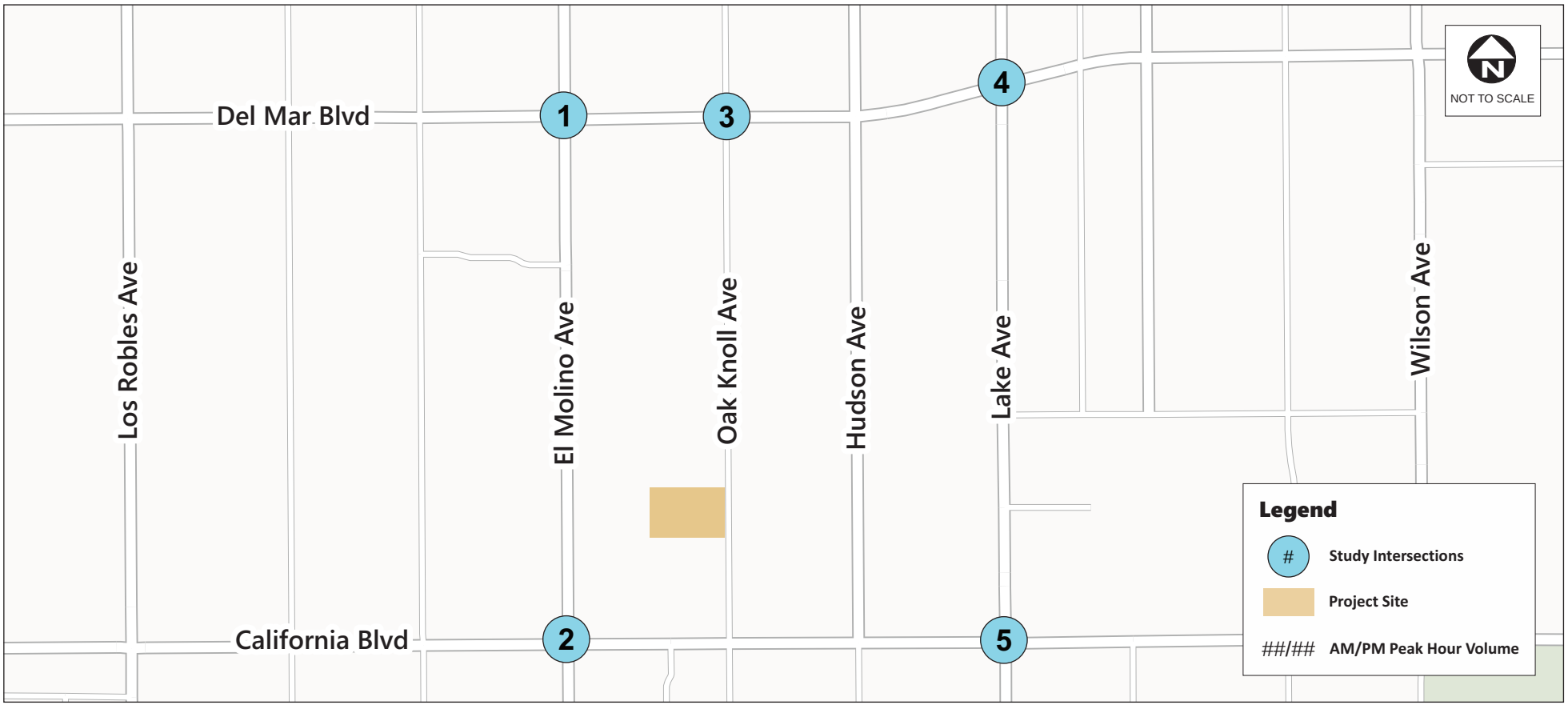
Future baseline traffic volumes are illustrated in **Figure 9**. **Table 6** summarizes the future baseline LOS at the study intersections. LOS calculation sheets are provided in **Appendix B**.

Table 6: Future (2026) Baseline Intersection Peak Hour Level of Service

Intersection		Control Type	AM Peak Hour		PM Peak Hour	
			Delay (s)	LOS	Delay (s)	LOS
1	El Molino Ave/Del Mar Blvd	Signalized	10.3	B	11.5	B
2	El Molino Ave/California Blvd	Signalized	10.9	B	13.7	B
3	Oak Knoll Ave/Del Mar Blvd*	Signalized	12.5	B	13.0	B
4	Lake Ave/Del Mar Blvd	Signalized	27.2	C	26.3	C
5	Lake Ave/California Blvd	Signalized	25.4	C	38.5	D

Notes:
s = seconds, LOS = Level of Service.

As shown in **Table 6**, all study intersections would operate at LOS D or better during both a.m. and p.m. peak hours in the future baseline conditions. The Lake Avenue/California Boulevard intersection would experience the highest delays, with LOS C during the a.m. peak hour and LOS D during the p.m. peak hour.



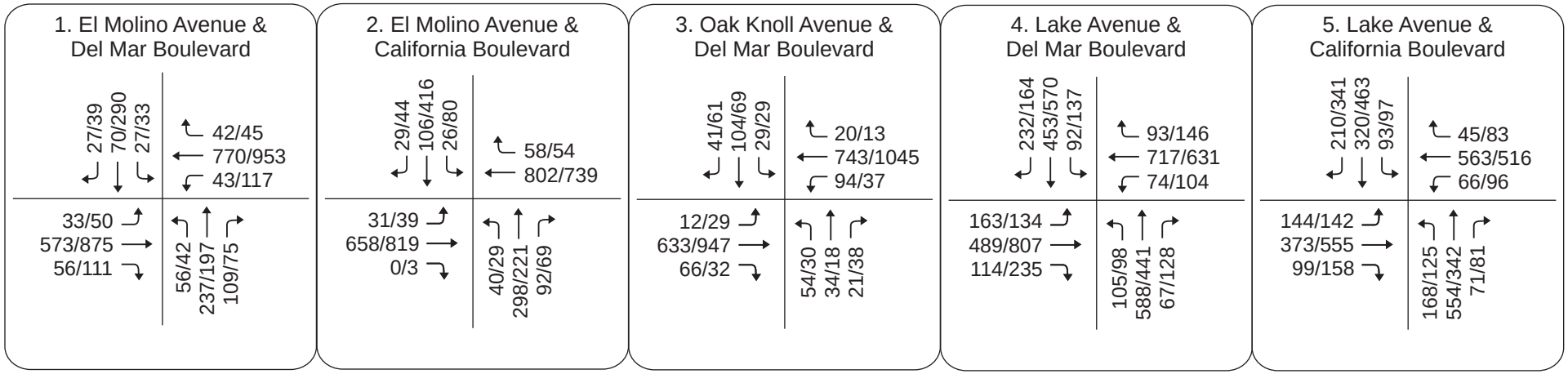


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Figure 9
Future (2026) Baseline Peak Hour Intersection Volumes

4.3.4 Future With Project Conditions

This section presents the analysis of future with project conditions. Future with project conditions traffic volumes were developed by adding trips forecast to be generated by the project to future baseline conditions volumes. Future with project traffic volumes are illustrated in **Figure 10**.

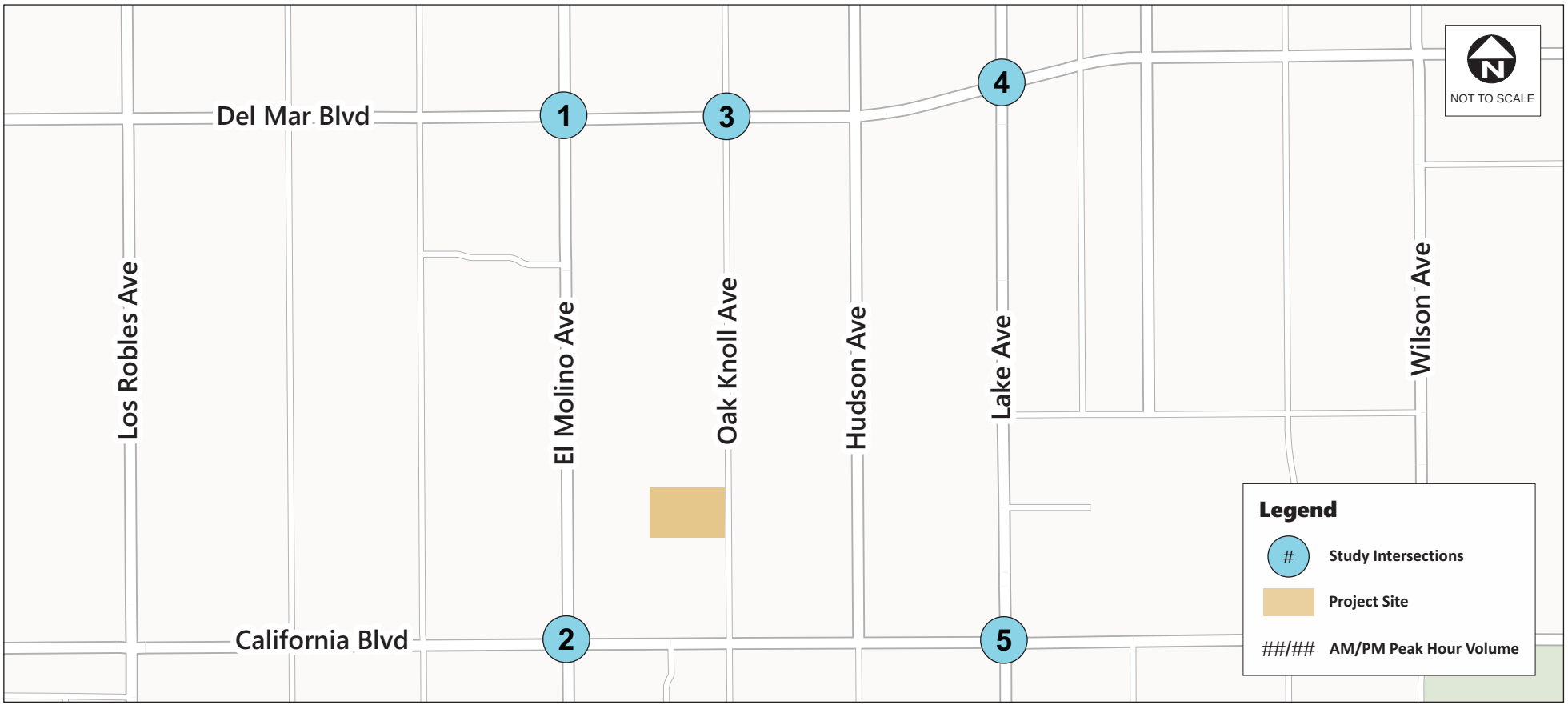
Future with project levels of service at the study intersections are summarized in **Table 7**. Level of service calculation worksheets are included in **Appendix B**.

Table 7: Future (2026) With Project Intersection Peak Hour Level of Service

Intersection		Future (2026) Baseline Conditions				Future (2026) With Project Conditions				Exceeds LOS Cap?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
		Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	
1	El Molino Ave/Del Mar Blvd	10.3	B	11.5	B	10.4	B	11.6	B	No
2	El Molino Ave/California Blvd	10.9	B	13.7	B	10.9	B	13.7	B	No
3	Oak Knoll Ave/Del Mar Blvd*	12.5	B	13.0	B	12.5	B	13.1	B	No
4	Lake Ave/Del Mar Blvd	27.2	C	26.3	C	27.2	C	26.4	C	No
5	Lake Ave/California Blvd	25.4	C	38.5	D	25.4	C	38.6	D	No

Notes:
s = seconds, LOS = Level of Service.

As shown in **Table 7**, the study intersections would experience marginal or no increases in delays with the proposed project. All intersections would continue to operate at LOS D or better during both a.m. and p.m. peak hours under the future with project conditions, and the LOS cap would not be exceeded as a result of the proposed project.



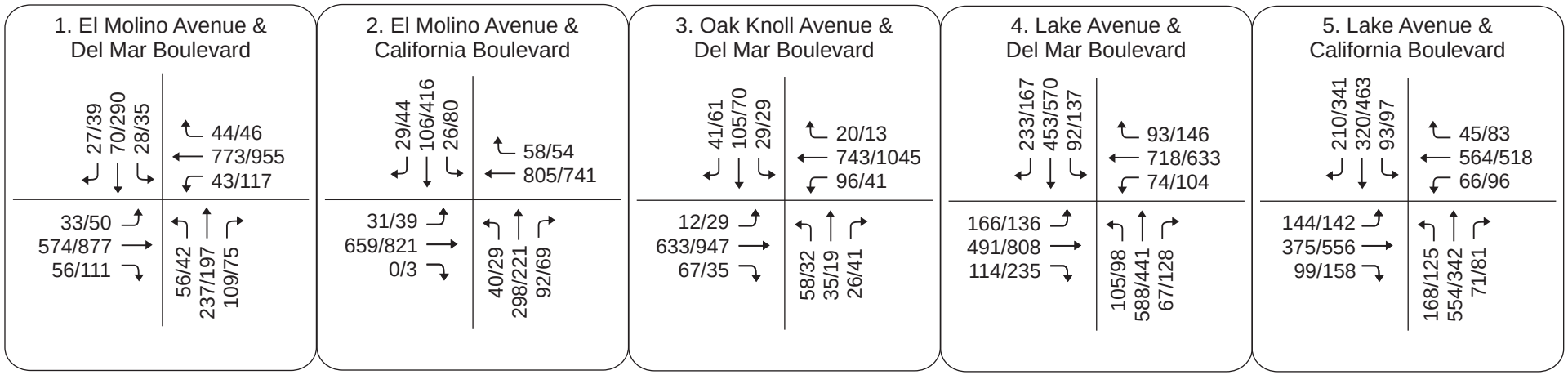


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Figure 10
Future (2026) with Project Peak Hour Intersection Volumes

5 STREET SEGMENT ANALYSIS

This section presents the evaluation of street segments in the vicinity of the proposed project site.

5.1 Analysis Methodology

The project site will be accessed via Oak Knoll Avenue, which is designated as an access roadway. A street segment analysis was conducted to measure the project-related vehicular increase in Average Daily Traffic (ADT) as compared to the existing ADT of the roadway. In order to determine whether there would be any potential significant volume increases along residential neighborhood street segments by the addition of project traffic, the calculation below is applied:

Percent of Increase = net new project trips/existing daily traffic

Using the percentage of increase calculated from the formula above or the project-related increase in trips, the project's traffic impact is analyzed based on the impact thresholds listed in **Table 8**.

Table 8: Street Segment Thresholds

Existing ADT	Project-Related Vehicular Increase in ADT
0 to 1,500 daily trips	150 trips or more
1,501 to 3,499 daily trips	10 percent or more of final project ADT
3,500 or more	8 percent or more of final project ADT

5.2 Analysis

One (1) Oak Knoll Avenue segment was analyzed to determine whether the project-related increase in ADT exceeds the residential neighborhood intrusion criteria along Access or Neighborhood Connector streets. The street segment evaluated was:

- Oak Knoll Avenue north of Del Mar Boulevard.

The analysis is summarized in **Table 9**. Existing ADT counts were collected by a count firm on a typical weekday in December 2024 (same day as the intersection counts). Using the daily trip generation number and the project trip distribution, a daily project trip assignment volume was calculated for the segment.

Table 9: Street Segment Analysis Summary

Segment	Existing ADT	Daily Project Trip Assignment	Vehicular Increase	Impact?
Oak Knoll Avenue north of Del Mar Boulevard	2,565	11	0.4%	No

As shown, the project is not anticipated to generate more daily trips than the existing land use in the study segment of Oak Knoll Avenue. Thus, the segment is not forecast to be impacted by the proposed project.

6 OFF-SITE QUEUING ANALYSIS

The exclusive turn lane movements at the study intersections were evaluated to determine if adequate storage would be provided with the addition of project-related trips. **Table 10** summarizes the 95th percentile queue lengths for future year without and with project conditions. The calculated 95th percentile queue lengths are rounded up to the nearest ten feet. Queue output sheets are provided in **Appendix C**.

Table 10: Off-site Queue Analysis Summary

Intersection Movement	Storage Length (ft)	Future (2026) Baseline Conditions		Future (2026) With Project Conditions	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1. El Molino Ave/Del Mar Blvd					
Eastbound Left-turn	70	30	40	30	40
Westbound Left-turn	70	30	130*	30	130*
2. El Molino Ave/California Blvd					
Eastbound Left-turn	100	30	40	30	40
Southbound Right-turn	40	10	20	10	20
3. Oak Knoll Ave/Del Mar Blvd					
Eastbound Left-turn	70	20	30	20	30
Westbound Left-turn	110	80	40	80	40
4. Lake Ave/Del Mar Blvd					
Eastbound Left-turn	80	120*	80	130*	80
Eastbound Right-turn	200	40	50	40	50
Westbound Left-turn	90	50	60	50	60
Westbound Right-turn	130	20	40	20	40
Northbound Left-turn	100	70	70	70	70
Southbound Left-turn	120	60	90	60	90
Southbound Right-turn	90	60	60	60	60
5. Lake Ave/California Blvd					
Eastbound Left-turn	190	190	170	190	170
Eastbound Right-turn	370**	30	50	30	50
Westbound Left-turn	100	90	140*	90	140*
Northbound Left-turn	140	210*	180*	210*	180*
Southbound Left-turn	150	130	100	130	100
Southbound Right-turn	340**	90	160	90	160

* 95th percentile queue lengths at the exclusive turning movements are forecast to exceed the available storage lengths.
**Trap lane. The distance to the adjacent intersection is presented.

As shown in **Table 10**, 95th percentile queues are expected to exceed the current exclusive turn lane pocket lengths in both future baseline and future with project conditions at multiple study intersections. While turn

lane pocket lengths are exceeded at these locations, the project is not expected to generate additional trips in these lanes, except at one location. Furthermore, the project would not cause any turn lanes under capacity in the future baseline conditions to exceed their capacity. The following provides detailed information of the project's effects where capacity is forecast to be exceeded:

- El Molino Avenue/Del Mar Boulevard
  - Westbound left-turn pocket during the p.m. peak hour. The proposed project is forecast to add no trips to this turning movement during the a.m. peak hour.
- Lake Avenue/Del Mar Boulevard
  - Eastbound left-turn pocket during the a.m. peak hour. The proposed project is forecast to add 3 trips to this turning movement during the a.m. peak hour. The 95th percentile queue length would increase by approximately 10 feet as a result of the project.
- Lake Avenue/California Boulevard
  - Westbound left-turn pocket during the p.m. peak hour. The proposed project is forecast to add no trips to this turning movement during the p.m. peak hour.
  - Northbound left-turn pocket during the a.m. peak hour and p.m. peak hour. The proposed project is forecast to add no trips to this turning movement during both a.m. and p.m. peak hours.

7 ACTIVE TRANSPORTATION REVIEW

This section presents an Active Transportation Review, for the purpose of determining the proposed project's effect on the pedestrian, bicycle, and transit network in the vicinity of the site. The review focuses on whether the project would result in a negative effect through removal or degradation of existing facilities, or by adding demand to substandard or inadequate facilities. Iteris staff conducted a thorough field survey of the project site area to develop an inventory of facilities. Following the inventory collection, the project's potential negative effects were evaluated based on the City of Pasadena's latest Transportation Impact Analysis Guidelines.

7.1 Inventory

As mentioned, a field survey of the area was performed to collect the appropriate data. The survey included the collection of all pedestrian, bicycle, and transit facilities within a 0.25-mile radius of the project boundary. The 0.25-mile radius includes grids of roadway segments consisting of Del Mar Boulevard, San Pasqual Street, California Boulevard, Oakland Avenue, Madison Avenue, El Molino Avenue, Oak Knoll Avenue, Hudson Avenue, and Lake Avenue. The survey was performed for each crossing intersection and each segment between the crossing intersections within the 0.25-mile radius. A detailed list of items observed by the field survey is as follows:

- Intersection Inventory
  - Pedestrian curb ramps and ADA features: ramp type, truncated dome, sufficient landing space, other obstructions
  - Curb extension and bulb-outs
  - Crosswalk Features: signalized, type, color, raised, advanced stop line, midblock median (pedestrian refuge island)
  - Pedestrian Assistance Features (for signalized intersections): push button, audible pedestrian signals (APS), pedestrian countdown signal, leading pedestrian interval (LPI).

- Segment Inventory
  - Pedestrian: unobstructed and full widths of sidewalks
  - Bicycle: bikeway types, bike lane width, bicycle parking, bike share lots
  - Transit: number of stops, transit lines, transit shelter at stops, benches at stops
  - Miscellaneous: number of trash cans, other active transportation facilities

Figure 11 summarizes key results of the field survey. The detailed field survey inventory sheet is provided in **Appendix D**. The list below provides a general summary description of the intersection inventory and segment inventory within the 0.25-mile radius of the project.

- *Signalized Intersections* – Eight signalized intersections were surveyed:

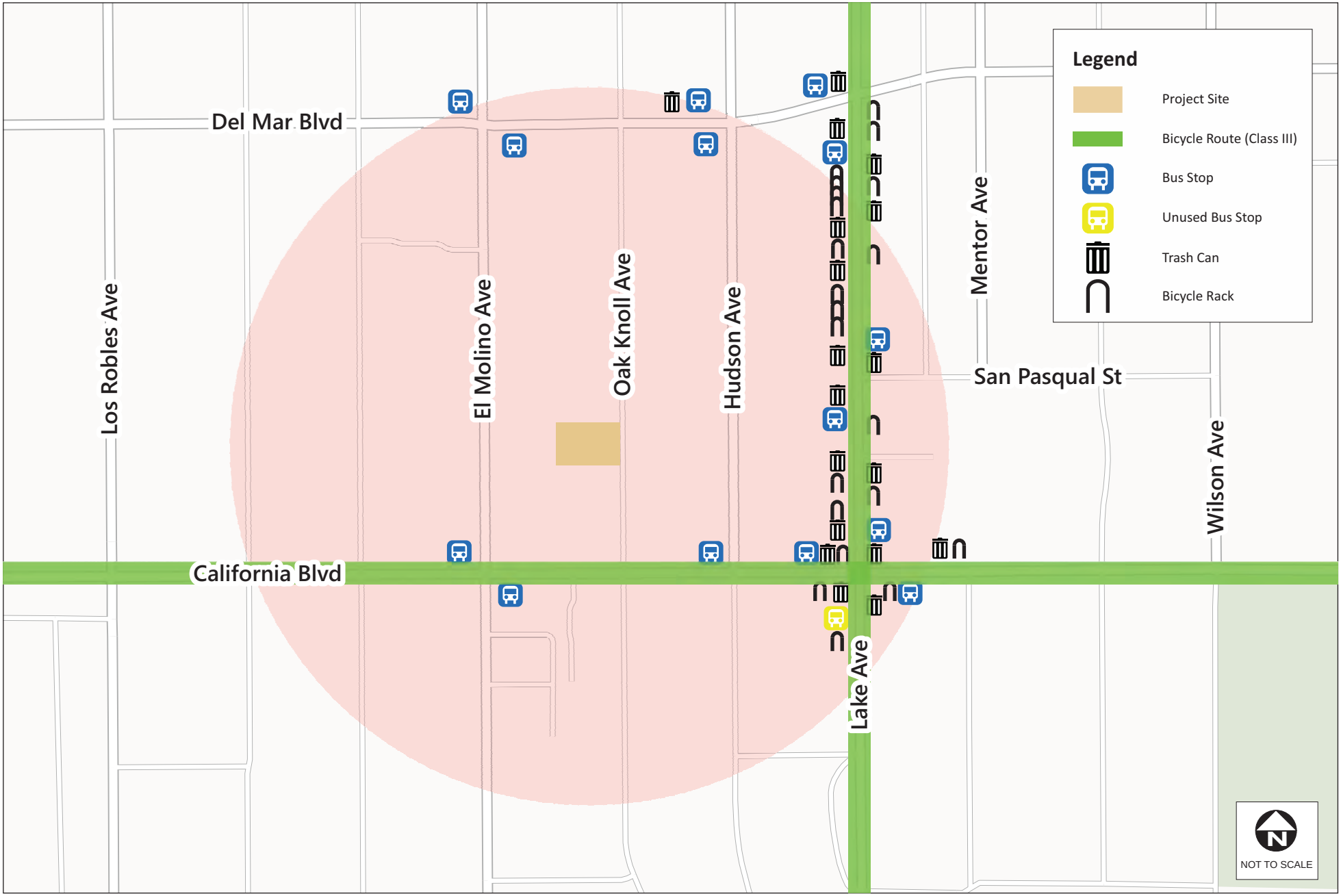
  - *Del Mar Boulevard/El Molino Avenue* intersection includes diagonal curb ramps, truncated domes, sufficient landing spaces, and no obstructions in all four corners. Ladder crosswalks have yellow markings with advanced stop lines on all four legs. Push buttons and countdown signals exist to assist pedestrians crossing.
  - *Del Mar Boulevard/Oak Knoll Avenue* intersection includes diagonal curb ramps, truncated domes, sufficient landing spaces, and no obstructions in all four corners. Ladder crosswalks

have yellow markings with advanced stop lines on all four legs. Push buttons, countdown signals, audible pedestrian signals, and leading pedestrian intervals exist to assist pedestrians crossing.

- *Del Mar Boulevard/Hudson Avenue* intersection includes diagonal curb ramps, truncated domes, sufficient landing spaces, and no obstructions in all four corners. Ladder crosswalks have yellow markings on all four legs, with advanced stop lines on the east, west and south legs only. Push buttons and countdown signals exist to assist pedestrians crossing.
- *San Pasqual Street/Lake Avenue* intersection includes diagonal curb ramps in the northeast and southeast corners and a perpendicular curb ramp in the northwest corner. All three corners provide sufficient landing spaces and no obstructions. Parallel crosswalks have white markings with advanced stop lines on the north and east legs. Push buttons, countdown signals, audible pedestrian signals, and leading pedestrian intervals exist to assist pedestrians crossing.
- *California Boulevard/El Molino Avenue* intersection includes diagonal curb ramps, truncated domes, sufficient landing spaces, and no obstructions in all four corners, with curb extension in the southwest corner only. Parallel crosswalks have white markings with advanced stop lines on all four legs. Push buttons and countdown signals exist to assist pedestrians crossing.
- *California Boulevard/Hudson Avenue* intersection includes diagonal curb ramps, truncated domes, sufficient landing spaces, and no obstructions in all four corners. Parallel crosswalks have white markings on all four legs, with advanced stop lines on the east, west and south legs only. Push buttons and countdown signals exist to assist pedestrians crossing.
- *California Boulevard/Lake Avenue* intersection includes diagonal curb ramps, truncated domes, sufficient landing spaces, and no obstructions in all four corners. Parallel crosswalks have white markings with advanced stop lines on all four legs. Push buttons, countdown signals, and audible pedestrian signals exist to assist pedestrians crossing.
- *Granite Drive/Lake Avenue* intersection includes perpendicular curb ramps in the northeast and southwest corners and a diagonal curb ramp in the southeast corner. All three corners provide sufficient landing spaces and no obstructions. Continental crosswalks have white markings with advanced stop lines on the east and south legs. Push buttons, countdown signals and audible pedestrian signals exist to assist pedestrians crossing.

- *Del Mar Boulevard* segment generally consists of 9 to 10-foot sidewalks with an unobstructed width of 4 to 5 feet on both sides of the roadway. This roadway provides connections to the Class III bike route along Lake Avenue. Multiple bus lines from Pasadena Transit and Metro travel on Del Mar Boulevard. Bus stops generally have amenities such as benches.
- *San Pasqual Street* segment generally consists of 4 to 15-foot sidewalks with an unobstructed width of 4 to 11 feet on both sides of the roadway. This roadway provides connections to the Class III bike route along Lake Avenue. No transit routes travel along San Pasqual Street in the study area.
- *California Boulevard* segment generally consists of 9 to 10-foot sidewalks with an unobstructed width of 5 to 9 feet on both sides of the roadway. This roadway is classified as a Class III bike route in both directions and provides connections to the Class III bike route along Lake Avenue. Multiple bus lines from Pasadena Transit travel on California Boulevard. Bus stops generally have amenities such as benches.
- *Oakland Avenue* segment generally consists of 11 to 12-foot sidewalks with an unobstructed width of 6 feet on both sides of the roadway. This roadway provides connections to the Class III bike route along California Boulevard. No transit routes travel along Oakland Avenue in the study area.

- *Madison Avenue* segment generally consists of 11 to 12-foot sidewalks with an unobstructed width of 4 to 6 feet on both sides of the roadway. This roadway provides connections to the Class III bike route along California Boulevard. No transit routes travel along Madison Avenue in the study area.
- *El Molino Avenue* segment generally consists of 12 to 15-foot sidewalks with an unobstructed width of 5 to 7 feet on both sides of the roadway. This roadway provides connections to the Class III bike route along California Boulevard. No transit routes travel along El Molino Avenue in the study area.
- *Oak Knoll Avenue* segment generally consists of 10 to 11-foot sidewalks with an unobstructed width of 4 to 5 feet on both sides of the roadway. This roadway provides connections to the Class III bike route along California Boulevard. No transit routes travel along Oak Knoll Avenue in the study area.
- *Hudson Avenue* segment generally consists of 12 to 14-foot sidewalks with an unobstructed width of 4 to 5 feet on both sides of the roadway. This roadway provides connections to the Class III bike route along California Boulevard. No transit routes travel along Hudson Avenue in the study area.
- *Lake Avenue* segment generally consists of 14 to 15-foot sidewalks with an unobstructed width of 6 to 9 feet on both sides of the roadway. This roadway is classified as a Class III bike route in both directions and provides connections to the Class III bike route along California Boulevard. Multiple bus lines from Pasadena Transit travel on Lake Avenue. Bus stops generally have amenities such as benches and trash cans.



iteris

City of Pasadena
505 South Oak Knoll Avenue Residential
Local Mobility Analysis

Figure 11
Active Transportation Facilities

7.2 Assessment

Per the City's guidelines, a development project would result in a negative effect on the active transportation network if it resulted in the removal or degradation of existing infrastructure which supports pedestrian, bicycle, and transit travel modes. In addition, a development project would also have a negative effect on the transportation network if it resulted in increased pedestrian or bicycle demand for facilities which are missing, damaged, or not designed to current standards. Given these criteria, the assessment of the project's impacts is shown in **Table 11**.

Table 11: Active Transportation Impact Assessment

Criteria	Yes/No?
Assessment 1: Removal or degradation of existing infrastructure	
Would the project remove transit stops, public benches/shelters, or other transit amenities?	No
Would the project remove bicycle lanes or public bicycle parking?	No
Would the project remove or obstruct sidewalks, pedestrian paths, or crossings?	No
Would the project degrade street buffering elements such as street trees, parkway strips, and bicycle lane buffers?	No
Would the project degrade visibility and lines of sight?	No
Would the project degrade appropriate-scale lighting?	No
Assessment 2: Increased demand on missing/damaged/sub-standard facilities	
Would the project increase pedestrian demand where there are missing curb ramps/crosswalks, narrow or broken sidewalks, or where a controlled crossing is not available without significant rerouting?	No
Would the project increase bicycle demand where there are no bicycle lanes, poor quality pavement, or lack of secure and well-lit parking?	No
Would the project increase transit demand where there are missing crossings or where stops are located in isolated, unshaded, or unlit areas?	No

As shown in **Table 11**, the project is not anticipated to have an impact on the existing active transportation system within the 0.25-mile radius. A detailed summary of the active transportation impact assessment is provided in **Appendix D**.

8 CONCLUSIONS

Iteris prepared a Local Mobility Analysis for the proposed residential development located at 505 S Oak Knoll Avenue Boulevard in the City of Pasadena. The following describe the results of the Local Mobility Analysis:

- The proposed project is forecast to result in an additional 18 a.m. peak hour trips, 18 p.m. peak hour trips, and 209 daily trips.
- None of the study intersections are forecast to operate at an LOS that exceeds the LOS cap.
- The evaluated street segment (Oak Knoll Avenue) is not forecast to be impacted by the proposed project based on the City's street segment thresholds.
- The eastbound left-turn pocket at the Lake Avenue/Del Mar Boulevard intersection 95th percentile queue length exceeds the storage length during the a.m. peak hour under the existing conditions. 3 additional trips to this turning movement generated by the project would increase the 95th percentile queue length by 10 feet during the a.m. peak hour.
- Based on a comprehensive field survey, the proposed project is not anticipated to have a negative impact on the existing active transportation system within a 0.25-mile radius, per the City's guidelines.

505 S Oak Knoll Avenue Residential Local Mobility Analysis

Technical Appendix

Submitted to:

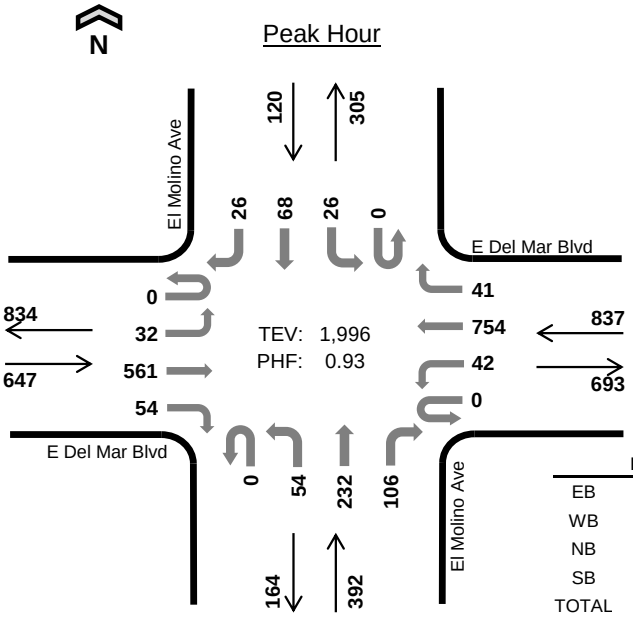
12700.25 | Prepared by **Iteris, Inc.**

Innovating Through Informatics™

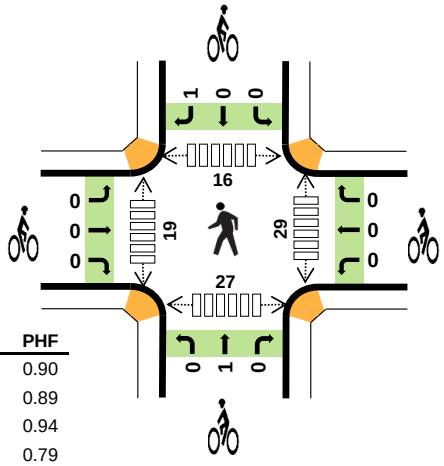
APPENDIX A – TRAFFIC COUNT DATA

El Molino Ave
E Del Mar Blvd

Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	2.3%	0.90
WB	2.2%	0.89
NB	0.5%	0.94
SB	0.8%	0.79
TOTAL	1.8%	0.93



Two-Hour Count Summaries

Interval Start	E Del Mar Blvd Eastbound				E Del Mar Blvd Westbound				El Molino Ave Northbound				El Molino Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	1	0	65	3	0	7	97	3	0	7	15	6	0	4	19	6	233	0
7:15 AM	0	2	64	6	0	4	125	7	0	6	20	7	0	5	12	3	261	0
7:30 AM	0	4	92	10	0	6	177	7	0	15	36	11	0	2	13	4	377	0
7:45 AM	0	4	115	10	0	13	206	16	0	20	54	20	0	5	23	8	494	1,365
8:00 AM	**0**	**9**	**147**	**9**	**0**	**13**	**188**	**13**	**0**	**17**	**58**	**19**	**0**	**10**	**19**	**7**	**509**	1,641
8:15 AM	**0**	**7**	**153**	**19**	**0**	**11**	**212**	**11**	**0**	**13**	**58**	**29**	**0**	**5**	**15**	**4**	**537**	1,917
8:30 AM	**0**	**5**	**133**	**10**	**0**	**10**	**141**	**7**	**0**	**13**	**61**	**30**	**0**	**6**	**21**	**11**	**448**	1,988
8:45 AM	**0**	**11**	**128**	**16**	**0**	**8**	**213**	**10**	**0**	**11**	**55**	**28**	**0**	**5**	**13**	**4**	**502**	**1,996**
Count Total	1	42	897	83	0	72	1,359	74	0	102	357	150	0	42	135	47	3,361	0
Peak Hour All	**0**	**32**	**561**	**54**	**0**	**42**	**754**	**41**	**0**	**54**	**232**	**106**	**0**	**26**	**68**	**26**	**1,996**	**0**
Peak Hour HV	**0**	**0**	**13**	**2**	**0**	**0**	**17**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**36**	**0**
Peak Hour HV%	**-**	**0%**	**2%**	**4%**	**-**	**0%**	**2%**	**2%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	5	2	0	0	*7*	0	1	0	0	*1*	1	1	1	2	*5*
7:15 AM	1	6	0	0	*7*	0	0	0	0	*0*	4	4	1	3	*12*
7:30 AM	2	7	1	1	*11*	0	0	0	0	*0*	4	3	2	2	*11*
7:45 AM	2	6	0	0	*8*	0	0	0	0	*0*	1	4	0	7	*12*
8:00 AM	**5**	**3**	**1**	**1**	***10***	**0**	**0**	**0**	**0**	***0***	**6**	**10**	**5**	**5**	*26*
8:15 AM	**3**	**6**	**1**	**0**	***10***	**0**	**0**	**1**	**0**	***1***	**9**	**3**	**4**	**3**	*19*
8:30 AM	**2**	**4**	**0**	**0**	***6***	**0**	**0**	**0**	**1**	***1***	**9**	**5**	**6**	**12**	*32*
8:45 AM	**5**	**5**	**0**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**5**	**1**	**1**	**7**	***14***
Count Total	25	39	3	2	*69*	0	1	1	1	*3*	39	31	20	41	*131*
Peak Hour	**15**	**18**	**2**	**1**	***36***	**0**	**0**	**1**	**1**	***2***	**29**	**19**	**16**	**27**	***91***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Del Mar Blvd				E Del Mar Blvd				El Molino Ave				El Molino Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	7	0
7:15 AM	0	0	1	0	0	0	5	1	0	0	0	0	0	0	0	0	7	0
7:30 AM	0	0	2	0	0	0	7	0	0	0	1	0	0	0	0	1	11	0
7:45 AM	0	0	2	0	0	0	5	1	0	0	0	0	0	0	0	0	8	33
8:00 AM	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**10**	36
8:15 AM	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**10**	39
8:30 AM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	34
8:45 AM	**0**	**0**	**3**	**2**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**36**
Count Total	0	0	23	2	0	0	36	3	0	0	3	0	0	0	1	1	69	0
Peak Hour	**0**	**0**	**13**	**2**	**0**	**0**	**17**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**36**	**0**

Two-Hour Count Summaries - Bikes

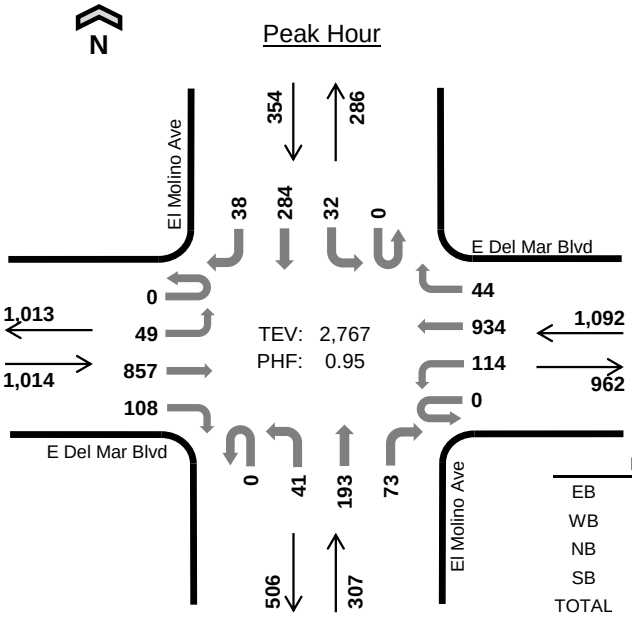
Interval Start	E Del Mar Blvd			E Del Mar Blvd			El Molino Ave			El Molino Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	1
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	2
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Count Total	0	0	0	0	1	0	0	1	0	0	0	1	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**2**	**0**

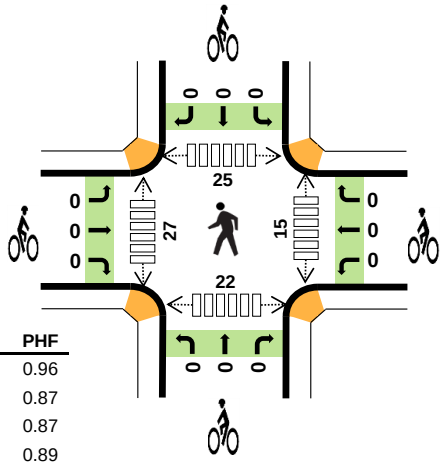
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

El Molino Ave
E Del Mar Blvd

Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour





	HV %:	PHF
EB	1.3%	0.96
WB	0.8%	0.87
NB	0.3%	0.87
SB	0.3%	0.89
TOTAL	0.9%	0.95

Two-Hour Count Summaries

Interval Start	E Del Mar Blvd Eastbound				E Del Mar Blvd Westbound				El Molino Ave Northbound				El Molino Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	10	237	11	0	26	221	15	0	7	46	20	0	8	58	12	671	0
4:15 PM	0	12	186	26	0	28	165	7	0	11	51	16	0	7	53	7	569	0
4:30 PM	2	7	204	24	0	30	217	11	0	11	50	21	0	12	54	7	650	0
4:45 PM	**0**	**18**	**226**	**19**	**0**	**21**	**240**	**7**	**0**	**7**	**46**	**28**	**0**	**8**	**56**	**5**	**681**	2,571
5:00 PM	**0**	**7**	**237**	**14**	**0**	**24**	**275**	**15**	**0**	**10**	**38**	**18**	**0**	**10**	**67**	**13**	**728**	2,628
5:15 PM	**0**	**13**	**190**	**34**	**0**	**30**	**229**	**17**	**0**	**14**	**45**	**13**	**0**	**5**	**82**	**8**	**680**	2,739
5:30 PM	**0**	**11**	**204**	**41**	**0**	**39**	**190**	**5**	**0**	**10**	**64**	**14**	**0**	**9**	**79**	**12**	**678**	**2,767**
5:45 PM	0	15	211	16	0	25	202	7	0	11	54	22	0	9	61	9	642	2,728
Count Total	2	93	1,695	185	0	223	1,739	84	0	81	394	152	0	68	510	73	5,299	0
Peak Hour All	**0**	**49**	**857**	**108**	**0**	**114**	**934**	**44**	**0**	**41**	**193**	**73**	**0**	**32**	**284**	**38**	**2,767**	**0**
Peak Hour HV	**0**	**2**	**10**	**1**	**0**	**0**	**9**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**24**	**0**
Peak Hour HV%	**-**	**4%**	**1%**	**1%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	1	1	1	0	*3*	0	0	1	0	*1*	12	6	2	10	*30*
4:15 PM	5	6	0	0	*11*	0	0	0	0	*0*	4	6	3	9	*22*
4:30 PM	2	2	0	0	*4*	0	0	1	0	*1*	2	4	5	11	*22*
4:45 PM	**3**	**3**	**0**	**1**	***7***	**0**	**0**	**0**	**0**	***0***	**5**	**9**	**6**	**5**	*25*
5:00 PM	**3**	**3**	**1**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**2**	**7**	**5**	**4**	*18*
5:15 PM	**5**	**2**	**0**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**5**	**8**	**9**	**6**	*28*
5:30 PM	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**3**	**3**	**5**	**7**	***18***
5:45 PM	3	5	0	0	*8*	0	0	0	0	*0*	4	7	3	3	*17*
Count Total	24	23	2	1	*50*	0	0	2	0	*2*	37	50	38	55	*180*
Peak Hour	**13**	**9**	**1**	**1**	***24***	**0**	**0**	**0**	**0**	***0***	**15**	**27**	**25**	**22**	***89***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Del Mar Blvd				E Del Mar Blvd				El Molino Ave				El Molino Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	3	0
4:15 PM	0	1	3	1	0	0	6	0	0	0	0	0	0	0	0	0	11	0
4:30 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
4:45 PM	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**7**	25
5:00 PM	**0**	**1**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	29
5:15 PM	**0**	**0**	**4**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	25
5:30 PM	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**24**
5:45 PM	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8	25
Count Total	0	3	19	2	0	0	23	0	0	0	2	0	0	0	1	0	50	0
Peak Hour	**0**	**2**	**10**	**1**	**0**	**0**	**9**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**24**	**0**

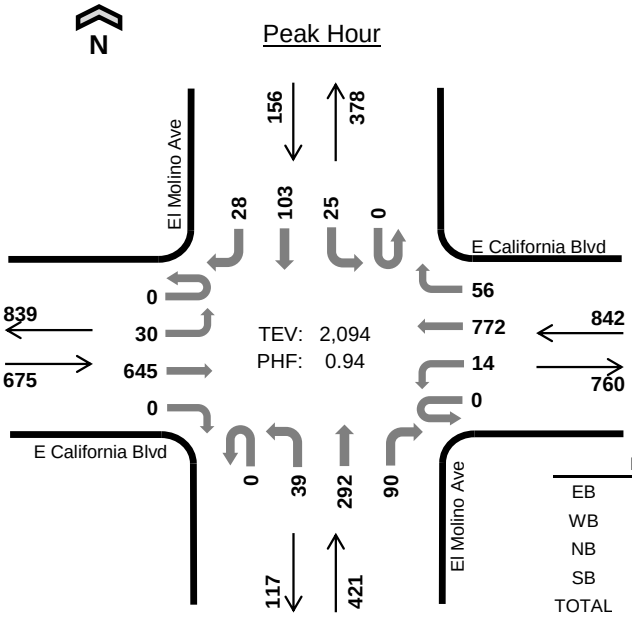
Two-Hour Count Summaries - Bikes

Interval Start	E Del Mar Blvd			E Del Mar Blvd			El Molino Ave			El Molino Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	2	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

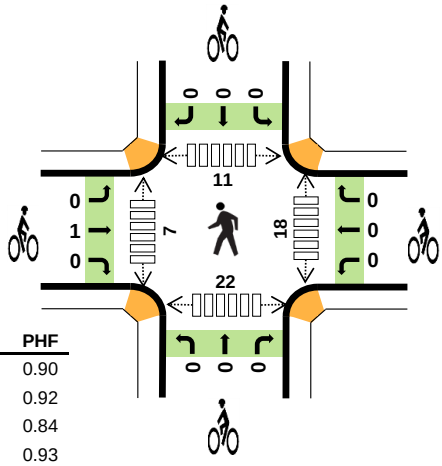
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

El Molino Ave
E California Blvd

Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	1.9%	0.90
WB	1.3%	0.92
NB	0.5%	0.84
SB	0.6%	0.93
TOTAL	1.3%	0.94



Two-Hour Count Summaries

Interval Start	E California Blvd Eastbound				E California Blvd Westbound				El Molino Ave Northbound				El Molino Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	3	89	1	0	2	133	7	0	1	14	8	0	5	19	3	285	0
7:15 AM	0	3	82	0	0	1	144	4	0	5	17	12	0	6	17	5	296	0
7:30 AM	0	6	125	0	0	5	181	10	0	13	45	11	0	3	18	10	427	0
7:45 AM	**0**	**5**	**133**	**0**	**0**	**2**	**200**	**11**	**0**	**10**	**68**	**15**	**0**	**4**	**29**	**9**	**486**	1,494
8:00 AM	**0**	**4**	**184**	**0**	**0**	**4**	**172**	**18**	**0**	**6**	**62**	**18**	**0**	**5**	**30**	**7**	**510**	1,719
8:15 AM	**0**	**12**	**165**	**0**	**0**	**3**	**192**	**11**	**0**	**9**	**77**	**30**	**0**	**10**	**23**	**7**	**539**	1,962
8:30 AM	**0**	**9**	**163**	**0**	**0**	**5**	**208**	**16**	**0**	**14**	**85**	**27**	**0**	**6**	**21**	**5**	**559**	**2,094**
8:45 AM	0	3	142	1	0	9	165	9	0	10	67	25	0	6	24	11	472	2,080
Count Total	0	45	1,083	2	0	31	1,395	86	0	68	435	146	0	45	181	57	3,574	0
Peak Hour All	**0**	**30**	**645**	**0**	**0**	**14**	**772**	**56**	**0**	**39**	**292**	**90**	**0**	**25**	**103**	**28**	**2,094**	**0**
Peak Hour HV	**0**	**0**	**13**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**27**	**0**
Peak Hour HV%	**-**	**0%**	**2%**	**-**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**4%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	3	0	0	*5*	0	0	0	0	*0*	0	0	1	1	*2*
7:15 AM	2	2	0	0	*4*	0	0	0	0	*0*	1	3	5	3	*12*
7:30 AM	2	3	0	0	*5*	0	1	0	0	*1*	2	5	2	0	*9*
7:45 AM	**3**	**1**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**2**	**8**	*12*
8:00 AM	**4**	**2**	**1**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**9**	**0**	**4**	**5**	*18*
8:15 AM	**3**	**3**	**1**	**1**	***8***	**1**	**0**	**0**	**0**	***1***	**3**	**3**	**3**	**3**	*12*
8:30 AM	**3**	**5**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**5**	**3**	**2**	**6**	***16***
8:45 AM	1	6	1	0	*8*	5	0	0	0	*5*	3	2	6	4	*15*
Count Total	20	25	3	1	*49*	6	1	0	0	*7*	24	17	25	30	*96*
Peak Hour	**13**	**11**	**2**	**1**	***27***	**1**	**0**	**0**	**0**	***1***	**18**	**7**	**11**	**22**	***58***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E California Blvd				E California Blvd				El Molino Ave				El Molino Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
7:15 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
7:30 AM	0	1	1	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
7:45 AM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	18
8:00 AM	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	20
8:15 AM	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**8**	24
8:30 AM	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**27**
8:45 AM	0	0	1	0	0	0	6	0	0	1	0	0	0	0	0	0	8	31
Count Total	0	1	19	0	0	0	25	0	0	1	2	0	0	1	0	0	49	0
Peak Hour	**0**	**0**	**13**	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**27**	**0**

Two-Hour Count Summaries - Bikes

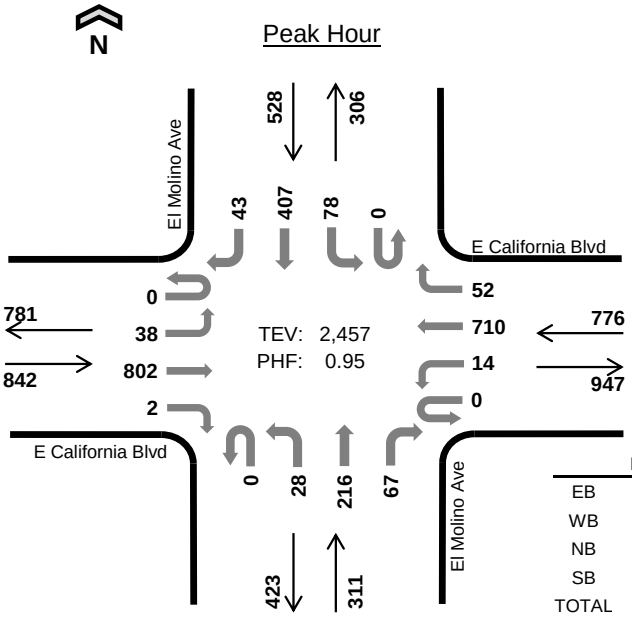
Interval Start	E California Blvd			E California Blvd			El Molino Ave			El Molino Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:45 AM	0	5	0	0	0	0	0	0	0	0	0	0	5	6
Count Total	0	6	0	0	1	0	0	0	0	0	0	0	7	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

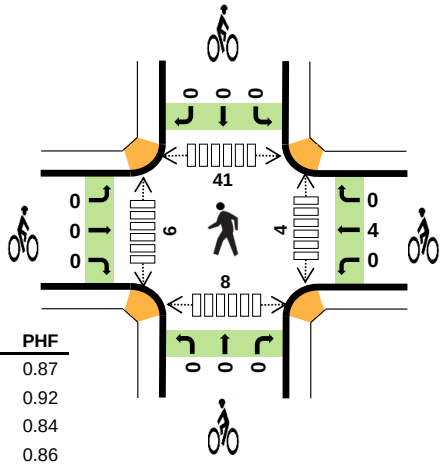
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

El Molino Ave
E California Blvd

Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

Peak Hour





	HV %:	PHF
EB	1.0%	0.87
WB	0.9%	0.92
NB	0.0%	0.84
SB	0.4%	0.86
TOTAL	0.7%	0.95

Two-Hour Count Summaries

Interval Start	E California Blvd Eastbound				E California Blvd Westbound				El Molino Ave Northbound				El Molino Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	9	226	0	0	3	220	11	0	4	52	19	0	12	48	13	617	0
4:15 PM	0	13	231	3	0	6	176	9	0	5	53	16	0	21	71	7	611	0
4:30 PM	0	7	210	2	0	7	188	13	0	3	57	16	0	17	78	9	607	0
4:45 PM	0	15	188	6	0	3	195	14	0	7	54	15	0	13	71	5	586	2,421
5:00 PM	**0**	**8**	**205**	**0**	**0**	**3**	**184**	**8**	**0**	**5**	**46**	**11**	**0**	**20**	**95**	**9**	**594**	2,398
5:15 PM	**0**	**9**	**207**	**1**	**0**	**3**	**182**	**11**	**0**	**8**	**58**	**19**	**0**	**23**	**111**	**15**	**647**	2,434
5:30 PM	**0**	**11**	**158**	**0**	**0**	**5**	**158**	**12**	**0**	**7**	**63**	**23**	**0**	**22**	**118**	**13**	**590**	2,417
5:45 PM	**0**	**10**	**232**	**1**	**0**	**3**	**186**	**21**	**0**	**8**	**49**	**14**	**0**	**13**	**83**	**6**	**626**	**2,457**
Count Total	0	82	1,657	13	0	33	1,489	99	0	47	432	133	0	141	675	77	4,878	0
Peak Hour All	**0**	**38**	**802**	**2**	**0**	**14**	**710**	**52**	**0**	**28**	**216**	**67**	**0**	**78**	**407**	**43**	**2,457**	**0**
Peak Hour HV	**0**	**0**	**8**	**0**	**0**	**1**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**17**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**0%**	**-**	**7%**	**1%**	**4%**	**-**	**0%**	**0%**	**0%**	**-**	**1%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	4	2	0	*9*	1	0	1	0	*2*	2	0	4	2	*8*
4:15 PM	5	1	0	1	*7*	2	0	0	0	*2*	7	7	6	5	*25*
4:30 PM	1	0	0	0	*1*	0	1	1	0	*2*	1	5	4	1	*11*
4:45 PM	2	4	0	0	*6*	0	0	0	0	*0*	4	7	7	3	*21*
5:00 PM	**2**	**1**	**0**	**1**	***4***	**0**	**2**	**0**	**0**	***2***	**2**	**0**	**13**	**2**	*17*
5:15 PM	**1**	**1**	**0**	**1**	***3***	**0**	**2**	**0**	**0**	***2***	**1**	**4**	**10**	**0**	*15*
5:30 PM	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**8**	**2**	*11*
5:45 PM	**3**	**2**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**10**	**4**	***16***
Count Total	19	16	2	3	*40*	3	5	2	0	*10*	18	25	62	19	*124*
Peak Hour	**8**	**7**	**0**	**2**	***17***	**0**	**4**	**0**	**0**	***4***	**4**	**6**	**41**	**8**	***59***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E California Blvd				E California Blvd				El Molino Ave				El Molino Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	3	0	0	0	4	0	0	0	2	0	0	0	0	0	9	0
4:15 PM	0	0	5	0	0	0	1	0	0	0	0	0	0	1	0	0	7	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6	23
5:00 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	18
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	14
5:30 PM	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	18
5:45 PM	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**17**
Count Total	0	0	19	0	0	1	13	2	0	0	2	0	0	2	1	0	40	0
Peak Hour	**0**	**0**	**8**	**0**	**0**	**1**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**17**	**0**

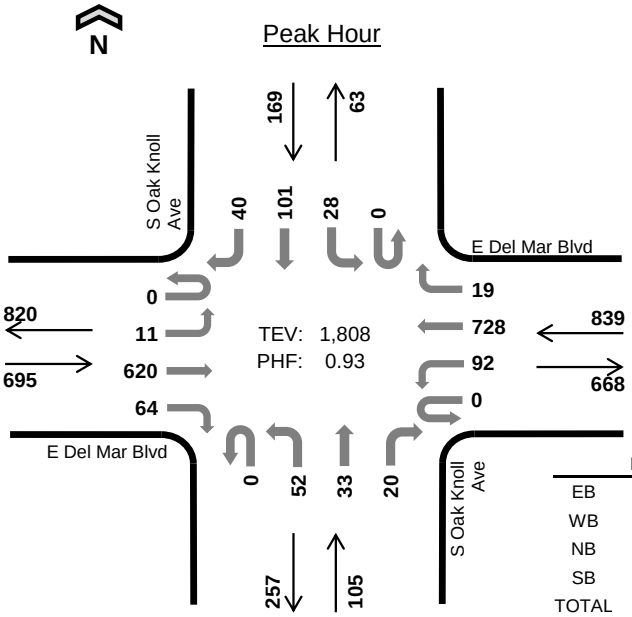
Two-Hour Count Summaries - Bikes

Interval Start	E California Blvd			E California Blvd			El Molino Ave			El Molino Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2	0
4:15 PM	1	1	0	0	0	0	0	0	0	0	0	0	2	0
4:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:00 PM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	6
5:15 PM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	6
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
Count Total	1	2	0	0	5	0	0	2	0	0	0	0	10	0
Peak Hour	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**

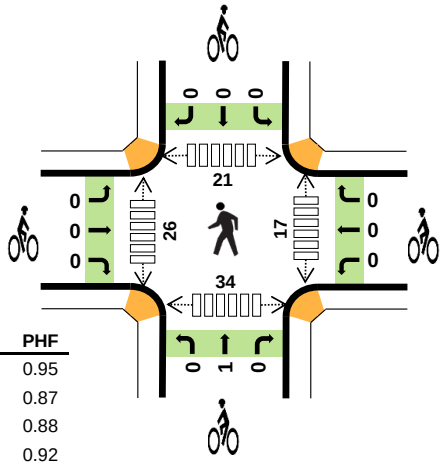
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S Oak Knoll Ave
E Del Mar Blvd

Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	2.0%	0.95
WB	2.3%	0.87
NB	1.9%	0.88
SB	1.2%	0.92
TOTAL	2.0%	0.93



Two-Hour Count Summaries

Interval Start	E Del Mar Blvd Eastbound				E Del Mar Blvd Westbound				S Oak Knoll Ave Northbound				S Oak Knoll Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	75	1	0	5	104	2	0	2	1	1	0	3	2	7	204	0
7:15 AM	0	1	76	3	0	2	135	1	0	0	1	1	0	2	1	5	228	0
7:30 AM	0	1	109	5	0	6	165	5	0	3	2	5	0	3	3	10	317	0
7:45 AM	0	4	131	9	0	11	210	2	0	6	7	14	0	6	20	8	428	1,177
8:00 AM	**0**	**2**	**157**	**18**	**0**	**34**	**192**	**6**	**0**	**9**	**11**	**8**	**0**	**5**	**35**	**6**	**483**	1,456
8:15 AM	**0**	**1**	**160**	**21**	**0**	**29**	**206**	**6**	**0**	**11**	**8**	**0**	**0**	**7**	**24**	**15**	**488**	1,716
8:30 AM	**0**	**4**	**133**	**17**	**0**	**17**	**148**	**4**	**0**	**19**	**5**	**4**	**0**	**8**	**27**	**5**	**391**	1,790
8:45 AM	**0**	**4**	**170**	**8**	**0**	**12**	**182**	**3**	**0**	**13**	**9**	**8**	**0**	**8**	**15**	**14**	**446**	**1,808**
Count Total	0	18	1,011	82	0	116	1,342	29	0	63	44	41	0	42	127	70	2,985	0
Peak Hour All	**0**	**11**	**620**	**64**	**0**	**92**	**728**	**19**	**0**	**52**	**33**	**20**	**0**	**28**	**101**	**40**	**1,808**	**0**
Peak Hour HV	**0**	**0**	**12**	**2**	**0**	**1**	**18**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**37**	**0**
Peak Hour HV%	**-**	**0%**	**2%**	**3%**	**-**	**1%**	**2%**	**0%**	**-**	**0%**	**6%**	**0%**	**-**	**0%**	**1%**	**3%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	5	3	0	2	*10*	0	1	0	0	*1*	3	3	1	3	*10*
7:15 AM	1	6	0	0	*7*	0	0	1	0	*1*	1	1	1	2	*5*
7:30 AM	2	4	0	1	*7*	0	0	0	0	*0*	5	1	5	8	*19*
7:45 AM	2	5	1	1	*9*	0	0	0	0	*0*	3	1	4	8	*16*
8:00 AM	**5**	**3**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**7**	**3**	**6**	**7**	*23*
8:15 AM	**3**	**5**	**1**	**1**	***10***	**0**	**0**	**1**	**0**	***1***	**4**	**2**	**5**	**3**	*14*
8:30 AM	**3**	**5**	**1**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**6**	**14**	**5**	**16**	*41*
8:45 AM	**3**	**6**	**0**	**1**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**7**	**5**	**8**	***20***
Count Total	24	37	3	6	*70*	0	1	2	0	*3*	29	32	32	55	*148*
Peak Hour	**14**	**19**	**2**	**2**	***37***	**0**	**0**	**1**	**0**	***1***	**17**	**26**	**21**	**34**	***98***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Del Mar Blvd				E Del Mar Blvd				S Oak Knoll Ave				S Oak Knoll Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	5	0	0	0	3	0	0	0	0	0	0	2	0	0	10	0
7:15 AM	0	0	1	0	0	0	6	0	0	0	0	0	0	0	0	0	7	0
7:30 AM	0	0	2	0	0	0	4	0	0	0	0	0	0	1	0	0	7	0
7:45 AM	0	0	2	0	0	0	5	0	0	1	0	0	0	0	1	0	9	33
8:00 AM	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	31
8:15 AM	**0**	**0**	**1**	**2**	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**10**	34
8:30 AM	**0**	**0**	**3**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**9**	36
8:45 AM	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**10**	**37**
Count Total	0	0	22	2	0	1	36	0	0	1	2	0	0	3	2	1	70	0
Peak Hour	**0**	**0**	**12**	**2**	**0**	**1**	**18**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**37**	**0**

Two-Hour Count Summaries - Bikes

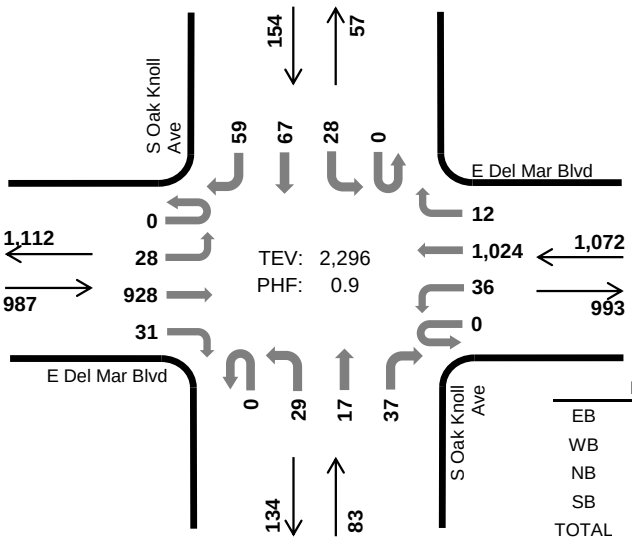
Interval Start	E Del Mar Blvd			E Del Mar Blvd			S Oak Knoll Ave			S Oak Knoll Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	1
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	0	0	0	1	0	0	2	0	0	0	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

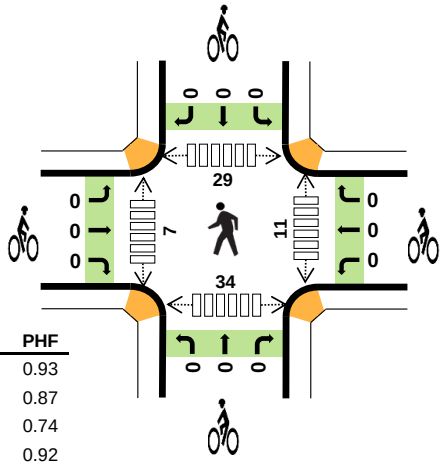
S Oak Knoll Ave
E Del Mar Blvd

Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

Peak Hour



	HV %:	PHF
EB	1.1%	0.93
WB	0.8%	0.87
NB	1.2%	0.74
SB	0.0%	0.92
TOTAL	0.9%	0.90



Two-Hour Count Summaries

Interval Start	E Del Mar Blvd Eastbound				E Del Mar Blvd Westbound				S Oak Knoll Ave Northbound				S Oak Knoll Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	8	257	4	0	3	236	3	0	6	3	8	0	6	24	7	565	0
4:15 PM	0	2	190	10	1	11	177	5	0	7	4	9	0	4	12	11	443	0
4:30 PM	**0**	**3**	**236**	**5**	**0**	**9**	**236**	**0**	**0**	**9**	**5**	**11**	**0**	**6**	**19**	**15**	**554**	0
4:45 PM	**0**	**12**	**248**	**5**	**0**	**4**	**235**	**3**	**0**	**7**	**2**	**8**	**0**	**7**	**13**	**22**	**566**	2,128
5:00 PM	**0**	**5**	**251**	**8**	**0**	**14**	**287**	**7**	**0**	**10**	**7**	**11**	**0**	**8**	**20**	**12**	**640**	2,203
5:15 PM	**0**	**8**	**193**	**13**	**0**	**9**	**266**	**2**	**0**	**3**	**3**	**7**	**0**	**7**	**15**	**10**	**536**	**2,296**
5:30 PM	0	2	222	6	0	9	228	3	0	1	5	6	0	8	16	12	518	2,260
5:45 PM	0	7	235	5	0	16	205	6	0	3	6	6	0	11	15	16	531	2,225
Count Total	0	47	1,832	56	1	75	1,870	29	0	46	35	66	0	57	134	105	4,353	0
Peak Hour All	**0**	**28**	**928**	**31**	**0**	**36**	**1,024**	**12**	**0**	**29**	**17**	**37**	**0**	**28**	**67**	**59**	**2,296**	**0**
Peak Hour HV	**0**	**0**	**10**	**1**	**0**	**1**	**8**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**21**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**3%**	**-**	**3%**	**1%**	**0%**	**-**	**0%**	**0%**	**3%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	1	0	0	*2*	0	0	0	0	*0*	2	1	7	14	*24*
4:15 PM	4	6	2	0	*12*	0	0	0	0	*0*	3	1	4	14	*22*
4:30 PM	**4**	**1**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**4**	**2**	**8**	**11**	*25*
4:45 PM	**3**	**2**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**3**	**2**	**9**	**12**	*26*
5:00 PM	**1**	**1**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**6**	**3**	*11*
5:15 PM	**3**	**5**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**4**	**1**	**6**	**8**	***19***
5:30 PM	1	2	0	0	*3*	0	0	0	0	*0*	2	6	4	11	*23*
5:45 PM	3	5	0	0	*8*	0	0	0	0	*0*	1	1	5	5	*12*
Count Total	20	23	3	0	*46*	0	0	0	0	*0*	19	16	49	78	*162*
Peak Hour	**11**	**9**	**1**	**0**	***21***	**0**	**0**	**0**	**0**	***0***	**11**	**7**	**29**	**34**	***81***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Del Mar Blvd				E Del Mar Blvd				S Oak Knoll Ave				S Oak Knoll Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
4:15 PM	0	0	3	1	0	1	5	0	0	1	0	1	0	0	0	0	12	0
4:30 PM	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	0
4:45 PM	**0**	**0**	**2**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	24
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	25
5:15 PM	**0**	**0**	**3**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**21**
5:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	19
5:45 PM	0	0	3	0	0	1	4	0	0	0	0	0	0	0	0	0	8	22
Count Total	0	0	18	2	0	3	20	0	0	1	0	2	0	0	0	0	46	0
Peak Hour	**0**	**0**	**10**	**1**	**0**	**1**	**8**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**21**	**0**

Two-Hour Count Summaries - Bikes

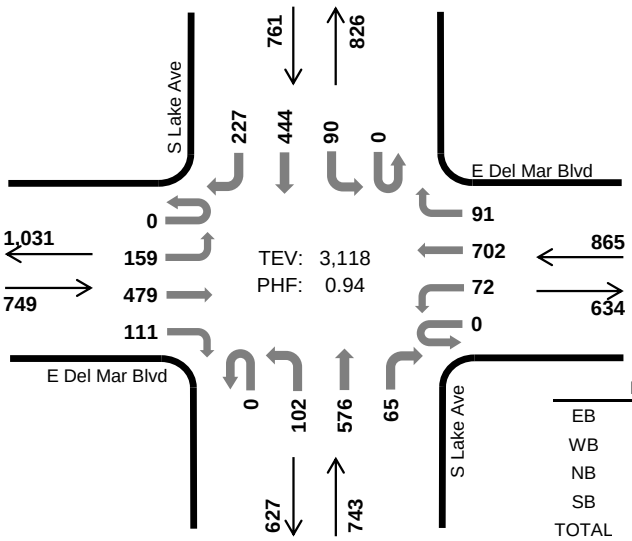
Interval Start	E Del Mar Blvd			E Del Mar Blvd			S Oak Knoll Ave			S Oak Knoll Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

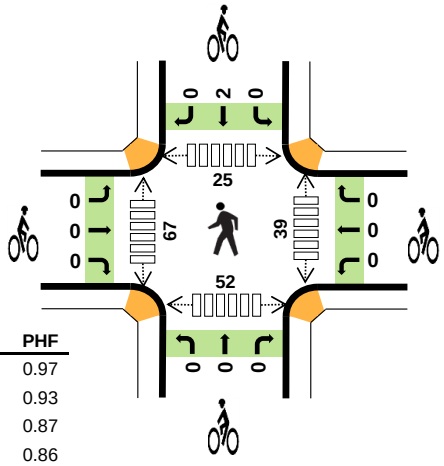
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S Lake Ave
E Del Mar Blvd

Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM

Peak Hour





	HV %:	PHF
EB	2.4%	0.97
WB	2.3%	0.93
NB	1.9%	0.87
SB	2.9%	0.86
TOTAL	2.4%	0.94

Two-Hour Count Summaries

Interval Start	E Del Mar Blvd Eastbound				E Del Mar Blvd Westbound				S Lake Ave Northbound				S Lake Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	18	42	15	0	8	97	9	0	6	60	1	0	14	56	20	346	0
7:15 AM	0	23	43	12	0	12	115	26	0	13	71	5	0	19	67	24	430	0
7:30 AM	0	17	82	21	0	7	178	28	0	15	81	15	0	17	96	33	590	0
7:45 AM	0	32	94	20	0	17	204	23	0	28	148	13	0	15	78	41	713	2,079
8:00 AM	**0**	**37**	**114**	**37**	**0**	**18**	**183**	**21**	**0**	**28**	**133**	**15**	**0**	**23**	**131**	**66**	**806**	2,539
8:15 AM	**0**	**42**	**127**	**24**	**0**	**17**	**188**	**20**	**0**	**32**	**149**	**15**	**0**	**20**	**126**	**69**	**829**	2,938
8:30 AM	**0**	**36**	**128**	**27**	**0**	**18**	**142**	**25**	**0**	**17**	**176**	**21**	**0**	**27**	**96**	**52**	**765**	3,113
8:45 AM	**0**	**44**	**110**	**23**	**0**	**19**	**189**	**25**	**0**	**25**	**118**	**14**	**0**	**20**	**91**	**40**	**718**	**3,118**
Count Total	0	249	740	179	0	116	1,296	177	0	164	936	99	0	155	741	345	5,197	0
Peak Hour All	**0**	**159**	**479**	**111**	**0**	**72**	**702**	**91**	**0**	**102**	**576**	**65**	**0**	**90**	**444**	**227**	**3,118**	**0**
Peak Hour HV	**0**	**2**	**8**	**8**	**0**	**0**	**13**	**7**	**0**	**1**	**13**	**0**	**0**	**8**	**9**	**5**	**74**	**0**
Peak Hour HV%	**-**	**1%**	**2%**	**7%**	**-**	**0%**	**2%**	**8%**	**-**	**1%**	**2%**	**0%**	**-**	**9%**	**2%**	**2%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	9	1	1	6	*17*	0	1	0	1	*2*	8	10	3	5	*26*
7:15 AM	3	9	3	8	*23*	1	0	0	0	*1*	7	8	3	2	*20*
7:30 AM	4	4	2	7	*17*	0	0	0	0	*0*	9	12	7	8	*36*
7:45 AM	3	4	4	2	*13*	0	0	0	1	*1*	8	8	6	7	*29*
8:00 AM	**8**	**4**	**2**	**5**	***19***	**0**	**0**	**0**	**0**	***0***	**12**	**21**	**9**	**10**	*52*
8:15 AM	**2**	**4**	**6**	**7**	***19***	**0**	**0**	**0**	**2**	***2***	**10**	**29**	**9**	**10**	*58*
8:30 AM	**5**	**5**	**4**	**4**	***18***	**0**	**0**	**0**	**0**	***0***	**9**	**4**	**2**	**9**	*24*
8:45 AM	**3**	**7**	**2**	**6**	***18***	**0**	**0**	**0**	**0**	***0***	**8**	**13**	**5**	**23**	***49***
Count Total	37	38	24	45	*144*	1	1	0	4	*6*	71	105	44	74	*294*
Peak Hour	**18**	**20**	**14**	**22**	***74***	**0**	**0**	**0**	**2**	***2***	**39**	**67**	**25**	**52**	***183***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Del Mar Blvd				E Del Mar Blvd				S Lake Ave				S Lake Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	3	2	4	0	0	1	0	0	0	1	0	0	1	4	1	17	0
7:15 AM	0	1	0	2	0	0	7	2	0	0	2	1	0	3	4	1	23	0
7:30 AM	0	0	3	1	0	0	3	1	0	0	1	1	0	1	5	1	17	0
7:45 AM	0	2	1	0	0	1	2	1	0	0	3	1	0	0	0	2	13	70
8:00 AM	**0**	**0**	**2**	**6**	**0**	**0**	**2**	**2**	**0**	**0**	**2**	**0**	**0**	**1**	**3**	**1**	**19**	72
8:15 AM	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**5**	**0**	**0**	**3**	**2**	**2**	**19**	68
8:30 AM	**0**	**0**	**4**	**1**	**0**	**0**	**3**	**2**	**0**	**0**	**4**	**0**	**0**	**2**	**2**	**0**	**18**	69
8:45 AM	**0**	**1**	**1**	**1**	**0**	**0**	**6**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**2**	**2**	**18**	**74**
Count Total	0	8	14	15	0	1	26	11	0	1	20	3	0	13	22	10	144	0
Peak Hour	**0**	**2**	**8**	**8**	**0**	**0**	**13**	**7**	**0**	**1**	**13**	**0**	**0**	**8**	**9**	**5**	**74**	**0**

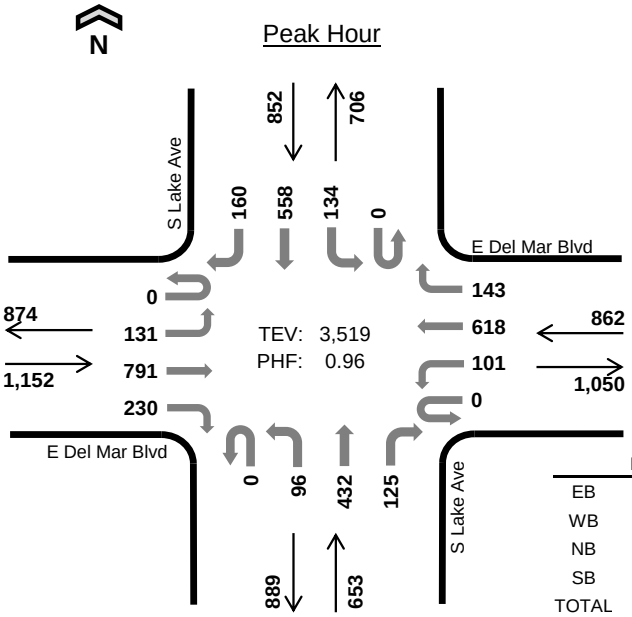
Two-Hour Count Summaries - Bikes

Interval Start	E Del Mar Blvd			E Del Mar Blvd			S Lake Ave			S Lake Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	3
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Count Total	0	1	0	0	1	0	0	0	0	0	4	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**

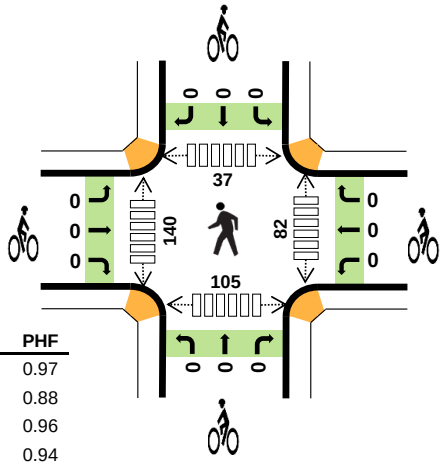
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S Lake Ave
E Del Mar Blvd

Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	1.0%	0.97
WB	0.9%	0.88
NB	1.2%	0.96
SB	1.4%	0.94
TOTAL	1.1%	0.96



Two-Hour Count Summaries

Interval Start	E Del Mar Blvd Eastbound				E Del Mar Blvd Westbound				S Lake Ave Northbound				S Lake Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	38	244	66	0	31	166	36	0	27	95	27	0	30	131	30	921	0
4:15 PM	0	45	173	56	0	28	107	21	0	31	87	25	0	35	137	38	783	0
4:30 PM	**0**	**38**	**210**	**46**	**0**	**16**	**146**	**29**	**0**	**23**	**118**	**29**	**0**	**25**	**158**	**43**	**881**	0
4:45 PM	**0**	**28**	**201**	**59**	**0**	**33**	**153**	**38**	**0**	**20**	**104**	**35**	**0**	**34**	**138**	**36**	**879**	3,464
5:00 PM	**0**	**27**	**202**	**67**	**0**	**28**	**179**	**37**	**0**	**26**	**109**	**32**	**0**	**29**	**141**	**39**	**916**	3,459
5:15 PM	**0**	**38**	**178**	**58**	**0**	**24**	**140**	**39**	**0**	**27**	**101**	**29**	**0**	**46**	**121**	**42**	**843**	**3,519**
5:30 PM	0	29	193	52	0	26	150	23	0	24	114	10	0	33	111	37	802	3,440
5:45 PM	0	42	186	67	0	29	139	39	0	26	113	31	0	42	124	24	862	3,423
Count Total	0	285	1,587	471	0	215	1,180	262	0	204	841	218	0	274	1,061	289	6,887	0
Peak Hour All	**0**	**131**	**791**	**230**	**0**	**101**	**618**	**143**	**0**	**96**	**432**	**125**	**0**	**134**	**558**	**160**	**3,519**	**0**
Peak Hour HV	**0**	**2**	**6**	**3**	**0**	**0**	**5**	**3**	**0**	**1**	**5**	**2**	**0**	**4**	**5**	**3**	**39**	**0**
Peak Hour HV%	**-**	**2%**	**1%**	**1%**	**-**	**0%**	**1%**	**2%**	**-**	**1%**	**1%**	**2%**	**-**	**3%**	**1%**	**2%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	1	4	1	1	*7*	0	0	0	0	*0*	23	25	13	22	*83*
4:15 PM	4	3	3	6	*16*	0	1	0	0	*1*	21	48	15	24	*108*
4:30 PM	**3**	**1**	**3**	**4**	***11***	**0**	**0**	**0**	**0**	***0***	**19**	**35**	**11**	**24**	*89*
4:45 PM	**3**	**3**	**2**	**2**	***10***	**0**	**0**	**0**	**0**	***0***	**18**	**28**	**4**	**17**	*67*
5:00 PM	**2**	**1**	**2**	**2**	***7***	**0**	**0**	**0**	**0**	***0***	**23**	**42**	**7**	**27**	*99*
5:15 PM	**3**	**3**	**1**	**4**	***11***	**0**	**0**	**0**	**0**	***0***	**22**	**35**	**15**	**37**	***109***
5:30 PM	2	3	1	1	*7*	0	0	0	0	*0*	25	38	7	28	*98*
5:45 PM	4	5	1	3	*13*	0	0	0	0	*0*	23	50	15	22	*110*
Count Total	22	23	14	23	*82*	0	1	0	0	*1*	174	301	87	201	*763*
Peak Hour	**11**	**8**	**8**	**12**	***39***	**0**	**0**	**0**	**0**	***0***	**82**	**140**	**37**	**105**	***364***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Del Mar Blvd				E Del Mar Blvd				S Lake Ave				S Lake Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	2	2	0	0	1	0	0	0	1	0	7	0
4:15 PM	0	1	2	1	0	0	2	1	0	1	1	1	0	2	2	2	16	0
4:30 PM	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**1**	**0**	**1**	**2**	**1**	**11**	0
4:45 PM	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**1**	**10**	44
5:00 PM	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**7**	44
5:15 PM	**0**	**0**	**2**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**0**	**2**	**2**	**0**	**11**	**39**
5:30 PM	0	1	0	1	0	2	1	0	0	0	1	0	0	0	1	0	7	35
5:45 PM	0	1	2	1	0	0	3	2	0	0	1	0	0	2	1	0	13	38
Count Total	0	5	10	7	0	2	13	8	0	2	9	3	0	8	10	5	82	0
Peak Hour	**0**	**2**	**6**	**3**	**0**	**0**	**5**	**3**	**0**	**1**	**5**	**2**	**0**	**4**	**5**	**3**	**39**	**0**

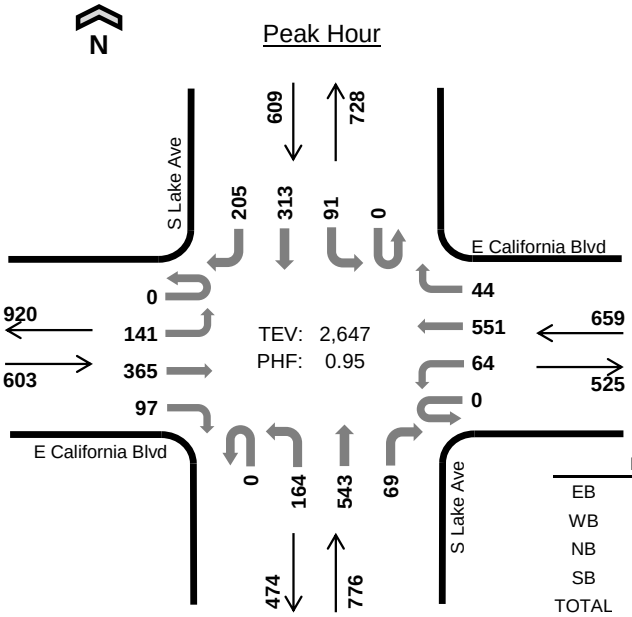
Two-Hour Count Summaries - Bikes

Interval Start	E Del Mar Blvd			E Del Mar Blvd			S Lake Ave			S Lake Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

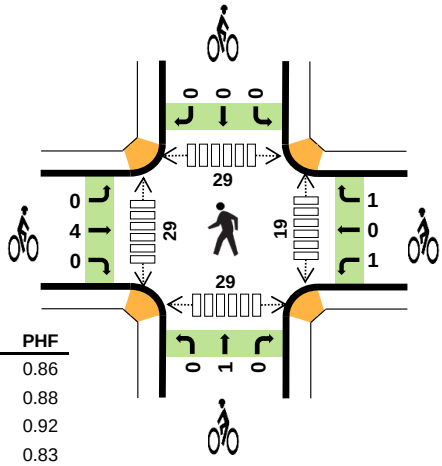
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S Lake Ave
E California Blvd

Peak Hour



Date: 12/10/2024
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	1.5%	0.86
WB	1.4%	0.88
NB	0.8%	0.92
SB	1.8%	0.83
TOTAL	1.3%	0.95

Two-Hour Count Summaries

Interval Start	E California Blvd Eastbound				E California Blvd Westbound				S Lake Ave Northbound				S Lake Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	18	52	18	0	5	108	7	0	14	45	6	0	12	37	32	354	0
7:15 AM	0	25	52	21	0	16	120	7	0	21	51	7	0	12	56	35	423	0
7:30 AM	0	26	72	14	0	16	142	8	0	37	86	13	0	20	61	31	526	0
7:45 AM	**0**	**31**	**74**	**17**	**0**	**15**	**160**	**12**	**0**	**32**	**135**	**13**	**0**	**19**	**63**	**40**	**611**	1,914
8:00 AM	**0**	**36**	**101**	**24**	**0**	**15**	**127**	**11**	**0**	**46**	**132**	**22**	**0**	**32**	**95**	**56**	**697**	2,257
8:15 AM	**0**	**38**	**100**	**37**	**0**	**27**	**128**	**10**	**0**	**42**	**121**	**22**	**0**	**21**	**92**	**50**	**688**	2,522
8:30 AM	**0**	**36**	**90**	**19**	**0**	**7**	**136**	**11**	**0**	**44**	**155**	**12**	**0**	**19**	**63**	**59**	**651**	**2,647**
8:45 AM	0	35	79	17	0	13	117	15	0	40	121	12	0	26	54	37	566	2,602
Count Total	0	245	620	167	0	114	1,038	81	0	276	846	107	0	161	521	340	4,516	0
Peak Hour All	**0**	**141**	**365**	**97**	**0**	**64**	**551**	**44**	**0**	**164**	**543**	**69**	**0**	**91**	**313**	**205**	**2,647**	**0**
Peak Hour HV	**0**	**8**	**1**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**4**	**2**	**0**	**2**	**3**	**6**	**35**	**0**
Peak Hour HV%	**-**	**6%**	**0%**	**0%**	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**1%**	**3%**	**-**	**2%**	**1%**	**3%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	2	0	5	*9*	1	0	0	0	*1*	2	9	3	5	*19*
7:15 AM	1	1	0	6	*8*	0	0	0	0	*0*	3	7	4	15	*29*
7:30 AM	1	6	0	4	*11*	0	0	1	0	*1*	6	5	6	10	*27*
7:45 AM	**1**	**1**	**1**	**0**	***3***	**2**	**0**	**0**	**0**	***2***	**4**	**4**	**4**	**7**	*19*
8:00 AM	**1**	**2**	**1**	**6**	***10***	**0**	**0**	**0**	**0**	***0***	**5**	**10**	**9**	**10**	*34*
8:15 AM	**4**	**1**	**3**	**4**	***12***	**1**	**1**	**0**	**0**	***2***	**5**	**9**	**6**	**6**	*26*
8:30 AM	**3**	**5**	**1**	**1**	***10***	**1**	**1**	**1**	**0**	***3***	**5**	**6**	**10**	**6**	***27***
8:45 AM	1	4	4	4	*13*	3	1	0	0	*4*	7	12	10	9	*38*
Count Total	14	22	10	30	*76*	8	3	2	0	*13*	37	62	52	68	*219*
Peak Hour	**9**	**9**	**6**	**11**	***35***	**4**	**2**	**1**	**0**	***7***	**19**	**29**	**29**	**29**	***106***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E California Blvd				E California Blvd				S Lake Ave				S Lake Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	1	0	0	0	2	0	0	0	0	0	0	3	0	2	9	0
7:15 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	2	2	2	8	0
7:30 AM	0	0	1	0	0	2	2	2	0	0	0	0	0	1	0	3	11	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	31
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**4**	**10**	32
8:15 AM	**0**	**3**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**0**	**1**	**2**	**1**	**12**	36
8:30 AM	**0**	**3**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**10**	**35**
8:45 AM	0	1	0	0	0	0	4	0	0	1	2	1	0	0	1	3	13	45
Count Total	0	11	3	0	0	2	17	3	0	1	6	3	0	8	6	16	76	0
Peak Hour	**0**	**8**	**1**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**4**	**2**	**0**	**2**	**3**	**6**	**35**	**0**

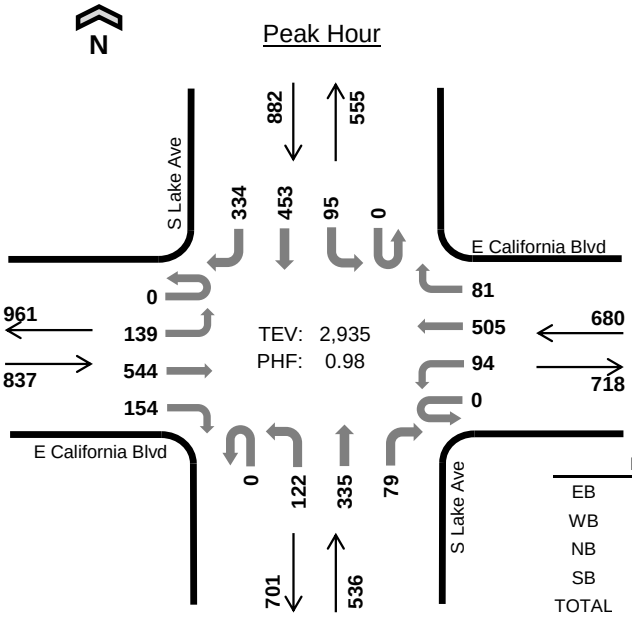
Two-Hour Count Summaries - Bikes

Interval Start	E California Blvd			E California Blvd			S Lake Ave			S Lake Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	0
7:45 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:15 AM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	5
8:30 AM	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**7**
8:45 AM	1	2	0	0	1	0	0	0	0	0	0	0	4	9
Count Total	1	6	1	1	1	1	1	1	0	0	0	0	13	0
Peak Hour	**0**	**4**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**

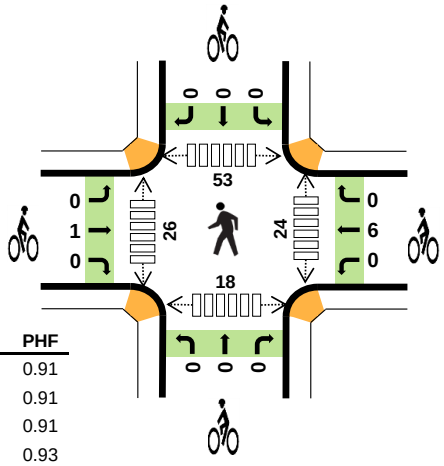
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

S Lake Ave
E California Blvd

Date: 12/10/2024
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	0.7%	0.91
WB	0.6%	0.91
NB	0.2%	0.91
SB	1.0%	0.93
TOTAL	0.7%	0.98



Two-Hour Count Summaries

Interval Start	E California Blvd Eastbound				E California Blvd Westbound				S Lake Ave Northbound				S Lake Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	32	140	31	0	22	147	20	0	34	72	18	0	16	92	97	721	0
4:15 PM	0	37	148	39	0	22	107	20	0	31	70	18	1	34	125	91	743	0
4:30 PM	**0**	**37**	**142**	**40**	**0**	**23**	**112**	**14**	**0**	**34**	**94**	**20**	**0**	**26**	**102**	**85**	**729**	0
4:45 PM	**0**	**30**	**127**	**35**	**0**	**20**	**122**	**26**	**0**	**33**	**88**	**19**	**0**	**20**	**114**	**85**	**719**	2,912
5:00 PM	**0**	**33**	**130**	**34**	**0**	**29**	**133**	**24**	**0**	**28**	**92**	**20**	**0**	**22**	**107**	**83**	**735**	2,926
5:15 PM	**0**	**39**	**145**	**45**	**0**	**22**	**138**	**17**	**0**	**27**	**61**	**20**	**0**	**27**	**130**	**81**	**752**	**2,935**
5:30 PM	0	27	115	32	0	16	125	28	0	24	74	22	0	24	113	79	679	2,885
5:45 PM	0	24	137	38	0	22	139	19	0	27	103	13	0	24	95	77	718	2,884
Count Total	0	259	1,084	294	0	176	1,023	168	0	238	654	150	1	193	878	678	5,796	0
Peak Hour All	**0**	**139**	**544**	**154**	**0**	**94**	**505**	**81**	**0**	**122**	**335**	**79**	**0**	**95**	**453**	**334**	**2,935**	**0**
Peak Hour HV	**0**	**3**	**3**	**0**	**0**	**1**	**1**	**2**	**0**	**1**	**0**	**0**	**0**	**4**	**1**	**4**	**20**	**0**
Peak Hour HV%	**-**	**2%**	**1%**	**0%**	**-**	**1%**	**0%**	**2%**	**-**	**1%**	**0%**	**0%**	**-**	**4%**	**0%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	3	1	1	1	*6*	0	0	0	0	*0*	3	7	9	2	*21*
4:15 PM	6	2	1	2	*11*	1	0	0	1	*2*	8	7	17	6	*38*
4:30 PM	**3**	**2**	**0**	**2**	***7***	**0**	**2**	**0**	**0**	***2***	**5**	**8**	**13**	**3**	*29*
4:45 PM	**1**	**1**	**1**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**4**	**10**	**15**	**5**	*34*
5:00 PM	**2**	**0**	**0**	**1**	***3***	**1**	**3**	**0**	**0**	***4***	**8**	**5**	**15**	**6**	*34*
5:15 PM	**0**	**1**	**0**	**2**	***3***	**0**	**1**	**0**	**0**	***1***	**7**	**3**	**10**	**4**	***24***
5:30 PM	2	0	0	2	*4*	0	0	0	0	*0*	3	4	18	3	*28*
5:45 PM	2	1	0	2	*5*	0	0	0	0	*0*	4	6	8	1	*19*
Count Total	19	8	3	16	*46*	2	6	0	1	*9*	42	50	105	30	*227*
Peak Hour	**6**	**4**	**1**	**9**	***20***	**1**	**6**	**0**	**0**	***7***	**24**	**26**	**53**	**18**	***121***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E California Blvd				E California Blvd				S Lake Ave				S Lake Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	2	0	0	0	1	0	0	1	0	0	0	0	0	1	6	0
4:15 PM	0	2	3	1	0	1	0	1	0	0	0	1	0	1	0	1	11	0
4:30 PM	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**7**	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**2**	**7**	31
5:00 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	28
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**	**20**
5:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	4	17
5:45 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	1	5	15
Count Total	0	8	10	1	0	2	3	3	0	2	0	1	0	6	1	9	46	0
Peak Hour	**0**	**3**	**3**	**0**	**0**	**1**	**1**	**2**	**0**	**1**	**0**	**0**	**0**	**4**	**1**	**4**	**20**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E California Blvd			E California Blvd			S Lake Ave			S Lake Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	1	0	2	0
4:30 PM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:00 PM	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	8
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Count Total	0	2	0	0	6	0	0	0	0	0	1	0	9	0
Peak Hour	**0**	**1**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

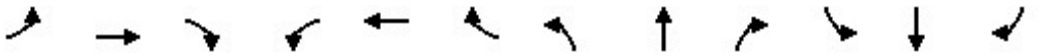
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Date: Tuesday, December 10th, 2024
Location: S Oak Knoll Ave_N-O E Del Mar Blvd
Site Code: 01
Time: 24 Hour

Light Vehicles					Heavy Vehicles					All Vehicles				
Time	NB	SB	Total	Total	Time	NB	SB	Total	Total	Time	NB	SB	Total	Total
0:00	3	2	5	11	0:00	0	0	0	0	0:00	3	2	5	11
0:15	4	0	4		0:15	0	0	0		0:15	4	0	4	
0:30	1	1	2		0:30	0	0	0		0:30	1	1	2	
0:45	0	0	0		0:45	0	0	0		0:45	0	0	0	
1:00	0	0	0	1	1:00	0	0	0	0	1:00	0	0	0	1
1:15	0	0	0		1:15	0	0	0		1:15	0	0	0	
1:30	0	1	1		1:30	0	0	0		1:30	0	1	1	
1:45	0	0	0		1:45	0	0	0		1:45	0	0	0	
2:00	0	1	1	5	2:00	0	0	0	0	2:00	0	1	1	5
2:15	0	1	1		2:15	0	0	0		2:15	0	1	1	
2:30	0	2	2		2:30	0	0	0		2:30	0	2	2	
2:45	0	1	1		2:45	0	0	0		2:45	0	1	1	
3:00	0	1	1	3	3:00	0	0	0	0	3:00	0	1	1	3
3:15	0	1	1		3:15	0	0	0		3:15	0	1	1	
3:30	0	1	1		3:30	0	0	0		3:30	0	1	1	
3:45	0	0	0		3:45	0	0	0		3:45	0	0	0	
4:00	1	0	1	4	4:00	0	1	1	3	4:00	1	1	2	7
4:15	0	1	1		4:15	0	1	1		4:15	0	2	2	
4:30	0	1	1		4:30	0	0	0		4:30	0	1	1	
4:45	0	1	1		4:45	0	1	1		4:45	0	2	2	
5:00	0	0	0	6	5:00	0	0	0	0	5:00	0	0	0	6
5:15	0	1	1		5:15	0	0	0		5:15	0	1	1	
5:30	1	2	3		5:30	0	0	0		5:30	1	2	3	
5:45	1	1	2		5:45	0	0	0		5:45	1	1	2	
6:00	2	5	7	44	6:00	1	0	1	1	6:00	3	5	8	45
6:15	2	11	13		6:15	0	0	0		6:15	2	11	13	
6:30	4	9	13		6:30	0	0	0		6:30	4	9	13	
6:45	4	7	11		6:45	0	0	0		6:45	4	7	11	
7:00	4	10	14	95	7:00	0	2	2	4	7:00	4	12	16	99
7:15	3	8	11		7:15	0	0	0		7:15	3	8	11	
7:30	8	14	22		7:30	0	1	1		7:30	8	15	23	
7:45	13	35	48		7:45	0	1	1		7:45	13	36	49	
8:00	18	44	62	221	8:00	0	0	0	4	8:00	18	44	62	225
8:15	15	43	58		8:15	1	1	2		8:15	16	44	60	
8:30	12	37	49		8:30	1	0	1		8:30	13	37	50	
8:45	15	37	52		8:45	0	1	1		8:45	15	38	53	
9:00	9	26	35	115	9:00	0	0	0	2	9:00	9	26	35	117
9:15	10	17	27		9:15	0	0	0		9:15	10	17	27	
9:30	11	19	30		9:30	0	0	0		9:30	11	19	30	
9:45	8	15	23		9:45	0	2	2		9:45	8	17	25	
10:00	7	22	29	129	10:00	0	1	1	1	10:00	7	23	30	130
10:15	7	30	37		10:15	0	0	0		10:15	7	30	37	
10:30	9	19	28		10:30	0	0	0		10:30	9	19	28	
10:45	10	25	35		10:45	0	0	0		10:45	10	25	35	
11:00	10	24	34	152	11:00	2	2	4	8	11:00	12	26	38	160
11:15	11	27	38		11:15	0	2	2		11:15	11	29	40	
11:30	11	28	39		11:30	0	2	2		11:30	11	30	41	
11:45	13	28	41		11:45	0	0	0		11:45	13	28	41	
12:00	17	24	41	177	12:00	0	0	0	2	12:00	17	24	41	179
12:15	12	26	38		12:15	0	1	1		12:15	12	27	39	
12:30	16	35	51		12:30	0	0	0		12:30	16	35	51	
12:45	15	32	47		12:45	0	1	1		12:45	15	33	48	
13:00	12	28	40	158	13:00	0	0	0	3	13:00	12	28	40	161
13:15	13	29	42		13:15	1	0	1		13:15	14	29	43	
13:30	14	28	42		13:30	0	1	1		13:30	14	29	43	
13:45	13	21	34		13:45	0	1	1		13:45	13	22	35	
14:00	15	31	46	179	14:00	1	2	3	4	14:00	16	33	49	183
14:15	15	25	40		14:15	0	0	0		14:15	15	25	40	
14:30	10	29	39		14:30	0	0	0		14:30	10	29	39	
14:45	13	41	54		14:45	0	1	1		14:45	13	42	55	
15:00	25	47	72	210	15:00	0	0	0	1	15:00	25	47	72	211
15:15	24	39	63		15:15	0	0	0		15:15	24	39	63	
15:30	14	22	36		15:30	0	1	1		15:30	14	23	37	
15:45	11	28	39		15:45	0	0	0		15:45	11	28	39	
16:00	13	40	53	200	16:00	0	0	0	0	16:00	13	40	53	200
16:15	12	29	41		16:15	0	0	0		16:15	12	29	41	
16:30	8	40	48		16:30	0	0	0		16:30	8	40	48	
16:45	17	41	58		16:45	0	0	0		16:45	17	41	58	
17:00	19	37	56	215	17:00	0	0	0	0	17:00	19	37	56	215
17:15	15	32	47		17:15	0	0	0		17:15	15	32	47	
17:30	11	38	49		17:30	0	0	0		17:30	11	38	49	
17:45	21	42	63		17:45	0	0	0		17:45	21	42	63	
18:00	12	31	43	186	18:00	0	0	0	3	18:00	12	31	43	189
18:15	12	38	50		18:15	1	0	1		18:15	13	38	51	
18:30	16	28	44		18:30	0	0	0		18:30	16	28	44	
18:45	16	33	49		18:45	0	2	2		18:45	16	35	51	
19:00	12	26	38	149	19:00	0	0	0	0	19:00	12	26	38	149
19:15	10	24	34		19:15	0	0	0		19:15	10	24	34	
19:30	9	33	42		19:30	0	0	0		19:30	9	33	42	
19:45	15	20	35		19:45	0	0	0		19:45	15	20	35	
20:00	12	17	29	128	20:00	0	0	0	0	20:00	12	17	29	128
20:15	9	23	32		20:15	0	0	0		20:15	9	23	32	
20:30	15	25	40		20:30	0	0	0		20:30	15	25	40	
20:45	8	19	27		20:45	0	0	0		20:45	8	19	27	
21:00	7	19	26	68	21:00	0	0	0	0	21:00	7	19	26	68
21:15	5	13	18		21:15	0	0	0		21:15	5	13	18	
21:30	3	15	18		21:30	0	0	0		21:30	3	15	18	
21:45	3	3	6		21:45	0	0	0		21:45	3	3	6	
22:00	5	11	16	51	22:00	0	0	0	0	22:00	5	11	16	51
22:15	3	3	6		22:15	0	0	0		22:15	3	3	6	
22:30	2	5	7		22:30	0	0	0		22:30	2	5	7	
22:45	4	18	22		22:45	0	0	0		22:45	4	18	22	
23:00	2	7	9	22	23:00	0	0	0	0	23:00	2	7	9	22
23:15	2	2	4		23:15	0	0	0		23:15	2	2	4	
23:30	2	1	3		23:30	0	0	0		23:30	2	1	3	
23:45	4	2	6		23:45	0	0	0		23:45	4	2	6	
Total:	770	1,759	2,529		Total:	3	10	36		Total:	778	1,787	2,565	

APPENDIX B – LOS CALCULATION SHEETS

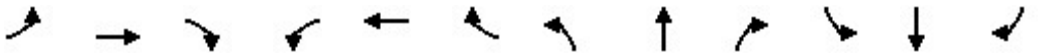
Existing Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	561	54	42	754	41	54	232	106	26	68	26
Future Volume (veh/h)	32	561	54	42	754	41	54	232	106	26	68	26
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1786	1786	1786	1786	1786	1786
Adj Flow Rate, veh/h	34	603	58	45	811	44	58	249	114	28	73	28
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	305	1219	117	365	1276	69	157	361	151	182	373	121
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	578	3104	298	692	3247	176	138	1061	445	188	1097	356
Grp Volume(v), veh/h	34	327	334	45	420	435	421	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	578	1683	1718	692	1683	1740	1644	0	0	1642	0	0
Q Serve(g_s), s	1.9	5.4	5.4	1.9	7.5	7.5	3.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.4	5.4	5.4	7.4	7.5	7.5	8.3	0.0	0.0	2.0	0.0	0.0
Prop In Lane	1.00		0.17	1.00		0.10	0.14		0.27	0.22		0.22
Lane Grp Cap(c), veh/h	305	661	675	365	661	684	669	0	0	676	0	0
V/C Ratio(X)	0.11	0.49	0.50	0.12	0.64	0.64	0.63	0.00	0.00	0.19	0.00	0.00
Avail Cap(c_a), veh/h	423	1005	1026	506	1005	1039	1122	0	0	1088	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.9	8.5	8.5	11.3	9.1	9.1	10.8	0.0	0.0	8.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.6	0.6	0.1	1.0	1.0	1.0	0.0	0.0	0.1	0.0	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	0.2	1.4	1.4	0.2	1.9	2.0	2.5	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	9.0	9.0	11.4	10.1	10.1	11.7	0.0	0.0	8.9	0.0	0.0
LnGrp LOS	B	A	A	B	B	B	B	A	A	A	A	A
Approach Vol, veh/h		695			900			421			129	
Approach Delay, s/veh		9.2			10.2			11.7			8.9	
Approach LOS		A			B			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		17.9		19.1		17.9		19.1				
Change Period (Y+Rc), s		5.3		4.6		5.3		4.6				
Max Green Setting (Gmax), s		23.0		22.1		23.0		22.1				
Max Q Clear Time (g_c+I1), s		10.3		11.4		4.0		9.5				
Green Ext Time (p_c), s		2.3		3.2		0.7		4.5				

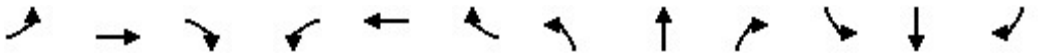
Intersection Summary												
HCM 6th Ctrl Delay			10.1									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	645	0	0	786	56	39	292	90	25	103	28
Future Volume (veh/h)	30	645	0	0	786	56	39	292	90	25	103	28
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	0	1786	1786	1800	1800	1800	1786	1715	1715
Adj Flow Rate, veh/h	32	686	0	0	836	60	41	311	96	27	110	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	0	1	1	0	0	0	1	1	1
Cap, veh/h	286	1350	0	0	1287	92	127	424	124	164	499	495
Arrive On Green	0.40	0.40	0.00	0.00	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	556	3455	0	0	3300	230	84	1246	363	164	1466	1453
Grp Volume(v), veh/h	32	686	0	0	442	454	448	0	0	137	0	30
Grp Sat Flow(s),veh/h/ln	556	1683	0	0	1697	1744	1693	0	0	1630	0	1453
Q Serve(g_s), s	2.0	6.1	0.0	0.0	8.4	8.4	3.3	0.0	0.0	0.0	0.0	0.6
Cycle Q Clear(g_c), s	10.4	6.1	0.0	0.0	8.4	8.4	9.3	0.0	0.0	2.3	0.0	0.6
Prop In Lane	1.00		0.00	0.00		0.13	0.09		0.21	0.20		1.00
Lane Grp Cap(c), veh/h	286	1350	0	0	680	699	675	0	0	663	0	495
V/C Ratio(X)	0.11	0.51	0.00	0.00	0.65	0.65	0.66	0.00	0.00	0.21	0.00	0.06
Avail Cap(c_a), veh/h	379	1910	0	0	962	990	1031	0	0	974	0	806
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	9.0	0.0	0.0	9.7	9.7	11.7	0.0	0.0	9.4	0.0	8.8
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.0	1.1	1.0	1.1	0.0	0.0	0.2	0.0	0.1
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	0.2	1.7	0.0	0.0	2.4	2.5	3.0	0.0	0.0	0.7	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	9.3	0.0	0.0	10.7	10.7	12.8	0.0	0.0	9.6	0.0	8.9
LnGrp LOS	B	A	A	A	B	B	B	A	A	A	A	A
Approach Vol, veh/h		718			896			448			167	
Approach Delay, s/veh		9.5			10.7			12.8			9.4	
Approach LOS		A			B			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.4		18.5		21.4		18.5				
Change Period (Y+Rc), s		5.4		4.9		5.4		4.9				
Max Green Setting (Gmax), s		22.6		22.1		22.6		22.1				
Max Q Clear Time (g_c+I1), s		12.4		11.3		10.4		4.3				
Green Ext Time (p_c), s		3.6		2.2		4.6		0.8				

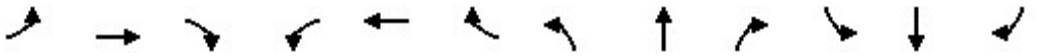
Intersection Summary												
HCM 6th Ctrl Delay			10.6									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	620	64	92	728	19	52	33	20	28	101	40
Future Volume (vph)	11	620	64	92	728	19	52	33	20	28	101	40
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	12	12	12	12	12	12
Total Lost time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1478	3196		1478	3229			1677			1711	
Flt Permitted	0.29	1.00		0.33	1.00			0.80			0.93	
Satd. Flow (perm)	454	3196		510	3229			1367			1608	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	12	667	69	99	783	20	56	35	22	30	109	43
RTOR Reduction (vph)	0	11	0	0	2	0	0	16	0	0	21	0
Lane Group Flow (vph)	12	725	0	99	801	0	0	97	0	0	161	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	21.6	21.6		21.6	21.6			10.8			10.8	
Effective Green, g (s)	21.6	21.6		21.6	21.6			10.8			10.8	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.21			0.21	
Clearance Time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	194	1372		219	1386			293			345	
v/s Ratio Prot		0.23			c0.25							
v/s Ratio Perm	0.03			0.19				0.07			c0.10	
v/c Ratio	0.06	0.53		0.45	0.58			0.33			0.47	
Uniform Delay, d1	8.4	10.6		10.2	10.9			16.7			17.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.4		1.5	0.6			0.7			1.0	
Delay (s)	8.5	11.0		11.6	11.5			17.4			18.2	
Level of Service	A	B		B	B			B			B	
Approach Delay (s)		10.9			11.5			17.4			18.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	50.3	Sum of lost time (s)	15.9
Intersection Capacity Utilization	57.6%	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)	159	479	111	72	702	91	102	576	65	90	444	227
Future Volume (veh/h)	159	479	111	72	702	91	102	576	65	90	444	227
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1660	1758	1758
Adj Flow Rate, veh/h	169	510	0	77	747	0	109	613	69	96	472	241
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	331	985		388	909		346	749	84	312	862	384
Arrive On Green	0.12	0.29	0.00	0.10	0.27	0.00	0.10	0.25	0.25	0.11	0.26	0.26
Sat Flow, veh/h	1594	3367	1502	1594	3367	1502	1594	3051	343	1581	3340	1490
Grp Volume(v), veh/h	169	510	0	77	747	0	109	338	344	96	472	241
Grp Sat Flow(s),veh/h/ln	1594	1683	1502	1594	1683	1502	1594	1683	1710	1581	1670	1490
Q Serve(g_s), s	5.2	9.1	0.0	2.3	15.0	0.0	3.5	13.7	13.7	3.0	8.8	10.3
Cycle Q Clear(g_c), s	5.2	9.1	0.0	2.3	15.0	0.0	3.5	13.7	13.7	3.0	8.8	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	331	985		388	909		346	414	420	312	862	384
V/C Ratio(X)	0.51	0.52		0.20	0.82		0.32	0.82	0.82	0.31	0.55	0.63
Avail Cap(c_a), veh/h	344	1076		437	1076		372	489	497	319	970	433
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	21.3	0.0	15.6	24.7	0.0	17.2	25.7	25.7	17.5	23.2	23.7
Incr Delay (d2), s/veh	1.2	0.4	0.0	0.2	4.5	0.0	0.5	9.0	9.1	0.6	0.5	2.4
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	1.8	3.4	0.0	0.8	6.1	0.0	1.3	6.3	6.4	1.1	3.4	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	21.7	0.0	15.8	29.2	0.0	17.7	34.7	34.8	18.0	23.7	26.1
LnGrp LOS	B	C		B	C		B	C	C	B	C	C
Approach Vol, veh/h		679	A		824	A		791			809	
Approach Delay, s/veh		20.9			28.0			32.4			23.7	
Approach LOS		C			C			C			C	

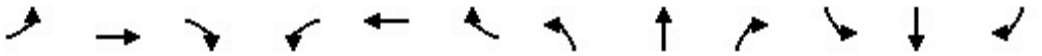
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	22.4	11.3	26.4	11.3	23.3	12.9	24.8
Change Period (Y+Rc), s	* 4.2	4.6	* 4.2	5.3	* 4.2	4.6	* 4.2	5.3
Max Green Setting (Gmax), s	* 8.3	21.0	* 9.3	23.1	* 8.3	21.0	* 9.3	23.1
Max Q Clear Time (g_c+I1), s	5.0	15.7	4.3	11.1	5.5	12.3	7.2	17.0
Green Ext Time (p_c), s	0.1	2.0	0.1	2.6	0.1	2.7	0.1	2.5

Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C

Notes

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

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



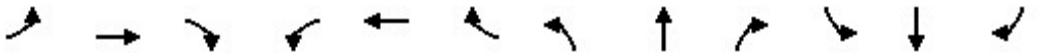
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	365	97	64	551	44	164	543	69	91	313	205
Future Volume (veh/h)	141	365	97	64	551	44	164	543	69	91	313	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1687	1786	1786	1673	1772	1772
Adj Flow Rate, veh/h	148	384	102	67	580	46	173	572	73	96	329	216
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	183	486	412	136	774	61	211	1321	168	274	422	529
Arrive On Green	0.11	0.27	0.27	0.08	0.24	0.24	0.13	0.44	0.44	0.24	0.24	0.24
Sat Flow, veh/h	1606	1786	1514	1606	3185	252	1606	3028	385	703	1772	1502
Grp Volume(v), veh/h	148	384	102	67	308	318	173	320	325	96	329	216
Grp Sat Flow(s),veh/h/ln	1606	1786	1514	1606	1697	1741	1606	1697	1717	703	1772	1502
Q Serve(g_s), s	6.1	13.5	3.6	2.7	11.4	11.4	7.1	8.9	8.9	8.1	11.7	7.4
Cycle Q Clear(g_c), s	6.1	13.5	3.6	2.7	11.4	11.4	7.1	8.9	8.9	8.1	11.7	7.4
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	183	486	412	136	412	423	211	740	749	274	422	529
V/C Ratio(X)	0.81	0.79	0.25	0.49	0.75	0.75	0.82	0.43	0.43	0.35	0.78	0.41
Avail Cap(c_a), veh/h	281	764	647	190	630	647	297	982	993	336	579	662
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	29.2	22.8	19.2	29.5	23.7	23.7	28.6	13.2	13.3	22.7	24.1	16.6
Incr Delay (d2), s/veh	9.8	3.0	0.3	2.7	2.7	2.7	11.7	0.4	0.4	0.8	4.6	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	2.7	5.7	1.2	1.1	4.6	4.7	3.3	3.2	3.3	1.4	5.2	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	25.8	19.5	32.3	26.4	26.4	40.3	13.6	13.7	23.5	28.7	17.1
LnGrp LOS	D	C	B	C	C	C	D	B	B	C	C	B
Approach Vol, veh/h		634			693			818			641	
Approach Delay, s/veh		27.9			27.0			19.3			24.0	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	23.3		34.4	11.9	21.3	13.4	21.0				
Change Period (Y+Rc), s	* 4.2	4.9		4.9	* 4.2	4.9	4.5	4.9				
Max Green Setting (Gmax), s	* 8	28.9		39.1	* 12	25.1	12.5	22.1				
Max Q Clear Time (g_c+I1), s	4.7	15.5		10.9	8.1	13.4	9.1	13.7				
Green Ext Time (p_c), s	0.0	2.3		4.6	0.1	3.0	0.1	2.4				

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

Notes

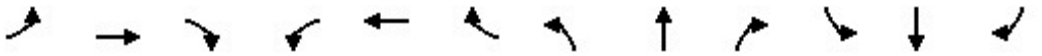
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	857	108	114	934	44	41	193	73	32	284	38
Future Volume (veh/h)	49	857	108	114	934	44	41	193	73	32	284	38
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	52	902	114	120	983	46	43	203	77	34	299	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	0	0	0	0	0	0
Cap, veh/h	308	1599	202	310	1741	81	119	313	109	103	396	50
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	494	3031	383	500	3300	154	135	1151	403	87	1457	186
Grp Volume(v), veh/h	52	505	511	120	505	524	323	0	0	373	0	0
Grp Sat Flow(s),veh/h/ln	494	1697	1717	500	1697	1758	1689	0	0	1730	0	0
Q Serve(g_s), s	3.9	9.9	9.9	10.5	9.9	9.9	0.0	0.0	0.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	13.8	9.9	9.9	20.3	9.9	9.9	8.2	0.0	0.0	9.7	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.09	0.13		0.24	0.09		0.11
Lane Grp Cap(c), veh/h	308	895	906	310	895	927	542	0	0	550	0	0
V/C Ratio(X)	0.17	0.56	0.56	0.39	0.56	0.56	0.60	0.00	0.00	0.68	0.00	0.00
Avail Cap(c_a), veh/h	332	978	989	334	978	1013	806	0	0	830	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.5	7.8	7.8	14.7	7.8	7.8	16.1	0.0	0.0	16.6	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.6	0.6	0.8	0.6	0.6	1.1	0.0	0.0	1.5	0.0	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	0.4	2.6	2.6	1.0	2.6	2.7	3.1	0.0	0.0	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.7	8.5	8.5	15.5	8.5	8.4	17.1	0.0	0.0	18.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		1068			1149			323			373	
Approach Delay, s/veh		8.7			9.2			17.1			18.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.7		30.6		18.7		30.6				
Change Period (Y+Rc), s		5.3		4.6		5.3		4.6				
Max Green Setting (Gmax), s		21.7		28.4		21.7		28.4				
Max Q Clear Time (g_c+I1), s		10.2		15.8		11.7		22.3				
Green Ext Time (p_c), s		1.6		5.7		1.7		3.7				

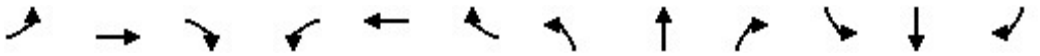
Intersection Summary												
HCM 6th Ctrl Delay			11.0									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	802	2	0	724	52	28	216	67	78	407	43
Future Volume (veh/h)	38	802	2	0	724	52	28	216	67	78	407	43
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	0	1786	1786	1800	1800	1800	1800	1728	1728
Adj Flow Rate, veh/h	40	844	2	0	762	55	29	227	71	82	428	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	0	1	1	0	0	0	0	0	0
Cap, veh/h	266	1277	3	0	1180	85	104	401	115	161	552	584
Arrive On Green	0.37	0.37	0.37	0.00	0.37	0.37	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	603	3473	8	0	3299	232	38	1006	289	166	1383	1464
Grp Volume(v), veh/h	40	412	434	0	403	414	327	0	0	510	0	45
Grp Sat Flow(s),veh/h/ln	603	1697	1784	0	1697	1744	1333	0	0	1549	0	1464
Q Serve(g_s), s	2.6	9.0	9.0	0.0	8.7	8.7	1.0	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	11.3	9.0	9.0	0.0	8.7	8.7	13.9	0.0	0.0	12.9	0.0	0.8
Prop In Lane	1.00		0.00	0.00		0.13	0.09		0.22	0.16		1.00
Lane Grp Cap(c), veh/h	266	624	656	0	624	641	621	0	0	712	0	584
V/C Ratio(X)	0.15	0.66	0.66	0.00	0.65	0.65	0.53	0.00	0.00	0.72	0.00	0.08
Avail Cap(c_a), veh/h	312	754	793	0	754	775	891	0	0	976	0	833
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.2	11.7	11.7	0.0	11.6	11.6	10.0	0.0	0.0	11.6	0.0	8.2
Incr Delay (d2), s/veh	0.3	1.6	1.5	0.0	1.4	1.4	0.7	0.0	0.0	1.6	0.0	0.1
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	0.3	2.9	3.1	0.0	2.8	2.9	2.0	0.0	0.0	3.8	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.5	13.3	13.2	0.0	13.0	12.9	10.7	0.0	0.0	13.2	0.0	8.3
LnGrp LOS	B	B	B	A	B	B	B	A	A	B	A	A
Approach Vol, veh/h		886			817			327			555	
Approach Delay, s/veh		13.4			13.0			10.7			12.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.6		22.5		21.6		22.5				
Change Period (Y+Rc), s		5.4		4.9		5.4		4.9				
Max Green Setting (Gmax), s		19.6		25.1		19.6		25.1				
Max Q Clear Time (g_c+I1), s		13.3		15.9		10.7		14.9				
Green Ext Time (p_c), s		2.9		1.4		3.4		2.7				

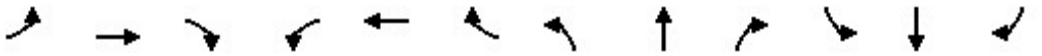
Intersection Summary												
HCM 6th Ctrl Delay			12.8									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	928	31	36	1024	12	29	17	37	28	67	59
Future Volume (vph)	28	928	31	36	1024	12	29	17	37	28	67	59
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	12	12	12	12	12	12
Total Lost time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.94			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1492	3258		1492	3268			1646			1691	
Flt Permitted	0.17	1.00		0.20	1.00			0.83			0.92	
Satd. Flow (perm)	265	3258		313	3268			1386			1577	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	31	1031	34	40	1138	13	32	19	41	31	74	66
RTOR Reduction (vph)	0	3	0	0	1	0	0	35	0	0	46	0
Lane Group Flow (vph)	31	1062	0	40	1150	0	0	57	0	0	125	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	24.6	24.6		24.6	24.6			7.9			7.9	
Effective Green, g (s)	24.6	24.6		24.6	24.6			7.9			7.9	
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.16			0.16	
Clearance Time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	129	1590		152	1595			217			247	
v/s Ratio Prot		0.33			c0.35							
v/s Ratio Perm	0.12			0.13				0.04			c0.08	
v/c Ratio	0.24	0.67		0.26	0.72			0.26			0.51	
Uniform Delay, d1	7.5	9.8		7.6	10.2			18.7			19.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	1.1		0.9	1.6			0.7			1.6	
Delay (s)	8.4	10.9		8.5	11.8			19.4			21.1	
Level of Service	A	B		A	B			B			C	
Approach Delay (s)		10.8			11.7			19.4			21.1	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	50.4	Sum of lost time (s)	15.9
Intersection Capacity Utilization	51.9%	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)	131	791	230	101	618	143	96	432	125	134	558	160
Future Volume (veh/h)	131	791	230	101	618	143	96	432	125	134	558	160
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1687	1786	1786	1687	1786	1786
Adj Flow Rate, veh/h	136	824	0	105	644	0	100	450	130	140	581	167
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	377	995		321	970		311	577	165	328	807	360
Arrive On Green	0.12	0.29	0.00	0.11	0.29	0.00	0.10	0.22	0.22	0.11	0.24	0.24
Sat Flow, veh/h	1606	3393	1514	1606	3393	1514	1606	2603	746	1606	3393	1514
Grp Volume(v), veh/h	136	824	0	105	644	0	100	292	288	140	581	167
Grp Sat Flow(s),veh/h/ln	1606	1697	1514	1606	1697	1514	1606	1697	1652	1606	1697	1514
Q Serve(g_s), s	3.9	16.0	0.0	3.0	11.8	0.0	3.2	11.4	11.6	4.5	11.1	6.7
Cycle Q Clear(g_c), s	3.9	16.0	0.0	3.0	11.8	0.0	3.2	11.4	11.6	4.5	11.1	6.7
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	377	995		321	970		311	376	366	328	807	360
V/C Ratio(X)	0.36	0.83		0.33	0.66		0.32	0.78	0.79	0.43	0.72	0.46
Avail Cap(c_a), veh/h	399	1152		354	1152		343	487	474	335	974	434
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	23.2	0.0	15.7	22.2	0.0	18.2	25.8	25.8	18.2	24.7	23.0
Incr Delay (d2), s/veh	0.6	4.6	0.0	0.6	1.1	0.0	0.6	5.9	6.5	0.9	2.1	0.9
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	1.3	6.5	0.0	1.0	4.5	0.0	1.2	5.0	5.0	1.7	4.5	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	27.8	0.0	16.3	23.3	0.0	18.8	31.6	32.3	19.1	26.8	23.9
LnGrp LOS	B	C		B	C		B	C	C	B	C	C
Approach Vol, veh/h		960	A		749	A		680			888	
Approach Delay, s/veh		26.0			22.3			30.0			25.0	
Approach LOS		C			C			C			C	

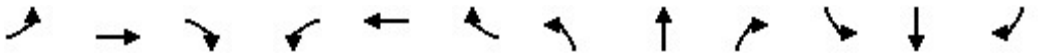
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	20.2	12.0	25.9	11.1	21.3	12.6	25.4
Change Period (Y+Rc), s	* 4.2	4.6	* 4.2	5.3	* 4.2	4.6	* 4.2	5.3
Max Green Setting (Gmax), s	* 8.3	20.2	* 9.3	23.9	* 8.3	20.2	* 9.3	23.9
Max Q Clear Time (g_c+I1), s	6.5	13.6	5.0	18.0	5.2	13.1	5.9	13.8
Green Ext Time (p_c), s	0.1	2.0	0.1	2.7	0.1	2.7	0.1	3.0

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

Notes

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	544	154	94	505	81	122	335	79	95	453	334
Future Volume (veh/h)	139	544	154	94	505	81	122	335	79	95	453	334
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1700	1800	1800	1687	1786	1786
Adj Flow Rate, veh/h	142	555	157	96	515	83	124	342	81	97	462	341
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	0	0	0	1	1	1
Cap, veh/h	172	590	500	133	896	144	146	1175	275	330	510	594
Arrive On Green	0.11	0.33	0.33	0.08	0.31	0.31	0.09	0.43	0.43	0.29	0.29	0.29
Sat Flow, veh/h	1606	1786	1514	1606	2928	470	1619	2751	643	869	1786	1514
Grp Volume(v), veh/h	142	555	157	96	298	300	124	211	212	97	462	341
Grp Sat Flow(s),veh/h/ln	1606	1786	1514	1606	1697	1701	1619	1710	1684	869	1786	1514
Q Serve(g_s), s	7.6	26.4	6.8	5.1	12.9	13.0	6.6	7.1	7.2	7.9	21.8	15.5
Cycle Q Clear(g_c), s	7.6	26.4	6.8	5.1	12.9	13.0	6.6	7.1	7.2	7.9	21.8	15.5
Prop In Lane	1.00		1.00	1.00		0.28	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	172	590	500	133	519	520	146	730	719	330	510	594
V/C Ratio(X)	0.83	0.94	0.31	0.72	0.57	0.58	0.85	0.29	0.29	0.29	0.91	0.57
Avail Cap(c_a), veh/h	231	602	510	147	519	520	146	752	741	342	533	613
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	38.3	28.5	21.9	39.2	25.6	25.6	39.2	16.4	16.4	25.1	30.1	20.8
Incr Delay (d2), s/veh	16.2	22.9	0.4	14.5	1.5	1.6	34.7	0.2	0.2	0.5	18.8	1.2
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	3.7	14.5	2.4	2.5	5.3	5.3	4.0	2.8	2.8	1.7	11.8	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	51.3	22.2	53.7	27.1	27.2	74.0	16.6	16.7	25.6	48.9	22.1
LnGrp LOS	D	D	C	D	C	C	E	B	B	C	D	C
Approach Vol, veh/h		854			694			547			900	
Approach Delay, s/veh		46.5			30.8			29.6			36.2	
Approach LOS		D			C			C			D	

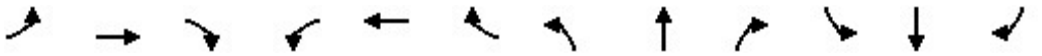
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	33.8		42.3	13.6	31.7	12.4	29.9				
Change Period (Y+Rc), s	* 4.2	4.9		4.9	* 4.2	4.9	4.5	4.9				
Max Green Setting (Gmax), s	* 8	29.5		38.5	* 13	24.9	7.9	26.1				
Max Q Clear Time (g_c+I1), s	7.1	28.4		9.2	9.6	15.0	8.6	23.8				
Green Ext Time (p_c), s	0.0	0.5		2.8	0.1	2.6	0.0	1.1				

Intersection Summary			
HCM 6th Ctrl Delay		36.7	
HCM 6th LOS		D	

Notes

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

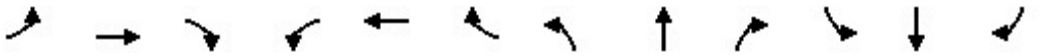
Existing with Project Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	562	54	42	757	43	54	232	106	27	68	26
Future Volume (veh/h)	32	562	54	42	757	43	54	232	106	27	68	26
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1786	1786	1786	1786	1786	1786
Adj Flow Rate, veh/h	34	604	58	45	814	46	58	249	114	29	73	28
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	303	1222	117	365	1276	72	157	360	151	186	370	120
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	575	3104	298	692	3239	183	138	1061	445	197	1090	353
Grp Volume(v), veh/h	34	327	335	45	423	437	421	0	0	130	0	0
Grp Sat Flow(s),veh/h/ln	575	1683	1718	692	1683	1739	1644	0	0	1641	0	0
Q Serve(g_s), s	1.9	5.4	5.4	1.9	7.6	7.6	3.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.4	5.4	5.4	7.4	7.6	7.6	8.3	0.0	0.0	2.0	0.0	0.0
Prop In Lane	1.00		0.17	1.00		0.11	0.14		0.27	0.22		0.22
Lane Grp Cap(c), veh/h	303	663	677	365	663	685	669	0	0	676	0	0
V/C Ratio(X)	0.11	0.49	0.49	0.12	0.64	0.64	0.63	0.00	0.00	0.19	0.00	0.00
Avail Cap(c_a), veh/h	419	1002	1023	504	1002	1035	1119	0	0	1084	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.9	8.5	8.5	11.3	9.1	9.1	10.8	0.0	0.0	8.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.6	0.6	0.1	1.0	1.0	1.0	0.0	0.0	0.1	0.0	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	0.2	1.4	1.4	0.2	2.0	2.0	2.5	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	9.0	9.0	11.4	10.1	10.1	11.8	0.0	0.0	8.9	0.0	0.0
LnGrp LOS	B	A	A	B	B	B	B	A	A	A	A	A
Approach Vol, veh/h		696			905			421			130	
Approach Delay, s/veh		9.2			10.2			11.8			8.9	
Approach LOS		A			B			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		17.9		19.2		17.9		19.2				
Change Period (Y+Rc), s		5.3		4.6		5.3		4.6				
Max Green Setting (Gmax), s		23.0		22.1		23.0		22.1				
Max Q Clear Time (g_c+I1), s		10.3		11.4		4.0		9.6				
Green Ext Time (p_c), s		2.3		3.2		0.7		4.6				

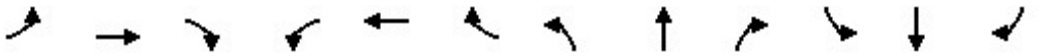
Intersection Summary												
HCM 6th Ctrl Delay			10.1									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	646	0	0	789	56	39	292	90	25	103	28
Future Volume (veh/h)	30	646	0	0	789	56	39	292	90	25	103	28
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	0	1786	1786	1800	1800	1800	1786	1715	1715
Adj Flow Rate, veh/h	32	687	0	0	839	60	41	311	96	27	110	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	0	1	1	0	0	0	1	1	1
Cap, veh/h	286	1352	0	0	1289	92	127	424	123	164	499	495
Arrive On Green	0.40	0.40	0.00	0.00	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	554	3455	0	0	3301	230	84	1246	363	164	1465	1453
Grp Volume(v), veh/h	32	687	0	0	443	456	448	0	0	137	0	30
Grp Sat Flow(s),veh/h/ln	554	1683	0	0	1697	1745	1693	0	0	1630	0	1453
Q Serve(g_s), s	2.0	6.1	0.0	0.0	8.4	8.4	3.3	0.0	0.0	0.0	0.0	0.6
Cycle Q Clear(g_c), s	10.4	6.1	0.0	0.0	8.4	8.4	9.4	0.0	0.0	2.3	0.0	0.6
Prop In Lane	1.00		0.00	0.00		0.13	0.09		0.21	0.20		1.00
Lane Grp Cap(c), veh/h	286	1352	0	0	681	700	675	0	0	663	0	495
V/C Ratio(X)	0.11	0.51	0.00	0.00	0.65	0.65	0.66	0.00	0.00	0.21	0.00	0.06
Avail Cap(c_a), veh/h	377	1907	0	0	961	988	1029	0	0	973	0	805
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	9.0	0.0	0.0	9.7	9.7	11.7	0.0	0.0	9.4	0.0	8.9
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.0	1.1	1.0	1.1	0.0	0.0	0.2	0.0	0.1
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	0.2	1.7	0.0	0.0	2.4	2.5	3.0	0.0	0.0	0.7	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	9.3	0.0	0.0	10.7	10.7	12.9	0.0	0.0	9.6	0.0	8.9
LnGrp LOS	B	A	A	A	B	B	B	A	A	A	A	A
Approach Vol, veh/h		719			899			448			167	
Approach Delay, s/veh		9.5			10.7			12.9			9.5	
Approach LOS		A			B			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.4		18.5		21.4		18.5				
Change Period (Y+Rc), s		5.4		4.9		5.4		4.9				
Max Green Setting (Gmax), s		22.6		22.1		22.6		22.1				
Max Q Clear Time (g_c+I1), s		12.4		11.4		10.4		4.3				
Green Ext Time (p_c), s		3.6		2.2		4.6		0.8				

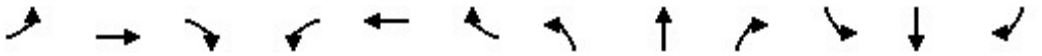
Intersection Summary												
HCM 6th Ctrl Delay			10.7									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	620	65	94	728	19	56	34	25	28	102	40
Future Volume (vph)	11	620	65	94	728	19	56	34	25	28	102	40
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	12	12	12	12	12	12
Total Lost time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1478	3195		1478	3229			1672			1712	
Flt Permitted	0.29	1.00		0.33	1.00			0.79			0.93	
Satd. Flow (perm)	453	3195		508	3229			1356			1606	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	12	667	70	101	783	20	60	37	27	30	110	43
RTOR Reduction (vph)	0	11	0	0	2	0	0	19	0	0	20	0
Lane Group Flow (vph)	12	726	0	101	801	0	0	105	0	0	163	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	21.6	21.6		21.6	21.6			10.9			10.9	
Effective Green, g (s)	21.6	21.6		21.6	21.6			10.9			10.9	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.22			0.22	
Clearance Time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	194	1369		217	1383			293			347	
v/s Ratio Prot		0.23			c0.25							
v/s Ratio Perm	0.03			0.20				0.08			c0.10	
v/c Ratio	0.06	0.53		0.47	0.58			0.36			0.47	
Uniform Delay, d1	8.5	10.6		10.3	10.9			16.8			17.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.4		1.6	0.6			0.8			1.0	
Delay (s)	8.6	11.0		11.9	11.5			17.5			18.2	
Level of Service	A	B		B	B			B			B	
Approach Delay (s)		11.0			11.6			17.5			18.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	12.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	50.4	Sum of lost time (s)	15.9
Intersection Capacity Utilization	58.9%	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)	162	481	111	72	703	91	102	576	65	90	444	228
Future Volume (veh/h)	162	481	111	72	703	91	102	576	65	90	444	228
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1660	1758	1758
Adj Flow Rate, veh/h	172	512	0	77	748	0	109	613	69	96	472	243
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	331	986		388	910		346	749	84	312	862	384
Arrive On Green	0.12	0.29	0.00	0.10	0.27	0.00	0.10	0.25	0.25	0.11	0.26	0.26
Sat Flow, veh/h	1594	3367	1502	1594	3367	1502	1594	3051	343	1581	3340	1490
Grp Volume(v), veh/h	172	512	0	77	748	0	109	338	344	96	472	243
Grp Sat Flow(s),veh/h/ln	1594	1683	1502	1594	1683	1502	1594	1683	1710	1581	1670	1490
Q Serve(g_s), s	5.3	9.2	0.0	2.3	15.1	0.0	3.5	13.7	13.8	3.0	8.8	10.5
Cycle Q Clear(g_c), s	5.3	9.2	0.0	2.3	15.1	0.0	3.5	13.7	13.8	3.0	8.8	10.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	331	986		388	910		346	413	420	312	862	384
V/C Ratio(X)	0.52	0.52		0.20	0.82		0.32	0.82	0.82	0.31	0.55	0.63
Avail Cap(c_a), veh/h	344	1075		436	1075		372	489	497	318	970	433
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	21.3	0.0	15.6	24.8	0.0	17.2	25.7	25.8	17.5	23.2	23.8
Incr Delay (d2), s/veh	1.3	0.4	0.0	0.2	4.5	0.0	0.5	9.0	9.1	0.6	0.5	2.5
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	1.9	3.4	0.0	0.8	6.1	0.0	1.3	6.3	6.4	1.1	3.4	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.4	21.8	0.0	15.9	29.3	0.0	17.8	34.8	34.9	18.0	23.7	26.3
LnGrp LOS	B	C		B	C		B	C	C	B	C	C
Approach Vol, veh/h		684	A		825	A		791			811	
Approach Delay, s/veh		20.9			28.0			32.5			23.8	
Approach LOS		C			C			C			C	

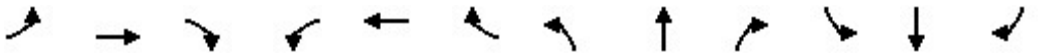
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	22.4	11.3	26.5	11.3	23.3	12.9	24.8
Change Period (Y+Rc), s	* 4.2	4.6	* 4.2	5.3	* 4.2	4.6	* 4.2	5.3
Max Green Setting (Gmax), s	* 8.3	21.0	* 9.3	23.1	* 8.3	21.0	* 9.3	23.1
Max Q Clear Time (g_c+I1), s	5.0	15.8	4.3	11.2	5.5	12.5	7.3	17.1
Green Ext Time (p_c), s	0.1	2.0	0.1	2.6	0.1	2.7	0.1	2.5

Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C

Notes

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

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



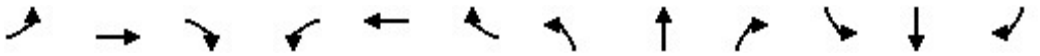
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	367	97	64	552	44	164	543	69	91	313	205
Future Volume (veh/h)	141	367	97	64	552	44	164	543	69	91	313	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1687	1786	1786	1673	1772	1772
Adj Flow Rate, veh/h	148	386	102	67	581	46	173	572	73	96	329	216
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	183	486	412	136	775	61	211	1320	168	274	422	529
Arrive On Green	0.11	0.27	0.27	0.08	0.24	0.24	0.13	0.44	0.44	0.24	0.24	0.24
Sat Flow, veh/h	1606	1786	1514	1606	3186	252	1606	3028	385	703	1772	1502
Grp Volume(v), veh/h	148	386	102	67	309	318	173	320	325	96	329	216
Grp Sat Flow(s),veh/h/ln	1606	1786	1514	1606	1697	1741	1606	1697	1717	703	1772	1502
Q Serve(g_s), s	6.1	13.6	3.6	2.7	11.4	11.4	7.1	8.9	8.9	8.2	11.7	7.4
Cycle Q Clear(g_c), s	6.1	13.6	3.6	2.7	11.4	11.4	7.1	8.9	8.9	8.2	11.7	7.4
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	183	486	412	136	413	423	211	740	748	274	422	529
V/C Ratio(X)	0.81	0.79	0.25	0.49	0.75	0.75	0.82	0.43	0.43	0.35	0.78	0.41
Avail Cap(c_a), veh/h	280	763	647	190	630	646	297	981	993	336	579	662
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	29.2	22.8	19.2	29.6	23.7	23.7	28.6	13.3	13.3	22.7	24.1	16.6
Incr Delay (d2), s/veh	9.8	3.1	0.3	2.7	2.7	2.7	11.8	0.4	0.4	0.8	4.6	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	2.7	5.7	1.2	1.1	4.6	4.7	3.3	3.2	3.3	1.4	5.3	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	25.9	19.5	32.3	26.4	26.4	40.4	13.7	13.7	23.5	28.7	17.1
LnGrp LOS	D	C	B	C	C	C	D	B	B	C	C	B
Approach Vol, veh/h		636			694			818			641	
Approach Delay, s/veh		28.0			27.0			19.3			24.0	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	23.3		34.4	11.9	21.3	13.4	21.0				
Change Period (Y+Rc), s	* 4.2	4.9		4.9	* 4.2	4.9	4.5	4.9				
Max Green Setting (Gmax), s	* 8	28.9		39.1	* 12	25.1	12.5	22.1				
Max Q Clear Time (g_c+I1), s	4.7	15.6		10.9	8.1	13.4	9.1	13.7				
Green Ext Time (p_c), s	0.0	2.3		4.6	0.1	3.0	0.1	2.4				

Intersection Summary			
HCM 6th Ctrl Delay		24.3	
HCM 6th LOS		C	

Notes

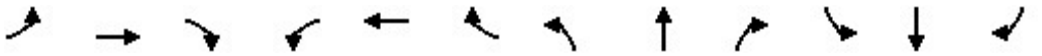
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	859	108	114	936	45	41	193	73	34	284	38
Future Volume (veh/h)	49	859	108	114	936	45	41	193	73	34	284	38
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	52	904	114	120	985	47	43	203	77	36	299	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	0	0	0	0	0	0
Cap, veh/h	306	1598	202	309	1738	83	119	314	110	105	395	50
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	493	3032	382	499	3297	157	135	1151	403	93	1450	184
Grp Volume(v), veh/h	52	506	512	120	507	525	323	0	0	375	0	0
Grp Sat Flow(s),veh/h/ln	493	1697	1717	499	1697	1758	1689	0	0	1728	0	0
Q Serve(g_s), s	3.9	9.9	9.9	10.5	10.0	10.0	0.0	0.0	0.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	13.9	9.9	9.9	20.5	10.0	10.0	8.2	0.0	0.0	9.8	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.09	0.13		0.24	0.10		0.11
Lane Grp Cap(c), veh/h	306	895	905	309	895	927	543	0	0	551	0	0
V/C Ratio(X)	0.17	0.57	0.57	0.39	0.57	0.57	0.60	0.00	0.00	0.68	0.00	0.00
Avail Cap(c_a), veh/h	329	974	986	332	974	1009	803	0	0	826	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.6	7.9	7.9	14.8	7.9	7.9	16.1	0.0	0.0	16.6	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.6	0.6	0.8	0.7	0.6	1.0	0.0	0.0	1.5	0.0	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	0.4	2.6	2.6	1.0	2.6	2.7	3.1	0.0	0.0	3.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	8.5	8.5	15.6	8.5	8.5	17.1	0.0	0.0	18.1	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		1070			1152			323			375	
Approach Delay, s/veh		8.7			9.3			17.1			18.1	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.8		30.7		18.8		30.7				
Change Period (Y+Rc), s		5.3		4.6		5.3		4.6				
Max Green Setting (Gmax), s		21.7		28.4		21.7		28.4				
Max Q Clear Time (g_c+I1), s		10.2		15.9		11.8		22.5				
Green Ext Time (p_c), s		1.6		5.6		1.7		3.6				

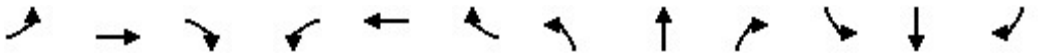
Intersection Summary												
HCM 6th Ctrl Delay			11.1									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	804	2	0	726	52	28	216	67	78	407	43
Future Volume (veh/h)	38	804	2	0	726	52	28	216	67	78	407	43
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	0	1786	1786	1800	1800	1800	1800	1728	1728
Adj Flow Rate, veh/h	40	846	2	0	764	55	29	227	71	82	428	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	0	1	1	0	0	0	0	0	0
Cap, veh/h	268	1249	3	0	1155	83	108	397	114	166	551	577
Arrive On Green	0.36	0.36	0.36	0.00	0.36	0.36	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	602	3473	8	0	3299	231	37	1007	290	167	1398	1464
Grp Volume(v), veh/h	40	413	435	0	404	415	327	0	0	510	0	45
Grp Sat Flow(s),veh/h/ln	602	1697	1784	0	1697	1744	1334	0	0	1564	0	1464
Q Serve(g_s), s	2.5	8.6	8.6	0.0	8.4	8.4	0.9	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	10.9	8.6	8.6	0.0	8.4	8.4	13.0	0.0	0.0	12.1	0.0	0.8
Prop In Lane	1.00		0.00	0.00		0.13	0.09		0.22	0.16		1.00
Lane Grp Cap(c), veh/h	268	610	642	0	610	627	620	0	0	716	0	577
V/C Ratio(X)	0.15	0.68	0.68	0.00	0.66	0.66	0.53	0.00	0.00	0.71	0.00	0.08
Avail Cap(c_a), veh/h	299	698	734	0	698	717	848	0	0	939	0	788
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	11.3	11.3	0.0	11.3	11.3	9.6	0.0	0.0	11.1	0.0	7.9
Incr Delay (d2), s/veh	0.3	2.2	2.1	0.0	1.9	1.9	0.7	0.0	0.0	1.7	0.0	0.1
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	0.3	2.9	3.0	0.0	2.7	2.8	1.9	0.0	0.0	3.6	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	13.5	13.4	0.0	13.2	13.1	10.3	0.0	0.0	12.9	0.0	8.0
LnGrp LOS	B	B	B	A	B	B	B	A	A	B	A	A
Approach Vol, veh/h		888			819			327			555	
Approach Delay, s/veh		13.6			13.2			10.3			12.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.4		21.4		20.4		21.4				
Change Period (Y+Rc), s		5.4		4.9		5.4		4.9				
Max Green Setting (Gmax), s		17.2		22.5		17.2		22.5				
Max Q Clear Time (g_c+I1), s		12.9		15.0		10.4		14.1				
Green Ext Time (p_c), s		2.2		1.2		2.9		2.4				

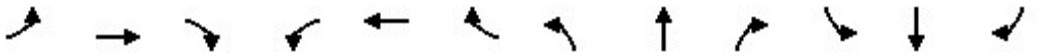
Intersection Summary												
HCM 6th Ctrl Delay			12.8									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	928	34	40	1024	12	31	18	40	28	68	59
Future Volume (vph)	28	928	34	40	1024	12	31	18	40	28	68	59
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	12	12	12	12	12	12
Total Lost time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.94			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1492	3256		1492	3268			1646			1692	
Flt Permitted	0.17	1.00		0.20	1.00			0.82			0.93	
Satd. Flow (perm)	264	3256		310	3268			1376			1586	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	31	1031	38	44	1138	13	34	20	44	31	76	66
RTOR Reduction (vph)	0	3	0	0	1	0	0	37	0	0	45	0
Lane Group Flow (vph)	31	1066	0	44	1150	0	0	61	0	0	128	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	24.6	24.6		24.6	24.6			8.0			8.0	
Effective Green, g (s)	24.6	24.6		24.6	24.6			8.0			8.0	
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.16			0.16	
Clearance Time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	128	1586		151	1591			217			251	
v/s Ratio Prot		0.33			c0.35							
v/s Ratio Perm	0.12			0.14				0.04			c0.08	
v/c Ratio	0.24	0.67		0.29	0.72			0.28			0.51	
Uniform Delay, d1	7.5	9.9		7.7	10.3			18.7			19.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	1.1		1.1	1.7			0.7			1.8	
Delay (s)	8.5	11.0		8.8	11.9			19.4			21.2	
Level of Service	A	B		A	B			B			C	
Approach Delay (s)		10.9			11.8			19.4			21.2	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	12.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	50.5	Sum of lost time (s)	15.9
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 (veh/h)	133	792	230	101	620	143	96	432	125	134	558	163
Future Volume (veh/h)	133	792	230	101	620	143	96	432	125	134	558	163
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1687	1786	1786	1687	1786	1786
Adj Flow Rate, veh/h	139	825	0	105	646	0	100	450	130	140	581	170
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	377	996		321	969		310	577	165	328	807	360
Arrive On Green	0.12	0.29	0.00	0.11	0.29	0.00	0.10	0.22	0.22	0.11	0.24	0.24
Sat Flow, veh/h	1606	3393	1514	1606	3393	1514	1606	2603	746	1606	3393	1514
Grp Volume(v), veh/h	139	825	0	105	646	0	100	292	288	140	581	170
Grp Sat Flow(s),veh/h/ln	1606	1697	1514	1606	1697	1514	1606	1697	1652	1606	1697	1514
Q Serve(g_s), s	4.0	16.0	0.0	3.0	11.8	0.0	3.2	11.4	11.6	4.5	11.1	6.8
Cycle Q Clear(g_c), s	4.0	16.0	0.0	3.0	11.8	0.0	3.2	11.4	11.6	4.5	11.1	6.8
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	377	996		321	969		310	376	366	328	807	360
V/C Ratio(X)	0.37	0.83		0.33	0.67		0.32	0.78	0.79	0.43	0.72	0.47
Avail Cap(c_a), veh/h	398	1152		354	1152		343	487	474	335	973	434
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	23.2	0.0	15.7	22.2	0.0	18.2	25.8	25.8	18.2	24.7	23.0
Incr Delay (d2), s/veh	0.6	4.6	0.0	0.6	1.1	0.0	0.6	5.9	6.5	0.9	2.1	1.0
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	1.4	6.5	0.0	1.0	4.5	0.0	1.2	5.1	5.0	1.7	4.5	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	27.8	0.0	16.3	23.3	0.0	18.8	31.6	32.4	19.1	26.8	24.0
LnGrp LOS	B	C		B	C		B	C	C	B	C	C
Approach Vol, veh/h		964	A		751	A		680			891	
Approach Delay, s/veh		26.0			22.4			30.1			25.0	
Approach LOS		C			C			C			C	

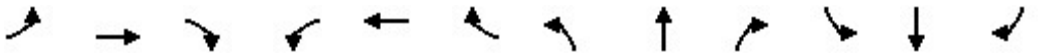
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	20.2	12.0	26.0	11.1	21.3	12.6	25.4
Change Period (Y+Rc), s	* 4.2	4.6	* 4.2	5.3	* 4.2	4.6	* 4.2	5.3
Max Green Setting (Gmax), s	* 8.3	20.2	* 9.3	23.9	* 8.3	20.2	* 9.3	23.9
Max Q Clear Time (g_c+I1), s	6.5	13.6	5.0	18.0	5.2	13.1	6.0	13.8
Green Ext Time (p_c), s	0.1	2.0	0.1	2.7	0.1	2.7	0.1	3.0

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

Notes

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	545	154	94	507	81	122	335	79	95	453	334
Future Volume (veh/h)	139	545	154	94	507	81	122	335	79	95	453	334
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1700	1800	1800	1687	1786	1786
Adj Flow Rate, veh/h	142	556	157	96	517	83	124	342	81	97	462	341
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	0	0	0	1	1	1
Cap, veh/h	172	591	500	133	897	143	146	1174	275	330	509	594
Arrive On Green	0.11	0.33	0.33	0.08	0.31	0.31	0.09	0.43	0.43	0.29	0.29	0.29
Sat Flow, veh/h	1606	1786	1514	1606	2930	468	1619	2751	643	869	1786	1514
Grp Volume(v), veh/h	142	556	157	96	299	301	124	211	212	97	462	341
Grp Sat Flow(s),veh/h/ln	1606	1786	1514	1606	1697	1702	1619	1710	1684	869	1786	1514
Q Serve(g_s), s	7.6	26.5	6.8	5.1	13.0	13.1	6.6	7.1	7.2	7.9	21.8	15.5
Cycle Q Clear(g_c), s	7.6	26.5	6.8	5.1	13.0	13.1	6.6	7.1	7.2	7.9	21.8	15.5
Prop In Lane	1.00		1.00	1.00		0.28	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	172	591	500	133	519	521	146	730	719	330	509	594
V/C Ratio(X)	0.83	0.94	0.31	0.72	0.57	0.58	0.85	0.29	0.29	0.29	0.91	0.57
Avail Cap(c_a), veh/h	231	602	510	147	519	521	146	752	741	341	532	613
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	38.3	28.5	21.9	39.2	25.6	25.6	39.2	16.4	16.4	25.2	30.2	20.9
Incr Delay (d2), s/veh	16.3	23.0	0.4	14.6	1.5	1.6	34.9	0.2	0.2	0.5	18.8	1.2
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	3.7	14.6	2.4	2.5	5.3	5.4	4.0	2.8	2.8	1.7	11.8	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.6	51.5	22.2	53.8	27.1	27.2	74.1	16.6	16.7	25.7	49.0	22.1
LnGrp LOS	D	D	C	D	C	C	E	B	B	C	D	C
Approach Vol, veh/h		855			696			547			900	
Approach Delay, s/veh		46.6			30.8			29.7			36.3	
Approach LOS		D			C			C			D	

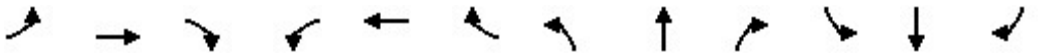
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	33.8		42.3	13.6	31.7	12.4	29.9				
Change Period (Y+Rc), s	* 4.2	4.9		4.9	* 4.2	4.9	4.5	4.9				
Max Green Setting (Gmax), s	* 8	29.5		38.5	* 13	24.9	7.9	26.1				
Max Q Clear Time (g_c+I1), s	7.1	28.5		9.2	9.6	15.1	8.6	23.8				
Green Ext Time (p_c), s	0.0	0.5		2.8	0.1	2.6	0.0	1.1				

Intersection Summary		
HCM 6th Ctrl Delay		36.8
HCM 6th LOS		D

Notes

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

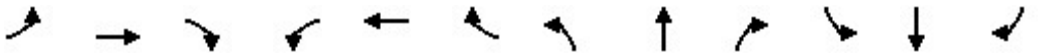
Future Baseline Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	573	56	43	770	42	56	237	109	27	70	27
Future Volume (veh/h)	33	573	56	43	770	42	56	237	109	27	70	27
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1786	1786	1786	1786	1786	1786
Adj Flow Rate, veh/h	35	616	60	46	828	45	60	255	117	29	75	29
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	296	1227	119	357	1285	70	156	364	153	182	375	123
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	568	3100	301	683	3247	176	140	1058	445	194	1091	358
Grp Volume(v), veh/h	35	334	342	46	429	444	432	0	0	133	0	0
Grp Sat Flow(s),veh/h/ln	568	1683	1718	683	1683	1740	1643	0	0	1644	0	0
Q Serve(g_s), s	2.0	5.7	5.7	2.1	7.9	7.9	3.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.9	5.7	5.7	7.8	7.9	7.9	8.8	0.0	0.0	2.1	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.10	0.14		0.27	0.22		0.22
Lane Grp Cap(c), veh/h	296	666	680	357	666	689	673	0	0	681	0	0
V/C Ratio(X)	0.12	0.50	0.50	0.13	0.64	0.64	0.64	0.00	0.00	0.20	0.00	0.00
Avail Cap(c_a), veh/h	401	977	997	483	977	1010	1091	0	0	1060	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.3	8.7	8.7	11.6	9.3	9.3	11.0	0.0	0.0	8.9	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.6	0.6	0.2	1.0	1.0	1.0	0.0	0.0	0.1	0.0	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	0.2	1.5	1.5	0.3	2.1	2.2	2.7	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	9.3	9.3	11.8	10.4	10.3	12.0	0.0	0.0	9.0	0.0	0.0
LnGrp LOS	B	A	A	B	B	B	B	A	A	A	A	A
Approach Vol, veh/h		711			919			432			133	
Approach Delay, s/veh		9.5			10.4			12.0			9.0	
Approach LOS		A			B			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.4		19.7		18.4		19.7				
Change Period (Y+Rc), s		5.3		4.6		5.3		4.6				
Max Green Setting (Gmax), s		23.0		22.1		23.0		22.1				
Max Q Clear Time (g_c+I1), s		10.8		11.9		4.1		9.9				
Green Ext Time (p_c), s		2.3		3.2		0.7		4.6				

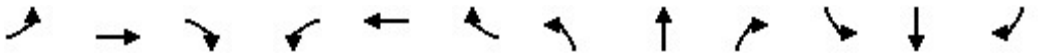
Intersection Summary												
HCM 6th Ctrl Delay			10.3									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	658	0	0	802	58	40	298	92	26	106	29
Future Volume (veh/h)	31	658	0	0	802	58	40	298	92	26	106	29
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	0	1786	1786	1800	1800	1800	1786	1715	1715
Adj Flow Rate, veh/h	33	700	0	0	853	62	43	317	98	28	113	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	0	1	1	0	0	0	1	1	1
Cap, veh/h	279	1360	0	0	1295	94	127	427	125	164	503	500
Arrive On Green	0.40	0.40	0.00	0.00	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	546	3455	0	0	3297	233	88	1241	362	170	1461	1453
Grp Volume(v), veh/h	33	700	0	0	451	464	458	0	0	141	0	31
Grp Sat Flow(s),veh/h/ln	546	1683	0	0	1697	1744	1691	0	0	1630	0	1453
Q Serve(g_s), s	2.1	6.4	0.0	0.0	8.8	8.8	3.7	0.0	0.0	0.0	0.0	0.6
Cycle Q Clear(g_c), s	11.0	6.4	0.0	0.0	8.8	8.8	9.8	0.0	0.0	2.4	0.0	0.6
Prop In Lane	1.00		0.00	0.00		0.13	0.09		0.21	0.20		1.00
Lane Grp Cap(c), veh/h	279	1360	0	0	685	704	678	0	0	667	0	500
V/C Ratio(X)	0.12	0.51	0.00	0.00	0.66	0.66	0.68	0.00	0.00	0.21	0.00	0.06
Avail Cap(c_a), veh/h	360	1861	0	0	938	964	1004	0	0	951	0	785
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.4	9.2	0.0	0.0	9.9	9.9	12.0	0.0	0.0	9.6	0.0	9.0
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.0	1.1	1.1	1.2	0.0	0.0	0.2	0.0	0.1
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	0.2	1.8	0.0	0.0	2.6	2.7	3.2	0.0	0.0	0.8	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.5	9.5	0.0	0.0	11.0	11.0	13.2	0.0	0.0	9.7	0.0	9.0
LnGrp LOS	B	A	A	A	B	B	B	A	A	A	A	A
Approach Vol, veh/h		733			915			458			172	
Approach Delay, s/veh		9.7			11.0			13.2			9.6	
Approach LOS		A			B			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.9		19.0		21.9		19.0				
Change Period (Y+Rc), s		5.4		4.9		5.4		4.9				
Max Green Setting (Gmax), s		22.6		22.1		22.6		22.1				
Max Q Clear Time (g_c+I1), s		13.0		11.8		10.8		4.4				
Green Ext Time (p_c), s		3.5		2.2		4.6		0.8				

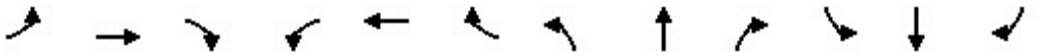
Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	633	66	94	743	20	54	34	21	29	104	41
Future Volume (vph)	12	633	66	94	743	20	54	34	21	29	104	41
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	12	12	12	12	12	12
Total Lost time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1478	3195		1478	3228			1677			1711	
Flt Permitted	0.28	1.00		0.32	1.00			0.79			0.93	
Satd. Flow (perm)	438	3195		495	3228			1357			1606	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	13	681	71	101	799	22	58	37	23	31	112	44
RTOR Reduction (vph)	0	11	0	0	3	0	0	16	0	0	20	0
Lane Group Flow (vph)	13	741	0	101	818	0	0	102	0	0	167	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	21.7	21.7		21.7	21.7			11.0			11.0	
Effective Green, g (s)	21.7	21.7		21.7	21.7			11.0			11.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.22			0.22	
Clearance Time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	187	1370		212	1384			295			349	
v/s Ratio Prot		0.23			c0.25							
v/s Ratio Perm	0.03			0.20				0.07			c0.10	
v/c Ratio	0.07	0.54		0.48	0.59			0.34			0.48	
Uniform Delay, d1	8.5	10.7		10.4	11.1			16.7			17.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	0.4		1.7	0.7			0.7			1.0	
Delay (s)	8.7	11.2		12.1	11.7			17.5			18.3	
Level of Service	A	B		B	B			B			B	
Approach Delay (s)		11.1			11.8			17.5			18.3	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	50.6	Sum of lost time (s)	15.9
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)	163	489	114	74	717	93	105	588	67	92	453	232
Future Volume (veh/h)	163	489	114	74	717	93	105	588	67	92	453	232
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1660	1758	1758
Adj Flow Rate, veh/h	173	520	0	79	763	0	112	626	71	98	482	247
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	327	989		385	918		342	755	86	307	865	386
Arrive On Green	0.12	0.29	0.00	0.10	0.27	0.00	0.10	0.25	0.25	0.11	0.26	0.26
Sat Flow, veh/h	1594	3367	1502	1594	3367	1502	1594	3048	345	1581	3340	1490
Grp Volume(v), veh/h	173	520	0	79	763	0	112	345	352	98	482	247
Grp Sat Flow(s),veh/h/ln	1594	1683	1502	1594	1683	1502	1594	1683	1710	1581	1670	1490
Q Serve(g_s), s	5.4	9.4	0.0	2.4	15.6	0.0	3.6	14.2	14.2	3.1	9.1	10.8
Cycle Q Clear(g_c), s	5.4	9.4	0.0	2.4	15.6	0.0	3.6	14.2	14.2	3.1	9.1	10.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	327	989		385	918		342	417	424	307	865	386
V/C Ratio(X)	0.53	0.53		0.20	0.83		0.33	0.83	0.83	0.32	0.56	0.64
Avail Cap(c_a), veh/h	341	1069		431	1064		367	481	489	313	955	426
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	21.5	0.0	15.7	25.0	0.0	17.4	26.0	26.0	17.7	23.4	24.0
Incr Delay (d2), s/veh	1.4	0.4	0.0	0.3	5.0	0.0	0.6	10.2	10.2	0.6	0.6	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.5	0.0	0.8	6.4	0.0	1.3	6.7	6.8	1.1	3.6	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	22.0	0.0	15.9	30.0	0.0	17.9	36.2	36.3	18.3	24.0	26.8
LnGrp LOS	B	C		B	C		B	D	D	B	C	C
Approach Vol, veh/h		693	A		842	A		809			827	
Approach Delay, s/veh		21.2			28.7			33.7			24.2	
Approach LOS		C			C			C			C	

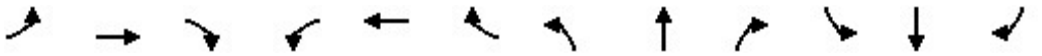
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	22.7	11.4	26.8	11.4	23.5	12.9	25.2
Change Period (Y+Rc), s	* 4.2	4.6	* 4.2	5.3	* 4.2	4.6	* 4.2	5.3
Max Green Setting (Gmax), s	* 8.3	20.9	* 9.3	23.2	* 8.3	20.9	* 9.4	23.1
Max Q Clear Time (g_c+I1), s	5.1	16.2	4.4	11.4	5.6	12.8	7.4	17.6
Green Ext Time (p_c), s	0.1	1.9	0.1	2.6	0.1	2.7	0.1	2.4

Intersection Summary		
HCM 6th Ctrl Delay		27.2
HCM 6th LOS		C

Notes

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

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



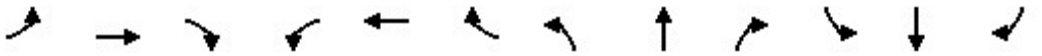
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	373	99	66	563	45	168	554	71	93	320	210
Future Volume (veh/h)	144	373	99	66	563	45	168	554	71	93	320	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1687	1786	1786	1673	1772	1772
Adj Flow Rate, veh/h	152	393	104	69	593	47	177	583	75	98	337	221
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	187	493	418	136	779	62	214	1325	170	270	426	535
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.24	0.13	0.44	0.44	0.24	0.24	0.24
Sat Flow, veh/h	1606	1786	1514	1606	3185	252	1606	3025	388	694	1772	1502
Grp Volume(v), veh/h	152	393	104	69	315	325	177	326	332	98	337	221
Grp Sat Flow(s),veh/h/ln	1606	1786	1514	1606	1697	1741	1606	1697	1716	694	1772	1502
Q Serve(g_s), s	6.4	14.2	3.7	2.9	12.0	12.1	7.5	9.3	9.4	8.7	12.4	7.7
Cycle Q Clear(g_c), s	6.4	14.2	3.7	2.9	12.0	12.1	7.5	9.3	9.4	8.7	12.4	7.7
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	187	493	418	136	415	426	214	743	752	270	426	535
V/C Ratio(X)	0.81	0.80	0.25	0.51	0.76	0.76	0.83	0.44	0.44	0.36	0.79	0.41
Avail Cap(c_a), veh/h	272	741	628	184	611	627	288	952	963	324	562	651
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	23.4	19.6	30.5	24.4	24.4	29.4	13.6	13.6	23.4	24.8	16.9
Incr Delay (d2), s/veh	11.4	3.6	0.3	2.9	3.2	3.2	13.4	0.4	0.4	0.8	5.7	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	3.0	6.1	1.3	1.2	4.9	5.1	3.6	3.4	3.5	1.4	5.7	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.5	27.0	19.9	33.4	27.6	27.6	42.8	14.0	14.0	24.2	30.5	17.4
LnGrp LOS	D	C	B	C	C	C	D	B	B	C	C	B
Approach Vol, veh/h		649			709			835			656	
Approach Delay, s/veh		29.3			28.2			20.1			25.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.1	24.1		35.4	12.3	21.9	13.8	21.6				
Change Period (Y+Rc), s	* 4.2	4.9		4.9	* 4.2	4.9	4.5	4.9				
Max Green Setting (Gmax), s	* 8	28.9		39.1	* 12	25.1	12.5	22.1				
Max Q Clear Time (g_c+I1), s	4.9	16.2		11.4	8.4	14.1	9.5	14.4				
Green Ext Time (p_c), s	0.0	2.3		4.7	0.1	3.0	0.1	2.3				

Intersection Summary			
HCM 6th Ctrl Delay		25.4	
HCM 6th LOS		C	

Notes

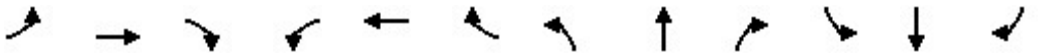
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	875	111	117	953	45	42	197	75	33	290	39
Future Volume (veh/h)	50	875	111	117	953	45	42	197	75	33	290	39
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	53	921	117	123	1003	47	44	207	79	35	305	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	0	0	0	0	0	0
Cap, veh/h	303	1657	211	305	1806	85	112	306	108	97	392	50
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	485	3029	385	490	3300	155	136	1137	401	90	1457	187
Grp Volume(v), veh/h	53	516	522	123	516	534	330	0	0	381	0	0
Grp Sat Flow(s),veh/h/ln	485	1697	1717	490	1697	1758	1674	0	0	1734	0	0
Q Serve(g_s), s	4.3	10.7	10.7	11.8	10.7	10.7	0.0	0.0	0.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	15.0	10.7	10.7	22.4	10.7	10.7	9.4	0.0	0.0	10.9	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.09	0.13		0.24	0.09		0.11
Lane Grp Cap(c), veh/h	303	928	939	305	928	962	526	0	0	540	0	0
V/C Ratio(X)	0.17	0.56	0.56	0.40	0.56	0.56	0.63	0.00	0.00	0.71	0.00	0.00
Avail Cap(c_a), veh/h	338	1051	1063	340	1051	1089	735	0	0	761	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.8	7.9	7.9	15.2	7.9	7.9	17.8	0.0	0.0	18.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.5	0.5	0.9	0.5	0.5	1.2	0.0	0.0	1.7	0.0	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	0.4	2.9	2.9	1.2	2.9	3.0	3.6	0.0	0.0	4.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	8.5	8.5	16.1	8.5	8.4	19.1	0.0	0.0	20.1	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	A	A
Approach Vol, veh/h		1091			1173			330			381	
Approach Delay, s/veh		8.7			9.3			19.1			20.1	
Approach LOS		A			A			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.8		34.1		19.8		34.1				
Change Period (Y+Rc), s		5.3		4.6		5.3		4.6				
Max Green Setting (Gmax), s		21.7		33.4		21.7		33.4				
Max Q Clear Time (g_c+I1), s		11.4		17.0		12.9		24.4				
Green Ext Time (p_c), s		1.5		6.8		1.6		5.1				

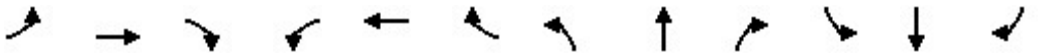
Intersection Summary												
HCM 6th Ctrl Delay			11.5									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	819	3	0	739	54	29	221	69	80	416	44
Future Volume (veh/h)	39	819	3	0	739	54	29	221	69	80	416	44
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	0	1786	1786	1800	1800	1800	1800	1728	1728
Adj Flow Rate, veh/h	41	862	3	0	778	57	31	233	73	84	438	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	0	1	1	0	0	0	0	0	0
Cap, veh/h	257	1249	4	0	1154	85	104	388	111	162	550	592
Arrive On Green	0.36	0.36	0.36	0.00	0.36	0.36	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	593	3468	12	0	3295	235	35	959	275	163	1361	1464
Grp Volume(v), veh/h	41	422	443	0	412	423	337	0	0	522	0	46
Grp Sat Flow(s),veh/h/ln	593	1697	1784	0	1697	1744	1268	0	0	1524	0	1464
Q Serve(g_s), s	2.7	9.3	9.3	0.0	9.0	9.0	1.2	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	11.7	9.3	9.3	0.0	9.0	9.0	14.7	0.0	0.0	13.5	0.0	0.8
Prop In Lane	1.00		0.01	0.00		0.13	0.09		0.22	0.16		1.00
Lane Grp Cap(c), veh/h	257	611	642	0	611	628	603	0	0	712	0	592
V/C Ratio(X)	0.16	0.69	0.69	0.00	0.67	0.67	0.56	0.00	0.00	0.73	0.00	0.08
Avail Cap(c_a), veh/h	282	683	718	0	683	702	763	0	0	868	0	740
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.8	11.9	11.9	0.0	11.8	11.8	9.9	0.0	0.0	11.5	0.0	8.0
Incr Delay (d2), s/veh	0.3	2.6	2.5	0.0	2.3	2.2	0.8	0.0	0.0	2.6	0.0	0.1
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	0.3	3.2	3.3	0.0	3.0	3.1	2.0	0.0	0.0	4.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	14.5	14.4	0.0	14.1	14.0	10.7	0.0	0.0	14.0	0.0	8.1
LnGrp LOS	B	B	B	A	B	B	B	A	A	B	A	A
Approach Vol, veh/h		906			835			337			568	
Approach Delay, s/veh		14.5			14.1			10.7			13.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.1		22.6		21.1		22.6				
Change Period (Y+Rc), s		5.4		4.9		5.4		4.9				
Max Green Setting (Gmax), s		17.6		22.1		17.6		22.1				
Max Q Clear Time (g_c+I1), s		13.7		16.7		11.0		15.5				
Green Ext Time (p_c), s		2.0		1.0		2.8		2.1				

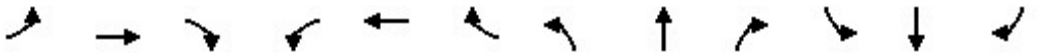
Intersection Summary												
HCM 6th Ctrl Delay			13.7									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	947	32	37	1045	13	30	18	38	29	69	61
Future Volume (vph)	29	947	32	37	1045	13	30	18	38	29	69	61
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	12	12	12	12	12	12
Total Lost time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.94			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1492	3257		1492	3267			1647			1691	
Flt Permitted	0.16	1.00		0.19	1.00			0.86			0.93	
Satd. Flow (perm)	253	3257		299	3267			1437			1579	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	32	1052	36	41	1161	14	33	20	42	32	77	68
RTOR Reduction (vph)	0	3	0	0	1	0	0	34	0	0	39	0
Lane Group Flow (vph)	32	1085	0	41	1174	0	0	61	0	0	138	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	29.1	29.1		29.1	29.1			10.6			10.6	
Effective Green, g (s)	29.1	29.1		29.1	29.1			10.6			10.6	
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.18			0.18	
Clearance Time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	127	1645		151	1650			264			290	
v/s Ratio Prot		0.33			c0.36							
v/s Ratio Perm	0.13			0.14				0.04			c0.09	
v/c Ratio	0.25	0.66		0.27	0.71			0.23			0.48	
Uniform Delay, d1	8.1	10.6		8.2	11.0			20.0			21.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	1.0		1.0	1.5			0.4			1.2	
Delay (s)	9.1	11.5		9.1	12.5			20.5			22.2	
Level of Service	A	B		A	B			C			C	
Approach Delay (s)		11.5			12.4			20.5			22.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	15.9
Intersection Capacity Utilization	53.2%	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 (veh/h)	134	807	235	104	631	146	98	441	128	137	570	164
Future Volume (veh/h)	134	807	235	104	631	146	98	441	128	137	570	164
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1687	1786	1786	1687	1786	1786
Adj Flow Rate, veh/h	140	841	0	108	657	0	102	459	133	143	594	171
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	373	1000		317	977		307	584	168	324	812	362
Arrive On Green	0.12	0.29	0.00	0.11	0.29	0.00	0.10	0.22	0.22	0.11	0.24	0.24
Sat Flow, veh/h	1606	3393	1514	1606	3393	1514	1606	2600	748	1606	3393	1514
Grp Volume(v), veh/h	140	841	0	108	657	0	102	298	294	143	594	171
Grp Sat Flow(s),veh/h/ln	1606	1697	1514	1606	1697	1514	1606	1697	1651	1606	1697	1514
Q Serve(g_s), s	4.0	16.6	0.0	3.1	12.2	0.0	3.3	11.8	12.0	4.6	11.5	6.9
Cycle Q Clear(g_c), s	4.0	16.6	0.0	3.1	12.2	0.0	3.3	11.8	12.0	4.6	11.5	6.9
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	373	1000		317	977		307	381	371	324	812	362
V/C Ratio(X)	0.38	0.84		0.34	0.67		0.33	0.78	0.79	0.44	0.73	0.47
Avail Cap(c_a), veh/h	393	1129		348	1129		338	486	473	330	972	433
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	23.5	0.0	16.0	22.4	0.0	18.4	26.0	26.1	18.4	25.0	23.2
Incr Delay (d2), s/veh	0.6	5.3	0.0	0.6	1.3	0.0	0.6	6.3	7.0	0.9	2.3	1.0
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	1.4	6.8	0.0	1.1	4.7	0.0	1.2	5.3	5.2	1.7	4.7	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	28.8	0.0	16.6	23.7	0.0	19.0	32.3	33.0	19.4	27.3	24.2
LnGrp LOS	B	C		B	C		B	C	C	B	C	C
Approach Vol, veh/h		981	A		765	A		694			908	
Approach Delay, s/veh		27.0			22.7			30.7			25.5	
Approach LOS		C			C			C			C	

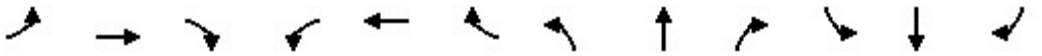
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	20.6	12.1	26.3	11.1	21.7	12.6	25.8
Change Period (Y+Rc), s	* 4.2	4.6	* 4.2	5.3	* 4.2	4.6	* 4.2	5.3
Max Green Setting (Gmax), s	* 8.3	20.4	* 9.3	23.7	* 8.3	20.4	* 9.3	23.7
Max Q Clear Time (g_c+I1), s	6.6	14.0	5.1	18.6	5.3	13.5	6.0	14.2
Green Ext Time (p_c), s	0.1	2.0	0.1	2.5	0.1	2.7	0.1	3.0

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

Notes

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	555	158	96	516	83	125	342	81	97	463	341
Future Volume (veh/h)	142	555	158	96	516	83	125	342	81	97	463	341
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1700	1800	1800	1687	1786	1786
Adj Flow Rate, veh/h	145	566	161	98	527	85	128	349	83	99	472	348
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	0	0	0	1	1	1
Cap, veh/h	175	595	504	132	898	144	143	1172	275	329	513	600
Arrive On Green	0.11	0.33	0.33	0.08	0.31	0.31	0.09	0.43	0.43	0.29	0.29	0.29
Sat Flow, veh/h	1606	1786	1514	1606	2928	470	1619	2748	645	862	1786	1514
Grp Volume(v), veh/h	145	566	161	98	305	307	128	215	217	99	472	348
Grp Sat Flow(s),veh/h/ln	1606	1786	1514	1606	1697	1701	1619	1710	1684	862	1786	1514
Q Serve(g_s), s	7.8	27.4	7.0	5.3	13.4	13.5	6.9	7.3	7.5	8.2	22.7	16.0
Cycle Q Clear(g_c), s	7.8	27.4	7.0	5.3	13.4	13.5	6.9	7.3	7.5	8.2	22.7	16.0
Prop In Lane	1.00		1.00	1.00		0.28	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	175	595	504	132	520	522	143	729	718	329	513	600
V/C Ratio(X)	0.83	0.95	0.32	0.74	0.59	0.59	0.90	0.30	0.30	0.30	0.92	0.58
Avail Cap(c_a), veh/h	227	597	506	145	520	522	143	742	731	336	527	611
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	38.6	28.8	22.0	39.7	25.9	26.0	39.9	16.7	16.7	25.4	30.5	20.9
Incr Delay (d2), s/veh	17.7	25.2	0.4	16.7	1.7	1.7	46.1	0.2	0.2	0.5	21.2	1.3
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	3.9	15.4	2.5	2.7	5.5	5.6	4.6	2.9	2.9	1.7	12.6	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.3	54.0	22.4	56.4	27.6	27.7	86.1	16.9	16.9	25.9	51.8	22.3
LnGrp LOS	E	D	C	E	C	C	F	B	B	C	D	C
Approach Vol, veh/h		872			710			560			919	
Approach Delay, s/veh		48.5			31.6			32.7			37.8	
Approach LOS		D			C			C			D	

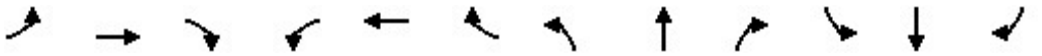
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	34.4		42.6	13.8	32.0	12.3	30.3				
Change Period (Y+Rc), s	* 4.2	4.9		4.9	* 4.2	4.9	4.5	4.9				
Max Green Setting (Gmax), s	* 8	29.6		38.4	* 13	25.1	7.8	26.1				
Max Q Clear Time (g_c+I1), s	7.3	29.4		9.5	9.8	15.5	8.9	24.7				
Green Ext Time (p_c), s	0.0	0.1		2.9	0.1	2.6	0.0	0.8				

Intersection Summary			
HCM 6th Ctrl Delay		38.5	
HCM 6th LOS		D	

Notes

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

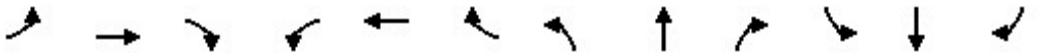
Future with Project Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	574	56	43	773	44	56	237	109	28	70	27
Future Volume (veh/h)	33	574	56	43	773	44	56	237	109	28	70	27
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1786	1786	1786	1786	1786	1786
Adj Flow Rate, veh/h	35	617	60	46	831	47	60	255	117	30	75	29
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	1	1	1
Cap, veh/h	296	1233	120	357	1289	73	155	363	153	185	372	122
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	565	3100	301	682	3239	183	140	1057	445	203	1085	356
Grp Volume(v), veh/h	35	335	342	46	432	446	432	0	0	134	0	0
Grp Sat Flow(s),veh/h/ln	565	1683	1718	682	1683	1739	1643	0	0	1644	0	0
Q Serve(g_s), s	2.0	5.7	5.7	2.1	7.9	7.9	4.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.0	5.7	5.7	7.8	7.9	7.9	8.8	0.0	0.0	2.1	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.11	0.14		0.27	0.22		0.22
Lane Grp Cap(c), veh/h	296	670	683	357	670	692	671	0	0	679	0	0
V/C Ratio(X)	0.12	0.50	0.50	0.13	0.64	0.64	0.64	0.00	0.00	0.20	0.00	0.00
Avail Cap(c_a), veh/h	402	987	1007	486	987	1019	1074	0	0	1044	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.4	8.6	8.7	11.6	9.3	9.3	11.1	0.0	0.0	8.9	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.6	0.6	0.2	1.0	1.0	1.0	0.0	0.0	0.1	0.0	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	0.2	1.5	1.5	0.3	2.1	2.2	2.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	9.2	9.2	11.8	10.4	10.3	12.1	0.0	0.0	9.1	0.0	0.0
LnGrp LOS	B	A	A	B	B	B	B	A	A	A	A	A
Approach Vol, veh/h		712			924			432			134	
Approach Delay, s/veh		9.4			10.4			12.1			9.1	
Approach LOS		A			B			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.4		19.8		18.4		19.8				
Change Period (Y+Rc), s		5.3		4.6		5.3		4.6				
Max Green Setting (Gmax), s		22.7		22.4		22.7		22.4				
Max Q Clear Time (g_c+I1), s		10.8		12.0		4.1		9.9				
Green Ext Time (p_c), s		2.3		3.2		0.7		4.7				

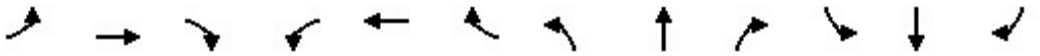
Intersection Summary												
HCM 6th Ctrl Delay			10.4									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	659	0	0	805	58	40	298	92	26	106	29
Future Volume (veh/h)	31	659	0	0	805	58	40	298	92	26	106	29
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	0	1786	1786	1800	1800	1800	1786	1715	1715
Adj Flow Rate, veh/h	33	701	0	0	856	62	43	317	98	28	113	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	0	1	1	0	0	0	1	1	1
Cap, veh/h	278	1361	0	0	1297	94	126	427	124	164	503	500
Arrive On Green	0.40	0.40	0.00	0.00	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	544	3455	0	0	3298	232	88	1241	362	170	1461	1453
Grp Volume(v), veh/h	33	701	0	0	453	465	458	0	0	141	0	31
Grp Sat Flow(s),veh/h/ln	544	1683	0	0	1697	1744	1691	0	0	1631	0	1453
Q Serve(g_s), s	2.1	6.4	0.0	0.0	8.9	8.9	3.7	0.0	0.0	0.0	0.0	0.6
Cycle Q Clear(g_c), s	11.0	6.4	0.0	0.0	8.9	8.9	9.9	0.0	0.0	2.4	0.0	0.6
Prop In Lane	1.00		0.00	0.00		0.13	0.09		0.21	0.20		1.00
Lane Grp Cap(c), veh/h	278	1361	0	0	686	705	678	0	0	666	0	500
V/C Ratio(X)	0.12	0.51	0.00	0.00	0.66	0.66	0.68	0.00	0.00	0.21	0.00	0.06
Avail Cap(c_a), veh/h	358	1858	0	0	936	963	1002	0	0	950	0	784
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.4	9.2	0.0	0.0	9.9	9.9	12.0	0.0	0.0	9.6	0.0	9.0
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.0	1.1	1.1	1.2	0.0	0.0	0.2	0.0	0.1
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	0.2	1.8	0.0	0.0	2.6	2.7	3.2	0.0	0.0	0.8	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.6	9.5	0.0	0.0	11.0	11.0	13.2	0.0	0.0	9.8	0.0	9.1
LnGrp LOS	B	A	A	A	B	B	B	A	A	A	A	A
Approach Vol, veh/h		734			918			458			172	
Approach Delay, s/veh		9.7			11.0			13.2			9.6	
Approach LOS		A			B			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.0		19.0		22.0		19.0				
Change Period (Y+Rc), s		5.4		4.9		5.4		4.9				
Max Green Setting (Gmax), s		22.6		22.1		22.6		22.1				
Max Q Clear Time (g_c+I1), s		13.0		11.9		10.9		4.4				
Green Ext Time (p_c), s		3.5		2.2		4.6		0.8				

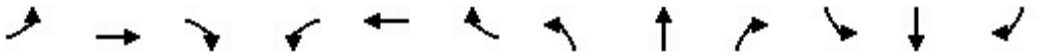
Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	633	67	96	743	20	58	35	26	29	105	41
Future Volume (vph)	12	633	67	96	743	20	58	35	26	29	105	41
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	12	12	12	12	12	12
Total Lost time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1478	3195		1478	3228			1672			1712	
Flt Permitted	0.28	1.00		0.32	1.00			0.78			0.93	
Satd. Flow (perm)	438	3195		494	3228			1339			1604	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	13	681	72	103	799	22	62	38	28	31	113	44
RTOR Reduction (vph)	0	11	0	0	3	0	0	19	0	0	20	0
Lane Group Flow (vph)	13	742	0	103	818	0	0	109	0	0	168	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	21.7	21.7		21.7	21.7			11.0			11.0	
Effective Green, g (s)	21.7	21.7		21.7	21.7			11.0			11.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.22			0.22	
Clearance Time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	187	1370		211	1384			291			348	
v/s Ratio Prot		0.23			c0.25							
v/s Ratio Perm	0.03			0.21				0.08			c0.10	
v/c Ratio	0.07	0.54		0.49	0.59			0.38			0.48	
Uniform Delay, d1	8.5	10.7		10.4	11.1			16.9			17.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	0.4		1.8	0.7			0.8			1.1	
Delay (s)	8.7	11.2		12.2	11.7			17.7			18.4	
Level of Service	A	B		B	B			B			B	
Approach Delay (s)		11.1			11.8			17.7			18.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	50.6	Sum of lost time (s)	15.9
Intersection Capacity Utilization	59.9%	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)	166	491	114	74	718	93	105	588	67	92	453	233
Future Volume (veh/h)	166	491	114	74	718	93	105	588	67	92	453	233
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1660	1758	1758
Adj Flow Rate, veh/h	177	522	0	79	764	0	112	626	71	98	482	248
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	3	3	3
Cap, veh/h	327	991		385	919		342	755	86	307	865	386
Arrive On Green	0.12	0.29	0.00	0.10	0.27	0.00	0.10	0.25	0.25	0.11	0.26	0.26
Sat Flow, veh/h	1594	3367	1502	1594	3367	1502	1594	3048	345	1581	3340	1490
Grp Volume(v), veh/h	177	522	0	79	764	0	112	345	352	98	482	248
Grp Sat Flow(s),veh/h/ln	1594	1683	1502	1594	1683	1502	1594	1683	1710	1581	1670	1490
Q Serve(g_s), s	5.5	9.5	0.0	2.4	15.6	0.0	3.6	14.2	14.2	3.1	9.1	10.8
Cycle Q Clear(g_c), s	5.5	9.5	0.0	2.4	15.6	0.0	3.6	14.2	14.2	3.1	9.1	10.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	327	991		385	919		342	417	424	307	865	386
V/C Ratio(X)	0.54	0.53		0.21	0.83		0.33	0.83	0.83	0.32	0.56	0.64
Avail Cap(c_a), veh/h	341	1068		431	1063		366	481	489	313	955	426
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	21.6	0.0	15.7	25.0	0.0	17.4	26.0	26.0	17.7	23.5	24.1
Incr Delay (d2), s/veh	1.6	0.4	0.0	0.3	5.1	0.0	0.6	10.2	10.3	0.6	0.6	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.5	0.0	0.8	6.4	0.0	1.3	6.7	6.8	1.1	3.6	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	22.0	0.0	15.9	30.1	0.0	18.0	36.3	36.3	18.3	24.0	26.9
LnGrp LOS	B	C		B	C		B	D	D	B	C	C
Approach Vol, veh/h		699	A		843	A		809			828	
Approach Delay, s/veh		21.2			28.7			33.8			24.2	
Approach LOS		C			C			C			C	

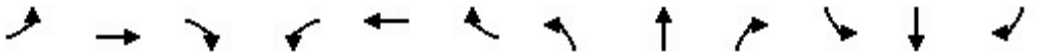
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	22.7	11.4	26.8	11.4	23.5	13.0	25.3
Change Period (Y+Rc), s	* 4.2	4.6	* 4.2	5.3	* 4.2	4.6	* 4.2	5.3
Max Green Setting (Gmax), s	* 8.3	20.9	* 9.3	23.2	* 8.3	20.9	* 9.4	23.1
Max Q Clear Time (g_c+I1), s	5.1	16.2	4.4	11.5	5.6	12.8	7.5	17.6
Green Ext Time (p_c), s	0.1	1.9	0.1	2.6	0.1	2.7	0.1	2.4

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

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

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



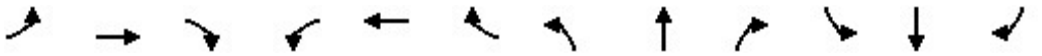
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	375	99	66	564	45	168	554	71	93	320	210
Future Volume (veh/h)	144	375	99	66	564	45	168	554	71	93	320	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1687	1786	1786	1673	1772	1772
Adj Flow Rate, veh/h	152	395	104	69	594	47	177	583	75	98	337	221
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	187	494	419	136	780	62	214	1325	170	270	425	535
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.24	0.13	0.44	0.44	0.24	0.24	0.24
Sat Flow, veh/h	1606	1786	1514	1606	3186	252	1606	3025	388	694	1772	1502
Grp Volume(v), veh/h	152	395	104	69	316	325	177	326	332	98	337	221
Grp Sat Flow(s),veh/h/ln	1606	1786	1514	1606	1697	1741	1606	1697	1716	694	1772	1502
Q Serve(g_s), s	6.4	14.3	3.7	2.9	12.0	12.1	7.5	9.3	9.4	8.7	12.4	7.7
Cycle Q Clear(g_c), s	6.4	14.3	3.7	2.9	12.0	12.1	7.5	9.3	9.4	8.7	12.4	7.7
Prop In Lane	1.00		1.00	1.00		0.14	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	187	494	419	136	415	426	214	743	752	270	425	535
V/C Ratio(X)	0.81	0.80	0.25	0.51	0.76	0.76	0.83	0.44	0.44	0.36	0.79	0.41
Avail Cap(c_a), veh/h	272	740	627	184	611	627	288	952	962	323	562	651
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	23.4	19.6	30.5	24.4	24.4	29.4	13.6	13.6	23.4	24.9	16.9
Incr Delay (d2), s/veh	11.5	3.8	0.3	2.9	3.2	3.2	13.4	0.4	0.4	0.8	5.7	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	3.0	6.2	1.3	1.2	4.9	5.1	3.6	3.4	3.5	1.4	5.7	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.5	27.2	19.9	33.4	27.7	27.7	42.9	14.0	14.1	24.3	30.5	17.4
LnGrp LOS	D	C	B	C	C	C	D	B	B	C	C	B
Approach Vol, veh/h		651			710			835			656	
Approach Delay, s/veh		29.4			28.2			20.2			25.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.1	24.2		35.4	12.3	22.0	13.8	21.6				
Change Period (Y+Rc), s	* 4.2	4.9		4.9	* 4.2	4.9	4.5	4.9				
Max Green Setting (Gmax), s	* 8	28.9		39.1	* 12	25.1	12.5	22.1				
Max Q Clear Time (g_c+I1), s	4.9	16.3		11.4	8.4	14.1	9.5	14.4				
Green Ext Time (p_c), s	0.0	2.3		4.7	0.1	3.0	0.1	2.3				

Intersection Summary			
HCM 6th Ctrl Delay		25.4	
HCM 6th LOS		C	

Notes

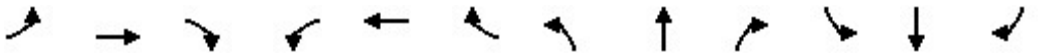
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	877	111	117	955	46	42	197	75	35	290	39
Future Volume (veh/h)	50	877	111	117	955	46	42	197	75	35	290	39
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	53	923	117	123	1005	48	44	207	79	37	305	41
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	0	0	0	0	0	0
Cap, veh/h	301	1657	210	303	1803	86	112	307	108	99	392	50
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	483	3030	384	489	3297	157	136	1136	400	97	1450	185
Grp Volume(v), veh/h	53	517	523	123	517	536	330	0	0	383	0	0
Grp Sat Flow(s),veh/h/ln	483	1697	1717	489	1697	1758	1673	0	0	1732	0	0
Q Serve(g_s), s	4.3	10.7	10.7	11.8	10.8	10.8	0.0	0.0	0.0	1.6	0.0	0.0
Cycle Q Clear(g_c), s	15.1	10.7	10.7	22.6	10.8	10.8	9.4	0.0	0.0	11.0	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.09	0.13		0.24	0.10		0.11
Lane Grp Cap(c), veh/h	301	928	939	303	928	961	527	0	0	541	0	0
V/C Ratio(X)	0.18	0.56	0.56	0.41	0.56	0.56	0.63	0.00	0.00	0.71	0.00	0.00
Avail Cap(c_a), veh/h	335	1047	1059	338	1047	1084	732	0	0	757	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.9	8.0	8.0	15.3	8.0	8.0	17.8	0.0	0.0	18.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.5	0.5	0.9	0.5	0.5	1.2	0.0	0.0	1.8	0.0	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	0.4	2.9	2.9	1.2	2.9	3.0	3.6	0.0	0.0	4.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	8.5	8.5	16.2	8.5	8.5	19.1	0.0	0.0	20.2	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	A	A
Approach Vol, veh/h		1093			1176			330			383	
Approach Delay, s/veh		8.7			9.3			19.1			20.2	
Approach LOS		A			A			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.9		34.2		19.9		34.2				
Change Period (Y+Rc), s		5.3		4.6		5.3		4.6				
Max Green Setting (Gmax), s		21.7		33.4		21.7		33.4				
Max Q Clear Time (g_c+I1), s		11.4		17.1		13.0		24.6				
Green Ext Time (p_c), s		1.5		6.7		1.6		5.0				

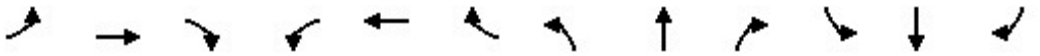
Intersection Summary												
HCM 6th Ctrl Delay			11.6									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	821	3	0	741	54	29	221	69	80	416	44
Future Volume (veh/h)	39	821	3	0	741	54	29	221	69	80	416	44
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	0	1786	1786	1800	1800	1800	1800	1728	1728
Adj Flow Rate, veh/h	41	864	3	0	780	57	31	233	73	84	438	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	0	1	1	0	0	0	0	0	0
Cap, veh/h	256	1250	4	0	1155	84	104	387	111	161	550	592
Arrive On Green	0.36	0.36	0.36	0.00	0.36	0.36	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	592	3468	12	0	3296	234	35	958	274	163	1360	1464
Grp Volume(v), veh/h	41	423	444	0	413	424	337	0	0	522	0	46
Grp Sat Flow(s),veh/h/ln	592	1697	1784	0	1697	1744	1267	0	0	1523	0	1464
Q Serve(g_s), s	2.8	9.3	9.3	0.0	9.0	9.0	1.2	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	11.8	9.3	9.3	0.0	9.0	9.0	14.7	0.0	0.0	13.5	0.0	0.8
Prop In Lane	1.00		0.01	0.00		0.13	0.09		0.22	0.16		1.00
Lane Grp Cap(c), veh/h	256	611	643	0	611	628	602	0	0	711	0	592
V/C Ratio(X)	0.16	0.69	0.69	0.00	0.68	0.68	0.56	0.00	0.00	0.73	0.00	0.08
Avail Cap(c_a), veh/h	281	682	717	0	682	701	761	0	0	866	0	739
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.8	11.9	11.9	0.0	11.8	11.8	9.9	0.0	0.0	11.5	0.0	8.0
Incr Delay (d2), s/veh	0.3	2.6	2.5	0.0	2.3	2.2	0.8	0.0	0.0	2.6	0.0	0.1
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	0.3	3.2	3.3	0.0	3.1	3.1	2.0	0.0	0.0	4.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	14.5	14.4	0.0	14.1	14.1	10.7	0.0	0.0	14.0	0.0	8.1
LnGrp LOS	B	B	B	A	B	B	B	A	A	B	A	A
Approach Vol, veh/h		908			837			337			568	
Approach Delay, s/veh		14.6			14.1			10.7			13.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.2		22.6		21.2		22.6				
Change Period (Y+Rc), s		5.4		4.9		5.4		4.9				
Max Green Setting (Gmax), s		17.6		22.1		17.6		22.1				
Max Q Clear Time (g_c+I1), s		13.8		16.7		11.0		15.5				
Green Ext Time (p_c), s		2.0		1.0		2.8		2.1				

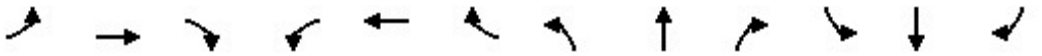
Intersection Summary												
HCM 6th Ctrl Delay			13.7									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	947	35	41	1045	13	32	19	41	29	70	61
Future Volume (vph)	29	947	35	41	1045	13	32	19	41	29	70	61
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1800	1800	1800
Lane Width	10	11	11	10	11	11	12	12	12	12	12	12
Total Lost time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.94			0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1492	3256		1492	3267			1646			1692	
Flt Permitted	0.16	1.00		0.19	1.00			0.85			0.92	
Satd. Flow (perm)	252	3256		297	3267			1423			1578	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	32	1052	39	46	1161	14	36	21	46	32	78	68
RTOR Reduction (vph)	0	3	0	0	1	0	0	37	0	0	38	0
Lane Group Flow (vph)	32	1088	0	46	1174	0	0	66	0	0	140	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	29.1	29.1		29.1	29.1			10.7			10.7	
Effective Green, g (s)	29.1	29.1		29.1	29.1			10.7			10.7	
Actuated g/C Ratio	0.50	0.50		0.50	0.50			0.19			0.19	
Clearance Time (s)	5.3	5.3		5.3	5.3			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	127	1642		149	1647			263			292	
v/s Ratio Prot		0.33			c0.36							
v/s Ratio Perm	0.13			0.15				0.05			c0.09	
v/c Ratio	0.25	0.66		0.31	0.71			0.25			0.48	
Uniform Delay, d1	8.1	10.6		8.4	11.1			20.1			21.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	1.0		1.2	1.5			0.5			1.2	
Delay (s)	9.2	11.7		9.6	12.6			20.6			22.2	
Level of Service	A	B		A	B			C			C	
Approach Delay (s)		11.6			12.4			20.6			22.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	57.7	Sum of lost time (s)	15.9
Intersection Capacity Utilization	56.9%	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)	136	808	235	104	633	146	98	441	128	137	570	167
Future Volume (veh/h)	136	808	235	104	633	146	98	441	128	137	570	167
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1687	1786	1786	1687	1786	1786
Adj Flow Rate, veh/h	142	842	0	108	659	0	102	459	133	143	594	174
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	373	1001		317	976		307	584	168	324	812	362
Arrive On Green	0.12	0.30	0.00	0.11	0.29	0.00	0.10	0.22	0.22	0.11	0.24	0.24
Sat Flow, veh/h	1606	3393	1514	1606	3393	1514	1606	2600	748	1606	3393	1514
Grp Volume(v), veh/h	142	842	0	108	659	0	102	298	294	143	594	174
Grp Sat Flow(s),veh/h/ln	1606	1697	1514	1606	1697	1514	1606	1697	1651	1606	1697	1514
Q Serve(g_s), s	4.1	16.6	0.0	3.1	12.2	0.0	3.3	11.8	12.0	4.6	11.5	7.0
Cycle Q Clear(g_c), s	4.1	16.6	0.0	3.1	12.2	0.0	3.3	11.8	12.0	4.6	11.5	7.0
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	373	1001		317	976		307	381	371	324	812	362
V/C Ratio(X)	0.38	0.84		0.34	0.67		0.33	0.78	0.79	0.44	0.73	0.48
Avail Cap(c_a), veh/h	392	1129		347	1129		337	486	473	330	972	433
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	23.6	0.0	16.0	22.4	0.0	18.4	26.0	26.1	18.4	25.0	23.3
Incr Delay (d2), s/veh	0.6	5.3	0.0	0.6	1.3	0.0	0.6	6.3	7.0	0.9	2.3	1.0
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	1.4	6.8	0.0	1.1	4.7	0.0	1.2	5.3	5.2	1.7	4.7	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	28.9	0.0	16.6	23.8	0.0	19.0	32.3	33.1	19.4	27.3	24.3
LnGrp LOS	B	C		B	C		B	C	C	B	C	C
Approach Vol, veh/h		984	A		767	A		694			911	
Approach Delay, s/veh		27.0			22.7			30.7			25.5	
Approach LOS		C			C			C			C	

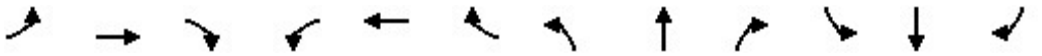
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	20.6	12.1	26.3	11.1	21.7	12.7	25.8
Change Period (Y+Rc), s	* 4.2	4.6	* 4.2	5.3	* 4.2	4.6	* 4.2	5.3
Max Green Setting (Gmax), s	* 8.3	20.4	* 9.3	23.7	* 8.3	20.4	* 9.3	23.7
Max Q Clear Time (g_c+I1), s	6.6	14.0	5.1	18.6	5.3	13.5	6.1	14.2
Green Ext Time (p_c), s	0.1	2.0	0.1	2.4	0.1	2.7	0.1	3.0

Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Notes

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	556	158	96	518	83	125	342	81	97	463	341
Future Volume (veh/h)	142	556	158	96	518	83	125	342	81	97	463	341
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1687	1786	1786	1687	1786	1786	1700	1800	1800	1687	1786	1786
Adj Flow Rate, veh/h	145	567	161	98	529	85	128	349	83	99	472	348
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	0	0	0	1	1	1
Cap, veh/h	175	596	505	132	899	144	143	1171	275	329	513	599
Arrive On Green	0.11	0.33	0.33	0.08	0.31	0.31	0.09	0.43	0.43	0.29	0.29	0.29
Sat Flow, veh/h	1606	1786	1514	1606	2929	469	1619	2748	645	862	1786	1514
Grp Volume(v), veh/h	145	567	161	98	306	308	128	215	217	99	472	348
Grp Sat Flow(s),veh/h/ln	1606	1786	1514	1606	1697	1702	1619	1710	1684	862	1786	1514
Q Serve(g_s), s	7.8	27.4	7.0	5.3	13.5	13.6	6.9	7.3	7.5	8.2	22.7	16.0
Cycle Q Clear(g_c), s	7.8	27.4	7.0	5.3	13.5	13.6	6.9	7.3	7.5	8.2	22.7	16.0
Prop In Lane	1.00		1.00	1.00		0.28	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	175	596	505	132	521	522	143	729	718	329	513	599
V/C Ratio(X)	0.83	0.95	0.32	0.74	0.59	0.59	0.90	0.30	0.30	0.30	0.92	0.58
Avail Cap(c_a), veh/h	227	597	506	145	521	522	143	742	730	336	527	611
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	38.6	28.8	22.0	39.7	25.9	26.0	40.0	16.7	16.7	25.4	30.6	21.0
Incr Delay (d2), s/veh	17.7	25.4	0.4	16.8	1.7	1.8	46.3	0.2	0.2	0.5	21.3	1.3
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	3.9	15.4	2.5	2.7	5.5	5.6	4.6	2.9	2.9	1.7	12.6	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.3	54.2	22.4	56.5	27.7	27.7	86.2	16.9	17.0	25.9	51.8	22.3
LnGrp LOS	E	D	C	E	C	C	F	B	B	C	D	C
Approach Vol, veh/h		873			712			560			919	
Approach Delay, s/veh		48.7			31.7			32.8			37.9	
Approach LOS		D			C			C			D	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	34.4		42.6	13.8	32.1	12.3	30.3				
Change Period (Y+Rc), s	* 4.2	4.9		4.9	* 4.2	4.9	4.5	4.9				
Max Green Setting (Gmax), s	* 8	29.6		38.4	* 13	25.1	7.8	26.1				
Max Q Clear Time (g_c+I1), s	7.3	29.4		9.5	9.8	15.6	8.9	24.7				
Green Ext Time (p_c), s	0.0	0.1		2.9	0.1	2.6	0.0	0.8				

Intersection Summary			
HCM 6th Ctrl Delay		38.6	
HCM 6th LOS		D	

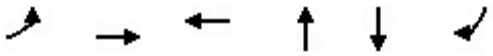
Notes

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

APPENDIX C – QUEUING CALCULATION SHEETS

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	35	676	46	873	432	133
v/c Ratio	0.23	0.52	0.21	0.68	0.70	0.23
Control Delay	15.0	12.1	13.1	14.6	18.1	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.0	12.1	13.1	14.6	18.1	9.5
Queue Length 50th (ft)	6	61	7	88	83	18
Queue Length 95th (ft)	26	123	29	171	176	49
Internal Link Dist (ft)		356		432	1581	349
Turn Bay Length (ft)	75		75			
Base Capacity (vph)	197	1671	284	1675	889	826
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.40	0.16	0.52	0.49	0.16

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	33	700	915	458	141	31
v/c Ratio	0.22	0.55	0.69	0.73	0.27	0.06
Control Delay	14.8	13.1	14.9	20.3	12.7	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.8	13.1	14.9	20.3	12.7	2.9
Queue Length 50th (ft)	6	76	105	105	28	0
Queue Length 95th (ft)	25	131	177	196	62	9
Internal Link Dist (ft)		406	428	382	1581	
Turn Bay Length (ft)	100					50
Base Capacity (vph)	188	1590	1655	850	711	701
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.44	0.55	0.54	0.20	0.04

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	13	752	101	821	118	187
v/c Ratio	0.07	0.55	0.48	0.59	0.38	0.51
Control Delay	10.8	12.7	20.6	13.6	18.8	20.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.8	12.7	20.6	13.6	18.8	20.9
Queue Length 50th (ft)	2	77	20	88	26	45
Queue Length 95th (ft)	12	145	#72	164	63	94
Internal Link Dist (ft)		432		792	438	347
Turn Bay Length (ft)	75		125			
Base Capacity (vph)	210	1546	237	1554	634	750
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.49	0.43	0.53	0.19	0.25

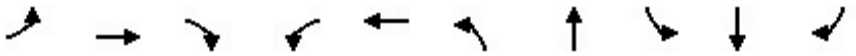
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	173	520	121	79	763	99	112	697	98	482	247
v/c Ratio	0.62	0.47	0.20	0.20	0.82	0.19	0.37	0.82	0.41	0.57	0.46
Control Delay	25.1	23.9	4.5	13.3	34.0	2.9	18.5	35.5	20.0	27.9	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.1	23.9	4.5	13.3	34.0	2.9	18.5	35.5	20.0	27.9	7.2
Queue Length 50th (ft)	49	114	0	21	185	0	34	168	29	110	4
Queue Length 95th (ft)	#120	164	31	45	#274	19	67	#256	60	158	58
Internal Link Dist (ft)		792			571			1665		669	
Turn Bay Length (ft)	100		200	100		150	100		125		75
Base Capacity (vph)	281	1109	602	397	1033	570	303	932	242	926	568
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.47	0.20	0.20	0.74	0.17	0.37	0.75	0.40	0.52	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	152	393	104	69	640	177	658	98	337	221
v/c Ratio	0.76	0.67	0.18	0.48	0.76	0.78	0.48	0.65	0.85	0.31
Control Delay	61.9	32.2	3.6	50.5	35.4	60.5	18.0	53.0	52.6	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.9	32.2	3.6	50.5	35.4	60.5	18.0	53.0	52.6	9.5
Queue Length 50th (ft)	83	193	0	38	168	97	128	49	178	36
Queue Length 95th (ft)	#184	296	24	#88	231	#207	181	#125	#326	86
Internal Link Dist (ft)		378			473		329		1665	
Turn Bay Length (ft)	200			125		150		150		
Base Capacity (vph)	214	626	615	145	995	243	1488	168	443	727
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.63	0.17	0.48	0.64	0.73	0.44	0.58	0.76	0.30

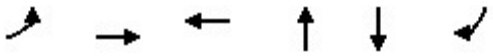
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	53	1038	123	1050	330	381
v/c Ratio	0.34	0.64	0.76	0.64	0.65	0.72
Control Delay	16.3	12.1	47.2	12.4	23.3	26.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	12.1	47.2	12.4	23.3	26.7
Queue Length 50th (ft)	10	121	31	125	98	124
Queue Length 95th (ft)	38	195	#127	201	177	212
Internal Link Dist (ft)		356		432	1581	349
Turn Bay Length (ft)	75		75			
Base Capacity (vph)	202	2081	207	2094	675	709
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.50	0.59	0.50	0.49	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	41	865	835	337	522	46
v/c Ratio	0.30	0.78	0.73	0.47	0.85	0.07
Control Delay	18.9	20.4	17.7	11.3	28.6	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.9	20.4	17.7	11.3	28.6	3.1
Queue Length 50th (ft)	8	115	106	56	125	0
Queue Length 95th (ft)	31	#184	161	111	#280	12
Internal Link Dist (ft)		406	428	382	1581	
Turn Bay Length (ft)	100					50
Base Capacity (vph)	148	1201	1243	795	691	685
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.72	0.67	0.42	0.76	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

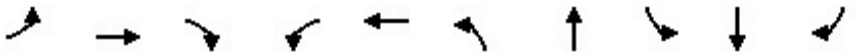
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	32	1088	41	1175	95	177
v/c Ratio	0.25	0.66	0.27	0.71	0.32	0.54
Control Delay	15.9	13.6	15.5	14.7	15.6	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.9	13.6	15.5	14.7	15.6	21.7
Queue Length 50th (ft)	6	129	7	146	16	40
Queue Length 95th (ft)	28	232	33	262	48	90
Internal Link Dist (ft)		432		792	438	347
Turn Bay Length (ft)	75		125			
Base Capacity (vph)	128	1651	150	1654	599	660
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.66	0.27	0.71	0.16	0.27

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	140	841	245	108	657	152	102	592	143	594	171
v/c Ratio	0.41	0.79	0.37	0.37	0.62	0.26	0.36	0.69	0.51	0.69	0.36
Control Delay	16.0	31.4	5.1	15.9	26.0	5.4	18.7	28.5	22.4	30.6	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.0	31.4	5.1	15.9	26.0	5.4	18.7	28.5	22.4	30.6	9.1
Queue Length 50th (ft)	38	206	0	29	151	0	31	130	44	141	9
Queue Length 95th (ft)	72	#311	50	58	210	40	62	187	84	200	57
Internal Link Dist (ft)		792			571			1665		669	
Turn Bay Length (ft)	100		200	100		150	100		125		75
Base Capacity (vph)	346	1186	705	294	1186	645	286	1017	285	1020	541
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.71	0.35	0.37	0.55	0.24	0.36	0.58	0.50	0.58	0.32

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



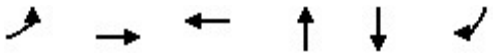
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	145	566	161	98	612	128	432	99	472	348
v/c Ratio	0.75	0.97	0.27	0.74	0.65	0.92	0.32	0.43	0.98	0.45
Control Delay	62.1	61.5	5.0	73.0	31.3	101.1	16.2	33.2	69.7	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.1	61.5	5.0	73.0	31.3	101.1	16.2	33.2	69.7	12.7
Queue Length 50th (ft)	80	314	0	55	157	74	74	46	265	84
Queue Length 95th (ft)	#167	#526	42	#137	216	#180	110	96	#462	153
Internal Link Dist (ft)		378			473		329		1665	
Turn Bay Length (ft)	200			125		150		150		
Base Capacity (vph)	207	586	606	132	936	139	1346	228	482	786
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.97	0.27	0.74	0.65	0.92	0.32	0.43	0.98	0.44

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	35	677	46	878	432	134
v/c Ratio	0.23	0.52	0.21	0.68	0.70	0.24
Control Delay	14.9	12.0	13.0	14.5	18.4	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.9	12.0	13.0	14.5	18.4	9.7
Queue Length 50th (ft)	6	61	7	88	84	18
Queue Length 95th (ft)	26	122	29	170	178	50
Internal Link Dist (ft)		356		432	1581	349
Turn Bay Length (ft)	75		75			
Base Capacity (vph)	198	1688	287	1692	873	814
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.40	0.16	0.52	0.49	0.16

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	33	701	918	458	141	31
v/c Ratio	0.22	0.55	0.69	0.73	0.27	0.06
Control Delay	14.9	13.1	15.0	20.3	12.7	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.9	13.1	15.0	20.3	12.7	2.9
Queue Length 50th (ft)	6	76	105	105	28	0
Queue Length 95th (ft)	25	131	178	196	62	9
Internal Link Dist (ft)		406	428	382	1581	
Turn Bay Length (ft)	100					50
Base Capacity (vph)	187	1590	1655	850	711	701
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.44	0.55	0.54	0.20	0.04

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	13	753	103	821	128	188
v/c Ratio	0.07	0.55	0.49	0.60	0.41	0.51
Control Delay	10.8	12.7	21.1	13.6	19.3	21.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.8	12.7	21.1	13.6	19.3	21.0
Queue Length 50th (ft)	2	78	20	89	28	45
Queue Length 95th (ft)	12	146	#77	165	67	94
Internal Link Dist (ft)		432		792	438	347
Turn Bay Length (ft)	75		125			
Base Capacity (vph)	210	1545	237	1552	626	748
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.49	0.43	0.53	0.20	0.25

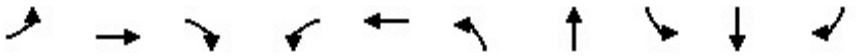
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	177	522	121	79	764	99	112	697	98	482	248
v/c Ratio	0.63	0.47	0.20	0.20	0.82	0.19	0.37	0.82	0.41	0.57	0.46
Control Delay	25.8	23.9	4.5	13.4	34.0	2.9	18.5	35.5	20.0	27.9	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.8	23.9	4.5	13.4	34.0	2.9	18.5	35.5	20.0	27.9	7.2
Queue Length 50th (ft)	51	114	0	21	186	0	34	168	29	110	4
Queue Length 95th (ft)	#125	164	31	45	#274	19	67	#256	60	158	59
Internal Link Dist (ft)		792			571			1665		669	
Turn Bay Length (ft)	100		200	100		150	100		125		75
Base Capacity (vph)	281	1109	603	395	1032	570	303	931	242	925	568
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.47	0.20	0.20	0.74	0.17	0.37	0.75	0.40	0.52	0.44

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	152	395	104	69	641	177	658	98	337	221
v/c Ratio	0.76	0.67	0.18	0.48	0.76	0.78	0.48	0.65	0.85	0.31
Control Delay	62.0	32.3	3.6	50.6	35.4	60.5	18.0	53.0	52.7	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.0	32.3	3.6	50.6	35.4	60.5	18.0	53.0	52.7	9.6
Queue Length 50th (ft)	83	194	0	38	169	97	128	49	179	36
Queue Length 95th (ft)	#184	298	24	#88	231	#207	181	#125	#326	86
Internal Link Dist (ft)		378			473		329		1665	
Turn Bay Length (ft)	200			125		150		150		
Base Capacity (vph)	214	626	615	145	994	243	1488	168	442	727
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.63	0.17	0.48	0.64	0.73	0.44	0.58	0.76	0.30

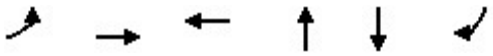
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	53	1040	123	1053	330	383
v/c Ratio	0.34	0.64	0.77	0.65	0.65	0.73
Control Delay	16.4	12.1	48.2	12.4	23.3	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.4	12.1	48.2	12.4	23.3	26.9
Queue Length 50th (ft)	10	122	31	127	98	125
Queue Length 95th (ft)	39	195	#128	202	177	214
Internal Link Dist (ft)		356		432	1581	349
Turn Bay Length (ft)	75		75			
Base Capacity (vph)	200	2075	205	2089	673	705
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.50	0.60	0.50	0.49	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	41	867	837	337	522	46
v/c Ratio	0.30	0.78	0.73	0.47	0.85	0.07
Control Delay	19.0	20.5	17.8	11.3	28.5	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.0	20.5	17.8	11.3	28.5	3.1
Queue Length 50th (ft)	8	115	106	56	125	0
Queue Length 95th (ft)	31	#185	161	111	#280	12
Internal Link Dist (ft)		406	428	382	1581	
Turn Bay Length (ft)	100					50
Base Capacity (vph)	147	1201	1242	794	691	684
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.72	0.67	0.42	0.76	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

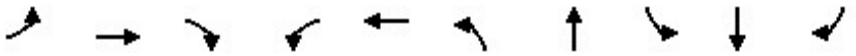
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	32	1091	46	1175	103	178
v/c Ratio	0.25	0.66	0.31	0.71	0.34	0.54
Control Delay	16.0	13.7	16.9	14.8	15.8	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.0	13.7	16.9	14.8	15.8	21.8
Queue Length 50th (ft)	6	130	8	146	17	41
Queue Length 95th (ft)	28	235	38	263	51	91
Internal Link Dist (ft)		432		792	438	347
Turn Bay Length (ft)	75		125			
Base Capacity (vph)	127	1649	149	1652	595	658
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.66	0.31	0.71	0.17	0.27

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	142	842	245	108	659	152	102	592	143	594	174
v/c Ratio	0.41	0.79	0.37	0.37	0.62	0.26	0.36	0.69	0.51	0.69	0.36
Control Delay	16.2	31.4	5.1	15.9	26.0	5.4	18.7	28.5	22.4	30.6	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.2	31.4	5.1	15.9	26.0	5.4	18.7	28.5	22.4	30.6	9.3
Queue Length 50th (ft)	39	207	0	29	151	0	31	130	44	141	11
Queue Length 95th (ft)	73	#312	50	58	210	40	62	187	84	200	59
Internal Link Dist (ft)		792			571			1665		669	
Turn Bay Length (ft)	100		200	100		150	100		125		75
Base Capacity (vph)	345	1186	705	294	1186	645	286	1017	285	1020	541
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.71	0.35	0.37	0.56	0.24	0.36	0.58	0.50	0.58	0.32

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	145	567	161	98	614	128	432	99	472	348
v/c Ratio	0.75	0.97	0.27	0.74	0.65	0.92	0.32	0.43	0.98	0.45
Control Delay	62.1	61.5	5.0	73.2	31.3	101.4	16.2	33.2	69.9	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.1	61.5	5.0	73.2	31.3	101.4	16.2	33.2	69.9	12.7
Queue Length 50th (ft)	80	314	0	55	157	74	74	46	265	84
Queue Length 95th (ft)	#167	#527	42	#137	217	#180	110	96	#462	154
Internal Link Dist (ft)		378			473		329		1665	
Turn Bay Length (ft)	200			125		150		150		
Base Capacity (vph)	207	586	606	132	938	139	1345	228	482	785
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.97	0.27	0.74	0.65	0.92	0.32	0.43	0.98	0.44

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX D – ACTIVE TRANSPORTATION REVIEW SHEETS

Active Transportation - Segment Inventory

Del Mar Blvd (West to East)

Criteria 1: Pedestrian				
Del Mar Blvd:	***From***		***El Molino Ave***	***Oak Knoll Ave***
	To	***El Molino Ave***	***Oak Knoll Ave***	
Width (feet): unobstructed;full	**EB**	5;10	5;10	4;9
	WB	5;10	5;10	4;9

Criteria 2: Bikes				
Del Mar Blvd:	***From***		***El Molino Ave***	***Oak Knoll Ave***
	To	***El Molino Ave***	***Oak Knoll Ave***	
Bikeway Type (1,2,3,None)	**EB**	None	None	None
	WB	None	None	None
Bike Lane Width (0 if none)	**EB**	0	0	0
	WB	0	0	0
Parking (# of Racks)	**EB**	0	0	0
	WB	0	0	0
Bike Share Lots (Y/N)	**EB**	N	N	N
	WB	N	N	N

Criteria 3: Transit				
Del Mar Blvd:	***From***		***El Molino Ave***	***Oak Knoll Ave***
	To	***El Molino Ave***	***Oak Knoll Ave***	
Transit Stops (#)	**EB**	0	1	1
	WB	1	0	1
Transit Line Available	**EB**	-	P53;M267;M662	P53;M267;M662
	WB	P53;M267;M662	-	P53;M267;M662
Shelter at the Stop? (Y/N)	**EB**	-	N	N
	WB	N	-	N
Bench at the Stop? (Y/N)	**EB**	-	Y	Y
	WB	Y	-	Y

**P = PASADENA TRANSIT; M = LA METRO*

Criteria 4: Miscellaneous				
Del Mar Blvd:	***From***		***El Molino Ave***	***Oak Knoll Ave***
	To	***El Molino Ave***	***Oak Knoll Ave***	
# of Trash Cans	**EB**	0	0	0
	WB	0	0	1

Active Transportation - Segment Inventory

San Pasqual St (West to East)

Criteria 1: Pedestrian			
San Pasqual St:	***From***	***Lake Ave***	***Shoppers Ln***
	To	***Shoppers Ln***	
Width (feet): unobstructed;full	**EB**	11;11	4;4
	WB	9;15	4;14

Criteria 2: Bikes			
San Pasqual St:	***From***	***Lake Ave***	***Shoppers Ln***
	To	***Shoppers Ln***	
Bikeway Type (1,2,3,None)	**EB**	None	None
	WB	None	None
Bike Lane Width (0 if none)	**EB**	0	0
	WB	0	0
Parking (# of Racks)	**EB**	0	0
	WB	0	0
Bike Share Lots (Y/N)	**EB**	N	N
	WB	N	N

Criteria 3: Transit			
San Pasqual St:	***From***	***Lake Ave***	***Shoppers Ln***
	To	***Shoppers Ln***	
Transit Stops (#)	**EB**	0	0
	WB	0	0
Transit Line Available	**EB**	-	-
	WB	-	-
Shelter at the Stop? (Y/N)	**EB**	-	-
	WB	-	-
Bench at the Stop? (Y/N)	**EB**	-	-
	WB	-	-

Criteria 4: Miscellaneous			
San Pasqual St:	***From***	***Lake Ave***	***Shoppers Ln***
	To	***Shoppers Ln***	
# of Trash Cans	**EB**	0	0
	WB	0	0

Active Transportation - Segment Inventory

California Blvd (West to East)

Criteria 1: Pedestrian							
California Blvd:	***From***		***Madison Ave***	***El Molino Ave***	***Oak Knoll Ave***	***Hudson Ave***	***Lake Ave***
	To	***Madison Ave***	***El Molino Ave***	***Oak Knoll Ave***	***Hudson Ave***	***Lake Ave***	
Width (feet): unobstructed;full	**EB**	6;9	6;9	6;9	6;9	6;9	5;9
	WB	6;10	6;10	6;9	6;9	5;10	9;9

Criteria 2: Bikes							
California Blvd:	***From***		***Madison Ave***	***El Molino Ave***	***Oak Knoll Ave***	***Hudson Ave***	***Lake Ave***
	To	***Madison Ave***	***El Molino Ave***	***Oak Knoll Ave***	***Hudson Ave***	***Lake Ave***	
Bikeway Type (1,2,3,None)	**EB**	III	III	III	III	III	None
	WB	III	III	III	III	III	None
Bike Lane Width (0 if none)	**EB**	Share the Road	Share the Road	Share the Road	Share the Road	Share the Road	0
	WB	Share the Road	Share the Road	Share the Road	Share the Road	Share the Road	0
Parking (# of Racks)	**EB**	0	0	0	0	1	1
	WB	0	0	0	0	1	1
Bike Share Lots (Y/N)	**EB**	N	N	N	N	N	N
	WB	N	N	N	N	N	N

Criteria 3: Transit							
California Blvd:	***From***		***Madison Ave***	***El Molino Ave***	***Oak Knoll Ave***	***Hudson Ave***	***Lake Ave***
	To	***Madison Ave***	***El Molino Ave***	***Oak Knoll Ave***	***Hudson Ave***	***Lake Ave***	
Transit Stops (#)	**EB**	0	0	1	0	0	1
	WB	0	1	0	1	1	0
Transit Line Available*	**EB**	-	-	P20	-	-	P53
	WB	-	P20	-	P20	P20	-
Shelter at the Stop? (Y/N)	**EB**	-	-	N	-	-	N
	WB	-	N	-	N	N	-
Bench at the Stop? (Y/N)	**EB**	-	-	Y	-	-	N
	WB	-	Y	-	N	Y	-

**P = PASADENA TRANSIT*

Criteria 4: Miscellaneous							
California Blvd:	***From***		***Madison Ave***	***El Molino Ave***	***Oak Knoll Ave***	***Hudson Ave***	***Lake Ave***
	To	***Madison Ave***	***El Molino Ave***	***Oak Knoll Ave***	***Hudson Ave***	***Lake Ave***	
# of Trash Cans	**EB**	0	0	0	0	0	0
	WB	0	0	0	0	1	1

Active Transportation - Segment Inventory

Oakland Ave (North to South)

Criteria 1: Pedestrian		
Oakland Ave:	***From***	***Del Mar Blvd***
	To	***California Blvd***
Width (feet): unobstructed;full	**NB**	6;12
	SB	6;11

Criteria 2: Bikes		
Oakland Ave:	***From***	***Del Mar Blvd***
	To	***California Blvd***
Bikeway Type (1,2,3,None)	**NB**	None
	SB	None
Bike Lane Width (0 if none)	**NB**	0
	SB	0
Parking (# of Racks)	**NB**	0
	SB	0
Bike Share Lots (Y/N)	**NB**	N
	SB	N

Criteria 3: Transit		
Oakland Ave:	***From***	***Del Mar Blvd***
	To	***California Blvd***
Transit Stops (#)	**NB**	0
	SB	0
Transit Line Available	**NB**	-
	SB	-
Shelter at the Stop? (Y/N)	**NB**	-
	SB	-
Bench at the Stop? (Y/N)	**NB**	-
	SB	-

Criteria 4: Miscellaneous		
Oakland Ave:	***From***	***Del Mar Blvd***
	To	***California Blvd***
# of Trash Cans	**NB**	0
	SB	0

Active Transportation - Segment Inventory

Madison Ave (North to South)

Criteria 1: Pedestrian			
Madison Ave:	***From***		***California Blvd***
	To	***California Blvd***	
Width (feet): unobstructed;full	**NB**	6;12	4;11
	SB	6;11	4;11

Criteria 2: Bikes			
Madison Ave:	***From***		***California Blvd***
	To	***California Blvd***	
Bikeway Type (1,2,3,None)	**NB**	None	None
	SB	None	None
Bike Lane Width (0 if none)	**NB**	0	0
	SB	0	0
Parking (# of Racks)	**NB**	0	0
	SB	0	0
Bike Share Lots (Y/N)	**NB**	N	N
	SB	N	N

Criteria 3: Transit			
Madison Ave:	***From***		***California Blvd***
	To	***California Blvd***	
Transit Stops (#)	**NB**	0	0
	SB	0	0
Transit Line Available	**NB**	-	-
	SB	-	-
Shelter at the Stop? (Y/N)	**NB**	-	-
	SB	-	-
Bench at the Stop? (Y/N)	**NB**	-	-
	SB	-	-

Criteria 4: Miscellaneous			
Madison Ave:	***From***		***California Blvd***
	To	***California Blvd***	
# of Trash Cans	**NB**	0	0
	SB	0	0

Active Transportation - Segment Inventory

El Molino Ave (North to South)

Criteria 1: Pedestrian			
El Molino Ave:	***From***		***California Blvd***
	To	***California Blvd***	
Width (feet): unobstructed;full	**NB**	6;12	5;15
	SB	6;12	7;14

Criteria 2: Bikes			
El Molino Ave:	***From***		***California Blvd***
	To	***California Blvd***	
Bikeway Type (1,2,3,None)	**NB**	None	None
	SB	None	None
Bike Lane Width (0 if none)	**NB**	0	0
	SB	0	0
Parking (# of Racks)	**NB**	0	0
	SB	0	0
Bike Share Lots (Y/N)	**NB**	N	N
	SB	N	N

Criteria 3: Transit			
El Molino Ave:	***From***		***California Blvd***
	To	***California Blvd***	
Transit Stops (#)	**NB**	0	0
	SB	0	0
Transit Line Available	**NB**	-	-
	SB	-	-
Shelter at the Stop? (Y/N)	**NB**	-	-
	SB	-	-
Bench at the Stop? (Y/N)	**NB**	-	-
	SB	-	-

Criteria 4: Miscellaneous			
El Molino Ave:	***From***		***California Blvd***
	To	***California Blvd***	
# of Trash Cans	**NB**	0	0
	SB	0	0

Active Transportation - Segment Inventory

Oak Knoll Ave (North to South)

Criteria 1: Pedestrian			
Oak Knoll Ave:	***From***		***California Ave***
	To	***California Ave***	
Width (feet): unobstructed;full	**NB**	5;10	4;10
	SB	5;10	4;11

Criteria 2: Bikes			
Oak Knoll Ave:	***From***		***California Ave***
	To	***California Ave***	
Bikeway Type (1,2,3,None)	**NB**	None	None
	SB	None	None
Bike Lane Width (0 if none)	**NB**	0	0
	SB	0	0
Parking (# of Racks)	**NB**	0	0
	SB	0	0
Bike Share Lots (Y/N)	**NB**	N	N
	SB	N	N

Criteria 3: Transit			
Oak Knoll Ave:	***From***		***California Ave***
	To	***California Ave***	
Transit Stops (#)	**NB**	0	0
	SB	0	0
Transit Line Available*	**NB**	-	-
	SB	-	-
Shelter at the Stop? (Y/N)	**NB**	-	-
	SB	-	-
Bench at the Stop? (Y/N)	**NB**	-	-
	SB	-	-

Criteria 4: Miscellaneous			
Oak Knoll Ave:	***From***		***California Ave***
	To	***California Ave***	
# of Trash Cans	**NB**	0	0
	SB	0	0

Active Transportation - Segment Inventory

Hudson Ave (North to South)

Criteria 1: Pedestrian				
Hudson Ave:	***From***		***California Blvd***	***Oakwood Pl***
	To	***California Blvd***	***Oakwood Pl***	
Width (feet): unobstructed;full	**NB**	4;12	5;14	4;14
	SB	5;12	5;14	5;14

Criteria 2: Bikes				
Hudson Ave:	***From***		***California Blvd***	***Oakwood Pl***
	To	***California Blvd***	***Oakwood Pl***	
Bikeway Type (1,2,3,None)	**NB**	None	None	None
	SB	None	None	None
Bike Lane Width (0 if none)	**NB**	0	0	0
	SB	0	0	0
Parking (# of Racks)	**NB**	0	0	0
	SB	0	0	0
Bike Share Lots (Y/N)	**NB**	N	N	N
	SB	N	N	N

Criteria 3: Transit				
Hudson Ave:	***From***		***California Blvd***	***Oakwood Pl***
	To	***California Blvd***	***Oakwood Pl***	
Transit Stops (#)	**NB**	0	0	0
	SB	0	0	0
Transit Line Available	**NB**	-	-	-
	SB	-	-	-
Shelter at the Stop? (Y/N)	**NB**	-	-	-
	SB	-	-	-
Bench at the Stop? (Y/N)	**NB**	-	-	-
	SB	-	-	-

Criteria 4: Miscellaneous				
Hudson Ave:	***From***		***California Blvd***	***Oakwood Pl***
	To	***California Blvd***	***Oakwood Pl***	
# of Trash Cans	**NB**	0	0	0
	SB	0	0	0

Active Transportation - Segment Inventory

Lake Ave (North to South)

Criteria 1: Pedestrian					
Lake Ave:	***From***		***San Pasqual St***	***Granite Dr***	***California Blvd***
	To	***San Pasqual St***	***Granite Dr***	***California Blvd***	
Width (feet): unobstructed;full	**NB**	8;14	9;15	9;15	6;15
	SB	8;15	9;14	9;14	6;15

Criteria 2: Bikes					
Lake Ave:	***From***		***San Pasqual St***	***Granite Dr***	***California Blvd***
	To	***San Pasqual St***	***Granite Dr***	***California Blvd***	
Bikeway Type (1,2,3,None)	**NB**	III	III	III	III
	SB	III	III	III	III
Bike Lane Width (0 if none)	**NB**	Share the Road	Share the Road	Share the Road	Share the Road
	SB	Share the Road	Share the Road	Share the Road	Share the Road
Parking (# of Racks)	**NB**	4	1	1	0
	SB	8	0	2	1
Bike Share Lots (Y/N)	**NB**	N	N	N	N
	SB	N	N	N	N

Criteria 3: Transit					
Lake Ave:	***From***		***San Pasqual St***	***Granite Dr***	***California Blvd***
	To	***San Pasqual St***	***Granite Dr***	***California Blvd***	
Transit Stops (#)	**NB**	1	0	1	0
	SB	1	1	0	1
Transit Line Available	**NB**	P20	-	P20	-
	SB	P20	P20;P53	-	-
Shelter at the Stop? (Y/N)	**NB**	N	-	N	-
	SB	Y	Y	-	Y
Bench at the Stop? (Y/N)	**NB**	Y	-	Y	-
	SB	Y	Y	-	Y

**P = PASADENA TRANSIT*

Criteria 4: Miscellaneous					
Lake Ave:	***From***		***San Pasqual St***	***Granite Dr***	***California Blvd***
	To	***San Pasqual St***	***Granite Dr***	***California Blvd***	
# of Trash Cans	**NB**	3	0	2	1
	SB	4	1	2	1

Active Transportation - Intersection Inventory

Criteria 1: Pedestrian Curb Ramps and ADA Features												
Del Mar Blvd at:	**El Molino Ave**				**Oak Knoll Ave**				**Hudson Ave**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Ramp Type (N/D/P)*	D	D	D	D	D	D	D	D	D	D	D	D
Truncated Dome? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Landing Space? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obstructions (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N

**Ramp Type N = None, D = Diagonal; P = Perpendicular/Directional*

Criteria 2: Curb Extensions and Bulb-Outs												
Del Mar Blvd at:	**El Molino Ave**				**Oak Knoll Ave**				**Hudson Ave**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Does it Exist? (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N

Criteria 3: Crosswalk Features												
Del Mar Blvd at:	**El Molino Ave**				**Oak Knoll Ave**				**Hudson Ave**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Does it Exist? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Signalized? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Type? (N/P/L/Z/C/O)*	L	L	L	L	L	L	L	L	L	L	L	L
Color (W/Y/D)**	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Raised? (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N
Advanced Stop? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Midblock Median? (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N

**Crosswalk Type N = not marked; P = Parallel Line; L = Ladder; Z = Zebra; C = Continental; O = Others*

***Crosswalk Color W = White; Y = Yellow; D = Decorative*

Criteria 4: Pedestrian Assistance Features (For Signalized Intersections)												
Del Mar Blvd at:	**El Molino Ave**				**Oak Knoll Ave**				**Hudson Ave**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Push Button? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
APS? (Y/N)	N	N	N	N	Y	Y	Y	Y	N	N	N	N
Countdown Signal? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
LPI? (Y/N)	N	N	N	N	Y	Y	Y	Y	N	N	N	N

Active Transportation - Intersection Inventory

Criteria 1: Pedestrian Curb Ramps and ADA Features								
San Pasqual St at:	**Lake Ave**				**Shoppers Ln**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Ramp Type (N/D/P)*	P	D		D	D	D		
Truncated Dome? (Y/N)	N	N		N	N	N		
Landing Space? (Y/N)	Y	Y		Y	Y	Y		
Obstructions (Y/N)	N	N		N	N	N		

**Ramp Type N = None, D = Diagonal; P = Perpendicular/Directional*

Criteria 2: Curb Extensions and Bulb-Outs								
San Pasqual St at:	**Lake Ave**				**Shoppers Ln**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Does it Exist? (Y/N)		N		N	N	N		

Criteria 3: Crosswalk Features								
San Pasqual St at:	**Lake Ave**				**Shoppers Ln**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Does it Exist? (Y/N)	Y	Y		N	N	Y	N	
Signalized? (Y/N)	Y	Y				N		
Type? (N/P/L/Z/C/O)*	P	P				N		
Color (W/Y/D)**	W	W						
Raised? (Y/N)	N	N				N		
Advanced Stop? (Y/N)	Y	Y				Y		
Midblock Median? (Y/N)	N	N				N		

**Crosswalk Type N = not marked; P = Parallel Line; L = Ladder; Z = Zebra; C = Continental; O = Others*

***Crosswalk Color W = White; Y = Yellow; D = Decorative*

Criteria 4: Pedestrian Assistance Features (For Signalized Intersections)								
San Pasqual St at:	**Lake Ave**				**Shoppers Ln**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Push Button? (Y/N)	Y	Y						
APS? (Y/N)	Y	Y						
Countdown Signal? (Y/N)	Y	Y						
LPI? (Y/N)	Y	Y						

Active Transportation - Intersection Inventory

Criteria 1: Pedestrian Curb Ramps and ADA Features																								
California Blvd at:	**Oakland Ave**				**Madison Ave**				**El Molino Ave**				**Oak Knoll Ave**				**Hudson Ave**				**Lake Ave**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Ramp Type (N/D/P)*	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Truncated Dome? (Y/N)	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y
Landing Space? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obstructions (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

**Ramp Type N = None, D = Diagonal; P = Perpendicular/Directional*

Criteria 2: Curb Extensions and Bulb-Outs																								
California Blvd at:	**Oakland Ave**				**Madison Ave**				**El Molino Ave**				**Oak Knoll Ave**				**Hudson Ave**				**Lake Ave**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Does it Exist? (Y/N)	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N

Criteria 3: Crosswalk Features																								
California Blvd at:	**Oakland Ave**				**Madison Ave**				**El Molino Ave**				**Oak Knoll Ave**				**Hudson Ave**				**Lake Ave**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Does it Exist? (Y/N)	N	N	N	N	N	N	N	N	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y
Signalized? (Y/N)									Y	Y	Y	Y					Y	Y	Y	Y	Y	Y	Y	Y
Type? (N/P/L/Z/C/O)*									P	P	P	P					P	P	P	P	P	P	P	P
Color (W/Y/D)**									W	W	W	W					W	W	W	W	W	W	W	W
Raised? (Y/N)									N	N	N	N					N	N	N	N	N	N	N	N
Advanced Stop? (Y/N)									Y	Y	Y	Y					Y	N	Y	Y	Y	Y	Y	Y
Midblock Median? (Y/N)									N	N	N	N					N	N	N	N	N	N	N	N

**Crosswalk Type N = not marked; P = Parallel Line; L = Ladder; Z = Zebra; C = Continental; O = Others*

***Crosswalk Color W = White; Y = Yellow; D = Decorative*

Criteria 4: Pedestrian Assistance Features (For Signalized Intersections)																								
California Blvd at:	**Oakland Ave**				**Madison Ave**				**El Molino Ave**				**Oak Knoll Ave**				**Hudson Ave**				**Lake Ave**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Push Button? (Y/N)									Y	Y	Y	Y					Y	Y	Y	Y	Y	Y	Y	Y
APS? (Y/N)									N	N	N	N					N	N	N	N	Y	Y	Y	Y
Countdown Signal? (Y/N)									Y	Y	Y	Y					Y	Y	Y	Y	Y	Y	Y	Y
LPI? (Y/N)									N	N	N	N					N	N	N	N	N	N	N	N

Active Transportation - Intersection Inventory

Criteria 1: Pedestrian Curb Ramps and ADA Features				
Oakland Ave at:	**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**
Ramp Type (N/D/P)*	D	D	D	D
Truncated Dome? (Y/N)	Y	Y	Y	Y
Landing Space? (Y/N)	Y	Y	Y	Y
Obstructions (Y/N)	N	N	N	N

**Ramp Type N = None, D = Diagonal; P = Perpendicular/Directional*

Criteria 2: Curb Extensions and Bulb-Outs				
Oakland Ave at:	**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**
Does it Exist? (Y/N)	N	N	N	N

Criteria 3: Crosswalk Features				
Oakland Ave at:	**California Blvd**			
Legs:	**E**	**N**	**W**	**S**
Does it Exist? (Y/N)	N	N	N	N
Signalized? (Y/N)				
Type? (N/P/L/Z/C/O)*				
Color (W/Y/D)**				
Raised? (Y/N)				
Advanced Stop? (Y/N)				
Midblock Median? (Y/N)				

**Crosswalk Type N = not marked; P = Parallel Line; L = Ladder; Z = Zebra; C = Continental; O = Others*

***Crosswalk Color W = White; Y = Yellow; D = Decorative*

Criteria 4: Pedestrian Assistance Features (For Signalized Intersections)				
Oakland Ave at:	**California Blvd**			
Legs:	**E**	**N**	**W**	**S**
Push Button? (Y/N)				
APS? (Y/N)				
Countdown Signal? (Y/N)				
LPI? (Y/N)				

Active Transportation - Intersection Inventory

Criteria 1: Pedestrian Curb Ramps and ADA Features				
Madison Ave at:	**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**
Ramp Type (N/D/P)*	D	D	D	D
Truncated Dome? (Y/N)	N	N	N	N
Landing Space? (Y/N)	Y	Y	Y	Y
Obstructions (Y/N)	N	N	N	N

**Ramp Type N = None, D = Diagonal; P = Perpendicular/Directional*

Criteria 2: Curb Extensions and Bulb-Outs				
Madison Ave at:	**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**
Does it Exist? (Y/N)	N	N	N	N

Criteria 3: Crosswalk Features				
Madison Ave at:	**California Blvd**			
Legs:	**E**	**N**	**W**	**S**
Does it Exist? (Y/N)	N	N	N	N
Signalized? (Y/N)				
Type? (N/P/L/Z/C/O)*				
Color (W/Y/D)**				
Raised? (Y/N)				
Advanced Stop? (Y/N)				
Midblock Median? (Y/N)				

**Crosswalk Type N = not marked; P = Parallel Line; L = Ladder; Z = Zebra; C = Continental; O = Others*

***Crosswalk Color W = White; Y = Yellow; D = Decorative*

Criteria 4: Pedestrian Assistance Features (For Signalized Intersections)				
Madison Ave at:	**California Blvd**			
Legs:	**E**	**N**	**W**	**S**
Push Button? (Y/N)				
APS? (Y/N)				
Countdown Signal? (Y/N)				
LPI? (Y/N)				

Active Transportation - Intersection Inventory

Criteria 1: Pedestrian Curb Ramps and ADA Features								
El Molino Ave at:	**Del Mar Blvd**				**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Ramp Type (N/D/P)*	D	D	D	D	D	D	D	D
Truncated Dome? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
Landing Space? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
Obstructions (Y/N)	N	N	N	N	N	N	N	N

**Ramp Type N = None, D = Diagonal; P = Perpendicular/Directional*

Criteria 2: Curb Extensions and Bulb-Outs								
El Molino Ave at:	**Del Mar Blvd**				**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Does it Exist? (Y/N)	N	N	N	N	N	N	Y	N

Criteria 3: Crosswalk Features								
El Molino Ave at:	**Del Mar Blvd**				**California Blvd**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Does it Exist? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
Signalized? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
Type? (N/P/L/Z/C/O)*	L	L	L	L	P	P	P	P
Color (W/Y/D)**	Y	Y	Y	Y	W	W	W	W
Raised? (Y/N)	N	N	N	N	N	N	N	N
Advanced Stop? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
Midblock Median? (Y/N)	N	N	N	N	N	N	N	N

**Crosswalk Type N = not marked; P = Parallel Line; L = Ladder; Z = Zebra; C = Continental; O = Others*

***Crosswalk Color W = White; Y = Yellow; D = Decorative*

Criteria 4: Pedestrian Assistance Features (For Signalized Intersections)								
El Molino Ave at:	**Del Mar Blvd**				**California Blvd**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Push Button? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
APS? (Y/N)	N	N	N	N	N	N	N	N
Countdown Signal? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
LPI? (Y/N)	N	N	N	N	N	N	N	N

Active Transportation - Intersection Inventory

Criteria 1: Pedestrian Curb Ramps and ADA Features								
Oak Knoll Ave at:	**Del Mar Blvd**				**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Ramp Type (N/D/P)*	D	D	D	D	D	D	D	D
Truncated Dome? (Y/N)	Y	Y	Y	Y	N	N	N	N
Landing Space? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
Obstructions (Y/N)	N	N	N	N	N	N	N	N

**Ramp Type N = None, D = Diagonal; P = Perpendicular/Directional*

Criteria 2: Curb Extensions and Bulb-Outs								
Oak Knoll Ave at:	**Del Mar Blvd**				**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Does it Exist? (Y/N)	N	N	N	N	N	N	N	N

Criteria 3: Crosswalk Features								
Oak Knoll Ave at:	**Del Mar Blvd**				**California Blvd**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Does it Exist? (Y/N)	Y	Y	Y	Y	N	N	N	N
Signalized? (Y/N)	Y	Y	Y	Y				
Type? (N/P/L/Z/C/O)*	L	L	L	L				
Color (W/Y/D)**	Y	Y	Y	Y				
Raised? (Y/N)	N	N	N	N				
Advanced Stop? (Y/N)	Y	Y	Y	Y				
Midblock Median? (Y/N)	N	N	N	N				

**Crosswalk Type N = not marked; P = Parallel Line; L = Ladder; Z = Zebra; C = Continental; O = Others*

***Crosswalk Color W = White; Y = Yellow; D = Decorative*

Criteria 4: Pedestrian Assistance Features (For Signalized Intersections)								
Oak Knoll Ave at:	**Del Mar Blvd**				**California Blvd**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Push Button? (Y/N)	Y	Y	Y	Y				
APS? (Y/N)	Y	Y	Y	Y				
Countdown Signal? (Y/N)	Y	Y	Y	Y				
LPI? (Y/N)	Y	Y	Y	Y				

Active Transportation - Intersection Inventory

Criteria 1: Pedestrian Curb Ramps and ADA Features												
Hudson Ave at:	**Del Mar Blvd**				**California Blvd**				**Oakwood Pl**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Ramp Type (N/D/P)*	D	D	D	D	D	D	D	D		P		P
Truncated Dome? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y		Y		Y
Landing Space? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y		Y		Y
Obstructions (Y/N)	N	N	N	N	N	N	N	N		N		N

**Ramp Type N = None, D = Diagonal; P = Perpendicular/Directional*

Criteria 2: Curb Extensions and Bulb-Outs												
Hudson Ave at:	**Del Mar Blvd**				**California Blvd**				**Oakwood Pl**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Does it Exist? (Y/N)	N	N	N	N	N	N	N	N		N		N

Criteria 3: Crosswalk Features												
Hudson Ave at:	**Del Mar Blvd**				**California Blvd**				**Oakwood Pl**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Does it Exist? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	N		N
Signalized? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	N			
Type? (N/P/L/Z/C/O)*	L	L	L	L	P	P	P	P	N			
Color (W/Y/D)**	Y	Y	Y	Y	W	W	W	W				
Raised? (Y/N)	N	N	N	N	N	N	N	N	N			
Advanced Stop? (Y/N)	Y	N	Y	Y	Y	N	Y	Y	N			
Midblock Median? (Y/N)	N	N	N	N	N	N	N	N	N			

**Crosswalk Type N = not marked; P = Parallel Line; L = Ladder; Z = Zebra; C = Continental; O = Others*

***Crosswalk Color W = White; Y = Yellow; D = Decorative*

Criteria 4: Pedestrian Assistance Features (For Signalized Intersections)												
Hudson Ave at:	**Del Mar Blvd**				**California Blvd**				**Oakwood Pl**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Push Button? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y				
APS? (Y/N)	N	N	N	N	N	N	N	N				
Countdown Signal? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y				
LPI? (Y/N)	N	N	N	N	N	N	N	N				

Active Transportation - Intersection Inventory

Criteria 1: Pedestrian Curb Ramps and ADA Features												
Lake Ave at:	**San Pasqual St**				**Granite Dr**				**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Ramp Type (N/D/P)*	P	D		D		P	P	D	D	D	D	D
Truncated Dome? (Y/N)	N	N		N		Y	Y	Y	Y	Y	Y	Y
Landing Space? (Y/N)	Y	Y		Y		Y	Y	Y	Y	Y	Y	Y
Obstructions (Y/N)	N	N		N		N	N	N	N	N	N	N

**Ramp Type N = None, D = Diagonal; P = Perpendicular/Directional*

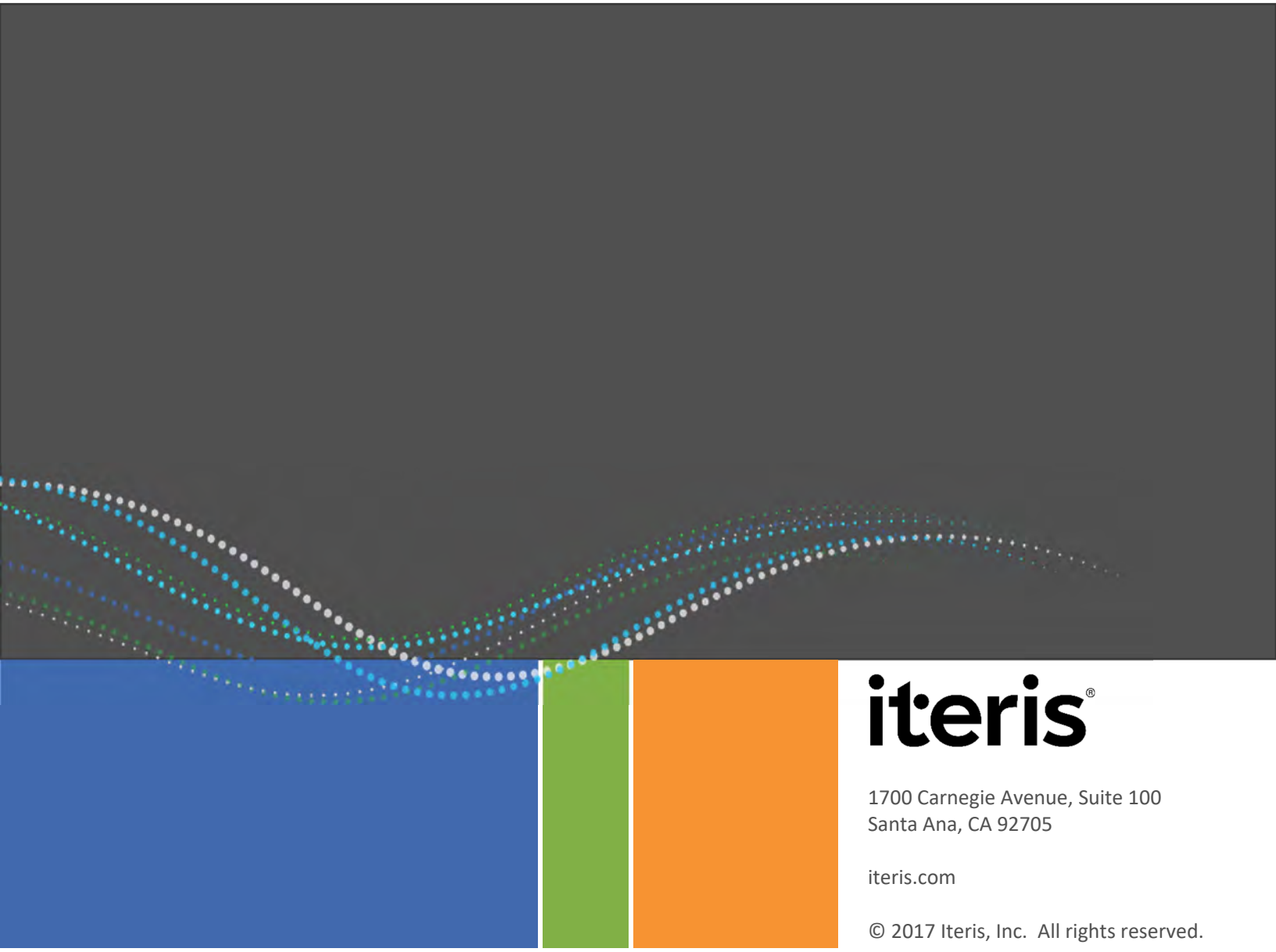
Criteria 2: Curb Extensions and Bulb-Outs												
Lake Ave at:	**San Pasqual St**				**Granite Dr**				**California Blvd**			
Corners:	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**	**NW**	**NE**	**SW**	**SE**
Does it Exist? (Y/N)		N		N		N		N	N	N	N	N

Criteria 3: Crosswalk Features												
Lake Ave at:	**San Pasqual St**				**Granite Dr**				**California Blvd**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Does it Exist? (Y/N)	Y	Y		N	Y	N		Y	Y	Y	Y	Y
Signalized? (Y/N)	Y	Y			Y			Y	Y	Y	Y	Y
Type? (N/P/L/Z/C/O)*	P	P			C			C	P	P	P	P
Color (W/Y/D)**	W	W			W			W	W	W	W	W
Raised? (Y/N)	N	N			N			N	N	N	N	N
Advanced Stop? (Y/N)	Y	Y			Y			Y	Y	Y	Y	Y
Midblock Median? (Y/N)	N	N			N			N	N	N	N	N

**Crosswalk Type N = not marked; P = Parallel Line; L = Ladder; Z = Zebra; C = Continental; O = Others*

***Crosswalk Color W = White; Y = Yellow; D = Decorative*

Criteria 4: Pedestrian Assistance Features (For Signalized Intersections)												
Lake Ave at:	**San Pasqual St**				**Granite Dr**				**California Blvd**			
Legs:	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**	**E**	**N**	**W**	**S**
Push Button? (Y/N)	Y	Y			Y			Y	Y	Y	Y	Y
APS? (Y/N)	Y	Y			Y			Y	Y	Y	Y	Y
Countdown Signal? (Y/N)	Y	Y			Y			Y	Y	Y	Y	Y
LPI? (Y/N)	Y	Y			N			N	N	N	N	N



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