Appendix G. Transportation Analysis

This page intentionally left blank.

LINSCOTT LAW & GREENSPAN engineers

TRANSPORTATION ANALYSIS

EAST VALLEY SPECIFIC PLAN (EVSP)

Escondido, California
March 24, 2023

LLG Ref. 3-21-3338

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

TABLE OF CONTENTS

APPENDICES

APPENDIX

LIST OF FIGURES

LIST OF TABLES

TRANSPORTATION ANALYSIS

EAST VALLEY SPECIFIC PLAN (EVSP)

Escondido, California
March 24, 2023

1.0 INTRODUCTION

Linscott, Law & Greenspan Engineers (LLG) has been retained to prepare a traffic analysis associated with the proposed Escondido East Valley Specific Plan (EVSP) project. This traffic analysis includes a VMT analysis to determine if the project would have a CEQA transportation impact and an LOS analysis to determine if the City Mobility Element roadways can accommodate the Project traffic from a capacity standpoint. The identified LOS analysis is not required to determine if the Project would have a CEQA transportation impact. A more detailed project description is presented in *Section 2.0* of this report.

The traffic analysis presented in this report includes the following:

- Project Description
- Study Area, Analysis Approach and Methodology
- Existing Conditions
- CEQA Vehicle Miles Traveled (VMT) Analysis
- VMT Impacts Summary and Mitigation Measures
- Substantial Effect Criteria
- Analysis of Existing Conditions
- Traffic Modeling
- LOS Analysis Results
- Potential Roadway Classification Downgrades
- Conclusions

2.0 PROJECT DESCRIPTION

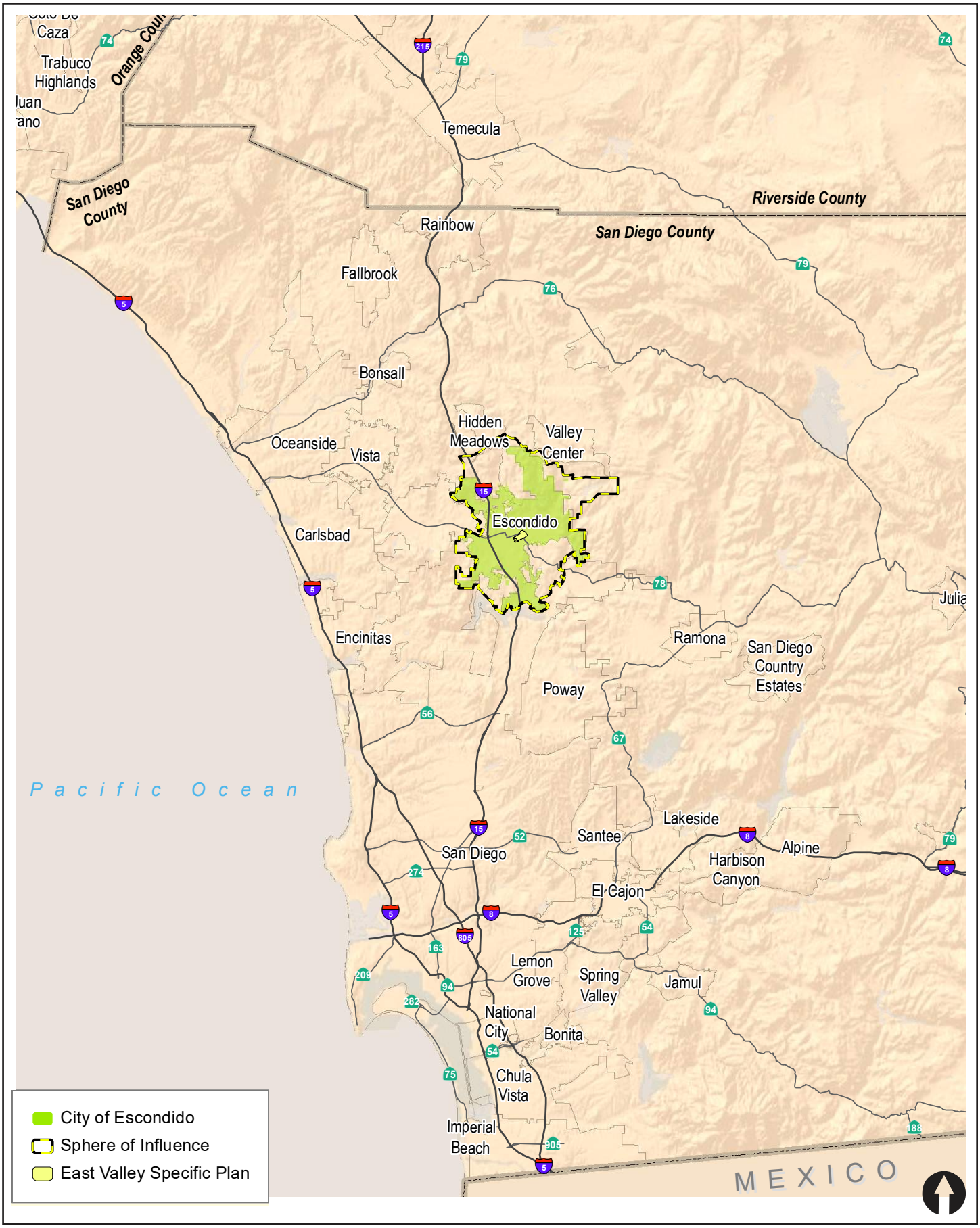
The City of Escondido (City) is preparing a new East Valley Specific Plan (EVSP) that would focus growth and increase density in the new EVSP area, located in central Escondido, California, immediately adjacent to and east of downtown (***Figure 2–1***, Regional Location). The goal of the proposed EVSP is to encourage new housing opportunities, improve economic vibrancy, and allow for flexibility in use and implementation as the EVSP area changes over time. The EVSP would rezone the existing 191-acre EVSP area to cluster uses to create a more cohesive pattern and design with a goal of revitalizing the physical character and economic health of the community. The proposed land uses are shown on ***Figure 2–2***, East Valley Specific Plan Proposed Land Use Plan. ***Table 2–1*** shows the proposed land uses. The EVSP presents goals, policies, design standards, and implementation strategies for topics such as land use, mobility, and parks. The EVSP is intended to provide guidance for private development and public investment over the next 20 years. No new roadways are proposed; however, some roadways are proposed to be re-classified to accommodate increased traffic volumes and pedestrian and bicycle improvements. The EVSP includes a Density Transfer Program (EVSP Density Transfer Program) to enable the City to transfer densities from undeveloped or underutilized properties in the EVSP area to other properties in the EVSP area to enable a developing property to increase its density beyond what current zoning would permit.

TABLE 2–1
PROPOSED LAND USES

Development Type	2035 Specific Plan Buildout
Residential	6,164 DU
Office	657,786 SF[a]
Retail	1,025,801 SF
Parks	25 acres
Community Services	123,084 SF

Footnotes:

a. Includes both Commercial Office (274,848 SF) and Medical Office (382,938 SF).



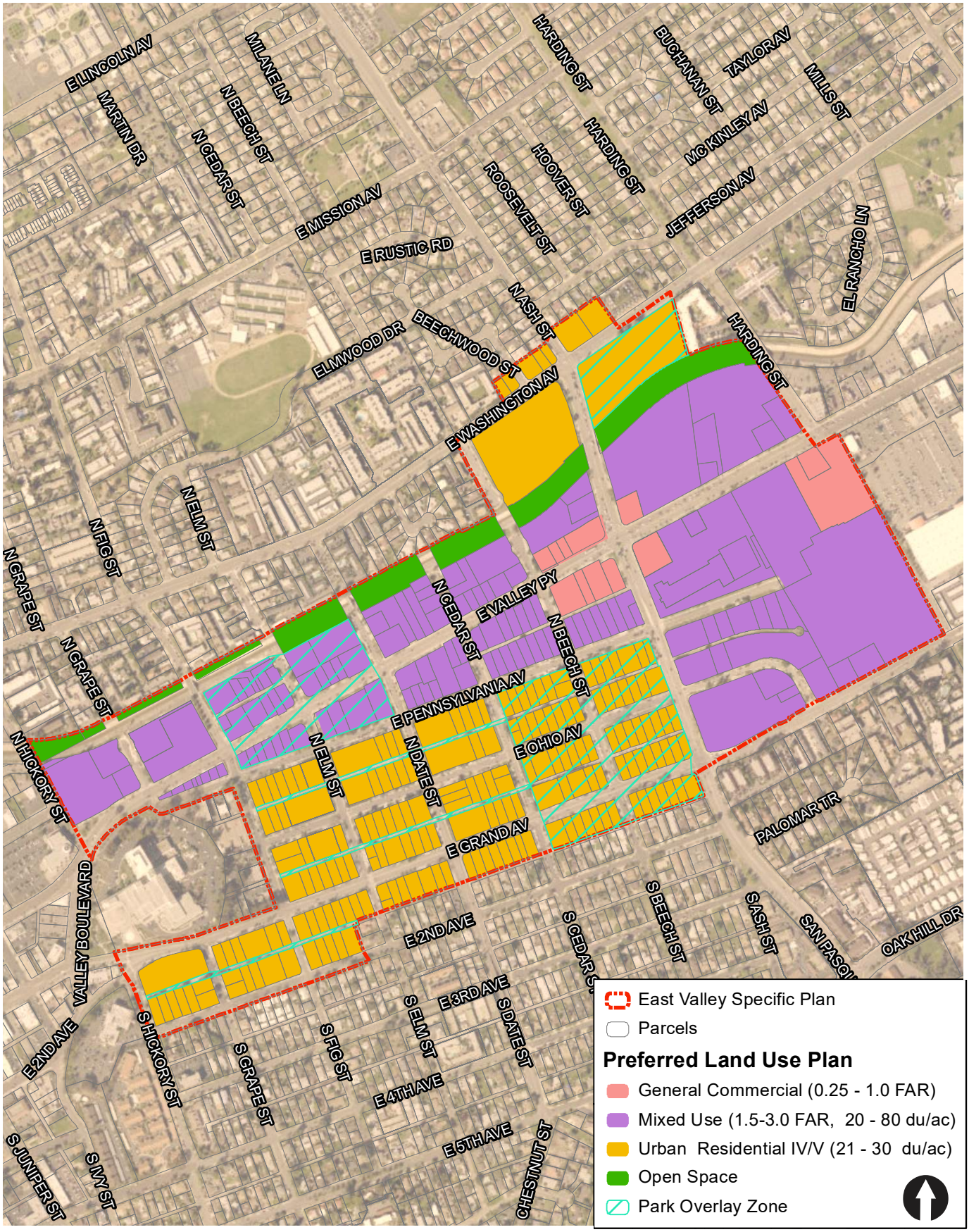
LINSCOTT LAW & GREENSPAN engineers

N:\3338\Figures
Date: 04/19/21

Figure 2-1

Regional Location

East Valley Specific Plan (EVSP)



LINSCOTT LAW & GREENSPAN engineers

N:\3338\Figures
Date: 04/19/21

Figure 2-2

East Valley Specific Plan Proposed Land Use Plan

3.0 STUDY AREA, ANALYSIS APPROACH AND METHODOLOGY

3.1 CEQA VMT Analysis

The City of Escondido *Transportation Impact Analysis Guidelines (TIAG)* were adopted on April 21, 2021. This document sets up the methodology for conducting a Transportation Study and a CEQA VMT analysis. SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers, to measuring the impact of driving. The change is being made by replacing LOS with VMT for CEQA purposes and providing streamlined review of land use and transportation projects that will help reduce future VMT growth. This shift in transportation impact focus is expected to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce GHG emissions, encourage infill development, and improve public health through more active transportation.

The California Office of Planning and Research (OPR) has updated the CEQA Guidelines and provided a final Technical Advisory in December 2018, which recommends vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts under CEQA. The California Natural Resources Agency certified and adopted the CEQA Guidelines including the Guidelines section implementing SB 743. The changes have been approved by the Office of the Administrative Law and have been in effect since July 2020.

While VMT is the preferred quantitative metric for assessing potentially significant transportation impacts under CEQA, it should be noted that SB 743 does not prevent a city or county from using metrics such as LOS as part of the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city's planning approval process; cities can still ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity. As such, the City can continue to require congestion-related transportation analysis and mitigation projects through planning approval processes outside CEQA.

3.1.1 *Metrics by Project Type*

Based on guidance from the TIAG, in general, transportation VMT analysis for CEQA should be conducted using the SANDAG Regional Travel Demand Model. The model outputs can be used to produce VMT/ capita, VMT / employee, and total VMT.

The following summarizes the appropriate metric for various types of projects:

- *Residential:* VMT/capita
- *General Employment:* VMT/employee
- *Industrial Employment:* VMT/employee
- *Regional Retail., Regional Recreational, or Regional Public Facilities:* Change in total VMT (using the boundary method)
- *Mixed-Use:* Each project component evaluated per the appropriate metric based on land use type (e.g., residential, employment, and retail)

- *Transportation Project:* Change in total VMT (using the boundary method)
- Unique circumstances may require alternate metrics

3.1.2 *Screening Criteria*

The requirements to prepare a detailed transportation VMT analysis apply to all land development projects, except those that meet at least one of the screening criteria. A project that meets at least one of the following screening criteria below would be presumed to have a less than significant VMT impact due to project characteristics and/or location:

- Small Residential and Employment Projects
- Projects Located in a Transit-Accessible Area
- Projects in a VMT-Efficient Area
- Locally-Serving Retail Projects
- Locally-Serving Public Facilities
- Redevelopment Projects with Lower Total VMT

3.1.3 *Thresholds of Significance*

It is recommended that VMT thresholds for SB 743 analysis be developed using comparisons to average VMT/capita (for residential projects) or VMT/employee (for employment projects). The analysis can be conducted by comparing either the project VMT/capita or VMT/employee to the San Diego regional average. If the project average is lower than 85% of the regional average, the VMT impacts of the project can be presumed to be less than significant. The City has adopted VMT thresholds based on regional averages, with some exceptions.

Projects that do not meet the above screening criteria must include a detailed evaluation of the VMT produced by the project. The significant thresholds and specific VMT metrics used to measure VMT are described by land use type below.

- Residential: 15% below regional average VMT/capita
- Employment: 15% below regional average VMT/employee
- Industrial Employment: At or below regional average VMT/employee
- Mixed-Use: Each project component evaluated per the appropriate metric based on land use type (e.g., residential, employment, and retail)
- Regional Retail, Regional Recreational, or Regional Public Facilities: A net increase in total regional VMT using the boundary method

3.2 Roadway Capacity and Intersection Analysis

In addition to a VMT analysis, a Local Mobility Analysis (LMA) was also prepared that focuses on automobile delay and Level of Service (LOS). The LOS analysis was conducted to identify Project effects on the roadway operations in the Project study area and recommend Project improvements to address noted deficiencies. However, impacts on the study area roadway network are not considered CEQA impacts pursuant to California Public Resources Code Section 21099(b)(2).

3.2.1 *Study Area*

STREET SEGMENTS

The following study area was developed based on the anticipated assignment of Project traffic and locations which will carry the most Project traffic[1].

Mission Avenue

1. Centre City Parkway to Escondido Boulevard
2. Escondido Boulevard to Broadway
3. Broadway to Hickory Street
4. Hickory Street to Fig Street
5. Fig Street to Ash Street
6. Ash Street to Harding Street
7. Harding Street to Rose Street
8. Rose Street to Midway Drive

Washington Avenue

9. Centre City Parkway to Escondido Boulevard
10. Escondido Boulevard to Broadway
11. Broadway to Jupiter Street
12. Jupiter Street to Hickory Street
13. Hickory Street to Fig Street
14. Fig Street to Ash Street
15. Ash Street to Harding Street
16. Harding Street to Rose Street
17. Rose Street to Midway Drive

Valley Boulevard

18. Valley Parkway to Grand Avenue

Valley Parkway

19. Centre City Parkway to Escondido Boulevard
20. Escondido Boulevard to Broadway
21. Broadway to Juniper Street
22. Juniper Street to Hickory Street

[1] These study area street segments are further discussed in *Section 4.0* and shown in *Figure 4–1*.

23. Hickory Street to Fig Street
24. Fig Street to Date Street
25. Date Street to Ash Street
26. Ash Street to Harding Street
27. Harding Street to Rose Street
28. Rose Street to Midway Drive

Grand Avenue

29. Centre City Parkway to Escondido Boulevard
30. Escondido Boulevard to Broadway
31. Broadway to Juniper Street
32. Juniper Street to Valley Boulevard
33. Valley Boulevard to Fig Street
34. Fig Street to Date Street
35. Date Street to Ash Street
36. Ash Street to Rose Street
37. Rose Street to Midway Drive

2nd Avenue

38. Centre City Parkway to Escondido Boulevard
39. Escondido Boulevard to Broadway
40. Broadway to Juniper Street
41. Juniper Street to Grand Avenue

Centre City Parkway

42. SR 78 to Mission Avenue
43. Mission Avenue to Washington Avenue
44. Washington Avenue to Valley Parkway
45. Valley Parkway to Grand Avenue
46. Grand Avenue to 2nd Avenue

Escondido Boulevard

47. Lincoln Avenue to Mission Avenue
48. Mission Avenue to Washington Avenue
49. Washington Avenue to Valley Parkway
50. Valley Parkway to Grand Avenue
51. Grand Avenue to 2nd Avenue

Broadway

52. Mission Avenue to Washington Avenue
53. Washington Avenue to Valley Parkway
54. Valley Parkway to Grand Avenue
55. Grand Avenue to 2nd Avenue

Juniper Street

56. Washington Avenue to Valley Parkway
57. Valley Parkway to Grand Avenue
58. Grand Avenue to 2nd Avenue

Hickory Street

59. Mission Avenue to Washington Avenue
60. Washington Avenue to Valley Parkway

Fig Street

61. Lincoln Avenue to Mission Avenue
62. Mission Avenue to Washington Avenue
63. Washington Avenue to Valley Parkway
64. Valley Parkway to Grand Avenue

Date Street

65. Valley Parkway to Grand Avenue
66. Grand Avenue to 2nd Avenue

Ash Street / San Pasqual Valley Road

67. Lincoln Avenue to Mission Avenue
68. Mission Avenue to Washington Avenue
69. Washington Avenue to Valley Parkway
70. Valley Parkway to Grand Avenue
71. Grand Avenue to 2nd Avenue

Harding Street

72. Mission Avenue to Washington Avenue
73. Washington Avenue to Valley Parkway

Rose Street

74. Lincoln Avenue to Mission Avenue
75. Mission Avenue to Washington Avenue
76. Washington Avenue to Valley Parkway
77. Valley Parkway to Grand Avenue

Midway Drive

78. Lincoln Avenue to Mission Avenue
79. Mission Avenue to Washington Avenue
80. Washington Avenue to Valley Parkway
81. Valley Parkway to Grand Avenue

INTERSECTIONS

In order to comply with the City's TIA guidelines and to have a better understanding of how the Project would affect the study area, intersection analysis were also conducted. The following intersections were selected based on coordination with City staff on which intersections are anticipated to carry the most Project traffic and currently operating at or close to a deficient level.

1. El Norte Parkway / Centre City Parkway
2. El Norte Parkway / Broadway
3. El Norte Parkway / Fig Street
4. Lincoln Avenue / Broadway
5. Lincoln Avenue / Fig Street
6. Lincoln Avenue / Ash Street
7. Lincoln Parkway / Broadway
8. Mission Avenue / Escondido Boulevard
9. Mission Avenue / Broadway
10. Mission Avenue / Hickory Street
11. Mission Avenue / Ash Street
12. Mission Avenue / Harding Street
13. Mission Avenue / Rose Street
14. Washington Avenue / Escondido Boulevard
15. Washington Avenue / Broadway
16. Washington Avenue / Juniper Street
17. Washington Avenue / Hickory Street
18. Washington Avenue / Fig Street
19. Washington Avenue / Ash Street
20. Washington Avenue / Harding Street
21. Washington Avenue / Rose Street
22. Valley Parkway / Hickory Street
23. Valley Parkway / Fig Street
24. Valley Parkway / Date Street
25. Valley Parkway / Ash Street
26. Valley Parkway / Harding Street
27. Valley Parkway / Rose Street
28. Grand Avenue / Valley Boulevard
29. Grand Avenue / Date Street
30. Grand Avenue / Ash Street
31. Grand Avenue / Rose Street

3.2.2 *Analysis Scenarios*

This study includes analysis of the following scenarios:

- Existing
- Long-Term Without Project
- Long-Term With Project

3.2.3 *Analysis Methodology*

STREET SEGMENTS

The measure of effectiveness for street segment operations is Level of Service (LOS), which denotes the operating conditions which occur at a given street segment under various traffic volume loads. Street segment analysis is based upon the comparison of average daily traffic volumes (ADTs) to the City of Escondido's *Roadway Classification, Level of Service, and ADT Table*. This table provides segment capacities for different street classifications, based on traffic volumes and roadway characteristics. The City of Escondido's *Roadway Classification, Level of Service and ADT* table is provided in ***Appendix A***.

SIGNALIZED INTERSECTIONS

For signalized intersections, LOS criteria are stated in terms of the average control delay per vehicle for a 15-minute analysis period. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 19 of the *Highway Capacity Manual (HCM) 6th Edition*, with the assistance of the *Synchro* (version 10) computer software. The delay values (represented in seconds) were quantified with a corresponding intersection LOS.

UNSIGNALIZED INTERSECTIONS

For unsignalized intersections, LOS is determined by the computed or measured control delay and is defined for each minor movement: LOS is not defined for the intersection as a whole. Level of Service F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This Level of Service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits. LOS F may also appear in the form of side-street vehicles selecting smaller-than-usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues, but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing. Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and LOS was determined based upon the procedures found in Chapters 20 and 21 of the *HCM 6th Edition*, with the assistance of the *Synchro* (version 10) computer software.

Table 3–1 summarizes the intersection levels of service descriptions. ***Table 3–2*** depicts the

intersection LOS and corresponding delay ranges, which are based on overall intersection delay (signalized intersections) and the average control delay for any particular minor movement (unsignalized intersections), respectively. LOS relative to signalized and unsignalized intersection is further described below.

LOS A describes operations with very low delay, (i.e. less than 10.0 seconds per vehicle). This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LOS B describes operations with delay in the range 10.1 seconds and 20.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

LOS C describes operations with delay in the range 20.1 seconds and 35.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear. *Signal cycle failure (or overflow) is an interrupted traffic condition in which a number of queued vehicles are unable to depart due to insufficient capacity during a signal cycle.* The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.

LOS D describes operations with delay in the range 35.1 seconds and 55.0 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or higher volume (demand) / capacity (v/c) ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are frequent.

LOS E describes operations with delay in the range of 55.1 seconds to 80.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with delay in excess of over 80.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

TABLE 3–1
INTERSECTION LEVEL OF SERVICE DESCRIPTIONS

Level of Service	Description
A	Occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	Occurs generally with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
C	Results generally when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	Results generally in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.
F	Considered to be unacceptable to most drivers. This condition often occurs with oversaturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high volume-to-capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels

TABLE 3–2
INTERSECTION LOS & DELAY RANGES

LOS	Delay (seconds/vehicle)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10.0	≤ 10.0
B	10.1 to 20.0	10.1 to 15.0
C	20.1 to 35.0	15.1 to 25.0
D	35.1 to 55.0	25.1 to 35.0
E	55.1 to 80.0	35.1 to 50.0
F	≥ 80.1	≥ 50.1

Source: Highway Capacity Manual, 6th Edition.

4.0 EXISTING CONDITIONS

Effective evaluation of the traffic impacts associated with the proposed Project requires an understanding of the existing transportation system within the project area. ***Figure 4–1*** shows an existing conditions diagram of the study area street segments.

4.1 Existing Transportation Conditions

4.1.1 *Existing Street Network*

The following is a description of the existing street network in the study area.

El Norte Parkway is classified as a Major Road between Centre City Parkway and Rose Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a four-lane divided road between Centre City Parkway and Broadway, a four-lane undivided road with a two-way left-turn lane between Broadway and Fig Street and a four-lane divided road between Fig Street and Rose Street. Sidewalks are provided on both sides of the roadway. Bike lanes are provided between Centre City Parkway and Rose Street. The posted speed limit is 45 mph.

Lincoln Avenue is classified as a Prime Arterial between Lincoln Parkway and Fig Street and as a Collector Street between Fig Street and Midway Drive, in the Escondido Circulation Element in the project vicinity. It is currently constructed as a four-lane undivided road between Lincoln Parkway and Ash Street and a two-lane undivided road between Ash Street and Midway Drive. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway between Ash Street and Midway Drive. The posted speed limit is 45 mph between Lincoln Parkway and Fig Street, 40 mph between Fig Street and Ash Street and 35 mph between Ash Street and Midway Drive.

Mission Avenue is classified as a Major Road between Centre City Parkway and Ash Street, as a Collector Street between Ash Street and Rose Street and as a Local Collector Street between Rose Street and Midway Drive, in the Escondido Circulation Element in the project vicinity. It is currently constructed as a four-lane undivided road with a two-way-left-turn lane west of Fig Street. Between Fig Street and Buchanan Street, Mission Avenue is built as a two-lane undivided roadway with a two-way-left-turn lane. East of this intersection, Mission Avenue is a two-lane undivided roadway. Sidewalks are provided on both sides of the roadway. Bike lanes are provided between Centre City Parkway and Fig Street. Shared bike lanes are provided east of Ash Street. Curbside parking is permitted on both sides of the roadway east of Ash Street. The posted speed limits are 40 mph and 35 mph.

Washington Avenue is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a four-lane undivided road with a two-way-left-turn lane west of Juniper Street. Between Juniper Street and Date Street is built as a four-lane undivided roadway. Between Date Street and Ash Street is built as a four-lane undivided road with a two-way-left-turn lane. East of this intersection, Washington Avenue is a four-lane undivided roadway.

Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway east of Juniper Street. The posted speed limit is 35 mph.

Valley Boulevard is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a three-lane undivided roadway (one SB lane and two NB lanes) between Valley Parkway and Grand Avenue. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway between Grand Avenue and Hickory Street. The posted speed limit is 30 mph.

Valley Parkway is classified as a Collector Street between Centre City Parkway and Hickory Street and as a Major Road between Hickory Street and Midway Drive in the Escondido Circulation Element in the project vicinity. It is currently constructed as a five-lane one-way (WB) roadway between Centre City Parkway and Escondido Boulevard, as a three-lane one-way (WB) roadway between Escondido Boulevard and Hickory Street, as a four-lane undivided roadway between Hickory Street and Fig Street, and as a four-lane undivided road with a two-way-left-turn lane between Fig Street and Midway Drive. Sidewalks are provided on both sides of the roadway. Bike lanes are provided between Centre City Parkway and Broadway. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 35 mph.

Grand Avenue is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a four-lane divided road west of Valley Boulevard. Between Valley Boulevard and Hickory Street, Grand Avenue is built as a two-lane undivided roadway. East of this intersection, Grand Avenue is three-lane undivided roadway, one westbound and two eastbound. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. The posted speed limit is 30 mph.

2nd Avenue is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a three-lane one-way roadway. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 30 mph.

Centre City Parkway is classified as a Major Road between El Norte Parkway and Mission Avenue and as a Super Major Road between Mission Avenue and 2nd Avenue, in the Escondido Circulation Element in the project vicinity. It is currently constructed as a four-lane divided roadway. Sidewalks are provided on both sides of the roadway between Valley Parkway and 2nd Avenue. Bike lanes are provided. Curbside parking is not permitted. The posted speed limit is 45 mph.

Escondido Boulevard is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a four-lane undivided road with a two-way-left-turn lane. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is not permitted. The posted speed limit is 35 mph.

Broadway is classified as a Major Road in the Escondido Circulation Element in the project vicinity. It is currently constructed as a four-lane undivided road with a two-way-left-turn lane

between Lincoln Parkway to Grand Avenue and as a two-lane undivided road with a two-way-left-turn lane between Grand Avenue and 2nd Avenue. Sidewalks are provided on both sides of the roadway. Bike lanes are provided between Clark Street and Valley Parkway. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 35 mph.

Juniper Street is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a two-lane undivided roadway between Washington Avenue and Valley Parkway and as a two-lane undivided roadway with a two-way-left-turn lane between Valley Parkway and 2nd Avenue. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 25 mph.

N. Hickory Street is classified as a Local Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a two-lane undivided roadway. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 25 mph.

Fig Street is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a two-lane undivided roadway with a two-way-left-turn lane between El Norte Parkway and Mission Avenue and as a two-lane undivided roadway between Mission Avenue and Grand Avenue. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 25 mph.

Date Street is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a two-lane undivided roadway between Valley Parkway and Grand Avenue and as a four-lane undivided roadway between Grand Avenue and 2nd Street. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both side of the roadway. The posted speed limit is 30 mph.

N. Ash Street is classified as a Collector between El Norte Parkway and Lincoln Avenue and a Major Road between Lincoln Avenue and 2nd Avenue, in the Escondido Circulation Element in the project vicinity. It is currently constructed as a two-lane undivided road with a two-way left-turn lane between El Norte Parkway and Lincoln Avenue and a four-lane undivided roadway with a two-way-left-turn lane between Lincoln Avenue and Mission Avenue and between Washington Avenue and 2nd Street and as a four-lane undivided roadway between Mission Avenue and Washington Avenue. Sidewalks are provided on both sides of the roadway. Bike lanes are provided between El Norte Parkway and Mission Avenue. Curbside parking is permitted intermittently north of Lincoln Avenue. The posted speed limit is 35 mph.

Harding Street is classified as a Local Collector Street between Lincoln Avenue and Mission Avenue and as a Collector Street between Mission Avenue and Valley Parkway in the Escondido Circulation Element in the project vicinity. It is currently constructed as a two-lane divided roadway between Lincoln Avenue and Washington Avenue and as a four-way undivided roadway with a two-

way-left-turn lane between Washington Avenue and Valley Parkway. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 35 mph.

Rose Street is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a two-lane undivided roadway between El Norte Parkway and Jefferson Avenue and as a two-lane undivided roadway with a two-way-left-turn lane between Jefferson Avenue and Grand Avenue. Sidewalks are provided on the west side only between El North Parkway and Lincoln Avenue and on both sides of the roadway between Lincoln Avenue and Grande Avenue. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 30 mph.

Midway Drive is classified as a Collector Street in the Escondido Circulation Element in the project vicinity. It is currently constructed as a two-lane undivided roadway between El Norte Parkway and Lee Drive, as a two-lane undivided roadway with a two-way-left-turn lane between Lee Drive and Valley Parkway and as a four-lane undivided roadway with a two-way-left-turn lane between Valley Parkway and Grand Avenue. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 35 mph.

4.1.2 *Existing Pedestrian Network*

This section presents the pedestrian connectivity within the Project's study area.

El Norte Parkway – Within the study area, El Norte Parkway currently provides contiguous sidewalk on both sides between Centre City Parkway and Rose Street. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Lincoln Avenue – Within the study area, Lincoln Avenue currently provides contiguous sidewalk on both sides between Lincoln Parkway and Midway Drive. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Mission Avenue – Within the study area, Mission Avenue currently provides contiguous sidewalk on both sides between Centre City Parkway and Fig Street and noncontiguous sidewalks are provided intermittently on both sides between Fig Street and Midway Drive. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Washington Avenue – Within the study area, Washington Avenue currently provides contiguous sidewalk on both sides between Centre City Parkway and Midway Drive with exception to a small portion between Harding Street and Rose Street where noncontiguous sidewalks are provided on the south side intermittently. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Valley Boulevard – Within the study area, the small segment of Valley Boulevard between Valley Parkway and Grand Avenue currently provides contiguous sidewalks on both sides. The signalized intersections on each end of the street segment are approximately 600 feet apart from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Valley Parkway – Within the study area, Valley Parkway currently provides contiguous sidewalk on both sides between Centre City Parkway and Midway Drive with exception to a small portion between Fig Street and Rose Street where noncontiguous sidewalks are provided on both sides intermittently. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Grand Avenue – Within the study area, Grand Avenue currently provides contiguous sidewalk on both sides between Centre City Parkway and Midway Drive with exception to a small portion between Grape Street and Date Street and between Rose Street and Midway Drive where noncontiguous sidewalks are provided on both sides intermittently. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

2nd Avenue – Within the study area, 2nd Avenue currently provides contiguous sidewalk on both sides between Centre City Parkway and Grand Avenue with exception to a small portion between Maple Street and Ivy Street where noncontiguous sidewalks are provided on both sides intermittently and between Ivy Street and Grand Avenue where no sidewalks are provided on the south side. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Centre City Parkway – Within the study area, Centre City Parkway currently does not provide any sidewalk between the SR 78 ramps and 2nd Avenue with exception to a small portion between Valley Parkway and 2nd Avenue where contiguous sidewalks are provided on the east side. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Escondido Boulevard – Within the study area, Escondido Boulevard currently provides contiguous sidewalk on both sides between Lincoln Avenue and 2nd Avenue with exception to a small portion just north of Valley Parkway where noncontiguous sidewalks are provided on the east side for approximately 700 feet. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Broadway – Within the study area, Broadway currently provides contiguous sidewalk on both sides between Mission Avenue and 2nd Avenue. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Juniper Street – Within the study area, Juniper Street currently provides contiguous sidewalk on both sides between Washington Avenue and 2nd Avenue. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

N. Hickory Street – Within the study area, N. Hickory Street currently provides contiguous sidewalk on both sides between Mission Avenue and Valley Parkway. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Fig Street – Within the study area, Fig Street currently provides contiguous sidewalk on both sides between Lincoln Avenue and Grand Avenue with exception to small portions between Lincoln Avenue and Mission Avenue where no sidewalks are provided. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Date Street – Within the study area, Date Street currently provides contiguous sidewalk on both sides between Valley Parkway and 2nd Avenue. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

N. Ash Street – Within the study area, N. Ash Street currently provides contiguous sidewalk on both sides between Lincoln Avenue and 2nd Avenue with exception to a small portion between Lincoln Avenue and Mission Avenue where noncontiguous sidewalks are provided on the west side and between Mission Avenue and Washington Avenue where noncontiguous sidewalks are provided on the east side intermittently. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Harding Street – Within the study area, Harding Street currently provides contiguous sidewalk on both sides between Mission Avenue and Valley Parkway with exception to the segment between Mission Avenue and Washington Avenue where noncontiguous sidewalks are provided on both sides intermittently. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Rose Street – Within the study area, Rose Street currently provides contiguous sidewalk on both sides between Lincoln Avenue and Grand Avenue with exception to small portions throughout the study area street segment where noncontiguous sidewalks are provided on both sides intermittently. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Midway Drive – Within the study area, Midway Drive currently provides contiguous sidewalk on both sides between Lincoln Avenue and Grand Avenue with exception to the segment between Lincoln Avenue and Washington Avenue where noncontiguous sidewalks are provided intermittently and a small portion just south of Washington Avenue where no sidewalk is provided on the west side for about 300 feet. Signalized intersections are separated by at most a ½ mile from each other, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

4.1.3 *Existing Bicycle Network*

This section presents the bicycle network within the Project's study area. The *City of Escondido Bicycle Master Plan (2012)* was also reviewed. There are four different existing and proposed bicycle facility classifications located within the study area – Class I, Class II, Class III and Class IV as shown in ***Table 4–1.***

TABLE 4–1
BICYCLE FACILITY CLASSIFICATIONS

Class I refers to exclusive **bike paths**, also termed shared-use or multi-use paths, for exclusive use by bicyclists, pedestrians, and those using non-motorized modes of travel. They are physically separated from vehicular traffic and can be constructed in roadway right-of-way or exclusive right-of-way. Bike paths provide critical connections where roadways are absent or are not conducive to bicycle travel.

Class II refers to **bicycle lanes** defined by pavement striping and signage used to allocate a portion of a roadway for bicycle travel. Bike lanes are one-way facilities on either side of a roadway. A painted buffer can separate bikes from vehicles or parking lanes. Green paint can identify conflict zones.

Class III refers to bike routes that share use with motor vehicle traffic within the same travel lane. Bike routes are identified with signage and street markings known as "sharrows" or shared lane markings to delineate that the road is a shared-use facility.

Class IV refers to a **Cycle Track**, which is a hybrid type bicycle facility that combines the experience of a separated path with the on-street infrastructure of a conventional bike lane. Cycle tracks are bikeways located in roadway right-of-way but separated from vehicle lanes by physical barriers, flexible posts, on-street parking curbs, or other objects. Cycle tracks provide for one-way or two-way bicycle travel and are exclusively for bicycle use.

EXISTING BICYCLE NETWORK

A bicycle network inventory was conducted for the study area. Based on a review of the *City of Escondido Bicycle Master Plan*, October 2012, bicycle facility classifications are planned along the following street segments:

Class II – Class II facilities exist on El Norte Parkway between Centre City Parkway and Rose Street, Mission Avenue between Centre City Parkway and Fig Street, Centre City Parkway between SR 78 and 2nd Avenue, Ash Street between Lincoln Avenue and Mission Avenue.

Class III – Class III facilities exist on Mission Avenue between Harding Street and Midway Drive.

Class IV – Class I facilities exist on Valley Parkway between Centre City Parkway and Broadway, Broadway between Woodward Street and Valley Parkway.

FUTURE BICYCLE NETWORK

The future bicycle network is anticipated to include the bicycle facility classifications at the following study area street segments:

Class II – Mission Avenue between Fig Street and Harding Street, Washington Avenue between Centre City Parkway and Broadway, Grand Avenue between 2nd Avenue and Midway Drive, 2nd Avenue between Centre City Parkway and Grand Avenue, Broadway between Lincoln Avenue and Woodward Street, Juniper Street between Washington Avenue and 2nd Avenue, Fig Street between El Norte Parkway and Washington Avenue, Date Street between Valley Parkway and 2nd Avenue, Ash Street between El Norte Parkway and 2nd Avenue, Rose Street between Lincoln Avenue and Grand Avenue, and Midway Drive between El Norte Parkway and Grand Avenue

Class III – Escondido Boulevard between Washington Avenue and 2nd Avenue, Harding Street between Mission Avenue and Valley Parkway, and Rose Street between El Norte Parkway and Lincoln Avenue

Appendix B also includes figure excerpts from the *City of Escondido Bicycle Master Plan*.

4.1.4 *Existing Transit Network*

This section presents the existing transit conditions in the Project study area. Bus service is provided by the North County Transit District (NTCD). The bus routes serving in the immediate Project area include bus routes 351, 352, 354, 355, 357 and 388.

A description of all the routes in the project study area is provided below. ***Appendix C*** includes the timetable of these bus routes.

Route 351 and 352 runs from the Escondido Transit Center to Midway Drive. The route runs along Grand Avenue, Midway Drive and Washington Avenue. Weekday service begins at 4:05 AM with 30-minute headways throughout the day and ends at 10:54 PM. Saturday and Sunday service begins at 6:59 AM with 30-minute headways throughout the day and ends at 9:44 PM.

Route 354 runs from the Escondido Transit Center to Midway Drive. The route runs along Mission Avenue and Midway Drive. Weekday service begins at 5:31 AM with 30-minute headways throughout the day and ends at 8:26 PM. Saturday and Sunday service begins at 8:32 AM with 1-hour headways throughout the day and ends at 6:26 PM.

Route 355 and 357 runs from the Escondido Transit Center to El Norte Parkway / Valley Parkway. The route runs along Valley Parkway, El Norte Parkway and Broadway. Weekday service begins at 6:02 AM with 1-hour headways throughout the day and ends at 8:41 PM. Saturday and Sunday service begins at 6:32 AM with 2-hour headways throughout the day and ends at 8:07 PM.

Route 388 runs from the Escondido Transit Center to Pala Casino. The route runs along Valley Parkway and Valley Center Road and passes Valley View Casino, Harrah's Rincon Casino and Casino Pauma. Weekday service begins at 4:33 AM with 1 to 2-hour headways throughout the day and ends at 10:27 PM. Saturday and Sunday service begins at 5:33 AM with 1 to 2-hour headways throughout the day and ends at 10:26 PM.

The Escondido Transit Center is an important component of the mobility network that operates as a regional transit hub that is served by the Metropolitan Transit System (MTS) and North County Transit District (NCTD). The City is continuously coordinating with MTS and NCTD to review potential bus stop locations, promoting changes and improvements to service over time as new development occurs. The City of Escondido's Transit Center is located 1 miles west of the Project site at the northwest corner of N. Quince Street and W. Valley Parkway. The Escondido Transit Center is a bus and train station located in Downtown Escondido, California. It serves as the current eastern terminus of the North County Transit District's (NTCD) SPRINTER light rail line. Multiple transit services via NCTD Breeze, NCTD, and MTS bus transit lines are provided.

The NTCD SPRINTER Light Rail Line runs to Oceanside. The SPRINTER runs every 30 minutes in each direction Monday through Friday from approximately 4:00 AM to 9:00 PM. Saturday, Sunday, and holiday trains operate every 30 minutes between 10:00 AM and 6:00 PM and hourly before 10:00 AM and after 6:00 PM. The Sprinter station is located adjacent to the Escondido Transit Center, which is connected to the Project by the previously discussed bus routes.

Bike and pedestrian access are available to the Escondido Transit Center. Bike access is available to the Escondido Transit Center on the bike lane along Centre City Parkway. From the Escondido Transit Center, residents can reach the beaches in Oceanside, and connect to trains to Los Angeles or San Diego. Residents can also connect to an Express Bus to downtown San Diego. These bus services are provided by the Metropolitan Transit System (MTS). The bus routes serving in the immediate Project area include MTS Routes 235 and 280 as discussed below.

Route 235 runs from the Escondido Transit Center to the Santa Fe Depot Transit Center in Downtown San Diego. The route runs along Broadway, SR 94 and I-15. Weekday service begins at 4:43 AM with 15-30 minute headways throughout the day and ends at 11:51 PM. Saturday and Sunday service begins at 4:43 AM with 30-minute headways throughout the day and ends at 11:21 PM.

Route 280 run from the Escondido Transit Center to Grape Street and Pacific Highway in Downtown San Diego. The route runs along SR 163, Broadway and Pacific Highway. Weekday service begins at 5:00 AM and ends at 9:03 AM and begins again at 3:03 PM and ends at 6:25 PM with 30-50 minute headways during these period. This route does not operate on the weekends.

4.2 Existing Traffic Volumes

Due to the ongoing Covid-19 pandemic, which has altered traffic patterns and volumes, conducting Year 2020 / 2021 traffic counts would not provide an accurate baseline. Therefore, traffic counts

from previously prepared LLG traffic studies in the study area were used in addition to historical traffic counts provided by the City. The year these counts were conducted varied from Year 2012 to 2018. A growth rate of 1% per year was applied. For street segments that did not have any count source, LLG utilized the SANDAG Series 13 Year 2020 ADTs. ***Table 4–2*** summarizes these traffic volumes.

Similarly, intersection peak hour counts from previously prepared LLG traffic studies in the study area were used in addition to historical traffic counts provided by the City for 10 out of the 31 intersections. LLG also conducted traffic counts on either Tuesday, August 31, 2021, Wednesday, September 1, 2021 or Thursday, September 2. 2021 at the remaining 21 intersections to be analyzed.

In order to determine if any factor should be applied to the counted peak hour volumes, the intersection analysis results were conducted and compared with historical studies. Per discussion with City staff, the study area intersection operations showed a comparable operation result with the exception of El Norte Parkway / Broadway where its operations showed better results under August/September 2021 counts as compared to other studies. Therefore, a 10% growth factor was applied to the counted volumes at this intersection.

Study area street segment ADT volumes and intersection peak hour volumes for the existing scenario are depicted on ***Figure 4–2***. ***Appendix D*** contains the count sheets and traffic volumes.

TABLE 4–2
EXISTING TRAFFIC VOLUMES

Street Segment	ADT [a]	Count Date	Source
Mission Avenue			
Centre City Parkway to Escondido Boulevard	24,370	2016	City[b]
Escondido Boulevard to Broadway	18,840	2016	City[b]
Broadway to Hickory Street	23,500	2020	SANDAG[c]
Hickory Street to Fig Street	18,000	2020	SANDAG[c]
Fig Street to Ash Street	13,480	2018	City[b]
Ash Street to Harding Street	11,200	2020	SANDAG[c]
Harding Street to Rose Street	15,900	2020	SANDAG[c]
Rose Street to Midway Drive	9,900	2020	SANDAG[c]
Washington Avenue			
Centre City Parkway to Escondido Boulevard	19,220	2016	City[b]
Escondido Boulevard to Broadway	19,560	2016	City[b]
Broadway to Juniper Street	20,190	2016	City[b]
Juniper Street to Hickory Street	11,500	2020	SANDAG[c]
Hickory Street to Fig Street	11,800	2020	SANDAG[c]
Fig Street to Ash Street	7,400	2020	SANDAG[c]
Ash Street to Harding Street	4,500	2020	SANDAG[c]
Harding Street to Rose Street	5,700	2020	SANDAG[c]
Rose Street to Midway Drive	8,100	2020	SANDAG[c]
Valley Boulevard			
Valley Parkway to Grand Avenue	9,980	2018	LLG
Valley Parkway			
Centre City Parkway to Escondido Boulevard	16,830	2017	City[b]
Escondido Boulevard to Broadway	18,000	2017	City[b]
Broadway to Juniper Street	17,050	2017	City[b]
Juniper Street to Hickory Street	14,790	2018	LLG
Hickory Street to Fig Street	23,680	2018	LLG
Fig Street to Date Street	19,600	2020	SANDAG[c]
Date Street to Ash Street	25,360	2018	City[b]
Ash Street to Harding Street	30,210	2017	City[b]
Harding Street to Rose Street	30,210	2017	City[b]
Rose Street to Midway Drive	29,180	2017	City[b]
Grand Avenue			
Centre City Parkway to Escondido Boulevard	8,420	2017	City[b]
Escondido Boulevard to Broadway	10,250	2017	City[b]
Broadway to Juniper Street	9,210	2017	City[b]
Juniper Street to Valley Boulevard	9,550	2018	LLG
Valley Boulevard to Fig Street	15,130	2018	LLG
Fig Street to Date Street	6,300	2020	SANDAG[c]
Date Street to Ash Street	9,500	2020	SANDAG[c]

TABLE 4–2
EXISTING TRAFFIC VOLUMES (CONT'D)

Street Segment	ADT [a]	Count Date	Source
Ash Street to Rose Street	8,100	2020	SANDAG[c]
Rose Street to Midway Drive	5,600	2020	SANDAG[c]
2nd Avenue			
Centre City Parkway to Escondido Boulevard	14,210	2017	City[b]
Escondido Boulevard to Broadway	15,060	2017	City[b]
Broadway to Juniper Street	14,590	2017	City[b]
Juniper Street to Grand Avenue	13,680	2018	LLG
Centre City Parkway			
SR 78 to Mission Avenue	33,420	2016	City[b]
Mission Avenue to Washington Avenue	23,170	2016	City[b]
Washington Avenue to Valley Parkway	23,920	2016	City[b]
Valley Parkway to Grand Avenue	28,260	2012	City[b]
Grand Avenue to 2nd Street	30,210	2012	City[b]
Escondido Boulevard			
Lincoln Avenue to Mission Avenue	11,180	2013	City[b]
Mission Avenue to Washington Avenue	15,410	2016	City[b]
Washington Avenue to Valley Parkway	14,860	2016	City[b]
Valley Parkway to Grand Avenue	11,340	2016	City[b]
Grand Avenue to 2nd Avenue	11,420	2016	City[b]
Broadway			
Mission Avenue to Washington Avenue	25,660	2012	City[b]
Washington Avenue to Valley Parkway	20,250	2012	City[b]
Valley Parkway to Grand Avenue	8,590	2016	City[b]
Grand Avenue to 2nd Street	8,880	2012	City[b]
Juniper Street			
Washington Avenue to Valley Parkway	3,000	2020	SANDAG[c]
Valley Parkway to Grand Avenue	5,870	2018	LLG
Grand Avenue to 2nd Avenue	6,810	2018	LLG
Hickory Street			
Mission Avenue to Washington Avenue	9,300	2020	SANDAG[c]
Washington Avenue to Valley Parkway	4,810	2018	LLG
Fig Street			
Lincoln Avenue to Mission Avenue	9,630	2013	City[b]
Mission Avenue to Washington Avenue	5,200	2020	SANDAG[c]
Washington Avenue to Valley Parkway	7,950	2018	LLG
Valley Parkway to Grand Avenue	5,660	2018	LLG

TABLE 4–2
EXISTING TRAFFIC VOLUMES (CONT'D)

Street Segment	ADT [a]	Count Date	Source
Date Street			
Valley Parkway to Grand Avenue	3,570	2012	City[b]
Grand Avenue to 2nd Avenue	9,800	2020	SANDAG[c]
Ash Street / San Pasqual Valley Road			
Lincoln Avenue to Mission Avenue	20,390	2017	City[b]
Mission Avenue to Washington Avenue	20,660	2017	City[b]
Washington Avenue to Valley Parkway	21,980	2012	City[b]
Valley Parkway to Grand Avenue	22,740	2012	City[b]
Grand Avenue to 2nd Avenue	23,400	2020	SANDAG[c]
Harding Street			
Mission Avenue to Washington Avenue	6,600	2020	SANDAG[c]
Washington Avenue to Valley Parkway	5,900	2020	SANDAG[c]
Rose Street			
Lincoln Avenue to Mission Avenue	3,100	2017	City[b]
Mission Avenue to Washington Avenue	6,800	2020	SANDAG[c]
Washington Avenue to Valley Parkway	5,200	2020	SANDAG[c]
Valley Parkway to Grand Avenue	7,500	2020	SANDAG[c]
Midway Drive			
Lincoln Avenue to Mission Avenue	4,200	2020	SANDAG[c]
Mission Avenue to Washington Avenue	5,600	2020	SANDAG[c]
Washington Avenue to Valley Parkway	7,300	2020	SANDAG[c]
Valley Parkway to Grand Avenue	6,300	2020	SANDAG[c]

Footnotes:

a. Average Daily Traffic Volumes. Volume reflects 1% per year of growth.
b. 1% per year growth applied.
c. SANDAG Series 13 Year 2020 volumes

4.3 Analysis of Existing Conditions

The analysis of existing conditions includes the assessment of the study area street segments and intersection using the methodologies described in *Section 3.0*.

4.4 Segment Operations

Table 4–3 summarizes the existing street segment operations along the key study area street segments. As shown in *Table 4–3*, majority of the street segments are calculated to currently operate LOS D or better with the exception of the following:

- Lincoln Avenue between Lincoln Parkway and Fig Street (LOS F)
- Lincoln Avenue between Ash Street and Harding Street (LOS F)
- Lincoln Avenue between Harding Street and Rose Street (LOS F)
- Lincoln Avenue between Rose Street and Midway Drive (LOS F)
- Mission Avenue between Fig Street and Ash Street (LOS F)
- Mission Avenue between Ash Street and Harding Street (LOS F)
- Mission Avenue between Harding Street and Rose Street (LOS F)
- Mission Avenue between Rose Street and Midway Drive (LOS E)
- Centre City Parkway between SR 78 and Mission Avenue (LOS E)
- Hickory Street between Mission Avenue and Washington Avenue (LOS E)

Figure 4–3 graphically shows the street segment operations.

4.5 Intersection Analysis

Table 4–4 summarizes the existing intersection operations at the study area intersections. As shown in *Table 4–4*, majority of the intersections are calculated to currently operate LOS D or better with the exception of the following:

- El Norte Parkway / Centre City Parkway (LOS E during the PM peak hour)
- El Norte Parkway / Broadway (LOS E during the AM and PM peak hours)
- Mission Avenue / Broadway (LOS F during the PM peak hour)[2]
- Mission Avenue / Harding Street (LOS F during the AM and LOS E during the PM peak hour)
- Washington Avenue / Juniper Street (LOS E during the AM and LOS F during the PM peak hour)[2]

Appendix E includes the Existing intersection analysis worksheets.

[2] Intersection located within Caltrans' jurisdiction.

TABLE 4–3
EXISTING STREET SEGMENT OPERATIONS

Street Segment	Existing Functional Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
El Norte Parkway					
Centre City Parkway to Escondido Boulevard	4-lane Major	37,000	27,250	C	0.736
Escondido Boulevard to Broadway	4-lane Major	37,000	28,910	D	0.781
Broadway to Fig Street	4-lane Major	37,000	31,440	D	0.850
Fig Street to Ash Street	4-lane Major	37,000	31,440	D	0.850
Ash Street to Rose Street	4-lane Major	37,000	25,180	C	0.681
Lincoln Avenue					
Lincoln Parkway to Fig Street	4-lane Collector NP	34,200	34,230	F	1.001
Fig Street to Ash Street	4-lane Collector NP	34,200	26,480	D	0.774
Ash Street to Harding Street	2-lane Local Collector WP	10,000	16,420	F	1.642
Harding Street to Rose Street	2-lane Local Collector WP	10,000	16,420	F	1.642
Rose Street to Midway Drive	2-lane Local Collector WP	10,000	10,260	F	1.026
Mission Avenue					
Centre City Parkway to Escondido Boulevard	4-lane Collector NP	34,200	24,370	C	0.713
Escondido Boulevard to Broadway	4-lane Collector NP	34,200	18,840	C	0.551
Broadway to Hickory Street	4-lane Collector NP	34,200	23,500	C	0.687
Hickory Street to Fig Street	4-lane Collector NP	34,200	18,000	B	0.526
Fig Street to Ash Street	2-lane Local Collector WP	10,000	13,480	F	1.348
Ash Street to Harding Street	2-lane Local Collector WP	10,000	11,200	F	1.120
Harding Street to Rose Street	2-lane Local Collector WP	10,000	15,900	F	1.590
Rose Street to Midway Drive	2-lane Local Collector WP	10,000	9,900	E	0.990
Washington Avenue					
Centre City Parkway to Escondido Boulevard	4-lane Collector NP	34,200	19,220	C	0.562
Escondido Boulevard to Broadway	4-lane Collector NP	34,200	19,560	C	0.572
Broadway to Juniper Street[g]	4-lane Collector NP	34,200	20,190	C	0.590
Juniper Street to Hickory Street[g]	4-lane Collector WP	20,000	11,500	C	0.575
Hickory Street to Fig Street[g]	4-lane Collector WP	20,000	11,800	C	0.590
Fig Street to Ash Street[g]	4-lane Collector WP	20,000	7,400	B	0.370
Ash Street to Harding Street	4-lane Collector WP	20,000	4,500	A	0.225
Harding Street to Rose Street	4-lane Collector WP	20,000	5,700	A	0.285
Rose Street to Midway Drive	4-lane Collector WP	20,000	8,100	B	0.405
Valley Boulevard					
Valley Parkway to Grand Avenue	3-lane Local Collector WP	15,000	9,980	C	0.665
Valley Parkway					
Centre City Parkway to Escondido Boulevard	5-lane One-Way Collector NP	43,500	16,830	B	0.387

TABLE 4–3
EXISTING STREET SEGMENT OPERATIONS (CONT'D)

Street Segment	Existing Functional Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
Escondido Boulevard to Broadway	3-lane One-Way Collector WP	30,000	18,000	C	0.600
Broadway to Juniper Street	3-lane One-Way Collector WP	30,000	17,050	C	0.568
Juniper Street to Hickory Street	3-lane One-Way Collector WP	30,000	14,790	B	0.493
Hickory Street to Fig Street	4-lane Collector NP	34,200	23,680	C	0.692
Fig Street to Date Street	4-lane Collector NP	34,200	19,600	C	0.573
Date Street to Ash Street	4-lane Collector NP	34,200	25,360	D	0.742
Ash Street to Harding Street	4-lane Collector NP	34,200	30,210	D	0.883
Harding Street to Rose Street	4-lane Collector NP	34,200	30,210	D	0.883
Rose Street to Midway Drive	4-lane Collector NP	34,200	29,180	D	0.853
Grand Avenue					
Centre City Parkway to Escondido Boulevard	4-lane Collector WP	20,000	8,420	B	0.421
Escondido Boulevard to Broadway	4-lane Collector WP	20,000	10,250	B	0.513
Broadway to Juniper Street	4-lane Collector WP	20,000	9,210	B	0.461
Juniper Street to Valley Boulevard	4-lane Collector WP	20,000	9,550	B	0.478
Valley Boulevard to Fig Street	3-lane Undivided-TWLTL NP	24,600[f]	15,130	C	0.615
Fig Street to Date Street	3-lane Undivided-TWLTL NP	24,600[f]	6,300	A	0.256
Date Street to Ash Street	3-lane Undivided-TWLTL WP	24,600[f]	9,500	B	0.386
Ash Street to Rose Street	4-lane Collector WP	20,000	8,100	B	0.405
Rose Street to Midway Drive	4-lane Collector WP	20,000	5,600	A	0.280
2nd Avenue					
Centre City Parkway to Escondido Boulevard	3-lane One-Way Collector WP	30,000	14,210	B	0.474
Escondido Boulevard to Broadway	3-lane One-Way Collector WP	30,000	15,060	B	0.502
Broadway to Juniper Street	3-lane One-Way Collector WP	30,000	14,590	B	0.486
Juniper Street to Grand Avenue	3-lane One-Way Collector WP	30,000	13,680	B	0.456
Centre City Parkway					
El Norte Parkway to SR 78	4-lane Major	37,000	26,800	C	0.724
SR 78 to Mission Avenue	4-lane Major	37,000	33,420	E	0.903
Mission Avenue to Washington Avenue	4-lane Major	37,000	23,170	C	0.626
Washington Avenue to Valley Parkway	4-lane Major	37,000	23,920	C	0.646
Valley Parkway to Grand Avenue	4-lane Major	37,000	28,260	D	0.764
Grand Avenue to 2nd Street	4-lane Major	37,000	30,210	D	0.816
Escondido Boulevard					
El Norte Parkway to Lincoln Avenue	2-lane Local Collector with TWLTL WP	15,000	10,310	C	0.687
Lincoln Avenue to Mission Avenue	4-lane Collector NP	34,200	11,180	A	0.327

TABLE 4–3
EXISTING STREET SEGMENT OPERATIONS (CONT'D)

Street Segment	Existing Functional Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
Mission Avenue to Washington Avenue	4-lane Collector NP	34,200	15,410	B	0.451
Washington Avenue to Valley Parkway	4-lane Collector NP	34,200	14,860	B	0.435
Valley Parkway to Grand Avenue	4-lane Collector NP	34,200	11,340	A	0.332
Grand Avenue to 2nd Avenue	4-lane Collector NP	34,200	11,420	A	0.334
Broadway					
Lincoln Avenue to Mission Avenue[g]	4-lane Collector NP	34,200	27,610	D	0.807
Mission Avenue to Washington Avenue[g]	4-lane Collector with TWLTL WP	34,200	25,660	D	0.750
Washington Avenue to Valley Parkway	4-lane Collector with TWLTL WP	34,200	20,250	C	0.592
Valley Parkway to Grand Avenue	4-lane Collector with TWLTL WP	34,200	8,590	A	0.251
Grand Avenue to 2nd Street	2-lane Local Collector WP	10,000	8,880	D	0.888
Juniper Street					
Washington Avenue to Valley Parkway	2-lane Local Collector WP	10,000	3,000	A	0.300
Valley Parkway to Grand Avenue	2-lane Collector with TWLTL WP	15,000	5,870	A	0.391
Grand Avenue to 2nd Avenue	2-lane Collector with TWLTL WP	15,000	6,810	B	0.454
Hickory Street					
Mission Avenue to Washington Avenue	2-lane Local Collector WP	10,000	9,300	E	0.930
Washington Avenue to Valley Parkway	2-lane Local Collector WP	10,000	4,810	B	0.481
Fig Street					
El Norte Parkway to Lincoln Avenue	2-lane Local Collector WP	10,000	7,700	D	0.770
Lincoln Avenue to Mission Avenue	2-lane Local Collector with TWLTL WP	15,000	9,630	C	0.642
Mission Avenue to Washington Avenue	2-lane Local Collector WP	10,000	5,200	B	0.520
Washington Avenue to Valley Parkway	2-lane Local Collector WP	10,000	7,950	D	0.795
Valley Parkway to Grand Avenue	2-lane Local Collector WP	10,000	5,660	C	0.566
Date Street					
Valley Parkway to Grand Avenue	2-lane Local Collector WP	10,000	3,570	B	0.357
Grand Avenue to 2nd Avenue	4-lane Collector NP	34,200	9,800	A	0.287

TABLE 4–3
EXISTING STREET SEGMENT OPERATIONS (CONT'D)

Street Segment	Existing Functional Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
Ash Street / San Pasqual Valley Road					
El Norte Parkway to Lincoln Avenue	2-lane Local Collector with TWLTL WP	15,000	9,890	C	0.659
Lincoln Avenue to Mission Avenue	4-lane Collector with TWLTL WP	34,200	20,390	C	0.596
Mission Avenue to Washington Avenue	4-lane Collector NP	34,200	20,660	C	0.604
Washington Avenue to Valley Parkway[g]	4-lane Collector with TWLTL NP	34,200	21,980	C	0.643
Valley Parkway to Grand Avenue[g]	4-lane Collector NP	34,200	22,740	C	0.665
Grand Avenue to 2nd Avenue[g]	4-lane Collector with TWLTL NP	34,200	23,400	C	0.684
Harding Street					
Lincoln Avenue to Mission Avenue	2-lane Local Collector WP	20,000[e]	11,500	C	0.575
Mission Avenue to Washington Avenue	2-lane Local Collector WP	20,000[e]	6,600	A	0.330
Washington Avenue to Valley Parkway	4-lane Collector with TWLTL NP	34,200	5,900	A	0.173
Rose Street					
El Norte Parkway to Lincoln Avenue	2-lane Local Collector WP	10,000	1,800	A	0.180
Lincoln Avenue to Mission Avenue	2-lane Local Collector WP	10,000	3,100	A	0.310
Mission Avenue to Washington Avenue	2-lane Local Collector WP	10,000	6,800	C	0.680
Washington Avenue to Valley Parkway	2-lane Local Collector WP	10,000	5,200	B	0.520
Valley Parkway to Grand Avenue	2-lane Local Collector with TWLTL WP	15,000	7,500	B	0.500

TABLE 4–3
EXISTING STREET SEGMENT OPERATIONS (CONT'D)

Street Segment	Existing Functional Classification	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
Midway Drive					
El Norte Parkway to Lincoln Avenue	2-lane Local Collector WP	10,000	4,200	B	0.420
Lincoln Avenue to Mission Avenue	2-lane Local Collector WP	10,000	4,200	B	0.420
Mission Avenue to Washington Avenue	2-lane Local Collector with TWLTL WP	15,000	5,600	B	0.373
Washington Avenue to Valley Parkway	2-lane Local Collector with TWLTL WP	15,000	7,300	B	0.487
Valley Parkway to Grand Avenue	4-lane Collector with TWLTL NP	34,200	6,300	A	0.184

General Notes:

1. NP – no parking
2. WP – with parking

Footnotes:

a. Capacities based on City of Escondido Roadway Classification Table.
b. Average Daily Traffic Volumes.
c. Level of Service.
d. Volume to Capacity.
e. Capacity reflects presence of one-way couplet and raised median.
f. Capacity estimated by interpolating between a 4-lane Collector with TWLTL and 2-lane Collector with TWLTL.
g. Street segment located within Caltrans' jurisdiction.

TABLE 4–4
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Delay[a]	LOS[b]
1. El Norte Pkwy / Centre City Pkwy	Signal	AM	51.7	D
		PM	57.1	E
2. El Norte Pkwy / Broadway	Signal	AM	62.8	E
		PM	55.2	E
3. El Norte Pkwy / Fig St	Signal	AM	22.7	C
		PM	16.6	B
4. Lincoln Ave / Broadway	Signal	AM	42.4	D
		PM	25.7	C
5. Lincoln Avenue / Fig St	Signal	AM	28.7	C
		PM	21.1	C
6. Lincoln Ave / Ash St	Signal	AM	42.8	D
		PM	38.3	D
7. Lincoln Pkwy / Broadway[d]	Signal	AM	50.1	D
		PM	54.4	D
8. Mission Ave / Escondido Blvd	Signal	AM	38.9	D
		PM	42.3	D
9. Mission Ave / Broadway[d]	Signal	AM	44.6	D
		PM	83.4	F
10. Mission Ave / Hickory St	MSSC[c]	AM	18.0	C
		PM	25.1	D
11. Mission Ave / Ash St	Signal	AM	37.3	D
		PM	33.8	C

TABLE 4–4
EXISTING INTERSECTION OPERATIONS (CONT'D)

Intersection	Control Type	Peak Hour	Delay[a]	LOS[b]
12. Mission Ave / Harding St	MSSC[c]	AM	83.2	F
		PM	43.2	E
13. Mission Ave / Rose St	Signal	AM	32.6	C
		PM	30.7	C
14. Washington Ave / Escondido Blvd	Signal	AM	34.2	C
		PM	44.6	D
15. Washington Ave / Broadway[d]	Signal	AM	29.9	C
		PM	40.2	D
16. Washington Ave / Juniper St[d]	MSSC[c]	AM	36.6	E
		PM	52.0	F
17. Washington Ave / Hickory St[d]	Signal	AM	8.6	A
		PM	11.1	B
18. Washington Ave / Fig St[d]	Signal	AM	33.3	C
		PM	44.8	D
19. Washington Ave / Ash St[d]	Signal	AM	48.2	D
		PM	40.7	D
20. Washington Ave / Harding St	Signal	AM	16.7	B
		PM	16.7	B
21. Washington Ave / Rose St	Signal	AM	19.2	B
		PM	16.8	B
22. Valley Pkwy / Hickory St	Signal	AM	7.9	A
		PM	12.0	B
23. Valley Pkwy / Fig St	Signal	AM	11.4	B
		PM	13.1	B

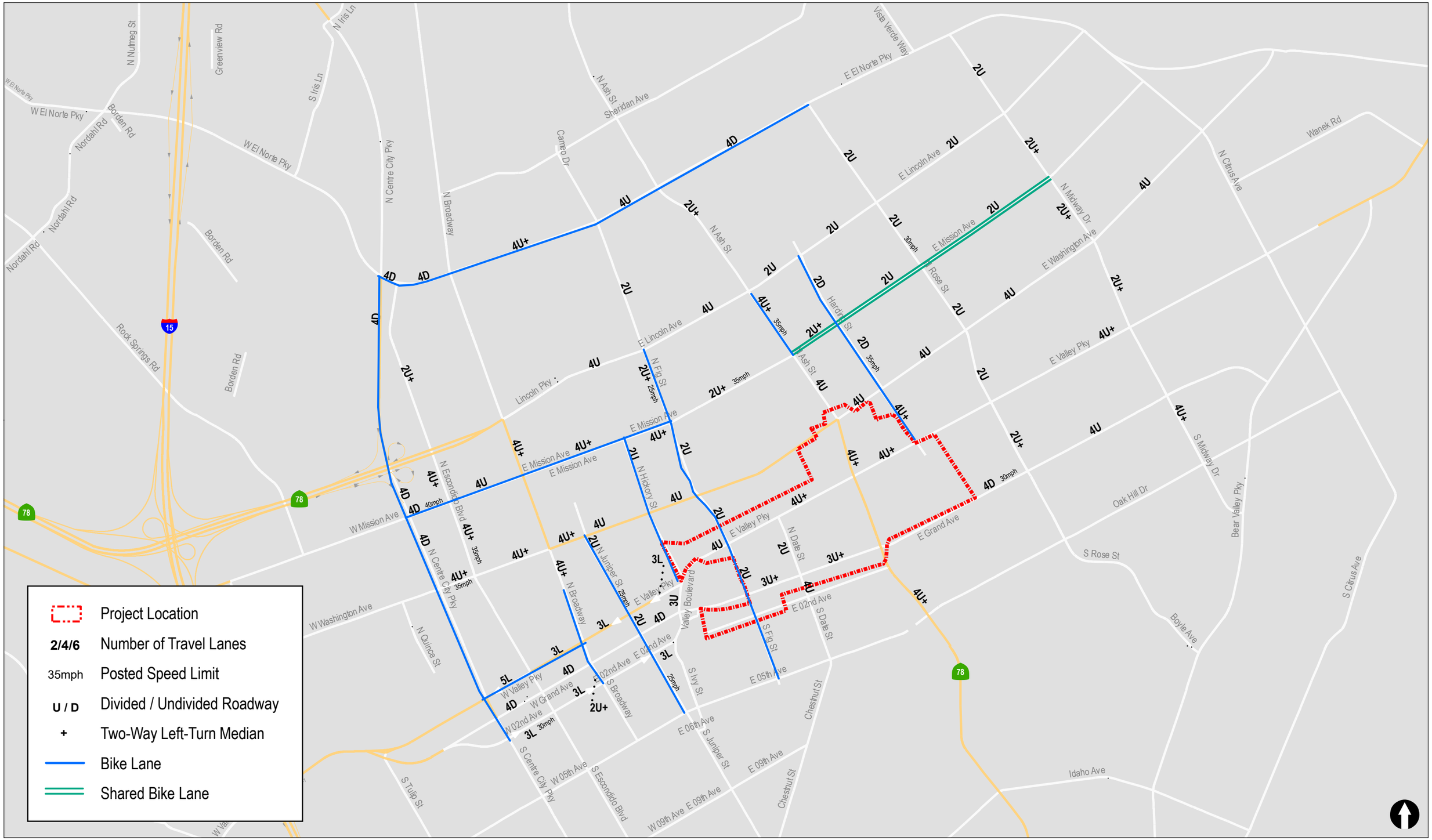
TABLE 4–4
EXISTING INTERSECTION OPERATIONS (CONT'D)

Intersection	Control Type	Peak Hour	Delay[a]	LOS[b]
24. Valley Pkwy / Date St	Signal	AM	11.8	B
		PM	13.6	B
25. Valley Pkwy / Ash St[d]	Signal	AM	45.1	D
		PM	46.3	D
26. Valley Pkwy / Harding St	Signal	AM	12.2	B
		PM	15.9	B
27. Valley Pkwy / Rose St	Signal	AM	51.4	D
		PM	37.2	D
28. Grand Ave / Valley Blvd	Signal	AM	25.7	C
		PM	29.4	C
29. Grand Ave / Date St	Signal	AM	15.4	B
		PM	16.9	B
30. Grand Ave / Ash St[d]	Signal	AM	36.8	D
		PM	38.0	D
31. Grand Ave / Rose St	Signal	AM	31.4	C
		PM	26.8	C

Footnotes:

a. Average delay expressed in seconds per vehicle
b. Level of Service
c. MSSC- Minor Street Stop Controlled intersection. Worst-case movement approach delay and LOS reported.
d. Intersection located within Caltrans' jurisdiction.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F



LINSCOTT LAW & GREENSPAN engineers

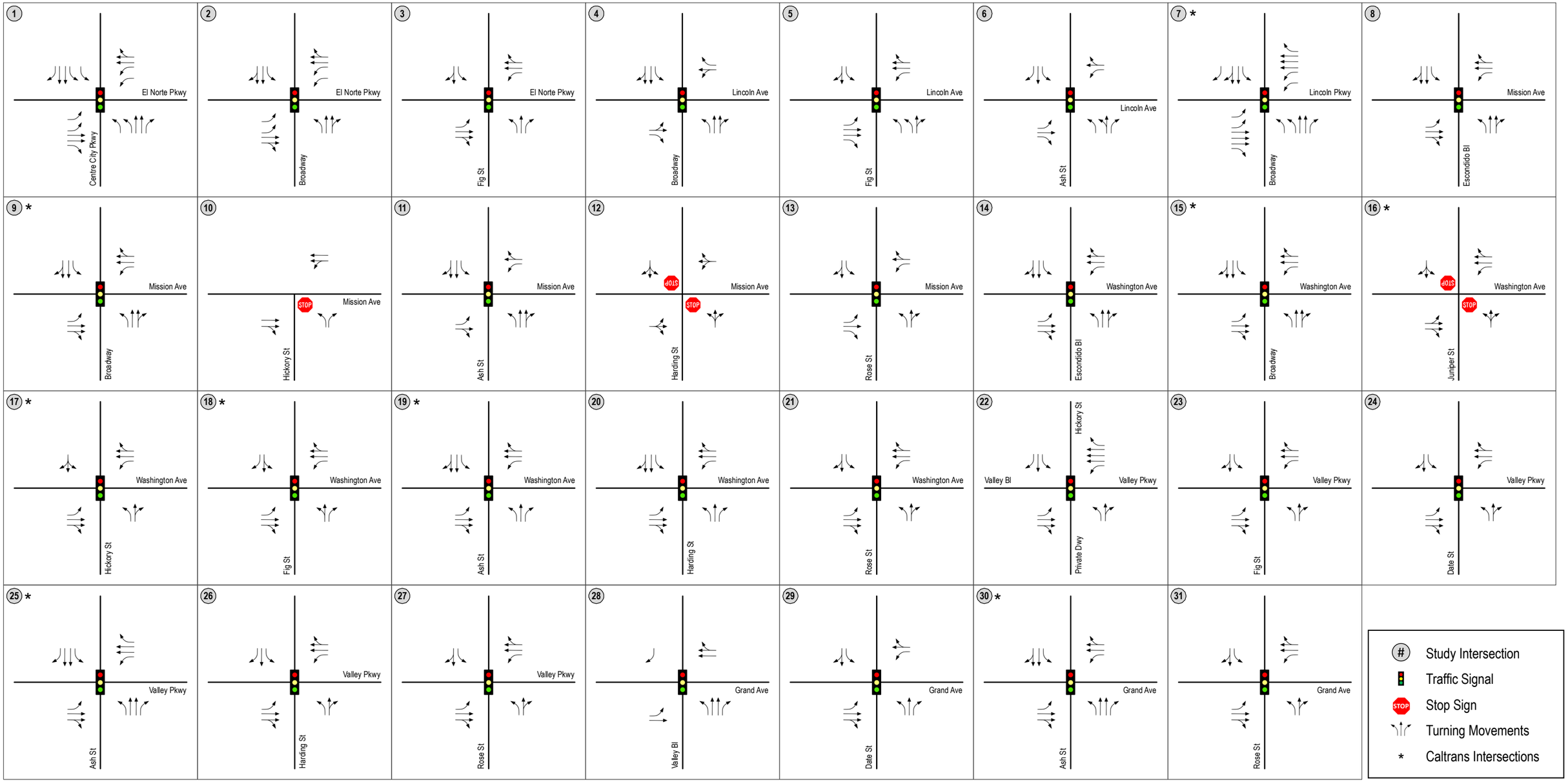
N:\3338\Figures
Date: 1/18/2023
Time: 11:08 AM

Figure 4-1

Existing Conditions Diagram

(Page 1 of 2)

East Valley Specific Plan (EVSP)



LINSCOTT LAW & GREENSPAN engineers

N:\3338\Figures
Date: 1/18/2023
Time: 11:19 AM

Figure 4-1

Existing Conditions Diagram

(Page 2 of 2)

East Valley Specific Plan (EVSP)

LINSCOTT LAW & GREENSPAN engineers

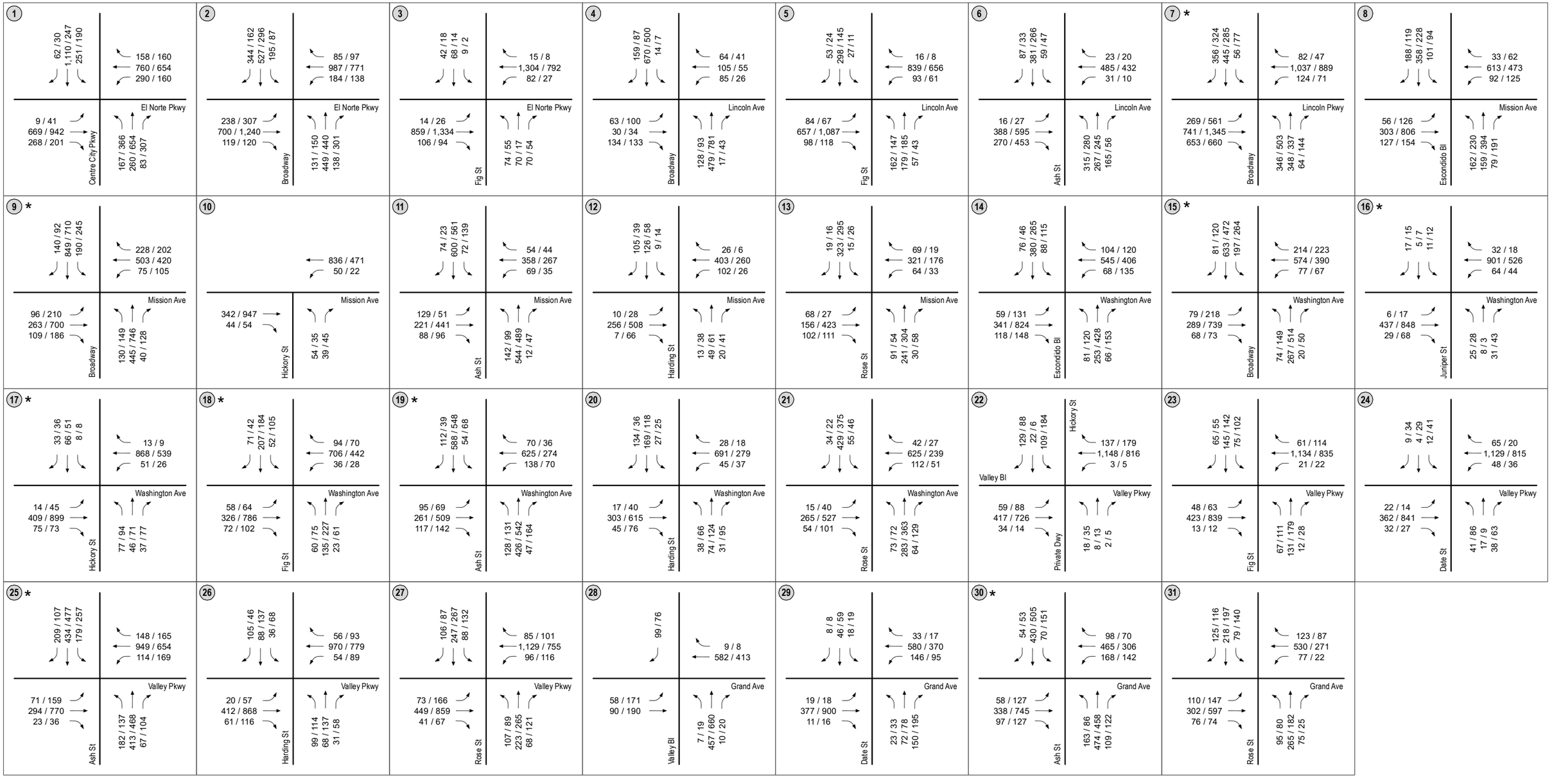
N:\3338\Figures
Date: 1/18/2023
Time: 11:20 AM

Figure 4-2

Existing Traffic Volumes

(Page 1 of 2)

East Valley Specific Plan (EVSP)



LINSCOTT LAW & GREENSPAN engineers

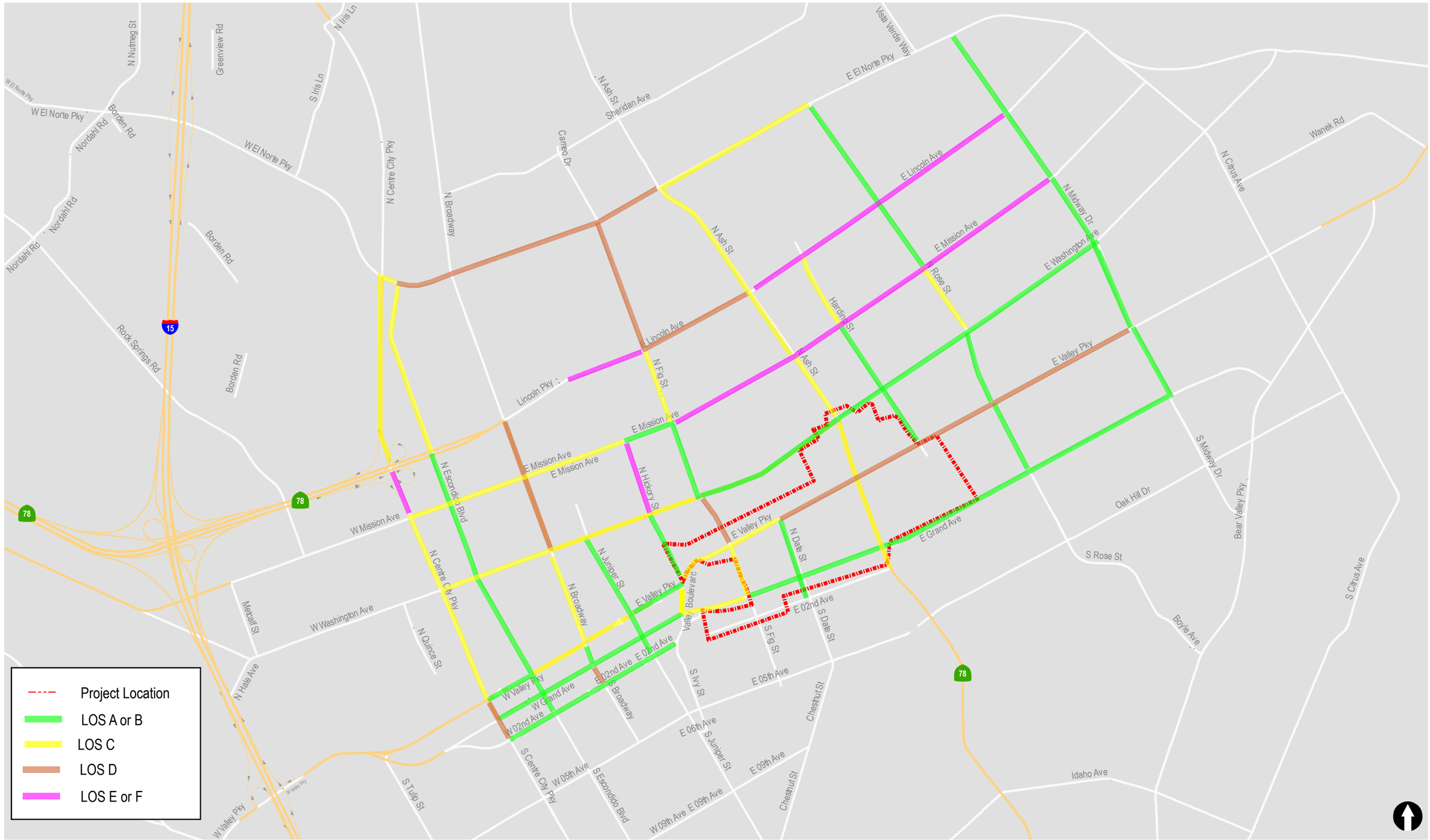
N:\3338\Figures
Date: 1/18/2023
Time: 12:34 PM

Figure 4-2

Existing Traffic Volumes

(Page 2 of 2)

East Valley Specific Plan (EVSP)



N:\3338\Figures
Date: 01/18/23

Figure 4-3

Existing Street Segment Operations

East Valley Specific Plan (EVSP)

5.0 VMT ANALYSIS

5.1 Map-Based Screening

Prior to any detailed project-specific VMT analysis, OPR allows for the use of a "map-based screening" (screening map) to identify if a project would result in a less-than-significant impact. The SANDAG screening map which has been developed for the VMT guidelines was utilized for the Project. This map provides VMT per capita, VMT per employee and retail VMT evaluation for locations throughout the City, and accounts for surrounding land uses, population density, and transportation infrastructure in accordance with OPR guidelines. These elements collectively shape mobility behavior and provide a strong indication of expected project VMT.

In general, higher density and mix of land uses with access to mobility options are expected to generate lower VMT. ***Appendix F*** contains the SANDAG screening map.

5.1.1 *Screening Map Results*

The SANDAG screening map allows for a search by address of properties within the City of Escondido. The data presented in the screening map includes the following:

- Census Tract
- VMT per capita or VMT per employee
- Percent of regional mean
- Description of VMT results

The data represented on the screening map follows the OPR guidance and displays VMT efficient areas that are 85% of less of the SANDAG regional average. The data is also based on SANDAG Series 13 Year 2050 model.

5.2 Location Near Transit Opportunities

Transit opportunities for the Project are located along multiple study area street segments, and all bus routes along these street segments connect to a major transit stop, the Escondido Transit Center, which connects residents to the beaches in Oceanside, and trains to Los Angeles or San Diego. Residents can also connect to an Express Bus to downtown San Diego. However, the Project is located over a ½ mile walking distance from that major transit stop, and the headways for all bus routes within the study area during the AM and PM peak commuter periods are greater than 15 minutes. Therefore, the current service frequencies do not allow the project to be eligible for transit-based screening and a VMT per capita, VMT per employee and retail VMT analysis was conducted as described below.

5.3 VMT Analysis

In order to calculate the VMT for the baseline and the Project, the SANDAG Series 13 Year 2050 Travel Demand Model was used. The model generates a land use-specific average trip length (residential, office and retail) as well as an average daily volume, which ultimately calculates the

total VMT per capita, VMT per employee and retail VMT, both regionwide and for the Project. The SANDAG Series 13 Year 2050 Travel Demand Model results are included in *Appendix F*.

Table 5–1 summarizes the Regional average baseline VMT results provided by SANDAG using the Series 13 model. As seen in *Table 5–1*, the Project's VMT per capita is 5.8 miles per resident, and the Project's VMT per employee is 12.7 miles per employee. For the purpose of determining the significance of VMT impacts, the Project VMT per capita and VMT per employee would need to be 85% below the Regional average of 19.0 and 27.2, respectively. This equates to 16.15 VMT per capita and 23.12 per employee.

Since the Project VMT per capita and VMT per employee is lower than 85% of the Regional average, no significant VMT impact is calculated for residential and office uses.

The model indicates the "With Project" citywide VMT for retail is 6,004,710 miles. This is greater than the VMT for retail without the Project which is 5,759,217. However, since the Project plans to maintain its purpose of providing local serving retail with less than 50,000 square feet, the retail portion may also be presumed to have a less than significant impact as local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.

TABLE 5–1
SANDAG MODEL VMT RESULTS

VMT	Project	Regional (Year 2016 Baseline)	85% of Regional (Year 2016 Baseline)	Sig?
Residential				
VMT per resident	5.8	19.0	16.15	No
Office				
VMT per employee	12.7	27.2	23.12	No
Total VMT	**Without Project**	**With Project**	**Delta**	**Sig?**
Retail				
Citywide	5,759,217	6,004,710	245,493	No[a]

Footnote:
a. Less than 50,000 SF of local serving retail.

6.0 VMT STRATEGIES

Several quantifiable Transportation Demand Management (TDM) strategies can be used to maintain the Project's VMT at a level below significance. TDM strategies can be quantified using methodologies described in *Handbook for Analyzing Greenhouse Gas Emission Reductions* published by the California Air Pollution Control Officers Association (CAPCOA) in December 2021.

The TDM measures presented in the draft *City of Escondido East Valley Specific Plan (EVSP) 2021* can be used to reduce VMT associated with new development and provide transportation choices for residents and visitors within the study area. These TDM measures are intended to reduce the overall number of VMT by providing better incentives and opportunities to choose alternative modes of travel. These TDM measures are separated by public improvements and private development, both of which build off the General Plan TDM policies.

6.1 Specific Plan TDM Strategies

PUBLIC IMPROVEMENTS

Based on the draft EVSP, public improvement projects carried out by the City will strive to implement the following TDM strategies:

- Develop and implement a Safe and more frequent Routes to Transit Plan.
- Participate in the City commuter program that includes subsidized transit passes, preferred parking spots for car- or vanpool, bike racks, showers on-site, teleworking, and flexible work schedules.
- Encourage employers to offer programs, facilities, and incentives to their employees that would promote carpooling, transit use, and use of other alternative modes. Provide businesses and business organizations, such as Chambers of Commerce, with information on iCommute.
- Provide information on commuting resources. Install a kiosk with information on commute alternatives and provide information on Web sites and newsletters.
- Participate in and promote annual regional events and campaigns that encourage commute alternatives to driving alone such as Bike to Work Month, Dump the Pump, Rideshare Week, and Walk and Bike to School Day.

PRIVATE DEVELOPMENT

Also according to the draft EVSP, private development projects will strive to implement the following TDM strategies:

Residential

- Provide bicycle parking.
- Provide six-month transit passes to new residents.
- Monitor transit use by new residents for the first six months of operation and present monitoring results to the City.

Non-Residential

- Provide bicycle parking.
- Provide "end-of-trip" facilities onsite for bicycle commuters (i.e. bicycle parking spaces, showers, changing rooms, and lockers).
- Provide informational material to employees for carpool and vanpool ride-matching services.
- Develop alternate workplace, telecommuting, and/or alternate work schedule programs.

7.0 SUBSTANTIAL EFFECT CRITERIA

For purposes of this TIA, the criteria established in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), Transportation, will apply to the analysis of direct, indirect, and cumulative effects. As such, a substantial effect to transportation and traffic-related facilities would result if the Project would:

A. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

B. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) (regarding the use of vehicles miles traveled (VMT) as a criterion for analyzing transportation impacts).

C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

D. Result in inadequate emergency access.

For Item A, the Project's consistency (i.e., potential conflicts) with relevant programs, plans, ordinances, and/or policies relating to transit, roadway, bicycle, and pedestrian facilities is addressed in this section.

Specific to roadway conflicts, the Project's consistency with the General Plan Mobility and Infrastructure Element will be addressed, as well as consistency with the City's Traffic Impact Analysis Requirements Guidelines. A component of this analysis includes consideration of whether LOS targets identified in the General Plan and Traffic Guidelines would be achieved or whether the Project would conflict with such targets. To assist in that analysis, the Substantial Effect Criteria shown in ***Table 7–1*** below are utilized to assess potential conflicts and related impacts. Since the analysis focuses on the long-term time frame and in order to be consistent with language contained in the 2013 Downtown Specific Plan and the City's General Plan Update Traffic Study, LOS D or better was considered acceptable.

TABLE 7–1
CITY OF ESCONDIDO TRANSPORTATION SUBSTANTIAL EFFECT CRITERIA

Level of Service with Project	Allowable Change due to Project Impact		
	Roadway Segments		Intersections Delay (sec.)
	V/C	Speed (mph)	
E or F	0.02	1	2

Source: See City of Escondido.
Notes: V/C = volume to capacity ratio (use LOS E for capacity).
No Significant Impact occurs at areas in GP Downtown Specific Area that operate at LOS "D" or better.
Mitigation measures should also be considered for any segment or intersection operating at LOS "F" subject to less than substantial effect.

8.0 TRIP GENERATION

SANDAG TRIP RATES

The land use trip generation rates associated with each of the Project developments are based on the *SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*.

Table 8–1 shows the trip generation summary for the proposed developments. Based on the trip generation calculations, the project is calculated to generate a total of 110,195 gross average daily trips (ADT) with 6,811 trips during the AM peak hour (3,417 inbound / 3,394 outbound) and 10,697 trips during the PM peak hour (5,351 inbound / 5,346 outbound), if no mixed-use reduction were applied.

PROJECT MIXED-USE REDUCTION

Due to the large scale of the potential development in the area, it is reasonable to apply a mixed-use factor to account for area-specific mix of land uses (commercial, office, residential, parks, and community services), density, and walking and transit options. Therefore, the CAPCOA LUT-3 (Mixed-Use) formula was used. Unlike other methods that require very specific inputs that are not readily available for a Specific Plan level project, this method only requires the estimated square footage of the various land uses.

This method uses formulas that consider the different type of land uses in an integrated development project with functional interrelationships and a coherent physical design, thereby encouraging non-auto modes of transport and reducing the need for external trips. The formula calculates a land use index based on the diversity of uses and translates that to a VMT reduction. Based on the Project's land use mix, the VMT reduction is approximately 34.80% as compared to a single-use development. CAPCOA states the max percentage is 30%.

It should be noted that several of the CAPCOA measures work by directly inducing a mode shift and reduce vehicle trips. An example would be a transit subsidy program which incorporates the percent of vehicular trips in order to obtain a VMT percent reduction. For these measures, CAPCOA explicitly assumes a 1:1 conversion from vehicle trips to VMT. This is not empirical but rather an assumption that the external trips being substituted for internal trips (vehicular or non-vehicular) will average out to the typical trip length.

For the purpose of this Project's trip generation calculation, a reverse approach is taken by obtaining a mixed-use/ internal capture reduction from the calculated VMT percent reduction. The mixed-use / internal capture reduction is the decrease in external trips due to the diversity of land uses in the plan area. These are trips for which the users can meet their needs without leaving the area. However, some of them may still be vehicle trips. A comparison below further shows the relationship between the two.

External trip reduction =

A. Mode-shifted trips (ped/bike/transit) = NO VMT
B. Internal-Internal vehicle trips = SOME VMT (less)

Trip reduction = 100% of *A* + 100% of *B*

VMT reduction = 100% of *A* + *X*% of *B*, where X is less 100%.

Therefore, the external trip reduction is necessarily greater than or equal to the VMT reduction due to the amount of internal-internal vehicle trips considered, and assuming a 1:1 relationship means that using CAPCOA results in a conservative (slightly understated) mixed-use reduction. To be conservative and to take into account any land uses not captured in the mixed-use/ internal capture reduction, it was deemed appropriate to use approximately half of the maximum percentage (30%) as a mixed-use reduction. Therefore, a 15% mixed-use reduction was applied to the gross trips to obtain the net Project trips. ***Appendix G*** contains the mixed-use reduction calculation worksheets.

As shown in *Table 8–1*, with the mixed-use reduction, the project is calculated to generate 93,666 net Project ADT with 5,789 trips during the AM peak hour (2,904 inbound / 2,885 outbound) and 9,092 trips during the PM peak hour (4,548 inbound / 4,544 outbound).

TABLE 8–1
TRIP GENERATION - 2035 SPECIFIC PLAN BUILDOUT

Land Use	Quantity	Daily Volumes		AM Peak Hour					PM Peak Hour				
		Rate [a]	Volume	Rate	Split	In	Out	Total	Rate	Split	In	Out	Total
Single Family	648 DU	10/DU	6,480	8%	30%:70%	155	363	518	10%	70%:30%	454	194	648
Multifamily	5,516 DU	6/DU	33,096	8%	20%:80%	530	2,118	2,648	9%	70%:30%	2,085	894	2,979
Commercial Office	275 KSF	20/KSF	5,497	14%	90%:10%	693	77	770	13%	20%:80%	143	572	715
Medical Office	383 KSF	50/KSF	19,147	6%	80%:20%	919	230	1,149	11%	30%:70%	632	1,474	2,106
Retail	1,026 KSF	40/KSF	41,032	3%	60%:40%	739	492	1,231	9%	50%:50%	1,847	1,846	3,693
City Parks	25 acres	50/acre	1,250	13%	50%:50%	82	81	163	9%	50%:50%	57	56	113
Community Services [b]	123 KSF	30/KSF	3,693	9%	90%:10%	299	33	332	12%	30%:70%	133	310	443
Gross Project Trip Generation			**110,195**			**3,417**	**3,394**	**6,811**			**5,351**	**5,346**	**10,697**
Internal Capture [c]		**15%**	**16,529**			**513**	**509**	**1,022**			**803**	**802**	**1,605**
Net Project Trip Generation			**93,666**			**2,904**	**2,885**	**5,789**			**4,548**	**4,544**	**9,092**

Footnotes:

a. Trip generation rate from SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002. ("SANDAG Brief Guide")

b. Government (Civic Center) trip rate.

c. Project mixed use/internal capture reduction was calculated using CAPCOA (2010). Applied internal capture rate is one-half of the reduction calculated using the CAPCOA methods.

9.0 SANDAG TRAFFIC MODELING

9.1 Methodology

As mentioned in *Section 5.0*, the SANDAG Series 13 Travel Demand Model was used to generate Year 2050 average daily volumes with the Project. The Project site is comprised of multiple Master Geographic Reference Areas (MGRA) where a group of land uses were inputted in each to generate trips reflecting the proposed Project. The Year 2050 Without Project volumes were obtained from the SANDAG Series 13 model without assuming any changes to the land use inputs.

9.2 Year 2050 Results

Based on the land uses assigned in each MGRA, the model simulates individual and household transportation decisions that compose the Project's daily travel itinerary. People travel outside their home for activities such as work, school, shopping, healthcare, and recreation, and the model attempts to predict whether, where, when, and how this travel occurs.

The SANDAG model strives to be as behaviorally realistic as possible and is based on empirical data collected by SANDAG, Caltrans, and the federal government. It predicts the travel decisions of San Diego residents at a detailed level, taking into account the way people schedule their day, their behavioral patterns, and the need to cooperate with other household members. When simulating a person's travel patterns, the model takes into consideration a multitude of personal and household attributes like age, income, and gender.

Appendix H contains a Traffic Volume Forecasting Memo which includes additional information on the SANDAG model.

9.3 Project Traffic Volumes

Project traffic volumes were calculated by using the difference from the two SANDAG Series 13 Year 2050 models (SANDAG Series 13 Travel Demand Model minus SANDAG Series 2050 TFIC model). The Project traffic volumes were then added onto the Long-Term volumes (which were obtained from the City's Circulation Element model) to obtain Long-Term + Project traffic volumes.

Table 9–1 is a summary of the Year 2050 Without and With Project forecast volumes and Project traffic volumes. ***Figure 9–1*** shows the Project traffic volumes.

Appendix I contains a Trip Generation Memo which contains further information on the Project traffic volume calculations.

TABLE 9–1
YEAR 2050 TRAFFIC VOLUMES

Street Segment	Without Project	With Project	Δ (Project Traffic)
El Norte Parkway			
Centre City Parkway to Escondido Boulevard	23,500	24,320	820
Escondido Boulevard to Broadway	18,600	19,190	590
Broadway to Fig Street	16,400	17,100	700
Fig Street to Ash Street	14,900	15,020	120
Ash Street to Rose Street	13,300	13,530	230
Lincoln Avenue			
Lincoln Parkway to Fig Street	38,300	40,290	1,990
Fig Street to Ash Street	32,200	33,600	1,400
Ash Street to Harding Street	23,000	22,910	-90
Harding Street to Rose Street	14,500	14,010	-490
Rose Street to Midway Drive	12,800	12,510	-290
Mission Avenue			
Centre City Parkway to Escondido Boulevard	16,500	17,550	1,050
Escondido Boulevard to Broadway	14,100	15,890	1,790
Broadway to Hickory Street	28,800	33,540	4,740
Hickory Street to Fig Street	19,400	21,450	2,050
Fig Street to Ash Street	13,400	13,800	400
Ash Street to Harding Street	7,600	7,740	140
Harding Street to Rose Street	15,400	16,050	650
Rose Street to Midway Drive	8,800	9,320	520
Washington Avenue			
Centre City Parkway to Escondido Boulevard	12,500	13,090	590
Escondido Boulevard to Broadway	11,300	11,810	510
Broadway to Juniper Street	10,400	11,810	1,410
Juniper Street to Hickory Street	7,200	8,100	900
Hickory Street to Fig Street	12,300	14,090	1,790
Fig Street to Ash Street	12,500	14,420	1,920
Ash Street to Harding Street	4,000	4,550	550
Harding Street to Rose Street	5,700	5,960	260
Rose Street to Midway Drive	7,700	8,210	510
Valley Boulevard			
Valley Parkway to Grand Avenue	8,600	10,790	2,190
Valley Parkway			
Centre City Parkway to Escondido Boulevard	7,200	8,020	820
Escondido Boulevard to Broadway	8,200	9,480	1,280
Broadway to Juniper Street	7,200	8,740	1,540

TABLE 9–1
YEAR 2050 TRAFFIC VOLUMES (CONT'D)

Street Segment	Without Project	With Project	Δ (Project Traffic)
Juniper Street to Hickory Street	7,400	9,320	1,920
Hickory Street to Fig Street	14,600	22,680	8,080
Fig Street to Date Street	17,600	26,230	8,630
Date Street to Ash Street	19,800	28,840	9,040
Ash Street to Harding Street	15,400	17,730	2,330
Harding Street to Rose Street	20,500	23,320	2,820
Rose Street to Midway Drive	20,500	22,420	1,920
Grand Avenue			
Centre City Parkway to Escondido Boulevard	4,800	5,030	230
Escondido Boulevard to Broadway	3,300	3,310	10
Broadway to Juniper Street	2,500	2,760	260
Juniper Street to Valley Boulevard	2,400	3,300	900
Valley Boulevard to Fig Street	5,000	6,510	1,510
Fig Street to Date Street	6,200	8,800	2,600
Date Street to Ash Street	12,800	14,030	1,230
Ash Street to Rose Street	8,200	8,340	140
Rose Street to Midway Drive	6,400	7,170	770
2nd Avenue			
Centre City Parkway to Escondido Boulevard	12,100	13,150	1,050
Escondido Boulevard to Broadway	10,200	11,350	1,150
Broadway to Juniper Street	11,000	12,280	1,280
Juniper Street to Grand Avenue	10,000	12,180	2,180
Centre City Parkway			
El Norte Parkway to SR 78	26,300	26,530	230
SR 78 to Mission Avenue	30,200	30,670	470
Mission Avenue to Washington Avenue	20,600	20,720	120
Washington Avenue to Valley Parkway	19,200	19,430	230
Valley Parkway to Grand Avenue	19,300	19,310	10
Grand Avenue to 2nd Street	13,500	13,210	-290
Escondido Boulevard			
El Norte Parkway to Lincoln Avenue	15,200	16,020	820
Lincoln Avenue to Mission Avenue	14,400	15,100	700
Mission Avenue to Washington Avenue	12,700	12,710	10
Washington Avenue to Valley Parkway	6,900	7,020	120
Valley Parkway to Grand Avenue	6,500	6,410	-90
Grand Avenue to 2nd Avenue	7,100	6,910	-190

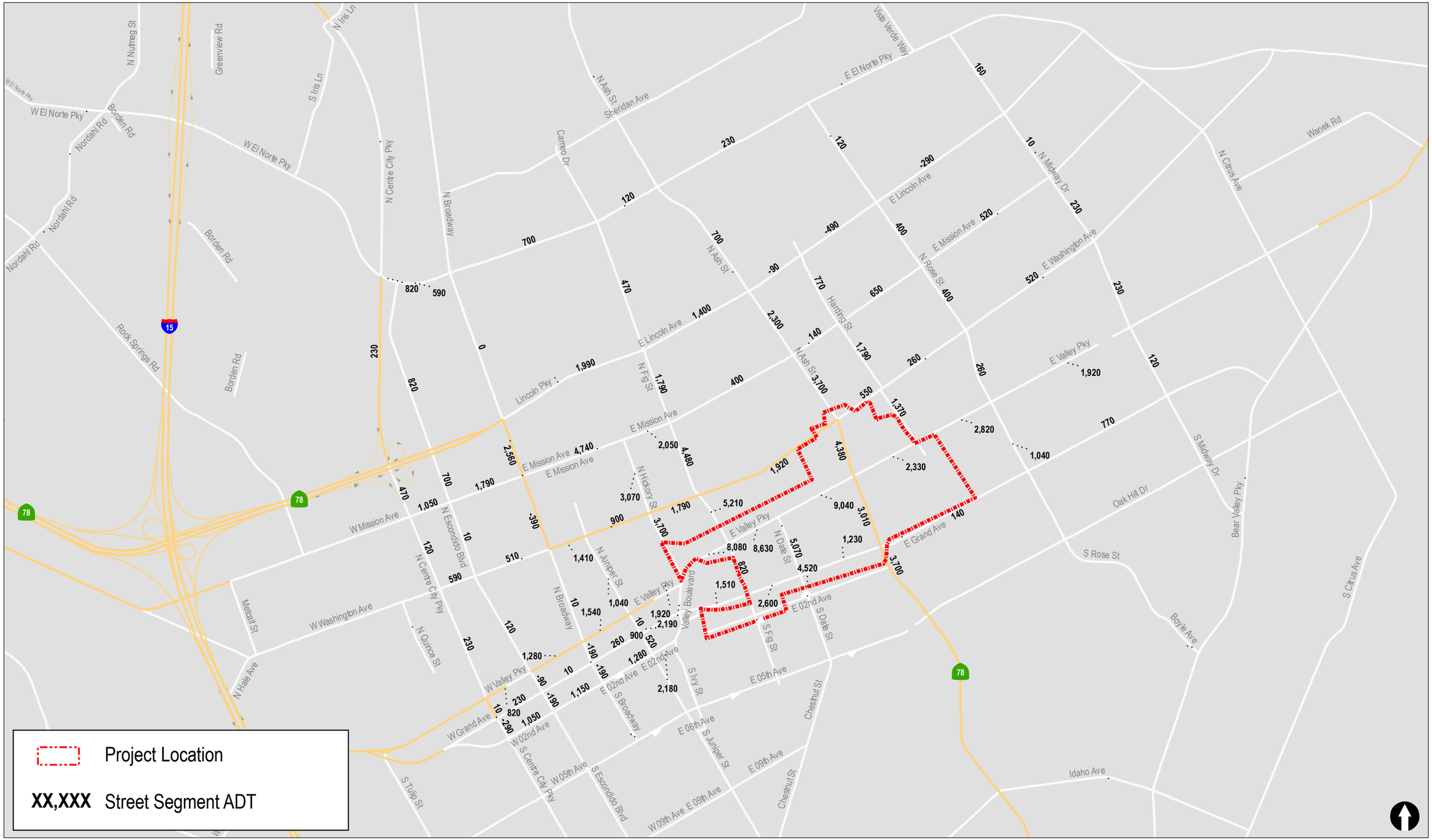
TABLE 9–1
YEAR 2050 TRAFFIC VOLUMES (CONT'D)

Street Segment	Without Project	With Project	Δ (Project Traffic)
Broadway			
Lincoln Avenue to Mission Avenue	30,600	33,160	2,560
Mission Avenue to Washington Avenue	19,200	18,810	-290
Washington Avenue to Valley Parkway	12,400	12,410	10
Valley Parkway to Grand Avenue	8,000	7,810	-190
Grand Avenue to 2nd Street	6,400	6,210	-190
Juniper Street			
Washington Avenue to Valley Parkway	4,100	5,140	1,040
Valley Parkway to Grand Avenue	2,200	2,210	10
Grand Avenue to 2nd Avenue	2,600	3,120	520
Hickory Street			
Mission Avenue to Washington Avenue	10,900	13,970	3,070
Washington Avenue to Valley Parkway	7,700	11,400	3,700
Fig Street			
El Norte Parkway to Lincoln Avenue	6,800	7,270	470
Lincoln Avenue to Mission Avenue	7,400	9,190	1,790
Mission Avenue to Washington Avenue	7,200	11,680	4,480
Washington Avenue to Valley Parkway	6,800	12,010	5,210
Valley Parkway to Grand Avenue	1,500	2,320	820
Date Street			
Valley Parkway to Grand Avenue	10,800	15,870	5,070
Grand Avenue to 2nd Avenue	8,200	12,720	4,520
Ash Street / San Pasqual Valley Road			
El Norte Parkway to Lincoln Avenue	7,300	8,000	700
Lincoln Avenue to Mission Avenue	10,900	13,200	2,300
Mission Avenue to Washington Avenue	14,300	18,000	3,700
Washington Avenue to Valley Parkway	15,400	19,780	4,380
Valley Parkway to Grand Avenue	16,000	19,010	3,010
Grand Avenue to 2nd Avenue	25,300	29,000	3,700
Harding Street			
Lincoln Avenue to Mission Avenue	14,000	14,770	770
Mission Avenue to Washington Avenue	6,500	8,290	1,790
Washington Avenue to Valley Parkway	6,000	7,370	1,370

TABLE 9–1
YEAR 2050 TRAFFIC VOLUMES (CONT'D)

Street Segment	Without Project	With Project	Δ (Project Traffic)
Rose Street			
El Norte Parkway to Lincoln Avenue	1,900	2,020	120
Lincoln Avenue to Mission Avenue	2,000	2,400	400
Mission Avenue to Washington Avenue	7,400	7,800	400
Washington Avenue to Valley Parkway	6,500	6,760	260
Valley Parkway to Grand Avenue	7,800	8,840	1,040
Midway Drive			
El Norte Parkway to Lincoln Avenue	5,000	5,160	160
Lincoln Avenue to Mission Avenue	5,200	5,210	10
Mission Avenue to Washington Avenue	6,800	7,030	230
Washington Avenue to Valley Parkway	8,600	8,830	230
Valley Parkway to Grand Avenue	7,500	7,620	120

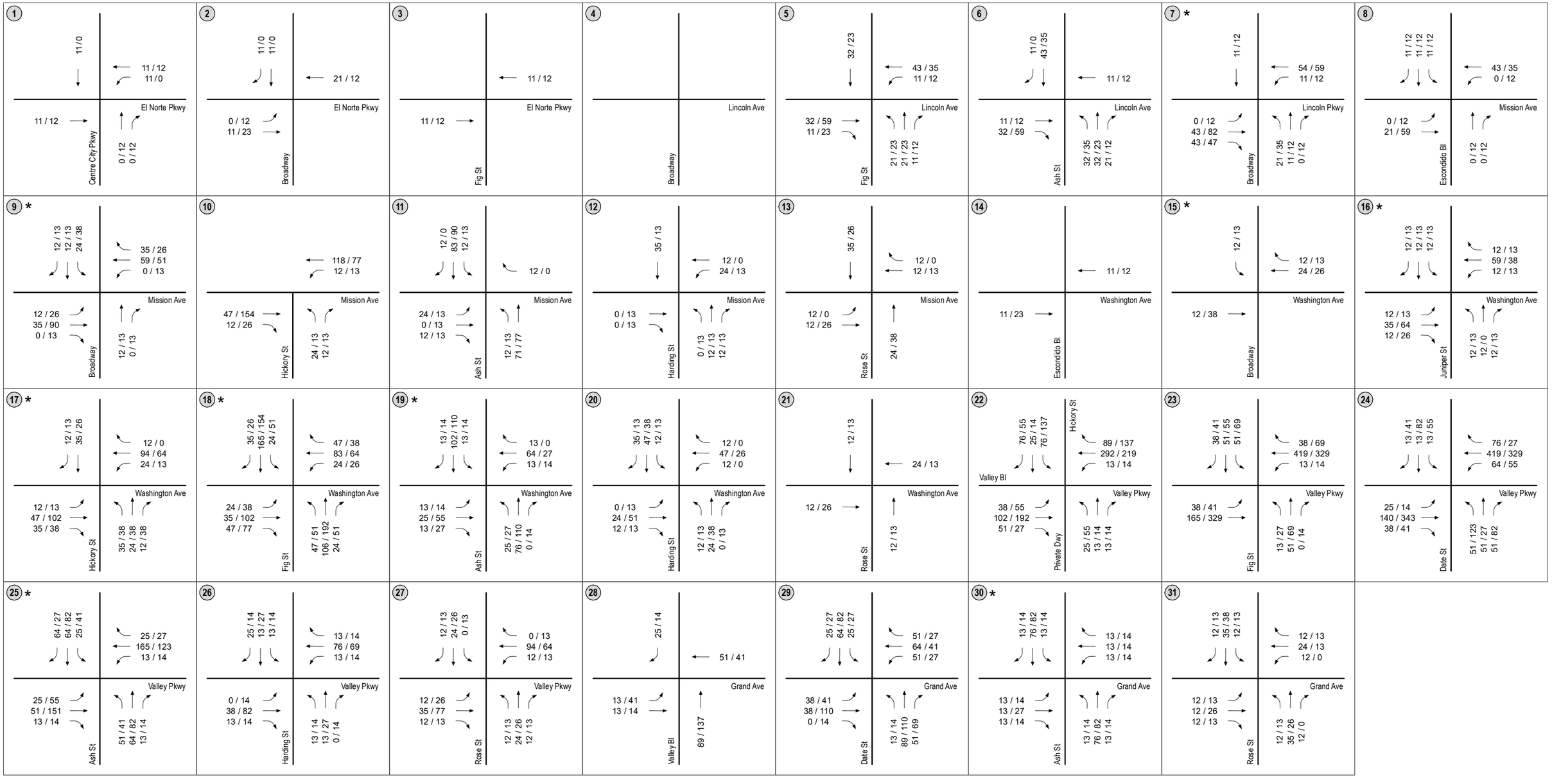
Footnote:
a. *Appendix H* contains more information on the "With Project" traffic volumes.



N:\3338\Figures
Date: 1/18/2023
Time: 11:30 AM

Figure 9-1
Project Traffic Volumes

Sixth Cycle Housing Element



LINSCOTT LAW & GREENSPAN engineers

N:\3338\Figures
Date: 1/18/2023
Time: 12:40 PM

Figure 9-1

Project Traffic Volumes

(Page 2 of 2)

East Valley Specific Plan (EVSP)

10.0 LOS ANALYSIS RESULTS

For the Long-Term analysis, roadway segments were assumed to be built out to their ultimate classifications under Alternative 3 as is identified in the *Escondido General Plan Update* as the "Year 2035 Proposed General Plan Circulation Element." Long-Term traffic volumes were obtained from SANDAG's Series 13 model.

10.1 Long-Term

10.1.1 *Segment Operations*

Table 10–1 summarizes the Long-Term Without Project street segment operations. *Table 10–1* shows that in the Long-Term Without Project scenario, all the study area street segments are calculated to operate at LOS D or better with the exception of the following:

- El Norte Parkway between Broadway and Fig Street (LOS E)
- Centre City Parkway between El Norte Parkway and SR 78 (LOS F)

Figure 10–1 shows the Long-Term traffic volumes. ***Figure 10–2*** graphically shows the street segment operations with Long-Term traffic volumes under its ultimate roadway classifications.

10.1.2 *Intersection Analysis*

Table 10–2 summarizes the Long-Term Without Project intersection operations. *Table 10–2* shows that in the Long-Term Without Project scenario, all the study area intersections are calculated to operate at LOS D or better with the exception of the following:

- El Norte Parkway / Centre City Parkway (LOS E during the AM and PM peak hours)
- El Norte Parkway / Broadway (LOS F during the AM and LOS E during the PM peak hour)
- Lincoln Parkway / Broadway (LOS E during the AM and PM peak hours)[3]
- Mission Avenue / Broadway (LOS E during the AM and LOS F during the PM peak hour)[3]
- Mission Avenue / Hickory Street (LOS F during the PM peak hour)
- Mission Avenue / Harding Street (LOS F during the AM and PM peak hours)
- Washington Avenue / Juniper Street (LOS F during the AM and PM peak hours)[3]
- Valley Parkway / Rose Street (LOS E during the AM peak hour)

Appendix J contains the Long-Term intersection analysis worksheets.

[3] Intersection located within Caltrans' jurisdiction.

10.2 Long-Term + Project

10.2.1 *Segment Operations*

Table 10–1 summarizes the Long-Term With Project street segment operations. As shown in *Table 10–1,* with the addition of Project traffic volumes, all the study area street segments are calculated to operate at LOS D or better with the exception of the following:

- El Norte Parkway between Broadway and Fig Street (LOS E)
- Mission Avenue between Broadway and Hickory Street (LOS E)
- Centre City Parkway between El Norte Parkway and SR 78 (LOS F)
- Broadway between Lincoln Avenue and Mission Avenue (LOS E)[4]
- Ash Street / San Pasqual Valley Road between Grand Avenue and 2nd Avenue (LOS E)[4]

Figure 10–3 shows the Long-Term + Project traffic volumes. ***Figure 10–4*** graphically shows the street segment operations with Long-Term + Project traffic volumes under its ultimate roadway classifications.

With the addition of Project traffic, the increase in volume/capacity due to the Project exceeds the allowable threshold of 0.02 for the following street segment. Therefore, the Project effects are considered a substantial effect.

- Mission Avenue between Broadway and Hickory Street (LOS E)
- Broadway between Lincoln Avenue and Mission Avenue (LOS E)[4]
- Ash Street / San Pasqual Valley Road between Grand Avenue and 2nd Avenue (LOS E)[4]

Per City guidelines, transportation improvements should be considered for any segment operating at LOS F even if the increase in volume/capacity due to the Project is within the allowable threshold of 0.02. These improvements for the following segment are discussed in *Section 11.0*:

- Centre City Parkway between El Norte Parkway and SR 78

10.2.2 *Intersection Analysis*

Table 10–2 summarizes the Long-Term With Project intersection operations. As shown in *Table 10–2,* with the addition of Project traffic volumes, all the study area intersections are calculated to operate at LOS D or better with the exception of the following:

- El Norte Parkway / Broadway (LOS F during the AM and LOS E during the PM peak hour)
- Lincoln Parkway / Broadway (LOS E during the AM and PM peak hours)[4]
- Mission Avenue / Broadway (LOS E during the AM and LOS F during the PM peak hour)[4]
- Mission Avenue / Hickory Street (LOS F during the AM and PM peak hours)

[4] Street segment / intersection located within Caltrans' jurisdiction.

- Mission Avenue / Harding Street (LOS F during the AM and PM peak hours)
- Washington Avenue / Juniper Street (LOS F during the AM and PM peak hours)[5]
- Washington Avenue / Ash Street (LOS E during the AM and PM peak hours)[5]
- Valley Parkway / Rose Street (LOS E during the AM and PM peak hours)

Appendix K contains the Long-Term + Project intersection analysis worksheets.

With the addition of Project traffic, the increase in delay due to the Project exceeds the allowable threshold of 2 seconds for the following intersections. Therefore, the Project effects are considered a substantial effect.

- El Norte Parkway / Broadway (LOS F during the AM and LOS E during the PM peak hour)
- Lincoln Parkway / Broadway (LOS E during the AM and PM peak hours)[5]
- Mission Avenue / Broadway (LOS E during the AM and LOS F during the PM peak hour)[5]
- Mission Avenue / Hickory Street (LOS F during the AM and PM peak hours)
- Mission Avenue / Harding Street (LOS F during the AM and PM peak hours)
- Washington Avenue / Juniper Street (LOS F during the AM and PM peak hours)[5]
- Washington Avenue / Ash Street (LOS E during the AM and PM peak hours)[5]
- Valley Parkway / Rose Street (LOS E during the AM and PM peak hours)

[5] Street segment / intersection located within Caltrans' jurisdiction.

TABLE 10–1
LONG-TERM STREET SEGMENT OPERATIONS WITH CIRCULATION ELEMENT CLASSIFICATIONS

Street Segment	Circulation Element Classifications	Capacity (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Δ[e]	Substantial Effect? [f]
			ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C		
El Norte Parkway										
Centre City Parkway to Escondido Boulevard	6-lane Super Major	50,000	34,100	C	0.682	34,920	C	0.698	0.016	No
Escondido Boulevard to Broadway	6-lane Super Major	50,000	33,100	C	0.662	33,690	C	0.674	0.012	No
Broadway to Fig Street	4-lane Major	37,000	33,400	E	0.903	34,100	E	0.922	0.019	No
Fig Street to Ash Street	4-lane Major	37,000	30,200	D	0.816	30,320	D	0.819	0.003	No
Ash Street to Rose Street	4-lane Major	37,000	28,300	D	0.765	28,530	D	0.771	0.006	No
Lincoln Avenue										
Lincoln Parkway to Fig Street	6-lane Prime Arterial	60,000	34,000	C	0.567	35,990	C	0.600	0.033	No
Fig Street to Ash Street	6-lane Prime Arterial	60,000	26,900	B	0.448	28,300	B	0.472	0.024	No
Ash Street to Harding Street	4-lane Collector NP	34,200	20,300	C	0.594	20,210	C	0.591	(0.003)	No
Harding Street to Rose Street	4-lane Collector NP	34,200	11,100	A	0.325	10,610	A	0.310	(0.015)	No
Rose Street to Midway Drive	2-lane Local Collector NP	15,000	11,600	D	0.773	11,310	D	0.753	(0.020)	No
Mission Avenue										
Centre City Parkway to Escondido Boulevard	6-lane Super Major	50,000	31,800	C	0.636	32,850	C	0.657	0.021	No
Escondido Boulevard to Broadway	4-lane Major	37,000	20,400	C	0.551	22,190	C	0.600	0.049	No
Broadway to Hickory Street	4-lane Major	37,000	28,800	D	0.778	33,540	E	0.906	0.128	**Yes**
Hickory Street to Fig Street	4-lane Major	37,000	25,800	C	0.697	27,850	D	0.753	0.056	No
Fig Street to Ash Street	4-lane Major	37,000	21,900	C	0.592	22,300	C	0.603	0.011	No
Ash Street to Harding Street	4-lane Collector NP	34,200	11,400	A	0.333	11,540	A	0.337	0.004	No
Harding Street to Rose Street	4-lane Collector NP	34,200	17,500	B	0.512	18,150	B	0.531	0.019	No
Rose Street to Midway Drive	2-lane Local Collector NP	15,000	9,500	C	0.633	10,020	C	0.668	0.035	No
Washington Avenue										
Centre City Parkway to Escondido Boulevard	4-Lane Collector NP	34,200	17,500	B	0.512	18,090	B	0.529	0.017	No
Escondido Boulevard to Broadway	4-Lane Collector NP	34,200	17,900	B	0.523	18,410	B	0.538	0.015	No
Broadway to Juniper Street[h]	4-Lane Collector NP	34,200	19,900	C	0.582	21,310	C	0.623	0.041	No
Juniper Street to Hickory Street[h]	4-Lane Collector NP	34,200	16,300	B	0.477	17,200	B	0.503	0.026	No
Hickory Street to Fig Street[h]	4-Lane Collector NP	34,200	16,500	B	0.482	18,290	B	0.535	0.053	No

TABLE 10–1
LONG-TERM STREET SEGMENT OPERATIONS WITH CIRCULATION ELEMENT CLASSIFICATIONS (CONT'D)

Street Segment	Circulation Element Classifications	Capacity (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Δ[e]	Substantial Effect? [f]
			ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C		
Fig Street to Ash Street[h]	4-Lane Collector NP	34,200	16,900	B	0.494	18,820	C	0.550	0.056	No
Ash Street to Harding Street	4-Lane Collector NP	34,200	7,900	A	0.231	8,450	A	0.247	0.016	No
Harding Street to Rose Street	4-Lane Collector NP	34,200	10,000	A	0.292	10,260	A	0.300	0.008	No
Rose Street to Midway Drive	4-Lane Collector NP	34,200	13,100	B	0.383	13,620	B	0.398	0.015	No
Valley Boulevard										
Valley Parkway to Grand Avenue	3-lane Local Collector WP	15,000	7,800	B	0.520	9,990	C	0.666	0.146	No
Valley Parkway										
Centre City Parkway to Escondido Boulevard	5-lane One-Way Collector NP	43,500	15,200	A	0.349	16,020	B	0.368	0.019	No
Escondido Boulevard to Broadway	3-lane One-Way Collector WP	30,000	17,800	C	0.593	19,080	C	0.636	0.043	No
Broadway to Juniper Street	3-lane One-Way Collector WP	30,000	14,300	B	0.477	15,840	B	0.528	0.051	No
Juniper Street to Hickory Street	3-lane One-Way Collector WP	30,000	10,000	A	0.333	11,920	B	0.397	0.064	No
Hickory Street to Fig Street	4-lane Major	37,000	15,700	B	0.424	23,780	C	0.643	0.219	No
Fig Street to Date Street	4-lane Major	37,000	16,200	B	0.438	24,830	C	0.671	0.233	No
Date Street to Ash Street	4-lane Major	37,000	19,900	B	0.538	28,940	D	0.782	0.244	No
Ash Street to Harding Street	4-lane Major	37,000	16,200	B	0.438	18,530	B	0.501	0.063	No
Harding Street to Rose Street	4-lane Major	37,000	19,300	B	0.522	22,120	C	0.598	0.076	No
Rose Street to Midway Drive	4-lane Major	37,000	26,200	C	0.708	28,120	D	0.760	0.052	No
Grand Avenue										
Centre City Parkway to Escondido Boulevard	4-lane Collector NP	34,200	7,100	A	0.208	7,330	A	0.214	0.006	No
Escondido Boulevard to Broadway	4-lane Collector NP	34,200	6,800	A	0.199	6,810	A	0.199	0.000	No
Broadway to Juniper Street	4-lane Collector NP	34,200	9,500	A	0.278	9,760	A	0.285	0.007	No
Juniper Street to Valley Boulevard	4-lane Collector NP	34,200	11,200	A	0.327	12,100	B	0.354	0.027	No
Valley Boulevard to Fig Street	4-lane Collector NP	34,200	15,600	B	0.456	17,110	B	0.500	0.044	No

TABLE 10–1
LONG-TERM STREET SEGMENT OPERATIONS WITH CIRCULATION ELEMENT CLASSIFICATIONS (CONT'D)

Street Segment	Circulation Element Classifications	Capacity (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Δ[e]	Substantial Effect? [f]
			ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C		
Fig Street to Date Street	4-lane Collector NP	34,200	20,900	C	0.611	23,500	C	0.687	0.076	No
Date Street to Ash Street	4-lane Collector NP	34,200	20,800	C	0.608	22,030	C	0.644	0.036	No
Ash Street to Rose Street	4-lane Collector NP	34,200	20,100	C	0.588	20,240	C	0.592	0.004	No
Rose Street to Midway Drive	4-lane Collector NP	34,200	13,500	B	0.395	14,270	B	0.417	0.022	No
2nd Avenue										
Centre City Parkway to Escondido Boulevard	3-lane One-Way Collector WP	30,000	15,000	B	0.500	16,050	B	0.535	0.035	No
Escondido Boulevard to Broadway	3-lane One-Way Collector WP	30,000	12,600	B	0.420	13,750	B	0.458	0.038	No
Broadway to Juniper Street	3-lane One-Way Collector WP	30,000	13,400	B	0.447	14,680	B	0.489	0.042	No
Juniper Street to Grand Avenue	3-lane One-Way Collector WP	30,000	12,100	B	0.403	14,280	B	0.476	0.073	No
Centre City Parkway										
El Norte Parkway to SR 78	4-lane Major	37,000	38,200	F	1.032	38,430	F	1.039	0.007	No
SR 78 to Mission Avenue	6-lane Super Major	50,000	43,900	D	0.878	44,370	D	0.887	0.009	No
Mission Avenue to Washington Avenue	6-lane Super Major	50,000	26,900	B	0.538	27,020	B	0.540	0.002	No
Washington Avenue to Valley Parkway	6-lane Super Major	50,000	28,700	C	0.574	28,930	C	0.579	0.005	No
Valley Parkway to Grand Avenue	6-lane Super Major	50,000	23,100	B	0.462	23,110	B	0.462	0.000	No
Grand Avenue to 2nd Avenue	6-lane Super Major	50,000	19,900	B	0.398	19,610	B	0.392	(0.006)	No
Escondido Boulevard										
El Norte Parkway to Lincoln Avenue	4-lane Collector NP	34,200	12,000	B	0.351	12,820	B	0.375	0.024	No
Lincoln Avenue to Mission Avenue	4-lane Collector NP	34,200	14,700	B	0.430	15,400	B	0.450	0.020	No
Mission Avenue to Washington Avenue	4-lane Collector NP	34,200	20,400	C	0.596	20,410	C	0.597	0.001	No
Washington Avenue to Valley Parkway	4-lane Collector NP	34,200	11,500	A	0.336	11,620	A	0.340	0.004	No
Valley Parkway to Grand Avenue	4-lane Collector NP	34,200	10,200	A	0.298	10,110	A	0.296	(0.002)	No
Grand Avenue to 2nd Avenue	4-lane Collector NP	34,200	10,500	A	0.307	10,310	A	0.301	(0.006)	No

TABLE 10–1
LONG-TERM STREET SEGMENT OPERATIONS WITH CIRCULATION ELEMENT CLASSIFICATIONS (CONT'D)

Street Segment	Circulation Element Classifications	Capacity (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Δ[e]	Substantial Effect? [f]
			ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C		
Broadway										
Lincoln Avenue to Mission Avenue[h]	4-lane Major	37,000	32,200	D	0.870	34,760	E	0.939	0.069	**Yes**
Mission Avenue to Washington Avenue[h]	4-lane Major	37,000	23,700	C	0.641	23,310	C	0.630	(0.011)	No
Washington Avenue to Valley Parkway	4-lane Major	37,000	18,500	B	0.500	18,510	B	0.500	0.000	No
Valley Parkway to Grand Avenue	4-lane Major	37,000	15,900	B	0.430	15,710	B	0.425	(0.005)	No
Grand Avenue to 2nd Avenue	4-lane Major	37,000	7,900	A	0.214	7,710	A	0.208	(0.006)	No
Juniper Street										
Washington Avenue to Valley Parkway	4-lane Collector NP	34,200	4,100	A	0.120	5,140	A	0.150	0.030	No
Valley Parkway to Grand Avenue	4-lane Collector NP	34,200	2,900	A	0.085	2,910	A	0.085	0.000	No
Grand Avenue to 2nd Avenue	4-lane Collector NP	34,200	2,000	A	0.058	2,520	A	0.074	0.016	No
Hickory Street										
Mission Avenue to Washington Avenue	2-lane Local Collector NP	15,000	9,500	C	0.633	12,570	D	0.838	0.205	No
Washington Avenue to Valley Parkway	2-lane Local Collector NP	15,000	8,800	C	0.587	12,500	D	0.833	0.246	No
Fig Street										
El Norte Parkway to Lincoln Avenue	4-lane Collector NP	34,200	10,200	A	0.298	10,670	A	0.312	0.014	No
Lincoln Avenue to Mission Avenue	4-lane Collector NP	34,200	10,200	A	0.298	11,990	B	0.351	0.053	No
Mission Avenue to Washington Avenue	4-lane Collector NP	34,200	7,600	A	0.222	12,080	B	0.353	0.131	No
Washington Avenue to Valley Parkway	4-lane Collector NP	34,200	6,300	A	0.184	11,510	A	0.337	0.153	No
Valley Parkway to Grand Avenue	4-lane Collector NP	34,200	4,200	A	0.123	5,020	A	0.147	0.024	No
Date Street										
Valley Parkway to Grand Avenue	4-lane Collector NP	34,200	3,800	A	0.111	8,870	A	0.259	0.148	No
Grand Avenue to 2nd Avenue	4-lane Collector NP	34,200	11,400	A	0.333	15,920	B	0.465	0.132	No

TABLE 10–1
LONG-TERM STREET SEGMENT OPERATIONS WITH CIRCULATION ELEMENT CLASSIFICATIONS (CONT'D)

Street Segment	Circulation Element Classifications	Capacity (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Δ[e]	Substantial Effect? [f]
			ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C		
Ash Street / San Pasqual Valley Road										
El Norte Parkway to Lincoln Avenue	4-lane Collector NP	34,200	10,200	A	0.298	10,900	A	0.319	0.021	No
Lincoln Avenue to Mission Avenue	4-lane Major	37,000	11,000	A	0.297	13,300	B	0.359	0.062	No
Mission Avenue to Washington Avenue	4-lane Major	37,000	19,700	B	0.532	23,400	C	0.632	0.100	No
Washington Avenue to Valley Parkway[h]	4-lane Major	37,000	21,000	C	0.568	25,380	C	0.686	0.118	No
Valley Parkway to Grand Avenue[h]	4-lane Major	37,000	19,800	B	0.535	22,810	C	0.616	0.081	No
Grand Avenue to 2nd Avenue[h]	4-lane Major	37,000	29,900	D	0.808	33,600	E	0.908	0.100	**Yes**
Harding Street										
Lincoln Avenue to Mission Avenue	2-lane Local Collector NP	20,000[g]	16,400	D	0.820	17,170	D	0.859	0.039	No
Mission Avenue to Washington Avenue	2-lane Local Collector NP	20,000[g]	6,000	A	0.300	7,790	B	0.390	0.090	No
Washington Avenue to Valley Parkway	4-lane Collector NP	34,200	8,200	A	0.240	9,570	A	0.280	0.040	No
Rose Street										
El Norte Parkway to Lincoln Avenue	2-lane Local Collector NP	15,000	4,800	A	0.320	4,920	A	0.328	0.008	No
Lincoln Avenue to Mission Avenue	4-lane Collector NP	34,200	4,800	A	0.140	5,200	A	0.152	0.012	No
Mission Avenue to Washington Avenue	4-lane Collector NP	34,200	11,600	A	0.339	12,000	B	0.351	0.012	No
Washington Avenue to Valley Parkway	4-lane Collector NP	34,200	9,900	A	0.289	10,160	A	0.297	0.008	No
Valley Parkway to Grand Avenue	4-lane Collector NP	34,200	12,200	B	0.357	13,240	B	0.387	0.030	No

TABLE 10–1
LONG-TERM STREET SEGMENT OPERATIONS WITH CIRCULATION ELEMENT CLASSIFICATIONS (CONT'D)

Street Segment	Circulation Element Classifications	Capacity (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Δ[e]	Substantial Effect? [f]
			ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C		
Midway Drive										
El Norte Parkway to Lincoln Avenue	4-lane Collector NP	34,200	5,600	A	0.164	5,760	A	0.168	0.004	No
Lincoln Avenue to Mission Avenue	4-lane Collector NP	34,200	5,500	A	0.161	5,510	A	0.161	0.000	No
Mission Avenue to Washington Avenue	4-lane Collector NP	34,200	6,700	A	0.196	6,930	A	0.203	0.007	No
Washington Avenue to Valley Parkway	4-lane Collector NP	34,200	11,300	A	0.330	11,530	A	0.337	0.007	No
Valley Parkway to Grand Avenue	4-lane Collector NP	34,200	10,900	A	0.319	11,020	A	0.322	0.003	No

General Notes:

1. NP – no parking
2. WP – with parking

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Level of Service.
d. Volume to Capacity.
e. Δ denotes a project-induced change in the Volume to Capacity (V/C) ratio.
f. Substantial effect contributed by project traffic based on City criteria.
g. Capacity reflects one-way couplet and raised median.
h. Street segment located within Caltrans' jurisdiction.

* Source: City of Escondido Circulation Element

TABLE 10–2
LONG-TERM INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Long-Term Without Project		Long-Term With Project		Δ[c]	Substantial Effect?[d]
			Delay[a]	LOS[b]	Delay[a]	LOS[b]		
1. El Norte Pkwy / Centre City Pkwy	Signal	AM	60.8	E	62.7	E	1.9	No
		PM	57.7	E	58.1	E	0.4	No
2. El Norte Pkwy / Broadway	Signal	AM	114.3	F	116.5	F	2.2	**Yes**
		PM	65.2	E	65.6	E	0.4	No
3. El Norte Pkwy / Fig St	Signal	AM	28.5	C	28.6	C	0.1	No
		PM	20.2	C	20.2	C	0.0	No
4. Lincoln Ave / Broadway	Signal	AM	49.3	D	49.3	D	0.0	No
		PM	27.6	C	27.6	C	0.0	No
5. Lincoln Avenue / Fig St	Signal	AM	26.5	C	27.3	C	0.8	No
		PM	20.4	C	21.2	C	0.8	No
6. Lincoln Ave / Ash St	Signal	AM	32.8	C	34.9	C	2.1	No
		PM	28.0	C	30.5	C	2.5	No
7. Lincoln Pkwy / Broadway[f]	Signal	AM	55.4	E	57.5	E	2.1	**Yes**
		PM	57.9	E	59.5	E	1.6	No
8. Mission Ave / Escondido Blvd	Signal	AM	45.6	D	46.4	D	0.8	No
		PM	47.2	D	49.1	D	1.9	No
9. Mission Ave / Broadway[f]	Signal	AM	62.0	E	71.3	E	9.3	**Yes**
		PM	106.9	F	129.8	F	22.9	**Yes**
10. Mission Ave / Hickory St	MSSC[e]	AM	28.1	D	48.9	E	20.8	**Yes**
		PM	53.4	F	102.3	F	48.9	**Yes**

TABLE 10–2
LONG-TERM INTERSECTION OPERATIONS (CONT'D)

Intersection	Control Type	Peak Hour	Long-Term Without Project		Long-Term With Project		Δ[c]	Substantial Effect?[d]
			Delay[a]	LOS[b]	Delay[a]	LOS[b]		
11. Mission Ave / Ash St	Signal	AM	36.0	D	37.2	D	1.2	No
		PM	33.3	C	33.6	C	0.3	No
12. Mission Ave / Harding St	MSSC[e]	AM	196.7	F	393.3	F	196.6	**Yes**
		PM	95.8	F	233.1	F	137.3	**Yes**
13. Mission Ave / Rose St	Signal	AM	38.1	D	39.7	D	1.6	No
		PM	34.2	C	35.2	D	1.0	No
14. Washington Ave / Escondido Blvd	Signal	AM	35.4	D	35.5	D	0.1	No
		PM	44.5	D	44.6	D	0.1	No
15. Washington Ave / Broadway[f]	Signal	AM	29.1	C	29.2	C	0.1	No
		PM	38.8	D	39.1	D	0.3	No
16. Washington Ave / Juniper St[f]	MSSC[c]	AM	300.2	F	1,797.6	F	1,497.4	**Yes**
		PM	489.4	F	947.5	F	458.1	**Yes**
17. Washington Ave / Hickory St[f]	Signal	AM	23.6	C	28.0	C	4.4	No
		PM	23.0	C	33.3	C	10.3	No
18. Washington Ave / Fig St[f]	Signal	AM	34.9	C	44.9	D	10.0	No
		PM	35.7	D	54.9	D	19.2	No
19. Washington Ave / Ash St[f]	Signal	AM	54.1	D	56.8	E	2.7	**Yes**
		PM	43.3	D	55.6	E	12.3	**Yes**
20. Washington Ave / Harding St	Signal	AM	22.6	C	26.5	C	3.9	No
		PM	20.9	C	23.6	C	2.7	No
21. Washington Ave / Rose St	Signal	AM	18.5	B	18.8	B	0.3	No
		PM	18.4	B	18.5	B	0.1	No

TABLE 10–2
LONG-TERM INTERSECTION OPERATIONS (CONT'D)

Intersection	Control Type	Peak Hour	Long-Term Without Project		Long-Term With Project		Δ[c]	Substantial Effect?[d]
			Delay[a]	LOS[b]	Delay[a]	LOS[b]		
22. Valley Pkwy / Hickory St	Signal	AM	13.7	B	16.7	B	3.0	No
		PM	19.8	B	26.1	C	6.3	No
23. Valley Pkwy / Fig St	Signal	AM	10.5	B	11.5	B	1.0	No
		PM	12.5	B	13.4	B	0.9	No
24. Valley Pkwy / Date St	Signal	AM	18.6	B	30.9	C	12.3	No
		PM	20.8	C	32.0	C	11.2	No
25. Valley Pkwy / Ash St[f]	Signal	AM	44.4	D	46.3	D	1.9	No
		PM	44.6	D	48.7	D	4.1	No
26. Valley Pkwy / Harding St	Signal	AM	18.0	B	18.1	B	0.1	No
		PM	22.4	C	23.4	C	1.0	No
27. Valley Pkwy / Rose St	Signal	AM	56.1	E	68.3	E	12.2	**Yes**
		PM	47.0	D	56.3	E	9.3	**Yes**
28. Grand Ave / Valley Blvd	Signal	AM	25.8	C	27.3	C	1.5	No
		PM	28.3	C	30.5	C	2.2	No
29. Grand Ave / Date St	Signal	AM	15.1	B	19.2	B	4.1	No
		PM	20.6	C	28.2	C	7.6	No
30. Grand Ave / Ash St[f]	Signal	AM	41.9	D	44.3	D	2.4	No
		PM	51.9	D	54.7	D	2.8	No

TABLE 10–2
LONG-TERM INTERSECTION OPERATIONS (CONT'D)

Intersection	Control Type	Peak Hour	Long-Term Without Project		Long-Term With Project		Δ[c]	Substantial Effect?[d]
			Delay[a]	LOS[b]	Delay[a]	LOS[b]		
31. Grand Ave / Rose St	Signal	AM	43.5	D	46.6	D	3.1	No
		PM	31.1	C	33.6	C	2.5	No

General Note:

1. Circulation Element classification geometries assumed.

Footnotes:

a. Average delay expressed in seconds per vehicle
b. Level of Service
c. Δ denotes a project-induced change in the Volume to Capacity (V/C) ratio.
d. Substantial effect contributed by project traffic based on City criteria.
e. MSSC- Minor Street Stop Controlled intersection. Worst-case movement approach delay and LOS reported.
f. Intersection located within Caltrans' jurisdiction.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

LINSCOTT LAW & GREENSPAN engineers

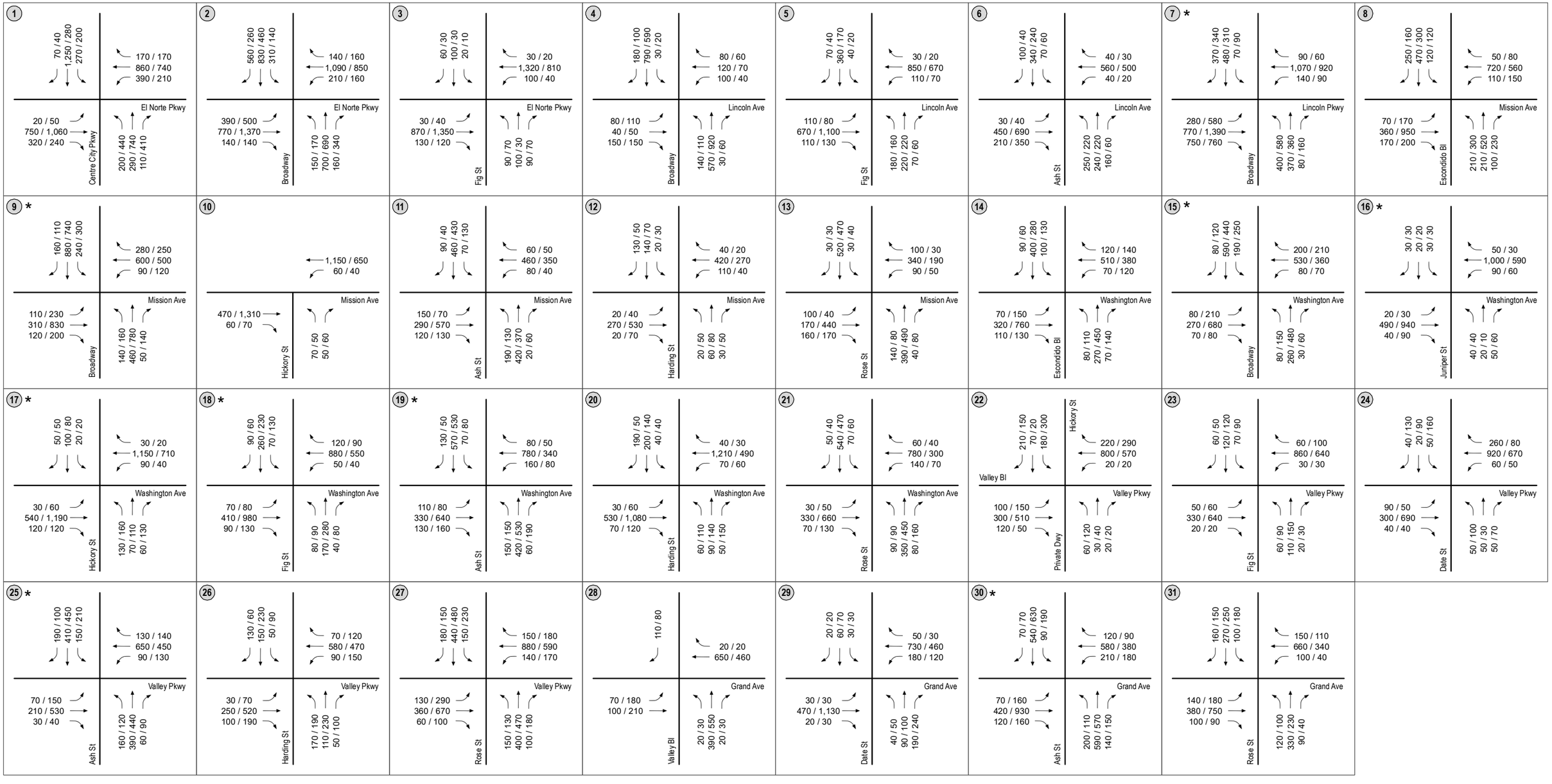
N:\3338\Figures
Date: 1/18/2023
Time: 12:45 PM

Figure 10-1

Long-Term Traffic Volumes

(Page 1 of 2)

East Valley Specific Plan (EVSP)



LINSCOTT LAW & GREENSPAN engineers

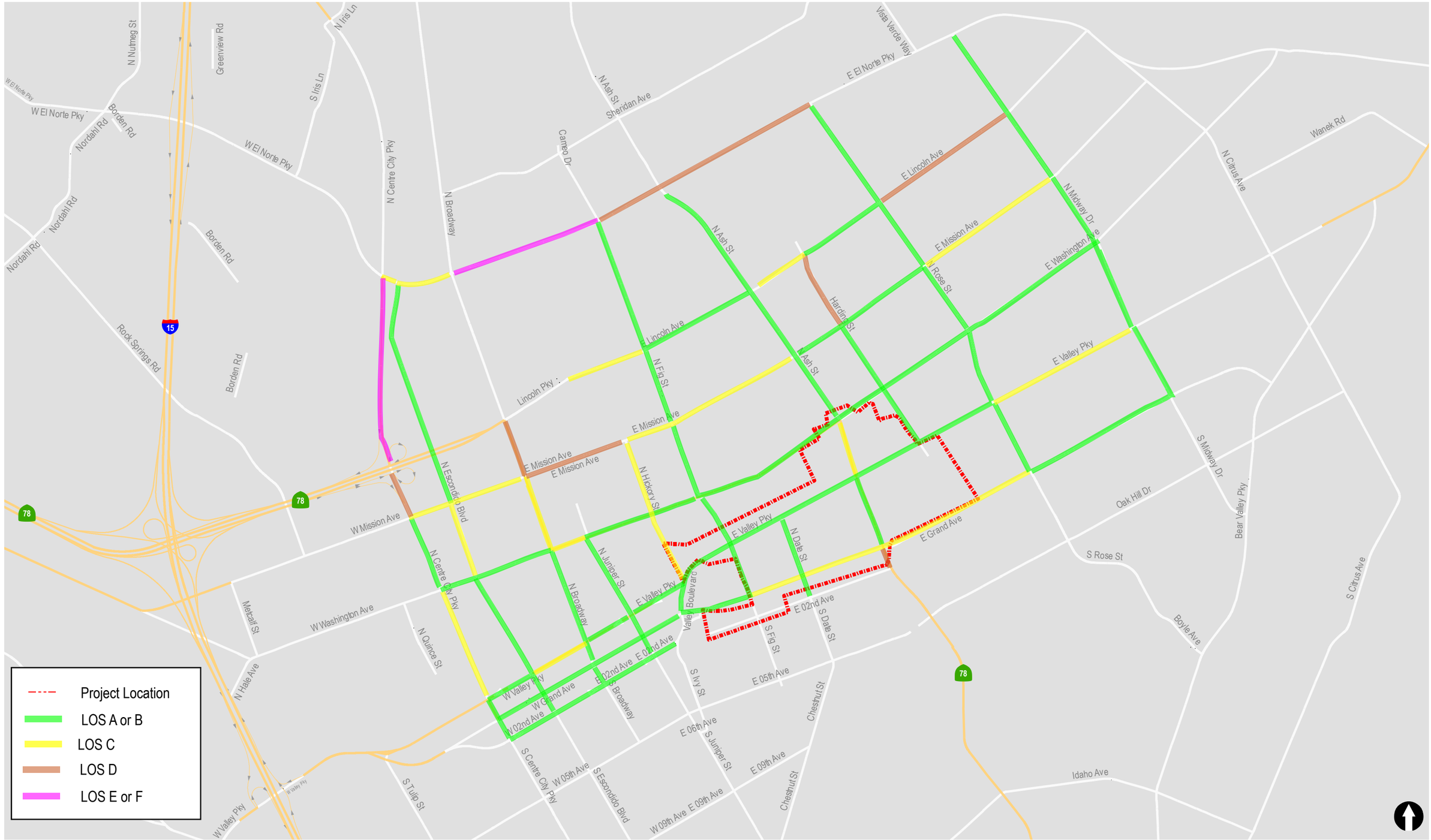
N:\3338\Figures
Date: 1/18/2023
Time: 12:41 PM

Figure 10-1

Long-Term Traffic Volumes

(Page 2 of 2)

East Valley Specific Plan (EVSP)



LINSCOTT LAW & GREENSPAN engineers

N:\3338\Figures
Date: 01/18/23

Figure 10-2

Long-Term Street Segment Operations

EAST VALLEY SPECIFIC PLAN (EVSP)

LINSCOTT LAW & GREENSPAN engineers

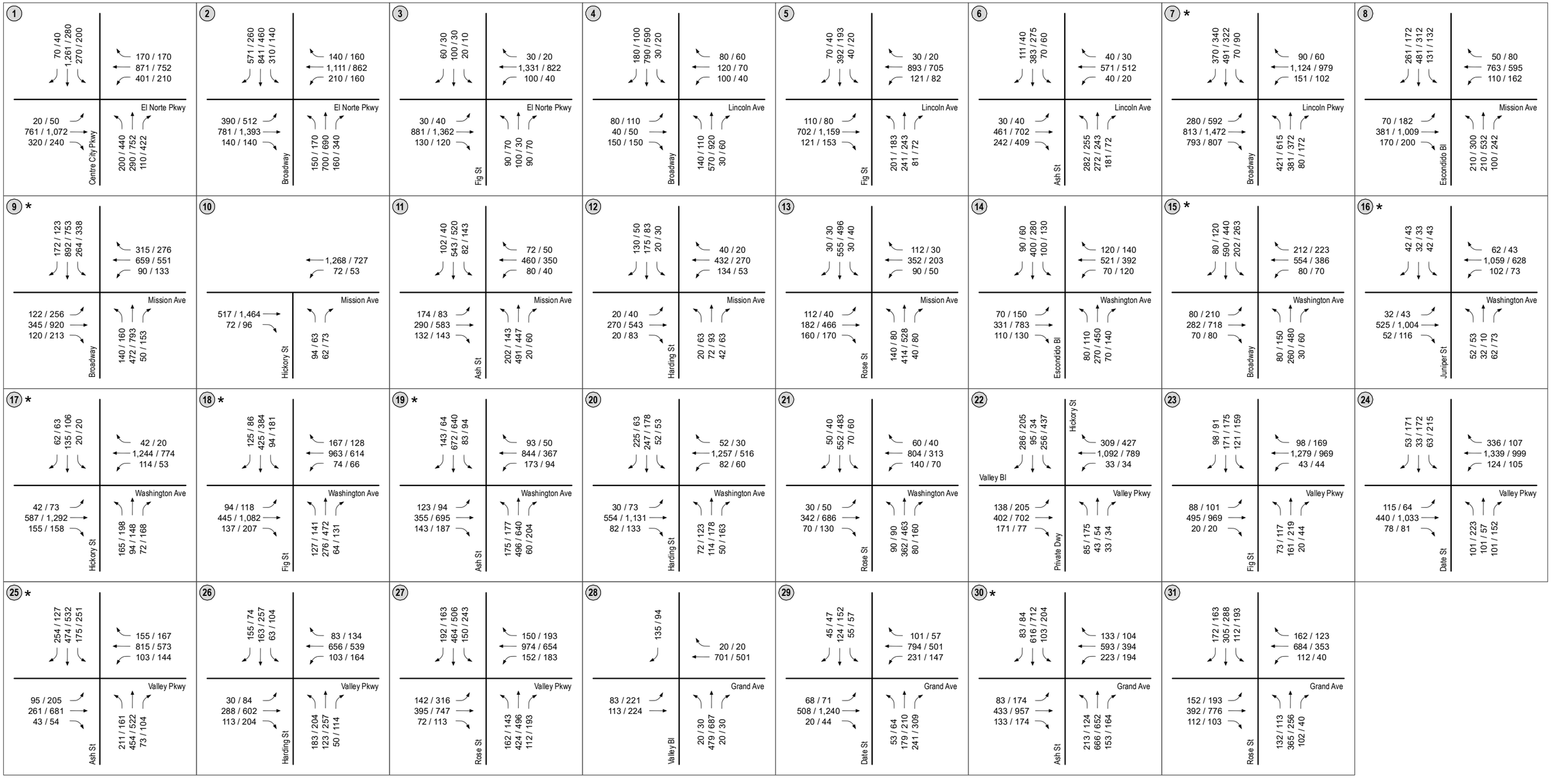
N:\3338\Figures
Date: 1/18/2023
Time: 12:52 PM

Figure 10-3

Long-Term + Project Traffic Volumes

(Page 1 of 2)

East Valley Specific Plan (EVSP)



LINSCOTT LAW & GREENSPAN engineers

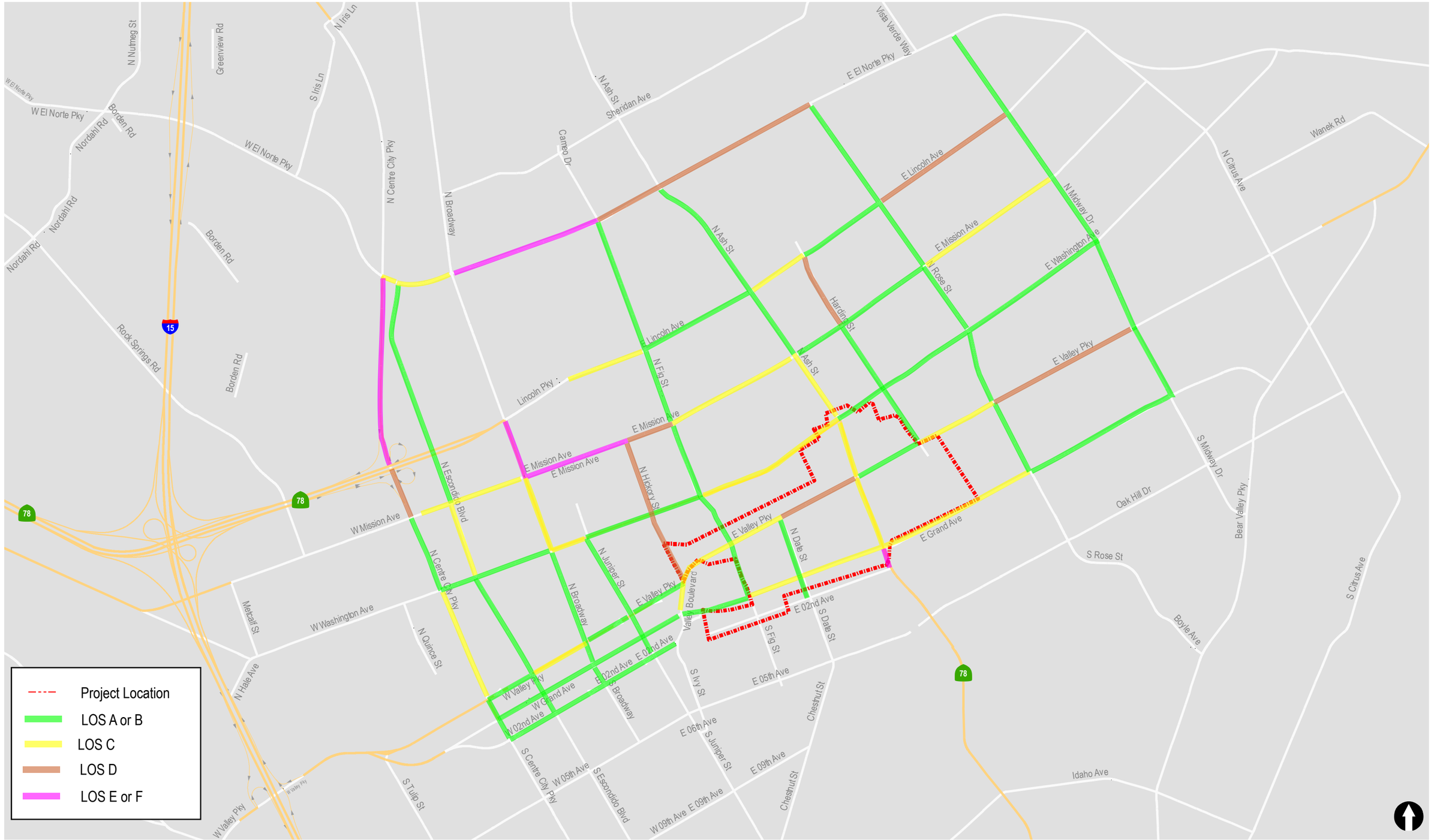
N:\3338\Figures
Date: 1/18/2023
Time: 12:54 PM

Figure 10-3

Long-Term + Project Traffic Volumes

(Page 2 of 2)

East Valley Specific Plan (EVSP)



LINSCOTT LAW & GREENSPAN engineers

N:\3338\Figures
Date: 01/18/23

Figure 10-4

Long-Term + Project Street Segment Operations

EAST VALLEY SPECIFIC PLAN (EVSP)

11.0 CIRCULATION ELEMENT DOWNGRADE

Street segment analysis was conducted using Long-Term volumes with existing roadway classifications in order to determine which study area street segments would operate at an acceptable LOS with a lower classification than currently in the Escondido General Plan Circulation Element. As shown in ***Table 11–1***, the following street segments are calculated to operate at LOS D or better in their existing configurations, and therefore, could potentially be downgraded:

- Lincoln Avenue between Fig Street and Ash Street (LOS D)
- Mission Avenue between Escondido Boulevard and Broadway (LOS C)
- Mission Avenue between Hickory Street and Fig Street (LOS D)
- Washington Avenue between Juniper Street and Hickory Street (LOS D)[6]
- Washington Avenue between Ash Street and Harding Street (LOS B)
- Washington Avenue between Harding Street and Rose Street (LOS B)
- Washington Avenue between Rose Street and Midway Drive (LOS C)
- Valley Parkway between Hickory Street and Midway Drive (LOS B to D)
- Grand Avenue between Centre City Parkway and Fig Street (LOS A to C)
- Grand Avenue between Date Street and Ash Street (LOS D)
- Grand Avenue between Rose Street and Midway Drive (LOS C)
- Centre City Parkway between Mission Avenue and 2nd Street (LOS B to D)
- Escondido Boulevard between El Norte Parkway and Lincoln Avenue (LOS D)
- Broadway between Mission Avenue and 2nd Street (LOS B to D)[6]
- Juniper Street between Washington Avenue and Valley Parkway (LOS B)
- Juniper Street between Valley Parkway and Grand Avenue (LOS A)
- Juniper Street between Grand Avenue and 2nd Avenue (LOS A)
- Fig Street between Lincoln Avenue and Mission Avenue (LOS D)
- Fig Street between Valley Parkway and Grand Avenue (LOS B)
- Date Street between Valley Parkway and Grand Avenue (LOS D)
- Ash Street / San Pasqual Valley Road between El Norte Parkway and Grand Avenue (LOS B to C)[6]
- Rose Street between El Norte Parkway and Lincoln Avenue (LOS B)
- Rose Street between Lincoln Avenue and Mission Avenue (LOS B)
- Rose Street between Valley Parkway and Grand Avenue (LOS D)
- Midway Drive between El Norte Parkway and Valley Parkway (LOS B to D)

[6] The following street segments are located within Caltrans' jurisdiction: Washington Avenue between Juniper Street and Hickory Street; Broadway between Mission Avenue and Washington Avenue; Ash Street / San Pasqual Valley Road between Washington Avenue and Grand Avenue.

TABLE 11–1
LONG-TERM STREET SEGMENT OPERATIONS WITH ON THE GROUND GEOMETRY[i]

Street Segment	Classified Per Circulation Element	Built Today	Capacity As Built Today (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Can Be Downgraded? [e]
				ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C	
El Norte Parkway										
Centre City Parkway to Escondido Boulevard	6-Lane Super Major	4-Lane Major	37,000	34,100	E	0.922	34,920	E	0.944	No
Escondido Boulevard to Broadway	6-Lane Super Major	4-Lane Major	37,000	33,100	D	0.895	33,690	E	0.911	No
Lincoln Avenue										
Lincoln Parkway to Fig Street	6-Lane Prime Arterial	4-Lane Collector NP	34,200	34,000	E	0.994	35,990	F	1.052	No
Fig Street to Ash Street	6-Lane Prime Arterial	4-Lane Collector NP	34,200	26,900	D	0.787	28,300	D	0.827	Yes
Ash Street to Harding Street	4-Lane Collector NP	2-lane Local Collector WP	10,000	20,300	F	2.030	20,210	F	2.021	No
Harding Street to Rose Street	4-Lane Collector NP	2-lane Local Collector WP	10,000	11,100	F	1.110	10,610	F	1.061	No[f]
Rose Street to Midway Drive	2-Lane Local Collector NP	2-lane Local Collector WP	10,000	11,600	F	1.160	11,310	F	1.131	No[f]
Mission Avenue										
Centre City Parkway to Escondido Boulevard	6-Lane Super Major	4-Lane Collector NP	34,200	31,800	E	0.930	32,850	E	0.961	No
Escondido Boulevard to Broadway	4-Lane Major	4-Lane Collector NP	34,200	20,400	C	0.596	22,190	C	0.649	Yes
Broadway to Hickory Street	4-Lane Major	4-Lane Collector NP	34,200	28,800	D	0.842	33,540	E	0.981	No
Hickory Street to Fig Street	4-Lane Major	4-Lane Collector NP	34,200	25,800	D	0.754	27,850	D	0.814	Yes
Fig Street to Ash Street	4-Lane Major	2-lane Local Collector WP	10,000	21,900	F	2.190	22,300	F	2.230	No[g]
Ash Street to Harding Street	4-Lane Collector NP	2-lane Local Collector WP	10,000	11,400	F	1.140	11,540	F	1.154	No[f]
Harding Street to Rose Street	4-Lane Collector NP	2-lane Local Collector WP	10,000	17,500	F	1.750	18,150	F	1.815	No
Rose Street to Midway Drive	2-Lane Local Collector NP	2-lane Local Collector WP	10,000	9,500	E	0.950	10,020	F	1.002	No[f]

TABLE 11–1
LONG-TERM STREET SEGMENT OPERATIONS WITH ON THE GROUND GEOMETRY[i] (CONT'D)

Street Segment	Classified Per Circulation Element	Built Today	Capacity As Built Today (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Can Be Downgraded? [e]
				ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C	
Washington Avenue										
Juniper Street to Hickory Street[j]	4-Lane Collector NP	4-Lane Collector WP	20,000	16,300	D	0.815	17,200	D	0.860	Yes
Hickory Street to Fig Street[j]	4-Lane Collector NP	4-Lane Collector WP	20,000	16,500	D	0.825	18,290	E	0.915	No
Fig Street to Ash Street[j]	4-Lane Collector NP	4-Lane Collector WP	20,000	16,900	D	0.845	18,820	E	0.941	No
Ash Street to Harding Street	4-Lane Collector NP	4-Lane Collector WP	20,000	7,900	B	0.395	8,450	B	0.423	Yes
Harding Street to Rose Street	4-Lane Collector NP	4-Lane Collector WP	20,000	10,000	B	0.500	10,260	B	0.513	Yes
Rose Street to Midway Drive	4-Lane Collector NP	4-Lane Collector WP	20,000	13,100	C	0.655	13,620	C	0.681	Yes
Valley Parkway										
Hickory Street to Fig Street	4-Lane Major	4-Lane Collector NP	34,200	15,700	B	0.459	23,780	C	0.695	Yes
Fig Street to Date Street	4-Lane Major	4-Lane Collector NP	34,200	16,200	B	0.474	24,830	C	0.726	Yes
Date Street to Ash Street	4-Lane Major	4-Lane Collector NP	34,200	19,900	C	0.582	28,940	D	0.846	Yes
Ash Street to Harding Street	4-Lane Major	4-Lane Collector NP	34,200	16,200	B	0.474	18,530	B	0.542	Yes
Harding Street to Rose Street	4-Lane Major	4-Lane Collector NP	34,200	19,300	C	0.564	22,120	C	0.647	Yes
Rose Street to Midway Drive	4-Lane Major	4-Lane Collector NP	34,200	26,200	D	0.766	28,120	D	0.822	Yes
Grand Avenue										
Centre City Parkway to Escondido Boulevard	4-Lane Collector NP	4-Lane Collector WP	20,000	7,100	B	0.355	7,330	B	0.367	Yes
Escondido Boulevard to Broadway	4-Lane Collector NP	4-Lane Collector WP	20,000	6,800	A	0.340	6,810	A	0.341	Yes
Broadway to Juniper Street	4-Lane Collector NP	4-Lane Collector WP	20,000	9,500	B	0.475	9,760	B	0.488	Yes
Juniper Street to Valley Boulevard	4-Lane Collector NP	4-Lane Collector WP	20,000	11,200	C	0.560	12,100	C	0.605	Yes
Valley Boulevard to Fig Street	4-Lane Collector NP	3-Lane Undivided-TWLTL NP	24,600	15,600	C	0.634	17,110	C	0.696	Yes
Fig Street to Date Street	4-Lane Collector NP	3-Lane Undivided-TWLTL NP	24,600	20,900	D	0.850	23,500	E	0.955	No
Date Street to Ash Street	4-Lane Collector NP	3-Lane Undivided-TWLTL WP	24,600	20,800	D	0.846	22,030	D	0.896	Yes

TABLE 11–1
LONG-TERM STREET SEGMENT OPERATIONS WITH ON THE GROUND GEOMETRY[i] (CONT'D)

Street Segment	Classified Per Circulation Element	Built Today	Capacity As Built Today (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Can Be Downgraded? [e]
				ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C	
Ash Street to Rose Street	4-Lane Collector NP	4-Lane Collector WP	20,000	20,100	F	1.005	20,240	F	1.012	No
Rose Street to Midway Drive	4-Lane Collector NP	4-Lane Collector WP	20,000	13,500	C	0.675	14,270	C	0.714	Yes
Centre City Parkway										
EL Norte Parkway to SR 78	4-Lane Major	4-Lane Major	37,000	38,200	F	1.032	38,430	F	1.039	No[h]
SR 78 to Mission Avenue	6-Lane Super Major	4-Lane Major	37,000	43,900	F	1.186	44,370	F	1.199	No
Mission Avenue to Washington Avenue	6-Lane Super Major	4-Lane Major	37,000	26,900	C	0.727	27,020	C	0.730	Yes
Washington Avenue to Valley Parkway	6-Lane Super Major	4-Lane Major	37,000	28,700	D	0.776	28,930	D	0.782	Yes
Valley Parkway to Grand Avenue	6-Lane Super Major	4-Lane Major	37,000	23,100	C	0.624	23,110	C	0.625	Yes
Grand Avenue to 2nd Street	6-Lane Super Major	4-Lane Major	37,000	19,900	B	0.538	19,610	B	0.530	Yes
Escondido Boulevard										
El Norte Parkway to Lincoln Avenue	4-Lane Collector NP	2-Lane Local Collector with TWLTL WP	15,000	12,000	D	0.800	12,820	D	0.855	Yes
Broadway										
Lincoln Avenue to Mission Avenue[j]	4-Lane Major	4-Lane Collector NP	34,200	32,200	E	0.942	34,760	F	1.016	No
Mission Avenue to Washington Avenue[j]	4-Lane Major	4-Lane Collector with TWLTL WP	34,200	23,700	C	0.693	23,310	C	0.682	Yes
Washington Avenue to Valley Parkway	4-Lane Major	4-Lane Collector with TWLTL WP	34,200	18,500	B	0.541	18,510	B	0.541	Yes
Valley Parkway to Grand Avenue	4-Lane Major	4-Lane Collector with TWLTL WP	34,200	15,900	B	0.465	15,710	B	0.459	Yes
Grand Avenue to 2nd Street	4-Lane Major	2-Lane Local Collector WP	10,000	7,900	D	0.790	7,710	D	0.771	Yes
Juniper Street										
Washington Avenue to Valley Parkway	4-Lane Collector NP	2-Lane Local Collector WP	10,000	4,100	B	0.410	5,140	B	0.514	Yes

TABLE 11–1
LONG-TERM STREET SEGMENT OPERATIONS WITH ON THE GROUND GEOMETRY[i] (CONT'D)

Street Segment	Classified Per Circulation Element	Built Today	Capacity As Built Today (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Can Be Downgraded? [e]
				ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C	
Valley Parkway to Grand Avenue	4-Lane Collector NP	2-Lane Collector with TWLTL WP	15,000	2,900	A	0.193	2,910	A	0.194	Yes
Grand Avenue to 2nd Avenue	4-Lane Collector NP	2-Lane Collector with TWLTL WP	15,000	2,000	A	0.133	2,520	A	0.168	Yes
Hickory Street										
Mission Avenue to Washington Avenue	2-Lane Local Collector NP	2-Lane Local Collector WP	10,000	9,500	E	0.950	12,570	F	1.257	No
Washington Avenue to Valley Parkway	2-Lane Local Collector NP	2-Lane Local Collector WP	10,000	8,800	D	0.880	12,500	F	1.250	No
Fig Street										
El Norte Parkway to Lincoln Avenue	4-Lane Collector NP	2-Lane Local Collector WP	10,000	10,200	F	1.020	10,670	F	1.067	No
Lincoln Avenue to Mission Avenue	4-Lane Collector NP	2-Lane Local Collector with TWLTL WP	15,000	10,200	C	0.680	11,990	D	0.799	Yes
Mission Avenue to Washington Avenue	4-Lane Collector NP	2-Lane Local Collector WP	10,000	7,600	D	0.760	12,080	F	1.208	No
Washington Avenue to Valley Parkway	4-Lane Collector NP	2-Lane Local Collector WP	10,000	6,300	C	0.630	11,510	F	1.151	No
Valley Parkway to Grand Avenue	4-Lane Collector NP	2-Lane Local Collector WP	10,000	4,200	B	0.420	5,020	B	0.502	Yes
Date Street										
Valley Parkway to Grand Avenue	4-Lane Collector NP	2-Lane Local Collector WP	10,000	3,800	B	0.380	8,870	D	0.887	Yes

TABLE 11–1
LONG-TERM STREET SEGMENT OPERATIONS WITH ON THE GROUND GEOMETRY[i] (CONT'D)

Street Segment	Classified Per Circulation Element	Built Today	Capacity As Built Today (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Can Be Downgraded? [e]
				ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C	
Ash Street / San Pasqual Valley Road										
El Norte Parkway to Lincoln Avenue	4-Lane Collector NP	2-Lane Local Collector with TWLTL WP	15,000	10,200	C	0.680	10,900	C	0.727	Yes
Lincoln Avenue to Mission Avenue	4-Lane Major	4-Lane Collector with TWLTL WP	34,200	11,000	A	0.322	13,300	B	0.389	Yes
Mission Avenue to Washington Avenue	4-Lane Major	4-Lane Collector NP	34,200	19,700	C	0.576	23,400	C	0.684	Yes
Washington Avenue to Valley Parkway[j]	4-Lane Major	4-Lane Collector with TWLTL NP	34,200	21,000	C	0.614	25,380	C	0.742	Yes
Valley Parkway to Grand Avenue[j]	4-Lane Major	4-Lane Collector NP	34,200	19,800	C	0.579	22,810	C	0.667	Yes
Grand Avenue to 2nd Avenue[j]	4-Lane Major	4-Lane Collector with TWLTL NP	34,200	29,900	D	0.874	33,600	E	0.982	No
Rose Street										
El Norte Parkway to Lincoln Avenue	2-lane Local Collector NP	2-lane Local Collector WP	10,000	4,800	B	0.480	4,920	B	0.492	Yes
Lincoln Avenue to Mission Avenue	4-Lane Collector NP	2-lane Local Collector WP	10,000	4,800	B	0.480	5,200	B	0.520	Yes
Mission Avenue to Washington Avenue	4-Lane Collector NP	2-lane Local Collector WP	10,000	11,600	F	1.160	12,000	F	1.200	No
Washington Avenue to Valley Parkway	4-Lane Collector NP	2-lane Local Collector WP	10,000	9,900	E	0.990	10,160	F	1.016	No
Valley Parkway to Grand Avenue	4-Lane Collector NP	2-lane Local Collector with TWLTL WP	15,000	12,200	D	0.813	13,240	D	0.883	Yes
Midway Drive										
El Norte Parkway to Lincoln Avenue	4-Lane Collector NP	2-lane Local Collector WP	10,000	5,600	C	0.560	5,760	C	0.576	Yes
Lincoln Avenue to Mission Avenue	4-Lane Collector NP	2-lane Local Collector WP	10,000	5,500	C	0.550	5,510	C	0.551	Yes

TABLE 11–1
LONG-TERM STREET SEGMENT OPERATIONS WITH ON THE GROUND GEOMETRY[i] (CONT'D)

Street Segment	Classified Per Circulation Element	Built Today	Capacity As Built Today (LOS E) [a]	Long-Term Without Project*			Long-Term With Project			Can Be Downgraded? [e]
				ADT[b]	LOS [c]	V/C [d]	ADT	LOS	V/C	
Mission Avenue to Washington Avenue	4-Lane Collector NP	2-lane Local Collector with TWLTL WP	15,000	6,700	B	0.447	6,930	B	0.462	Yes
Washington Avenue to Valley Parkway	4-Lane Collector NP	2-lane Local Collector with TWLTL NP	15,000	11,300	D	0.753	11,530	D	0.769	Yes

General Notes:

1. NP – no parking
2. WP – with parking

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Level of Service.
d. Volume to Capacity.
e. Street segment can be downgraded as long-term volume is calculated to operate efficiently under current roadway capacity.
f. Consider downgrading to 2-lane Local Collector with TWLTL.
g. Consider downgrading to 4-lane Collector.
h. Consider upgrading to 6-lane Super Major.
i. "On The Ground Geometry" refers to the current roadway conditions at the time of preparation of this report.
j. Street segment located within Caltrans' jurisdiction.

* Source: City of Escondido Circulation Element

12.0 MITIGATION TRIGGER ANALYSIS

An analysis was conducted to determine the estimated amount of Specific Plan traffic that could be added to each impacted location before triggering a substantial effect at an intersection or street segment under the Long-Term analysis presented in this report. The analysis is provided below.

12.1 Trigger Analysis Methodology

As mentioned in *Section 8.0*, the Project consists of the following land uses: residential, office, retail, parks and community services. Each of these uses has a different trip rate. For the purposes of this analysis, all of these differing metrics were converted to a common improvement trigger metric of overall Project ADT.

Street Segments – The percentage of overall Project ADT that could be added before a substantial effect to a street segment would occur (i.e. the Project adds traffic to a street segment that increases V/C by 0.02 on a street segment forecasted to operate at LOS E or F or the amount of ADT before the LOS degrades from LOS D to LOS E).

Intersections – The amount of overall peak hour traffic that could be added to the intersection before a substantial effect would occur was estimated (i.e. 2 seconds of delay or degrade to LOS E). Then the overall Specific Plan reduction in traffic that would correlate to the individual intersection peak hour traffic maintained before a substantial effect was calculated. The calculated reduction in peak hour traffic was then translated to a Specific Plan ADT.

As an example, an impacted location with an ADT threshold of 84,299 vehicles indicates that the Project can build up to 90% of its overall ADT of 93,666 before the improvement would be needed.

Table 12–1 shows the mitigation trigger analysis thresholds for each substantially impacted location. ***Table 12–2*** shows the Long-Term with development at the trigger threshold street segment operations. ***Table 12–3*** shows the Long-Term with development at the trigger threshold intersection operations. ***Appendix L*** contains the Long-Term with development at the trigger threshold intersection analysis worksheets.

TABLE 12–1
MITIGATION TRIGGER ANALYSIS THRESHOLDS

Impact Locations	Specific Plan Total ADT Trigger	% of Overall ADT
Street Segments		
Mission Avenue between Broadway and Hickory Street	80,553	86%
Centre City Parkway between El North Parkway and SR 78[a]	46,833	50%
Broadway between Lincoln Avenue and Mission Avenue[b]	25,290	27%
Ash Street / San Pasqual Valley Road between Grand Avenue and 2nd Avenue[b]	75,869	81%
Intersections		
2. El Norte Parkway / Broadway	84,299	90%
7. Lincoln Parkway / Broadway[b]	84,299	90%
9. Mission Avenue / Broadway[b]	9,367	10%
10. Mission Avenue / Hickory Street	9,367	10%
12. Mission Avenue / Harding Street	100	1%
16. Washington Avenue / Juniper Street[b]	100	1%
19. Washington Avenue / Ash Street[b]	74,933	80%
27. Valley Parkway / Rose Street	18,733	20%

Footnote:

a. Centre City Parkway between El Norte Parkway and SR 78 is not calculated to have a substantial effect with the addition of Project traffic. However, per City guidelines, transportation improvements should be considered for any segment operating at LOS F even if the increase in volume/capacity due to the Project is less than the allowable threshold of 0.02. Therefore, it was deemed appropriate to use half of the overall Project ADT as the threshold for this street segment.

b. Street segment / intersection located within Caltrans' jurisdiction.

TABLE 12–2
LONG-TERM WITH DEVELOPMENT AT THE TRIGGER THRESHOLD STREET SEGMENT OPERATIONS

Street Segment	Circulation Element Classifications	Capacity (LOS E) [a]	Long-Term Without Project			Long-Term With Project			Long-Term With Development at the Trigger Threshold		
			ADT[b]	LOS[c]	V/C[d]	ADT	LOS	V/C	ADT	LOS	V/C
Mission Avenue Broadway to Hickory Street	4-lane Major	37,000	28,800	D	0.778	33,540	E	0.906	32,900	D	0.889
Centre City Parkway El Norte Parkway to SR 78	4-lane Major	37,000	38,200	F	1.032	38,430	F	1.039	38,315	F	1.036
Broadway Lincoln Avenue to Mission Avenue[e]	4-lane Major	37,000	32,200	D	0.870	34,760	E	0.939	32,900	D	0.889
Ash Street / San Pasqual Valley Road Grand Avenue to 2nd Avenue[e]	4-lane Major	37,000	29,900	D	0.808	33,600	E	0.908	32,900	D	0.889

Footnotes:

a. Capacity based on roadway classification operating at LOS E.
b. Average Daily Traffic.
c. Level of Service.
d. Volume to Capacity.
e. Street segment located within Caltrans' jurisdiction.

TABLE 12–3
LONG-TERM WITH DEVELOPMENT AT THE TRIGGER THRESHOLD INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Long-Term Without Project		Long-Term With Project		Long-Term With Development at the Trigger Threshold	
			Delay[a]	LOS[b]	Delay[a]	LOS[b]	Delay[a]	LOS[b]
2. El Norte Parkway / Broadway	Signal	AM	114.3	F	116.5	F	116.2	F
7. Lincoln Parkway / Broadway[e]	Signal	AM	55.4	E	57.5	E	57.2	E
9. Mission Ave / Broadway[e]	Signal	AM	62.0	E	63.6	E	63.3	E
		PM	106.9	F	129.8	F	108.4	F
10. Mission Ave / Hickory St	MSSC[c]	AM	28.1	D	48.9	E	33.6	D
		PM	53.4	F	102.3	F	55.3	F
12. Mission Ave / Harding St	MSSC[c]	AM	196.7	F	393.3	F	196.7[d]	F
		PM	95.8	F	233.1	F	95.8[d]	F

TABLE 12–3
LONG-TERM WITH DEVELOPMENT AT THE TRIGGER THRESHOLD INTERSECTION OPERATIONS (CONT'D)

Intersection	Control Type	Peak Hour	Long-Term Without Project		Long-Term With Project		Long-Term With Development at the Trigger Threshold	
			Delay[a]	LOS[b]	Delay[a]	LOS[b]	Delay[a]	LOS[b]
16. Washington Ave / Juniper St[e]	MSSC[c]	AM	300.2	F	1,797.6	F	300.2[d]	F
		PM	489.4	F	947.5	F	489.4[d]	F
19. Washington Ave / Ash St[e]	Signal	AM	54.1	D	56.8	E	54.7	D
		PM	43.3	D	55.6	E	53.7	D
27. Valley Pkwy / Rose St	Signal	AM	56.1	E	68.3	E	57.8	E
		PM	47.0	D	56.3	E	54.4	D

Footnotes:

a. Average delay expressed in seconds per vehicle
b. Level of Service
c. MSSC- Minor Street Stop Controlled intersection. Worst-case movement approach delay and LOS reported.
d. Implementation of the recommended improvement at this location is necessary prior to the completion of the Project's initial land uses.
e. Intersection located within Caltrans' jurisdiction.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

13.0 CONCLUSION

The transportation study conducted three analyses, a CEQA VMT analysis and a segment and intersection level long-term LOS analysis with and without the Project.

13.1 VMT

According to the SANDAG screening maps, the Specific Plan area generates VMT less than the regional average and would generally screen out of needing further VMT analysis. As seen in *Table 5–1*, the Project's VMT per capita is 5.8 miles per resident, and the Project's VMT per employee is 12.7 miles per employee. Whereas the Regional average is 19.0 and 27.2, respectively. Since the Project VMT per capita and VMT per employee is lower than 85% of the Regional average, and the Project plans to maintain its purpose of providing local serving retail with less than 50,000 square feet of individual development, the VMT analysis shows that no significant impact would occur in terms of office (VMT per employee), residential (VMT per capita) or retail. In addition, the Project site's location is supported by several Downtown Escondido low headway transit lines with excellent pedestrian and bicycle connectivity.

13.2 Substantial Effect

Per the City's allowable thresholds and the analysis methodology presented in this report, project related traffic is calculated to cause substantial effects within the study area at the following locations. Improvements are recommended at the following three (3) street segments and eight (8) intersections:

Street Segments

- Mission Avenue between Broadway and Hickory Street (LOS E)
- Broadway between Lincoln Avenue and Mission Avenue (LOS E)[7]
- Ash Street / San Pasqual Valley Road between Grand Avenue and 2nd Avenue (LOS E)[7]

Intersections

- El Norte Parkway / Broadway (LOS F during the AM and LOS E during the PM peak hour)
- Lincoln Parkway / Broadway (LOS E during the AM and PM peak hours)[7]
- Mission Avenue / Broadway (LOS E during the AM and LOS F during the PM peak hour)
- Mission Avenue / Hickory Street (LOS E during the AM and LOS F during the PM peak hour)
- Mission Avenue / Harding Street (LOS F during the AM and PM peak hours)
- Washington Avenue / Juniper Street (LOS F during the AM and PM peak hours)[7]
- Washington Avenue / Ash Street (LOS E during the AM peak hour)[7]
- Valley Parkway / Rose Street (LOS E during the AM and PM peak hours)

[7] Street segment / intersection located within Caltrans' jurisdiction.

Recommendations

The City of Escondido General Plan's Quality of Life standard strives for a Level of Service "C" that provides for minimal delays. In addition, the standard also acknowledges that high density infill areas may override the ability to meet this standard. Therefore, a Level of Service "C" may not be feasible in all areas at all times, such as within or near the downtown area. Operational or Transportation System Management (TSM) improvements should be required or planned to improve the service level.

The following three (3) roadways would have a significant impact:

- Mission Avenue between Broadway and Hickory Street
- Broadway between Lincoln Avenue and Mission Avenue[8]
- Ash Street / San Pasqual Valley Road between Grand Avenue and 2nd Avenue[8]

Since the impacted street segments are built to their maximum roadway classification within the available right-of-way, widening these roadways would be infeasible. Therefore, improvements at individual intersections along each segment is recommended in addition to TSM improvements. An arterial analysis was performed for each street segment that exceeds the City's significance thresholds in order to determine if the recommended improvements would reduce the impact to within the allowable threshold.

As shown in ***Table 13–2***, during the AM and PM peak periods, the post-Project (with improvements) arterial operations are better than the pre-Project. Therefore, the improvements are shown to correct the forecasted deficiencies.

- **Mission Avenue between Broadway and Hickory Street** – To improve the segment deficiency to meet the City's goal standards, the recommended intersection improvements of providing a dedicated eastbound right-turn lane at the Mission Avenue / Broadway intersection and signalizing the Mission Avenue / Hickory Street intersection would improve the roadway operations. The intersection improvements will decrease travel times along the street segment by decreasing intersection delays at these intersections located along the impact street segment. It should be noted that the Mission Avenue / Broadway intersection is within Caltrans jurisdiction as it is along SR 78.

  In addition, implement Transportation System Management measures along this portion of Mission Avenue including adjustments to the signal timings, offsets, detection, and other parameters to improve intersection performance along the study corridor.

[8] Street segment located within Caltrans' jurisdiction.

- **Broadway between Lincoln Avenue and Mission Avenue** – To improve the segment deficiency to meet the City's goal standards, providing a dedicated southbound right-turn lane at the Mission Avenue / Broadway intersection is recommended to improve the roadway operations. It should be noted that this street segment and the Mission Avenue / Broadway intersection are within Caltrans jurisdiction as it is along SR 78.

  In addition, implement Transportation System Management measures along this portion of Broadway including adjustments to the signal timings, offsets, detection, and other parameters to improve intersection performance along the study corridor.

- **Ash Street / San Pasqual Valley Road between Grand Avenue and 2nd Avenue** – To improve the segment deficiency to meet the City's goal standards, the construction of a two-lane roundabout at the San Pasqual Valley Road / 2nd Avenue intersection would contribute towards reducing the substantial effect. It should be noted that this street segment and the Grand Avenue / Ash Street intersection are within Caltrans jurisdiction as it is along SR 78.

  In addition, implement Transportation System Management measures along this portion of Ash Street including adjustments to the signal timings, offsets, detection, and other parameters to improve intersection performance along the study corridor.

The following recommendations would improve the deficient intersections to acceptable LOS.

- **El Norte Parkway / Broadway** – To improve the project's level of deficiency to the City's goal standards, provide a dedicated southbound right-turn lane and a dedicated northbound right-turn lane.

- **Lincoln Parkway / Broadway** – To improve the project's level of deficiency to the City's goal standards, provide a southbound right-turn overlap phase. This would preclude the eastbound U-turn movements (Caltrans intersection).

- **Mission Avenue / Broadway** – To improve the project's level of deficiency to the City's goal standards, provide a dedicated eastbound right-turn lane (Caltrans intersection).

- **Mission Avenue / Hickory Street** – To improve the project's level of deficiency to the City's goal standards, signalize the intersection.

- **Mission Avenue / Harding Street** – To improve the project's level of deficiency to the City's goal standards, signalize the intersection.

- **Washington Avenue / Juniper Street** – To improve the project's level of deficiency to the City's goal standards, signalize the intersection (Caltrans intersection).

- **Washington Avenue / Ash Street** – This intersection is built to it ultimate classification, therefore, no physical improvement is possible. To improve the project's level of deficiency

to the City's goal standards, optimize the cycle length and signal timings (Caltrans intersection).

- **Valley Parkway / Rose Street** – To improve the project's level of deficiency to the City's goal standards, provide a dedicated westbound right-turn lane.

Table 13–1 shows the post improvement analysis. ***Appendix M*** contains the Long-Term + Project with recommendations intersection analysis worksheets.

13.3 LOS F Operating Segments

In addition to the areas with substantial effect, per City guidelines, transportation improvements should be considered for any location operating at LOS F. Improvements are recommended at the following one (1) street segment:

Street Segments

- Centre City Parkway between El Norte Parkway and SR 78

Recommendations

The following recommendations would improve the LOS F roadway operation.

- **Centre City Parkway between El Norte Parkway and SR 78** – To improve the project's level of deficiency to the City's goal standards, improvement the El Norte Parkway / Centre City Parkway intersection by providing an eastbound right-turn overlap phase and prohibiting the northbound U-turn movement is also recommended to improve the roadway operations. *Table 13–2* shows the roadway operation results.

13.4 Trigger Thresholds

Section 13.2 outlines various intersection and street segment required improvements that are necessary to accommodate Specific Plan traffic. For each location, the percent of the Specific Plan buildout which could be built before the improvement is triggered was calculated (see *Section 12.0*). A total cost for all of the improvements can be determined and a "per ADT" dollar amount can be calculated. When specific developments are proposed, the trips generated will be determined and the development's "fair-share" contribution to the overall improvements will be calculated. The fair-share percent contribution towards implementing each improvement is determined by dividing the development's total traffic volumes by the overall total traffic volumes at the impacted location.

TABLE 13–1
LONG-TERM INTERSECTION OPERATIONS WITH IMPROVEMENT

Intersection	Control Type	Peak Hour	Long-Term Without Project		Long-Term With Project		Improvement	Long-Term With Project	
			Delay[a]	LOS[b]	Delay[a]	LOS[b]		Delay[a]	LOS[b]
2. El Norte Parkway / Broadway	Signal	AM	114.3	F	116.5	F	Provide a dedicated southbound right-turn and a dedicated northbound right-turn lane	78.2	E
		PM	65.2	E	65.6	E		54.1	D
7. Lincoln Parkway / Broadway[d]	Signal	AM	55.4	E	57.5	E	Provide a southbound right-turn overlap phase	56.0	E
		PM	57.9	E	59.5	E		57.4	E
9. Mission Ave / Broadway[d]	Signal	AM	62.0	E	71.3	E	Provide a dedicated eastbound right-turn lane	47.1	D
		PM	106.9	F	129.8	F		56.5	E
10. Mission Ave / Hickory St	MSSC[c] / Signal	AM	28.1	D	48.9	E	Signalize	5.1	A
		PM	53.4	F	102.3	F		4.9	A
12. Mission Ave / Harding St	MSSC[c] / Signal	AM	196.7	F	393.3	F	Signalize	8.2	A
		PM	95.8	F	233.1	F		6.9	A

TABLE 13–1
LONG-TERM INTERSECTION OPERATIONS WITH IMPROVEMENT (CONT'D)

Intersection	Control Type	Peak Hour	Long-Term Without Project		Long-Term With Project		Improvement	Long-Term With Project	
			Delay[a]	LOS[b]	Delay[a]	LOS[b]		Delay[a]	LOS[b]
16. Washington Ave / Juniper St[d]	MSSC[c] / Signal	AM	300.2	F	1,797.6	F	Signalize	6.0	A
		PM	489.4	F	947.5	F		6.4	A
19. Washington Ave / Ash St[d]	Signal	AM	54.1	D	56.8	E	Optimize the cycle length and signal timings.	54.0	D
		PM	43.3	D	55.6	E		46.1	D
27. Valley Pkwy / Rose St	Signal	AM	56.1	E	68.3	E	Provide a dedicated westbound right-turn lane	52.0	D
		PM	47.0	D	56.3	E		50.0	D

Footnotes:

a. Average delay expressed in seconds per vehicle
b. Level of Service
c. MSSC- Minor Street Stop Controlled intersection. Worst-case movement approach delay and LOS reported.
d. Intersection located within Caltrans' jurisdiction.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

TABLE 13–2
LONG-TERM ARTERIAL OPERATIONS

Street Segment	Period	Direction	Long-Term without Project		Long-Term with Project with Recommend Improvements		Speed Increase/ Decrease
			Speed[a]	LOS[b]	Speed	LOS	
Mission Avenue Broadway to Hickory Street	AM	EB	–[c]	–[c]	30.1	B	–
		WB	24.5	C	24.0	D	-0.5
	PM	EB	–[c]	–[c]	28.2	B	–
		WB	21.6	D	20.9	D	-0.7
Centre City Parkway El Norte Parkway to SR 78	AM	NB	12.7	E	12.9	E	+0.2
		SB	–[d]	–[d]	–[d]	–[d]	–
	PM	NB	11.0	E	10.8	E	-0.2
		SB	–[d]	–[d]	–[d]	–[d]	–
Broadway Lincoln Avenue to Mission Avenue[f]	AM	NB	11.9	E	11.0	E	-0.9
		SB	10.6	E	9.9	F	-0.7
	PM	NB	9.9	F	10.2	E	+0.3
		SB	12.3	E	11.7	E	-0.6
Ash Street/ San Pasqual Valley Road Grand Avenue to 2nd Avenue[f]	AM	NB	8.7	F	8.5	F	-0.2
		SB	–[e]	–[e]	–[e]	–[e]	–
	PM	NB	7.7	F	7.6	F	-0.1
		SB	–[e]	–[e]	–[e]	–[e]	–

Footnotes:

a. Speed in miles per hour
b. Level of Service
c. The synchro software does not report a speed for the eastbound direction as Hickory Street is currently unsignalized. Therefore, only the westbound direction speed was reported at the Mission Avenue / Broadway signalized intersection.
d. The synchro software does not report a speed for the southbound direction as there is no study area intersection south of the El Norte Parkway / Centre City Parkway intersection. Therefore, only the northbound direction speed was reported.
e. The synchro software does not report a speed for the southbound direction as 2nd Avenue is currently unsignalized. Therefore, only the northbound direction speed was reported at the Grand Avenue / Ash Street signalized intersection.
f. Street segment located within Caltrans' jurisdiction.

General Notes:

1. See *Appendix M* for the calculation sheets

LINSCOTT
LAW &
GREENSPAN
engineers

TECHNICAL APPENDICES TO THE TRANSPORTATION ANALYSIS
EAST VALLEY SPECIFIC PLAN (EVSP)

Escondido, California
March 24, 2023

LLG Ref. 3-21-3338

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

APPENDICES

APPENDIX	
A.	City of Escondido Roadway Classification table
B.	City of Escondido Bicycle Master Plan excerpts
C.	Bus route map and schedules
D.	Street segment and intersection count sheets and traffic volumes
E.	Peak Hour Intersection Analysis Worksheets – Existing
F.	SANDAG Screening Map and Series 13 Year 2050 Travel Demand Model results
G.	CAPCOA VMT reduction excerpts
H.	Traffic Volume Forecasting Technical Memorandum
I.	Trip Generation Technical Memorandum
J.	Peak Hour Intersection Analysis Worksheets – Long-Term
K.	Peak Hour Intersection Analysis Worksheets – Long-Term + Project
L.	Peak Hour Intersection Analysis Worksheets – Long-Term with development at the trigger threshold
M.	Peak Hour Intersection Analysis Worksheets – Long-Term + Project with Recommendations

APPENDIX A

CITY OF ESCONDIDO ROADWAY CLASSIFICATION TABLE

Vehicle

The City's General Plan (2012) establishes a goal of LOS C for all City streets; however, due to overall citywide traffic conditions, LOS D was considered acceptable. If the existing LOS is D or worse, preservation of the existing LOS must be maintained, or acceptable mitigation must be identified.

Currently the approved level of service standards for different street segments based on their classifications and average daily vehicle trips (ADT) within the City of Escondido are provided in **Table 1**.

Table 1: City of Escondido Level of Service Standards:
Street Segments Average Daily Vehicle Trip Thresholds

Street Classification	Lanes	Cross Sections	Level of Service				
			A	B	C	D	E
Prime Arterial	(8 lanes)	116/136 (NP)	23,800	37,800	51,800	62,300	70,000
	(6 lanes)	106/126 (NP)	20,400	32,400	44,400	53,400	60,000
Major Road	(6 lanes)	90/110 (NP)	17,000	27,000	37,000	44,500	50,000
	(4 lanes)	82/102 (NP)	12,600	20,000	27,400	32,900	37,000
Collector	(4 lanes)	64/84 (NP)	11,600	18,500	25,300	30,400	34,200
	(4 lanes)	(WP)	6,800	10,800	14,800	17,800	20,000
Local Collector	(2 lanes)	42/66 (NP)	5,100	8,100	11,100	13,400	15,000
		(WP)	3,400	5,400	7,400	8900	10,000

Source: City of Escondido former Traffic Impact Analysis Guidelines.
Notes:
NP: No Parking, WP: With Parking
The following V/C Ratios were utilized for determining Existing and Future Level of Service (rounded to the nearest hundredth).

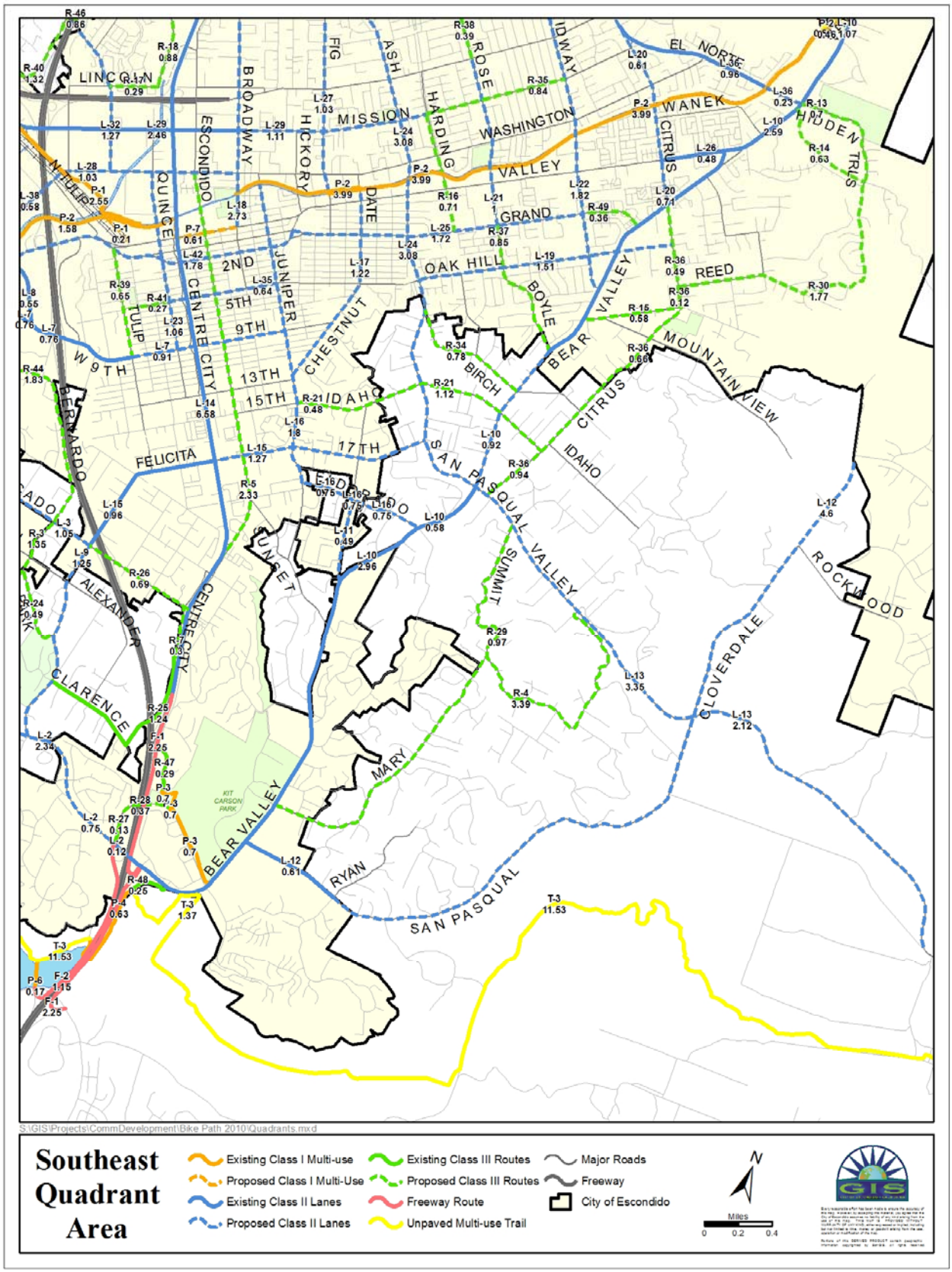
Level of Service	(V/C Ratio)
A - Less than or Equal to	0.00 to 0.34
B - Less than or Equal to	0.35 to 0.54
C - Less than or Equal to	0.55 to 0.74
D - Less than or Equal to	0.75 to 0.89
E - Less than or Equal to	0.90 to 1.00

Trip generation should be determined following the guidelines outlined in **Section 2.2**. Based on the adopted 2013 General Plan with a goal of LOS C, an LMA must be prepared for any project that generates and adds more than 2% of the ADT to any street segments operating at LOS C or worse within the preliminary study area identified by the City staff. Based on this threshold, **Table 2** contains the trigger-points for a required LMA within the City of Escondido for each street classification.

APPENDIX B

CITY OF ESCONDIDO BICYCLE MASTER PLAN EXCERPTS

Figure 6.5 Southeast Quadrant Area



APPENDIX C

BUS ROUTE MAP AND SCHEDULES

Effective SEPTEMBER 1, 2019

Rapid 235

Escondido – Downtown San Diego
via I-15

ONE-WAY FARES / *Tarifas Sencillas*

Exact fare, please / *Favor de pagar la cantidad exacta*

Adult / *Adulto*	**$2.50**
Senior/Disabled/Medicare* *Personas Mayores/con Discapacidades/Medicare**	**$1.25**
Youth (ages 6-18)* *Jóvenes (edades 6-18)**	**$2.50**

DAY PASS (Regional) / *Pase diario (Regional)*

Adult / *Adulto*	**$6.00**
Senior/Disabled/Medicare* *Personas Mayores/con Discapacidades/Medicare**	**$3.00**
Youth (ages 6-18)* *Jóvenes (edades 6-18)**	**$3.00**

MONTHLY PASSES / *Pases mensuales*

Adult / *Adulto*	**$72.00**
Senior/Disabled/Medicare* *Personas Mayores/con Discapacidades/Medicare**	**$23.00**
Youth (ages 6-18)* *Jóvenes (edades 6-18)**	**$23.00**

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959.
**Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959.*

COMPASS CARDS / *Tarjeta Compass*
There is a $2 charge for Compass Cards, which can be reloaded for future use.
Hay un costo de $2 por la tarjeta Compass Card, la cual puede ser recargada para usos futuros.

COMPASS CLOUD
Download the free Compass Cloud app on your Apple or Android phone.
Descargue la aplicación gratis Compass Cloud en su teléfono Apple o Android.

Visit sdmts.com/fares for more info. ***Visite sdmts.com/fares para más información.***

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**511** **or/ó** **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** **or/ó** **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
MTS Security *MTS Seguridad*	**(619) 595-4960**
Lost & Found *Objetos extraviados*	**(619) 233-3004**
Transit Store	**(619) 234-1060** 12th & Imperial Transit Center M–F 8am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at the Transit Store, or visit **sdmts.com.**

Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en la Transit Store, o visita a ***sdmts.com.***

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

DESTINATIONS

- Boulevard Transit Plaza
- City Heights Transit Plaza
- Del Lago Transit Station
- Kearny Mesa Transit Center
- Miramar College Transit Station
- Rancho Bernardo Transit Station
- Sabre Springs/Peñasquitos Transit Station

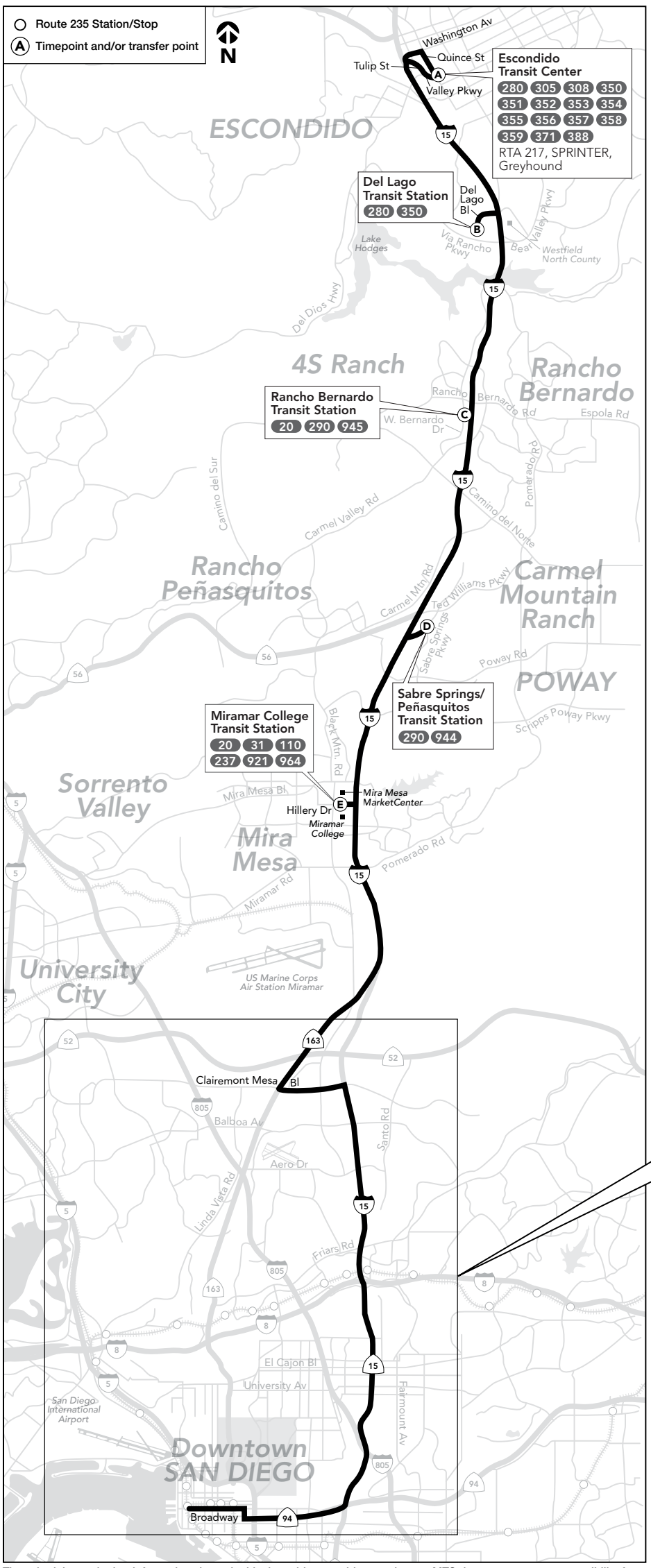
TROLLEY CONNECTIONS

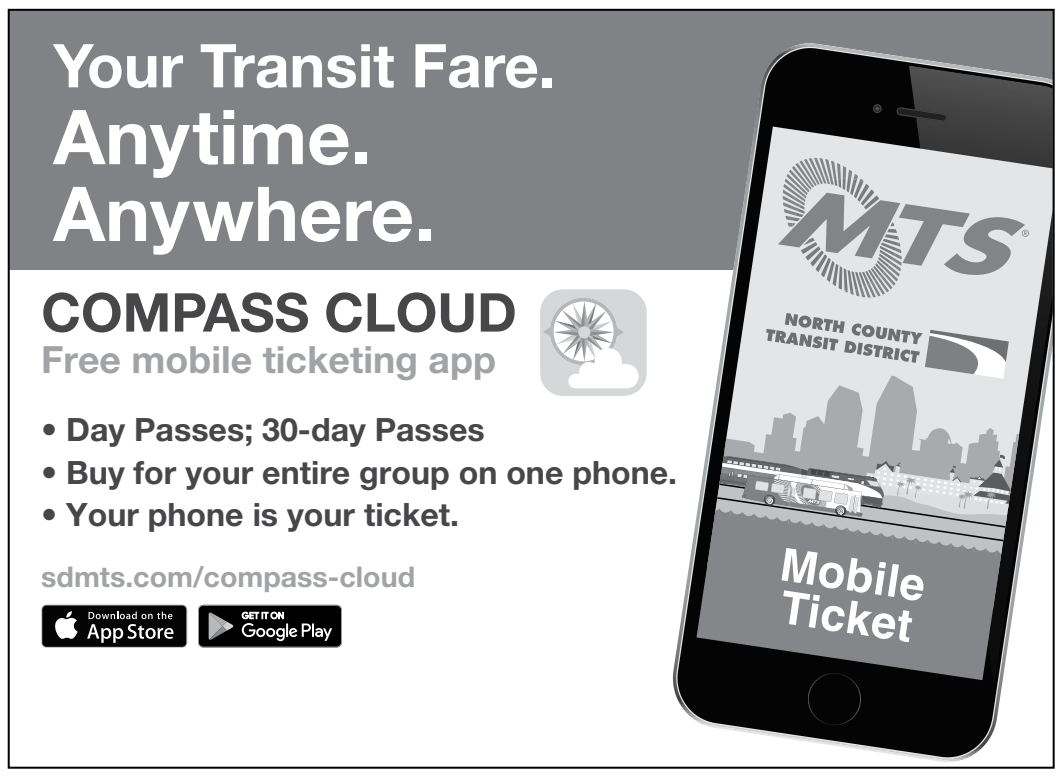
- City College
- America Plaza
- Santa Fe Depot

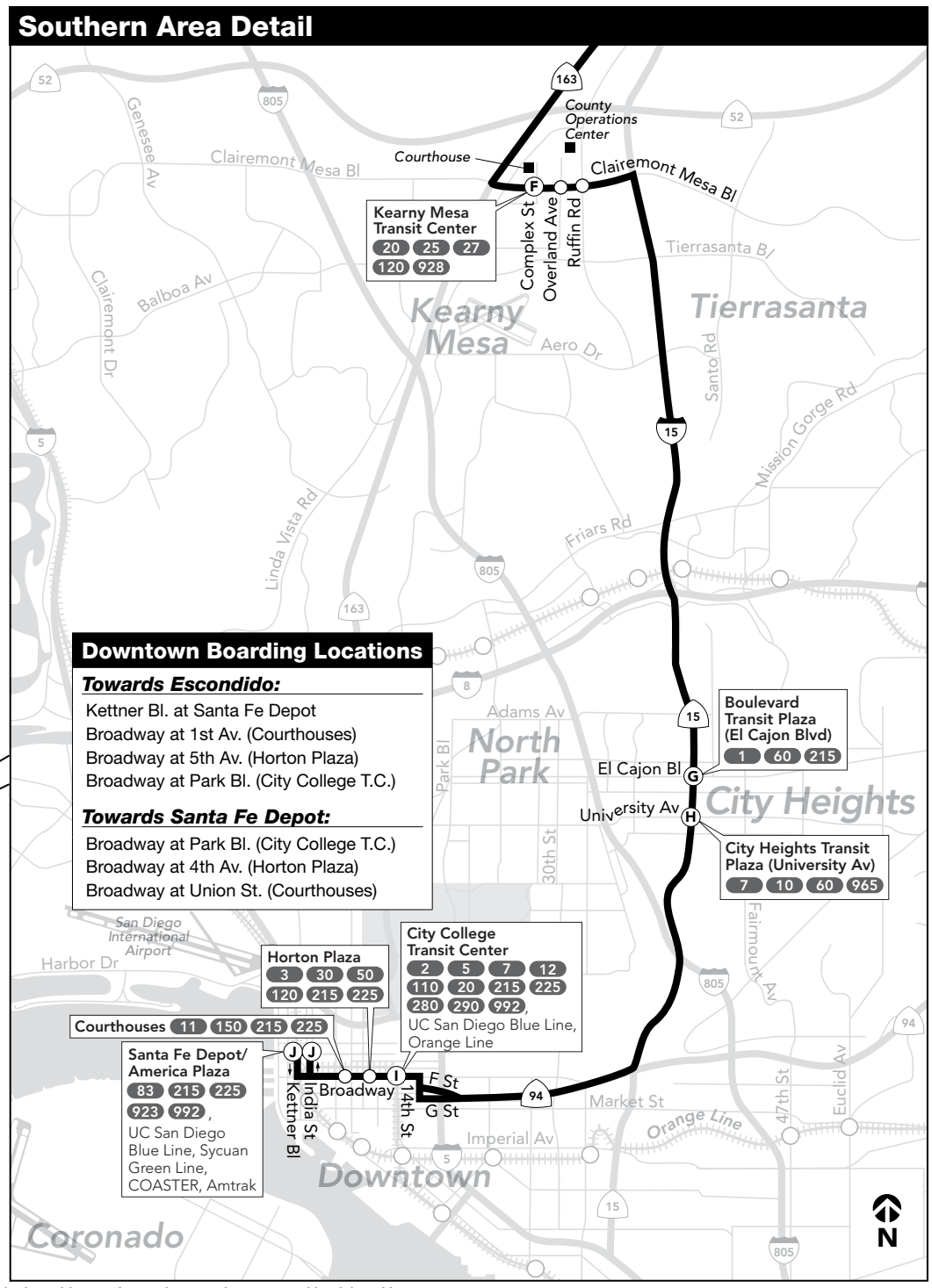
09/19

sdmts.com
Route Alerts, Updated Schedules, Connections & More

Alternative formats available upon request. Please call: (619) 557-4555 / ***Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555***







The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.
Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

Route 235 – Monday through Friday / *lunes a viernes*

Escondido ➡ Downtown San Diego

Ⓐ Escondido Transit Center **DEPART**	Ⓑ Del Lago Transit Station	Ⓒ Rancho Bernardo Transit Station	Ⓓ Sabre Springs/ Peñasquitos T.S.	Ⓔ Miramar College Transit Station	Ⓕ Kearny Mesa Transit Center	Ⓖ Boulevard Transit Plaza (El Cajon Bl.)	Ⓗ City Heights Transit Plaza (Univ. Av.)	Ⓘ City College Transit Station (Broadway)	Ⓙ America Plaza Trolley Station **ARRIVE**
—	—	—	—	—	4:58a	5:08a	5:10a	5:19a	5:26a
—	—	—	—	—	5:13	5:23	5:25	5:34	5:41
—	—	—	—	5:18a	5:28	5:38	5:40	5:49	5:56
5:00a	5:09a	5:17a	5:24a	5:33	5:43	5:53	5:55	6:04	6:11
—	—	—	—	5:48	5:59	6:09	6:11	6:21	6:28
5:33	5:42	5:50	5:57	6:06	6:17	6:27	6:29	6:40	6:47
—	—	—	—	6:21	6:32	6:43	6:45	6:57	7:05
6:03	6:12	6:20	6:27	6:36	6:47	6:58	7:00	7:12	7:20
6:18	6:27	6:35	6:42	6:51	7:02	7:13	7:15	7:27	7:35
6:30	6:40	6:48	6:55	7:04	7:15	7:26	7:28	7:41	7:50
6:46	6:56	7:04	7:11	7:20	7:31	7:42	7:44	7:57	8:06
7:01	7:11	7:19	7:26	7:35	7:46	7:57	7:59	8:12	8:21
7:16	7:26	7:34	7:41	7:50	8:01	8:12	8:14	8:27	8:36
7:31	7:41	7:49	7:56	8:05	8:16	8:27	8:29	8:42	8:51
7:46	7:56	8:04	8:11	8:20	8:31	8:42	8:44	8:57	9:06
8:01	8:11	8:19	8:26	8:35	8:46	8:57	8:59	9:11	9:20
8:17	8:26	8:34	8:41	8:50	9:01	9:12	9:14	9:26	9:35
8:33	8:42	8:50	8:57	9:06	9:17	9:28	9:30	9:41	9:50
8:48	8:57	9:05	9:12	9:21	9:32	9:43	9:45	9:56	10:05
9:03	9:12	9:20	9:27	9:36	9:47	9:58	10:00	10:11	10:20
9:18	9:27	9:35	9:42	9:51	10:02	10:13	10:15	10:26	10:35
9:33	9:42	9:50	9:57	10:06	10:17	10:28	10:30	10:41	10:50
9:48	9:57	10:05	10:12	10:21	10:32	10:43	10:45	10:56	11:05
10:03	10:12	10:20	10:27	10:36	10:47	10:58	11:00	11:11	11:20
10:18	10:27	10:35	10:42	10:51	11:02	11:13	11:15	11:26	11:35
10:33	10:42	10:50	10:57	11:06	11:17	11:29	11:31	11:42	11:51
10:48	10:57	11:05	11:12	11:21	11:32	11:44	11:46	11:57	**12:06p**
11:03	11:12	11:20	11:27	11:36	11:47	11:59	**12:01p**	**12:12p**	**12:21**
11:18	11:27	11:35	11:42	11:51	**12:02p**	**12:14p**	**12:16**	**12:27**	**12:36**
11:33	11:42	11:50	11:57	**12:06p**	**12:17**	**12:29**	**12:31**	**12:42**	**12:51**
11:48	11:57	**12:05p**	**12:12p**	**12:21**	**12:32**	**12:44**	**12:46**	**12:57**	**1:06**
12:03p	**12:12p**	**12:20**	**12:27**	**12:36**	**12:47**	**12:59**	**1:01**	**1:12**	**1:21**
12:19	**12:28**	**12:36**	**12:43**	**12:52**	**1:03**	**1:15**	**1:17**	**1:28**	**1:37**
12:34	**12:43**	**12:51**	**12:58**	**1:07**	**1:18**	**1:30**	**1:32**	**1:43**	**1:52**
12:49	**12:58**	**1:06**	**1:13**	**1:22**	**1:33**	**1:45**	**1:47**	**1:58**	**2:07**
1:03	**1:12**	**1:20**	**1:27**	**1:36**	**1:47**	**1:59**	**2:01**	**2:12**	**2:21**
1:18	**1:27**	**1:35**	**1:42**	**1:51**	**2:02**	**2:14**	**2:16**	**2:27**	**2:36**
1:33	**1:42**	**1:50**	**1:57**	**2:06**	**2:17**	**2:29**	**2:31**	**2:42**	**2:51**
1:47	**1:56**	**2:04**	**2:11**	**2:20**	**2:31**	**2:43**	**2:45**	**2:56**	**3:05**
2:00	**2:09**	**2:17**	**2:24**	**2:33**	**2:44**	**2:56**	**2:58**	**3:09**	**3:18**
2:13	**2:22**	**2:30**	**2:37**	**2:46**	**2:57**	**3:09**	**3:11**	**3:22**	**3:31**
2:28	**2:37**	**2:45**	**2:52**	**3:01**	**3:12**	**3:25**	**3:27**	**3:39**	**3:48**
2:42	**2:52**	**3:00**	**3:07**	**3:16**	**3:28**	**3:42**	**3:44**	**3:57**	**4:06**
2:55	**3:05**	**3:13**	**3:20**	**3:29**	**3:41**	**3:56**	**3:58**	**4:12**	**4:21**
3:10	**3:20**	**3:28**	**3:35**	**3:44**	**3:56**	**4:11**	**4:13**	**4:27**	**4:36**
3:23	**3:33**	**3:41**	**3:48**	**3:57**	**4:10**	**4:26**	**4:28**	**4:43**	**4:52**
3:39	**3:49**	**3:57**	**4:04**	**4:13**	**4:26**	**4:42**	**4:44**	**4:59**	**5:08**
3:54	**4:04**	**4:12**	**4:19**	**4:28**	**4:41**	**4:58**	**5:00**	**5:15**	**5:24**
4:09	**4:19**	**4:27**	**4:34**	**4:43**	**4:56**	**5:13**	**5:15**	**5:30**	**5:39**
4:24	**4:34**	**4:42**	**4:49**	**4:58**	**5:11**	**5:28**	**5:30**	**5:45**	**5:54**
4:39	**4:49**	**4:57**	**5:04**	**5:13**	**5:26**	**5:43**	**5:45**	**6:00**	**6:09**
4:54	**5:04**	**5:12**	**5:19**	**5:28**	**5:41**	**5:58**	**6:00**	**6:15**	**6:23**
5:10	**5:20**	**5:28**	**5:35**	**5:44**	**5:57**	**6:12**	**6:14**	**6:29**	**6:37**
5:27	**5:37**	**5:45**	**5:52**	**6:01**	**6:13**	**6:27**	**6:29**	**6:43**	**6:51**
5:45	**5:54**	**6:02**	**6:09**	**6:18**	**6:29**	**6:42**	**6:44**	**6:57**	**7:05**
6:02	**6:11**	**6:19**	**6:26**	**6:35**	**6:46**	**6:58**	**7:00**	**7:11**	**7:19**
6:17	**6:26**	**6:34**	**6:41**	**6:50**	**7:01**	**7:13**	**7:15**	**7:26**	**7:34**
6:32	**6:41**	**6:49**	**6:56**	**7:05**	**7:16**	**7:28**	**7:30**	**7:41**	**7:49**
6:47	**6:56**	**7:04**	**7:11**	**7:20**	**7:31**	**7:43**	**7:45**	**7:56**	**8:04**
7:06	**7:15**	**7:23**	**7:30**	**7:39**	**7:49**	**8:00**	**8:02**	**8:12**	**8:20**
7:36	**7:45**	**7:53**	**8:00**	**8:09**	**8:19**	**8:30**	**8:32**	**8:42**	**8:50**
8:05	**8:14**	**8:22**	**8:29**	**8:38**	**8:48**	**8:59**	**9:01**	**9:11**	**9:19**
8:35	**8:44**	**8:52**	**8:59**	**9:08**	**9:18**	**9:29**	**9:31**	**9:40**	**9:47**
9:05	**9:14**	**9:22**	**9:29**	**9:38**	**9:48**	**9:59**	**10:01**	**10:10**	**10:17**
9:35	**9:44**	**9:52**	**9:59**	**10:08**	**10:18**	**10:29**	**10:31**	**10:40**	**10:47**
10:05	**10:14**	**10:22**	**10:29**	**10:38**	**10:48**	**10:58**	**11:00**	**11:09**	**11:16**
10:35	**10:44**	**10:52**	**10:59**	**11:08**	**11:18**	**11:28**	**11:30**	**11:39**	**11:46**

Downtown San Diego ➡ Escondido

Ⓙ Santa Fe Depot Transit Ctr. **DEPART**	Ⓘ City College Transit Station (Broadway)	Ⓗ City Heights Transit Plaza (Univ. Av.)	Ⓖ Boulevard Transit Plaza (El Cajon Bl.)	Ⓕ Kearny Mesa Transit Center	Ⓔ Miramar College Transit Station	Ⓓ Sabre Springs/ Peñasquitos T.S.	Ⓒ Rancho Bernardo Transit Station	Ⓑ Del Lago Transit Station	Ⓐ Escondido Transit Center **ARRIVE**
4:43a	4:50a	5:00a	5:02a	5:13a	5:24a	5:31a	5:39a	5:46a	5:57a
5:03	5:10	5:20	5:22	5:33	5:44	5:51	5:59	6:06	6:17
5:18	5:25	5:35	5:37	5:49	6:00	6:07	6:15	6:22	6:34
5:33	5:40	5:50	5:52	6:04	6:15	6:22	6:30	6:37	6:49
5:46	5:53	6:03	6:05	6:17	6:28	6:35	6:43	6:50	7:02
5:59	6:06	6:16	6:18	6:30	6:41	6:48	6:56	7:03	7:15
6:12	6:19	6:29	6:31	6:44	6:55	7:02	7:10	7:17	7:29
6:26	6:34	6:44	6:46	7:00	7:12	7:19	7:27	7:34	7:46
6:41	6:49	6:59	7:01	7:15	7:27	7:34	7:42	7:49	8:01
6:55	7:03	7:14	7:16	7:32	7:44	7:51	7:59	8:06	8:18
7:10	7:18	7:29	7:31	7:47	7:59	8:06	8:14	8:21	8:33
7:25	7:33	7:44	7:46	8:02	8:14	8:21	8:29	8:36	8:48
7:40	7:48	7:59	8:01	8:17	8:29	8:36	8:44	8:51	9:03
7:55	8:03	8:14	8:16	8:32	8:44	8:51	8:59	9:06	9:18
8:10	8:18	8:29	8:31	8:47	8:59	9:06	9:14	9:21	9:33
8:25	8:33	8:43	8:45	9:00	9:12	9:19	9:27	9:34	9:46
8:40	8:48	8:58	9:00	9:14	9:26	9:33	9:41	9:48	10:00
8:55	9:03	9:13	9:15	9:28	9:39	9:46	9:54	10:01	10:13
9:10	9:18	9:28	9:30	9:43	9:54	10:01	10:09	10:16	10:28
9:23	9:31	9:41	9:43	9:56	10:07	10:14	10:22	10:29	10:41
9:38	9:46	9:56	9:58	10:11	10:22	10:29	10:37	10:44	10:56
9:53	10:01	10:11	10:13	10:26	10:37	10:44	10:52	10:59	11:11
10:08	10:16	10:26	10:28	10:41	10:52	10:59	11:07	11:14	11:26
10:23	10:31	10:41	10:43	10:56	11:07	11:14	11:22	11:29	11:41
10:38	10:46	10:56	10:58	11:11	11:22	11:29	11:37	11:44	11:56
10:53	11:01	11:11	11:13	11:26	11:37	11:44	11:52	11:59	**12:11p**
11:08	11:16	11:26	11:28	11:41	11:52	11:59	**12:07p**	**12:14p**	**12:26**
11:23	11:31	11:41	11:43	11:56	**12:07p**	**12:14p**	**12:22**	**12:29**	**12:41**
11:38	11:46	11:56	11:58	**12:11p**	**12:22**	**12:29**	**12:37**	**12:44**	**12:56**
11:53	**12:02p**	**12:12p**	**12:14p**	**12:27**	**12:38**	**12:45**	**12:53**	**1:00**	**1:12**
12:08p	**12:17**	**12:27**	**12:29**	**12:42**	**12:53**	**1:00**	**1:08**	**1:15**	**1:27**
12:23	**12:32**	**12:42**	**12:44**	**12:57**	**1:08**	**1:15**	**1:23**	**1:30**	**1:42**
12:38	**12:47**	**12:57**	**12:59**	**1:12**	**1:23**	**1:30**	**1:38**	**1:45**	**1:57**
12:53	**1:02**	**1:12**	**1:14**	**1:27**	**1:38**	**1:45**	**1:53**	**2:00**	**2:12**
1:07	**1:16**	**1:26**	**1:28**	**1:41**	**1:52**	**1:59**	**2:07**	**2:14**	**2:26**
1:24	**1:33**	**1:43**	**1:45**	**1:58**	**2:09**	**2:16**	**2:24**	**2:31**	**2:43**
1:39	**1:48**	**1:58**	**2:00**	**2:13**	**2:24**	**2:31**	**2:39**	**2:46**	**2:58**
1:55	**2:04**	**2:14**	**2:16**	**2:29**	**2:40**	**2:47**	**2:55**	**3:02**	**3:14**
2:11	**2:20**	**2:30**	**2:32**	**2:45**	**2:57**	**3:04**	**3:12**	**3:19**	**3:32**
2:26	**2:35**	**2:45**	**2:47**	**3:00**	**3:12**	**3:19**	**3:27**	**3:34**	**3:47**
2:41	**2:50**	**3:00**	**3:02**	**3:15**	**3:27**	**3:34**	**3:42**	**3:49**	**4:02**
2:56	**3:05**	**3:16**	**3:18**	**3:31**	**3:43**	**3:50**	**3:58**	**4:05**	**4:18**
3:10	**3:19**	**3:31**	**3:33**	**3:46**	**3:59**	**4:06**	**4:14**	**4:21**	**4:34**
3:24	**3:34**	**3:47**	**3:49**	**4:02**	**4:15**	**4:22**	**4:30**	**4:37**	**4:50**
3:39	**3:49**	**4:02**	**4:04**	**4:17**	**4:30**	**4:37**	**4:45**	**4:52**	**5:05**
3:54	**4:04**	**4:17**	**4:19**	**4:32**	**4:45**	**4:52**	**5:00**	**5:07**	**5:20**
4:09	**4:19**	**4:32**	**4:34**	**4:47**	**5:00**	**5:07**	**5:15**	**5:22**	**5:35**
4:25	**4:35**	**4:48**	**4:50**	**5:03**	**5:16**	**5:23**	**5:31**	**5:38**	**5:51**
4:40	**4:50**	**5:03**	**5:05**	**5:17**	**5:30**	**5:37**	**5:45**	**5:52**	**6:05**
4:55	**5:05**	**5:18**	**5:20**	**5:32**	**5:45**	**5:52**	**6:00**	**6:07**	**6:20**
5:10	**5:20**	**5:33**	**5:35**	**5:47**	**6:00**	**6:07**	**6:15**	**6:22**	**6:35**
5:26	**5:35**	**5:48**	**5:50**	**6:02**	**6:15**	**6:22**	**6:30**	**6:37**	**6:50**
5:41	**5:50**	**6:02**	**6:04**	**6:16**	**6:28**	**6:35**	**6:43**	**6:50**	**7:02**
5:56	**6:05**	**6:17**	**6:19**	**6:31**	**6:43**	**6:50**	**6:58**	**7:05**	**7:17**
6:12	**6:20**	**6:31**	**6:33**	**6:45**	**6:57**	**7:04**	**7:12**	**7:19**	**7:30**
6:27	**6:35**	**6:46**	**6:48**	**7:00**	**7:12**	**7:19**	**7:27**	**7:34**	**7:45**
6:42	**6:50**	**7:01**	**7:03**	**7:15**	**7:27**	**7:34**	**7:42**	**7:49**	**8:00**
7:08	**7:16**	**7:26**	**7:28**	**7:39**	**7:50**	**7:57**	**8:05**	**8:12**	**8:23**
7:38	**7:46**	**7:56**	**7:58**	**8:09**	**8:20**	**8:27**	**8:35**	**8:42**	**8:53**
8:07	**8:15**	**8:25**	**8:27**	**8:38**	**8:49**	**8:56**	**9:04**	**9:11**	**9:22**
8:37	**8:45**	**8:55**	**8:57**	**9:08**	**9:19**	**9:26**	**9:34**	**9:41**	**9:52**
9:08	**9:15**	**9:25**	**9:27**	**9:38**	**9:49**	**9:56**	**10:04**	**10:11**	**10:21**
9:38	**9:45**	**9:55**	**9:57**	**10:08**	**10:19**	**10:26**	**10:34**	**10:41**	**10:51**
10:08	**10:15**	**10:25**	**10:27**	**10:38**	**10:49**	**10:56**	**11:04**	**11:11**	**11:21**
10:38	**10:45**	**10:55**	**10:57**	**11:08**	**11:19**	**11:26**	**11:34**	**11:41**	**11:51**

Route 235 – Saturday and Sunday / *sábado y domingo*

Escondido ➡ Downtown San Diego

Ⓐ Escondido Transit Center **DEPART**	Ⓑ Del Lago Transit Station	Ⓒ Rancho Bernardo Transit Station	Ⓓ Sabre Springs/ Peñasquitos T.S.	Ⓔ Miramar College Transit Station	Ⓕ Kearny Mesa Transit Center	Ⓖ Boulevard Transit Plaza (El Cajon Bl.)	Ⓗ City Heights Transit Plaza (Univ. Av.)	Ⓘ City College Transit Station (Broadway)	Ⓙ America Plaza Trolley Station **ARRIVE**
—	—	—	—	—	5:14a	5:23a	5:25a	5:34a	5:41a
5:01a	5:10a	5:18a	5:25a	5:34a	5:44	5:53	5:55	6:04	6:11
5:30	5:39	5:47	5:54	6:03	6:13	6:22	6:24	6:34	6:41
6:00	6:09	6:17	6:24	6:33	6:43	6:52	6:54	7:04	7:11
6:30	6:39	6:47	6:54	7:03	7:14	7:24	7:26	7:36	7:44
7:00	7:09	7:17	7:24	7:33	7:44	7:54	7:56	8:06	8:14
7:30	7:39	7:47	7:54	8:03	8:14	8:24	8:26	8:36	8:44
8:00	8:09	8:17	8:24	8:33	8:44	8:54	8:56	9:06	9:14
8:30	8:39	8:47	8:54	9:03	9:14	9:24	9:26	9:36	9:44
9:04	9:13	9:21	9:28	9:37	9:48	9:58	10:00	10:11	10:19
9:34	9:43	9:51	9:58	10:07	10:18	10:28	10:30	10:41	10:49
10:04	10:13	10:21	10:28	10:37	10:48	10:58	11:00	11:11	11:19
10:33	10:42	10:50	10:57	11:06	11:17	11:28	11:30	11:41	11:49
11:03	11:12	11:20	11:27	11:36	11:47	11:58	**12:00p**	**12:11p**	**12:19p**
11:33	11:42	11:50	11:57	**12:06p**	**12:17p**	**12:28p**	**12:30**	**12:41**	**12:49**
12:03p	**12:12p**	**12:20p**	**12:27p**	**12:36**	**12:47**	**12:58**	**1:00**	**1:11**	**1:19**
12:33	**12:42**	**12:50**	**12:57**	**1:06**	**1:17**	**1:28**	**1:30**	**1:41**	**1:49**
1:03	**1:12**	**1:20**	**1:27**	**1:36**	**1:47**	**1:58**	**2:00**	**2:11**	**2:19**
1:33	**1:42**	**1:50**	**1:57**	**2:06**	**2:17**	**2:28**	**2:30**	**2:41**	**2:49**
2:03	**2:12**	**2:20**	**2:27**	**2:36**	**2:47**	**2:58**	**3:00**	**3:11**	**3:19**
2:33	**2:42**	**2:50**	**2:57**	**3:06**	**3:17**	**3:28**	**3:30**	**3:41**	**3:49**
3:03	**3:12**	**3:20**	**3:27**	**3:36**	**3:47**	**3:58**	**4:00**	**4:11**	**4:19**
3:33	**3:42**	**3:50**	**3:57**	**4:06**	**4:17**	**4:28**	**4:30**	**4:41**	**4:49**
4:03	**4:12**	**4:20**	**4:27**	**4:36**	**4:47**	**4:58**	**5:00**	**5:11**	**5:19**
4:33	**4:42**	**4:50**	**4:57**	**5:06**	**5:17**	**5:28**	**5:30**	**5:41**	**5:49**
5:03	**5:12**	**5:20**	**5:27**	**5:36**	**5:47**	**5:58**	**6:00**	**6:11**	**6:19**
5:31	**5:40**	**5:48**	**5:55**	**6:04**	**6:15**	**6:25**	**6:27**	**6:37**	**6:45**
6:01	**6:10**	**6:18**	**6:25**	**6:34**	**6:45**	**6:55**	**6:57**	**7:07**	**7:15**
6:31	**6:40**	**6:48**	**6:55**	**7:04**	**7:15**	**7:25**	**7:27**	**7:37**	**7:45**
7:01	**7:10**	**7:18**	**7:25**	**7:34**	**7:44**	**7:54**	**7:56**	**8:06**	**8:14**
7:34	**7:43**	**7:51**	**7:58**	**8:07**	**8:17**	**8:27**	**8:29**	**8:39**	**8:47**
8:05	**8:14**	**8:22**	**8:29**	**8:38**	**8:48**	**8:58**	**9:00**	**9:10**	**9:18**
8:35	**8:44**	**8:52**	**8:59**	**9:08**	**9:18**	**9:28**	**9:30**	**9:40**	**9:47**
9:05	**9:14**	**9:22**	**9:29**	**9:38**	**9:48**	**9:57**	**9:59**	**10:09**	**10:16**
9:35	**9:44**	**9:52**	**9:59**	**10:08**	**10:18**	**10:27**	**10:29**	**10:39**	**10:46**
10:05	**10:14**	**10:22**	**10:29**	**10:38**	**10:48**	**10:57**	**10:59**	**11:09**	**11:16**

Downtown San Diego ➡ Escondido

Ⓙ Santa Fe Depot Transit Ctr. **DEPART**	Ⓘ City College Transit Station (Broadway)	Ⓗ City Heights Transit Plaza (Univ. Av.)	Ⓖ Boulevard Transit Plaza (El Cajon Bl.)	Ⓕ Kearny Mesa Transit Center	Ⓔ Miramar College Transit Station	Ⓓ Sabre Springs/ Peñasquitos T.S.	Ⓒ Rancho Bernardo Transit Station	Ⓑ Del Lago Transit Station	Ⓐ Escondido Transit Center **ARRIVE**
4:43a	4:50a	5:00a	5:02a	5:13a	5:24a	5:31a	5:39a	5:46a	5:56a
5:10	5:17	5:27	5:29	5:40	5:51	5:58	6:06	6:13	6:23
5:40	5:47	5:57	5:59	6:10	6:21	6:28	6:36	6:43	6:53
6:10	6:17	6:27	6:29	6:40	6:51	6:58	7:06	7:13	7:23
6:40	6:47	6:57	6:59	7:10	7:21	7:28	7:36	7:43	7:53
7:10	7:18	7:28	7:30	7:41	7:52	7:59	8:07	8:14	8:24
7:40	7:48	7:58	8:00	8:11	8:22	8:29	8:37	8:44	8:54
8:09	8:17	8:27	8:29	8:40	8:51	8:58	9:06	9:13	9:23
8:39	8:47	8:57	8:59	9:11	9:22	9:29	9:37	9:44	9:55
9:10	9:18	9:28	9:30	9:42	9:53	10:00	10:08	10:15	10:26
9:40	9:48	9:58	10:00	10:12	10:23	10:30	10:38	10:45	10:56
10:11	10:19	10:29	10:31	10:43	10:54	11:01	11:09	11:16	11:27
10:41	10:49	10:59	11:01	11:13	11:24	11:31	11:39	11:46	11:57
11:11	11:19	11:29	11:31	11:43	11:54	**12:01p**	**12:09p**	**12:16p**	**12:27p**
11:41	11:49	11:59	**12:01p**	**12:13p**	**12:24p**	**12:31**	**12:39**	**12:46**	**12:57**
12:11p	**12:19p**	**12:29p**	**12:31**	**12:43**	**12:54**	**1:01**	**1:09**	**1:16**	**1:27**
12:41	**12:49**	**12:59**	**1:01**	**1:13**	**1:24**	**1:31**	**1:39**	**1:46**	**1:57**
1:11	**1:19**	**1:29**	**1:31**	**1:43**	**1:54**	**2:01**	**2:09**	**2:16**	**2:27**
1:41	**1:49**	**1:59**	**2:01**	**2:13**	**2:24**	**2:31**	**2:39**	**2:46**	**2:57**
2:11	**2:19**	**2:29**	**2:31**	**2:43**	**2:54**	**3:01**	**3:09**	**3:16**	**3:28**
2:41	**2:49**	**2:59**	**3:01**	**3:13**	**3:24**	**3:31**	**3:39**	**3:46**	**3:58**
3:09	**3:18**	**3:29**	**3:31**	**3:43**	**3:54**	**4:01**	**4:09**	**4:16**	**4:28**
3:39	**3:48**	**3:59**	**4:01**	**4:13**	**4:24**	**4:31**	**4:39**	**4:46**	**4:58**
4:09	**4:18**	**4:29**	**4:31**	**4:43**	**4:54**	**5:01**	**5:09**	**5:16**	**5:28**
4:40	**4:49**	**5:00**	**5:02**	**5:13**	**5:24**	**5:31**	**5:39**	**5:46**	**5:58**
5:10	**5:19**	**5:30**	**5:32**	**5:43**	**5:54**	**6:01**	**6:09**	**6:16**	**6:28**
5:39	**5:48**	**5:59**	**6:01**	**6:12**	**6:23**	**6:30**	**6:38**	**6:45**	**6:57**
6:10	**6:18**	**6:29**	**6:31**	**6:42**	**6:53**	**7:00**	**7:08**	**7:15**	**7:27**
6:41	**6:49**	**6:59**	**7:01**	**7:12**	**7:23**	**7:30**	**7:38**	**7:45**	**7:56**
7:09	**7:17**	**7:27**	**7:29**	**7:40**	**7:51**	**7:58**	**8:06**	**8:13**	**8:24**
7:39	**7:47**	**7:57**	**7:59**	**8:10**	**8:21**	**8:28**	**8:36**	**8:43**	**8:54**
8:07	**8:15**	**8:25**	**8:27**	**8:38**	**8:49**	**8:56**	**9:04**	**9:11**	**9:22**
8:38	**8:45**	**8:55**	**8:57**	**9:08**	**9:19**	**9:26**	**9:34**	**9:41**	**9:52**
9:08	**9:15**	**9:25**	**9:27**	**9:38**	**9:49**	**9:56**	**10:04**	**10:11**	**10:21**
9:38	**9:45**	**9:55**	**9:57**	**10:08**	**10:19**	**10:26**	**10:34**	**10:41**	**10:51**
10:08	**10:15**	**10:25**	**10:27**	**10:38**	**10:49**	**10:56**	**11:04**	**11:11**	**11:21**
10:38	**10:45**	**10:55**	**10:57**	**11:08**	**11:19**	**11:26**	**11:34**	**11:41**	**11:51**

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados

ONE-WAY FARES / *Tarifas Sencillas*

Exact fare, please / *Favor de pagar la cantidad exacta*	
Adult / *Adulto*	**$5.00**
Senior/Disabled/Medicare* *Personas Mayores/con Discapacidades/Medicare**	**$2.50**
Youth (ages 6-18)* *Jóvenes (edades 6-18)**	**$5.00**

DAY PASS (Regional) / *Pase diario (Regional)*

Adult / *Adulto*	**$12.00**
Senior/Disabled/Medicare* *Personas Mayores/con Discapacidades/Medicare**	**$6.00**
Youth (ages 6-18)* *Jóvenes (edades 6-18)**	**$6.00**

MONTHLY PASSES / *Pases mensuales*

Adult / *Adulto*	**$100.00**
Senior/Disabled/Medicare* *Personas Mayores/con Discapacidades/Medicare**	**$32.00**
Youth (ages 6-18)* *Jóvenes (edades 6-18)**	**$32.00**

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959.
**Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959.*

COMPASS CARDS / *Tarjeta Compass*
There is a $2 charge for Compass Cards, which can be reloaded for future use.
Hay un costo de $2 por la tarjeta Compass Card, la cual puede ser recargada para usos futuros..

COMPASS CLOUD
Download the free Compass Cloud app on your Apple or Android phone.
Descargue la aplicación gratis Compass Cloud en su teléfono Apple o Android.

Visit sdmts.com/fares for more info. ***Visite sdmts.com/fares para más información.***

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**511** **or/ó** **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** **or/ó** **(888) 722-4889**
InfoExpress **(24-hour info via Touch-Tone phone)** *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
MTS Security *MTS Seguridad*	**(619) 595-4960**
Lost & Found *Objetos extraviados*	**(619) 233-3004**
Transit Store	**(619) 234-1060** 12th & Imperial Transit Center M–F 8am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at the Transit Store, or visit **sdmts.com.**

Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en la Transit Store, o visita a ***sdmts.com.***

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JANUARY 31, 2021

280
Escondido / Del Lago – Downtown

290
Rancho Bernardo / Sabre Springs – Downtown

I-15 SERVICE

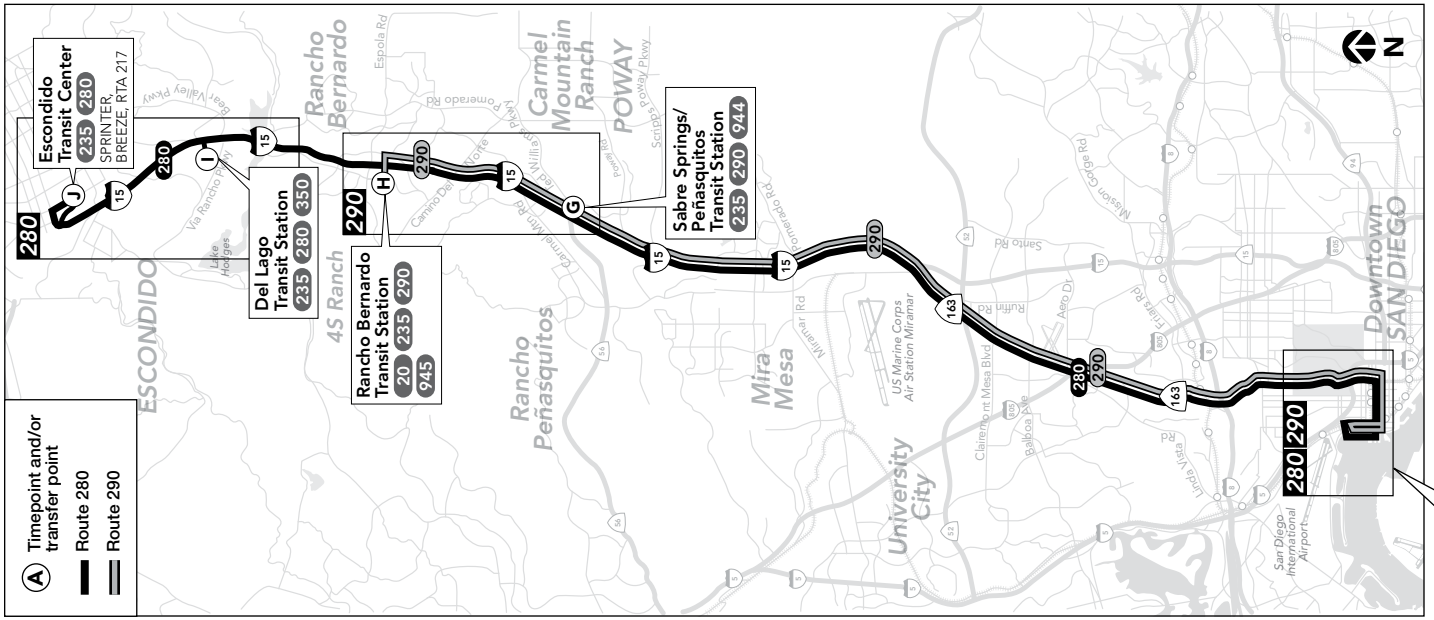
Rapid Express

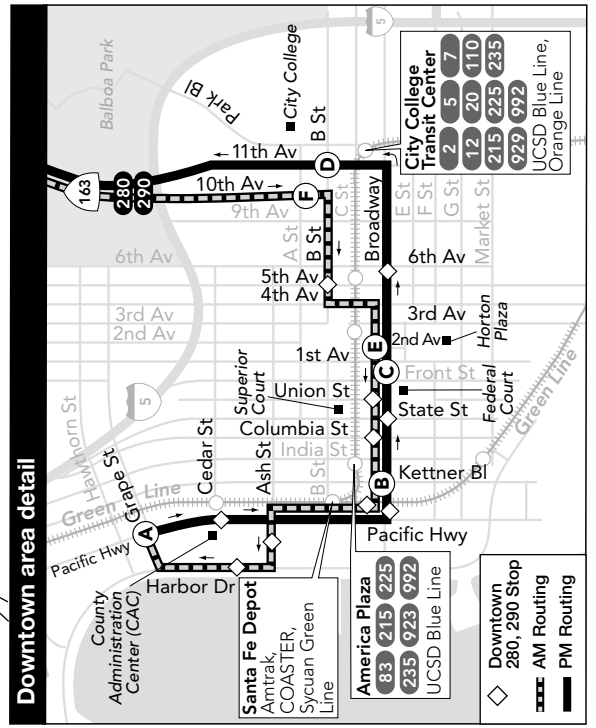
01/21

sdmts.com
Route Alerts, Updated Schedules, Connections & More

MTS

Alternative formats available upon request. Please call: (619) 557-4555
Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555





Routes 280 and 290 do not operate on weekends or on the observation of the following holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. A limited schedule may be operated the day after Thanksgiving. Information will be provided on buses and at **sdmts.com**.

Las rutas 280 y 290 no ofrecen servicio durante el fin de semana ó durante los siguientes días festivos: Año Nuevo, Presidents' Day, Memorial Day, Día de la Independencia (E.E.U.U.), Labor Day, Día de Acción de Gracias y Navidad. Se podría operar un horario limitado el día después del Día de Acción de Gracias. Se proporcionará información en los autobuses y ***sdmts.com****.*

Route 280 – Monday through Friday / *lunes a viernes*

Escondido ➡ Downtown San Diego

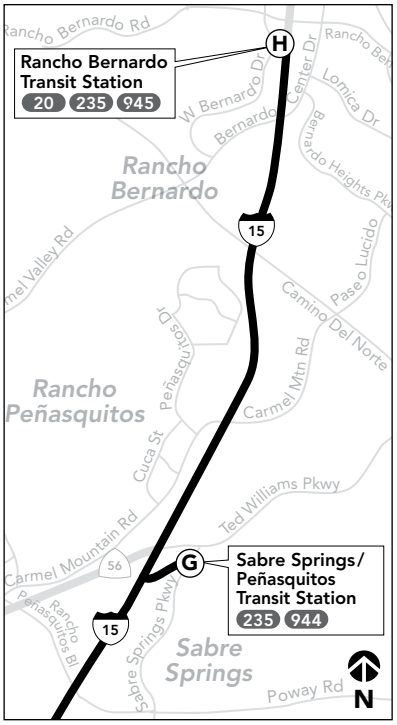
(J) Escondido Transit Center **DEPART**	(I) Del Lago Transit Station	(F) 10th Ave. & B St.	(E) Broadway & 2nd Ave.	(B) Broadway & Kettner Blvd.	(A) Grape St. & Pacific Hwy. **ARRIVE**
5:00a	5:11a	5:40a	5:45a	5:50a	5:55a
5:30	5:41	6:10	6:15	6:20	6:25
6:00	6:11	6:40	6:45	6:50	6:55
6:30	6:42	7:12	7:18	7:23	7:28
7:00	7:13	7:45	7:51	7:57	8:03
7:30	7:43	8:15	8:21	8:27	8:33
8:00	8:13	8:45	8:51	8:57	9:03

Downtown San Diego ➡ Escondido

(A) Pacific Hwy. & Grape St. **DEPART**	(B) Broadway & Kettner Blvd.	(C) Broadway & 1st Ave.	(D) 11th Ave. & B St.	(I) Del Lago Transit Station	(J) Escondido Transit Center **ARRIVE**
3:03p	**3:09p**	**3:13p**	**3:21p**	**3:52p**	**4:03p**
3:33	**3:39**	**3:43**	**3:51**	**4:22**	**4:33**
4:03	**4:09**	**4:13**	**4:21**	**4:53**	**5:05**
4:33	**4:39**	**4:43**	**4:51**	**5:23**	**5:35**
5:03	**5:09**	**5:13**	**5:21**	**5:53**	**6:05**
5:23	**5:29**	**5:33**	**5:41**	**6:13**	**6:25**

Shaded times are approximate; trip may run earlier than scheduled.
Los tiempos sombreados son aproximados; los viajes pueden operar más temprano de lo que se indica.

Route 290 – Monday through Friday / *lunes a viernes*



Rancho Bernardo ➡ Sabre Springs ➡ Downtown San Diego

(H) Rancho Bernardo Transit Station **DEPART**	(G) Sabre Springs/ Peñas. Transit Station	(F) 10th Ave. & B St.	(E) Broadway & 2nd Ave.	(B) Broadway & Kettner Blvd.	(A) Grape St. & Pacific Hwy. **ARRIVE**
5:15a	5:22a	5:44a	5:49a	5:54a	5:59a
5:45	5:52	6:14	6:19	6:24	6:29
6:15	6:22	6:44	6:50	6:55	7:00
6:45	6:52	7:14	7:20	7:25	7:30
7:15	7:22	7:46	7:52	7:58	8:04
7:45	7:52	8:18	8:24	8:30	8:36
8:10	8:17	8:43	8:49	8:55	9:01

Downtown San Diego ➡ Sabre Springs ➡ Rancho Bernardo

(A) Pacific Hwy. & Grape St. **DEPART**	(B) Broadway & Kettner Blvd.	(C) Broadway & 1st Ave.	(D) 11th Ave. & B St.	(G) Sabre Springs/ Peñas. Transit Station	(H) Rancho Bernardo Transit Station **ARRIVE**
3:01p	**3:07p**	**3:11p**	**3:19p**	**3:42p**	**3:49p**
3:31	**3:37**	**3:41**	**3:49**	**4:12**	**4:19**
4:01	**4:07**	**4:11**	**4:19**	**4:42**	**4:49**
4:31	**4:37**	**4:41**	**4:49**	**5:12**	**5:19**
5:01	**5:07**	**5:11**	**5:19**	**5:42**	**5:49**
5:21	**5:27**	**5:31**	**5:39**	**6:02**	**6:09**

Shaded times are approximate; trip may run earlier than scheduled.
Los tiempos sombreados son aproximados; los viajes pueden operar más temprano de lo que se indica.

Guaranteed Ride Home

Commuters who ride Rapid Express have a safety net with the SANDAG iCommute Guaranteed Ride Home Program (GRH). Participants must pre-register online in order to redeem up to three rides per fiscal year in the event of an emergency and other qualifying situations. For more information, including full eligibility details, visit 511sd.com/iCommute or call 511 and say “iCommute.”

Transporte Garantizado a Casa

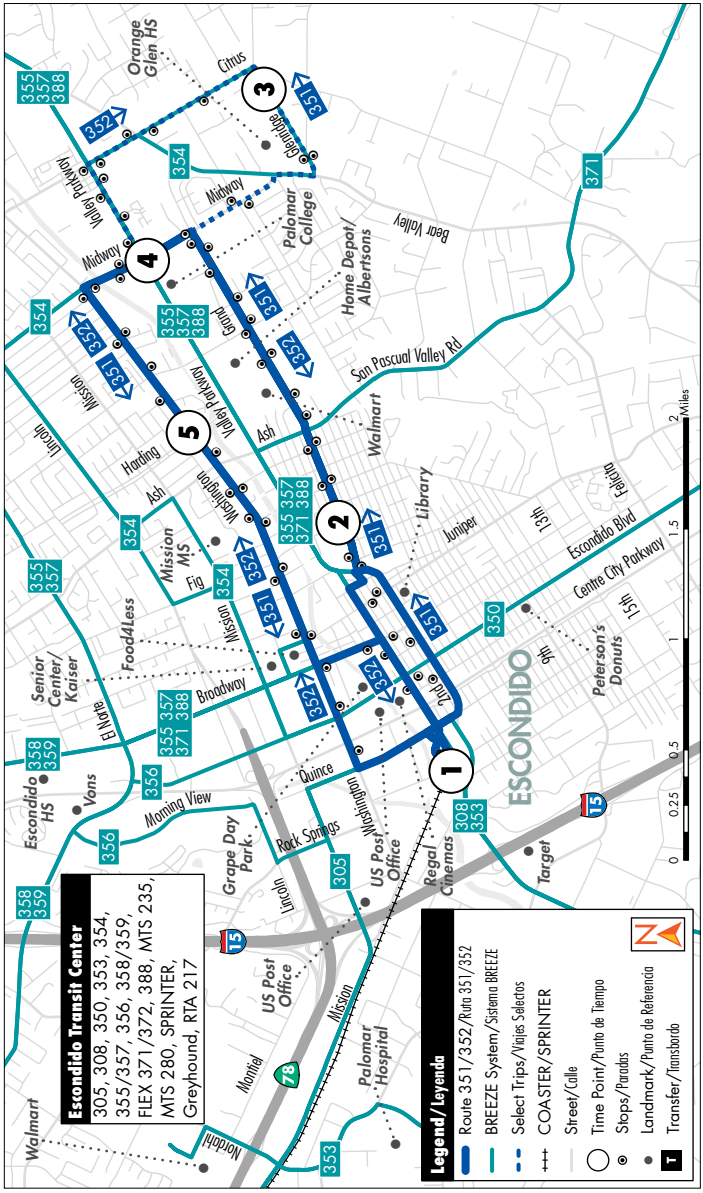
Los viajeros frecuentes que se trasladan en Rapid Express cuentan con la seguridad que les brinda el Programa de Transporte Garantizado a Casa de SANDAG (GRH, por sus siglas en inglés). Los participantes deben estar previamente inscritos en línea para poder canjear hasta tres viajes por año fiscal en caso de emergencia y de otras situaciones que reúnan los requisitos. Para obtener más información, incluidos todos los detalles de elegibilidad, visite 511sd.com/iCommute o llame al 511 y diga "iCommute".

351/352 Escondido Circulator

Escondido Circulator

M-F • SA • SU
L-V • SÁ • DO

Destinations/Destinos
- Palomar College Escondido Branch
- Hidden Valley Middle School
- Orange Glen High School
- Palomar Health Downtown Campus
- Escondido Civic Center
- North County Inland Career Center



351/352 Escondido Circulator
Escondido Circulator

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

351 Monday – Friday
Grand Ave. then Washington Ave.
351 Lunes a Viernes • Grand Ave. luego Washington Ave.

Escondido Transit Center	Grand Ave. & Fig St.	Orange Glen High School	Midway Dr. & Valley Pkwy.	Washington Ave. & Harding St.	Escondido Transit Center
1	2	3	4	5	1
4:50	4:54	–	5:01	5:06	5:17a
5:20	5:24	–	5:31	5:36	5:47
5:50	5:54	–	6:01	6:06	6:17
6:20	6:24	–	6:31	6:36	6:47
6:35	6:40	–	6:48	6:53	7:06
6:50	6:55	7:10	7:17	7:25	7:38
7:23	7:29	–	7:38	7:43	7:56
7:35	7:41	–	7:50	7:55	8:08
7:53	7:59	–	8:08	8:13	8:26
8:23	8:29	–	8:38	8:43	8:56
8:35	8:41	–	8:50	8:55	9:08
8:53	8:59	–	9:08	9:13	9:26
9:23	9:29	–	9:38	9:43	9:56
9:35	9:41	–	9:50	9:55	10:08
9:53	9:59	–	10:08	10:13	10:26
10:23	10:29	–	10:38	10:43	10:56
10:35	10:41	–	10:50	10:55	11:08
10:53	10:59	–	11:08	11:13	11:26
11:23	11:29	–	11:38	11:43	11:56
11:35	11:41	–	11:50	11:55	**12:08p**
11:53	11:59	–	**12:08**	**12:13**	**12:26**
12:23	**12:29**	**–**	**12:38**	**12:43**	**12:56**
12:35	**12:41**	**–**	**12:50**	**12:55**	**1:08**
12:53	**12:59**	**–**	**1:08**	**1:13**	**1:26**
1:23	**1:29**	**–**	**1:38**	**1:43**	**1:56**
1:35	**1:41**	**–**	**1:50**	**1:55**	**2:08**
1:53	**1:59**	**–**	**2:08**	**2:13**	**2:26**
2:23	**2:29**	**–**	**2:38**	**2:43**	**2:56**
2:37	**2:43**	**2:58**	**3:05**	**3:13**	**3:26**
2:53	**2:59**	**–**	**3:08**	**3:13**	**3:26**
3:22	**3:28**	**–**	**3:38**	**3:43**	**3:56**
3:35	**3:41**	**–**	**3:51**	**3:56**	**4:09**
3:52	**3:58**	**–**	**4:08**	**4:13**	**4:26**
4:22	**4:28**	**–**	**4:38**	**4:43**	**4:56**
4:35	**4:41**	**–**	**4:51**	**4:56**	**5:09**
4:52	**4:58**	**–**	**5:08**	**5:13**	**5:26**
5:23	**5:29**	**–**	**5:39**	**5:44**	**5:56**

351/352 Escondido Circulator
Escondido Circulator

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

351 Monday – Friday
Grand Ave. then Washington Ave.
351 Lunes a Viernes • Grand Ave. luego Washington Ave.

Escondido Transit Center	Grand Ave. & Fig St.	Orange Glen High School	Midway Dr. & Valley Pkwy.	Washington Ave. & Harding St.	Escondido Transit Center
1	**2**	**3**	**4**	**5**	**1**
5:35	5:41	–	5:51	5:56	6:08
5:53	5:59	–	6:09	6:14	6:26
6:20	6:26	–	6:35	6:40	6:51
6:50	6:56	–	7:05	7:10	7:20
7:20	7:25	–	7:33	7:38	7:48
7:50	7:55	–	8:03	8:07	8:17
8:20	8:24	–	8:32	8:36	8:46
8:50	8:54	–	9:02	9:06	9:16
9:20	9:24	–	9:31	9:34	9:43
10:32	10:36	–	10:42	10:45	10:54

351/352 Escondido Circulator
Escondido Circulator

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

352 Monday – Friday
Washington Ave. then Grand Ave.
352 Lunes a Viernes • Washington Ave. luego Grand Ave.

Escondido Transit Center	Washington Ave. & Harding St.	Midway Dr. & Valley Pkwy.	Orange Glen High School	Grand Ave. & Fig St.	Escondido Transit Center
1	**5**	**4**	**3**	**2**	**1**
4:05	4:11	4:16	–	4:23	4:28a
5:33	5:40	5:45	–	5:54	6:00
6:03	6:10	6:15	–	6:25	6:31
6:20	6:27	6:32	–	6:42	6:48
6:33	6:40	6:45	–	6:55	7:01
7:03	7:11	7:18	7:25	7:42	7:50
7:20	7:28	7:35	7:42	7:59	8:07
7:33	7:41	7:46	–	7:56	8:04
8:03	8:11	8:16	–	8:26	8:34
8:20	8:28	8:33	–	8:43	8:51
8:33	8:41	8:46	–	8:56	9:04
9:03	9:12	9:17	–	9:27	9:36
9:20	9:30	9:35	–	9:45	9:54
9:33	9:43	9:48	–	9:58	10:07
10:03	10:13	10:18	–	10:28	10:37
10:20	10:30	10:35	–	10:45	10:54
10:33	10:43	10:48	–	10:58	11:07
11:03	11:13	11:18	–	11:28	11:37
11:20	11:30	11:35	–	11:45	11:54
11:33	11:43	11:48	–	11:58	**12:07p**
12:03	**12:13**	**12:18**	**–**	**12:28**	**12:37**
12:20	**12:30**	**12:35**	**–**	**12:45**	**12:54**
12:33	**12:43**	**12:48**	**–**	**12:58**	**1:07**
1:03	**1:14**	**1:19**	**–**	**1:29**	**1:38**
1:20	**1:31**	**1:36**	**–**	**1:46**	**1:55**
1:33	**1:44**	**1:49**	**–**	**1:59**	**2:08**
2:03	**2:14**	**2:19**	**–**	**2:29**	**2:38**
2:20	**2:31**	**2:36**	**–**	**2:46**	**2:55**
2:33	**2:44**	**2:50**	**2:58**	**3:15**	**3:24**
3:03	**3:14**	**3:20**	**–**	**3:30**	**3:39**
3:20	**3:31**	**3:37**	**–**	**3:47**	**3:56**
3:33	**3:44**	**3:50**	**–**	**4:00**	**4:09**
4:03	**4:14**	**4:20**	**–**	**4:30**	**4:39**
4:20	**4:31**	**4:37**	**–**	**4:46**	**4:55**
4:33	**4:44**	**4:50**	**–**	**4:58**	**5:07**
5:03	**5:14**	**5:20**	**–**	**5:28**	**5:37**
5:20	**5:31**	**5:37**	**–**	**5:45**	**5:54**

351/352 Escondido Circulator
Escondido Circulator

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

352 Monday – Friday
Washington Ave. then Grand Ave.
352 Lunes a Viernes • Washington Ave. luego Grand Ave.

Escondido Transit Center	Washington Ave. & Harding St.	Midway Dr. & Valley Pkwy.	Orange Glen High School	Grand Ave. & Fig St.	Escondido Transit Center
1	5	4	3	2	1
5:33	5:44	5:50	–	5:58	6:07
6:03	6:12	6:17	–	6:25	6:33
6:33	6:42	6:47	–	6:55	7:02
7:03	7:12	7:16	–	7:23	7:30
7:33	7:41	7:45	–	7:52	7:59
8:03	8:11	8:15	–	8:21	8:28
8:33	8:40	8:44	–	8:50	8:57
9:03	9:10	9:14	–	9:20	9:26
9:33	9:40	9:44	–	9:50	9:56

351/352 Escondido Circulator
Escondido Circulator

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

351 Saturday & Sunday
Grand Ave. then Washington Ave.
351 Sábado y Domingo • Grand Ave. luego Washington Ave.

Escondido Transit Center	Grand Ave. & Fig St.	Midway Dr. & Valley Pkwy.	Washington Ave. & Harding St.	Escondido Transit Center
1	**2**	**4**	**5**	**1**
6:59	7:03	7:10	7:16	7:27a
7:32	7:36	7:43	7:49	8:00
8:02	8:07	8:14	8:20	8:31
8:32	8:37	8:45	8:51	9:02
9:02	9:07	9:16	9:22	9:33
9:32	9:37	9:46	9:52	10:04
10:02	10:08	10:17	10:23	10:35
10:32	10:38	10:47	10:53	11:05
11:02	11:08	11:17	11:23	11:35
11:32	11:38	11:47	11:53	**12:05p**
12:02	**12:08**	**12:17**	**12:23**	**12:35**
12:32	**12:38**	**12:47**	**12:53**	**1:05**
1:02	**1:08**	**1:17**	**1:23**	**1:35**
1:32	**1:38**	**1:47**	**1:53**	**2:05**
2:02	**2:08**	**2:17**	**2:23**	**2:35**
2:32	**2:38**	**2:47**	**2:53**	**3:05**
3:02	**3:08**	**3:17**	**3:23**	**3:35**
3:32	**3:38**	**3:47**	**3:53**	**4:05**
4:02	**4:08**	**4:17**	**4:23**	**4:35**
4:32	**4:38**	**4:47**	**4:53**	**5:04**
5:02	**5:07**	**5:16**	**5:22**	**5:33**
5:32	**5:37**	**5:46**	**5:52**	**6:03**
6:02	**6:07**	**6:16**	**6:21**	**6:32**
6:32	**6:37**	**6:46**	**6:51**	**7:02**
7:32	**7:37**	**7:46**	**7:51**	**8:02**
8:32	**8:37**	**8:45**	**8:50**	**9:01**
9:32	**9:36**	**9:44**	–	–

351/352 Escondido Circulator
Escondido Circulator

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

352 Saturday & Sunday
Washington Ave. then Grand Ave.
352 Sábado y Domingo • Washington Ave. luego Grand Ave.

Escondido Transit Center	Washington Ave. & Harding St.	Midway Dr. & Valley Pkwy.	Grand Ave. & Fig St.	Escondido Transit Center
1	**5**	**4**	**2**	**1**
–	–	5:14	5:21	5:26a
–	–	6:13	6:21	6:26
6:59	7:06	7:11	7:20	7:26
7:31	7:38	7:43	7:52	7:58
7:59	8:06	8:11	8:20	8:26
8:31	8:38	8:43	8:52	8:58
8:59	9:06	9:11	9:20	9:26
9:28	9:36	9:41	9:50	9:56
9:57	10:05	10:10	10:19	10:26
10:26	10:35	10:40	10:49	10:56
10:56	11:05	11:10	11:19	11:26
11:25	11:34	11:39	11:48	11:56
11:55	**12:04**	**12:09**	**12:18**	**12:26p**
12:25	**12:34**	**12:39**	**12:48**	**12:56**
12:55	**1:04**	**1:09**	**1:18**	**1:26**
1:25	**1:34**	**1:39**	**1:48**	**1:56**
1:55	**2:04**	**2:09**	**2:18**	**2:26**
2:26	**2:35**	**2:40**	**2:49**	**2:56**
2:56	**3:05**	**3:10**	**3:19**	**3:26**
3:26	**3:35**	**3:40**	**3:49**	**3:56**
3:57	**4:06**	**4:11**	**4:19**	**4:26**
4:27	**4:36**	**4:41**	**4:49**	**4:56**
4:57	**5:06**	**5:11**	**5:19**	**5:26**
5:28	**5:37**	**5:42**	**5:49**	**5:56**
5:58	**6:07**	**6:12**	**6:19**	**6:26**
6:28	**6:37**	**6:42**	**6:49**	**6:56**
6:58	**7:07**	**7:12**	**7:19**	**7:26**
7:58	**8:07**	**8:12**	**8:19**	**8:26**
8:59	**9:07**	**9:12**	**9:19**	**9:26**

354

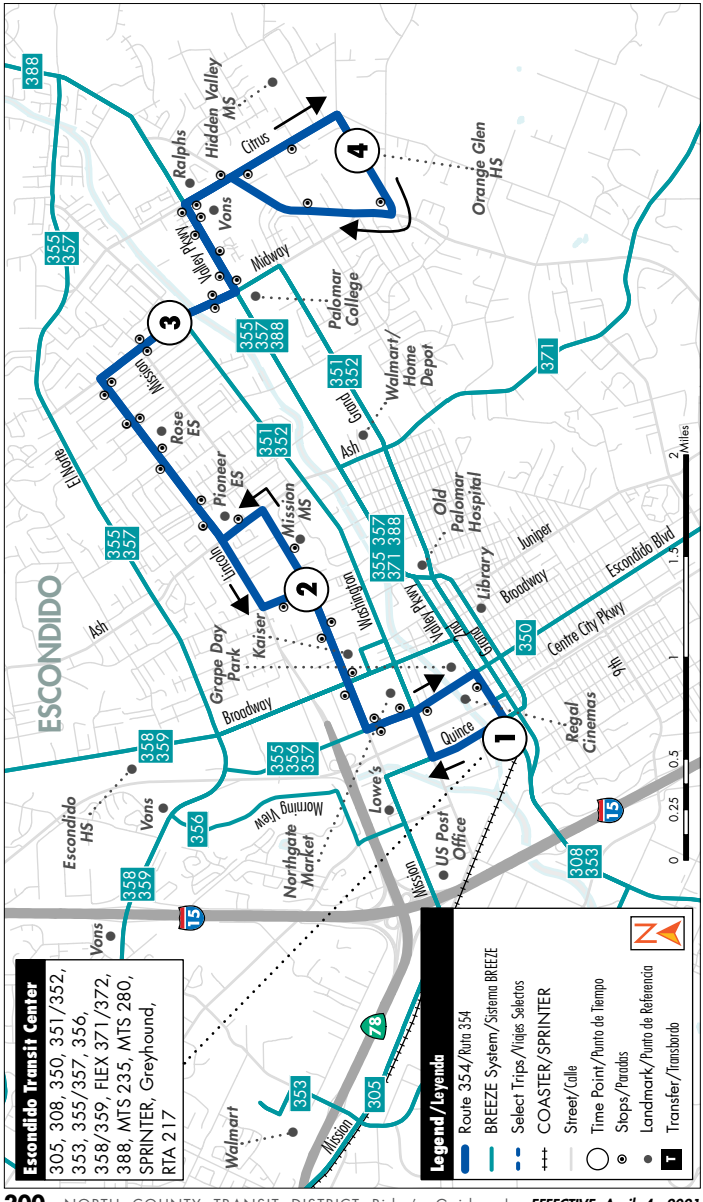
Orange Glen High School via Mission, Lincoln & Citrus

Orange Glen High School vía Mission, Lincoln y Citrus

M-F • SA • SU
L-V • SÁ • DO

Destinations/Destinos

- Escondido Civic Center
- Hidden Valley Middle School
- Orange Glen High School
- Mission Middle School
- Palomar College Escondido Branch
- North County Inland Career Center



354 Orange Glen High School via Mission, Lincoln & Citrus

Orange Glen High School vía Mission, Lincoln y Citrus

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

Monday - Friday
Eastbound to Orange Glen
Lunes a Viernes
Dirección hacia el este a Orange Glen

Escondido Transit Center	Mission Ave. & Fig St.	Washington Ave. & Midway Dr.	Orange Glen High School
1	**2**	**3**	**4**
–	–	5:13	5:19a
–	–	5:48	5:54
6:02	6:08	6:15	6:22
6:32	6:40	6:48	6:56
6:47	6:55	7:04	7:13
7:02	7:10	7:21	7:35
7:32	7:40	7:51	8:02
8:02	8:09	8:17	8:25
8:32	8:39	8:47	8:55
9:02	9:09	9:17	9:25
9:32	9:39	9:47	9:55
10:02	10:09	10:17	10:25
10:32	10:39	10:47	10:55
11:02	11:10	11:18	11:26
11:32	11:40	11:48	11:56
12:02	**12:10**	**12:18**	**12:26p**
12:32	**12:40**	**12:48**	**12:57**
1:02	**1:10**	**1:18**	**1:27**
1:32	**1:40**	**1:50**	**1:59**
2:02	**2:12**	**2:22**	**2:31**
2:32	**2:42**	**2:52**	**3:07**
3:02	**3:12**	**3:22**	**3:32**
3:32	**3:42**	**3:52**	**4:02**
4:02	**4:12**	**4:22**	**4:32**
4:32	**4:42**	**4:52**	**5:02**
5:02	**5:12**	**5:22**	**5:32**
5:32	**5:41**	**5:51**	**6:01**
6:02	**6:10**	**6:19**	**6:28**
6:32	**6:40**	**6:49**	**6:57**
7:02	**7:10**	**7:18**	**7:26**
7:32	**7:39**	**7:47**	**7:54**

Please note, BREEZE "school tripper" bus service only runs while Orange Glen High School is in session for in-person learning and are subject to change based on bell times. NCTD will update trip planning applications and GoNCTD.com when this service returns.

Tenga en cuenta que el servicio de autobús "school tripper" de BREEZE solo funciona mientras Orange Glen High School se encuentre abierta para clases presenciales y está sujeto a cambios en función de los horarios de entrada y salida. El NCTD actualizará las aplicaciones de planificación de viaje y GoNCTD.com cuando el servicio se reanude.

354 Orange Glen High School via Mission, Lincoln & Citrus

Orange Glen High School vía Mission, Lincoln y Citrus

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

Monday - Friday
Westbound to Escondido
Lunes a Viernes
Dirección hacia el oeste a Escondido

Orange Glen High School	Washington Ave. & Midway Dr.	Mission Ave. & Fig St.	Escondido Transit Center
4	**3**	**2**	**1**
5:31	5:38	5:48	5:56a
5:59	6:07	6:18	6:26
6:27	6:35	6:47	6:56
6:55	7:04	7:16	7:27
7:22	7:32	7:45	7:56
7:53	8:02	8:15	8:26
8:28	8:36	8:46	8:56
8:58	9:06	9:16	9:26
9:28	9:36	9:46	9:56
10:00	10:08	10:17	10:26
10:30	10:38	10:47	10:56
11:00	11:08	11:17	11:26
11:30	11:38	11:47	11:56
11:59	**12:07**	**12:17**	**12:26p**
12:29	**12:37**	**12:47**	**12:56**
12:59	**1:07**	**1:17**	**1:26**
1:29	**1:37**	**1:47**	**1:56**
1:57	**2:06**	**2:16**	**2:26**
***2:10**	***2:19**	***2:29**	***2:39**
2:27	**2:36**	**2:46**	**2:56**
****2:55**	****3:05**	****3:15**	****3:26**
3:08	**3:18**	**3:28**	**3:39**
3:26	**3:35**	**3:45**	**3:56**
3:57	**4:06**	**4:15**	**4:26**
4:27	**4:36**	**4:45**	**4:56**
4:59	**5:08**	**5:17**	**5:26**
5:29	**5:38**	**5:47**	**5:56**
6:00	**6:08**	**6:17**	**6:26**
6:30	**6:38**	**6:47**	**6:56**
7:01	**7:09**	**7:18**	**7:26**
7:31	**7:39**	**7:48**	**7:56**
8:02	**8:09**	**8:18**	**8:26**

* **Operates Mondays only.**
Opera solamente los Lunes.

** **Operates Tuesday, Wednesday, Thursday, and Friday.**
Opera Martes, Miércoles, Jueves y Viernes.

Please note, BREEZE "school tripper" bus service only runs while Orange Glen High School is in session for in-person learning and are subject to change based on bell times. NCTD will update trip planning applications and GoNCTD.com when this service returns.

Tenga en cuenta que el servicio de autobús "school tripper" de BREEZE solo funciona mientras Orange Glen High School se encuentre abierta para clases presenciales y está sujeto a cambios en función de los horarios de entrada y salida. El NCTD actualizará las aplicaciones de planificación de viaje y GoNCTD.com cuando el servicio se reanude.

354 Orange Glen High School via Mission, Lincoln & Citrus
Orange Glen High School vía Mission, Lincoln y Citrus

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

Saturday & Sunday
Eastbound to Orange Glen
Sábado y Domingo
Dirección hacia el este a Orange Glen

Escondido Transit Center	Mission Ave. & Fig St.	Washington Ave. & Midway Dr.	Orange Glen High School
1	**2**	**3**	**4**
8:32	8:39	8:46	8:54a
9:32	9:39	9:47	9:55
10:32	10:39	10:47	10:55
11:32	11:40	11:48	11:56
12:32	**12:40**	**12:48**	**12:56p**
1:32	**1:40**	**1:48**	**1:57**
2:32	**2:40**	**2:48**	**2:57**
3:32	**3:40**	**3:48**	**3:57**
4:32	**4:40**	**4:48**	**4:56**
5:32	**5:40**	**5:48**	**5:56**

Saturday & Sunday
Westbound to Escondido
Sábado y Domingo
Dirección hacia el oeste a Escondido

Orange Glen High School	Washington Ave. & Midway Dr.	Mission Ave. & Fig St.	Escondido Transit Center
4	**3**	**2**	**1**
8:59	9:07	9:16	9:26a
9:59	10:07	10:16	10:26
10:59	11:07	11:16	11:26
11:59	**12:07**	**12:16**	**12:26p**
12:59	**1:07**	**1:16**	**1:26**
2:00	**2:08**	**2:16**	**2:26**
3:00	**3:08**	**3:16**	**3:26**
4:01	**4:09**	**4:17**	**4:26**
5:01	**5:09**	**5:17**	**5:26**
6:02	**6:09**	**6:17**	**6:26**

355/357

El Norte Pkwy. & Valley Pkwy.

El Norte Pkwy. y Valley Pkwy.

M-F • SA • SU
L-V • SÁ • DO

Destinations/Destinos

- Valley High School
- Escondido Charter High School
- Palomar Health Downtown Campus
- Palomar College Escondido Branch
- Kaiser Permanente
- YMCA
- North County Inland Career Center
- Escondido Senior Center

355/357 El Norte Pkwy. & Valley Pkwy.
El Norte Pkwy. y Valley Pkwy.

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

355 Monday - Friday
Valley Pkwy. then El Norte Pkwy.
355 Lunes a Viernes • Valley Pkwy. luego El Norte Pkwy.

Escondido Transit Center	Valley Pkwy. & Midway Dr.	El Norte Pkwy. & Valley Pkwy.	El Norte Pkwy. & N. Broadway	Escondido Transit Center
1	**2**	**3**	**4**	**1**
6:02	6:12	6:18	6:34	6:46a
7:02	7:12	7:19	7:36	7:49
7:32	7:43	7:50	8:06	8:18
8:32	8:43	8:49	9:02	9:13
10:02	10:13	10:19	10:31	10:42
11:02	11:14	11:21	11:33	11:44
12:02	**12:15**	**12:21**	**12:33**	**12:44p**
1:02	**1:15**	**1:21**	**1:33**	**1:45**
2:02	**2:15**	**2:22**	**2:36**	**2:48**
3:02	**3:17**	**3:24**	**3:37**	**3:48**
4:02	**4:17**	**4:24**	**4:37**	**4:48**
5:02	**5:17**	**5:24**	**5:37**	**5:48**
6:02	**6:13**	**6:20**	**6:34**	**6:43**
7:02	**7:12**	**7:19**	**7:33**	**7:42**
8:02	**8:12**	**8:19**	**8:33**	**8:41**

357 Monday - Friday
El Norte Pkwy. then Valley Pkwy.
357 Lunes a Viernes • El Norte Pkwy. luego Valley Pkwy.

Escondido Transit Center	El Norte Pkwy. & N. Broadway	El Norte Pkwy. & Valley Pkwy.	Valley Pkwy. & Midway Dr.	Escondido Transit Center
1	**4**	**3**	**2**	**1**
6:32	6:41	6:51	6:58	7:11a
7:32	7:41	7:51	7:58	8:12
8:32	8:41	8:51	8:58	9:12
9:32	9:41	9:51	9:58	10:12
10:32	10:41	10:51	10:58	11:12
11:32	11:41	11:51	11:58	**12:13p**
12:32	**12:41**	**12:50**	**12:57**	**1:12**
1:32	**1:41**	**1:52**	**1:59**	**2:14**
2:32	**2:42**	**2:54**	**3:01**	**3:17**
3:32	**3:42**	**3:52**	**3:59**	**4:14**
4:32	**4:42**	**4:52**	**4:59**	**5:14**
5:32	**5:42**	**5:51**	**5:58**	**6:11**

355/357 El Norte Pkwy. & Valley Pkwy.
El Norte Pkwy. y Valley Pkwy.

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

355 Saturday & Sunday
Valley Pkwy. then El Norte Pkwy.
355 Sábado y Domingo • Valley Pkwy. luego El Norte Pkwy.

Escondido Transit Center	Valley Pkwy. & Midway Dr.	El Norte Pkwy. & Valley Pkwy.	El Norte Pkwy. & N. Broadway	Escondido Transit Center
1	**2**	**3**	**4**	**1**
6:32	6:41	6:45	6:57	7:08a
8:32	8:42	8:47	8:59	9:10
10:32	10:43	10:48	11:00	11:11
12:32	**12:43**	**12:48**	**1:00**	**1:11p**
2:32	**2:43**	**2:48**	**3:00**	**3:11**
4:32	**4:43**	**4:48**	**5:00**	**5:11**
6:32	**6:43**	**6:48**	**6:58**	**7:09**

357 Saturday & Sunday
El Norte Pkwy. then Valley Pkwy.
357 Sábado y Domingo • El Norte Pkwy. luego Valley Pkwy.

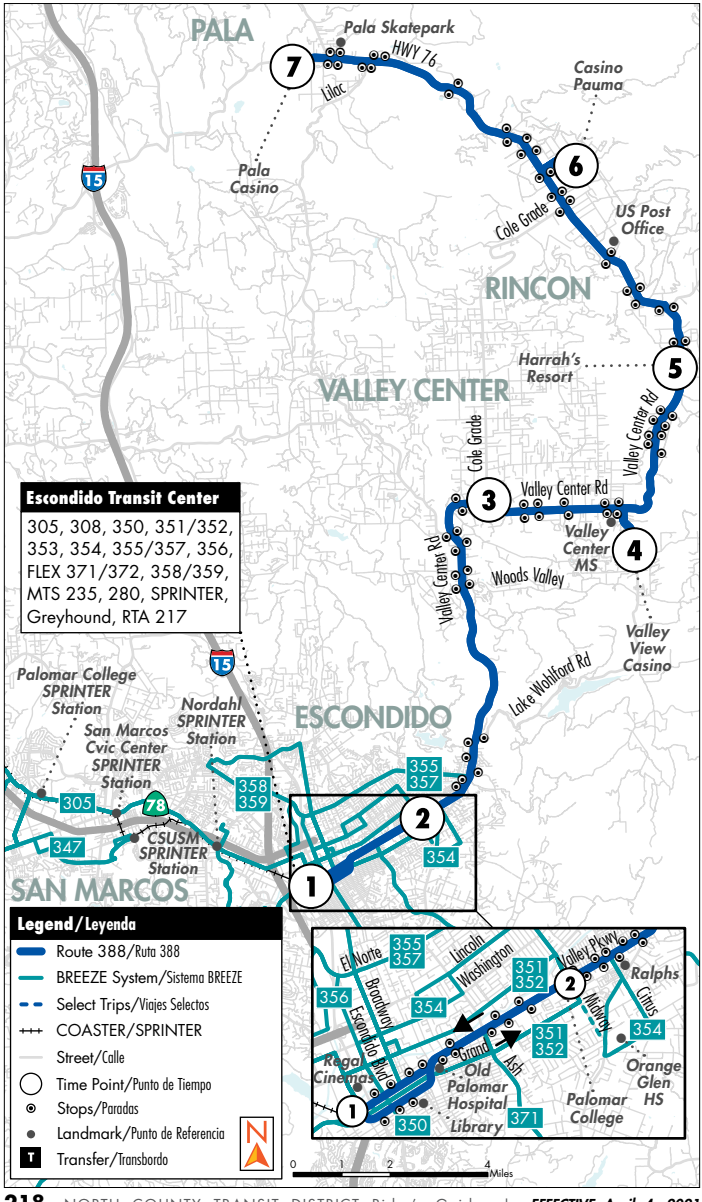
Escondido Transit Center	El Norte Pkwy. & N. Broadway	El Norte Pkwy. & Valley Pkwy.	Valley Pkwy. & Midway Dr.	Escondido Transit Center
1	**4**	**3**	**2**	**1**
7:32	7:40	7:49	7:57	8:07a
9:32	9:40	9:49	9:57	10:10
11:32	11:41	11:50	11:58	**12:11p**
1:32	**1:41**	**1:50**	**1:58**	**2:11**
3:32	**3:41**	**3:50**	**3:58**	**4:11**
5:32	**5:41**	**5:50**	**5:58**	**6:11**
7:32	**7:40**	**7:49**	**7:56**	**8:07**

388 Escondido to Pala

Escondido a Pala

M-F • SA • SU
L-V • SÁ • DO

Destinations/Destinos
- Palomar College Escondido Branch
- Regal Cinemas
- Palomar Medical Center
- Harrah's Rincon Casino
- Pala Casino
- Casino Pauma
- Valley View Casino
- East Valley Community Center



388 Escondido to Pala
Escondido a Pala

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

Monday - Friday
Northbound to Pala via Valley Center
Lunes a Viernes • Dirección hacia el norte a Pala vía Valley Center

Escondido Transit Center	Valley Pkwy. & Midway Dr.	Valley Center Rd. & Cole Grade Rd.	Valley View Casino	Harrah's Rincon Casino	Casino Pauma	Pala Casino
1	**2**	**3**	**4**	**5**	**6**	**7**
4:33	4:42	4:56	5:06	5:17	5:31	5:45a
5:03	5:13	5:27	5:37	5:48	6:02	6:16
7:03	7:15	7:33	7:43	7:54	8:10	8:24
9:03	9:15	9:33	9:43	9:54	10:10	10:25
11:03	11:17	11:35	11:45	11:56	**12:12**	**12:27p**
1:03	**1:17**	**1:36**	**1:46**	**1:57**	**2:13**	**2:29**
3:03	**3:17**	**3:37**	**3:47**	**3:58**	**4:14**	**4:30**
4:03	**4:17**	**4:37**	**4:47**	**4:58**	**5:14**	**5:30**
5:03	**5:17**	**5:38**	**5:48**	**5:59**	**6:15**	**6:32**
7:03	**7:15**	**7:32**	**7:42**	**7:53**	**8:09**	**8:25**

Monday - Friday
Southbound to Escondido via Valley Center
Lunes a Viernes • Dirección hacia el sur a Escondido vía Valley Center

Pala Casino	Casino Pauma	Harrah's Rincon Casino	Valley View Casino	Valley Center Rd. & Cole Grade Rd.	Valley Pkwy. & Midway Dr.	Escondido Transit Center
7	**6**	**5**	**4**	**3**	**2**	**1**
6:12	6:25	6:38	6:48	6:58	7:13	7:27a
7:12	7:25	7:38	7:48	7:58	8:13	8:27
9:09	9:23	9:37	9:47	9:57	10:13	10:27
11:09	11:23	11:37	11:47	11:57	**12:13**	**12:27p**
1:09	**1:23**	**1:38**	**1:48**	**1:58**	**2:13**	**2:27**
3:07	**3:21**	**3:36**	**3:47**	**3:57**	**4:12**	**4:27**
5:07	**5:21**	**5:36**	**5:47**	**5:57**	**6:12**	**6:27**
6:14	**6:27**	**6:40**	**6:51**	**6:59**	**7:13**	**7:27**
7:14	**7:27**	**7:40**	**7:51**	**7:59**	**8:13**	**8:27**
9:15	**9:28**	**9:41**	**9:52**	**10:00**	**10:14**	**10:27**

388 Escondido to Pala
Escondido a Pala

See pg. 6 for Holiday schedules/Ver pág. 248 para obtener los horarios de días festivos

Saturday & Sunday
Northbound to Pala via Valley Center
Sábado y Domingo • Dirección hacia el norte a Pala vía Valley Center

Escondido Transit Center	Valley Pkwy. & Midway Dr.	Valley Center Rd. & Cole Grade Rd.	Valley View Casino	Harrah's Rincon Casino	Casino Pauma	Pala Casino
1	**2**	**3**	**4**	**5**	**6**	**7**
5:33	5:43	5:58	6:08	6:19	6:34	6:48a
6:33	6:44	7:01	7:11	7:22	7:38	7:52
9:03	9:15	9:33	9:43	9:54	10:10	10:25
11:03	11:17	11:35	11:45	11:56	**12:12**	**12:27p**
1:03	**1:17**	**1:36**	**1:46**	**1:57**	**2:13**	**2:29**
3:03	**3:17**	**3:37**	**3:47**	**3:58**	**4:14**	**4:30**
4:03	**4:17**	**4:37**	**4:47**	**4:58**	**5:14**	**5:30**
5:03	**5:17**	**5:38**	**5:48**	**5:59**	**6:15**	**6:32**
7:03	**7:15**	**7:32**	**7:42**	**7:53**	**8:09**	**8:25**

Saturday & Sunday
Southbound to Escondido via Valley Center
Sábado y Domingo • Dirección hacia el sur a Escondido vía Valley Center

Pala Casino	Casino Pauma	Harrah's Rincon Casino	Valley View Casino	Valley Center Rd. & Cole Grade Rd.	Valley Pkwy. & Midway Dr.	Escondido Transit Center
7	**6**	**5**	**4**	**3**	**2**	**1**
6:11	6:24	6:37	6:47	6:57	7:12	7:26a
7:11	7:24	7:37	7:47	7:57	8:12	8:26
8:38	8:52	9:06	9:16	9:26	9:42	9:56
10:38	10:52	11:06	11:16	11:26	11:42	11:56
12:38	**12:52**	**1:07**	**1:17**	**1:27**	**1:42**	**1:56p**
3:06	**3:20**	**3:35**	**3:46**	**3:56**	**4:11**	**4:26**
5:06	**5:20**	**5:35**	**5:46**	**5:56**	**6:11**	**6:26**
6:13	**6:26**	**6:39**	**6:50**	**6:58**	**7:12**	**7:26**
7:13	**7:26**	**7:39**	**7:50**	**7:58**	**8:12**	**8:26**
9:14	**9:27**	**9:40**	**9:51**	**9:59**	**10:13**	**10:26**

APPENDIX D

STREET SEGMENT AND INTERSECTION COUNT SHEETS AND TRAFFIC VOLUMES

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Valley Blvd, between Grand Ave and Valley Parkway**

Date: **Thursday, March 22, 2018** Total Daily Volume: **9980** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
46	42	27	21	33	67	221	528	586	473	632	619	687	735	709	810	854	838	612	500	416	275	164	85
14	14	9	7	6	12	29	105	165	100	158	136	145	181	163	202	200	250	166	141	108	93	54	30
15	7	6	2	8	12	40	114	144	108	147	140	189	171	178	209	229	205	161	132	108	79	42	20
9	14	10	5	8	19	57	144	131	132	151	149	165	183	181	203	211	176	154	103	109	60	30	17
8	7	2	7	11	24	95	165	146	133	176	194	188	200	187	196	214	207	131	124	91	43	38	18

Date: **Thursday, March 22, 2018** Total Daily Volume: **8745** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
44	36	26	20	24	53	175	420	503	394	534	532	598	627	634	734	780	756	548	447	376	251	153	80
13	10	9	7	6	11	20	86	141	83	133	116	139	149	150	186	182	233	144	125	96	86	50	29
14	5	6	2	5	9	29	91	124	93	123	117	157	151	158	187	214	180	152	119	99	74	40	18
9	14	10	5	5	15	48	113	114	105	123	125	143	150	159	184	193	162	141	93	98	54	27	15
8	7	1	6	8	18	78	130	124	113	155	174	159	177	167	177	191	181	111	110	83	37	36	18

Date: **Thursday, March 22, 2018** Total Daily Volume: **1235** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
2	6	1	1	9	14	46	108	83	79	98	87	89	108	75	76	74	82	64	53	40	24	11	5
1	4	0	0	0	1	9	19	24	17	25	20	6	32	13	16	18	17	22	16	12	7	4	1
1	2	0	0	3	3	11	23	20	15	24	23	32	20	20	22	15	25	9	13	9	5	2	2
0	0	0	0	3	4	9	31	17	27	28	24	22	33	22	19	18	14	13	10	11	6	3	2
0	0	1	1	3	6	17	35	22	20	21	20	29	23	20	19	23	26	20	14	8	6	2	0

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Valley Parkway, between Juniper and Ivy Street**
Description: **Westbound Volume**

Date: **Thursday, March 22, 2018** Total Daily Volume: **14785**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
14	33	30	59	110	399	925	1370	1059	788	901	977
0	7	12	9	12	48	163	306	309	176	195	253
0	9	4	9	24	72	226	322	282	205	250	241
7	9	8	17	37	116	242	340	222	177	229	219
7	8	6	24	37	163	294	402	246	230	227	264

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
1033	923	954	955	973	1004	747	528	446	273	201	83
279	216	245	230	229	287	210	137	145	68	60	17
244	217	231	273	239	253	189	152	103	77	60	27
256	242	239	226	252	228	176	124	93	69	47	23
254	248	239	226	253	236	172	115	105	59	34	16

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Valley Parkway, between Hickory St and Fig St**

Date: **Thursday, March 22, 2018** Total Daily Volume: **23681** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
82	68	57	62	109	389	934	1592	1497	1200	1524	1517	1726	1599	1640	1737	1769	1753	1362	1028	874	607	374	181
13	17	18	15	14	53	159	333	437	279	364	383	414	397	407	471	440	481	373	293	241	185	121	59
36	14	9	5	25	73	205	380	381	272	383	338	445	359	404	426	464	490	354	265	240	173	103	47
21	23	18	19	31	108	241	402	323	320	388	366	437	419	407	428	437	358	343	230	205	138	81	43
12	14	12	23	39	155	329	477	356	329	389	430	430	424	422	412	428	424	292	240	188	111	69	32

Date: **Thursday, March 22, 2018** Total Daily Volume: **9030** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
41	34	25	17	26	54	157	384	444	400	576	551	639	641	669	772	842	771	588	482	388	278	160	91
10	6	9	7	6	13	23	67	132	83	142	132	149	153	152	197	204	225	158	132	93	101	52	36
15	7	5	1	6	10	36	92	107	86	140	114	163	143	180	189	229	198	164	122	110	80	42	22
11	15	8	4	5	10	38	111	95	112	134	133	157	167	165	196	207	162	141	106	100	55	33	19
5	6	3	5	9	21	60	114	110	119	160	172	170	178	172	190	202	186	125	122	85	42	33	14

Date: **Thursday, March 22, 2018** Total Daily Volume: **14651** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
41	34	32	45	83	335	777	1208	1053	800	948	966	1087	958	971	965	927	982	774	546	486	329	214	90
3	11	9	8	8	40	136	266	305	196	222	251	265	244	255	274	236	256	215	161	148	84	69	23
21	7	4	4	19	63	169	288	274	186	243	224	282	216	224	237	235	292	190	143	130	93	61	25
10	8	10	15	26	98	203	291	228	208	254	233	280	252	242	232	230	196	202	124	105	83	48	24
7	8	9	18	30	134	269	363	246	210	229	258	260	246	250	222	226	238	167	118	103	69	36	18

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Grand Ave, between Juniper St and Ivy St**

Date: **Thursday, March 22, 2018** Total Daily Volume: **9545** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
37	37	20	17	50	101	249	540	557	518	583	685	708	734	730	732	766	728	496	420	390	235	138	74
8	9	9	6	4	11	40	66	141	121	144	165	161	207	172	172	215	207	128	137	106	63	46	20
10	11	4	2	9	24	53	121	145	108	133	172	183	179	177	213	168	176	126	120	99	71	41	23
13	10	3	6	12	32	70	159	123	163	149	165	188	167	187	175	197	173	117	75	101	57	28	14
6	7	4	3	25	34	86	194	148	126	157	183	176	181	194	172	186	172	125	88	84	44	23	17

Date: **Thursday, March 22, 2018** Total Daily Volume: **4235** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
23	20	12	8	12	30	69	167	211	195	249	281	312	319	346	346	375	374	218	215	211	125	81	36
5	3	6	5	2	5	5	24	37	36	65	63	65	95	81	82	110	103	57	65	58	34	25	10
4	5	3	1	1	6	17	37	62	48	54	68	73	74	79	100	85	89	67	63	50	43	25	10
10	8	2	1	2	8	19	47	46	64	57	73	96	70	91	76	91	95	46	37	55	31	16	8
4	4	1	1	7	11	28	59	66	47	73	77	78	80	95	88	89	87	48	50	48	17	15	8

Date: **Thursday, March 22, 2018** Total Daily Volume: **5310** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
14	17	8	9	38	71	180	373	346	323	334	404	396	415	384	386	391	354	278	205	179	110	57	38
3	6	3	1	2	6	35	42	104	85	79	102	96	112	91	90	105	104	71	72	48	29	21	10
6	6	1	1	8	18	36	84	83	60	79	104	110	105	98	113	83	87	59	57	49	28	16	13
3	2	1	5	10	24	51	112	77	99	92	92	92	97	96	99	106	78	71	38	46	26	12	6
2	3	3	2	18	23	58	135	82	79	84	106	98	101	99	84	97	85	77	38	36	27	8	9

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Grand Ave, between Grape St and Fig St**

Date: **Thursday, March 22, 2018** Total Daily Volume: **15132** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
53	41	35	28	83	225	516	887	893	706	851	938	961	1067	1107	1207	1326	1279	919	683	580	390	220	137
14	10	13	7	9	38	92	144	257	162	201	218	244	276	287	293	337	356	267	205	146	109	72	43
15	10	4	6	17	39	120	199	211	158	195	235	232	238	264	310	319	337	219	195	143	112	63	33
11	11	9	7	25	60	141	255	197	192	216	235	232	254	269	302	341	332	228	156	149	91	44	33
13	10	9	8	32	88	163	289	228	194	239	250	253	299	287	302	329	254	205	127	142	78	41	28

Date: **Thursday, March 22, 2018** Total Daily Volume: **9061** Description: **Eastbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
39	27	23	10	21	53	153	351	411	389	493	537	573	691	670	782	913	908	610	470	410	282	155	90
12	10	8	5	4	16	21	59	111	85	120	120	139	184	165	193	235	250	180	136	98	87	48	30
9	7	2	1	3	7	33	78	100	89	108	128	143	142	154	199	222	248	156	138	103	80	40	16
8	5	5	1	7	6	49	100	87	108	116	152	141	177	168	189	243	234	142	115	103	65	35	24
10	5	8	3	7	24	50	114	113	107	149	137	150	188	183	201	213	176	132	81	106	50	32	20

Date: **Thursday, March 22, 2018** Total Daily Volume: **6071** Description: **Westbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
14	14	12	18	62	172	363	536	482	317	358	401	388	376	437	425	413	371	309	213	170	108	65	47
2	0	5	2	5	22	71	85	146	77	81	98	105	92	122	100	102	106	87	69	48	22	24	13
6	3	2	5	14	32	87	121	111	69	87	107	89	96	110	111	97	89	63	57	40	32	23	17
3	6	4	6	18	54	92	155	110	84	100	83	91	77	101	113	98	98	86	41	46	26	9	9
3	5	1	5	25	64	113	175	115	87	90	113	103	111	104	101	116	78	73	46	36	28	9	8

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **2nd Ave, between Juniper St and Ivy St**
Description: **Eastbound Volume**

Date: **Thursday, March 22, 2018** Total Daily Volume: **13658**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
67	49	33	27	33	85	293	690	767	646	790	806
22	19	10	8	6	22	40	126	218	141	199	178
18	7	6	2	6	14	44	147	190	145	180	191
11	12	11	6	10	14	88	179	188	170	178	206
16	11	6	11	11	35	121	238	171	190	233	231

12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
871	1023	962	1174	1244	1204	888	692	559	394	226	135
203	236	233	315	304	351	230	203	126	133	76	55
215	246	238	282	308	291	237	194	147	107	57	20
211	263	233	283	318	295	233	156	155	86	43	31
242	278	258	294	314	267	188	139	131	68	50	29

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Juniper St, between Valley Parkway and Grand Ave**

Date: **Thursday, March 22, 2018** Total Daily Volume: **5865** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
15	8	5	12	11	41	141	316	434	245	378	396	520	438	384	431	405	448	349	252	283	209	109	35
5	3	2	6	0	1	23	42	108	69	90	78	128	108	102	98	112	137	83	56	79	50	36	8
3	2	2	2	4	6	36	70	95	64	67	97	160	114	101	126	65	102	110	62	74	58	26	16
3	1	0	4	1	11	35	80	116	51	106	107	117	87	88	93	134	84	77	71	68	55	27	2
4	2	1	0	6	23	47	124	115	61	115	114	115	129	93	114	94	125	79	63	62	46	20	9

Date: **Thursday, March 22, 2018** Total Daily Volume: **2671** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
9	5	3	7	11	20	55	159	233	146	157	203	248	228	192	190	214	168	138	82	102	62	28	11
2	2	1	2	0	1	12	26	74	48	44	40	73	48	47	39	58	53	35	17	31	14	10	3
3	1	1	1	4	4	7	35	53	35	29	44	57	64	46	47	37	46	40	17	24	22	2	3
2	1	0	4	1	3	15	32	66	29	41	53	58	47	50	44	70	29	35	18	21	13	9	2
2	1	1	0	6	12	21	66	40	34	43	66	60	69	49	60	49	40	28	30	26	13	7	3

Date: **Thursday, March 22, 2018** Total Daily Volume: **3194** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
6	3	2	5	0	21	86	157	201	99	221	193	272	210	192	241	191	280	211	170	181	147	81	24
3	1	1	4	0	0	11	16	34	21	46	38	55	60	55	59	54	84	48	39	48	36	26	5
0	1	1	1	0	2	29	35	42	29	38	53	103	50	55	79	28	56	70	45	50	36	24	13
1	0	0	0	0	8	20	48	50	22	65	54	59	40	38	49	64	55	42	53	47	42	18	0
2	1	0	0	0	11	26	58	75	27	72	48	55	60	44	54	45	85	51	33	36	33	13	6

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Juniper St, between Grand Ave and 2nd Ave**

Date: **Thursday, March 22, 2018** Total Daily Volume: **6810** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
30	17	5	14	24	67	190	448	541	335	453	483	529	513	450	486	491	488	413	288	264	153	85	43
8	5	4	1	2	3	35	77	167	96	109	123	129	123	105	133	149	137	112	79	80	43	20	9
5	5	0	4	4	12	40	86	124	86	89	108	142	140	116	117	92	120	91	71	62	43	29	13
10	3	0	5	4	19	39	126	131	83	126	118	114	111	111	106	119	98	105	61	69	39	23	14
7	4	1	4	14	33	76	159	119	70	129	134	144	139	118	130	131	133	105	77	53	28	13	7

Date: **Thursday, March 22, 2018** Total Daily Volume: **3617** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
17	6	2	7	11	33	84	209	304	190	141	298	336	289	248	291	268	259	206	143	123	88	45	19
3	2	2	1	0	2	16	43	92	58	58	75	84	66	61	80	74	87	60	39	45	22	10	5
3	2	0	2	3	7	13	39	73	54	18	52	91	74	56	61	52	62	43	35	25	28	13	4
7	1	0	3	1	8	16	50	77	38	0	79	72	68	66	56	69	49	55	25	29	21	13	7
4	1	0	1	7	16	39	77	62	40	65	92	89	81	65	94	73	61	48	44	24	17	9	3

Date: **Thursday, March 22, 2018** Total Daily Volume: **3193** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
13	11	3	7	13	34	106	239	237	145	312	185	193	224	202	195	223	229	207	145	141	65	40	24
5	3	2	0	2	1	19	34	75	38	51	48	45	57	44	53	75	50	52	40	35	21	10	4
2	3	0	2	1	5	27	47	51	32	71	56	51	66	60	56	40	58	48	36	37	15	16	9
3	2	0	2	3	11	23	76	54	45	126	39	42	43	45	50	50	49	50	36	40	18	10	7
3	3	1	3	7	17	37	82	57	30	64	42	55	58	53	36	58	72	57	33	29	11	4	4

TUESDAY - SEPTEMBER 25, 2018 CITY: ESCONDIDO PROJECT: PTD18-0928-01

HICKORY ST - VALLEY PKWY TO WASHINGTON AVE

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		3					12:00	31		34				
00:15	1		0					12:15	37		33				
00:30	4		5					12:30	26		32				
00:45	3	10	4	12			22	12:45	26	120	40	139			259
01:00	4		2					13:00	21		23				
01:15	2		2					13:15	25		22				
01:30	2		1					13:30	32		24				
01:45	1	9	0	5			14	13:45	27	105	35	104			209
02:00	3		0					14:00	46		38				
02:15	3		4					14:15	48		40				
02:30	0		0					14:30	38		47				
02:45	2	8	3	7			15	14:45	43	175	38	163			338
03:00	1		0					15:00	64		37				
03:15	0		0					15:15	42		32				
03:30	0		0					15:30	53		27				
03:45	2	3	2	2			5	15:45	57	216	41	137			353
04:00	3		1					16:00	62		47				
04:15	1		4					16:15	68		55				
04:30	1		2					16:30	57		49				
04:45	3	8	9	16			24	16:45	62	249	47	198			447
05:00	7		8					17:00	72		43				
05:15	6		14					17:15	60		33				
05:30	8		16					17:30	68		43				
05:45	18	39	25	63			102	17:45	51	251	41	160			411
06:00	13		39					18:00	40		39				
06:15	18		41					18:15	45		50				
06:30	23		42					18:30	45		36				
06:45	26	80	46	168			248	18:45	47	177	35	160			337
07:00	26		51					19:00	35		38				
07:15	19		51					19:15	40		31				
07:30	32		52					19:30	34		43				
07:45	22	99	72	226			325	19:45	23	132	28	140			272
08:00	19		57					20:00	24		21				
08:15	22		49					20:15	30		24				
08:30	19		26					20:30	21		14				
08:45	16	76	44	176			252	20:45	19	94	26	85			179
09:00	25		44					21:00	24		19				
09:15	27		33					21:15	23		22				
09:30	19		34					21:30	17		9				
09:45	23	94	30	141			235	21:45	12	76	15	65			141
10:00	21		32					22:00	20		9				
10:15	24		21					22:15	8		15				
10:30	33		37					22:30	13		11				
10:45	27	105	29	119			224	22:45	9	50	8	43			93
11:00	29		32					23:00	15		9				
11:15	29		24					23:15	7		5				
11:30	34		29					23:30	6		8				
11:45	40	132	25	110			242	23:45	8	36	3	25			61
Total Vol.		663		1045			**1708**			1681		1419			**3100**

Daily Totals

NB	SB	EB	WB	**Combined**
2344	2464			**4808**

	AM			**PM**		
Split %	38.8%	61.2%	**35.5%**	54.2%	45.8%	**64.5%**
Peak Hour	11:30	07:15	**07:00**	16:45	16:00	**16:15**
Volume	142	232	**325**	262	198	**453**
P.H.F.	0.89	0.81	**0.86**	0.88	0.90	**0.92**

TUESDAY - SEPTEMBER 25, 2018 CITY: ESCONDIDO PROJECT: PTD18-0928-01

FIG ST - WASHINGTON AVE TO VALLEY PKWY

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		4					12:00	57		59				
00:15	2		2					12:15	51		53				
00:30	5		2					12:30	53		52				
00:45	3	15	2	10			25	12:45	56	217	56	220			437
01:00	6		2					13:00	46		74				
01:15	3		6					13:15	59		73				
01:30	2		4					13:30	51		55				
01:45	1	12	5	17			29	13:45	69	225	65	267			492
02:00	1		1					14:00	66		60				
02:15	1		5					14:15	62		61				
02:30	1		4					14:30	72		76				
02:45	1	4	2	12			16	14:45	71	271	80	277			548
03:00	0		4					15:00	74		84				
03:15	3		3					15:15	67		61				
03:30	2		0					15:30	70		79				
03:45	3	8	3	10			18	15:45	79	290	71	295			585
04:00	2		3					16:00	98		52				
04:15	1		5					16:15	101		79				
04:30	6		5					16:30	79		66				
04:45	7	16	7	20			36	16:45	80	358	88	285			643
05:00	6		9					17:00	102		63				
05:15	9		16					17:15	92		75				
05:30	26		23					17:30	85		71				
05:45	24	65	34	82			147	17:45	56	335	65	274			609
06:00	28		27					18:00	76		79				
06:15	34		33					18:15	73		64				
06:30	41		48					18:30	63		76				
06:45	34	137	60	168			305	18:45	60	272	64	283			555
07:00	42		83					19:00	43		65				
07:15	49		75					19:15	53		53				
07:30	54		83					19:30	46		50				
07:45	49	194	86	327			521	19:45	42	184	31	199			383
08:00	49		92					20:00	34		29				
08:15	45		81					20:15	50		39				
08:30	46		75					20:30	46		30				
08:45	39	179	89	337			516	20:45	38	168	41	139			307
09:00	39		63					21:00	29		28				
09:15	44		41					21:15	46		31				
09:30	48		60					21:30	38		23				
09:45	34	165	60	224			389	21:45	32	145	20	102			247
10:00	54		50					22:00	28		21				
10:15	50		54					22:15	25		18				
10:30	44		63					22:30	18		12				
10:45	50	198	54	221			419	22:45	19	90	14	65			155
11:00	52		56					23:00	17		12				
11:15	61		84					23:15	13		17				
11:30	59		53					23:30	10		13				
11:45	47	219	57	250			469	23:45	8	48	8	50			98
Total Vol.		1212		1678			**2890**			2603		2456			**5059**

	Daily Totals				
	NB	SB	EB	WB	Combined
	3815	4134			**7949**

	AM			PM		
Split %	41.9%	58.1%	**36.4%**	51.5%	48.5%	**63.6%**
Peak Hour	11:15	07:30	**07:30**	16:15	14:45	**16:15**
Volume	224	342	**539**	362	304	**658**
P.H.F.	0.92	0.93	**0.96**	0.84	0.90	**0.91**

PACIFIC TECHNICAL DATA

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street, Suite 100, San Diego, CA 92111

Average Daily Traffic

Location: **Fig St, between Valley Parkway and Grand Ave**

Date: **Thursday, March 22, 2018** Total Daily Volume: **5661** Description: **Total Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
34	15	12	13	26	76	186	376	315	286	324	355	399	417	410	436	457	480	345	241	186	140	73	59
6	4	2	2	5	12	31	69	81	82	64	74	111	82	114	113	118	147	109	60	60	49	25	19
13	4	0	1	3	18	36	85	91	73	77	74	99	98	98	125	129	116	88	66	41	39	20	13
6	1	8	5	8	20	57	112	70	61	90	93	80	117	105	112	108	108	79	69	35	29	15	13
9	6	2	5	10	26	62	110	73	70	93	114	109	120	93	86	102	109	69	46	50	23	13	14

Date: **Thursday, March 22, 2018** Total Daily Volume: **3214** Description: **Northbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
15	9	7	5	17	47	103	212	151	157	181	213	242	231	235	253	274	303	199	112	102	78	38	30
3	2	2	0	3	7	19	45	41	44	32	46	79	47	54	73	69	96	67	23	39	29	16	8
3	2	0	0	2	13	21	46	51	43	38	48	52	42	60	70	71	73	45	30	20	23	10	3
4	1	5	2	7	12	26	54	31	31	51	56	47	72	70	61	59	63	45	39	13	13	4	8
5	4	0	3	5	15	37	67	28	39	60	63	64	70	51	49	75	71	42	20	30	13	8	11

Date: **Thursday, March 22, 2018** Total Daily Volume: **2447** Description: **Southbound Volume**

0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
19	6	5	8	9	29	83	164	164	129	143	142	157	186	175	183	183	177	146	129	84	62	35	29
3	2	0	2	2	5	12	24	40	38	32	28	32	35	60	40	49	51	42	37	21	20	9	11
10	2	0	1	1	5	15	39	40	30	39	26	47	56	38	55	58	43	43	36	21	16	10	10
2	0	3	3	1	8	31	58	39	30	39	37	33	45	35	51	49	45	34	30	22	16	11	5
4	2	2	2	5	11	25	43	45	31	33	51	45	50	42	37	27	38	27	26	20	10	5	3

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Centre City
EAST & WEST: El Norte

PROJECT #: SC1152
LOCATION #: 4
CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ S ▼ E ▶ ◀ W

		NORTHBOUND Centre City			SOUTHBOUND Centre City			EASTBOUND El Norte			WESTBOUND El Norte			
	LANES:	NL 2	NT 2	NR 1	SL 2	ST 2	SR 1	EL 2	ET 2	ER 1	WL 2	WT 2	WR 0	TOTAL
AM	7:00 AM	35	38	26	52	186	5	4	115	67	73	157	24	782
	7:15 AM	29	59	13	61	199	14	4	173	67	68	179	45	911
	7:30 AM	49	74	19	62	310	17	1	151	72	64	197	39	1,055
	7:45 AM	41	50	28	59	266	18	2	186	59	78	182	38	1,007
	8:00 AM	40	64	19	57	281	10	2	127	57	66	165	28	916
	8:15 AM	49	41	24	45	139	15	3	130	52	61	181	31	771
	8:30 AM	34	52	29	33	132	13	4	103	54	65	115	25	659
	8:45 AM	47	49	21	20	106	5	3	104	65	64	128	19	631
	VOLUMES	324	427	179	389	1,619	97	23	1,089	493	539	1,304	249	6,732
	APPROACH %	35%	46%	19%	18%	77%	5%	1%	68%	31%	26%	62%	12%	
	APP/DEPART	930	/	697	2,105	/	2,651	1,605	/	1,652	2,092	/	1,732	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	159	247	79	239	1,056	59	9	637	255	276	723	150	3,889
	APPROACH %	33%	51%	16%	18%	78%	4%	1%	71%	28%	24%	63%	13%	
	PEAK HR FACTOR		0.854			0.870			0.912			0.958		0.922
	APP/DEPART	485	/	405	1,354	/	1,586	901	/	953	1,149	/	945	0
MIDDAY	11:00 AM	61	61	25	24	97	8	6	110	41	32	91	17	573
	11:15 AM	49	48	46	35	75	11	8	91	36	28	105	22	554
	11:30 AM	47	56	32	28	79	8	7	133	49	41	119	20	619
	11:45 AM	73	77	31	25	80	10	7	123	45	42	123	15	651
	12:00 PM	44	67	22	28	61	12	6	101	50	50	102	24	567
	12:15 PM	59	76	32	30	67	8	10	132	51	42	124	19	650
	12:30 PM	63	82	45	25	82	12	5	96	57	35	85	21	608
	12:45 PM	51	79	35	23	89	10	8	116	50	39	101	18	619
	VOLUMES	447	546	268	218	630	79	57	902	379	309	850	156	4,841
	APPROACH %	35%	43%	21%	24%	68%	9%	4%	67%	28%	23%	65%	12%	
	APP/DEPART	1,261	/	747	927	/	1,317	1,338	/	1,385	1,315	/	1,392	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	223	276	117	111	287	38	30	489	195	175	468	78	2,487
	APPROACH %	36%	45%	19%	25%	66%	9%	4%	68%	27%	24%	65%	11%	
	PEAK HR FACTOR		0.851			0.948			0.925			0.974		0.955
	APP/DEPART	616	/	382	436	/	657	714	/	714	721	/	734	0
PM	4:00 PM	82	130	58	39	64	8	6	189	49	41	139	37	842
	4:15 PM	79	130	77	26	52	12	12	207	58	30	134	43	860
	4:30 PM	78	114	75	58	86	11	4	198	33	46	146	37	886
	4:45 PM	101	162	67	43	60	10	16	246	49	26	138	26	944
	5:00 PM	75	137	77	46	62	9	8	208	57	37	158	43	917
	5:15 PM	94	194	76	47	74	6	6	202	45	41	143	39	967
	5:30 PM	78	129	72	45	39	4	9	240	40	48	183	44	931
	5:45 PM	93	136	60	57	55	8	6	204	33	43	146	32	873
	VOLUMES	680	1,132	562	361	492	68	67	1,694	364	312	1,187	301	7,220
	APPROACH %	29%	48%	24%	39%	53%	7%	3%	80%	17%	17%	66%	17%	
	APP/DEPART	2,374	/	1,504	921	/	1,162	2,125	/	2,613	1,800	/	1,941	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	348	622	292	181	235	29	39	896	191	152	622	152	3,759
	APPROACH %	28%	49%	23%	41%	53%	7%	3%	80%	17%	16%	67%	16%	
	PEAK HR FACTOR		0.867			0.876			0.905			0.842		0.972
	APP/DEPART	1,262	/	814	445	/	573	1,126	/	1,367	926	/	1,005	0

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#01	File Name:	ITM-21-049-01
Intersection:	East El Norte Parkway & North Broadway	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Broadway Southbound			East El Norte Parkway Westbound			North Broadway Northbound			East El Norte Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	21	97	55	29	283	9	20	62	12	28	112	19	747
7:15	22	94	73	52	269	15	16	95	33	38	173	23	903
7:30	28	93	70	39	236	16	21	90	30	48	231	23	925
7:45	46	122	60	45	238	24	44	106	32	52	174	39	982
8:00	56	142	96	29	187	18	31	130	28	58	85	23	883
8:15	47	122	87	54	236	19	23	82	35	58	146	23	932
8:30	34	79	58	42	247	18	18	35	28	34	120	21	734
8:45	16	55	43	34	175	5	21	45	35	20	103	21	573
Total	270	804	542	324	1871	124	194	645	233	336	1144	192	6679
Approach%	16.7	49.8	33.5	14.0	80.7	5.3	18.1	60.2	21.7	20.1	68.4	11.5	
Total%	4.0	12.0	8.1	4.9	28.0	1.9	2.9	9.7	3.5	5.0	17.1	2.9	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	177	479	313	167	897	77	119	408	125	216	636	108	3,722
Approach%	18.3	49.4	32.3	14.6	78.6	6.7	18.3	62.6	19.2	22.5	66.3	11.3	
Total%	4.8	12.9	8.4	4.5	24.1	2.1	3.2	11.0	3.4	5.8	17.1	2.9	
PHF			0.82			0.92			0.86			0.79	0.95

PM	North Broadway Southbound			East El Norte Parkway Westbound			North Broadway Northbound			East El Norte Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	22	76	41	27	180	5	21	79	63	69	309	18	910
16:15	16	65	27	37	180	16	26	72	63	68	262	27	859
16:30	22	85	37	21	182	15	39	111	76	63	256	26	933
16:45	18	72	36	43	170	24	40	92	75	74	282	40	966
17:00	16	51	39	36	182	36	22	94	56	78	308	22	940
17:15	23	61	35	25	167	13	35	103	67	64	281	21	895
17:30	18	74	46	40	162	17	28	97	67	63	265	26	903
17:45	20	48	30	26	177	16	24	84	70	80	281	26	882
Total	155	532	291	255	1400	142	235	732	537	559	2244	206	7288
Approach%	15.8	54.4	29.8	14.2	77.9	7.9	15.6	48.7	35.7	18.6	74.6	6.8	
Total%	2.1	7.3	4.0	3.5	19.2	1.9	3.2	10.0	7.4	7.7	30.8	2.8	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	79	269	147	125	701	88	136	400	274	279	1,127	109	3,734
Approach%	16.0	54.3	29.7	13.7	76.7	9.6	16.8	49.4	33.8	18.4	74.4	7.2	
Total%	2.1	7.2	3.9	3.3	18.8	2.4	3.6	10.7	7.3	7.5	30.2	2.9	
PHF			0.86			0.90			0.90			0.93	0.97

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

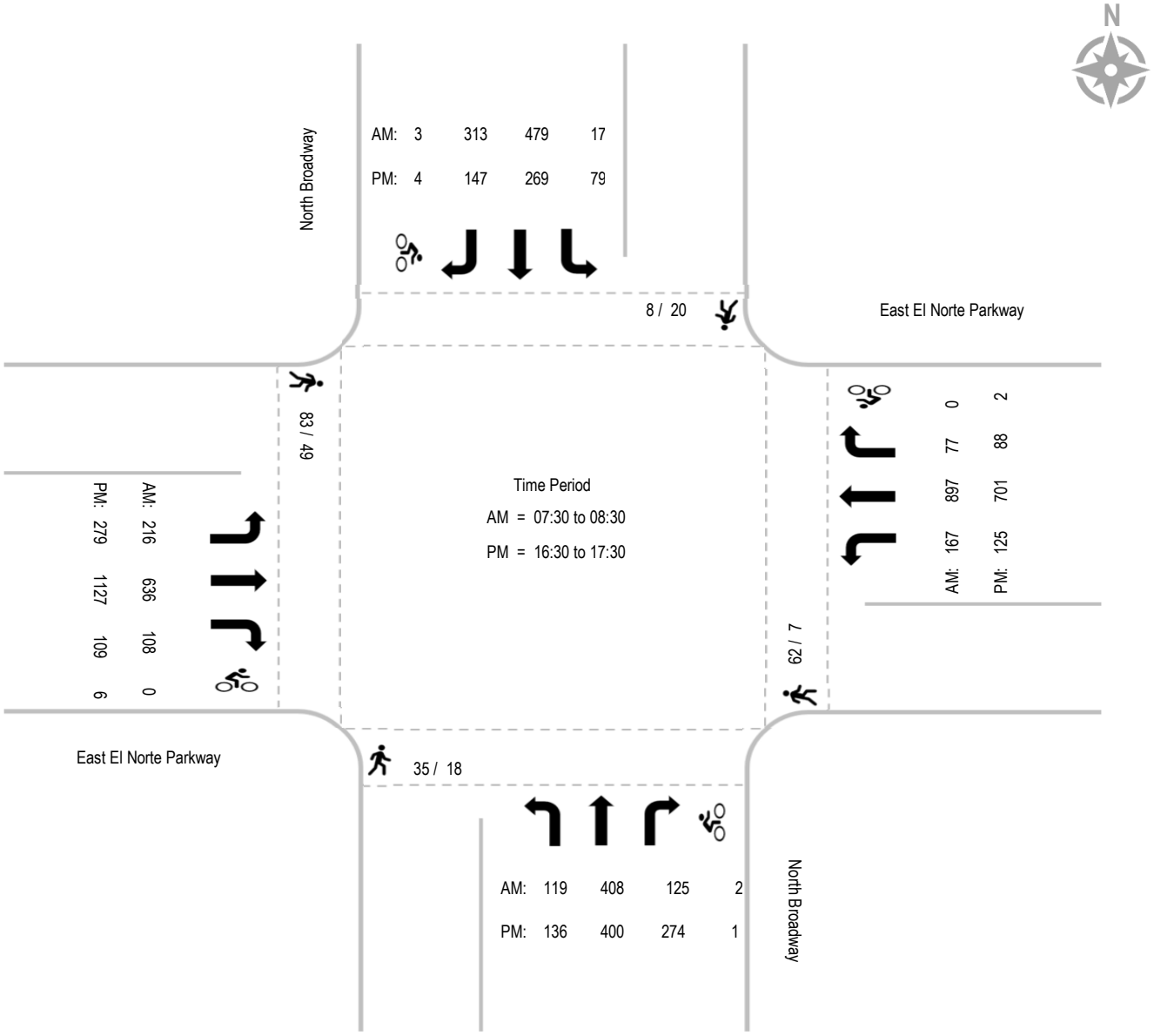
Location:	#01	File Name:	ITM-21-049-01
Intersection:	East El Norte Parkway & North Broadway	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Broadway Southbound				East El Norte Parkway Westbound				North Broadway Northbound				East El Norte Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	1	0	0	0	0	0	5	0	0	0	6	0	0	0	12	1
7:15	0	0	0	0	5	0	0	0	3	0	2	0	6	0	0	0	14	2
7:30	1	0	0	1	0	0	0	0	7	0	0	0	12	0	0	0	20	1
7:45	2	0	0	0	16	0	0	0	5	0	0	0	13	0	0	0	36	0
8:00	4	0	0	0	22	0	0	0	9	0	0	0	24	0	0	0	59	0
8:15	0	0	0	0	13	0	0	0	4	0	0	0	17	0	0	0	34	0
8:30	0	0	0	0	5	0	0	0	1	0	0	0	2	0	0	0	8	0
8:45	0	0	0	1	1	0	0	0	1	0	0	0	3	0	0	0	5	1
Ped Total	8				62				35				83				188	
Bike Total		0	1	2		0	0	0		0	2	0		0	0	0		5

PM	North Broadway Southbound				East El Norte Parkway Westbound				North Broadway Northbound				East El Norte Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	4	0	0	0	0	0	0	0	1	0	0	0	10	1	0	0	15	1
16:15	0	0	0	1	0	0	0	0	3	0	0	0	6	1	0	0	9	2
16:30	12	0	0	1	2	0	1	0	1	0	0	0	4	1	0	0	19	3
16:45	0	0	0	0	1	0	0	0	5	0	0	0	6	0	0	0	12	0
17:00	0	0	0	0	1	0	0	0	3	0	0	0	6	0	0	0	10	0
17:15	3	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	5	0
17:30	1	0	1	0	1	0	1	0	4	0	0	0	5	0	2	0	11	4
17:45	0	0	1	0	2	0	0	0	0	0	1	0	11	0	1	0	13	3
Ped Total	20				7				18				49				94	
Bike Total		0	2	2		0	2	0		0	1	0		3	3	0		13

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#01	File Name:	ITM-21-049-01
	Intersection:	East El Norte Parkway & North Broadway	Project:	LLG Ref. 3-21-3338
	Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-21-049-02
Intersection:	East El Norte Parkway & North Fig Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

AM	North Fig Street Southbound			East El Norte Parkway Westbound			North Fig Street Northbound			East El Norte Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	1	3	17	9	335	2	13	7	12	1	148	12	560
7:15	2	10	7	9	306	0	8	12	15	2	208	16	595
7:30	2	9	12	17	351	5	22	13	20	3	255	32	741
7:45	2	15	8	25	318	8	25	23	26	4	225	39	718
8:00	3	34	15	31	329	2	19	22	9	5	171	19	659
8:15	2	30	1	15	270	4	9	21	15	8	163	31	569
8:30	1	5	4	4	253	9	13	4	7	4	162	19	485
8:45	0	1	5	6	215	2	9	2	9	3	153	14	419
Total	13	107	69	116	2377	32	118	104	113	30	1485	182	4746
Approach%	6.9	56.6	36.5	4.6	94.1	1.3	35.2	31.0	33.7	1.8	87.5	10.7	
Total%	0.3	2.3	1.5	2.4	50.1	0.7	2.5	2.2	2.4	0.6	31.3	3.8	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	9	68	42	82	1,304	15	74	70	70	14	859	106	2,713
Approach%	7.6	57.1	35.3	5.9	93.1	1.1	34.6	32.7	32.7	1.4	87.7	10.8	
Total%	0.3	2.5	1.5	3.0	48.1	0.6	2.7	2.6	2.6	0.5	31.7	3.9	
PHF			0.57			0.94			0.72			0.84	0.92

PM	North Fig Street Southbound			East El Norte Parkway Westbound			North Fig Street Northbound			East El Norte Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	1	3	5	2	221	1	13	4	12	6	286	18	572
16:15	0	1	3	5	225	2	13	8	9	4	327	26	623
16:30	0	2	6	9	210	1	10	6	20	8	284	21	577
16:45	0	4	9	8	211	1	12	5	15	5	292	32	594
17:00	0	5	5	10	207	2	12	2	17	6	291	20	577
17:15	0	4	7	5	199	2	12	7	18	8	343	30	635
17:30	2	3	3	7	215	0	15	2	9	4	340	16	616
17:45	0	2	3	5	171	4	16	6	10	8	360	28	613
Total	3	24	41	51	1659	13	103	40	110	49	2523	191	4807
Approach%	4.4	35.3	60.3	3.0	96.3	0.8	40.7	15.8	43.5	1.8	91.3	6.9	
Total%	0.1	0.5	0.9	1.1	34.5	0.3	2.1	0.8	2.3	1.0	52.5	4.0	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	2	14	18	27	792	8	55	17	54	26	1,334	94	2,441
Approach%	5.9	41.2	52.9	3.3	95.8	1.0	43.7	13.5	42.9	1.8	91.7	6.5	
Total%	0.1	0.6	0.7	1.1	32.4	0.3	2.3	0.7	2.2	1.1	54.6	3.9	
PHF			0.77			0.93			0.85			0.92	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-21-049-02
Intersection:	East El Norte Parkway & North Fig Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

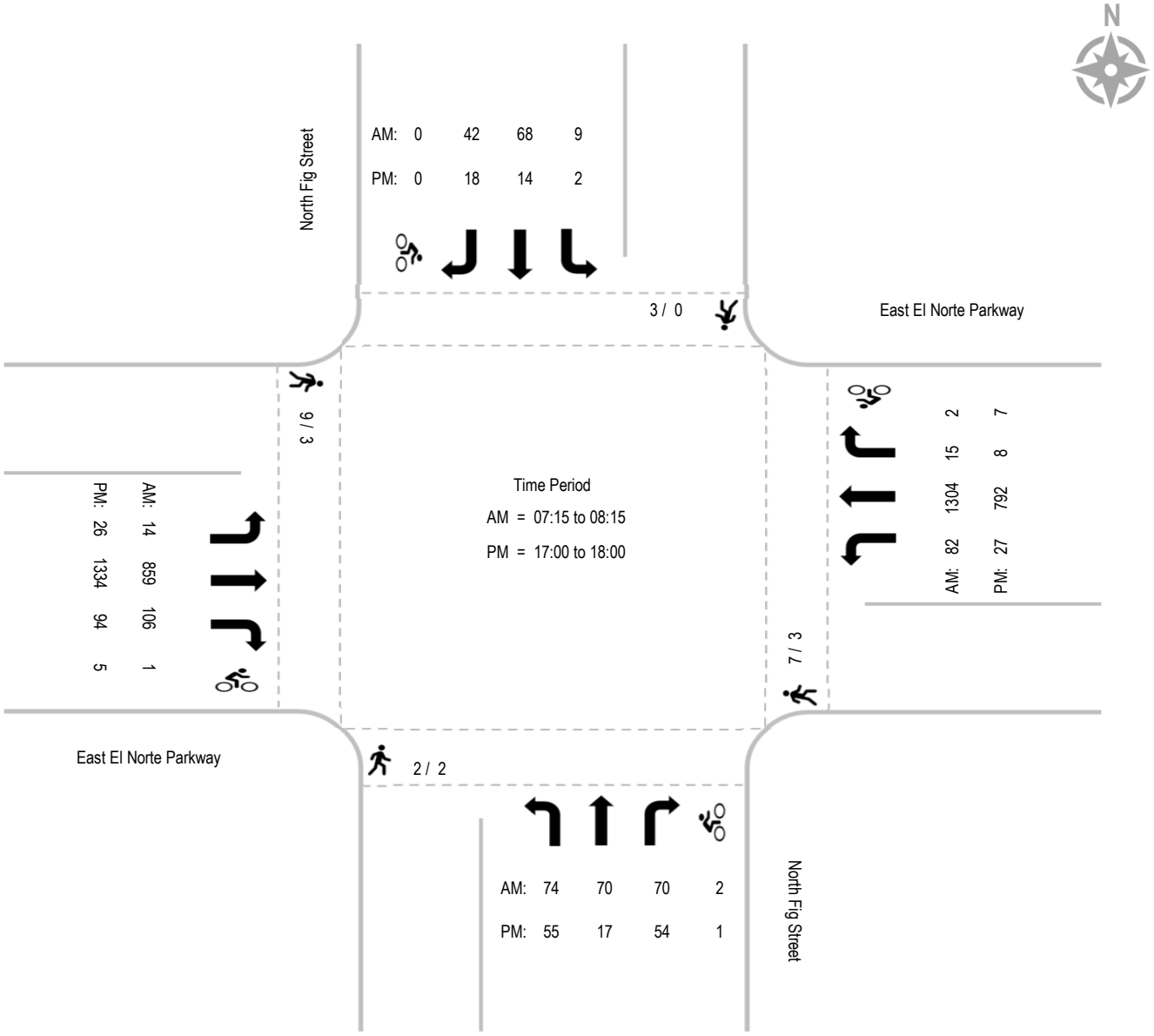
AM	North Fig Street Southbound				East El Norte Parkway Westbound				North Fig Street Northbound				East El Norte Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
7:15	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	2	1
7:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:45	1	0	0	0	3	0	0	0	0	1	0	0	1	0	0	0	5	1
8:00	0	0	0	0	1	0	0	0	0	0	0	0	4	0	1	0	5	1
8:15	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	2	1
8:30	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	1
8:45	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
Ped Total	3				7				2				9				21	
Bike Total		0	0	0		0	2	0		2	0	0		0	1	0		5

PM	North Fig Street Southbound				East El Norte Parkway Westbound				North Fig Street Northbound				East El Norte Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	1	0	1	0	0	2	0	0	0	2	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	4	0	2	0	0	0	0	0	2	0	2	6
17:30	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	3
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Ped Total	0				3				2				3				8	
Bike Total		0	0	0		0	6	1		1	0	0		0	4	1		13

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-21-049-02
Intersection:	East El Norte Parkway & North Fig Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-21-049-03
Intersection:	Lincoln Avenue & North Broadway	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Broadway Southbound			East Lincoln Avenue Westbound			North Broadway Northbound			West Lincoln Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	128	33	11	17	3	16	87	4	11	3	30	343
7:15	2	148	37	14	15	5	24	114	3	6	3	29	400
7:30	1	160	23	33	23	12	26	113	4	9	5	22	431
7:45	4	167	59	25	30	22	50	131	4	10	9	37	548
8:00	4	169	33	16	31	17	34	140	4	19	8	43	518
8:15	5	174	44	11	21	13	18	95	5	25	8	32	451
8:30	1	141	29	13	23	9	22	77	3	10	8	30	366
8:45	3	103	17	10	14	4	26	81	2	14	9	27	310
Total	20	1190	275	133	174	85	216	838	29	104	53	250	3367
Approach%	1.3	80.1	18.5	33.9	44.4	21.7	19.9	77.4	2.7	25.6	13.0	61.4	
Total%	0.6	35.3	8.2	4.0	5.2	2.5	6.4	24.9	0.9	3.1	1.6	7.4	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	14	670	159	85	105	64	128	479	17	63	30	134	1,948
Approach%	1.7	79.5	18.9	33.5	41.3	25.2	20.5	76.8	2.7	27.8	13.2	59.0	
Total%	0.7	34.4	8.2	4.4	5.4	3.3	6.6	24.6	0.9	3.2	1.5	6.9	
PHF			0.92			0.82			0.84			0.81	0.89

PM	North Broadway Southbound			East Lincoln Avenue Westbound			North Broadway Northbound			West Lincoln Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	2	108	20	7	13	8	28	164	15	21	12	38	436
16:15	1	127	20	5	11	8	28	159	13	23	10	33	438
16:30	2	123	29	3	13	9	16	202	12	39	6	38	492
16:45	4	137	22	9	13	11	32	194	12	20	9	33	496
17:00	0	108	20	7	18	13	20	167	4	22	12	31	422
17:15	1	132	16	7	11	8	25	218	15	19	7	31	490
17:30	1	115	21	6	9	10	18	172	8	17	5	22	404
17:45	1	91	37	7	8	13	18	175	14	29	11	30	434
Total	12	941	185	51	96	80	185	1451	93	190	72	256	3612
Approach%	1.1	82.7	16.3	22.5	42.3	35.2	10.7	83.9	5.4	36.7	13.9	49.4	
Total%	0.3	26.1	5.1	1.4	2.7	2.2	5.1	40.2	2.6	5.3	2.0	7.1	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	7	500	87	26	55	41	93	781	43	100	34	133	1,900
Approach%	1.2	84.2	14.6	21.3	45.1	33.6	10.1	85.2	4.7	37.5	12.7	49.8	
Total%	0.4	26.3	4.6	1.4	2.9	2.2	4.9	41.1	2.3	5.3	1.8	7.0	
PHF			0.91			0.80			0.89			0.80	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

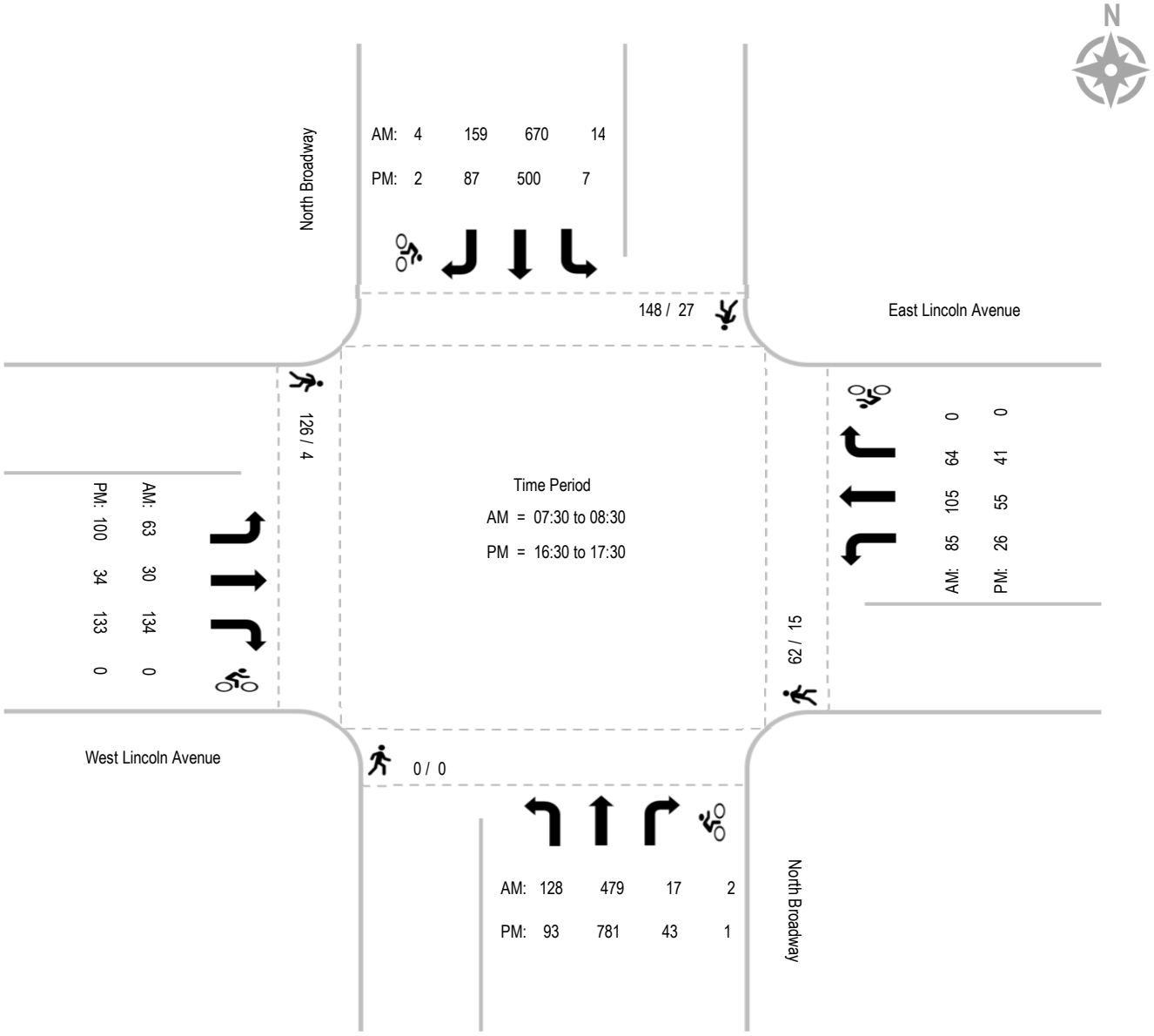
Location:	#03	File Name:	ITM-21-049-03
Intersection:	Lincoln Avenue & North Broadway	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Broadway Southbound				East Lincoln Avenue Westbound				North Broadway Northbound				West Lincoln Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	1	0	1	0	6	0	0	0	0	0	0	0	5	0	0	0	12	1
7:30	7	0	1	0	9	0	0	0	0	0	0	0	0	0	0	0	16	1
7:45	70	0	0	0	18	0	0	0	0	0	0	0	73	0	0	0	161	0
8:00	56	0	0	0	16	0	0	0	0	0	0	0	43	0	0	0	115	0
8:15	0	0	1	0	7	0	0	0	0	0	2	0	2	0	0	0	9	3
8:30	6	0	0	0	4	0	0	0	0	0	0	0	3	0	0	0	13	0
8:45	8	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	10	1
Ped Total	148				62				0				126				336	
Bike Total		0	4	0		0	0	0		0	2	0		0	0	0		6

PM	North Broadway Southbound				East Lincoln Avenue Westbound				North Broadway Northbound				West Lincoln Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	11	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	13	1
16:15	6	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	10	1
16:30	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
16:45	3	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	5	1
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:15	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	4	0
17:30	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
17:45	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	6	0
Ped Total	27				15				0				4				46	
Bike Total		0	2	0		0	0	0		0	1	0		0	0	0		3

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#03	File Name:	ITM-21-049-03
	Intersection:	Lincoln Avenue & North Broadway	Project:	LLG Ref. 3-21-3338
	Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-21-049-05
Intersection:	East Lincoln Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

AM	North Ash Street Southbound			East Lincoln Avenue Westbound			North Ash Street Northbound			East Lincoln Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	8	49	23	4	180	5	55	26	8	1	96	59	514
7:15	12	67	16	10	148	6	76	61	5	4	112	75	592
7:30	15	86	18	9	127	6	57	75	31	6	99	56	585
7:45	18	125	29	8	105	8	92	76	48	2	99	89	699
8:00	14	103	24	4	105	3	90	55	81	4	78	50	611
8:15	7	80	11	4	121	20	49	44	6	6	86	81	515
8:30	8	57	19	5	115	2	67	41	8	3	89	74	488
8:45	2	55	11	4	104	5	61	29	9	1	95	70	446
Total	84	622	151	48	1005	55	547	407	196	27	754	554	4450
Approach%	9.8	72.6	17.6	4.3	90.7	5.0	47.6	35.4	17.0	2.0	56.5	41.5	
Total%	1.9	14.0	3.4	1.1	22.6	1.2	12.3	9.1	4.4	0.6	16.9	12.4	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	59	381	87	31	485	23	315	267	165	16	388	270	2,487
Approach%	11.2	72.3	16.5	5.8	90.0	4.3	42.2	35.7	22.1	2.4	57.6	40.1	
Total%	2.4	15.3	3.5	1.2	19.5	0.9	12.7	10.7	6.6	0.6	15.6	10.9	
PHF			0.77			0.82			0.83			0.88	0.89

PM	North Ash Street Southbound			East Lincoln Avenue Westbound			North Ash Street Northbound			East Lincoln Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	9	68	8	2	125	3	66	57	9	5	153	113	618
16:15	7	57	11	1	91	2	65	58	11	6	120	91	520
16:30	8	56	8	6	110	1	65	62	5	6	129	84	540
16:45	5	64	7	1	100	8	78	79	10	9	97	69	527
17:00	7	77	9	2	119	3	72	65	11	2	119	96	582
17:15	12	56	9	2	99	5	69	70	15	13	157	114	621
17:30	10	78	4	2	124	7	58	45	11	7	173	122	641
17:45	18	55	11	4	90	5	81	65	19	5	146	121	620
Total	76	511	67	20	858	34	554	501	91	53	1094	810	4669
Approach%	11.6	78.1	10.2	2.2	94.1	3.7	48.3	43.7	7.9	2.7	55.9	41.4	
Total%	1.6	10.9	1.4	0.4	18.4	0.7	11.9	10.7	1.9	1.1	23.4	17.3	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	47	266	33	10	432	20	280	245	56	27	595	453	2,464
Approach%	13.6	76.9	9.5	2.2	93.5	4.3	48.2	42.2	9.6	2.5	55.3	42.1	
Total%	1.9	10.8	1.3	0.4	17.5	0.8	11.4	9.9	2.3	1.1	24.1	18.4	
PHF			0.93			0.87			0.88			0.89	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-21-049-05
Intersection:	East Lincoln Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

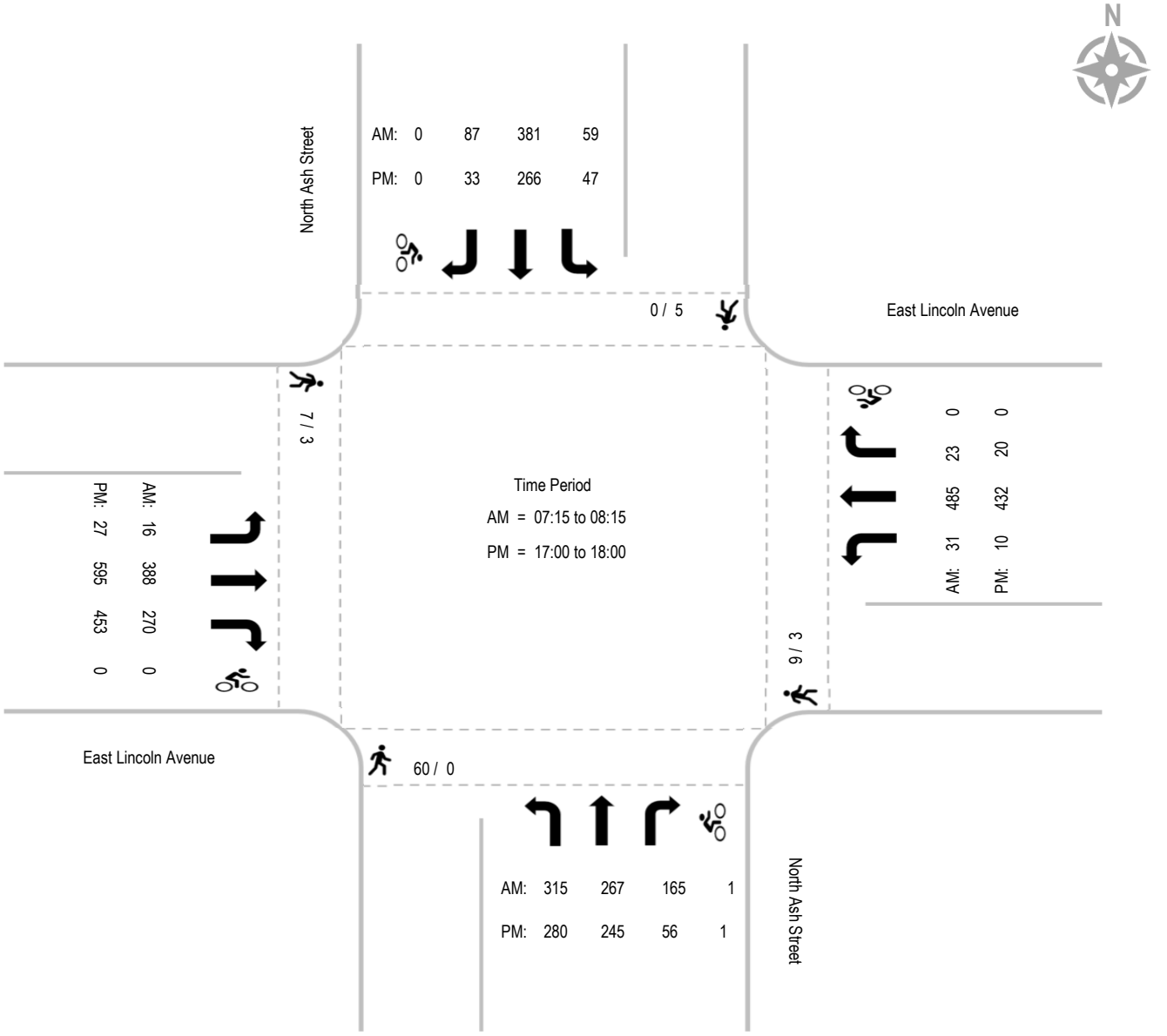
AM	North Ash Street Southbound				East Lincoln Avenue Westbound				North Ash Street Northbound				East Lincoln Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:15	0	0	0	0	1	0	0	0	4	0	0	0	1	0	0	0	6	0
7:30	0	0	0	0	3	0	0	0	26	0	0	0	3	0	0	0	32	0
7:45	0	0	0	0	0	0	0	0	14	0	0	0	3	0	0	0	17	0
8:00	0	0	0	0	2	0	0	0	10	0	1	0	0	0	0	0	12	1
8:15	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3	0
8:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
8:45	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	0
Ped Total	0				9				60				7				76	
Bike Total		0	0	0		0	0	0		0	1	0		0	0	0		1

PM	North Ash Street Southbound				East Lincoln Avenue Westbound				North Ash Street Northbound				East Lincoln Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
16:15	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
17:15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
17:30	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
17:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	5				3				0				3				11	
Bike Total		0	0	0		0	0	0		0	1	0		0	0	0		1

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-21-049-05
Intersection:	East Lincoln Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-21-049-05
Intersection:	East Lincoln Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

AM	North Ash Street Southbound			East Lincoln Avenue Westbound			North Ash Street Northbound			East Lincoln Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	8	49	23	4	180	5	55	26	8	1	96	59	514
7:15	12	67	16	10	148	6	76	61	5	4	112	75	592
7:30	15	86	18	9	127	6	57	75	31	6	99	56	585
7:45	18	125	29	8	105	8	92	76	48	2	99	89	699
8:00	14	103	24	4	105	3	90	55	81	4	78	50	611
8:15	7	80	11	4	121	20	49	44	6	6	86	81	515
8:30	8	57	19	5	115	2	67	41	8	3	89	74	488
8:45	2	55	11	4	104	5	61	29	9	1	95	70	446
Total	84	622	151	48	1005	55	547	407	196	27	754	554	4450
Approach%	9.8	72.6	17.6	4.3	90.7	5.0	47.6	35.4	17.0	2.0	56.5	41.5	
Total%	1.9	14.0	3.4	1.1	22.6	1.2	12.3	9.1	4.4	0.6	16.9	12.4	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	59	381	87	31	485	23	315	267	165	16	388	270	2,487
Approach%	11.2	72.3	16.5	5.8	90.0	4.3	42.2	35.7	22.1	2.4	57.6	40.1	
Total%	2.4	15.3	3.5	1.2	19.5	0.9	12.7	10.7	6.6	0.6	15.6	10.9	
PHF			0.77			0.82			0.83			0.88	0.89

PM	North Ash Street Southbound			East Lincoln Avenue Westbound			North Ash Street Northbound			East Lincoln Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	9	68	8	2	125	3	66	57	9	5	153	113	618
16:15	7	57	11	1	91	2	65	58	11	6	120	91	520
16:30	8	56	8	6	110	1	65	62	5	6	129	84	540
16:45	5	64	7	1	100	8	78	79	10	9	97	69	527
17:00	7	77	9	2	119	3	72	65	11	2	119	96	582
17:15	12	56	9	2	99	5	69	70	15	13	157	114	621
17:30	10	78	4	2	124	7	58	45	11	7	173	122	641
17:45	18	55	11	4	90	5	81	65	19	5	146	121	620
Total	76	511	67	20	858	34	554	501	91	53	1094	810	4669
Approach%	11.6	78.1	10.2	2.2	94.1	3.7	48.3	43.7	7.9	2.7	55.9	41.4	
Total%	1.6	10.9	1.4	0.4	18.4	0.7	11.9	10.7	1.9	1.1	23.4	17.3	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	47	266	33	10	432	20	280	245	56	27	595	453	2,464
Approach%	13.6	76.9	9.5	2.2	93.5	4.3	48.2	42.2	9.6	2.5	55.3	42.1	
Total%	1.9	10.8	1.3	0.4	17.5	0.8	11.4	9.9	2.3	1.1	24.1	18.4	
PHF			0.93			0.87			0.88			0.89	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-21-049-05
Intersection:	East Lincoln Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

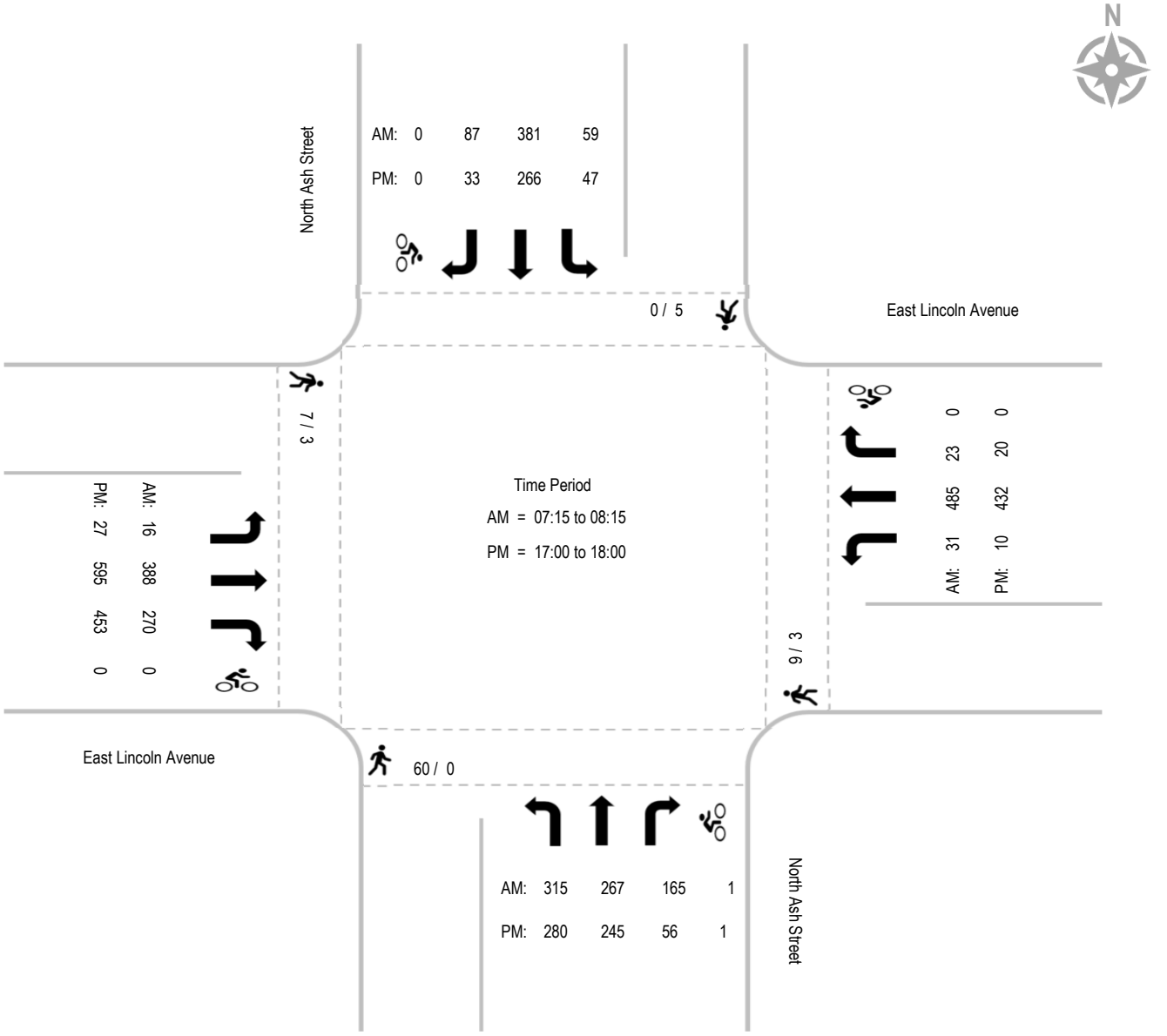
AM	North Ash Street Southbound				East Lincoln Avenue Westbound				North Ash Street Northbound				East Lincoln Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:15	0	0	0	0	1	0	0	0	4	0	0	0	1	0	0	0	6	0
7:30	0	0	0	0	3	0	0	0	26	0	0	0	3	0	0	0	32	0
7:45	0	0	0	0	0	0	0	0	14	0	0	0	3	0	0	0	17	0
8:00	0	0	0	0	2	0	0	0	10	0	1	0	0	0	0	0	12	1
8:15	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3	0
8:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
8:45	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	0
Ped Total	0				9				60				7				76	
Bike Total		0	0	0		0	0	0		0	1	0		0	0	0		1

PM	North Ash Street Southbound				East Lincoln Avenue Westbound				North Ash Street Northbound				East Lincoln Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
16:15	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
17:15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
17:30	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
17:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	5				3				0				3				11	
Bike Total		0	0	0		0	0	0		0	1	0		0	0	0		1

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#05	File Name:	ITM-21-049-05
Intersection:	East Lincoln Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#6	File Name:	ITM-21-049-06
Intersection:	East Lincoln Parkway & North Broadway	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Broaday Southbound			East Lincoln Parkway Westbound			North Broaday Northbound			Ronald Packard Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	12	61	97	11	233	6	83	56	5	66	196	117	943
7:15	17	66	119	10	226	5	105	57	6	74	229	142	1056
7:30	15	80	113	8	229	10	98	83	9	77	223	122	1067
7:45	20	105	105	32	225	15	87	124	11	84	230	148	1186
8:00	9	139	82	42	271	13	76	111	18	73	187	160	1181
8:15	13	117	86	34	249	14	80	75	19	53	145	149	1034
8:30	14	84	83	16	292	40	103	38	16	59	179	196	1120
8:45	16	53	79	20	203	10	110	42	12	62	202	130	939
Total	116	705	764	173	1928	113	742	586	96	548	1591	1164	8526
Approach%	7.3	44.5	48.2	7.8	87.1	5.1	52.1	41.2	6.7	16.6	48.2	35.2	
Total%	1.4	8.3	9.0	2.0	22.6	1.3	8.7	6.9	1.1	6.4	18.7	13.7	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	56	445	356	124	1,037	82	346	348	64	269	741	653	4,521
Approach%	6.5	51.9	41.5	10.0	83.4	6.6	45.6	45.9	8.4	16.2	44.6	39.3	
Total%	1.2	9.8	7.9	2.7	22.9	1.8	7.7	7.7	1.4	6.0	16.4	14.4	
PHF			0.93			0.89			0.85			0.90	0.95

PM	North Broaday Southbound			East Lincoln Parkway Westbound			North Broaday Northbound			Ronald Packard Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	30	67	70	20	247	9	115	75	27	125	319	154	1258
16:15	14	58	88	10	206	10	122	75	34	140	372	167	1296
16:30	12	62	77	20	219	15	134	105	32	138	314	175	1303
16:45	21	98	89	21	217	13	132	82	51	158	340	164	1386
17:00	7	69	70	15	218	12	134	58	14	121	372	157	1247
17:15	16	51	74	12	191	6	129	107	24	155	326	141	1232
17:30	5	88	75	16	185	15	116	89	41	132	285	137	1184
17:45	8	74	62	16	222	10	96	77	22	132	303	143	1165
Total	113	567	605	130	1705	90	978	668	245	1101	2631	1238	10071
Approach%	8.8	44.1	47.1	6.8	88.6	4.7	51.7	35.3	13.0	22.2	52.9	24.9	
Total%	1.1	5.6	6.0	1.3	16.9	0.9	9.7	6.6	2.4	10.9	26.1	12.3	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	77	285	324	71	889	47	503	337	144	561	1,345	660	5,243
Approach%	11.2	41.5	47.2	7.1	88.3	4.7	51.1	34.2	14.6	21.9	52.4	25.7	
Total%	1.5	5.4	6.2	1.4	17.0	0.9	9.6	6.4	2.7	10.7	25.7	12.6	
PHF			0.82			0.91			0.91			0.94	0.95

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

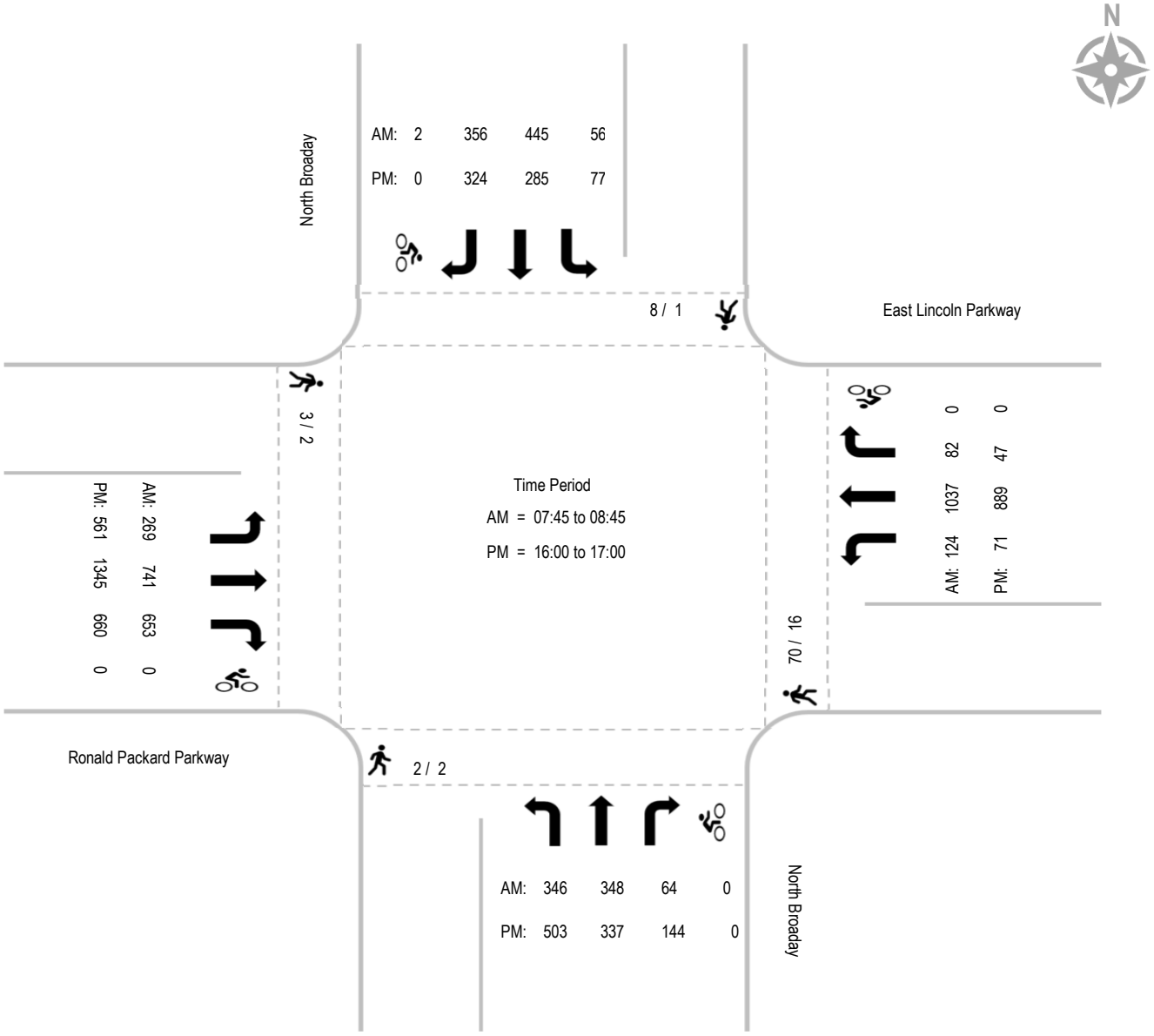
Location:	#6	File Name:	ITM-21-049-06
Intersection:	East Lincoln Parkway & North Broadway	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Broaday Southbound				East Lincoln Parkway Westbound				North Broaday Northbound				Ronald Packard Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2	1
7:15	1	0	1	0	2	0	0	0	0	0	0	0	2	0	0	0	5	1
7:30	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	13	0
7:45	4	0	0	0	27	0	0	0	1	0	0	0	0	0	0	0	32	0
8:00	2	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	15	0
8:15	0	0	0	0	9	0	0	0	1	0	0	0	1	0	0	0	11	0
8:30	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
8:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
Ped Total	8				70				2				3				83	
Bike Total		0	2	0		0	0	0		0	0	0		0	0	0		2

PM	North Broaday Southbound				East Lincoln Parkway Westbound				North Broaday Northbound				Ronald Packard Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
16:30	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3	0
16:45	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
17:15	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
17:30	0	0	0	0	7	0	0	0	0	0	0	0	1	0	0	0	8	0
17:45	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
Ped Total	1				16				2				2				21	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #6	File Name:	ITM-21-049-06
	Intersection: East Lincoln Parkway & North Broadway	Project:	LLG Ref. 3-21-3338
	Date of Count: Tuesday, August 31, 2021		Sixth Cycle Housing



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Escondido
EAST & WEST: Mission

PROJECT #: SC1152
LOCATION #: 9
CONTROL: SIGNAL

NOTES: MD WB queue

AM / PM / MD / OTHER / OTHER

N ▲ S ▼ E ▶ ◀ W

		NORTHBOUND Escondido			SOUTHBOUND Escondido			EASTBOUND Mission			WESTBOUND Mission			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	28	26	10	10	59	38	9	54	15	16	155	4	424
	7:15 AM	35	18	11	20	64	40	9	64	16	17	206	10	510
	7:30 AM	43	31	13	22	84	40	6	43	28	20	177	9	516
	7:45 AM	31	31	15	26	117	60	16	86	39	31	142	10	604
	8:00 AM	44	44	26	27	74	43	11	66	23	19	118	5	500
	8:15 AM	36	45	21	21	66	36	20	93	31	18	146	7	540
	8:30 AM	47	52	25	13	54	24	10	79	29	12	104	3	452
	8:45 AM	28	38	13	7	40	21	16	79	23	18	126	7	416
	VOLUMES	292	285	134	146	558	302	97	564	204	151	1,174	55	3,962
	APPROACH %	41%	40%	19%	15%	55%	30%	11%	65%	24%	11%	85%	4%	
	APP/DEPART	711	/	437	1,006	/	913	865	/	844	1,380	/	1,768	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	154	151	75	96	341	179	53	288	121	88	583	31	2,160
	APPROACH %	41%	40%	20%	16%	55%	29%	11%	62%	26%	13%	83%	4%	
	PEAK HR FACTOR		0.833			0.759			0.802			0.852		0.894
	APP/DEPART	380	/	235	616	/	550	462	/	459	702	/	916	0
MIDDAY	11:00 AM	37	45	25	16	57	26	22	87	38	17	94	8	472
	11:15 AM	37	42	18	16	57	27	18	112	32	22	100	10	491
	11:30 AM	48	54	31	15	62	34	24	94	42	24	105	11	544
	11:45 AM	46	64	23	16	57	43	31	132	32	28	93	9	574
	12:00 PM	53	50	27	13	64	29	22	93	38	27	114	10	540
	12:15 PM	46	50	23	15	55	24	25	131	39	27	99	6	540
	12:30 PM	48	51	31	18	62	25	33	108	23	24	81	9	513
	12:45 PM	37	54	30	35	53	44	25	124	54	30	114	11	611
	VOLUMES	352	410	208	144	467	252	200	881	298	199	800	74	4,285
	APPROACH %	36%	42%	21%	17%	54%	29%	15%	64%	22%	19%	75%	7%	
	APP/DEPART	970	/	684	863	/	964	1,379	/	1,233	1,073	/	1,404	0
	BEGIN PEAK HR		12:00 PM											
	VOLUMES	184	205	111	81	234	122	105	456	154	108	408	36	2,204
	APPROACH %	37%	41%	22%	19%	54%	28%	15%	64%	22%	20%	74%	7%	
	PEAK HR FACTOR		0.962			0.828			0.881			0.890		0.902
	APP/DEPART	500	/	346	437	/	496	715	/	648	552	/	714	0
PM	4:00 PM	47	84	37	22	52	27	28	188	53	31	106	13	688
	4:15 PM	50	73	48	29	34	23	41	208	48	27	103	11	695
	4:30 PM	41	90	41	16	58	21	43	160	39	31	94	9	643
	4:45 PM	48	98	32	22	54	29	27	161	37	20	118	16	662
	5:00 PM	48	98	47	25	49	27	32	202	36	30	114	22	730
	5:15 PM	62	86	53	20	61	22	37	204	39	36	106	10	736
	5:30 PM	61	93	50	22	53	35	24	200	35	33	112	11	729
	5:45 PM	56	72	48	18	45	9	41	163	43	18	118	16	647
	VOLUMES	413	694	356	174	406	193	273	1,486	330	226	871	108	5,530
	APPROACH %	28%	47%	24%	23%	53%	25%	13%	71%	16%	19%	72%	9%	
	APP/DEPART	1,463	/	1,075	773	/	962	2,089	/	2,016	1,205	/	1,477	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	219	375	182	89	217	113	120	767	147	119	450	59	2,857
	APPROACH %	28%	48%	23%	21%	52%	27%	12%	74%	14%	19%	72%	9%	
	PEAK HR FACTOR		0.951			0.952			0.923			0.946		0.970
	APP/DEPART	776	/	554	419	/	483	1,034	/	1,038	628	/	782	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Broadway
EAST & WEST: Mission

PROJECT #: SC1152
LOCATION #: 12
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

N ▲ S ▼ E ▶ ◀ W

		NORTHBOUND Broadway			SOUTHBOUND Broadway			EASTBOUND Mission			WESTBOUND Mission			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	27	114	12	35	157	25	14	41	14	13	145	80	677
	7:15 AM	33	114	6	49	188	25	16	54	25	19	157	55	741
	7:30 AM	36	115	8	46	187	30	21	38	22	21	149	53	726
	7:45 AM	35	102	8	45	223	33	22	70	29	14	113	63	757
	8:00 AM	21	94	12	50	178	45	25	61	30	24	109	44	693
	8:15 AM	32	112	10	40	220	25	23	81	23	12	108	57	743
	8:30 AM	21	94	12	40	184	27	27	67	19	14	89	46	640
	8:45 AM	31	96	12	34	161	26	22	64	20	13	92	43	614
	VOLUMES	236	841	80	339	1,498	236	170	476	182	130	962	441	5,591
	APPROACH %	20%	73%	7%	16%	72%	11%	21%	57%	22%	8%	63%	29%	
	APP/DEPART	1,157	/	1,452	2,073	/	1,810	828	/	895	1,533	/	1,434	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	124	423	38	181	808	133	91	250	104	71	479	217	2,919
	APPROACH %	21%	72%	6%	16%	72%	12%	20%	56%	23%	9%	62%	28%	
	PEAK HR FACTOR		0.920			0.932			0.876			0.860		0.964
	APP/DEPART	585	/	731	1,122	/	983	445	/	469	767	/	736	0
MIDDAY	11:00 AM	41	150	17	38	148	29	28	76	28	17	78	39	689
	11:15 AM	30	105	12	36	152	27	30	78	30	27	76	37	640
	11:30 AM	36	124	25	29	137	33	31	94	31	25	78	45	688
	11:45 AM	31	122	10	43	144	31	30	68	44	21	77	35	656
	12:00 PM	31	131	22	38	137	30	28	95	32	29	73	43	689
	12:15 PM	35	115	17	35	142	24	38	76	35	27	76	42	662
	12:30 PM	33	141	30	26	122	22	36	92	35	18	74	39	668
	12:45 PM	38	116	19	31	140	29	32	88	45	17	70	55	680
	VOLUMES	275	1,004	152	276	1,122	225	253	667	280	181	602	335	5,372
	APPROACH %	19%	70%	11%	17%	69%	14%	21%	56%	23%	16%	54%	30%	
	APP/DEPART	1,431	/	1,592	1,623	/	1,583	1,200	/	1,095	1,118	/	1,102	0
	BEGIN PEAK HR		12:00 PM											
	VOLUMES	137	503	88	130	541	105	134	351	147	91	293	179	2,699
	APPROACH %	19%	69%	12%	17%	70%	14%	21%	56%	23%	16%	52%	32%	
	PEAK HR FACTOR		0.892			0.946			0.958			0.971		0.979
	APP/DEPART	728	/	816	776	/	779	632	/	569	563	/	535	0
PM	4:00 PM	34	152	22	59	178	26	42	170	50	21	99	54	907
	4:15 PM	31	159	17	55	149	23	55	164	52	17	83	56	861
	4:30 PM	27	179	30	58	199	21	43	147	45	24	81	44	898
	4:45 PM	31	163	28	64	172	23	40	143	41	20	101	45	871
	5:00 PM	32	180	31	59	162	19	54	182	54	22	106	56	957
	5:15 PM	41	213	39	59	195	16	58	163	36	27	84	41	972
	5:30 PM	38	154	24	51	147	30	48	178	46	31	109	50	906
	5:45 PM	28	168	30	59	160	27	45	149	37	23	74	44	844
	VOLUMES	262	1,368	221	464	1,362	185	385	1,296	361	185	737	390	7,216
	APPROACH %	14%	74%	12%	23%	68%	9%	19%	63%	18%	14%	56%	30%	
	APP/DEPART	1,851	/	2,143	2,011	/	1,908	2,042	/	1,981	1,312	/	1,184	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	142	710	122	233	676	88	200	666	177	100	400	192	3,706
	APPROACH %	15%	73%	13%	23%	68%	9%	19%	64%	17%	14%	58%	28%	
	PEAK HR FACTOR		0.831			0.923			0.899			0.911		0.953
	APP/DEPART	974	/	1,102	997	/	953	1,043	/	1,021	692	/	630	0

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-21-049-07
Intersection:	East Mission Avenue & North Hickory Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

AM	Apartment Driveway Southbound			East Mission Avenue Westbound			North Hickory Street Northbound			East Mission Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	1	1	7	4	161	0	11	0	4	0	76	11	276
7:15	2	0	3	11	246	0	8	0	10	0	84	7	371
7:30	3	2	5	7	199	0	18	0	14	0	101	9	358
7:45	4	0	3	17	213	0	11	0	10	0	84	15	357
8:00	2	0	7	15	178	0	17	0	5	1	73	13	311
8:15	1	2	3	9	202	0	13	0	4	0	83	8	325
8:30	1	0	5	9	143	0	8	0	5	0	90	5	266
8:45	2	0	3	3	123	0	3	0	5	0	79	6	224
Total	16	5	36	75	1465	0	89	0	57	1	670	74	2488
Approach%	28.1	8.8	63.2	4.9	95.1	-	61.0	-	39.0	0.1	89.9	9.9	
Total%	0.6	0.2	1.4	3.0	58.9	-	3.6	-	2.3	0.0	26.9	3.0	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	11	2	18	50	836	-	54	-	39	1	342	44	1,397
Approach%	35.5	6.5	58.1	5.6	94.4	-	58.1	-	41.9	0.3	88.4	11.4	
Total%	0.8	0.1	1.3	3.6	59.8	-	3.9	-	2.8	0.1	24.5	3.1	
PHF			0.78			0.86			0.73			0.88	0.94

PM	Apartment Driveway Southbound			East Mission Avenue Westbound			North Hickory Street Northbound			East Mission Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	2	1	5	2	119	0	8	0	14	2	191	17	361
16:15	2	0	2	7	129	0	9	0	14	0	258	17	438
16:30	0	0	2	9	106	0	9	0	12	0	235	13	386
16:45	4	0	3	4	115	0	7	0	10	0	218	15	376
17:00	0	0	3	2	121	1	10	0	9	1	236	9	392
17:15	1	0	3	2	119	0	9	0	13	0	257	17	421
17:30	2	0	2	7	104	0	10	0	15	0	214	14	368
17:45	1	0	2	8	145	0	7	0	9	0	222	16	410
Total	12	1	22	41	958	1	69	0	96	3	1831	118	3152
Approach%	34.3	2.9	62.9	4.1	95.8	0.1	41.8	-	58.2	0.2	93.8	6.0	
Total%	0.4	0.0	0.7	1.3	30.4	0.0	2.2	-	3.0	0.1	58.1	3.7	

PM Intersection Peak Hour: **16:15 to 17:15**

Volume	6	-	10	22	471	1	35	-	45	1	947	54	1,592
Approach%	37.5	-	62.5	4.5	95.3	0.2	43.8	-	56.3	0.1	94.5	5.4	
Total%	0.4	-	0.6	1.4	29.6	0.1	2.2	-	2.8	0.1	59.5	3.4	
PHF			0.57			0.91			0.87			0.91	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-21-049-07
Intersection:	East Mission Avenue & North Hickory Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

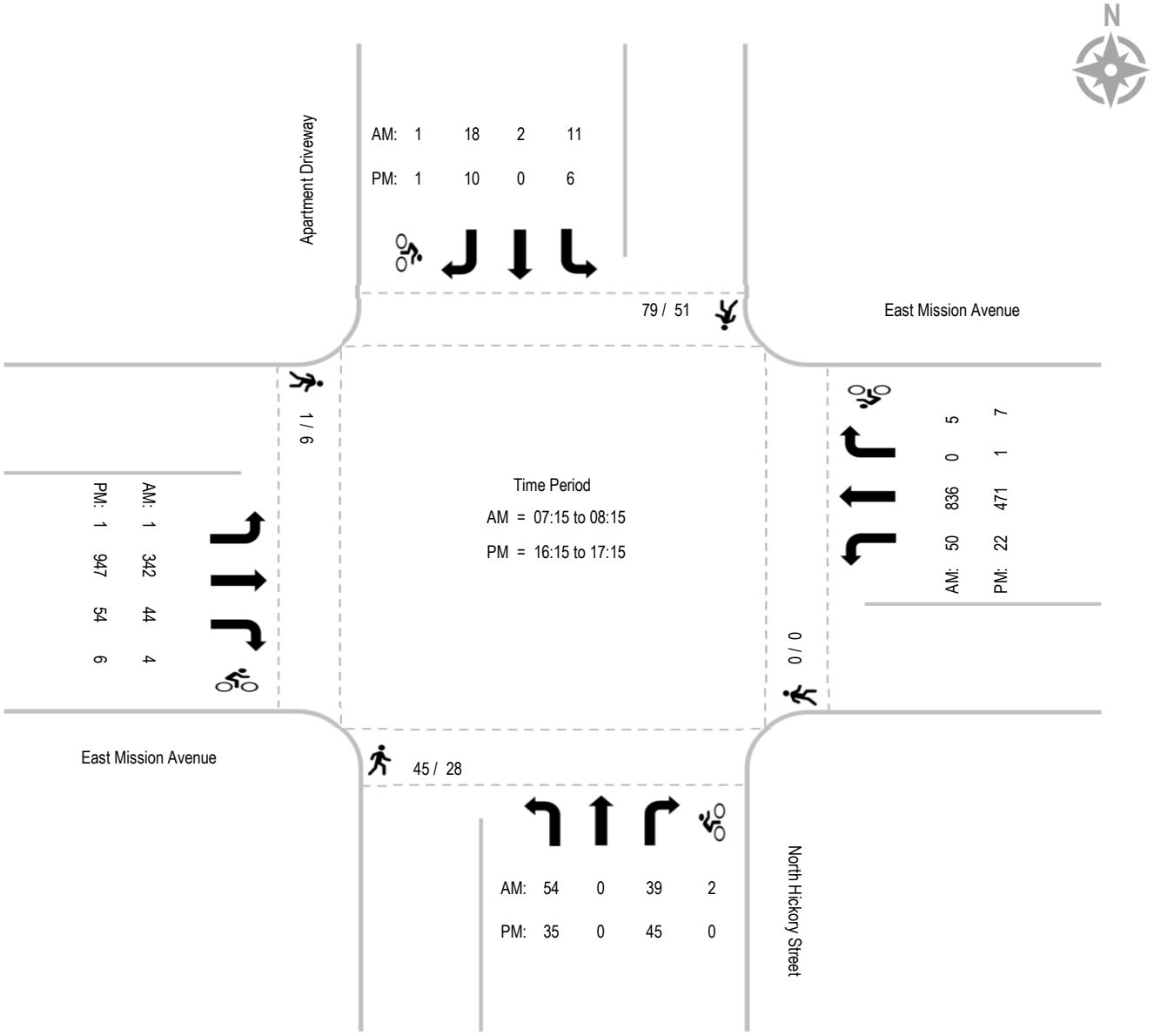
AM	Apartment Driveway Southbound				East Mission Avenue Westbound				North Hickory Street Northbound				East Mission Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	12	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	14	3
7:15	15	0	0	0	0	0	0	0	8	1	0	0	0	0	0	0	23	1
7:30	14	0	0	0	0	0	1	0	20	0	0	0	0	0	0	0	34	1
7:45	14	0	0	0	0	0	0	0	5	0	0	0	1	0	1	0	20	1
8:00	14	0	0	0	0	0	1	0	5	0	0	0	0	0	0	0	19	1
8:15	2	0	0	0	0	0	0	0	3	1	0	0	0	1	1	0	5	3
8:30	5	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	7	1
8:45	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	1
Ped Total	79				0				45				1				125	
Bike Total		0	0	1		0	5	0		2	0	0		1	2	1		12

PM	Apartment Driveway Southbound				East Mission Avenue Westbound				North Hickory Street Northbound				East Mission Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	18	0	0	1	0	1	1	0	9	0	0	0	3	0	0	0	30	3
16:15	7	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	9	2
16:30	3	0	0	0	0	1	1	0	0	0	0	0	1	0	3	0	4	5
16:45	4	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	7	0
17:00	6	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	9	0
17:15	3	0	0	0	0	0	1	0	3	0	0	0	0	0	1	0	6	2
17:30	6	0	0	0	0	0	2	0	4	0	0	0	2	0	0	0	12	2
17:45	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	8	0
Ped Total	51				0				28				6				85	
Bike Total		0	0	1		2	5	0		0	0	0		0	6	0		14

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-21-049-07
Intersection:	East Mission Avenue & North Hickory Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#08	File Name:	ITM-21-049-08
Intersection:	East Mission Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Ash Street Southbound			East Mission Avenue Westbound			North Ash Street Northbound			East Mission Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	10	91	4	3	103	24	30	57	2	7	29	9	369
7:15	16	121	10	11	116	7	39	113	3	13	49	10	508
7:30	22	143	18	14	94	16	44	158	1	43	62	23	638
7:45	22	186	26	22	67	14	38	137	6	48	57	34	657
8:00	12	150	20	22	81	17	21	136	2	25	53	21	560
8:15	7	162	7	7	101	15	32	87	6	12	41	15	492
8:30	11	101	11	3	76	8	19	76	3	6	48	8	370
8:45	10	107	8	7	68	7	17	80	2	7	39	17	369
Total	110	1061	104	89	706	108	240	844	25	161	378	137	3963
Approach%	8.6	83.2	8.2	9.9	78.2	12.0	21.6	76.1	2.3	23.8	55.9	20.3	
Total%	2.8	26.8	2.6	2.2	17.8	2.7	6.1	21.3	0.6	4.1	9.5	3.5	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	72	600	74	69	358	54	142	544	12	129	221	88	2,363
Approach%	9.7	80.4	9.9	14.3	74.4	11.2	20.3	77.9	1.7	29.5	50.5	20.1	
Total%	3.0	25.4	3.1	2.9	15.2	2.3	6.0	23.0	0.5	5.5	9.4	3.7	
PHF			0.80			0.90			0.86			0.79	0.90

PM	North Ash Street Southbound			East Mission Avenue Westbound			North Ash Street Northbound			East Mission Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	43	149	9	6	61	16	27	112	11	10	101	24	569
16:15	31	107	5	8	74	10	19	124	9	12	120	19	538
16:30	35	115	5	9	60	15	34	104	6	14	94	24	515
16:45	41	120	6	8	43	11	29	136	6	5	109	24	538
17:00	16	135	9	13	69	12	26	123	18	7	113	19	560
17:15	45	131	2	4	61	11	25	136	11	7	114	22	569
17:30	37	153	6	7	61	7	20	128	12	14	113	27	585
17:45	41	142	6	11	76	14	28	102	6	23	101	28	578
Total	289	1052	48	66	505	96	208	965	79	92	865	187	4452
Approach%	20.8	75.7	3.5	9.9	75.7	14.4	16.6	77.1	6.3	8.0	75.6	16.3	
Total%	6.5	23.6	1.1	1.5	11.3	2.2	4.7	21.7	1.8	2.1	19.4	4.2	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	139	561	23	35	267	44	99	489	47	51	441	96	2,292
Approach%	19.2	77.6	3.2	10.1	77.2	12.7	15.6	77.0	7.4	8.7	75.0	16.3	
Total%	6.1	24.5	1.0	1.5	11.6	1.9	4.3	21.3	2.1	2.2	19.2	4.2	
PHF			0.92			0.86			0.92			0.95	0.98

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

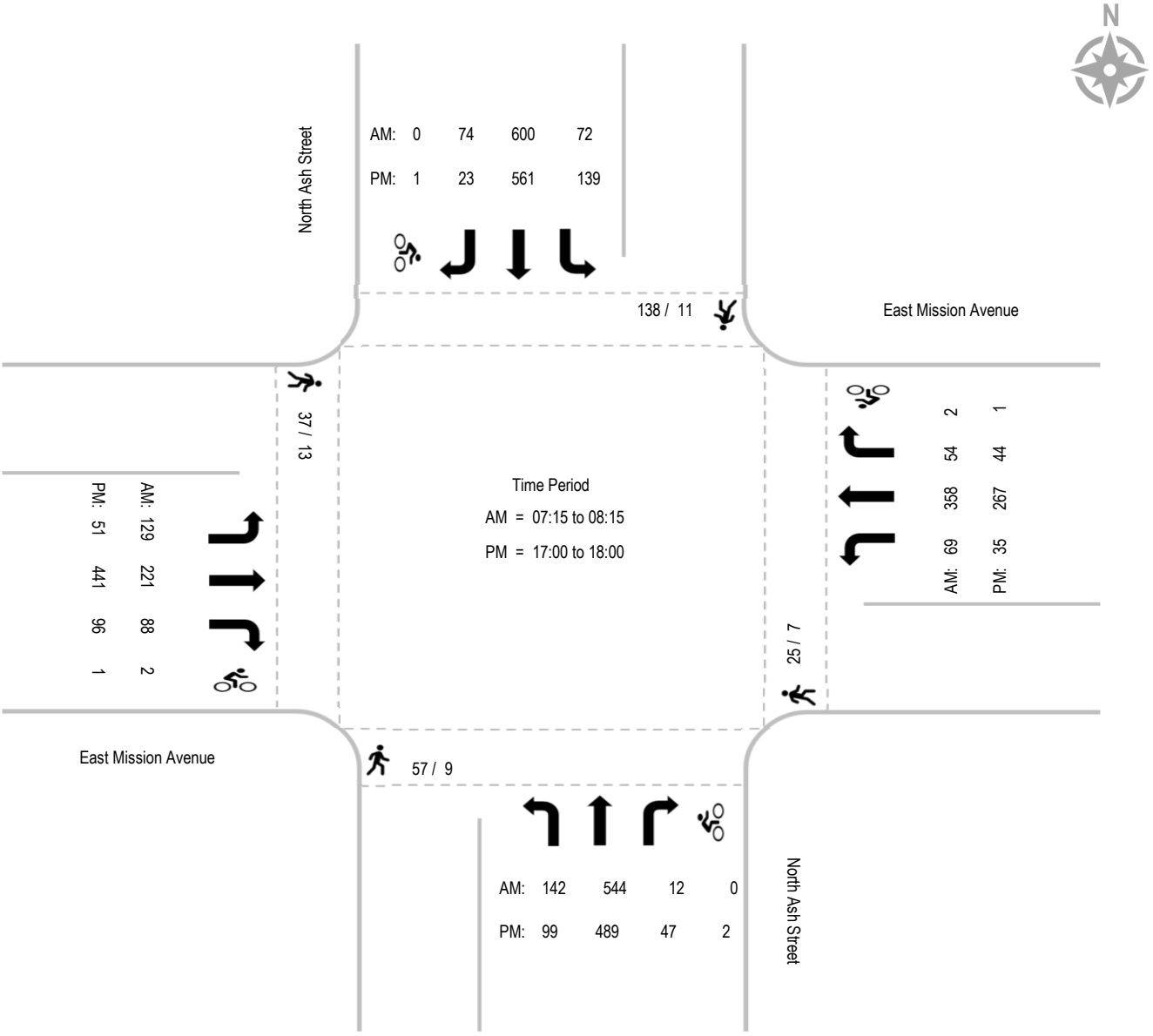
Location:	#08	File Name:	ITM-21-049-08
Intersection:	East Mission Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Ash Street Southbound				East Mission Avenue Westbound				North Ash Street Northbound				East Mission Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	2	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	5	0
7:15	8	0	0	0	0	0	2	0	4	0	0	0	18	0	0	0	30	2
7:30	38	0	0	0	9	0	0	0	24	0	0	0	13	0	0	0	84	0
7:45	55	0	0	0	8	0	0	0	21	0	0	0	0	0	0	0	84	0
8:00	21	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	26	0
8:15	9	0	0	0	4	0	0	0	1	0	0	0	0	0	1	0	14	1
8:30	4	0	0	0	0	0	0	0	3	0	0	0	2	0	1	0	9	1
8:45	1	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	5	0
Ped Total	138				25				57				37				257	
Bike Total		0	0	0		0	2	0		0	0	0		0	2	0		4

PM	North Ash Street Southbound				East Mission Avenue Westbound				North Ash Street Northbound				East Mission Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	1	0	0	0	1	0	1	0	1	0	3	0	0	1	4	4
16:15	2	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	4	1
16:30	4	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0	9	0
16:45	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	5	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	5	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	9	0
17:30	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0
17:45	0	0	0	0	1	0	0	0	2	0	0	0	3	0	0	0	6	0
Ped Total	11				7				9				13				40	
Bike Total		0	1	0		0	1	0		0	2	0		0	0	1		5

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #08	File Name:	ITM-21-049-08
	Intersection: East Mission Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
	Date of Count: Tuesday, August 31, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#09	File Name:	ITM-21-049-09
Intersection:	East Mission Avenue & Harding Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	Harding Street Southbound			East Mission Avenue Westbound			Harding Street Northbound			East Mission Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	5	19	8	2	111	2	11	6	3	2	35	1	205
7:15	3	9	11	10	133	0	4	11	4	2	53	1	241
7:30	0	23	19	22	99	12	2	15	4	1	80	0	277
7:45	4	45	39	33	77	12	3	14	6	6	67	0	306
8:00	2	49	36	37	94	2	4	9	6	1	56	6	302
8:15	0	12	18	6	68	4	12	9	3	4	42	7	185
8:30	2	9	4	5	77	1	6	4	0	3	39	6	156
8:45	4	8	4	4	67	1	4	17	0	4	43	4	160
Total	20	174	139	119	726	34	46	85	26	23	415	25	1832
Approach%	6.0	52.3	41.7	13.5	82.6	3.9	29.3	54.1	16.6	5.0	89.6	5.4	
Total%	1.1	9.5	7.6	6.5	39.6	1.9	2.5	4.6	1.4	1.3	22.7	1.4	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	9	126	105	102	403	26	13	49	20	10	256	7	1,126
Approach%	3.8	52.5	43.8	19.2	75.9	4.9	15.9	59.8	24.4	3.7	93.8	2.6	
Total%	0.8	11.2	9.3	9.1	35.8	2.3	1.2	4.4	1.8	0.9	22.7	0.6	
PHF			0.68			0.93			0.89			0.84	0.92

PM	Harding Street Southbound			East Mission Avenue Westbound			Harding Street Northbound			East Mission Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	3	14	3	5	61	2	9	12	7	7	111	21	255
16:15	2	15	4	6	65	1	9	17	10	9	129	15	282
16:30	2	15	4	8	61	1	16	9	12	7	127	0	262
16:45	3	9	7	6	48	2	12	13	15	8	144	15	282
17:00	3	20	13	8	62	1	11	16	9	9	125	21	298
17:15	3	12	10	8	68	2	9	14	8	8	127	15	284
17:30	5	17	9	4	82	1	6	18	9	3	112	15	281
17:45	4	15	10	4	80	3	5	18	9	5	110	19	282
Total	25	117	60	49	527	13	77	117	79	56	985	121	2226
Approach%	12.4	57.9	29.7	8.3	89.5	2.2	28.2	42.9	28.9	4.8	84.8	10.4	
Total%	1.1	5.3	2.7	2.2	23.7	0.6	3.5	5.3	3.5	2.5	44.2	5.4	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	14	58	39	26	260	6	38	61	41	28	508	66	1,145
Approach%	12.6	52.3	35.1	8.9	89.0	2.1	27.1	43.6	29.3	4.7	84.4	11.0	
Total%	1.2	5.1	3.4	2.3	22.7	0.5	3.3	5.3	3.6	2.4	44.4	5.8	
PHF			0.77			0.84			0.88			0.90	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

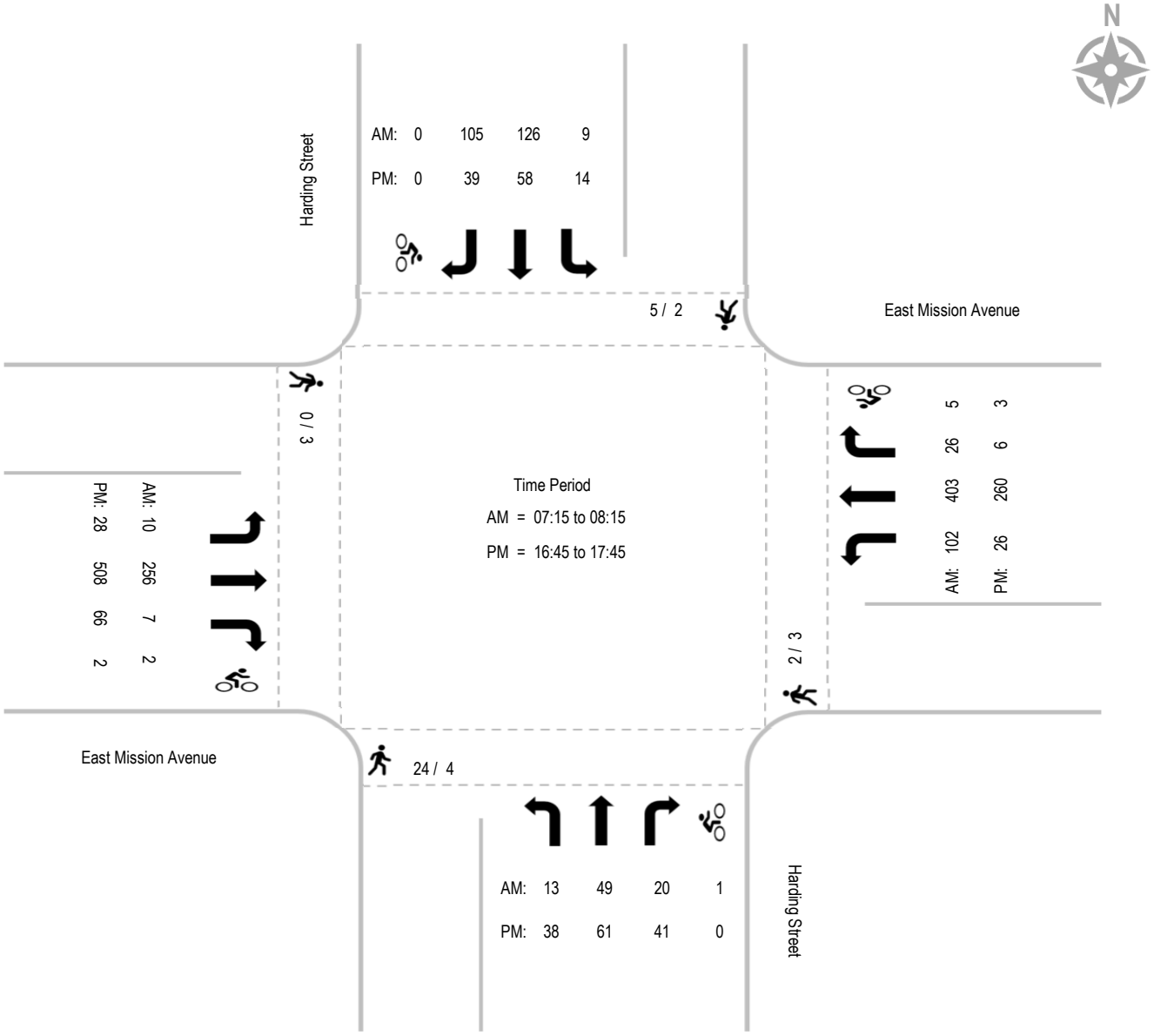
Location:	#09	File Name:	ITM-21-049-09
Intersection:	East Mission Avenue & Harding Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	Harding Street Southbound				East Mission Avenue Westbound				Harding Street Northbound				East Mission Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	2
7:15	0	0	0	0	0	0	3	0	0	1	0	0	0	0	1	0	0	5
7:30	4	0	0	0	1	0	1	0	13	0	0	0	0	0	0	0	18	1
7:45	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	0
8:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0
Ped Total	5				2				24				0				31	
Bike Total		0	0	0		0	5	0		1	0	0		0	2	0		8

PM	Harding Street Southbound				East Mission Avenue Westbound				Harding Street Northbound				East Mission Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	1	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
17:00	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	2	1
17:15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
17:30	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3	0
17:45	1	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	3	1
Ped Total	2				3				4				3				12	
Bike Total		0	0	0		0	3	0		0	0	0		0	2	0		5

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #09	File Name:	ITM-21-049-09
	Intersection: East Mission Avenue & Harding Street	Project:	LLG Ref. 3-21-3338
	Date of Count: Thursday, September 02, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#10	File Name:	ITM-21-049-10
Intersection:	East Mission Avenue & North Rose Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	North Rose Street Southbound			East Mission Avenue Westbound			North Rose Street Northbound			East Mission Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	3	59	6	10	84	8	9	35	5	0	32	9	260
7:15	1	88	1	8	113	8	20	76	6	8	41	20	390
7:30	3	64	4	13	60	28	24	66	11	33	36	25	367
7:45	5	93	10	26	65	24	30	64	9	22	40	24	412
8:00	6	78	4	17	83	9	17	35	4	5	39	33	330
8:15	4	51	3	7	51	4	14	41	8	3	33	13	232
8:30	3	35	1	6	63	3	9	40	3	1	21	8	193
8:45	0	38	2	7	49	4	8	25	9	2	27	15	186
Total	25	506	31	94	568	88	131	382	55	74	269	147	2370
Approach%	4.4	90.0	5.5	12.5	75.7	11.7	23.1	67.3	9.7	15.1	54.9	30.0	
Total%	1.1	21.4	1.3	4.0	24.0	3.7	5.5	16.1	2.3	3.1	11.4	6.2	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	15	323	19	64	321	69	91	241	30	68	156	102	1,499
Approach%	4.2	90.5	5.3	14.1	70.7	15.2	25.1	66.6	8.3	20.9	47.9	31.3	
Total%	1.0	21.5	1.3	4.3	21.4	4.6	6.1	16.1	2.0	4.5	10.4	6.8	
PHF			0.83			0.88			0.88			0.87	0.91

PM	North Rose Street Southbound			East Mission Avenue Westbound			North Rose Street Northbound			East Mission Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	6	59	3	2	52	7	10	66	9	2	83	35	334
16:15	18	60	4	8	39	5	18	73	14	6	75	28	348
16:30	10	51	1	8	48	4	15	81	19	7	88	35	367
16:45	5	86	5	3	40	4	20	77	18	5	136	33	432
17:00	7	67	1	10	60	7	11	68	5	7	87	20	350
17:15	8	77	4	7	31	3	11	64	13	6	109	30	363
17:30	6	65	6	13	45	5	12	95	22	9	91	28	397
17:45	9	66	7	12	55	5	15	89	12	10	81	19	380
Total	69	531	31	63	370	40	112	613	112	52	750	228	2971
Approach%	10.9	84.2	4.9	13.3	78.2	8.5	13.4	73.2	13.4	5.0	72.8	22.1	
Total%	2.3	17.9	1.0	2.1	12.5	1.3	3.8	20.6	3.8	1.8	25.2	7.7	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	26	295	16	33	176	19	54	304	58	27	423	111	1,542
Approach%	7.7	87.5	4.7	14.5	77.2	8.3	13.0	73.1	13.9	4.8	75.4	19.8	
Total%	1.7	19.1	1.0	2.1	11.4	1.2	3.5	19.7	3.8	1.8	27.4	7.2	
PHF			0.88			0.74			0.81			0.81	0.89

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

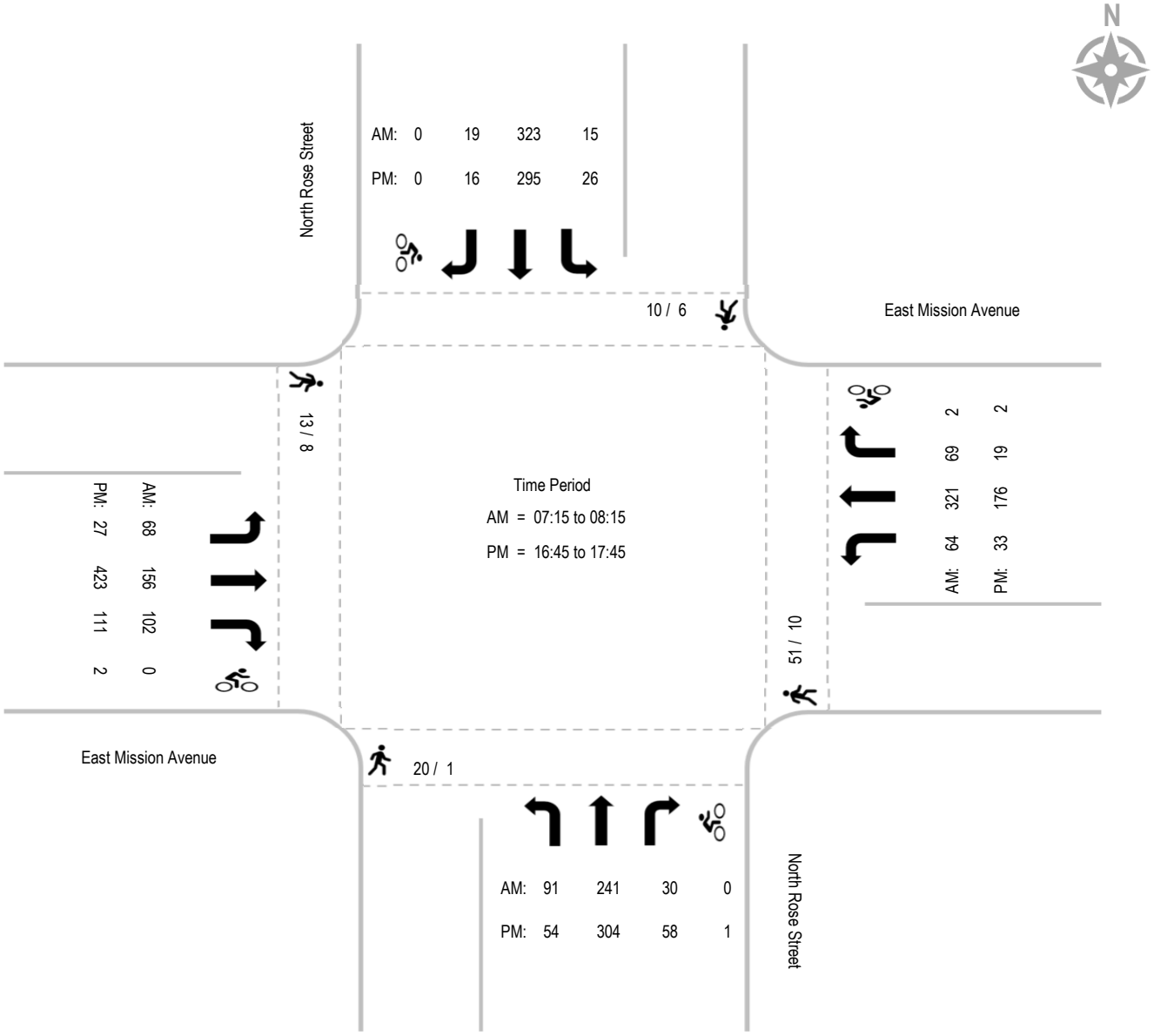
Location:	#10	File Name:	ITM-21-049-10
Intersection:	East Mission Avenue & North Rose Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	North Rose Street Southbound				East Mission Avenue Westbound				North Rose Street Northbound				East Mission Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15	2	0	0	0	1	0	0	0	7	0	0	0	0	0	0	0	10	0
7:30	1	0	0	0	14	0	0	0	4	0	0	0	10	0	0	0	29	0
7:45	1	0	0	0	31	0	1	0	6	0	0	0	1	0	0	0	39	1
8:00	0	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	5	0
8:15	2	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	5	0
8:30	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1
8:45	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
Ped Total	10				51				20				13				94	
Bike Total		0	0	0		1	1	0		0	0	0		0	0	0		2

PM	North Rose Street Southbound				East Mission Avenue Westbound				North Rose Street Northbound				East Mission Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	1	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	2	2
16:15	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	3	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0
16:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
17:15	2	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	7	0
17:30	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:45	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	7	1
Ped Total	6				10				1				8				25	
Bike Total		0	0	0		0	2	0		0	0	1		0	1	1		5

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#10	File Name: ITM-21-049-10
	Intersection:	East Mission Avenue & North Rose Street	Project: LLG Ref. 3-21-3338
	Date of Count:	Thursday, September 02, 2021	Sixth Cycle Housing



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Escondido
EAST & WEST: Washington

PROJECT #: SC1152
LOCATION #: 10
CONTROL: SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

N ▲ S ▼ E ▶ ◀ W

		NORTHBOUND Escondido			SOUTHBOUND Escondido			EASTBOUND Washington			WESTBOUND Washington			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	11	30	5	18	54	14	8	51	20	8	137	22	378
	7:15 AM	14	38	2	11	52	18	11	69	23	5	137	23	403
	7:30 AM	16	46	8	13	72	16	10	77	18	15	125	32	448
	7:45 AM	19	79	14	31	129	20	20	81	26	18	154	32	623
	8:00 AM	18	50	19	16	83	19	15	81	32	18	138	16	505
	8:15 AM	24	66	22	24	78	17	11	85	36	14	102	19	498
	8:30 AM	14	57	18	12	50	9	9	81	16	10	106	22	404
	8:45 AM	21	54	15	9	50	17	13	75	25	19	96	15	409
	VOLUMES	137	420	103	134	568	130	97	600	196	107	995	181	3,668
	APPROACH %	21%	64%	16%	16%	68%	16%	11%	67%	22%	8%	78%	14%	
	APP/DEPART	660	/	698	832	/	871	893	/	837	1,283	/	1,262	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	77	241	63	84	362	72	56	324	112	65	519	99	2,074
	APPROACH %	20%	63%	17%	16%	70%	14%	11%	66%	23%	10%	76%	14%	
	PEAK HR FACTOR		0.850			0.719			0.932			0.837		0.832
	APP/DEPART	381	/	396	518	/	539	492	/	471	683	/	668	0
MIDDAY	11:00 AM	13	59	31	19	52	18	13	102	28	20	100	21	476
	11:15 AM	22	65	37	19	75	18	13	104	30	22	103	11	519
	11:30 AM	21	56	35	24	65	12	26	106	31	26	79	19	500
	11:45 AM	16	75	33	21	71	15	17	105	20	30	98	23	524
	12:00 PM	27	53	36	16	67	20	20	123	24	35	101	20	542
	12:15 PM	21	76	30	18	70	25	22	95	23	35	109	30	554
	12:30 PM	20	53	25	20	64	20	22	123	31	34	121	26	559
	12:45 PM	18	74	34	22	83	29	27	93	29	33	94	25	561
	VOLUMES	158	511	261	159	547	157	160	851	216	235	805	175	4,235
	APPROACH %	17%	55%	28%	18%	63%	18%	13%	69%	18%	19%	66%	14%	
	APP/DEPART	930	/	846	863	/	998	1,227	/	1,271	1,215	/	1,120	0
	BEGIN PEAK HR		12:00 PM											
	VOLUMES	86	256	125	76	284	94	91	434	107	137	425	101	2,216
	APPROACH %	18%	55%	27%	17%	63%	21%	14%	69%	17%	21%	64%	15%	
	PEAK HR FACTOR		0.919			0.847			0.898			0.916		0.988
	APP/DEPART	467	/	448	454	/	528	632	/	635	663	/	605	0
PM	4:00 PM	22	88	28	40	72	22	31	165	16	31	110	30	655
	4:15 PM	23	91	31	35	83	21	33	205	34	29	80	25	690
	4:30 PM	25	88	31	29	57	11	41	198	55	18	101	17	671
	4:45 PM	30	93	43	19	77	16	22	201	28	41	111	35	716
	5:00 PM	30	122	43	31	65	7	31	182	22	24	83	31	671
	5:15 PM	29	104	29	30	53	10	31	203	36	45	91	31	692
	5:30 PM	23	112	34	34	67	13	37	180	25	20	105	20	670
	5:45 PM	21	96	31	35	62	12	32	137	17	32	89	24	588
	VOLUMES	203	794	270	253	536	112	258	1,471	233	240	770	213	5,353
	APPROACH %	16%	63%	21%	28%	59%	12%	13%	75%	12%	20%	63%	17%	
	APP/DEPART	1,267	/	1,266	901	/	1,009	1,962	/	1,993	1,223	/	1,085	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	114	407	146	109	252	44	125	784	141	128	386	114	2,750
	APPROACH %	17%	61%	22%	27%	62%	11%	12%	75%	13%	20%	61%	18%	
	PEAK HR FACTOR		0.855			0.904			0.893			0.840		0.960
	APP/DEPART	667	/	647	405	/	521	1,050	/	1,038	628	/	544	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Dec 8, 16

LOCATION: Escondido
NORTH & SOUTH: Broadway
EAST & WEST: Washington

PROJECT #: SC1152
LOCATION #: 13
CONTROL: SIGNAL

NOTES:

AM PM MD OTHER OTHER

▲ N
◄ W
E ►
S ▼

		NORTHBOUND Broadway			SOUTHBOUND Broadway			EASTBOUND Washington			WESTBOUND Washington			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	10	56	1	41	104	16	15	40	8	11	154	56	512
	7:15 AM	16	72	1	42	153	22	11	54	23	13	141	49	597
	7:30 AM	15	69	2	56	121	13	10	58	10	14	155	56	579
	7:45 AM	15	49	4	50	173	21	20	84	16	17	146	48	643
	8:00 AM	17	59	4	46	137	22	19	71	13	26	138	48	600
	8:15 AM	23	77	9	35	171	21	26	62	26	16	107	52	625
	8:30 AM	14	76	4	41	131	9	19	62	25	14	100	30	525
	8:45 AM	19	66	3	50	107	11	21	57	15	11	101	45	506
	VOLUMES	129	524	28	361	1,097	135	141	488	136	122	1,042	384	4,587
	APPROACH %	19%	77%	4%	23%	69%	8%	18%	64%	18%	8%	67%	25%	
	APP/DEPART	681	/	1,049	1,593	/	1,355	765	/	877	1,548	/	1,306	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	70	254	19	187	602	77	75	275	65	73	546	204	2,447
	APPROACH %	20%	74%	6%	22%	70%	9%	18%	66%	16%	9%	66%	25%	
	PEAK HR FACTOR		0.787			0.887			0.865			0.914		0.951
	APP/DEPART	343	/	533	866	/	740	415	/	481	823	/	693	0
MIDDAY	11:00 AM	24	102	10	49	93	30	38	72	20	17	92	44	591
	11:15 AM	19	75	4	48	103	32	27	95	13	19	100	46	581
	11:30 AM	24	77	8	48	91	27	36	100	23	11	98	43	586
	11:45 AM	35	81	4	49	117	26	27	105	16	19	90	44	613
	12:00 PM	23	84	2	49	91	25	20	103	14	15	92	39	557
	12:15 PM	31	80	8	46	107	27	33	111	22	16	113	42	636
	12:30 PM	30	100	9	42	95	25	39	108	19	7	98	45	617
	12:45 PM	29	85	17	56	95	22	26	101	32	15	108	48	634
	VOLUMES	215	684	62	387	792	214	246	795	159	119	791	351	4,815
	APPROACH %	22%	71%	6%	28%	57%	15%	21%	66%	13%	9%	63%	28%	
	APP/DEPART	961	/	1,280	1,393	/	1,070	1,200	/	1,244	1,261	/	1,221	0
	BEGIN PEAK HR		12:00 PM											
	VOLUMES	113	349	36	193	388	99	118	423	87	53	411	174	2,444
	APPROACH %	23%	70%	7%	28%	57%	15%	19%	67%	14%	8%	64%	27%	
	PEAK HR FACTOR		0.896			0.944			0.946			0.933		0.961
	APP/DEPART	498	/	640	680	/	528	628	/	652	638	/	624	0
PM	4:00 PM	28	102	11	63	121	21	49	166	14	15	110	48	748
	4:15 PM	21	98	13	57	98	23	46	191	26	15	91	29	708
	4:30 PM	37	101	12	67	106	28	52	190	14	23	91	50	771
	4:45 PM	32	124	13	70	121	33	60	159	20	17	97	54	800
	5:00 PM	40	141	12	40	80	26	45	175	18	12	93	54	736
	5:15 PM	33	123	11	74	142	27	50	179	17	12	90	54	812
	5:30 PM	15	106	17	71	102	29	35	183	15	21	109	57	760
	5:45 PM	28	76	9	65	81	13	41	151	20	18	112	43	657
	VOLUMES	234	871	98	507	851	200	378	1,394	144	133	793	389	5,992
	APPROACH %	19%	72%	8%	33%	55%	13%	20%	73%	8%	10%	60%	30%	
	APP/DEPART	1,203	/	1,638	1,558	/	1,128	1,916	/	1,999	1,315	/	1,227	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	142	489	48	251	449	114	207	703	69	64	371	212	3,119
	APPROACH %	21%	72%	7%	31%	55%	14%	21%	72%	7%	10%	57%	33%	
	PEAK HR FACTOR		0.880			0.837			0.956			0.963		0.960
	APP/DEPART	679	/	908	814	/	582	979	/	1,002	647	/	627	0

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#11	File Name:	ITM-21-049-11
Intersection:	East Washington Avenue & North Juniper Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

AM	North Juniper Street Southbound			East Washington Avenue Westbound			North Juniper Street Northbound			East Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	2	3	8	165	5	2	5	3	1	45	8	247
7:15	3	3	4	21	183	3	9	5	9	0	70	10	320
7:30	5	1	2	19	227	9	3	1	6	1	107	5	386
7:45	2	1	7	12	233	20	7	1	12	3	107	9	414
8:00	3	0	3	13	229	3	6	3	8	1	119	6	394
8:15	1	3	5	20	212	0	9	3	5	1	104	9	372
8:30	1	3	2	19	122	0	9	3	24	0	120	20	323
8:45	2	2	1	11	146	0	5	1	5	3	89	12	277
Total	17	15	27	123	1517	40	50	22	72	10	761	79	2733
Approach%	28.8	25.4	45.8	7.3	90.3	2.4	34.7	15.3	50.0	1.2	89.5	9.3	
Total%	0.6	0.5	1.0	4.5	55.5	1.5	1.8	0.8	2.6	0.4	27.8	2.9	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	11	5	17	64	901	32	25	8	31	6	437	29	1,566
Approach%	33.3	15.2	51.5	6.4	90.4	3.2	39.1	12.5	48.4	1.3	92.6	6.1	
Total%	0.7	0.3	1.1	4.1	57.5	2.0	1.6	0.5	2.0	0.4	27.9	1.9	
PHF			0.83			0.94			0.80			0.94	0.95

PM	North Juniper Street Southbound			East Washington Avenue Westbound			North Juniper Street Northbound			East Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	1	8	5	121	4	5	1	14	1	252	21	433
16:15	3	0	8	11	119	3	2	1	10	2	174	14	347
16:30	1	1	10	11	123	6	5	2	8	5	201	24	397
16:45	1	1	3	15	120	7	7	3	9	6	181	16	369
17:00	3	2	4	5	139	6	5	1	7	8	249	15	444
17:15	3	1	3	14	137	5	9	1	15	2	191	11	392
17:30	4	2	3	13	136	2	3	0	12	4	209	23	411
17:45	2	2	5	12	114	5	11	1	9	3	199	19	382
Total	17	10	44	86	1009	38	47	10	84	31	1656	143	3175
Approach%	23.9	14.1	62.0	7.6	89.1	3.4	33.3	7.1	59.6	1.7	90.5	7.8	
Total%	0.5	0.3	1.4	2.7	31.8	1.2	1.5	0.3	2.6	1.0	52.2	4.5	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	12	7	15	44	526	18	28	3	43	17	848	68	1,629
Approach%	35.3	20.6	44.1	7.5	89.5	3.1	37.8	4.1	58.1	1.8	90.9	7.3	
Total%	0.7	0.4	0.9	2.7	32.3	1.1	1.7	0.2	2.6	1.0	52.1	4.2	
PHF			0.94			0.94			0.74			0.86	0.92

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

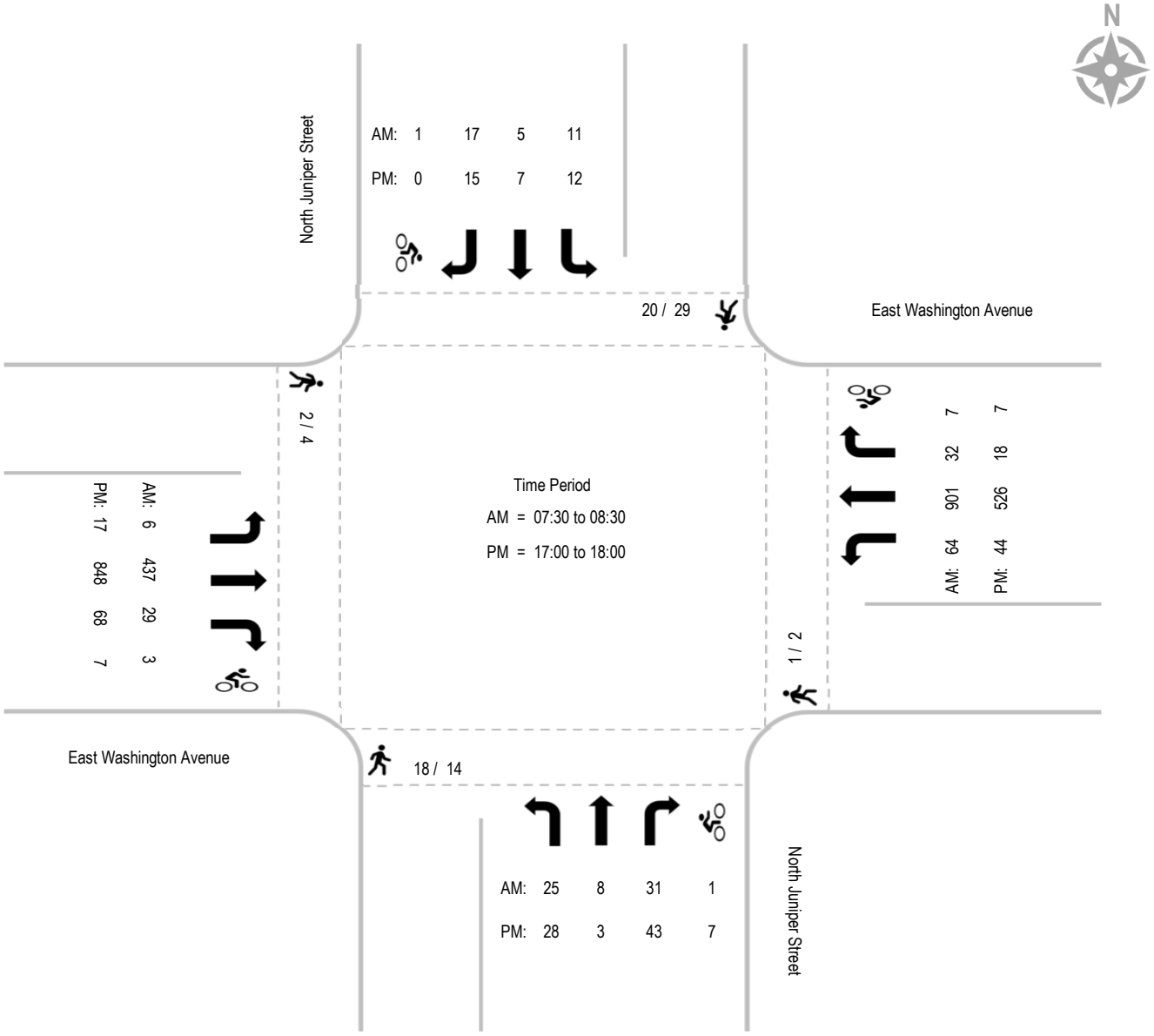
Location:	#11	File Name:	ITM-21-049-11
Intersection:	East Washington Avenue & North Juniper Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing

AM	North Juniper Street Southbound				East Washington Avenue Westbound				North Juniper Street Northbound				East Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	0	0	1	0	4	0	0	0	0	0	0	0	5	1
7:15	4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	6	0
7:30	6	0	0	0	0	1	0	1	2	0	0	0	1	0	0	0	9	2
7:45	1	0	0	0	1	0	1	0	4	0	0	1	0	0	1	0	6	3
8:00	1	0	0	1	0	0	0	1	3	0	0	0	0	0	0	0	4	2
8:15	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5	0
8:30	3	0	0	0	0	0	2	0	1	0	0	0	0	0	0	2	4	4
8:45	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
Ped Total	20				1				18				2				41	
Bike Total		0	0	1		1	4	2		0	0	1		0	1	2		12

PM	North Juniper Street Southbound				East Washington Avenue Westbound				North Juniper Street Northbound				East Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	5	0	0	0	0	2	0	0	3	0	0	0	0	0	0	1	8	3
16:15	2	0	0	0	0	0	1	0	1	1	0	1	2	1	0	0	5	4
16:30	1	0	0	0	0	0	0	0	2	2	0	0	0	0	1	1	3	4
16:45	2	0	0	0	1	0	1	0	3	0	0	0	0	0	0	0	6	1
17:00	3	0	0	0	1	0	0	0	2	0	0	0	0	0	2	0	6	2
17:15	9	0	0	0	0	0	3	0	2	0	0	1	1	0	0	0	12	4
17:30	6	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	6	2
17:45	1	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	3	1
Ped Total	29				2				14				4				49	
Bike Total		0	0	0		2	5	0		5	0	2		1	4	2		21

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#11	File Name:	ITM-21-049-11
	Intersection:	East Washington Avenue & North Juniper Street	Project:	LLG Ref. 3-21-3338
	Date of Count:	Wednesday, September 01, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#01	File Name:	ITM-19-064-01
Intersection:	North Hickery Street & East Washington Avenue	Project:	LLG Ref. 3-18-2878
Date of Count:	Thursday, May 30, 2019		Palomar Heights

AM	North Hickery Street Southbound			E Washington Avenue Westbound			North Hickery Street Northbound			E Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	2	8	8	5	165	3	9	7	8	1	54	15	285
7:15	0	18	5	11	206	4	24	10	11	2	85	15	391
7:30	3	11	6	12	202	4	16	15	5	3	86	17	380
7:45	2	19	11	9	241	2	21	12	9	6	127	23	482
8:00	3	17	10	18	202	3	14	8	11	3	103	19	411
8:15	4	15	10	4	166	6	16	7	6	2	105	15	356
8:30	1	15	4	7	133	2	10	9	6	3	104	8	302
8:45	0	10	5	10	137	6	20	5	5	3	75	14	290
Total	15	113	59	76	1452	30	130	73	61	23	739	126	2897
Approach%	8.0	60.4	31.6	4.9	93.2	1.9	49.2	27.7	23.1	2.6	83.2	14.2	
Total%	0.5	3.9	2.0	2.6	50.1	1.0	4.5	2.5	2.1	0.8	25.5	4.3	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	8	65	32	50	851	13	75	45	36	14	401	74	1,664
Approach%	7.6	61.9	30.5	5.5	93.1	1.4	48.1	28.8	23.1	2.9	82.0	15.1	
Total%	0.5	3.9	1.9	3.0	51.1	0.8	4.5	2.7	2.2	0.8	24.1	4.4	
PHF			0.82			0.91			0.87			0.78	0.86

PM	North Hickery Street Southbound			E Washington Avenue Westbound			North Hickery Street Northbound			E Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	5	13	7	5	127	4	18	11	10	11	219	18	448
16:15	7	11	11	5	136	0	19	10	12	12	208	21	452
16:30	4	11	7	3	138	1	17	15	20	10	230	18	474
16:45	1	13	15	9	116	1	24	26	25	12	201	17	460
17:00	3	9	8	6	135	4	25	14	17	7	228	19	475
17:15	0	17	5	7	139	3	26	15	13	15	222	18	480
17:30	0	16	9	8	136	0	29	14	13	7	219	14	465
17:45	2	17	7	3	136	11	10	14	6	10	196	13	425
Total	22	107	69	46	1063	24	168	119	116	84	1723	138	3679
Approach%	11.1	54.0	34.8	4.1	93.8	2.1	41.7	29.5	28.8	4.3	88.6	7.1	
Total%	0.6	2.9	1.9	1.3	28.9	0.7	4.6	3.2	3.2	2.3	46.8	3.8	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	8	50	35	25	528	9	92	70	75	44	881	72	1,889
Approach%	8.6	53.8	37.6	4.4	94.0	1.6	38.8	29.5	31.6	4.4	88.4	7.2	
Total%	0.4	2.6	1.9	1.3	28.0	0.5	4.9	3.7	4.0	2.3	46.6	3.8	
PHF			0.80			0.94			0.79			0.97	0.98

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

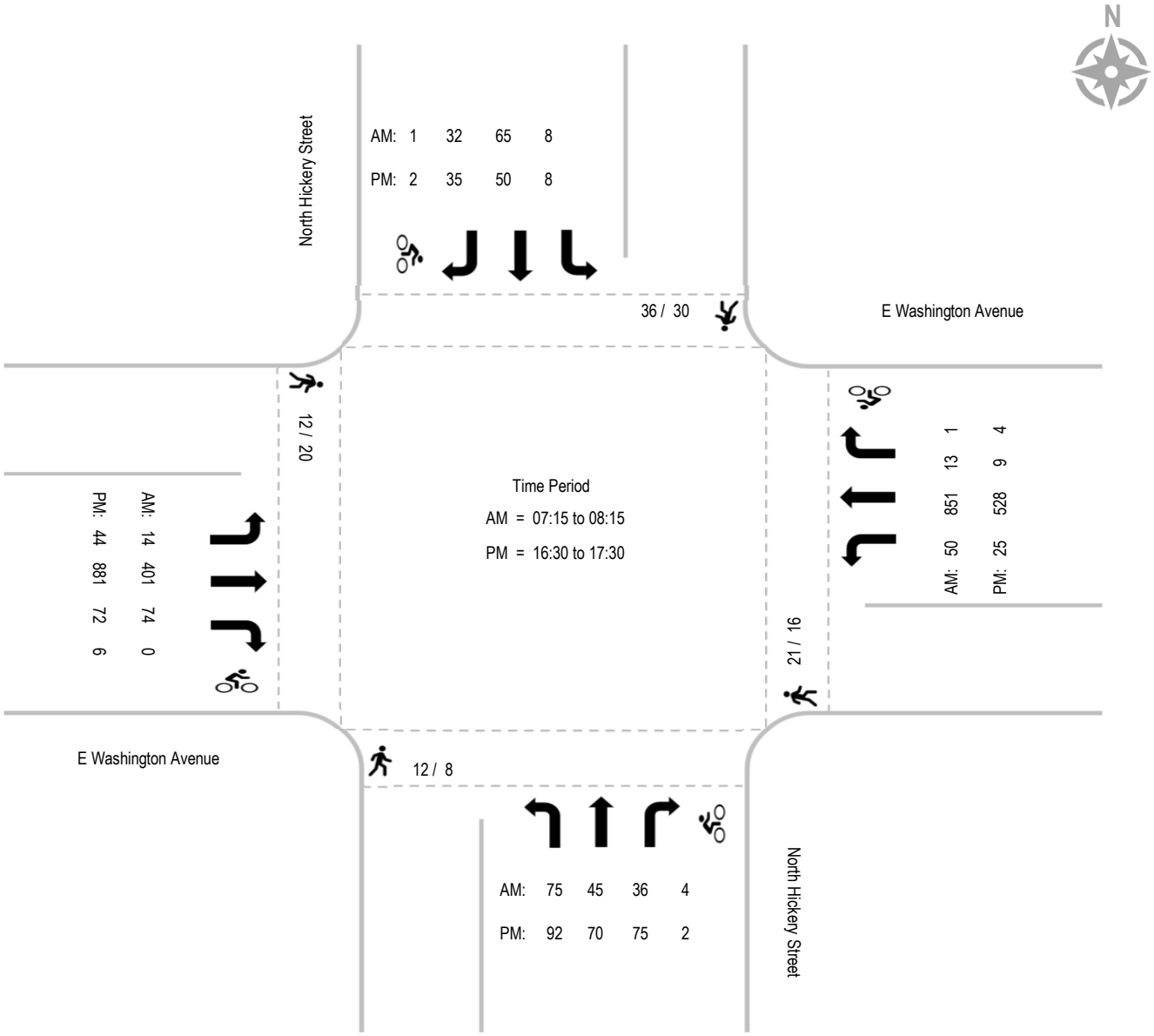
Location:	#01	File Name:	ITM-19-064-01
Intersection:	North Hickery Street & East Washington Avenue	Project:	LLG Ref. 3-18-2878
Date of Count:	Thursday, May 30, 2019		Palomar Heights

AM	North Hickery Street Southbound				E Washington Avenue Westbound				North Hickery Street Northbound				E Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	11	0	1	0	3	0	0	0	2	0	2	1	5	0	0	0	21	4
7:15	5	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	8	0
7:30	2	0	0	0	7	0	0	0	6	0	0	0	4	0	0	0	19	0
7:45	5	0	0	0	5	0	0	0	2	0	0	0	0	0	0	0	12	0
8:00	3	0	0	0	1	0	1	0	1	0	0	0	3	0	0	0	8	1
8:15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8:30	5	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	6	1
8:45	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	4	0
Ped Total	36				21				12				12				81	
Bike Total		0	1	0		0	1	0		0	3	1		0	0	0		6

PM	North Hickery Street Southbound				E Washington Avenue Westbound				North Hickery Street Northbound				E Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	8	0	0	0	0	0	1	0	0	0	0	0	6	0	0	0	14	1
16:15	6	0	0	0	5	0	2	0	6	0	1	0	7	0	1	0	24	4
16:30	1	0	0	0	1	0	0	0	1	0	0	0	2	0	1	0	5	1
16:45	4	0	0	0	3	0	0	0	0	0	0	0	1	0	1	0	8	1
17:00	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	1	5	1
17:15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
17:30	3	0	0	1	5	0	0	0	0	0	0	0	3	0	0	1	11	2
17:45	2	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	3	4
Ped Total	30				16				8				20				74	
Bike Total		0	1	1		0	4	0		0	2	0		0	4	2		14

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#01	File Name: ITM-19-064-01
	Intersection:	North Hickery Street & East Washington Avenue	Project: LLG Ref. 3-18-2878
	Date of Count:	Thursday, May 30, 2019	Palomar Heights



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-19-064-02
Intersection:	North Fig Street & East Washington Avenue	Project:	LLG Ref. 3-18-2878
Date of Count:	Thursday, May 30, 2019		Palomar Heights

AM	North Fig Street Southbound			E Washington Avenue Westbound			North Fig Street Northbound			E Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	10	35	19	6	115	13	8	21	2	5	39	12	285
7:15	14	43	20	7	160	17	9	29	4	16	65	13	397
7:30	15	48	18	4	168	30	13	41	7	15	70	13	442
7:45	9	57	17	8	183	26	21	35	5	19	91	25	496
8:00	13	55	15	16	181	19	16	27	7	7	94	20	470
8:15	10	47	22	4	127	12	11	25	6	3	76	26	369
8:30	10	38	13	6	97	7	12	32	2	5	78	17	317
8:45	5	49	13	7	115	19	12	26	7	4	54	14	325
Total	86	372	137	58	1146	143	102	236	40	74	567	140	3101
Approach%	14.5	62.5	23.0	4.3	85.1	10.6	27.0	62.4	10.6	9.5	72.6	17.9	
Total%	2.8	12.0	4.4	1.9	37.0	4.6	3.3	7.6	1.3	2.4	18.3	4.5	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	51	203	70	35	692	92	59	132	23	57	320	71	1,805
Approach%	15.7	62.7	21.6	4.3	84.5	11.2	27.6	61.7	10.7	12.7	71.4	15.8	
Total%	2.8	11.2	3.9	1.9	38.3	5.1	3.3	7.3	1.3	3.2	17.7	3.9	
PHF			0.98			0.94			0.88			0.83	0.92

PM	North Fig Street Southbound			E Washington Avenue Westbound			North Fig Street Northbound			E Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	13	36	14	7	89	15	18	54	14	11	127	19	417
16:15	21	35	10	10	98	18	17	48	15	7	170	33	482
16:30	37	50	10	11	112	19	15	47	10	16	195	32	554
16:45	24	48	14	5	95	22	17	63	12	17	166	20	503
17:00	19	41	10	1	120	11	18	51	20	15	200	26	532
17:15	23	41	7	10	106	17	24	62	18	15	210	22	555
17:30	15	41	14	4	112	12	15	48	15	17	178	21	492
17:45	30	48	13	6	108	15	20	41	7	16	154	29	487
Total	182	340	92	54	840	129	144	414	111	114	1400	202	4022
Approach%	29.6	55.4	15.0	5.3	82.1	12.6	21.5	61.9	16.6	6.6	81.6	11.8	
Total%	4.5	8.5	2.3	1.3	20.9	3.2	3.6	10.3	2.8	2.8	34.8	5.0	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	103	180	41	27	433	69	74	223	60	63	771	100	2,144
Approach%	31.8	55.6	12.7	5.1	81.9	13.0	20.7	62.5	16.8	6.7	82.5	10.7	
Total%	4.8	8.4	1.9	1.3	20.2	3.2	3.5	10.4	2.8	2.9	36.0	4.7	
PHF			0.84			0.93			0.86			0.95	0.97

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

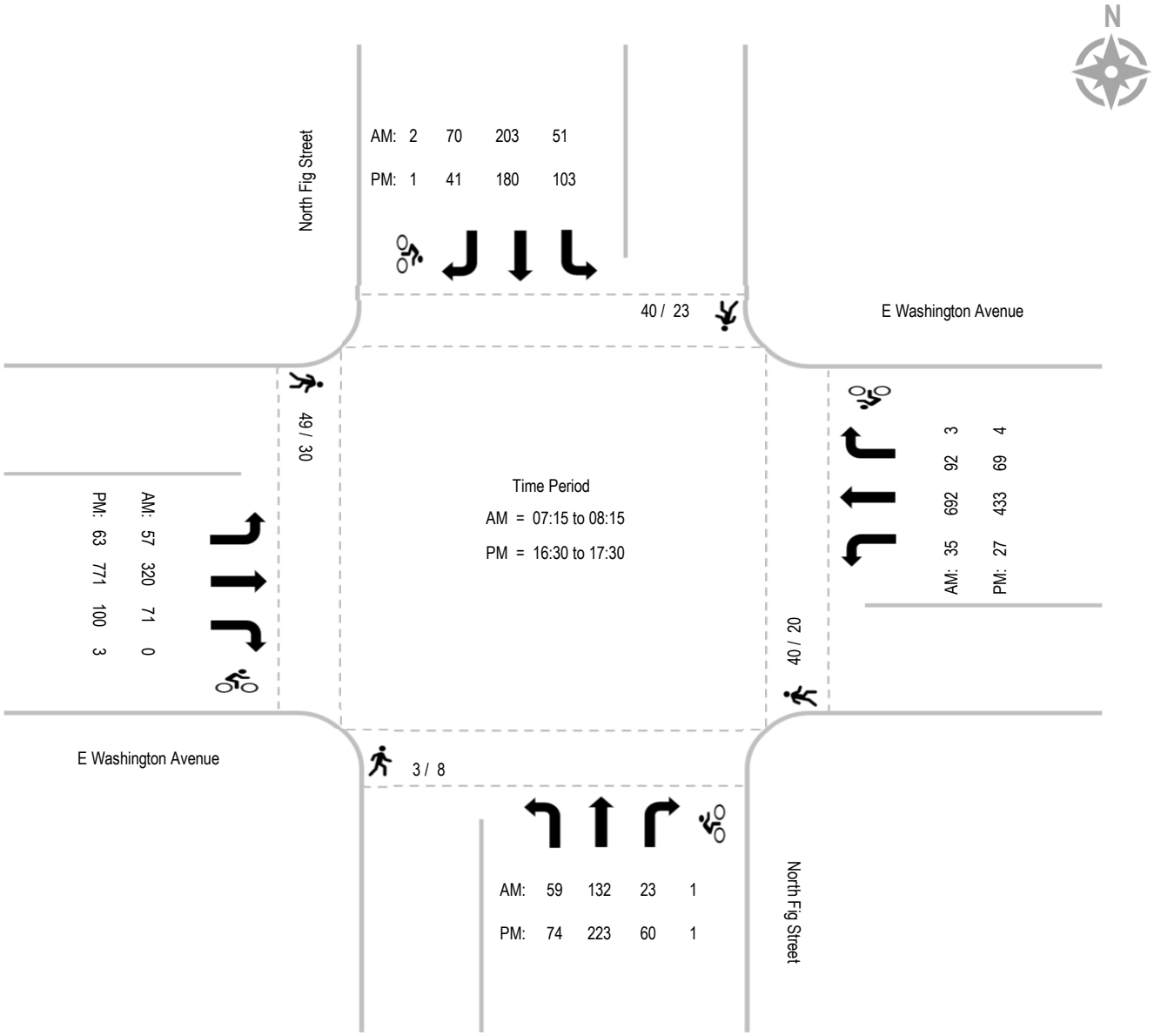
Location:	#02	File Name:	ITM-19-064-02
Intersection:	North Fig Street & East Washington Avenue	Project:	LLG Ref. 3-18-2878
Date of Count:	Thursday, May 30, 2019		Palomar Heights

AM	North Fig Street Southbound				E Washington Avenue Westbound				North Fig Street Northbound				E Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	6	0	0	0	0	0	2	0	0	0	0	0	7	0	0	0	13	2
7:15	12	0	0	0	6	0	0	0	1	0	0	0	9	0	0	0	28	0
7:30	10	0	0	0	4	0	0	0	1	0	0	0	13	0	0	0	28	0
7:45	8	0	0	0	6	0	0	1	0	0	0	0	6	0	0	0	20	1
8:00	0	0	1	0	9	0	0	0	0	0	0	0	5	0	0	0	14	1
8:15	0	0	0	0	8	0	0	0	0	0	1	0	4	0	0	0	12	1
8:30	4	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	9	0
8:45	0	0	1	0	4	0	0	0	1	0	0	0	3	0	0	0	8	1
Ped Total	40				40				3				49				132	
Bike Total		0	2	0		0	2	1		0	1	0		0	0	0		6

PM	North Fig Street Southbound				E Washington Avenue Westbound				North Fig Street Northbound				E Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	4	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0	11	0
16:15	5	0	0	0	5	0	2	0	2	0	0	0	3	0	2	0	15	4
16:30	4	0	0	0	2	0	0	0	1	0	0	0	1	0	1	0	8	1
16:45	1	0	1	0	1	0	0	0	2	0	0	0	7	0	0	0	11	1
17:00	0	0	0	0	6	0	0	0	0	0	0	0	2	0	0	0	8	0
17:15	1	0	0	0	2	0	0	0	0	0	1	0	9	0	0	0	12	1
17:30	5	0	0	0	4	0	0	2	0	0	0	0	2	0	0	0	11	2
17:45	3	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	5	0
Ped Total	23				20				8				30				81	
Bike Total		0	1	0		0	2	2		0	1	0		0	3	0		9

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#02	File Name: ITM-19-064-02
	Intersection:	North Fig Street & East Washington Avenue	Project: LLG Ref. 3-18-2878
	Date of Count:	Thursday, May 30, 2019	Palomar Heights



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#12	File Name:	ITM-21-049-12
Intersection:	East Washington Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Ash Street Southbound			East Washington Avenue Westbound			North Ash Street Northbound			East Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	9	108	3	16	76	9	16	75	5	9	46	15	387
7:15	7	111	13	17	104	20	25	96	6	8	36	29	472
7:30	11	131	19	35	153	20	25	126	12	26	66	34	658
7:45	17	153	45	49	167	24	34	112	14	29	74	31	749
8:00	11	170	34	31	185	18	33	106	12	34	59	28	721
8:15	15	134	14	23	120	8	36	82	9	6	62	24	533
8:30	9	103	7	20	82	5	29	94	11	10	54	27	451
8:45	33	123	8	27	79	10	22	82	9	5	56	20	474
Total	112	1033	143	218	966	114	220	773	78	127	453	208	4445
Approach%	8.7	80.2	11.1	16.8	74.4	8.8	20.5	72.2	7.3	16.1	57.5	26.4	
Total%	2.5	23.2	3.2	4.9	21.7	2.6	4.9	17.4	1.8	2.9	10.2	4.7	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	54	588	112	138	625	70	128	426	47	95	261	117	2,661
Approach%	7.2	78.0	14.9	16.6	75.0	8.4	21.3	70.9	7.8	20.1	55.2	24.7	
Total%	2.0	22.1	4.2	5.2	23.5	2.6	4.8	16.0	1.8	3.6	9.8	4.4	
PHF			0.88			0.87			0.92			0.88	0.89

PM	North Ash Street Southbound			East Washington Avenue Westbound			North Ash Street Northbound			East Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	16	145	12	14	72	10	41	129	32	12	134	33	650
16:15	13	110	4	19	69	6	39	130	42	14	128	34	608
16:30	12	139	9	13	64	11	24	136	48	9	103	28	596
16:45	11	120	11	19	60	10	44	134	27	22	128	35	621
17:00	7	130	7	16	62	12	35	129	64	20	119	31	632
17:15	13	122	13	22	71	8	32	157	41	18	126	41	664
17:30	26	133	11	12	73	7	38	141	21	17	137	33	649
17:45	22	163	8	20	68	9	26	115	38	14	127	37	647
Total	120	1062	75	135	539	73	279	1071	313	126	1002	272	5067
Approach%	9.5	84.5	6.0	18.1	72.2	9.8	16.8	64.4	18.8	9.0	71.6	19.4	
Total%	2.4	21.0	1.5	2.7	10.6	1.4	5.5	21.1	6.2	2.5	19.8	5.4	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	68	548	39	70	274	36	131	542	164	69	509	142	2,592
Approach%	10.4	83.7	6.0	18.4	72.1	9.5	15.7	64.8	19.6	9.6	70.7	19.7	
Total%	2.6	21.1	1.5	2.7	10.6	1.4	5.1	20.9	6.3	2.7	19.6	5.5	
PHF			0.85			0.94			0.91			0.96	0.98

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

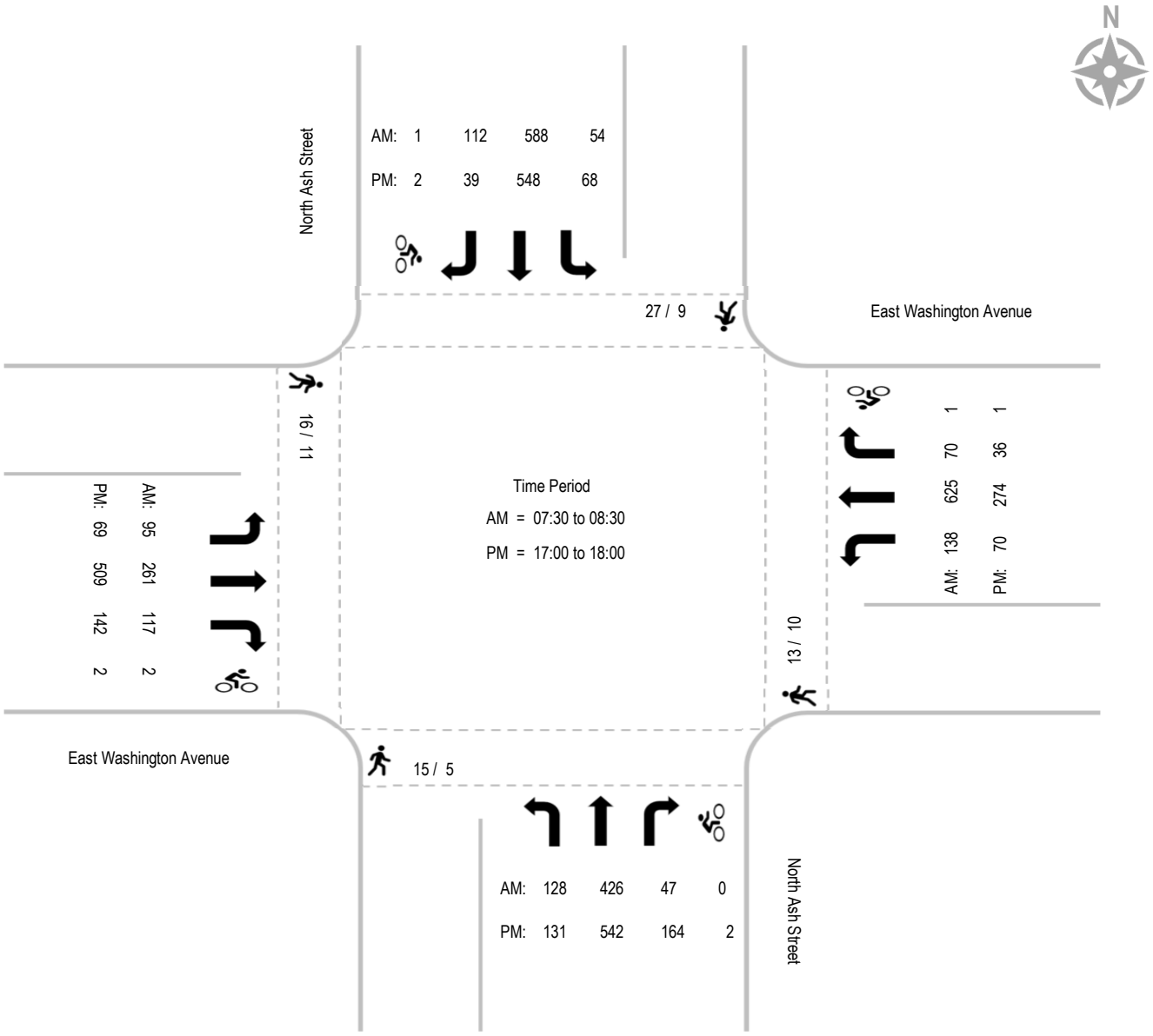
Location:	#12	File Name:	ITM-21-049-12
Intersection:	East Washington Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Ash Street Southbound				East Washington Avenue Westbound				North Ash Street Northbound				East Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	2	0	1	0	2	0	0	0	0	0	1	0	4	2
7:15	3	0	0	0	5	0	0	0	4	0	0	0	1	0	0	0	13	0
7:30	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4	0
7:45	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
8:00	6	0	1	0	1	0	0	0	4	0	0	0	3	0	0	0	14	1
8:15	5	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	10	0
8:30	2	0	0	0	2	0	0	0	0	0	0	0	6	0	0	0	10	0
8:45	0	0	0	0	1	0	0	0	3	0	0	0	1	0	1	0	5	1
Ped Total	27				13				15				16				71	
Bike Total		0	1	0		0	1	0		0	0	0		0	2	0		4

PM	North Ash Street Southbound				East Washington Avenue Westbound				North Ash Street Northbound				East Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
16:15	2	0	0	0	3	0	0	0	1	0	0	0	1	0	0	0	7	0
16:30	1	0	1	0	0	0	0	0	2	0	0	0	3	0	0	0	6	1
16:45	0	0	0	0	2	0	0	0	1	0	1	0	2	0	0	0	5	1
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:15	0	0	0	1	3	0	0	0	0	0	0	0	1	0	1	0	4	2
17:30	2	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	3	1
17:45	2	0	0	0	1	0	0	0	1	0	0	0	4	0	0	0	8	0
Ped Total	9				10				5				11				35	
Bike Total		0	1	1		0	1	0		0	2	0		0	2	0		7

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #12	File Name:	ITM-21-049-12
	Intersection: East Washington Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
	Date of Count: Tuesday, August 31, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#13	File Name:	ITM-21-049-13
Intersection:	East Washington Avenue & Harding Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	Harding Street Southbound			East Washington Avenue Westbound			Harding Street Northbound			East Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	2	19	11	5	85	2	8	8	1	2	48	11	202
7:15	4	31	16	5	134	6	4	12	4	3	40	7	266
7:30	8	31	33	7	196	8	13	13	8	3	76	6	402
7:45	10	43	39	14	211	8	8	17	9	5	98	11	473
8:00	5	52	47	21	160	7	10	17	8	5	66	15	413
8:15	4	43	15	3	124	5	7	27	6	4	63	13	314
8:30	4	27	12	1	100	4	8	18	5	0	76	9	264
8:45	1	20	6	8	101	1	5	18	6	2	56	12	236
Total	38	266	179	64	1111	41	63	130	47	24	523	84	2570
Approach%	7.9	55.1	37.1	5.3	91.4	3.4	26.3	54.2	19.6	3.8	82.9	13.3	
Total%	1.5	10.4	7.0	2.5	43.2	1.6	2.5	5.1	1.8	0.9	20.4	3.3	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	27	169	134	45	691	28	38	74	31	17	303	45	1,602
Approach%	8.2	51.2	40.6	5.9	90.4	3.7	26.6	51.7	21.7	4.7	83.0	12.3	
Total%	1.7	10.5	8.4	2.8	43.1	1.7	2.4	4.6	1.9	1.1	18.9	2.8	
PHF			0.79			0.82			0.89			0.80	0.85

PM	Harding Street Southbound			East Washington Avenue Westbound			Harding Street Northbound			East Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	5	42	10	11	65	4	13	26	25	9	155	28	393
16:15	4	29	5	15	84	4	15	37	18	15	147	2	375
16:30	3	26	4	7	63	2	11	33	16	4	117	0	286
16:45	7	32	8	6	60	3	16	36	38	8	140	38	392
17:00	2	32	7	10	70	6	18	40	27	13	150	22	397
17:15	5	19	8	13	71	2	16	27	21	17	136	15	350
17:30	9	27	10	7	72	8	15	30	20	5	151	19	373
17:45	9	40	11	7	66	2	17	27	27	5	178	20	409
Total	44	247	63	76	551	31	121	256	192	76	1174	144	2975
Approach%	12.4	69.8	17.8	11.6	83.7	4.7	21.3	45.0	33.7	5.5	84.2	10.3	
Total%	1.5	8.3	2.1	2.6	18.5	1.0	4.1	8.6	6.5	2.6	39.5	4.8	

PM Intersection Peak Hour: **17:00 to 18:00**

Volume	25	118	36	37	279	18	66	124	95	40	615	76	1,529
Approach%	14.0	65.9	20.1	11.1	83.5	5.4	23.2	43.5	33.3	5.5	84.1	10.4	
Total%	1.6	7.7	2.4	2.4	18.2	1.2	4.3	8.1	6.2	2.6	40.2	5.0	
PHF			0.75			0.96			0.84			0.90	0.93

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#13	File Name:	ITM-21-049-13
Intersection:	East Washington Avenue & Harding Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

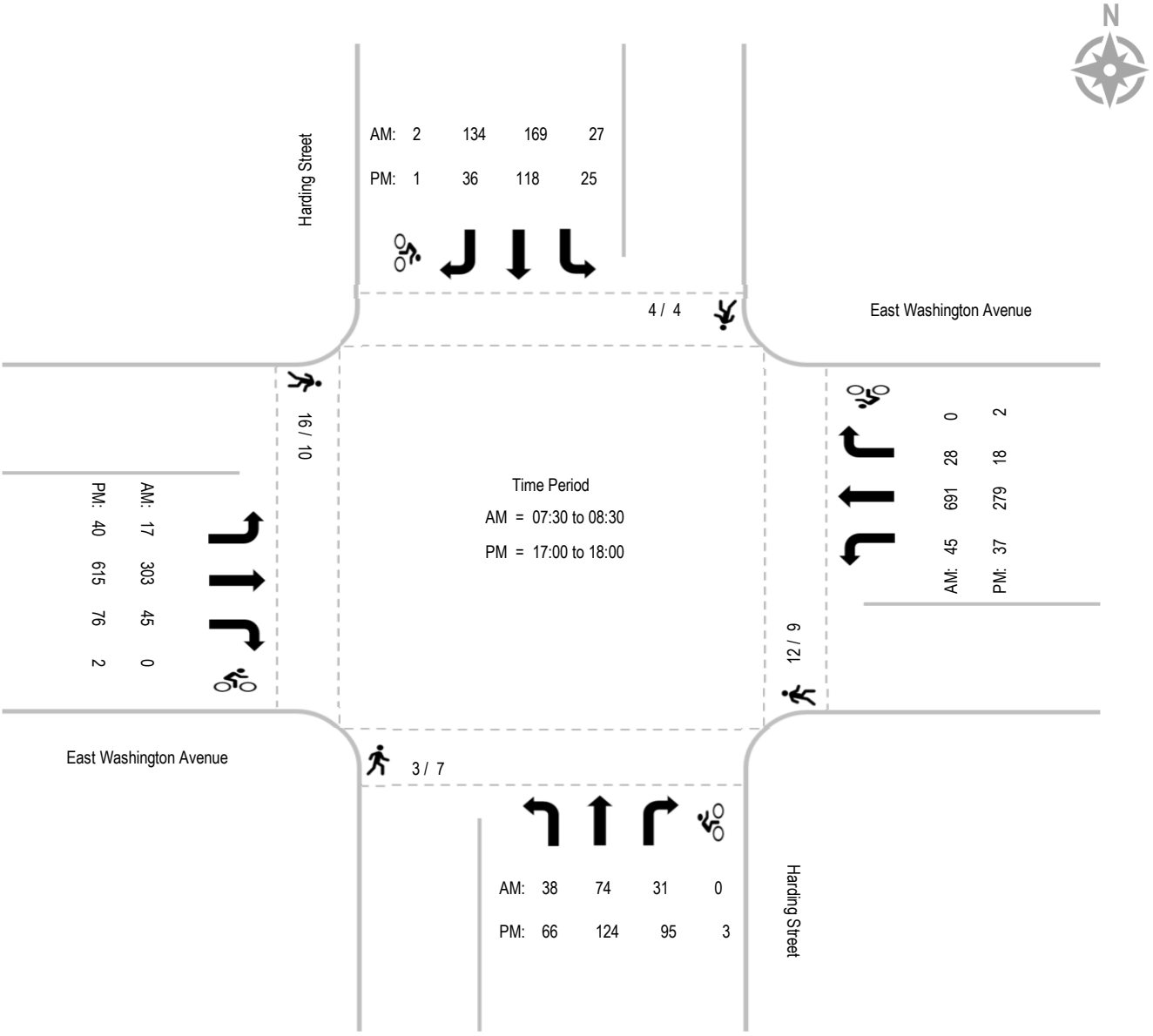
AM	Harding Street Southbound				East Washington Avenue Westbound				Harding Street Northbound				East Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	2	0	1	0	0	0	0	0	0	0	5	0	0	0	6	2
7:15	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	7	0
7:30	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	3	0
7:45	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	4	0
8:00	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	5	0
8:15	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:45	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	5	0
Ped Total	4				12				3				16				35	
Bike Total		0	2	0		0	0	0		0	0	0		0	0	0		2

PM	Harding Street Southbound				East Washington Avenue Westbound				Harding Street Northbound				East Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
16:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
16:30	1	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	6	0
16:45	0	0	1	0	2	0	0	0	0	0	0	0	2	0	0	0	4	1
17:00	0	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	5	0
17:15	3	0	0	0	1	0	0	2	2	0	1	0	0	0	0	0	6	3
17:30	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	2	1
17:45	0	0	0	0	0	0	0	0	2	0	1	0	4	0	0	1	6	2
Ped Total	4				9				7				10				30	
Bike Total		0	1	0		0	0	2		0	3	0		1	0	1		8

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#13	File Name:	ITM-21-049-13
Intersection:	East Washington Avenue & Harding Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#14	File Name:	ITM-21-049-14
Intersection:	East Washington Avenue & North Rose Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	North Rose Street Southbound			East Washington Avenue Westbound			North Rose Street Northbound			East Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	1	70	12	11	91	7	10	33	8	4	38	9	294
7:15	8	108	4	21	118	11	10	79	5	5	45	10	424
7:30	10	94	9	28	154	18	20	73	15	7	63	14	505
7:45	18	117	14	38	199	6	24	81	32	2	87	18	636
8:00	19	110	7	25	154	7	19	50	12	1	70	12	486
8:15	5	75	5	8	112	7	21	54	15	1	59	14	376
8:30	6	42	6	15	90	5	14	41	18	7	57	12	313
8:45	7	48	3	12	60	1	5	36	11	6	57	15	261
Total	74	664	60	158	978	62	123	447	116	33	476	104	3295
Approach%	9.3	83.2	7.5	13.2	81.6	5.2	17.9	65.2	16.9	5.4	77.7	17.0	
Total%	2.2	20.2	1.8	4.8	29.7	1.9	3.7	13.6	3.5	1.0	14.4	3.2	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	55	429	34	112	625	42	73	283	64	15	265	54	2,051
Approach%	10.6	82.8	6.6	14.4	80.2	5.4	17.4	67.4	15.2	4.5	79.3	16.2	
Total%	2.7	20.9	1.7	5.5	30.5	2.0	3.6	13.8	3.1	0.7	12.9	2.6	
PHF			0.87			0.80			0.77			0.78	0.81

PM	North Rose Street Southbound			East Washington Avenue Westbound			North Rose Street Northbound			East Washington Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	9	79	3	6	50	3	20	81	47	15	108	30	451
16:15	13	76	9	12	70	10	18	90	45	11	129	23	506
16:30	7	77	7	8	72	9	12	86	31	13	111	21	454
16:45	13	101	8	11	60	9	25	89	34	7	132	28	517
17:00	4	88	8	11	70	3	11	92	31	7	123	22	470
17:15	19	101	2	10	62	3	22	82	30	16	135	25	507
17:30	10	85	4	19	47	12	14	100	34	10	137	26	498
17:45	10	84	6	19	55	9	14	96	19	18	107	35	472
Total	85	691	47	96	486	58	136	716	271	97	982	210	3875
Approach%	10.3	84.0	5.7	15.0	75.9	9.1	12.1	63.8	24.1	7.5	76.2	16.3	
Total%	2.2	17.8	1.2	2.5	12.5	1.5	3.5	18.5	7.0	2.5	25.3	5.4	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	46	375	22	51	239	27	72	363	129	40	527	101	1,992
Approach%	10.4	84.7	5.0	16.1	75.4	8.5	12.8	64.4	22.9	6.0	78.9	15.1	
Total%	2.3	18.8	1.1	2.6	12.0	1.4	3.6	18.2	6.5	2.0	26.5	5.1	
PHF			0.91			0.94			0.95			0.95	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

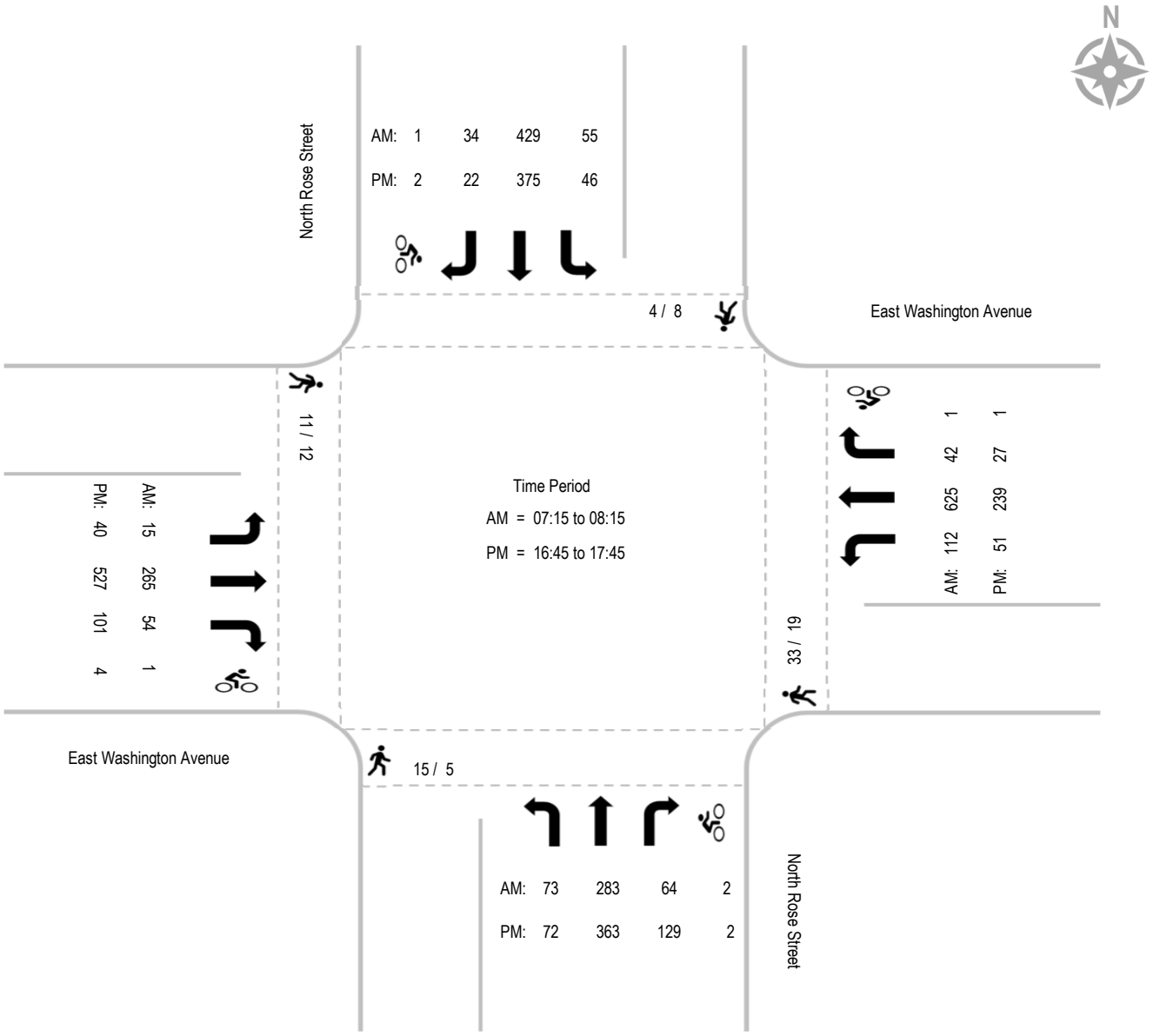
Location:	#14	File Name:	ITM-21-049-14
Intersection:	East Washington Avenue & North Rose Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	North Rose Street Southbound				East Washington Avenue Westbound				North Rose Street Northbound				East Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	1	0	0	0	2	0	0	1	1	0	0	0	5	1
7:15	0	0	0	0	6	0	0	0	2	0	0	0	2	0	0	0	10	0
7:30	0	0	0	0	10	0	0	0	4	0	0	0	3	0	0	0	17	0
7:45	2	0	1	0	9	0	0	0	1	0	0	1	3	0	0	0	15	2
8:00	0	0	0	0	4	0	0	0	1	0	0	0	1	0	0	0	6	0
8:15	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:45	1	0	0	0	2	0	0	1	3	0	0	0	0	0	1	0	6	2
Ped Total	4				33				15				11				63	
Bike Total		0	1	0		0	0	1		0	0	2		0	1	0		5

PM	North Rose Street Southbound				East Washington Avenue Westbound				North Rose Street Northbound				East Washington Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	2	0	1	0	0	0	1	0	1	0	1	0	4	0	2	0	7	5
16:15	0	0	0	0	4	0	0	0	2	0	0	0	1	0	1	0	7	1
16:30	0	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	6	0
16:45	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	2
17:00	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	5	0
17:15	1	0	0	0	4	0	0	0	0	0	1	0	0	0	0	0	5	1
17:30	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
17:45	5	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	10	0
Ped Total	8				19				5				12				44	
Bike Total		0	2	0		0	1	0		0	2	0		0	4	0		9

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #14	File Name:	ITM-21-049-14
	Intersection: East Washington Avenue & North Rose Street	Project:	LLG Ref. 3-21-3338
	Date of Count: Thursday, September 02, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-18-021-02
Intersection:	Valley Boulevard / North Hickory Street	Project:	LLG Ref. 3-18-XXXX
Date of Count:	Wednesday, February 28, 2018		Escondido

AM	Valley Parkway Southbound			North Hickory Street Westbound			Valley Parkway Northbound			North Hickory Street Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	256	29	4	0	2	11	51	9	20	6	26	414
7:15	1	252	30	3	3	0	11	73	6	25	5	32	441
7:30	0	268	40	11	2	1	14	98	7	23	5	36	505
7:45	2	310	32	3	0	1	19	141	17	31	7	37	600
8:00	0	284	31	0	3	0	13	93	3	27	4	20	478
8:15	0	218	29	4	1	0	12	97	4	29	3	19	416
8:30	0	197	33	0	1	1	17	75	3	22	3	14	366
8:45	2	180	35	0	1	1	18	94	5	39	3	20	398
Total	5	1965	259	25	11	6	115	722	54	216	36	204	3618
Approach%	0.2	88.2	11.6	59.5	26.2	14.3	12.9	81.0	6.1	47.4	7.9	44.7	
Total%	0.1	54.3	7.2	0.7	0.3	0.2	3.2	20.0	1.5	6.0	1.0	5.6	
AM Intersection Peak Hour:	**07:15 to 08:15**												
Volume	3	1,114	133	17	8	2	57	405	33	106	21	125	2,024
Approach%	0.2	89.1	10.6	63.0	29.6	7.4	11.5	81.8	6.7	42.1	8.3	49.6	
Total%	0.1	55.0	6.6	0.8	0.4	0.1	2.8	20.0	1.6	5.2	1.0	6.2	
PHF			0.91						0.70			0.84	

PM	Valley Parkway Southbound			North Hickory Street Westbound			Valley Parkway Northbound			North Hickory Street Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	194	50	4	1	2	16	188	2	41	1	13	512
16:15	2	180	36	9	0	1	31	191	2	61	0	16	529
16:30	1	193	59	8	4	1	21	169	6	43	1	17	523
16:45	0	199	43	12	1	1	21	162	3	49	1	23	515
17:00	2	184	41	11	6	1	20	171	4	47	2	22	511
17:15	2	216	31	3	2	2	23	203	1	40	2	23	548
17:30	2	163	49	4	0	2	17	166	3	29	1	13	449
17:45	0	171	46	2	2	1	20	177	0	47	1	16	483
Total	9	1500	355	53	16	11	169	1427	21	357	9	143	4070
Approach%	0.5	80.5	19.0	66.3	20.0	13.8	10.5	88.2	1.3	70.1	1.8	28.1	
Total%	0.2	41.5	9.8	1.5	0.4	0.3	4.7	39.4	0.6	9.9	0.2	4.0	
PM Intersection Peak Hour:	**16:30 to 17:30**												
Volume	5	792	174	34	13	5	85	705	14	179	6	85	2,097
Approach%	0.5	81.6	17.9	65.4	25.0	9.6	10.6	87.7	1.7	66.3	2.2	31.5	
Total%	0.2	39.1	8.6	1.7	0.6	0.2	4.2	34.8	0.7	8.8	0.3	4.2	
PHF			0.96						0.89			0.92	

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

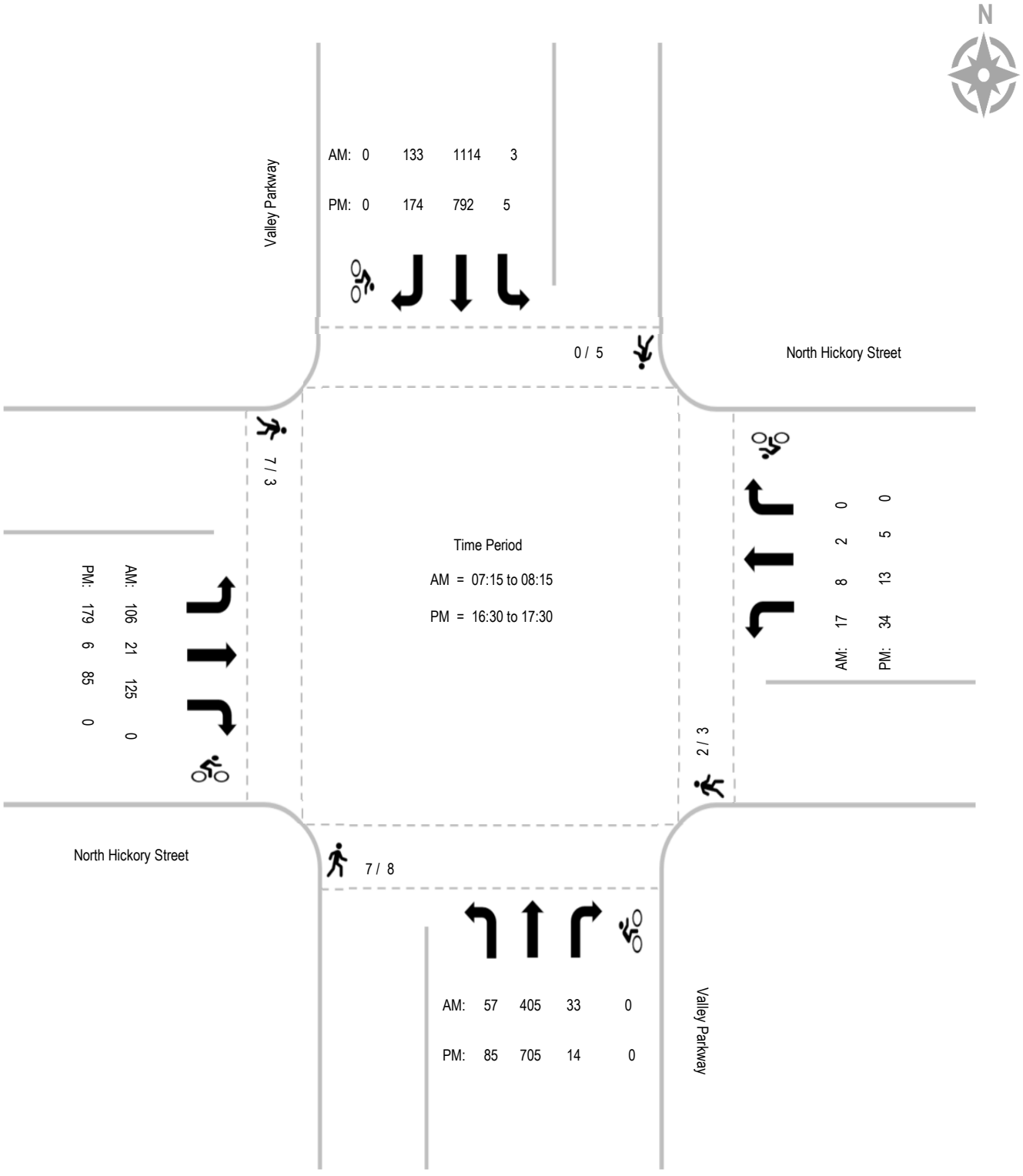
Location:	#03	File Name:	ITM-18-021-02
Intersection:	Valley Boulevard / North Hickory Street	Project:	LLG Ref. 3-18-XXXX
Date of Count:	Wednesday, February 28, 2018		Escondido

AM	Valley Parkway Southbound				North Hickory Street Westbound				Valley Parkway Northbound				North Hickory Street Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	4	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	3	0
7:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0
8:45	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
Ped Total	0				2				7				7				16	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Valley Parkway Southbound				North Hickory Street Westbound				Valley Parkway Northbound				North Hickory Street Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
16:15	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	3	0
16:30	2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	6	0
16:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
17:00	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
17:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
17:30	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
Ped Total	5				3				8				3				19	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#03	File Name:	ITM-18-021-02
	Intersection:	Valley Boulevard / North Hickory Street	Project:	LLG Ref. 3-18-XXXX
	Date of Count:	Wednesday, February 28, 2018		Escondido



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#04	File Name:	ITM-18-024-06
Intersection:	Fig Street & Valley Parkway	Project:	LLG Ref. 3-18-2878
Date of Count:	Thursday, March 22, 2018		Palomar Health

AM	Fig Street Southbound			Valley Parkway Westbound			Fig Street Northbound			Valley Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	16	26	17	2	235	5	14	27	0	4	66	1	413
7:15	10	35	14	7	260	7	18	31	1	5	89	1	478
7:30	10	41	19	3	288	14	13	33	2	7	98	6	534
7:45	20	36	16	6	289	13	25	46	2	13	104	5	575
8:00	29	34	15	3	280	15	13	22	2	14	116	1	544
8:15	14	30	13	8	244	17	14	26	6	13	93	1	479
8:30	18	33	9	4	201	12	15	26	2	7	99	2	428
8:45	18	34	8	11	216	19	20	16	2	9	95	0	448
Total	135	269	111	44	2013	102	132	227	17	72	760	17	3899
Approach%	26.2	52.2	21.6	2.0	93.2	4.7	35.1	60.4	4.5	8.5	89.5	2.0	
Total%	3.5	6.9	2.8	1.1	51.6	2.6	3.4	5.8	0.4	1.8	19.5	0.4	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	73	141	63	20	1,101	59	65	127	12	47	411	13	2,132
Approach%	26.4	50.9	22.7	1.7	93.3	5.0	31.9	62.3	5.9	10.0	87.3	2.8	
Total%	3.4	6.6	3.0	0.9	51.6	2.8	3.0	6.0	0.6	2.2	19.3	0.6	
PHF			0.89			0.96			0.70			0.90	

PM	Fig Street Southbound			Valley Parkway Westbound			Fig Street Northbound			Valley Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	33	39	11	12	193	24	29	49	5	15	192	4	606
16:15	31	43	8	5	184	24	31	42	8	15	204	5	600
16:30	26	34	9	5	210	22	16	44	2	19	200	3	590
16:45	23	25	17	4	194	30	20	46	9	14	186	2	570
17:00	19	36	19	7	222	35	41	42	8	13	224	2	668
17:15	30	35	14	6	228	27	33	35	6	14	168	2	598
17:30	32	35	7	2	168	26	17	38	3	15	154	2	499
17:45	32	43	17	3	186	18	28	31	7	18	176	3	562
Total	226	290	102	44	1585	206	215	327	48	123	1504	23	4693
Approach%	36.6	46.9	16.5	2.4	86.4	11.2	36.4	55.4	8.1	7.5	91.2	1.4	
Total%	5.8	7.4	2.6	1.1	40.7	5.3	5.5	8.4	1.2	3.2	38.6	0.6	

PM Intersection Peak Hour: **16:15 to 17:15**

Volume	99	138	53	21	810	111	108	174	27	61	814	12	2,428
Approach%	34.1	47.6	18.3	2.2	86.0	11.8	35.0	56.3	8.7	6.9	91.8	1.4	
Total%	4.6	6.5	2.5	1.0	38.0	5.2	5.1	8.2	1.3	2.9	38.2	0.6	
PHF			0.88			0.89			0.85			0.93	

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

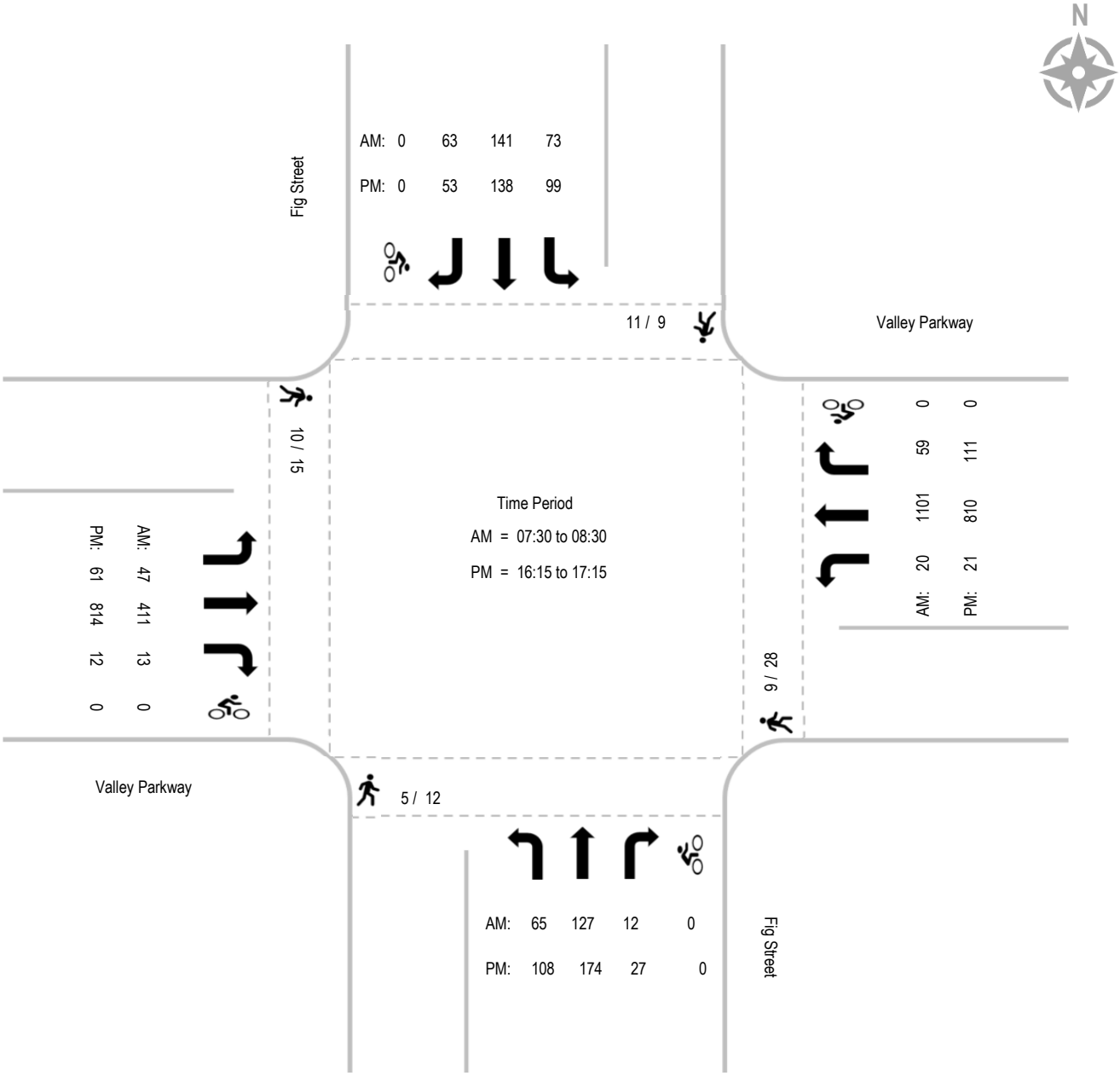
Location:	#04	File Name:	ITM-18-024-06
Intersection:	Fig Street & Valley Parkway	Project:	LLG Ref. 3-18-2878
Date of Count:	Thursday, March 22, 2018		Palomar Health

AM	Fig Street Southbound				Valley Parkway Westbound				Fig Street Northbound				Valley Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	5	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	2	0	0	0	1	0	0	0	1	0	0	0	3	0	0	0	7	0
8:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:15	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0
8:30	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	0
8:45	3	0	0	0	6	0	0	0	1	0	0	0	2	0	0	0	12	0
Ped Total	11				9				5				10				35	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Fig Street Southbound				Valley Parkway Westbound				Fig Street Northbound				Valley Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0
16:15	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	6	0
16:30	2	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	7	0
16:45	3	0	0	0	8	0	0	0	5	0	0	0	3	0	0	0	19	0
17:00	1	0	0	0	8	0	0	0	3	0	0	0	2	0	0	0	14	0
17:15	0	0	0	0	6	0	0	0	2	0	0	0	0	0	0	0	8	0
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
17:45	0	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	6	0
Ped Total	9				28				12				15				64	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#04	File Name:	ITM-18-024-06
	Intersection:	Fig Street & Valley Parkway	Project:	LLG Ref. 3-18-2878
	Date of Count:	Thursday, March 22, 2018		Palomar Health



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#15	File Name:	ITM-21-049-15
Intersection:	Valley Parkway & North Date Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Date Street Southbound			Valley Parkway Westbound			North Date Street Northbound			Valley Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	2	0	1	10	161	3	14	1	7	3	58	7	267
7:15	1	0	1	8	250	2	14	3	3	0	79	6	367
7:30	2	1	1	10	305	4	17	1	10	1	84	2	438
7:45	2	0	3	9	290	7	7	5	13	7	103	10	456
8:00	4	1	1	14	325	13	8	7	4	7	86	11	481
8:15	4	2	4	15	209	41	9	4	11	7	89	9	404
8:30	9	4	7	1	191	9	8	3	7	4	116	5	364
8:45	12	0	5	7	187	9	16	1	10	4	111	3	365
Total	36	8	23	74	1918	88	93	25	65	33	726	53	3142
Approach%	53.7	11.9	34.3	3.6	92.2	4.2	50.8	13.7	35.5	4.1	89.4	6.5	
Total%	1.1	0.3	0.7	2.4	61.0	2.8	3.0	0.8	2.1	1.1	23.1	1.7	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	12	4	9	48	1,129	65	41	17	38	22	362	32	1,779
Approach%	48.0	16.0	36.0	3.9	90.9	5.2	42.7	17.7	39.6	5.3	87.0	7.7	
Total%	0.7	0.2	0.5	2.7	63.5	3.7	2.3	1.0	2.1	1.2	20.3	1.8	
PHF			0.63			0.88			0.86			0.87	0.92

PM	North Date Street Southbound			Valley Parkway Westbound			North Date Street Northbound			Valley Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	15	4	8	13	177	7	21	1	19	6	218	7	496
16:15	12	4	7	11	196	3	13	1	13	3	207	10	480
16:30	9	7	6	5	230	5	21	2	15	3	217	5	525
16:45	6	8	8	14	209	6	27	3	16	5	198	7	507
17:00	14	10	13	6	180	6	25	3	19	3	219	5	503
17:15	8	1	8	16	172	4	22	1	11	1	191	2	437
17:30	4	7	1	11	171	6	17	3	6	0	184	3	413
17:45	4	1	3	10	199	1	18	4	13	2	188	3	446
Total	72	42	54	86	1534	38	164	18	112	23	1622	42	3807
Approach%	42.9	25.0	32.1	5.2	92.5	2.3	55.8	6.1	38.1	1.4	96.1	2.5	
Total%	1.9	1.1	1.4	2.3	40.3	1.0	4.3	0.5	2.9	0.6	42.6	1.1	

PM Intersection Peak Hour: **16:15 to 17:15**

Volume	41	29	34	36	815	20	86	9	63	14	841	27	2,015
Approach%	39.4	27.9	32.7	4.1	93.6	2.3	54.4	5.7	39.9	1.6	95.4	3.1	
Total%	2.0	1.4	1.7	1.8	40.4	1.0	4.3	0.4	3.1	0.7	41.7	1.3	
PHF			0.70			0.91			0.84			0.97	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#15	File Name:	ITM-21-049-15
Intersection:	Valley Parkway & North Date Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

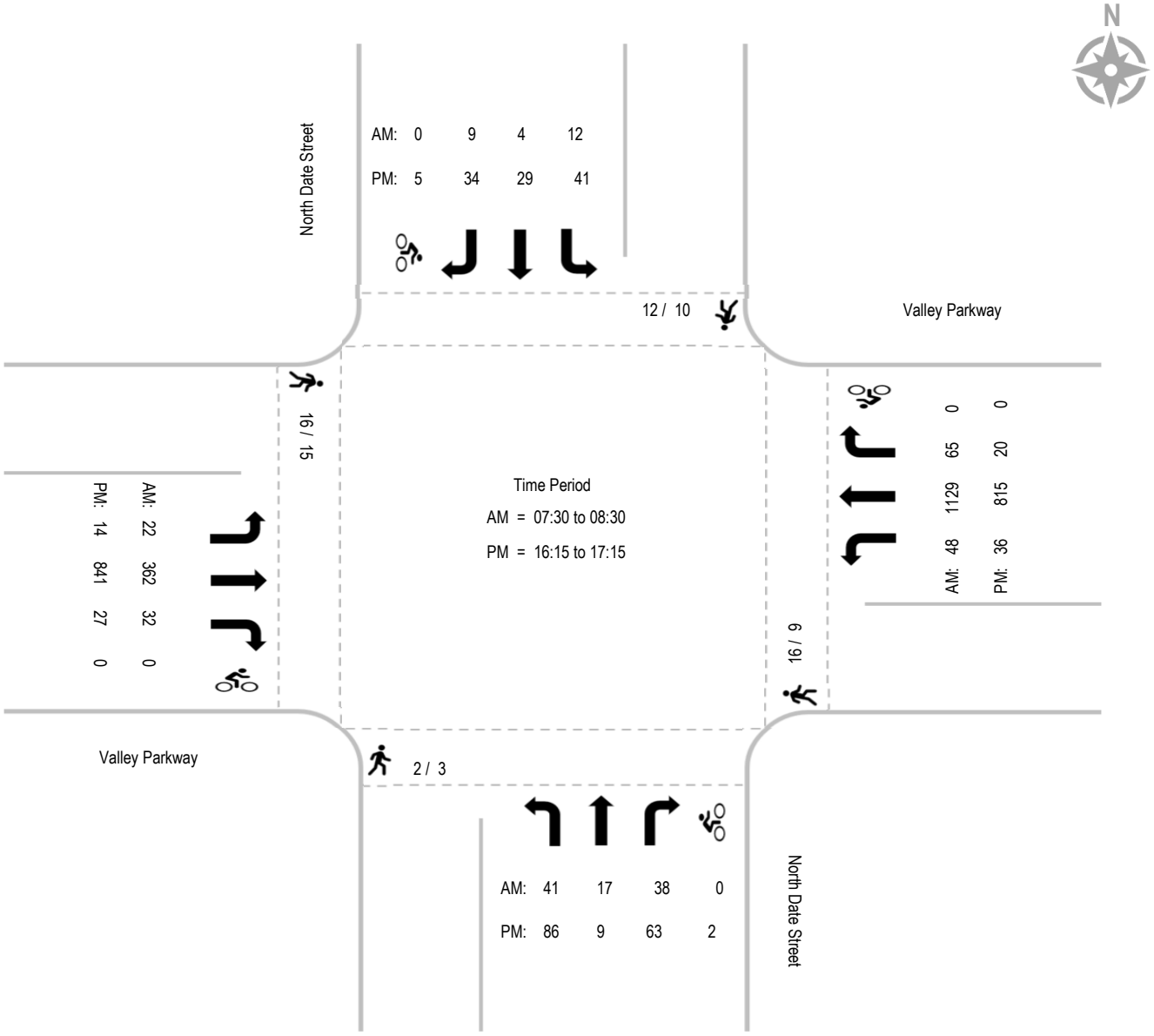
AM	North Date Street Southbound				Valley Parkway Westbound				North Date Street Northbound				Valley Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:15	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	5	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0
7:45	0	0	0	0	5	0	0	0	0	0	0	0	5	0	0	0	10	0
8:00	3	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	6	0
8:15	1	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	5	0
8:30	2	0	0	0	4	0	0	0	1	0	0	0	1	0	0	0	8	0
8:45	5	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	8	0
Ped Total	12				16				2				16				46	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	North Date Street Southbound				Valley Parkway Westbound				North Date Street Northbound				Valley Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	3	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	6	1
16:15	0	0	0	0	1	0	0	0	0	0	1	0	3	0	0	0	4	1
16:30	1	0	1	0	2	0	0	0	1	0	1	0	0	0	0	0	4	2
16:45	2	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	5	0
17:00	0	0	2	0	2	0	0	0	0	0	0	0	5	0	0	0	7	2
17:15	1	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0	4	1
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	3	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	7	0
Ped Total	10				9				3				15				37	
Bike Total		0	5	0		0	0	0		0	2	0		0	0	0		7

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#15	File Name:	ITM-21-049-15
Intersection:	Valley Parkway & North Date Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#16	File Name:	ITM-21-049-16
Intersection:	Valley Parkway & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

AM	North Ash Street Southbound			Valley Parkway Westbound			North Ash Street Northbound			Valley Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	27	105	24	22	140	22	23	79	10	10	55	4	521
7:15	53	122	34	17	183	25	48	103	15	12	58	1	671
7:30	37	115	44	28	242	29	51	97	14	23	61	4	745
7:45	48	122	56	32	262	36	43	121	18	21	79	10	848
8:00	51	108	68	31	242	38	52	90	17	11	80	4	792
8:15	43	89	41	23	203	45	36	105	18	16	74	5	698
8:30	49	70	28	22	172	39	36	81	13	21	100	5	636
8:45	51	84	26	20	170	25	18	72	14	32	91	10	613
Total	359	815	321	195	1614	259	307	748	119	146	598	43	5524
Approach%	24.0	54.5	21.5	9.4	78.0	12.5	26.1	63.7	10.1	18.6	76.0	5.5	
Total%	6.5	14.8	5.8	3.5	29.2	4.7	5.6	13.5	2.2	2.6	10.8	0.8	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	179	434	209	114	949	148	182	413	67	71	294	23	3,083
Approach%	21.8	52.8	25.4	9.4	78.4	12.2	27.5	62.4	10.1	18.3	75.8	5.9	
Total%	5.8	14.1	6.8	3.7	30.8	4.8	5.9	13.4	2.2	2.3	9.5	0.7	
PHF			0.91			0.92			0.91			0.88	0.91

PM	North Ash Street Southbound			Valley Parkway Westbound			North Ash Street Northbound			Valley Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	54	104	25	66	151	42	32	135	18	56	180	13	876
16:15	71	100	33	35	153	36	37	112	23	48	177	13	838
16:30	73	128	32	34	174	32	42	118	22	33	197	10	895
16:45	55	122	27	48	191	39	32	113	27	31	170	9	864
17:00	59	103	28	50	148	44	28	115	29	53	218	9	884
17:15	70	124	20	37	141	50	35	122	26	42	185	8	860
17:30	48	94	33	27	150	58	34	122	25	38	173	16	818
17:45	63	101	27	30	176	43	32	101	15	35	157	10	790
Total	493	876	225	327	1284	344	272	938	185	336	1457	88	6825
Approach%	30.9	55.0	14.1	16.7	65.7	17.6	19.5	67.2	13.3	17.9	77.5	4.7	
Total%	7.2	12.8	3.3	4.8	18.8	5.0	4.0	13.7	2.7	4.9	21.3	1.3	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	257	477	107	169	654	165	137	468	104	159	770	36	3,503
Approach%	30.6	56.7	12.7	17.1	66.2	16.7	19.3	66.0	14.7	16.5	79.8	3.7	
Total%	7.3	13.6	3.1	4.8	18.7	4.7	3.9	13.4	3.0	4.5	22.0	1.0	
PHF			0.90			0.89			0.97			0.86	0.98

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#16	File Name:	ITM-21-049-16
Intersection:	Valley Parkway & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing

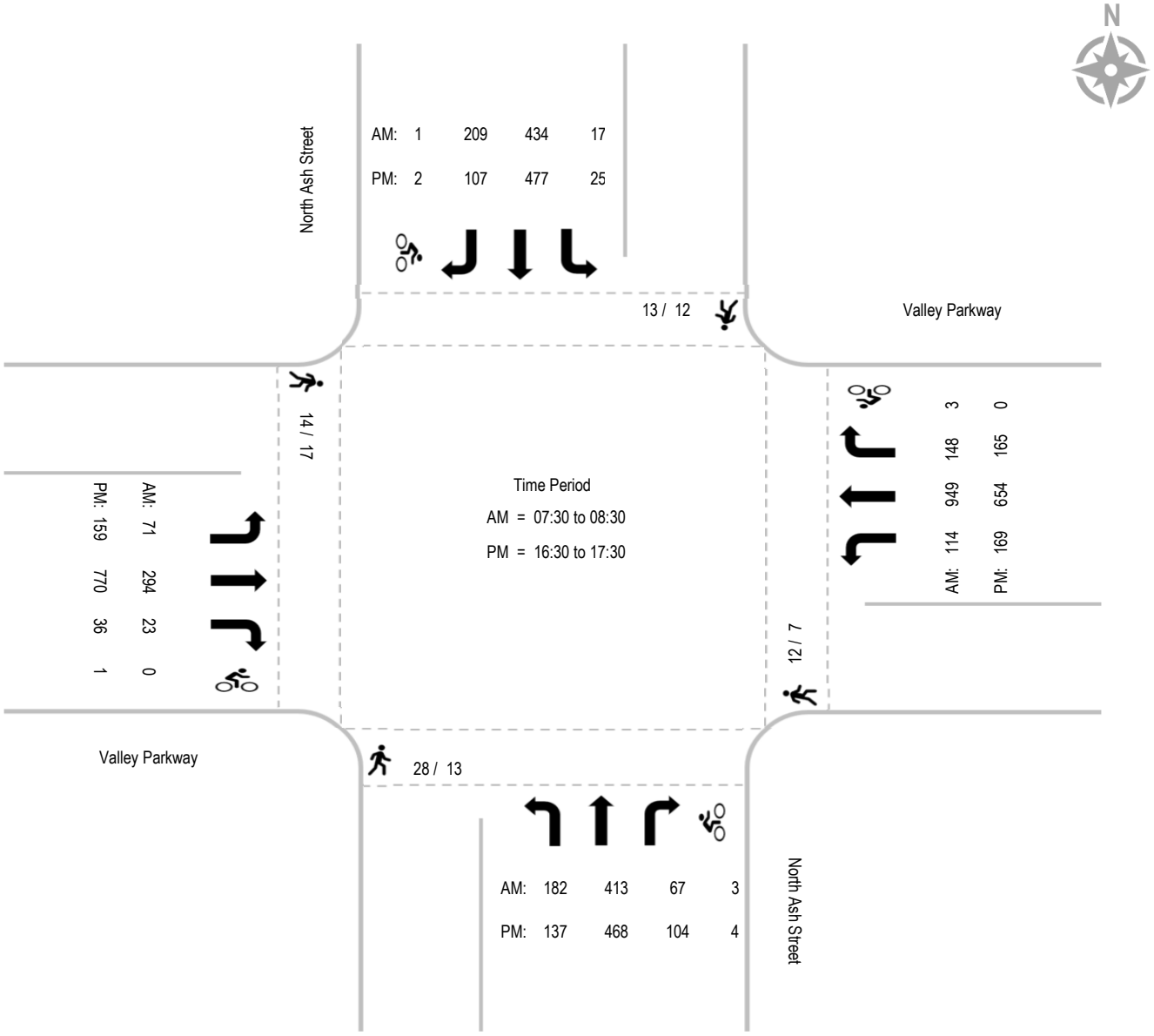
AM	North Ash Street Southbound				Valley Parkway Westbound				North Ash Street Northbound				Valley Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	2	1	1	0	0	0	1	0	0	0	0	0	3	3
7:15	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	4	0
7:30	1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	4	0
7:45	1	0	0	0	0	0	0	0	7	0	0	0	2	0	0	0	10	0
8:00	0	0	0	0	0	0	0	0	5	0	0	0	7	0	0	0	12	0
8:15	5	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	10	0
8:30	3	0	0	0	4	0	0	0	6	0	1	0	0	0	0	0	13	1
8:45	1	0	1	0	2	0	1	0	6	0	1	0	2	0	0	0	11	3
Ped Total	13				12				28				14				67	
Bike Total		0	1	0		1	2	0		0	3	0		0	0	0		7

PM	North Ash Street Southbound				Valley Parkway Westbound				North Ash Street Northbound				Valley Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
16:15	3	0	0	0	1	0	0	0	1	0	0	0	4	0	0	0	9	0
16:30	1	0	1	0	0	0	0	0	5	0	0	0	1	0	0	0	7	1
16:45	1	0	1	0	1	0	0	0	2	0	1	0	6	0	0	0	10	2
17:00	1	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	4	1
17:15	3	0	0	0	2	0	0	0	2	0	1	0	1	0	0	0	8	1
17:30	2	0	0	0	1	0	0	0	0	0	0	0	2	0	1	0	5	1
17:45	1	0	0	0	2	0	0	0	2	0	1	0	0	0	0	0	5	1
Ped Total	12				7				13				17				49	
Bike Total		0	2	0		0	0	0		0	4	0		0	1	0		7

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#16	File Name:	ITM-21-049-16
Intersection:	Valley Parkway & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Tuesday, August 31, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#17	File Name:	ITM-21-049-17
Intersection:	Valley Parkway & Harding Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	Harding Street Southbound			Valley Parkway Westbound			Harding Street Northbound			Valley Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	5	18	10	8	155	6	15	18	3	5	66	17	326
7:15	9	9	7	4	221	10	23	8	4	1	85	11	392
7:30	10	18	26	2	228	14	25	21	7	4	103	14	472
7:45	7	27	36	14	253	12	24	16	6	1	115	10	521
8:00	11	26	30	17	272	16	21	15	10	8	93	20	539
8:15	8	17	13	21	217	14	29	16	8	7	101	17	468
8:30	7	15	10	19	198	14	26	22	10	6	104	25	456
8:45	11	20	7	9	152	10	35	27	9	6	134	24	444
Total	68	150	139	94	1696	96	198	143	57	38	801	138	3618
Approach%	19.0	42.0	38.9	5.0	89.9	5.1	49.7	35.9	14.3	3.9	82.0	14.1	
Total%	1.9	4.1	3.8	2.6	46.9	2.7	5.5	4.0	1.6	1.1	22.1	3.8	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	36	88	105	54	970	56	99	68	31	20	412	61	2,000
Approach%	15.7	38.4	45.9	5.0	89.8	5.2	50.0	34.3	15.7	4.1	83.6	12.4	
Total%	1.8	4.4	5.3	2.7	48.5	2.8	5.0	3.4	1.6	1.0	20.6	3.1	
PHF			0.82			0.89			0.93			0.98	0.93

PM	Harding Street Southbound			Valley Parkway Westbound			Harding Street Northbound			Valley Parkway Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	15	37	12	20	189	23	36	35	11	9	226	23	636
16:15	20	34	15	19	179	31	19	21	22	22	218	37	637
16:30	16	35	10	30	213	22	25	33	12	15	202	38	651
16:45	17	31	9	20	198	17	34	48	13	11	222	18	638
17:00	17	37	10	22	151	20	26	27	18	12	219	27	586
17:15	16	37	10	17	180	29	24	32	19	17	224	22	627
17:30	19	37	8	27	179	22	28	32	21	12	189	22	596
17:45	20	32	8	18	199	16	28	33	16	17	179	17	583
Total	140	280	82	173	1488	180	220	261	132	115	1679	204	4954
Approach%	27.9	55.8	16.3	9.4	80.8	9.8	35.9	42.6	21.5	5.8	84.0	10.2	
Total%	2.8	5.7	1.7	3.5	30.0	3.6	4.4	5.3	2.7	2.3	33.9	4.1	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	68	137	46	89	779	93	114	137	58	57	868	116	2,562
Approach%	27.1	54.6	18.3	9.3	81.1	9.7	36.9	44.3	18.8	5.5	83.4	11.1	
Total%	2.7	5.3	1.8	3.5	30.4	3.6	4.4	5.3	2.3	2.2	33.9	4.5	
PHF			0.91			0.91			0.81			0.94	0.98

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#17	File Name:	ITM-21-049-17
Intersection:	Valley Parkway & Harding Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

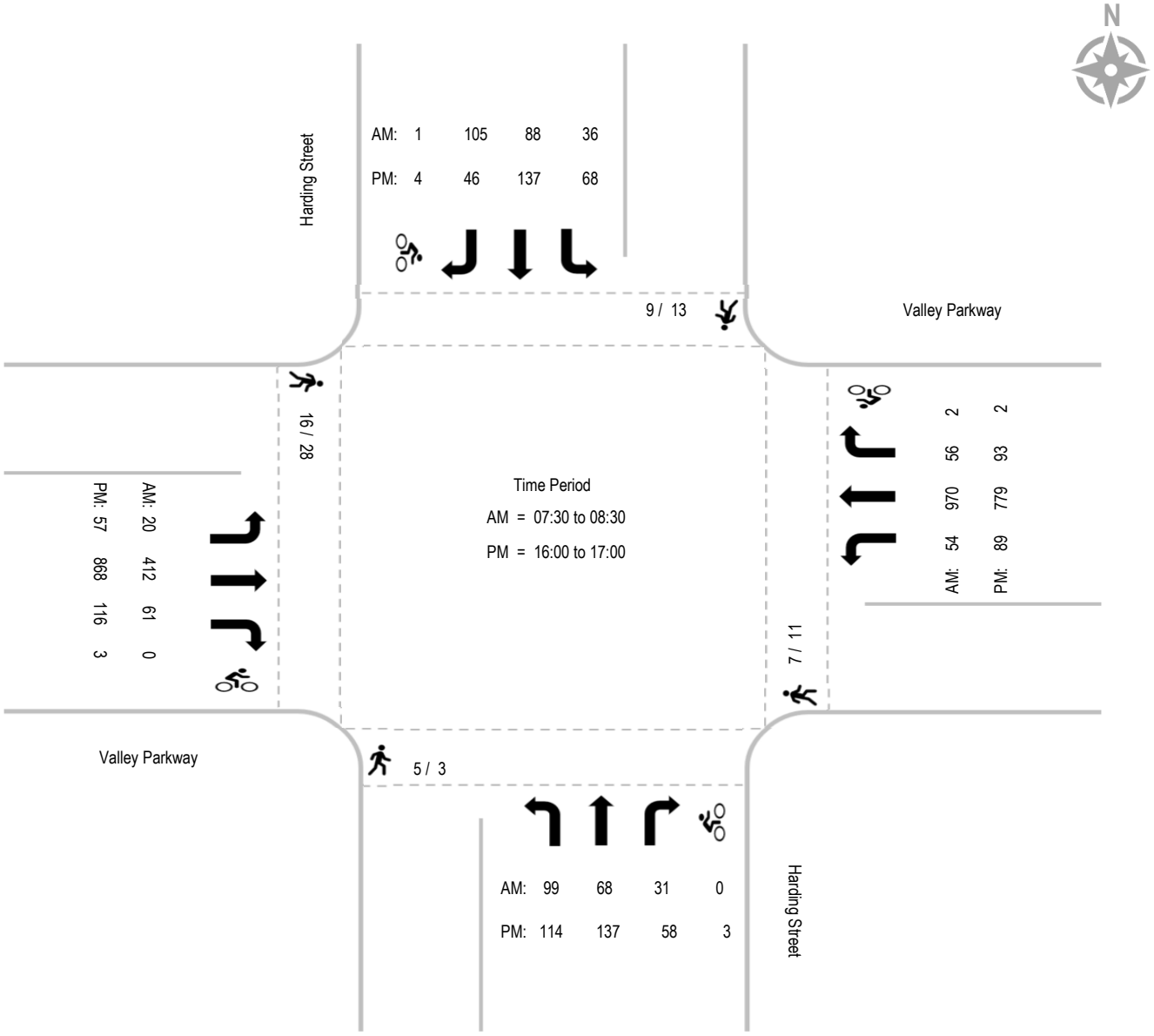
AM	Harding Street Southbound				Valley Parkway Westbound				Harding Street Northbound				Valley Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	1	0	2	0	1	0	0	0	0	0	2	0	0	0	4	2
7:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:30	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	0
7:45	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	5	0
8:00	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
8:15	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0
8:30	3	0	0	0	1	0	0	0	3	0	0	0	4	0	0	0	11	0
8:45	1	0	0	0	0	1	0	0	2	0	0	0	2	0	0	0	5	1
Ped Total	9				7				5				16				37	
Bike Total		0	1	0		1	1	0		0	0	0		0	0	0		3

PM	Harding Street Southbound				Valley Parkway Westbound				Harding Street Northbound				Valley Parkway Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	3	0	1	0	0	0	1	0	2	0	0	0	5	0	2	0	10	4
16:15	3	0	0	0	1	0	0	0	0	0	0	0	8	0	0	0	12	0
16:30	2	0	2	0	1	0	1	0	0	0	1	0	3	0	0	0	6	4
16:45	3	0	0	0	2	0	0	0	1	0	0	0	3	0	0	0	9	0
17:00	0	0	1	0	3	0	0	0	0	0	0	0	1	0	1	0	4	2
17:15	1	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	5	1
17:30	0	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	5	0
17:45	1	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	4	1
Ped Total	13				11				3				28				55	
Bike Total		0	4	0		0	2	0		0	3	0		0	3	0		12

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#17	File Name:	ITM-21-049-17
Intersection:	Valley Parkway & Harding Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#18	File Name:	ITM-21-049-18
Intersection:	Valley Parkway & North Rose Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	Valley Parkway Southbound			North Rose Street Westbound			Valley Parkway Northbound			North Rose Street Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	20	41	18	12	161	25	11	34	21	7	67	2	419
7:15	60	59	23	19	173	45	11	63	37	13	81	7	591
7:30	42	65	9	29	230	26	15	56	37	9	103	4	625
7:45	30	76	28	26	263	33	33	52	21	11	103	8	684
8:00	23	79	24	30	288	23	20	42	19	11	80	11	650
8:15	16	42	25	18	211	12	26	42	13	19	99	6	529
8:30	19	50	29	22	367	17	28	87	15	32	167	16	849
8:45	21	31	15	16	151	9	11	22	12	12	141	5	446
Total	231	443	171	172	1844	190	155	398	175	114	841	59	4793
Approach%	27.3	52.4	20.2	7.8	83.6	8.6	21.3	54.7	24.0	11.2	82.9	5.8	
Total%	4.8	9.2	3.6	3.6	38.5	4.0	3.2	8.3	3.7	2.4	17.5	1.2	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	88	247	106	96	1,129	85	107	223	68	73	449	41	2,712
Approach%	20.0	56.0	24.0	7.3	86.2	6.5	26.9	56.0	17.1	13.0	79.8	7.3	
Total%	3.2	9.1	3.9	3.5	41.6	3.1	3.9	8.2	2.5	2.7	16.6	1.5	
PHF			0.82			0.81			0.77			0.65	0.80

PM	Valley Parkway Southbound			North Rose Street Westbound			Valley Parkway Northbound			North Rose Street Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	26	62	24	22	192	22	28	71	25	24	183	15	694
16:15	30	51	30	23	185	30	23	82	34	42	207	19	756
16:30	28	61	24	22	213	25	28	67	29	60	176	16	749
16:45	34	58	23	26	192	17	20	63	30	43	217	19	742
17:00	37	77	29	29	172	22	24	65	31	40	208	21	755
17:15	36	59	14	34	195	27	19	74	23	39	222	12	754
17:30	25	73	21	27	196	35	26	63	37	44	212	15	774
17:45	30	61	28	20	183	33	24	64	21	31	215	22	732
Total	246	502	193	203	1528	211	192	549	230	323	1640	139	5956
Approach%	26.1	53.3	20.5	10.5	78.7	10.9	19.8	56.5	23.7	15.4	78.0	6.6	
Total%	4.1	8.4	3.2	3.4	25.7	3.5	3.2	9.2	3.9	5.4	27.5	2.3	

PM Intersection Peak Hour: **16:45 to 17:45**

Volume	132	267	87	116	755	101	89	265	121	166	859	67	3,025
Approach%	27.2	54.9	17.9	11.9	77.7	10.4	18.7	55.8	25.5	15.2	78.7	6.1	
Total%	4.4	8.8	2.9	3.8	25.0	3.3	2.9	8.8	4.0	5.5	28.4	2.2	
PHF			0.85			0.94			0.94			0.98	0.98

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

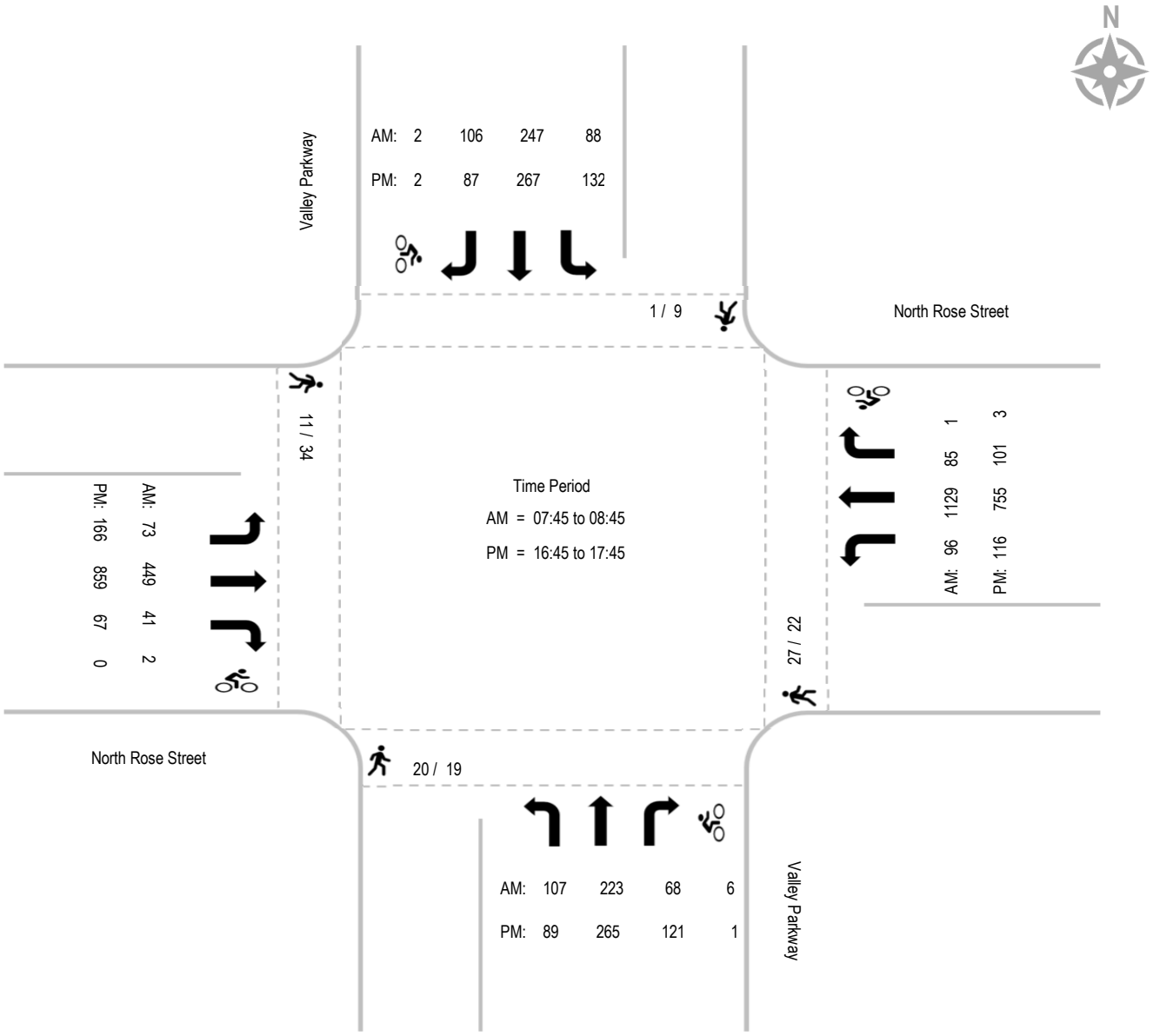
Location:	#18	File Name:	ITM-21-049-18
Intersection:	Valley Parkway & North Rose Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	Valley Parkway Southbound				North Rose Street Westbound				Valley Parkway Northbound				North Rose Street Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	0	3	3
7:15	0	0	0	0	5	0	0	0	4	0	0	0	0	0	0	0	9	0
7:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45	1	0	0	0	12	0	0	0	2	0	2	0	0	0	0	0	15	2
8:00	0	0	0	0	2	0	0	0	3	0	1	0	2	0	0	0	7	1
8:15	0	0	1	0	1	0	0	0	1	0	1	0	1	0	0	0	3	2
8:30	0	0	1	0	4	0	0	0	7	0	1	0	5	0	0	0	16	2
8:45	0	0	0	0	2	0	1	0	2	0	0	0	1	0	0	0	5	1
Ped Total	1				27				20				11				59	
Bike Total		0	2	0		0	1	0		0	6	0		0	2	0		11

PM	Valley Parkway Southbound				North Rose Street Westbound				Valley Parkway Northbound				North Rose Street Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	1	0	0	0	0	0	1	0	1	0	0	0	2	0	0	0	4	1
16:15	1	0	1	0	6	0	0	1	6	0	0	0	4	0	0	0	17	2
16:30	0	0	0	0	2	0	1	0	2	0	0	0	3	0	0	0	7	1
16:45	0	0	0	0	3	0	0	0	0	0	0	0	4	0	0	0	7	0
17:00	1	0	1	0	4	0	0	0	2	0	0	0	8	0	0	0	15	1
17:15	1	0	0	0	3	0	0	0	5	0	1	0	4	0	0	0	13	1
17:30	4	0	0	0	1	0	0	0	3	0	0	0	1	0	0	0	9	0
17:45	1	0	0	0	3	0	0	0	0	0	0	0	8	0	0	0	12	0
Ped Total	9				22				19				34				84	
Bike Total		0	2	0		0	2	1		0	1	0		0	0	0		6

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location: #18	File Name:	ITM-21-049-18
	Intersection: Valley Parkway & North Rose Street	Project:	LLG Ref. 3-21-3338
	Date of Count: Thursday, September 02, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#07	File Name:	ITM-18-021-04
Intersection:	East Grand Avenue / East 2nd Avenue / Valley Boulevard	Project:	LLG Ref. 3-18-XXXX
Date of Count:	Wednesday, February 28, 2018		Escondido

AM	Valley Boulevard Southbound			East Grand Avenue Westbound			East 2nd Avenue Northbound			East Grand Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	0	0	14	0	99	1	0	56	1	3	15	0	189
7:15	0	0	25	0	130	1	1	93	1	13	25	0	289
7:30	0	0	29	0	157	5	2	104	2	11	19	0	329
7:45	0	0	25	0	156	2	2	152	3	14	23	0	377
8:00	0	0	17	0	122	1	2	95	4	18	20	0	279
8:15	0	0	22	0	99	3	1	100	3	24	33	0	285
8:30	0	0	20	0	99	4	4	74	3	15	17	0	236
8:45	0	0	14	0	91	2	4	95	4	16	32	0	258
Total	0	0	166	0	953	19	16	769	21	114	184	0	2242
Approach%	-	-	100.0	-	98.0	2.0	2.0	95.4	2.6	38.3	61.7	-	
Total%	-	-	7.4	-	42.5	0.8	0.7	34.3	0.9	5.1	8.2	-	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	-	-	96	-	565	9	7	444	10	56	87	-	1,274
Approach%	-	-	100.0	-	98.4	1.6	1.5	96.3	2.2	39.2	60.8	-	
Total%	-	-	7.5	-	44.3	0.7	0.5	34.9	0.8	4.4	6.8	-	
PHF			0.83						0.73			0.94	

PM	Valley Boulevard Southbound			East Grand Avenue Westbound			East 2nd Avenue Northbound			East Grand Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	20	0	92	4	10	180	3	41	47	0	397
16:15	0	0	15	0	98	1	3	157	7	45	54	0	380
16:30	0	0	16	0	93	7	2	165	3	37	41	0	364
16:45	0	0	25	0	98	0	9	138	6	37	35	0	348
17:00	0	0	15	0	108	1	3	162	4	39	67	0	399
17:15	0	0	18	0	102	0	4	176	6	53	41	0	400
17:30	0	0	13	0	77	0	4	158	6	44	35	0	337
17:45	0	0	11	0	116	1	1	145	4	30	41	0	349
Total	0	0	133	0	784	14	36	1281	39	326	361	0	2974
Approach%	-	-	100.0	-	98.2	1.8	2.7	94.5	2.9	47.5	52.5	-	
Total%	-	-	5.9	-	35.0	0.6	1.6	57.1	1.7	14.5	16.1	-	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	-	-	74	-	401	8	18	641	19	166	184	-	1,511
Approach%	-	-	100.0	-	98.0	2.0	2.7	94.5	2.8	47.4	52.6	-	
Total%	-	-	5.8	-	31.5	0.6	1.4	50.3	1.5	13.0	14.4	-	
PHF			0.74						0.91			0.83	

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

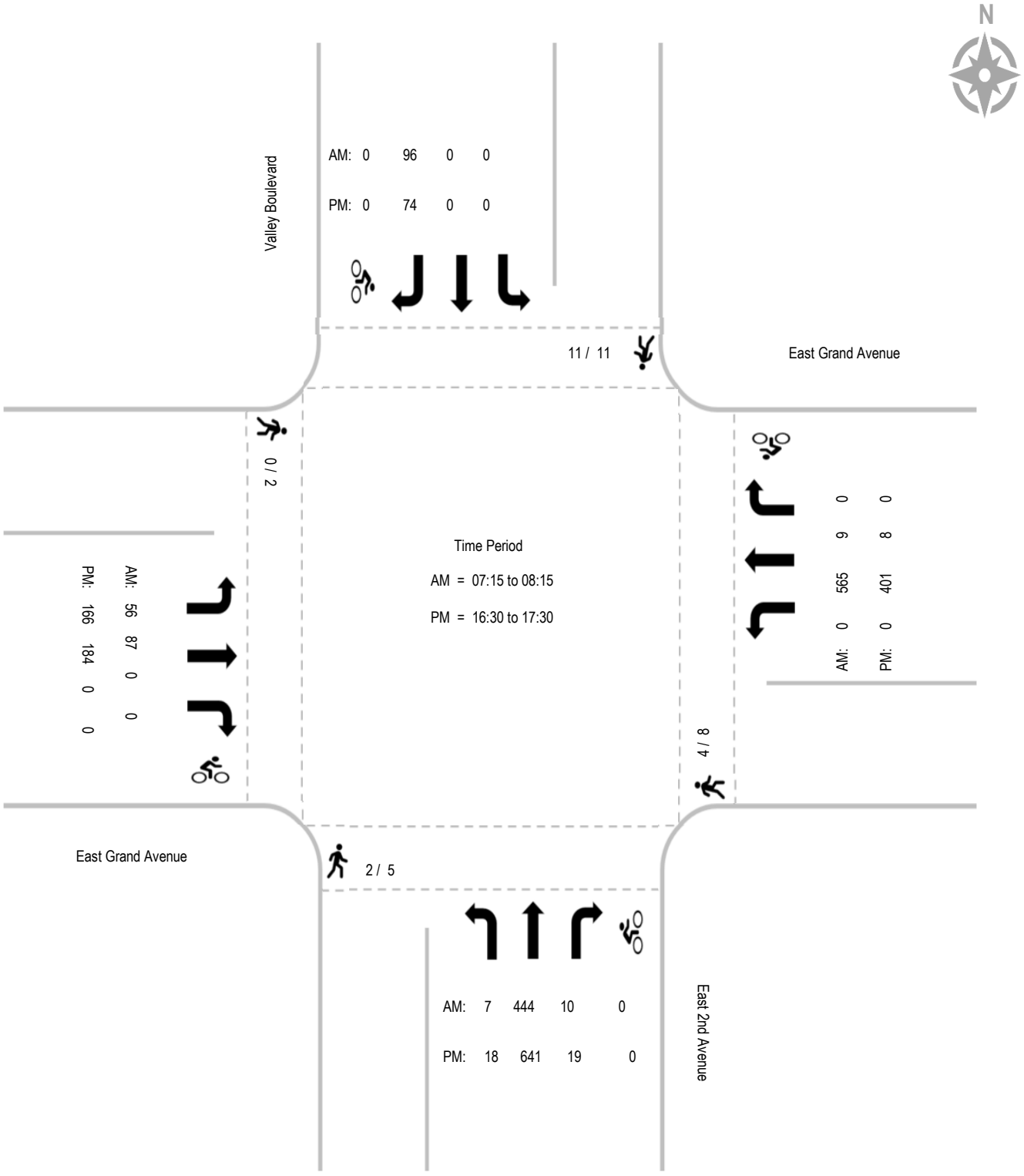
Location:	#07	File Name:	ITM-18-021-04
Intersection:	East Grand Avenue / East 2nd Avenue / Valley Boulevard	Project:	LLG Ref. 3-18-XXXX
Date of Count:	Wednesday, February 28, 2018		Escondido

AM	Valley Boulevard Southbound				East Grand Avenue Westbound				East 2nd Avenue Northbound				East Grand Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
7:15	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0
7:30	2	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	5	0
7:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
8:45	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Ped Total	11				4				2				0				17	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	Valley Boulevard Southbound				East Grand Avenue Westbound				East 2nd Avenue Northbound				East Grand Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	1	0	0	0	2	0	0	0	3	0	0	0	0	0	0	0	6	0
16:15	4	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	8	0
16:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:45	1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	4	0
17:00	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	0
17:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
17:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	11				8				5				2				26	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#07	File Name:	ITM-18-021-04
	Intersection:	East Grand Avenue / East 2nd Avenue / Valley Boulevard	Project:	LLG Ref. 3-18-XXXX
	Date of Count:	Wednesday, February 28, 2018		Escondido



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#19	File Name:	ITM-21-049-19
Intersection:	East Grand Avenue & Date Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	North Date Street Southbound			East Grand Avenue Westbound			South Date Street Northbound			East Grand Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	1	19	3	17	89	5	8	18	25	3	51	1	240
7:15	4	8	2	43	126	6	8	12	38	4	94	5	350
7:30	2	16	1	36	140	10	4	25	50	6	92	0	382
7:45	6	11	4	30	160	9	7	17	33	6	92	3	378
8:00	6	11	1	37	154	8	4	18	29	3	99	3	373
8:15	4	9	1	27	94	4	5	5	27	9	83	6	274
8:30	4	9	3	20	98	1	3	15	24	2	85	5	269
8:45	2	5	3	14	105	6	3	16	32	0	96	1	283
Total	29	88	18	224	966	49	42	126	258	33	692	24	2549
Approach%	21.5	65.2	13.3	18.1	78.0	4.0	9.9	29.6	60.6	4.4	92.4	3.2	
Total%	1.1	3.5	0.7	8.8	37.9	1.9	1.6	4.9	10.1	1.3	27.1	0.9	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	18	46	8	146	580	33	23	72	150	19	377	11	1,483
Approach%	25.0	63.9	11.1	19.2	76.4	4.3	9.4	29.4	61.2	4.7	92.6	2.7	
Total%	1.2	3.1	0.5	9.8	39.1	2.2	1.6	4.9	10.1	1.3	25.4	0.7	
PHF			0.86			0.95			0.78			0.97	0.97

PM	North Date Street Southbound			East Grand Avenue Westbound			South Date Street Northbound			East Grand Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	4	20	2	23	99	7	6	17	58	9	249	4	498
16:15	5	14	1	23	86	3	11	24	48	0	203	4	422
16:30	3	11	1	27	92	3	10	20	51	5	233	5	461
16:45	7	14	4	22	93	4	6	17	38	4	215	3	427
17:00	15	23	2	35	93	3	9	24	32	2	248	7	493
17:15	2	19	1	32	75	2	7	12	48	2	200	7	407
17:30	7	18	1	21	79	4	8	21	41	0	194	12	406
17:45	2	11	3	20	102	5	6	19	53	1	192	10	424
Total	45	130	15	203	719	31	63	154	369	23	1734	52	3538
Approach%	23.7	68.4	7.9	21.3	75.4	3.3	10.8	26.3	63.0	1.3	95.9	2.9	
Total%	1.3	3.7	0.4	5.7	20.3	0.9	1.8	4.4	10.4	0.7	49.0	1.5	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	19	59	8	95	370	17	33	78	195	18	900	16	1,808
Approach%	22.1	68.6	9.3	19.7	76.8	3.5	10.8	25.5	63.7	1.9	96.4	1.7	
Total%	1.1	3.3	0.4	5.3	20.5	0.9	1.8	4.3	10.8	1.0	49.8	0.9	
PHF			0.83			0.93			0.92			0.89	0.91

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#19	File Name:	ITM-21-049-19
Intersection:	East Grand Avenue & Date Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

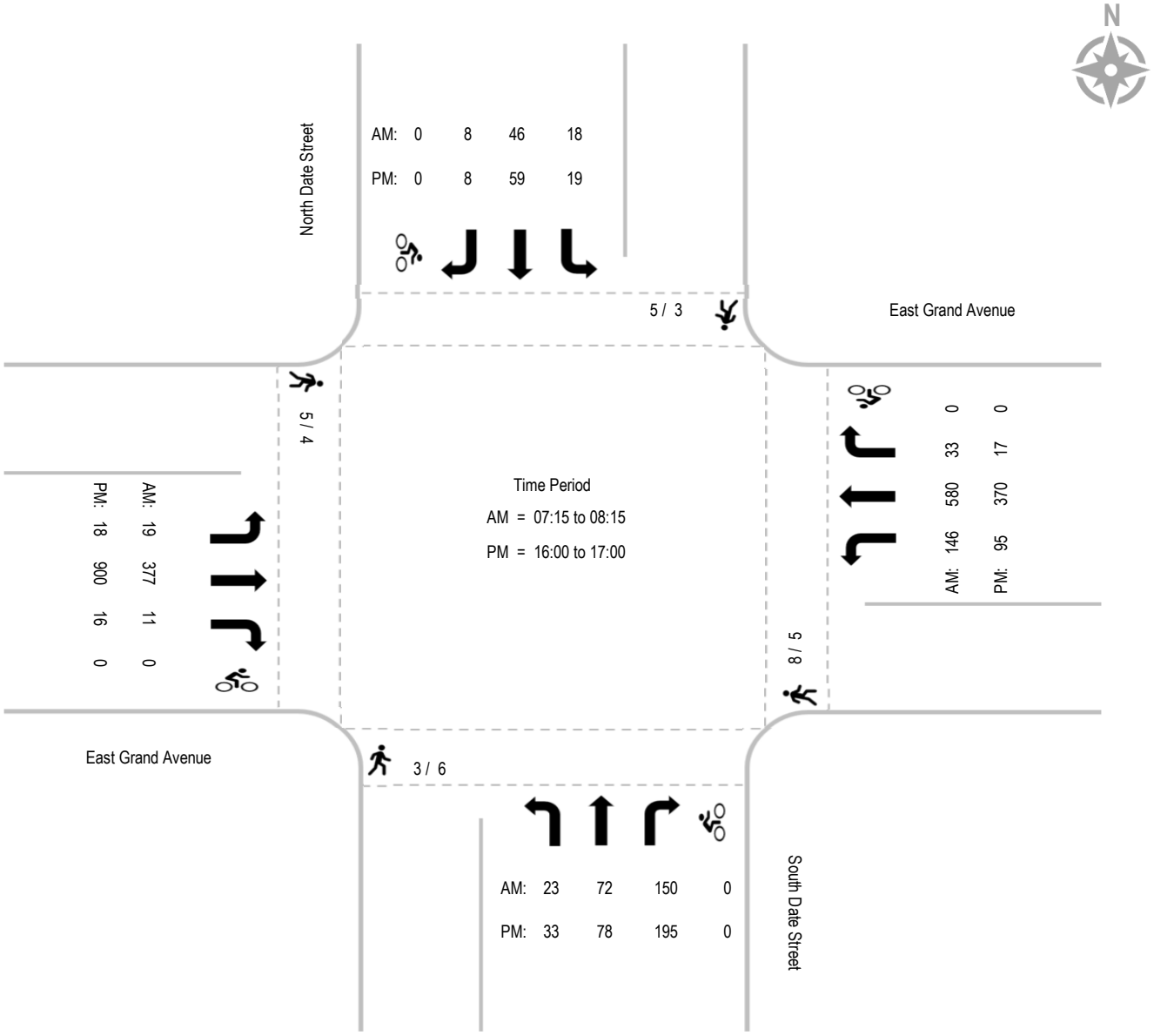
AM	North Date Street Southbound				East Grand Avenue Westbound				South Date Street Northbound				East Grand Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
7:15	2	0	0	0	3	0	0	0	1	0	0	0	2	0	0	0	8	0
7:30	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
7:45	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0
8:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:30	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	5				8				3				5				21	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

PM	North Date Street Southbound				East Grand Avenue Westbound				South Date Street Northbound				East Grand Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
16:30	0	0	0	0	1	0	0	0	5	0	0	0	0	0	0	0	6	0
16:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
17:00	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0
17:15	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0
17:30	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0
17:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	3				5				6				4				18	
Bike Total		0	0	0		0	0	0		0	0	0		0	0	0		0

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#19	File Name:	ITM-21-049-19
Intersection:	East Grand Avenue & Date Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#20	File Name:	ITM-21-049-20
Intersection:	East Grand Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	North Ash Street Southbound			East Grand Avenue Westbound			North Ash Street Northbound			East Grand Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	8	108	9	22	67	22	35	89	14	9	41	19	443
7:15	16	87	9	40	90	31	43	107	27	12	78	20	560
7:30	12	125	12	48	113	18	30	118	19	10	94	26	625
7:45	22	135	18	45	140	24	50	135	22	18	90	24	723
8:00	20	83	15	35	122	25	40	114	41	18	76	27	616
8:15	18	85	12	24	79	19	33	97	26	15	54	29	491
8:30	20	67	11	24	76	16	44	109	25	6	66	25	489
8:45	19	82	10	29	78	11	38	73	17	14	70	22	463
Total	135	772	96	267	765	166	313	842	191	102	569	192	4410
Approach%	13.5	77.0	9.6	22.3	63.9	13.9	23.3	62.6	14.2	11.8	65.9	22.2	
Total%	3.1	17.5	2.2	6.1	17.3	3.8	7.1	19.1	4.3	2.3	12.9	4.4	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	70	430	54	168	465	98	163	474	109	58	338	97	2,524
Approach%	12.6	77.6	9.7	23.0	63.6	13.4	21.8	63.5	14.6	11.8	68.6	19.7	
Total%	2.8	17.0	2.1	6.7	18.4	3.9	6.5	18.8	4.3	2.3	13.4	3.8	
PHF			0.79			0.87			0.90			0.93	0.87

PM	North Ash Street Southbound			East Grand Avenue Westbound			North Ash Street Northbound			East Grand Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	30	103	18	24	87	24	27	124	36	30	159	39	701
16:15	29	85	4	44	80	20	20	93	20	28	212	39	674
16:30	40	132	9	30	74	19	26	120	33	31	181	39	734
16:45	39	124	13	23	73	17	19	109	33	26	185	31	692
17:00	34	115	21	47	84	19	23	123	31	25	199	34	755
17:15	38	134	10	42	75	15	18	106	25	45	180	23	711
17:30	31	93	9	39	79	26	17	108	25	27	190	49	693
17:45	35	108	12	36	80	12	28	102	20	36	143	38	650
Total	276	894	96	285	632	152	178	885	223	248	1449	292	5610
Approach%	21.8	70.6	7.6	26.7	59.1	14.2	13.8	68.8	17.3	12.5	72.9	14.7	
Total%	4.9	15.9	1.7	5.1	11.3	2.7	3.2	15.8	4.0	4.4	25.8	5.2	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	151	505	53	142	306	70	86	458	122	127	745	127	2,892
Approach%	21.3	71.2	7.5	27.4	59.1	13.5	12.9	68.8	18.3	12.7	74.6	12.7	
Total%	5.2	17.5	1.8	4.9	10.6	2.4	3.0	15.8	4.2	4.4	25.8	4.4	
PHF			0.97			0.86			0.93			0.97	0.96

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

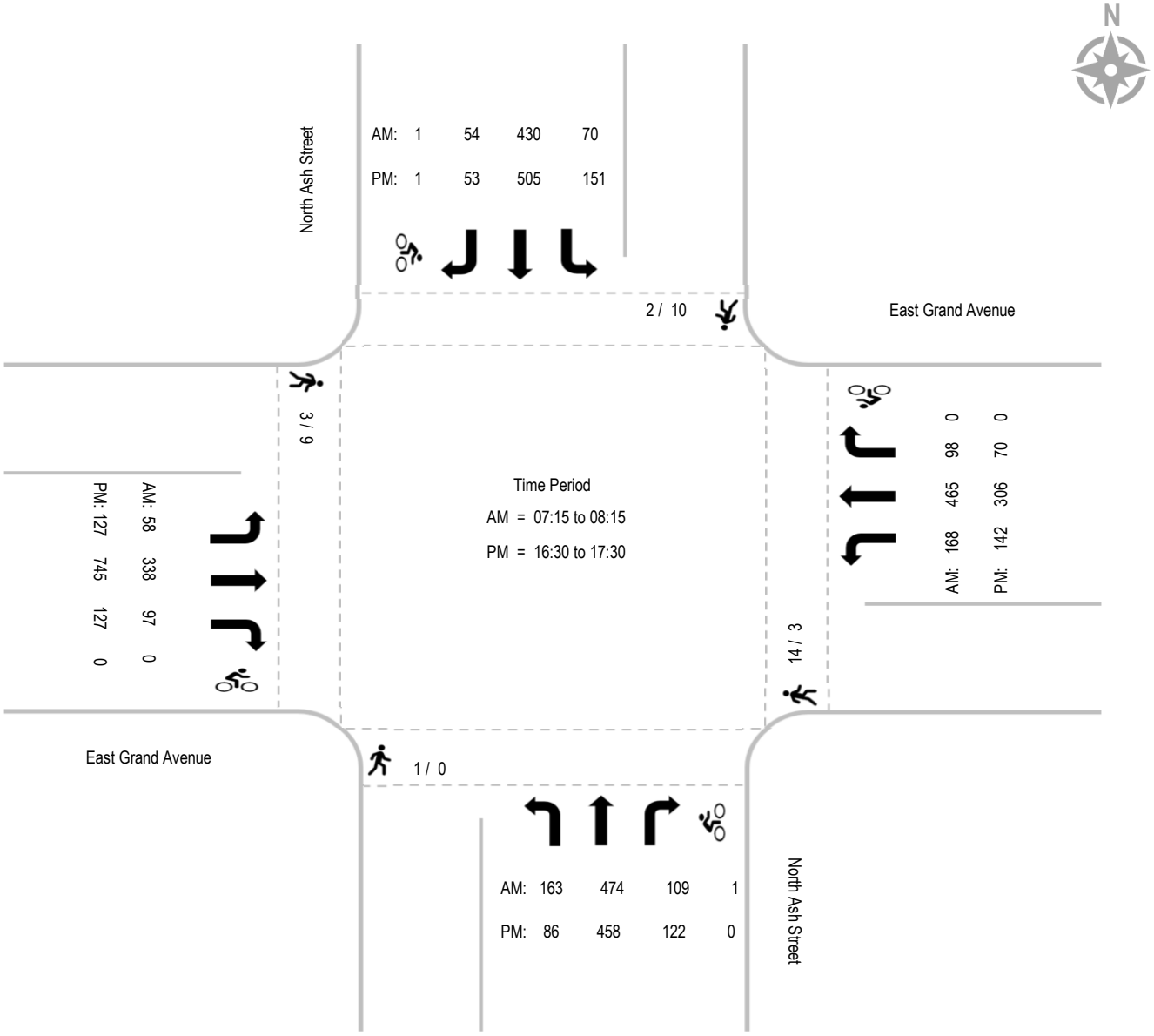
Location:	#20	File Name:	ITM-21-049-20
Intersection:	East Grand Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	North Ash Street Southbound				East Grand Avenue Westbound				North Ash Street Northbound				East Grand Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	1
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	0
7:45	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	4	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:15	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0
8:30	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	2	1
8:45	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	3	0
Ped Total	2				14				1				3				20	
Bike Total		1	0	0		0	0	0		0	1	0		0	0	0		2

PM	North Ash Street Southbound				East Grand Avenue Westbound				North Ash Street Northbound				East Grand Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:15	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	8	0
16:30	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
16:45	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	0
17:00	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Total	10				3				0				9				22	
Bike Total		0	1	0		0	0	0		0	0	0		0	0	0		1

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#20	File Name:	ITM-21-049-20
	Intersection:	East Grand Avenue & North Ash Street	Project:	LLG Ref. 3-21-3338
	Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#21	File Name:	ITM-21-049-21
Intersection:	East Grand Avenue & Rose Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

AM	North Rose Street Southbound			Grand Avenue Westbound			South Rose Street Northbound			Grand Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	10	21	19	5	73	21	15	47	4	15	37	18	285
7:15	22	34	24	12	130	35	17	66	6	20	66	17	449
7:30	14	51	32	31	112	29	19	73	18	43	85	22	529
7:45	19	64	33	23	149	45	26	79	21	27	79	19	584
8:00	24	69	36	11	139	14	33	47	30	20	72	18	513
8:15	14	32	20	7	76	15	19	62	4	11	50	17	327
8:30	15	27	19	2	88	16	20	43	4	12	58	9	313
8:45	12	28	22	0	55	14	14	20	2	10	57	30	264
Total	130	326	205	91	822	189	163	437	89	158	504	150	3264
Approach%	19.7	49.3	31.0	8.3	74.6	17.2	23.7	63.4	12.9	19.5	62.1	18.5	
Total%	4.0	10.0	6.3	2.8	25.2	5.8	5.0	13.4	2.7	4.8	15.4	4.6	

AM Intersection Peak Hour: **07:15 to 08:15**

Volume	79	218	125	77	530	123	95	265	75	110	302	76	2,075
Approach%	18.7	51.7	29.6	10.5	72.6	16.8	21.8	60.9	17.2	22.5	61.9	15.6	
Total%	3.8	10.5	6.0	3.7	25.5	5.9	4.6	12.8	3.6	5.3	14.6	3.7	
PHF			0.82			0.84			0.86			0.81	0.89

PM	North Rose Street Southbound			Grand Avenue Westbound			South Rose Street Northbound			Grand Avenue Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	33	56	32	3	84	20	25	49	9	37	149	17	514
16:15	30	38	21	4	57	14	16	50	11	41	126	20	428
16:30	39	40	21	4	77	22	24	47	9	30	149	18	480
16:45	28	54	31	4	57	27	19	47	7	41	151	21	487
17:00	33	47	25	7	69	15	13	45	3	37	133	16	443
17:15	40	56	39	7	68	23	24	43	6	39	164	19	528
17:30	33	36	31	7	65	19	13	45	6	42	131	25	453
17:45	31	51	24	4	80	15	16	54	6	32	134	19	466
Total	267	378	224	40	557	155	150	380	57	299	1137	155	3799
Approach%	30.7	43.5	25.8	5.3	74.1	20.6	25.6	64.7	9.7	18.8	71.5	9.7	
Total%	7.0	9.9	5.9	1.1	14.7	4.1	3.9	10.0	1.5	7.9	29.9	4.1	

PM Intersection Peak Hour: **16:30 to 17:30**

Volume	140	197	116	22	271	87	80	182	25	147	597	74	1,938
Approach%	30.9	43.5	25.6	5.8	71.3	22.9	27.9	63.4	8.7	18.0	73.0	9.0	
Total%	7.2	10.2	6.0	1.1	14.0	4.5	4.1	9.4	1.3	7.6	30.8	3.8	
PHF			0.84			0.92			0.90			0.92	0.92

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#21	File Name:	ITM-21-049-21
Intersection:	East Grand Avenue & Rose Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

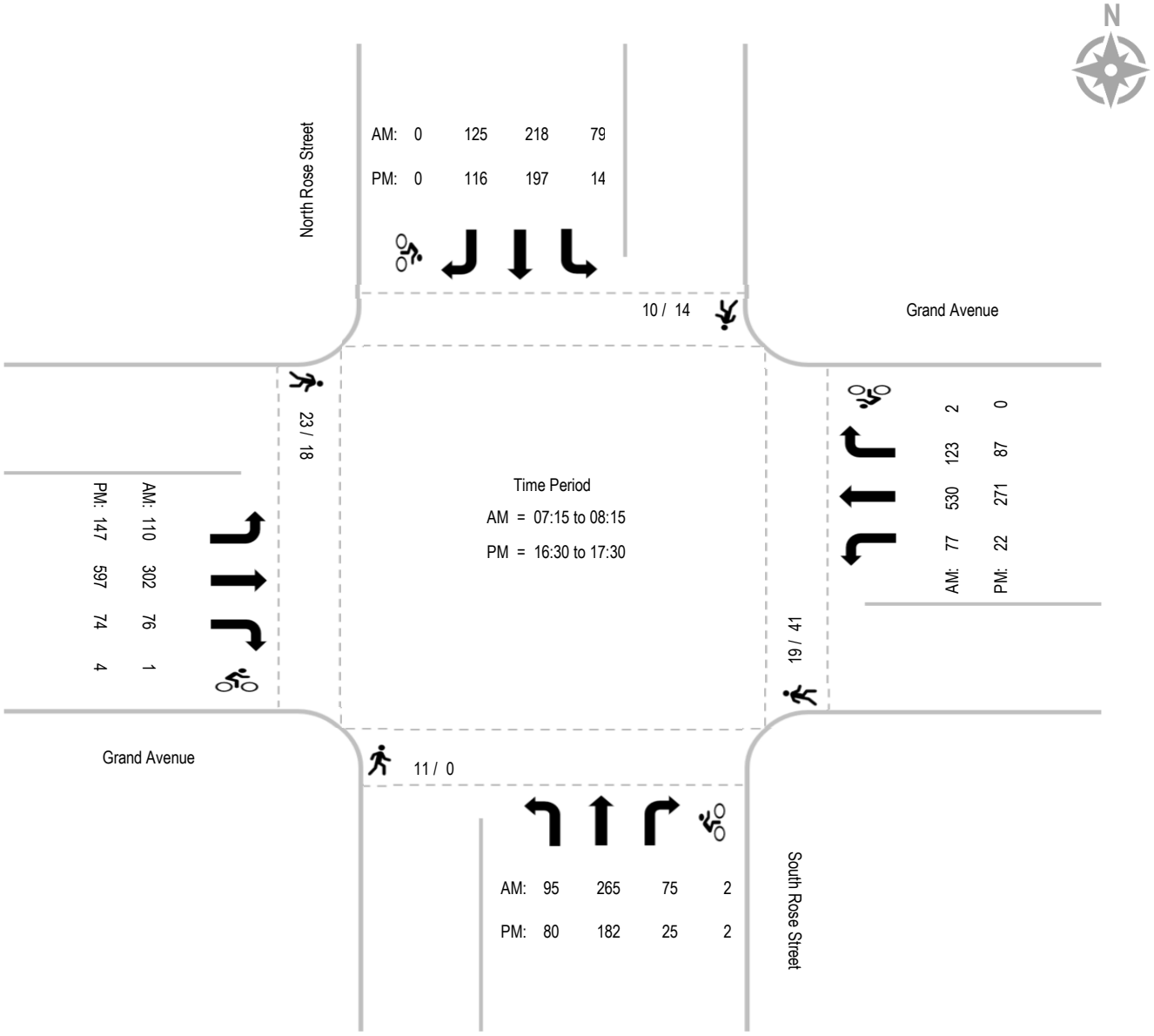
AM	North Rose Street Southbound				Grand Avenue Westbound				South Rose Street Northbound				Grand Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	4	0	0	0	4	0	0	0	0	0	1	0	1	0	0	0	9	1
7:15	0	0	0	0	5	0	1	0	4	1	0	0	3	0	1	0	12	3
7:30	2	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0	10	0
7:45	0	0	0	0	5	0	0	0	1	0	0	0	8	0	0	0	14	0
8:00	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	5	0
8:15	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	5	0
8:30	2	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	5	1
8:45	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0
Ped Total	10				19				11				23				63	
Bike Total		0	0	0		0	1	1		1	1	0		0	1	0		5

PM	North Rose Street Southbound				Grand Avenue Westbound				South Rose Street Northbound				Grand Avenue Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	3	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	4	1
16:15	6	0	0	0	9	0	0	0	0	0	0	0	6	0	0	0	21	0
16:30	1	0	0	0	5	0	0	0	0	1	0	0	3	0	0	1	9	2
16:45	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5	0
17:00	0	0	0	0	8	0	0	0	0	0	0	0	5	0	3	0	13	3
17:15	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	5	0
17:30	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
17:45	0	0	0	0	13	0	0	0	0	0	0	0	1	0	0	0	14	0
Ped Total	14				41				0				18				73	
Bike Total		0	0	0		0	0	0		1	1	0		0	3	1		6

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers

Location:	#21	File Name:	ITM-21-049-21
Intersection:	East Grand Avenue & Rose Street	Project:	LLG Ref. 3-21-3338
Date of Count:	Thursday, September 02, 2021		Sixth Cycle Housing

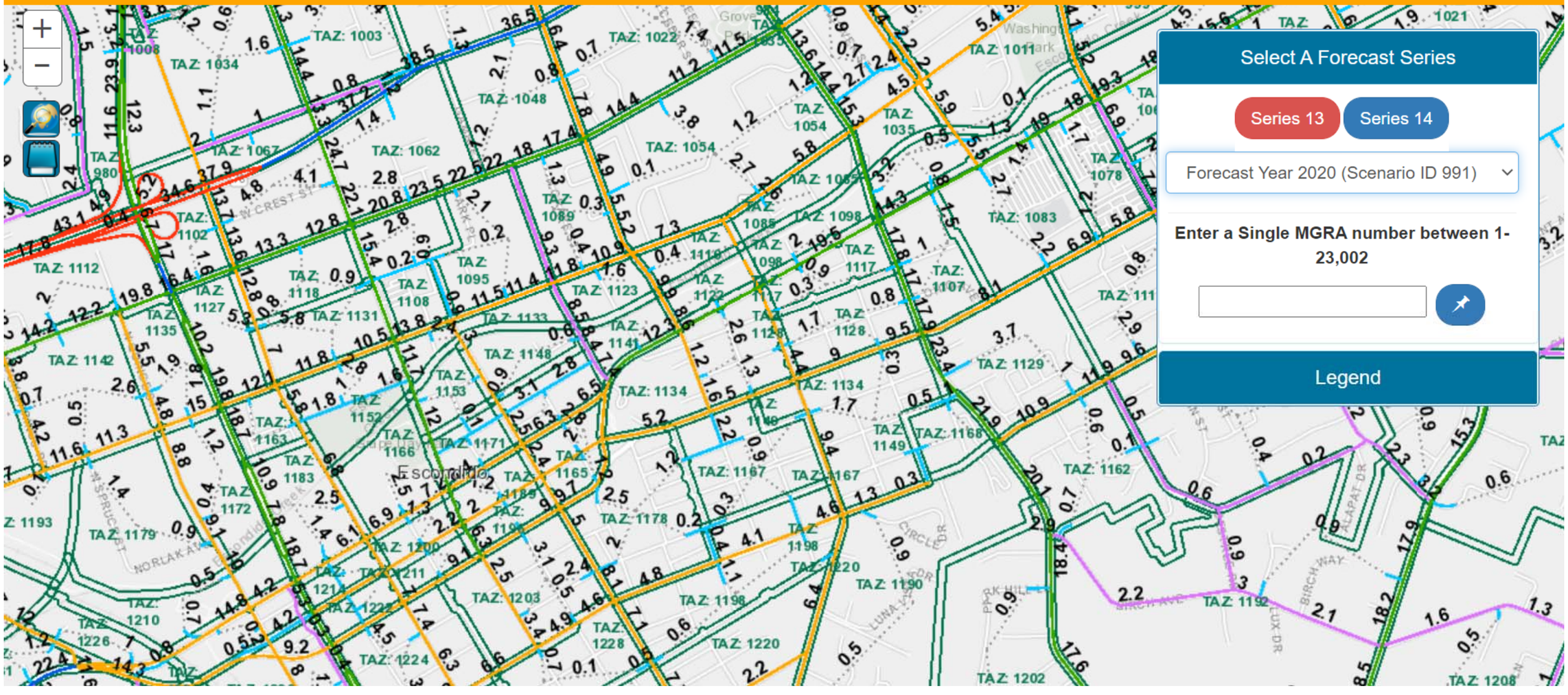


City of Escondido

adtid	Primary Street	First Cross Street	Second Cross Street	Latest ADT count	Year	Project name
6707	ASH ST	RINCON AVE	VISTA AVE	3944	2015	Boer Residential (2014), Pickering Residential (20
6795	ASH ST	VISTA AVE	EL NORTE PKWY	5143	2020	Covid related
6568	ASH ST	EL NORTE PKWY	LINCOLN AVE	9600	2017	speed survey
6569	ASH ST	LINCOLN AVE	MISSION AVE	19790	2017	speed survey
6570	ASH ST	MISSION AVE	WASHINGTON AVE	20051	2017	speed survey
				20300	2012	
6571	ASH ST/ROUTE 78	WASHINGTON AVE	VALLEY PKWY	24638	2017	1107 East Valley Pkwy Development TIA
				21000	2012	
6572	ASH ST/ROUTE 78	VALLEY PKWY	GRAND AVE	19429	2017	1107 East Valley Pkwy Development TIA
6743	BROADWAY	NORTH AVE	JESMOND DENE RD	5700	2012	
6739	BROADWAY	JESMOND DENE RD	CNTRY CLUB LN/RINCON AVE	11600	2012	
6706	BROADWAY	CNTRY CLUB LN/RINCON AVE	SHERIDAN AVE	9676	2018	Individual Count
6761	BROADWAY	SHERIDAN AVE	EL NORTE PKWY	11811	2018	Individual Count
6696	BROADWAY	EL NORTE PKWY	LINCOLN AVE	17534	2013	Centerpointe 78
6591	BROADWAY	LINCOLN AVE	ROUTE 78	20384	2013	Centerpointe 78
6592	BROADWAY/ROUTE 78	ROUTE 78	MISSION AVE	25500	2012	
6603	BROADWAY/ROUTE 78	MISSION AVE	WASHINGTON AVE	23700	2012	
6606	BROADWAY	WASHINGTON AVE	VALLEY PKWY	18700	2012	
6605	BROADWAY	VALLEY PKWY	GRAND AVE	8256	2016	Hotel
6672	BROADWAY	GRAND AVE	2ND AVE	8200	2012	
6604	BROADWAY	2ND AVE	5TH AVE	6000	2012	
6654	CENTRE CITY PKWY/I-15 RAMP	INTERSTATE 15	CENTRE CITY PKWY	7200	2012	
6737	CENTRE CITY PKWY	INTERSTATE 15 RAMPS	COUNTRY CLUB LN	13580	2018	Individual Count
6694	CENTRE CITY PKWY	COUNTRY CLUB LN	IRIS LN	11964	2013	
6696	CENTRE CITY PKWY	IRIS LN	EL NORTE PKWY	37541	2017	Individual Count
6664	CENTRE CITY PKWY	EL NORTE PKWY	ROUTE 78	25756	2016	CC Shopping Center
6663	CENTRE CITY PKWY	ROUTE 78	MISSION AVE	32113	2016	CC Shopping Center
6662	CENTRE CITY PKWY	MISSION AVE	WASHINGTON AVE	22266	2016	CC Shopping Center
6628	CENTRE CITY PKWY	WASHINGTON AVE	VALLEY PKWY	22985	2016	CC Shopping Center
6629	CENTRE CITY PKWY	VALLEY PKWY	GRAND AVE	26100	2012	
6670	CENTRE CITY PKWY	GRAND AVE	2ND AVE	27900	2012	
6630	CENTRE CITY PKWY	2ND AVE	5TH AVE	27400	2012	
6631	CENTRE CITY PKWY	5TH AVE	9TH AVE	20316	2018	Individual Count
6632	CENTRE CITY PKWY	9TH AVE	13TH AVE	30600	2012	
6633	CENTRE CITY PKWY	13TH AVE	FELICITA AVE	31800	2012	
6661	CENTRE CITY PKWY	FELICITA AVE	ESCONDIDO BLVD RAMP		2014	Del Prado, 2020 CCP Condos (Covid-19)
6694	CENTRE CITY PKWY	ESCONDIDO BLVD RAMP	CITRACADO PKWY		2014	Del Prado, 2020 CCP Condos (Covid-19)
6695	CENTRE CITY PKWY/I-15 RAMP	CITRACADO PKWY	INTERSTATE 15	24378	2014	Del Prado
6655	DATE ST	VALLEY PKWY	GRAND AVE	3300	2012	
6656	DATE ST	GRAND AVE	5TH AVE	7100	2012	
6714	ESCONDIDO BLVD	EL NORTE PKWY	DECATUR WY	7400	2013	Centerpointe 78
6589	ESCONDIDO BLVD	DECATUR WY	LINCOLN AVE	9618	2013	Centerpointe 78
6588	ESCONDIDO BLVD	LINCOLN AVE	MISSION AVE	10424	2013	Centerpointe 78
6587	ESCONDIDO BLVD	MISSION AVE	WASHINGTON AVE	14812	2016	CC Shopping Center
6586	ESCONDIDO BLVD	WASHINGTON AVE	VALLEY PKWY	14278	2016	Hotel, CC Shopping Center
6585	ESCONDIDO BLVD	VALLEY PKWY	GRAND AVE	10901	2016	Hotel
6671	ESCONDIDO BLVD	GRAND AVE	2ND AVE	10975	2016	Hotel
6584	ESCONDIDO BLVD	2ND AVE	5TH AVE			
6583	ESCONDIDO BLVD	5TH AVE	9TH AVE	12467	2018	Individual Count
6582	ESCONDIDO BLVD	9TH AVE	13TH AVE	12467	2018	Individual Count
6581	ESCONDIDO BLVD	13TH AVE	FELICITA AVE	12505	2018	Individual Count
6764	ESCONDIDO BLVD	FELICITA AVE	CENTRE CITY PKWY RAMP	**12443**	**2018**	Individual Count
6580	ESCONDIDO BLVD	CENTER CITY PKWY RAMP	BROTHERTON RD			S. Escondido New Dev 2020 TIA
6804	ESCONDIDO BLVD	BROTHERTON RD	CITRACADO PKWY			S. Escondido New Dev 2020 TIA
N/A	ESCONDIDO BLVD	CITRACADO PKWY	CRANSTON DR			S. Escondido New Dev 2020 TIA
	FIG ST	EL NORTE PKWY	SHERIDAN AVE	646	2020	Covid Related
6564	FIG ST	EL NORTE PKWY	LINCOLN AVE			
6565	FIG ST	LINCOLN AVE	MISSION AVE	8980	2013	Centerpointe 78
6566	FIG ST	MISSION AVE	WASHINGTON AVE			
6567	FIG ST	WASHINGTON AVE	VALLEY PKWY			
6748	FIG ST	VALLEY PKWY	GRAND AVE			
6772	GRAND AVE (E/B 1-WAY)	VALLEY PKWY	TULIP ST (S)			
6773	GRAND AVE (E/B 1-WAY)	TULIP ST (S)	QUINCE ST			
6646	GRAND AVE	QUINCE ST	CENTRE CITY PKWY			
6627	GRAND AVE	CENTRE CITY PKWY	ESCONDIDO BLVD	8168	2017	Individual Count
6626	GRAND AVE	ESCONDIDO BLVD	BROADWAY	9951	2017	Individual Count
6625	GRAND AVE	BROADWAY	JUNIPER ST	8935	2017	Individual Count
6624	GRAND AVE	JUNIPER ST	VALLEY BLVD	9488	2017	Individual Count
6719	GRAND AVE	VALLEY BLVD	2ND AVE (E.B. RAMP)			
6621	GRAND AVE	2ND AVE (E.B. RAMP)	FIG ST			
6759	GRAND AVE	FIG ST	DATE ST			
6622	GRAND AVE	DATE ST	ASH ST			
6547	GRAND AVE	ASH ST	ROSE ST			
6548	GRAND AVE	ROSE ST	MIDWAY DR			
6549	GRAND AVE	MIDWAY DR	BEAR VALLEY PKWY			
6642	HARDING ST	LINCOLN AVE	MISSION AVE			
6648	HARDING ST	MISSION AVE	WASHINGTON AVE			
6652	HARDING ST	WASHINGTON AVE	VALLEY PKWY			
6761	HICKORY ST	VALLEY PKWY	WASHINGTON AVE			
6753	HICKORY ST	WASHINGTON AVE	MISSION AVE			
6650	JUNIPER ST	WASHINGTON AVE	VALLEY PKWY			
6661	JUNIPER ST	VALLEY PKWY	GRAND AVE			
6614	JUNIPER ST	GRAND AVE	2ND AVE			
6660	JUNIPER ST	2ND AVE	5TH AVE	7531	2017	Ivy TIA
6659	JUNIPER ST	5TH AVE	9TH AVE			
6658	JUNIPER ST	9TH AVE	13TH AVE	9999	2019	CIP Juniper Improvements
6656	JUNIPER ST	13TH AVE	IDAHO AVE	14591	2019	CIP Juniper Improvements
6640	JUNIPER ST	IDAHO AVE	VALLEY VIEW CASINO DR/HICKORY AVE			
6637	JUNIPER ST	VALLEY VIEW CASINO DR/HICKORY AVE	11TH AVE	7198	2019	CIP Juniper Improvements
6556	MIDWAY DR	EL NORTE PKWY	LINCOLN AVE			
6555	MIDWAY DR	LINCOLN AVE	MISSION AVE			
6554	MIDWAY DR	MISSION AVE	WASHINGTON AVE			
6553	MIDWAY DR	WASHINGTON AVE	VALLEY PKWY			
6552	MIDWAY DR	VALLEY PKWY	GRAND AVE			
6551	MIDWAY DR	GRAND AVE	OAK HILL DR			
6550	MIDWAY DR	OAK HILL DR	BEAR VALLEY PKWY			
6523	MISSION AVE	MISSION RD/ANDREASEN DR	ROCK SPRINGS RD			
6716	MISSION AVE	ROCK SPRINGS RD	QUINCE ST	22209	2016	CenterCity shopping
6522	MISSION AVE	QUINCE ST	CENTRE CITY PKWY	25949	2016	CenterCity shopping
6521	MISSION AVE	CENTRE CITY PKWY	ESCONDIDO BLVD	23416	2016	CenterCity shopping
6520	MISSION AVE	ESCONDIDO BLVD	BROADWAY	18101	2016	CenterCity shopping
6519	MISSION AVE	BROADWAY	FIG ST			
6518	MISSION AVE	FIG ST	ASH ST	13216	2018	Individual Count
6517	MISSION AVE	ASH ST	ROSE ST			
6516	MISSION AVE	ROSE ST	MIDWAY DR			
6515	MISSION AVE	MIDWAY DR	CITRUS AVE	4161	2018	Individual Count
6657	MISSION RD	BARHAM DR	NORDAHL RD/CITRACADO PKWY			
6514	MISSION RD	NORDAHL RD/CITRACADO PKWY	MISSION AVE/ANDREASEN DR	18000	2013	Valiano
6647	ROSE ST	EL NORTE PKWY	LINCOLN AVE			
6557	ROSE ST	LINCOLN AVE	MISSION AVE	3010	2017	Individual count PD
6558	ROSE ST	MISSION AVE	WASHINGTON AVE			
6560	ROSE ST	WASHINGTON AVE	VALLEY PKWY			
6561	ROSE ST	VALLEY PKWY	GRAND AVE			
6562	ROSE ST	MIDWAY DR	OAK HILL DR			
6563	ROSE ST	OAK HILL DR	BEAR VALLEY PKWY			
6573	SAN PASQUAL VALLEY/RT 78	GRAND AVE	OAK HILL DR			
6574	SAN PASQUAL VALLEY/RT 78	OAK HILL DR	BIRCH AVE			
6753	SAN PASQUAL RD	BEAR VALLEY PKWY	RYAN DR	12718	2018	Safari Highlands
6623	VALLEY BLVD	VALLEY PKWY	GRAND AVE			
6720	VALLEY BLVD (N/B 1-WAY)	GRAND AVE	2ND AVE			
6771	VALLEY CENTER RD	LAKE WOHLFORD RD	CITY LIMIT	5362?	2017	Individual Count - data likely high (doubled)
6745	VALLEY CENTER RD	LAKE WOHLFORD RD	WASHINGTON AVE			
	VALLEY PKWY	EL NORTE PKWY	LAKE WOHLFORD RD	30908	2020	Covid Related
6688	VALLEY PKWY	EL NORTE PKWY	BEAR VALLEY PKWY	27400	2014	Oakvale Rd
6536	VALLEY PKWY	BEAR VALLEY PKWY	CITRUS AVE	17889	2017	Speed survey
6647	VALLEY PKWY	CITRUS AVE	MIDWAY DR			
6538	VALLEY PKWY	MIDWAY DR	ROSE ST	28318	2017	Speed survey
6539	VALLEY PKWY	ROSE ST	ASH ST	29324	2017	Speed survey
				25430	2017	1107 East Valley Pkwy Development TIA
6540	VALLEY PKWY	ASH ST	MAPLE ST	24858	2018	Individual Count
6541	VALLEY PKWY	DATE ST	FIG ST			
6542	VALLEY PKWY	FIG ST	HICKORY ST			
6543	VALLEY PKWY (W/B 1-WAY)	HICKORY ST	JUNIPER ST	11737	2017	Individual Count
6544	VALLEY PKWY (W/B 1-WAY)	JUNIPER ST	BROADWAY	16553	2017	Individual Count
6545	VALLEY PKWY (W/B 1-WAY)	BROADWAY	ESCONDIDO BLVD	17466	2017	Individual Count
6546	VALLEY PKWY (W/B 1-WAY)	ESCONDIDO BLVD	CENTRE CITY PKWY	16336	2017	Individual Count
6677	VALLEY PKWY (W/B 1-WAY)	CENTRE CITY PKWY	QUINCE ST			
6676	VALLEY PKWY (W/B 1-WAY)	QUINCE ST	TULIP ST (N)	24004	2017	ETC Project Count
6696	VALLEY PKWY	TULIP ST (N)	INTERSTATE 15			
6728	VALLEY PKWY	INTERSTATE 15	AUTO PARK WY	35308	2018	Individual Count
6816	VALLEY PKWY	AUTO PARK WY	9TH AVE	29314	2018	Individual Count
6686	VALLEY PKWY	9TH AVE	11TH AVE			
6687	VALLEY PKWY	11TH AVE	CITRACADO PKWY	19865	2018	Individual Count
6696	VALLEY PKWY	CITRACADO PKWY	VIA RANCHO PKWY			
6767	WASHINGTON AVE	MISSION AVE	HALE AVE	1368	2020	Covid Related
6532	WASHINGTON AVE	HALE AVE	ROCK SPRINGS RD	16761	2018	Individual Count
6742	WASHINGTON AVE	ROCK SPRINGS RD	QUINCE ST	18450	2018	Individual Count
6660	WASHINGTON AVE	QUINCE ST	CENTRE CITY PKWY	18166	2016	CC Shopping Center
6651	WASHINGTON AVE	CENTRE CITY PKWY	ESCONDIDO BLVD	18471	2016	CC Shopping Center
6530	WASHINGTON AVE	ESCONDIDO BLVD	BROADWAY	18795	2016	CC Shopping Center
6529	WASHINGTON AVE/ROUTE 78	BROADWAY	JUNIPER ST	19400	2016	CC Shopping Center
6528	WASHINGTON AVE/ROUTE 78	JUNIPER ST	FIG ST			
6527	WASHINGTON AVE/ROUTE 78	FIG ST	ASH ST			
6526	WASHINGTON AVE	ASH ST	ROSE ST			
6525	WASHINGTON AVE	ROSE ST	MIDWAY DR			
6524	WASHINGTON AVE	MIDWAY DR	CITRUS AVE	6274	2015	CalTrans
6741	WASHINGTON AVE	CITRUS AVE	EL NORTE PKWY			
6668	2ND AVE (E/B 1-WAY)	GRAND AVE	QUINCE ST			
6682	2ND AVE (E/B 1-WAY)	QUINCE ST	CENTRE CITY PKWY			
6668	2ND AVE (E/B 1-WAY)	CENTRE CITY PKWY	ESCONDIDO BLVD	13789	2017	Individual Count
6667	2ND AVE (E/B 1-WAY)	ESCONDIDO BLVD	S BROADWAY	14616	2017	Individual Count
6666	2ND AVE (E/B 1-WAY)	S BROADWAY	JUNIPER ST	14161	2017	Individual Count
6665	2ND AVE (E/B 1-WAY)	JUNIPER ST	VALLEY BLVD	13604	2017	Individual Count

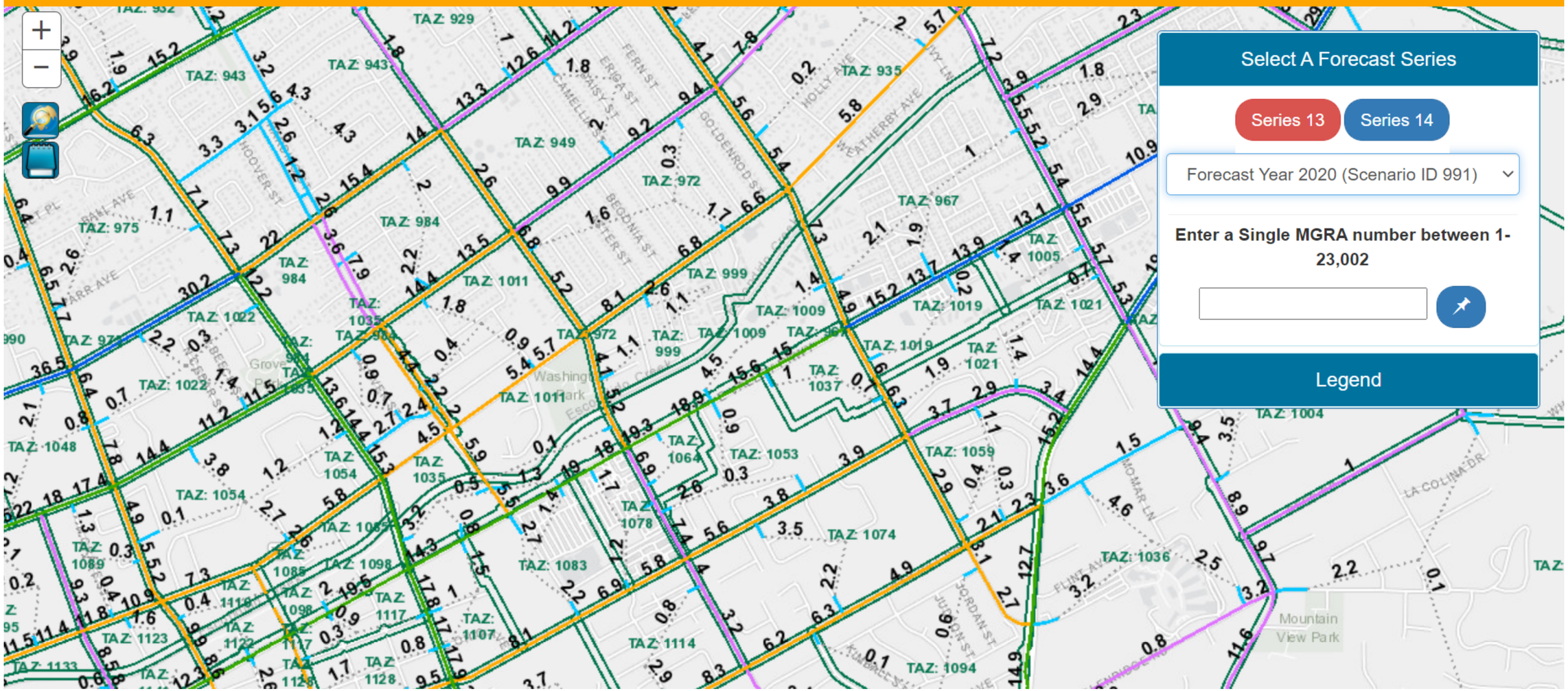
SANDAG Transportation Forecast Information Center

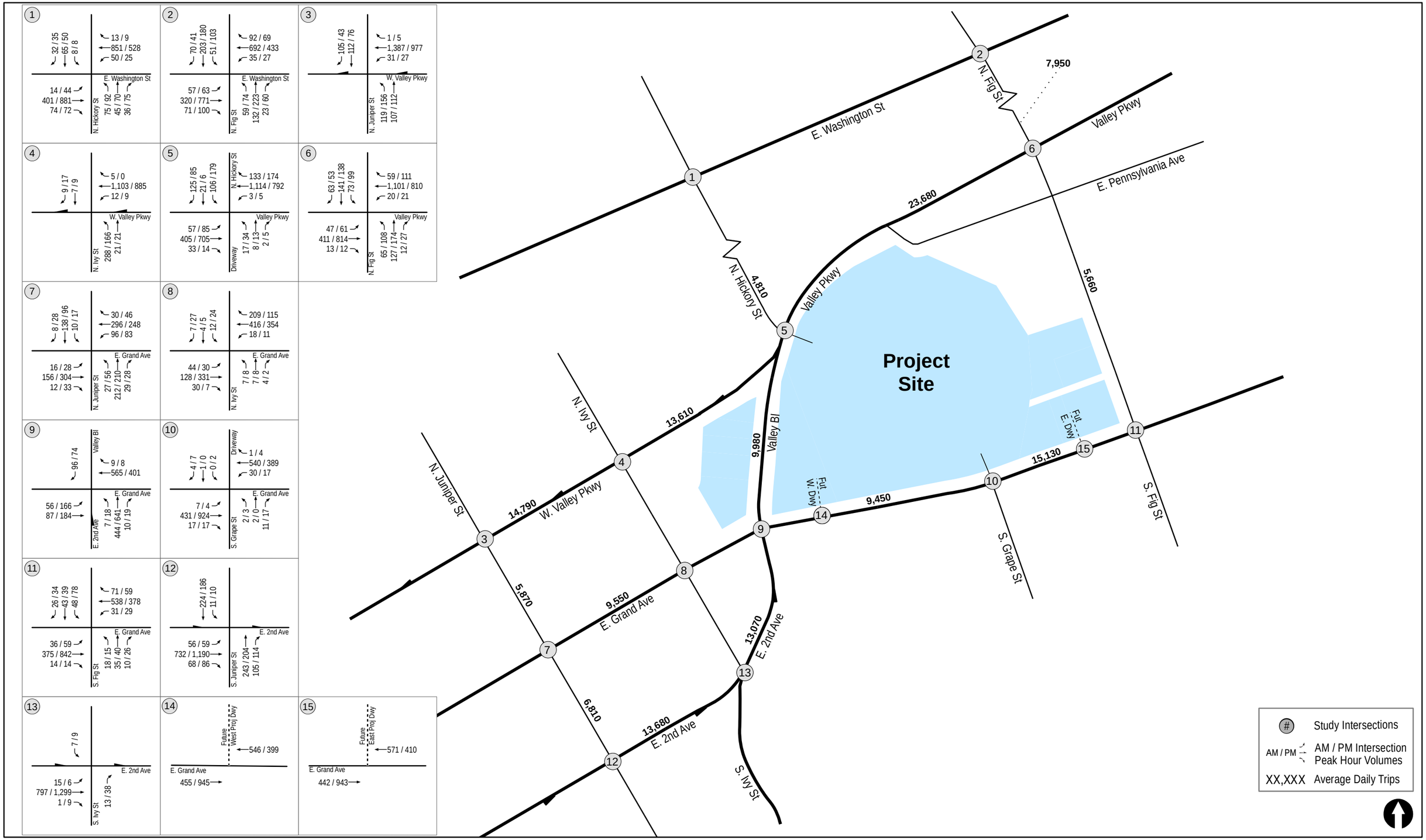
SB743-SR14 VMT Web App | Download Data | Map | Help | Contact



SANDAG Transportation Forecast Information Center

SB743-SR14 VMT Web App | Download Data | Map | Help | Contact





LINSCOTT LAW & GREENSPAN engineers

N:\2878\Figures
Date: 09/06/19

Figure 3-2

Existing Traffic Volumes

PALOMAR HEIGHTS

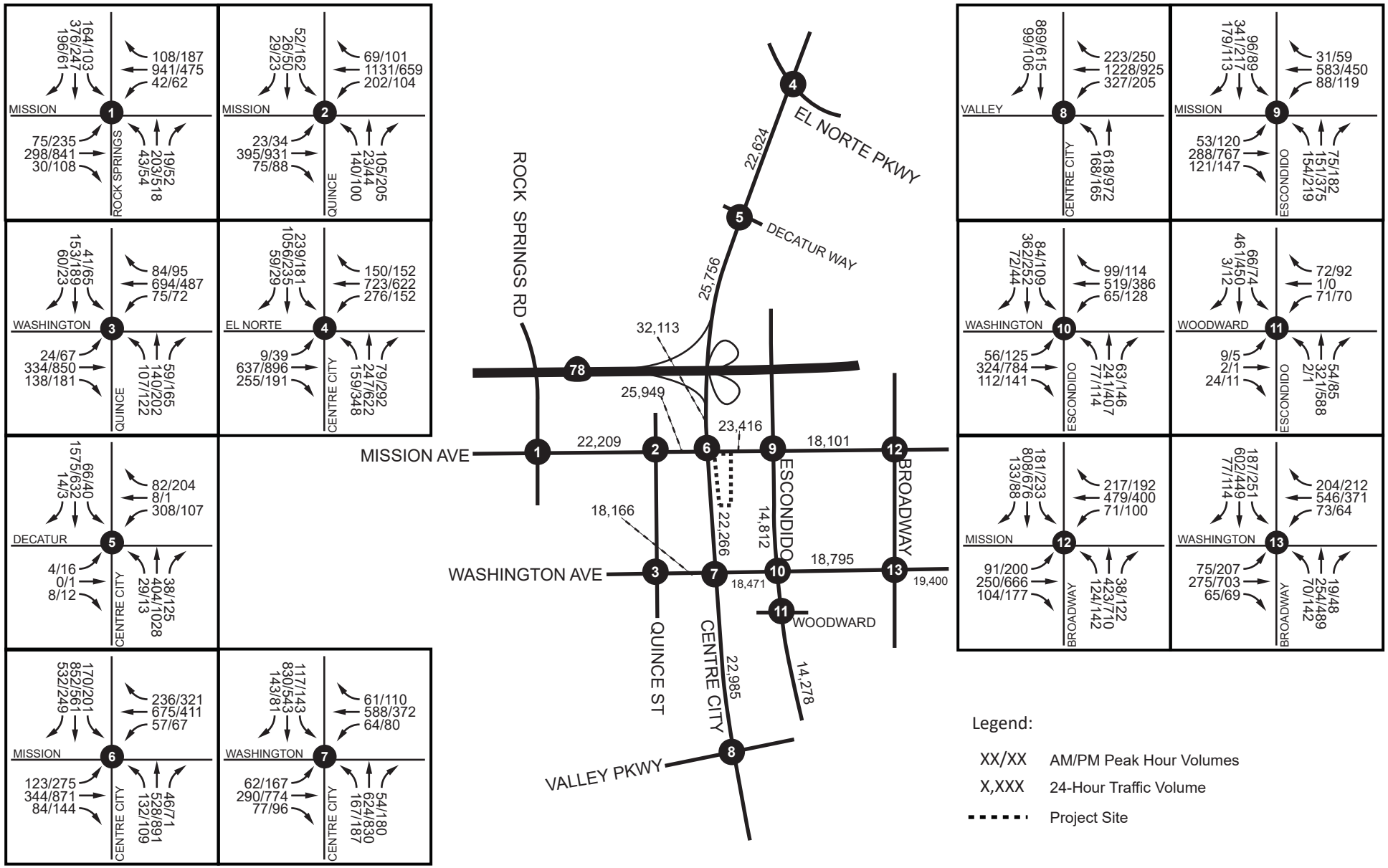


Exhibit 4A: Existing AM/PM Peak Hour Volumes

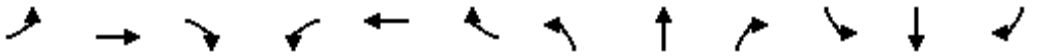
ONP-16-002 Centre City Shopping Center TIA

Not to Scale

Traffic Engineering & Transportation Planning Consultants - 6 Venture, Suite 265 - Irvine, CA 92618 - P: (949) 878-3509 - F: (949) 878-3593 - www.tjwengineering.com

APPENDIX E

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – EXISTING



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	669	268	290	760	158	167	260	83	251	1110	62
Future Volume (veh/h)	9	669	268	290	760	158	167	260	83	251	1110	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	727	291	315	826	172	182	283	90	273	1207	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	952	411	331	994	207	293	1413	615	316	1437	625
Arrive On Green	0.02	0.27	0.27	0.19	0.68	0.68	0.08	0.40	0.40	0.09	0.40	0.40
Sat Flow, veh/h	3456	3554	1536	3456	2912	606	3456	3554	1546	3456	3554	1546
Grp Volume(v), veh/h	10	727	291	315	504	494	182	283	90	273	1207	67
Grp Sat Flow(s),veh/h/ln	1728	1777	1536	1728	1777	1741	1728	1777	1546	1728	1777	1546
Q Serve(g_s), s	0.5	31.1	28.2	14.9	34.3	34.3	8.4	8.6	6.1	12.9	50.5	4.5
Cycle Q Clear(g_c), s	0.5	31.1	28.2	14.9	34.3	34.3	8.4	8.6	6.1	12.9	50.5	4.5
Prop In Lane	1.00		1.00	1.00		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	952	411	331	606	594	293	1413	615	316	1437	625
V/C Ratio(X)	0.13	0.76	0.71	0.95	0.83	0.83	0.62	0.20	0.15	0.86	0.84	0.11
Avail Cap(c_a), veh/h	209	1081	467	331	606	594	293	1413	615	419	1437	625
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.51	0.51	0.51	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	79.1	55.6	54.6	66.3	22.7	22.7	72.9	32.5	31.8	73.9	44.3	30.6
Incr Delay (d2), s/veh	0.6	3.5	5.3	23.8	5.5	5.6	3.0	0.3	0.5	10.9	6.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	14.2	11.5	6.9	10.1	9.9	3.9	3.9	2.4	6.2	23.5	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.7	59.1	59.9	90.2	28.2	28.3	75.9	32.8	32.3	84.8	50.4	30.9
LnGrp LOS	E	E	E	F	C	C	E	C	C	F	D	C
Approach Vol, veh/h		1028			1313			555			1547	
Approach Delay, s/veh		59.5			43.1			46.9			55.6	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	72.5	20.9	50.5	20.0	73.6	8.8	62.6
Change Period (Y+Rc), s	6.0	6.9	5.1	6.3	6.0	6.9	5.1	6.3
Max Green Setting (Gmax), s	20.0	54.7	15.8	50.2	14.0	60.7	10.0	56.0
Max Q Clear Time (g_c+I1), s	14.9	10.6	16.9	33.1	10.4	52.5	2.5	36.3
Green Ext Time (p_c), s	0.3	2.8	0.0	8.2	0.1	5.6	0.0	9.6

Intersection Summary	
HCM 6th Ctrl Delay	51.7
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	700	119	184	987	85	131	449	138	195	527	344
Future Volume (veh/h)	238	700	119	184	987	85	131	449	138	195	527	344
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.89	1.00		0.90
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	737	125	194	1039	89	138	473	145	205	555	362
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	1315	223	236	1383	118	158	667	202	226	579	378
Arrive On Green	0.08	0.44	0.44	0.07	0.42	0.42	0.09	0.26	0.26	0.13	0.29	0.29
Sat Flow, veh/h	3456	3018	512	3456	3299	282	1781	2599	787	1781	1965	1281
Grp Volume(v), veh/h	251	434	428	194	559	569	138	321	297	205	502	415
Grp Sat Flow(s),veh/h/ln	1728	1777	1753	1728	1777	1805	1781	1777	1609	1781	1777	1469
Q Serve(g_s), s	11.8	30.1	30.1	9.1	44.0	44.1	12.6	27.1	27.7	18.7	45.8	45.8
Cycle Q Clear(g_c), s	11.8	30.1	30.1	9.1	44.0	44.1	12.6	27.1	27.7	18.7	45.8	45.8
Prop In Lane	1.00		0.29	1.00		0.16	1.00		0.49	1.00		0.87
Lane Grp Cap(c), veh/h	293	774	764	236	745	757	158	456	413	226	524	433
V/C Ratio(X)	0.86	0.56	0.56	0.82	0.75	0.75	0.87	0.70	0.72	0.91	0.96	0.96
Avail Cap(c_a), veh/h	346	774	764	304	745	757	200	456	413	310	532	440
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)	0.63	0.63	0.63	0.68	0.68	0.68	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.5	34.8	34.8	75.9	40.6	40.6	74.2	55.7	55.9	71.0	57.2	57.2
Incr Delay (d2), s/veh	10.7	1.8	1.9	8.5	4.7	4.7	25.2	4.5	5.5	21.7	28.3	32.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	13.3	13.2	4.3	19.8	20.1	6.9	12.7	11.9	9.9	24.4	20.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.2	36.6	36.6	84.3	45.4	45.3	99.4	60.2	61.4	92.8	85.5	89.2
LnGrp LOS	F	D	D	F	D	D	F	E	E	F	F	F
Approach Vol, veh/h		1113			1322			756			1122	
Approach Delay, s/veh		47.6			51.1			67.8			88.2	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	76.8	19.2	53.2	18.5	74.1	25.5	46.9
Change Period (Y+Rc), s	4.5	4.9	4.5	4.6	4.5	4.9	4.5	4.6
Max Green Setting (Gmax), s	14.5	64.1	18.5	49.4	16.5	62.1	28.7	39.2
Max Q Clear Time (g_c+I1), s	11.1	32.1	14.6	47.8	13.8	46.1	20.7	29.7
Green Ext Time (p_c), s	0.1	4.6	0.1	0.8	0.2	5.1	0.2	2.2

Intersection Summary	
HCM 6th Ctrl Delay	62.8
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	859	106	82	1304	15	74	70	70	9	68	42
Future Volume (veh/h)	14	859	106	82	1304	15	74	70	70	9	68	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	934	115	89	1417	16	80	76	76	10	74	46
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	1691	208	130	2085	24	98	329	268	22	141	87
Arrive On Green	0.03	0.53	0.53	0.07	0.58	0.58	0.05	0.18	0.18	0.01	0.13	0.13
Sat Flow, veh/h	1781	3170	390	1781	3598	41	1781	1870	1520	1781	1055	656
Grp Volume(v), veh/h	15	524	525	89	699	734	80	76	76	10	0	120
Grp Sat Flow(s),veh/h/ln	1781	1777	1783	1781	1777	1861	1781	1870	1520	1781	0	1711
Q Serve(g_s), s	0.8	19.5	19.5	4.9	27.3	27.4	4.4	3.5	4.3	0.6	0.0	6.5
Cycle Q Clear(g_c), s	0.8	19.5	19.5	4.9	27.3	27.4	4.4	3.5	4.3	0.6	0.0	6.5
Prop In Lane	1.00		0.22	1.00		0.02	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	49	948	951	130	1030	1079	98	329	268	22	0	228
V/C Ratio(X)	0.31	0.55	0.55	0.68	0.68	0.68	0.82	0.23	0.28	0.46	0.00	0.53
Avail Cap(c_a), veh/h	144	948	951	148	1030	1079	98	511	415	91	0	452
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)	0.72	0.72	0.72	1.00	1.00	1.00	0.83	0.83	0.83	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.7	15.4	15.4	45.2	14.6	14.6	46.8	35.4	35.7	49.1	0.0	40.4
Incr Delay (d2), s/veh	1.0	1.7	1.7	7.5	3.6	3.5	32.3	0.4	0.6	5.6	0.0	2.3
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	0.4	7.4	7.4	2.4	10.4	10.9	2.8	1.6	1.6	0.3	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	17.1	17.1	52.7	18.2	18.1	79.1	35.7	36.3	54.7	0.0	42.7
LnGrp LOS	D	B	B	D	B	B	E	D	D	D	A	D
Approach Vol, veh/h		1064			1522			232			130	
Approach Delay, s/veh		17.5			20.1			50.9			43.6	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	58.8	10.0	19.3	7.2	63.4	5.7	23.6
Change Period (Y+Rc), s	4.5	5.5	4.5	6.0	4.5	* 5.5	4.5	* 6
Max Green Setting (Gmax), s	8.3	39.3	5.5	26.4	8.1	* 40	5.1	* 27
Max Q Clear Time (g_c+I1), s	6.9	21.5	6.4	8.5	2.8	29.4	2.6	6.3
Green Ext Time (p_c), s	0.0	9.3	0.0	0.6	0.0	8.3	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	22.7
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)	63	30	134	85	105	64	128	479	17	14	670	159
Future Volume (veh/h)	63	30	134	85	105	64	128	479	17	14	670	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.67	1.00		0.76	1.00		0.91	1.00		0.84
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	34	151	96	118	72	144	538	19	16	753	179
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	72	132	162	199	237	165	1708	60	95	1231	293
Arrive On Green	0.12	0.12	0.12	0.20	0.20	0.20	0.18	0.98	0.98	0.05	0.45	0.45
Sat Flow, veh/h	1223	586	1068	821	1009	1204	1781	3488	123	1781	2731	649
Grp Volume(v), veh/h	105	0	151	214	0	72	144	274	283	16	490	442
Grp Sat Flow(s),veh/h/ln	1809	0	1068	1829	0	1204	1781	1777	1834	1781	1777	1603
Q Serve(g_s), s	8.1	0.0	18.5	16.0	0.0	7.7	11.8	0.7	0.7	1.3	31.4	31.4
Cycle Q Clear(g_c), s	8.1	0.0	18.5	16.0	0.0	7.7	11.8	0.7	0.7	1.3	31.4	31.4
Prop In Lane	0.68		1.00	0.45		1.00	1.00		0.07	1.00		0.40
Lane Grp Cap(c), veh/h	223	0	132	360	0	237	165	870	898	95	801	723
V/C Ratio(X)	0.47	0.00	1.15	0.59	0.00	0.30	0.88	0.31	0.32	0.17	0.61	0.61
Avail Cap(c_a), veh/h	223	0	132	374	0	247	249	870	898	95	801	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	0.31	0.31	0.31
Uniform Delay (d), s/veh	61.2	0.0	65.8	54.8	0.0	51.5	60.3	0.8	0.8	67.8	31.2	31.2
Incr Delay (d2), s/veh	1.1	0.0	123.3	2.0	0.0	0.5	12.2	0.8	0.8	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	9.5	7.6	0.0	2.4	5.4	0.4	0.4	0.6	13.4	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.3	0.0	189.0	56.8	0.0	52.0	72.5	1.6	1.6	67.9	31.5	31.6
LnGrp LOS	E	A	F	E	A	D	E	A	A	E	C	C
Approach Vol, veh/h		256			286			701			948	
Approach Delay, s/veh		137.0			55.6			16.2			32.2	
Approach LOS		F			E			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	79.0		24.0	17.9	73.1		35.0
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5
Max Green Setting (Gmax), s	8.0	72.3		18.5	21.0	59.3		30.7
Max Q Clear Time (g_c+I1), s	13.3	2.7		20.5	13.8	33.4		18.0
Green Ext Time (p_c), s	0.0	2.8		0.0	0.1	3.1		1.0

Intersection Summary	
HCM 6th Ctrl Delay	42.4
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	657	98	93	839	16	162	179	57	27	298	53
Future Volume (veh/h)	84	657	98	93	839	16	162	179	57	27	298	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.86	1.00		0.83
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	692	103	98	883	17	171	188	60	28	314	56
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	1668	701	124	1695	33	235	373	119	34	356	63
Arrive On Green	0.06	0.47	0.47	0.07	0.48	0.48	0.07	0.29	0.29	0.02	0.24	0.24
Sat Flow, veh/h	1781	3554	1493	1781	3561	69	3456	1300	415	1781	1493	266
Grp Volume(v), veh/h	88	692	103	98	441	459	171	0	248	28	0	370
Grp Sat Flow(s),veh/h/ln	1781	1777	1493	1781	1777	1853	1728	0	1715	1781	0	1759
Q Serve(g_s), s	4.9	12.8	3.9	5.4	17.3	17.3	4.9	0.0	12.1	1.6	0.0	20.3
Cycle Q Clear(g_c), s	4.9	12.8	3.9	5.4	17.3	17.3	4.9	0.0	12.1	1.6	0.0	20.3
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.24	1.00		0.15
Lane Grp Cap(c), veh/h	112	1668	701	124	846	882	235	0	492	34	0	419
V/C Ratio(X)	0.79	0.41	0.15	0.79	0.52	0.52	0.73	0.00	0.50	0.82	0.00	0.88
Avail Cap(c_a), veh/h	160	1668	701	214	846	882	276	0	549	107	0	528
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	0.58	0.58	0.58	0.74	0.00	0.74	0.85	0.00	0.85
Uniform Delay (d), s/veh	46.2	17.5	15.1	45.8	18.3	18.3	45.7	0.0	29.7	48.9	0.0	36.7
Incr Delay (d2), s/veh	9.2	0.8	0.4	2.5	1.3	1.3	4.4	0.0	0.7	13.5	0.0	12.4
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	2.4	5.0	1.4	2.4	6.9	7.2	2.2	0.0	4.9	0.8	0.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.4	18.2	15.6	48.3	19.6	19.5	50.1	0.0	30.4	62.4	0.0	49.2
LnGrp LOS	E	B	B	D	B	B	D	A	C	E	A	D
Approach Vol, veh/h		883			998			419			398	
Approach Delay, s/veh		21.6			22.4			38.4			50.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	51.4	9.8	28.8	9.3	52.1	4.9	33.7
Change Period (Y+Rc), s	3.0	4.5	3.0	5.0	3.0	4.5	3.0	5.0
Max Green Setting (Gmax), s	12.0	34.5	8.0	30.0	9.0	37.5	6.0	32.0
Max Q Clear Time (g_c+I1), s	7.4	14.8	6.9	22.3	6.9	19.3	3.6	14.1
Green Ext Time (p_c), s	0.0	5.5	0.0	1.5	0.0	6.2	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	28.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	388	270	31	485	23	315	267	165	59	381	87
Future Volume (veh/h)	16	388	270	31	485	23	315	267	165	59	381	87
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		0.90	1.00		1.00	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	436	0	35	545	26	327	338	0	66	428	98
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	786		297	740	35	368	387		446	468	384
Arrive On Green	0.42	0.42	0.00	0.42	0.42	0.42	0.21	0.21	0.00	0.25	0.25	0.25
Sat Flow, veh/h	841	1870	1585	949	1760	84	1781	1870	1585	1781	1870	1534
Grp Volume(v), veh/h	18	436	0	35	0	571	327	338	0	66	428	98
Grp Sat Flow(s),veh/h/ln	841	1870	1585	949	0	1844	1781	1870	1585	1781	1870	1534
Q Serve(g_s), s	2.0	19.4	0.0	3.2	0.0	28.6	19.6	19.2	0.0	3.2	24.5	5.6
Cycle Q Clear(g_c), s	30.6	19.4	0.0	22.6	0.0	28.6	19.6	19.2	0.0	3.2	24.5	5.6
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	786		297	0	775	368	387		446	468	384
V/C Ratio(X)	0.09	0.55		0.12	0.00	0.74	0.89	0.87		0.15	0.91	0.26
Avail Cap(c_a), veh/h	200	786		297	0	775	423	444		497	522	428
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)	0.91	0.91	0.00	1.00	0.00	1.00	0.84	0.84	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	24.1	0.0	32.6	0.0	26.8	42.4	42.2	0.0	32.1	40.1	33.0
Incr Delay (d2), s/veh	0.8	2.6	0.0	0.1	0.0	3.5	15.4	13.2	0.0	0.1	19.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	8.7	0.0	0.7	0.0	12.8	10.0	10.1	0.0	1.4	13.5	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.4	26.7	0.0	32.8	0.0	30.3	57.8	55.4	0.0	32.2	59.2	33.3
LnGrp LOS	D	C		C	A	C	E	E		C	E	C
Approach Vol, veh/h		454	A		606			665	A		592	
Approach Delay, s/veh		27.2			30.4			56.6			51.9	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	50.7	32.0	50.7	27.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	39.7	30.7	39.7	26.1
Max Q Clear Time (g_c+I1), s	32.6	26.5	30.6	21.6
Green Ext Time (p_c), s	1.2	1.1	2.2	1.1

Intersection Summary	
HCM 6th Ctrl Delay	42.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR] 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)	269	741	653	124	1037	82	346	348	64	56	445	356
Future Volume (veh/h)	269	741	653	124	1037	82	346	348	64	56	445	356
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.90
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	283	780	687	131	1092	86	364	366	67	59	609	281
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	1821	742	275	1743	526	418	1120	458	130	1000	383
Arrive On Green	0.09	0.36	0.36	0.08	0.34	0.34	0.12	0.32	0.32	0.07	0.27	0.27
Sat Flow, veh/h	3456	5106	1543	3456	5106	1542	3456	3554	1453	1781	3741	1433
Grp Volume(v), veh/h	283	780	687	131	1092	86	364	366	67	59	609	281
Grp Sat Flow(s),veh/h/ln	1728	1702	1543	1728	1702	1542	1728	1777	1453	1781	1870	1433
Q Serve(g_s), s	12.1	17.4	53.5	5.4	26.9	5.8	15.5	11.8	5.0	4.8	21.4	26.8
Cycle Q Clear(g_c), s	12.1	17.4	53.5	5.4	26.9	5.8	15.5	11.8	5.0	4.8	21.4	26.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	328	1821	742	275	1743	526	418	1120	458	130	1000	383
V/C Ratio(X)	0.86	0.43	0.93	0.48	0.63	0.16	0.87	0.33	0.15	0.45	0.61	0.73
Avail Cap(c_a), veh/h	376	1821	742	279	1743	526	859	1334	545	144	1000	383
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	0.86	0.86	0.86	0.79	0.79	0.79
Uniform Delay (d), s/veh	66.9	36.6	36.9	66.0	41.4	34.5	64.8	39.2	36.9	66.6	48.1	50.1
Incr Delay (d2), s/veh	15.2	0.7	19.2	0.5	1.7	0.7	1.9	0.1	0.0	0.7	1.3	6.9
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	6.0	7.3	27.0	2.4	11.3	2.3	6.9	5.2	1.8	2.2	10.1	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.1	37.4	56.0	66.5	43.1	35.1	66.7	39.3	36.9	67.4	49.4	57.0
LnGrp LOS	F	D	E	E	D	D	E	D	D	E	D	E
Approach Vol, veh/h		1750			1309			797			949	
Approach Delay, s/veh		51.9			44.9			51.6			52.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	61.5	23.9	47.0	19.9	59.2	16.7	54.2
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.9	* 5.7	8.0	* 5.7	6.9
Max Green Setting (Gmax), s	* 13	43.2	* 37	31.1	* 16	39.0	* 12	56.3
Max Q Clear Time (g_c+I1), s	7.4	55.5	17.5	28.8	14.1	28.9	6.8	13.8
Green Ext Time (p_c), s	0.1	0.0	0.6	1.6	0.1	9.0	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	50.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* 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)	56	303	127	92	613	33	162	159	79	101	358	188
Future Volume (veh/h)	56	303	127	92	613	33	162	159	79	101	358	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	340	143	103	689	37	182	179	89	113	402	211
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	1104	455	128	1598	86	210	578	272	139	467	242
Arrive On Green	0.06	0.45	0.45	0.07	0.47	0.47	0.12	0.25	0.25	0.08	0.21	0.21
Sat Flow, veh/h	1781	2435	1003	1781	3425	184	1781	2316	1092	1781	2233	1155
Grp Volume(v), veh/h	63	246	237	103	357	369	182	135	133	113	319	294
Grp Sat Flow(s),veh/h/ln	1781	1777	1662	1781	1777	1832	1781	1777	1631	1781	1777	1611
Q Serve(g_s), s	4.1	10.5	10.9	6.8	16.1	16.1	12.0	7.4	8.0	7.5	20.7	21.2
Cycle Q Clear(g_c), s	4.1	10.5	10.9	6.8	16.1	16.1	12.0	7.4	8.0	7.5	20.7	21.2
Prop In Lane	1.00		0.60	1.00		0.10	1.00		0.67	1.00		0.72
Lane Grp Cap(c), veh/h	104	806	754	128	829	855	210	443	407	139	372	337
V/C Ratio(X)	0.60	0.31	0.31	0.81	0.43	0.43	0.87	0.30	0.33	0.82	0.86	0.87
Avail Cap(c_a), veh/h	147	806	754	206	829	855	340	554	508	236	450	408
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	0.61	0.61	0.61	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	20.8	20.9	54.9	21.4	21.4	52.0	36.6	36.8	54.5	45.7	45.9
Incr Delay (d2), s/veh	2.1	1.0	1.1	2.8	1.0	1.0	5.9	0.1	0.1	4.4	11.4	14.3
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	1.9	4.5	4.3	3.1	6.7	6.9	5.7	3.2	3.2	3.5	10.2	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.2	21.8	22.0	57.7	22.4	22.3	57.9	36.7	36.9	58.8	57.1	60.2
LnGrp LOS	E	C	C	E	C	C	E	D	D	E	E	E
Approach Vol, veh/h		546			829			450			726	
Approach Delay, s/veh		26.0			26.7			45.3			58.6	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	59.3	18.3	29.7	11.1	60.9	13.4	34.5
Change Period (Y+Rc), s	4.1	4.9	4.1	4.6	4.1	4.9	4.1	4.6
Max Green Setting (Gmax), s	13.9	35.1	22.9	30.4	9.9	39.1	15.9	37.4
Max Q Clear Time (g_c+I1), s	8.8	12.9	14.0	23.2	6.1	18.1	9.5	10.0
Green Ext Time (p_c), s	0.0	1.7	0.2	1.5	0.0	2.6	0.1	1.0

Intersection Summary	
HCM 6th Ctrl Delay	38.9
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	263	109	75	503	228	130	445	40	190	849	140
Future Volume (veh/h)	96	263	109	75	503	228	130	445	40	190	849	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	274	114	78	524	238	135	464	42	198	884	146
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	782	316	128	744	337	152	1061	96	206	1073	177
Arrive On Green	0.08	0.32	0.32	0.07	0.32	0.32	0.09	0.32	0.32	0.12	0.35	0.35
Sat Flow, veh/h	1781	2448	988	1781	2354	1065	1781	3288	296	1781	3039	502
Grp Volume(v), veh/h	100	197	191	78	395	367	135	250	256	198	517	513
Grp Sat Flow(s),veh/h/ln	1781	1777	1659	1781	1777	1642	1781	1777	1807	1781	1777	1764
Q Serve(g_s), s	6.3	9.7	10.2	4.9	22.5	22.6	8.6	12.7	12.9	12.7	30.5	30.5
Cycle Q Clear(g_c), s	6.3	9.7	10.2	4.9	22.5	22.6	8.6	12.7	12.9	12.7	30.5	30.5
Prop In Lane	1.00		0.60	1.00		0.65	1.00		0.16	1.00		0.28
Lane Grp Cap(c), veh/h	134	567	530	128	562	519	152	573	583	206	628	623
V/C Ratio(X)	0.75	0.35	0.36	0.61	0.70	0.71	0.89	0.44	0.44	0.96	0.82	0.82
Avail Cap(c_a), veh/h	139	567	530	139	562	519	152	603	613	206	657	652
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)	0.92	0.92	0.92	1.00	1.00	1.00	0.90	0.90	0.90	0.55	0.55	0.55
Uniform Delay (d), s/veh	52.1	30.0	30.1	51.8	34.6	34.6	52.1	30.7	30.7	50.6	33.9	33.9
Incr Delay (d2), s/veh	15.5	1.5	1.8	4.1	7.2	7.9	38.5	1.7	1.7	36.0	6.2	6.3
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	3.4	4.3	4.2	2.3	10.6	10.0	5.4	5.7	5.8	7.7	13.9	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	31.5	31.9	55.9	41.8	42.5	90.6	32.4	32.4	86.6	40.1	40.2
LnGrp LOS	E	C	C	E	D	D	F	C	C	F	D	D
Approach Vol, veh/h		488			840			641			1228	
Approach Delay, s/veh		39.0			43.4			44.7			47.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	41.8	14.5	45.7	13.3	41.5	18.0	42.2
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 8	34.1	* 9.8	42.5	* 9	34.1	* 13	39.0
Max Q Clear Time (g_c+I1), s	10.9	12.2	10.6	32.5	8.3	24.6	14.7	14.9
Green Ext Time (p_c), s	0.0	5.1	0.0	7.6	0.0	5.8	0.0	7.2

Intersection Summary	
HCM 6th Ctrl Delay	44.6
HCM 6th LOS	D

Notes

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

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	342	44	50	836	54	39
Future Vol, veh/h	342	44	50	836	54	39
Conflicting Peds, #/hr	0	45	45	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	45	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	364	47	53	889	57	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	456	0	994	261
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	561	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1101	-	242	738
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1054	-	207	700
Mov Cap-2 Maneuver	-	-	-	-	334	-
Stage 1	-	-	-	-	594	-
Stage 2	-	-	-	-	477	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	334	700	-	-	1054	-
HCM Lane V/C Ratio	0.172	0.059	-	-	0.05	-
HCM Control Delay (s)	18	10.5	-	-	8.6	0.4
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	221	88	69	358	54	142	544	12	72	600	74
Future Volume (veh/h)	129	221	88	69	358	54	142	544	12	72	600	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.84	1.00		0.93	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	143	246	98	77	398	60	158	604	13	80	667	82
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	388	155	99	431	65	189	1422	31	103	1114	137
Arrive On Green	0.10	0.32	0.32	0.06	0.28	0.28	0.11	0.40	0.40	0.06	0.35	0.35
Sat Flow, veh/h	1781	1208	481	1781	1543	233	1781	3550	76	1781	3165	389
Grp Volume(v), veh/h	143	0	344	77	0	458	158	302	315	80	374	375
Grp Sat Flow(s),veh/h/ln	1781	0	1689	1781	0	1775	1781	1777	1849	1781	1777	1777
Q Serve(g_s), s	7.9	0.0	17.4	4.3	0.0	25.0	8.7	12.3	12.3	4.4	17.3	17.3
Cycle Q Clear(g_c), s	7.9	0.0	17.4	4.3	0.0	25.0	8.7	12.3	12.3	4.4	17.3	17.3
Prop In Lane	1.00		0.28	1.00		0.13	1.00		0.04	1.00		0.22
Lane Grp Cap(c), veh/h	173	0	543	99	0	496	189	712	741	103	625	625
V/C Ratio(X)	0.83	0.00	0.63	0.78	0.00	0.92	0.84	0.42	0.43	0.78	0.60	0.60
Avail Cap(c_a), veh/h	214	0	543	176	0	533	230	712	741	180	625	625
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	0.00	1.00	1.00	0.00	1.00	0.53	0.53	0.53	0.78	0.78	0.78
Uniform Delay (d), s/veh	44.3	0.0	28.9	46.6	0.0	35.0	43.8	21.7	21.7	46.5	26.6	26.6
Incr Delay (d2), s/veh	15.9	0.0	2.6	4.9	0.0	21.3	9.7	1.0	0.9	3.8	3.3	3.3
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	4.2	0.0	7.2	2.0	0.0	13.4	4.3	5.1	5.3	2.0	7.6	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	31.5	51.5	0.0	56.2	53.5	22.6	22.6	50.3	29.9	29.9
LnGrp LOS	E	A	C	D	A	E	D	C	C	D	C	C
Approach Vol, veh/h		487			535			775			829	
Approach Delay, s/veh		39.9			55.6			28.9			31.9	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	44.5	9.0	37.1	14.1	39.7	13.2	33.0
Change Period (Y+Rc), s	3.5	4.5	3.5	5.0	3.5	4.5	3.5	5.0
Max Green Setting (Gmax), s	10.1	31.4	9.9	32.1	12.9	28.6	12.0	30.0
Max Q Clear Time (g_c+I1), s	6.4	14.3	6.3	19.4	10.7	19.3	9.9	27.0
Green Ext Time (p_c), s	0.0	4.0	0.0	2.0	0.0	3.6	0.0	0.9

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

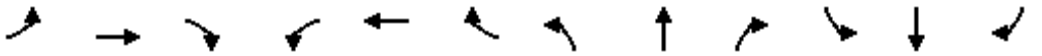
Intersection	
Int Delay, s/veh	22.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	256	7	102	403	26	13	49	20	9	126	105
Future Vol, veh/h	10	256	7	102	403	26	13	49	20	9	126	105
Conflicting Peds, #/hr	10	0	24	24	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	278	8	111	438	28	14	53	22	10	137	114

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	476	0	0	310	0	0	1138	1026	316	1036	1016	472
Stage 1	-	-	-	-	-	-	328	328	-	684	684	-
Stage 2	-	-	-	-	-	-	810	698	-	352	332	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1086	-	-	1250	-	-	179	235	724	210	238	592
Stage 1	-	-	-	-	-	-	685	647	-	439	449	-
Stage 2	-	-	-	-	-	-	374	442	-	665	644	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1076	-	-	1221	-	-	56	197	701	143	199	581
Mov Cap-2 Maneuver	-	-	-	-	-	-	56	197	-	143	199	-
Stage 1	-	-	-	-	-	-	661	624	-	430	390	-
Stage 2	-	-	-	-	-	-	169	384	-	577	621	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	1.6	52.1	83.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	161	1076	-	-	1221	-	-	274
HCM Lane V/C Ratio	0.554	0.01	-	-	0.091	-	-	0.952
HCM Control Delay (s)	52.1	8.4	0	-	8.2	0	-	83.2
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2.8	0	-	-	0.3	-	-	9.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	156	102	64	321	69	91	241	30	15	323	19
Future Volume (veh/h)	68	156	102	64	321	69	91	241	30	15	323	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.88	1.00		0.86
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	171	112	70	353	76	100	265	33	16	355	21
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	901	727	90	706	152	126	470	59	26	410	24
Arrive On Green	0.05	0.48	0.48	0.05	0.48	0.48	0.07	0.29	0.29	0.01	0.24	0.24
Sat Flow, veh/h	1781	1870	1509	1781	1476	318	1781	1604	200	1781	1730	102
Grp Volume(v), veh/h	75	171	112	70	0	429	100	0	298	16	0	376
Grp Sat Flow(s),veh/h/ln	1781	1870	1509	1781	0	1794	1781	0	1803	1781	0	1832
Q Serve(g_s), s	4.2	5.2	4.2	3.9	0.0	16.4	5.5	0.0	14.0	0.9	0.0	19.7
Cycle Q Clear(g_c), s	4.2	5.2	4.2	3.9	0.0	16.4	5.5	0.0	14.0	0.9	0.0	19.7
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.11	1.00		0.06
Lane Grp Cap(c), veh/h	96	901	727	90	0	858	126	0	529	26	0	434
V/C Ratio(X)	0.78	0.19	0.15	0.78	0.00	0.50	0.79	0.00	0.56	0.63	0.00	0.87
Avail Cap(c_a), veh/h	151	901	727	171	0	858	187	0	629	73	0	522
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	0.00	1.00	0.75	0.00	0.75	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.7	14.8	14.5	46.9	0.0	17.9	45.8	0.0	29.9	49.0	0.0	36.6
Incr Delay (d2), s/veh	5.1	0.5	0.4	5.4	0.0	2.1	5.6	0.0	0.5	8.9	0.0	11.9
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	1.9	2.2	1.5	1.8	0.0	6.9	2.6	0.0	6.0	0.5	0.0	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.8	15.2	14.9	52.3	0.0	20.0	51.4	0.0	30.4	58.0	0.0	48.5
LnGrp LOS	D	B	B	D	A	B	D	A	C	E	A	D
Approach Vol, veh/h		358			499			398			392	
Approach Delay, s/veh		22.8			24.5			35.7			48.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	52.7	10.6	28.2	8.9	52.3	4.9	33.8
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	9.6	35.4	10.5	28.5	8.5	36.5	4.1	34.9
Max Q Clear Time (g_c+I1), s	5.9	7.2	7.5	21.7	6.2	18.4	2.9	16.0
Green Ext Time (p_c), s	0.0	1.0	0.0	1.0	0.0	2.0	0.0	1.3

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	341	118	68	545	104	81	253	66	88	380	76
Future Volume (veh/h)	59	341	118	68	545	104	81	253	66	88	380	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	411	142	82	657	125	98	305	80	106	458	92
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	1325	452	111	1505	286	122	530	136	131	575	114
Arrive On Green	0.07	0.51	0.51	0.06	0.51	0.51	0.07	0.19	0.19	0.07	0.20	0.20
Sat Flow, veh/h	1781	2584	882	1781	2967	564	1781	2773	712	1781	2931	584
Grp Volume(v), veh/h	71	281	272	82	393	389	98	193	192	106	276	274
Grp Sat Flow(s),veh/h/ln	1781	1777	1688	1781	1777	1754	1781	1777	1708	1781	1777	1738
Q Serve(g_s), s	4.6	11.0	11.2	5.4	16.8	16.8	6.5	11.8	12.3	7.0	17.8	18.0
Cycle Q Clear(g_c), s	4.6	11.0	11.2	5.4	16.8	16.8	6.5	11.8	12.3	7.0	17.8	18.0
Prop In Lane	1.00		0.52	1.00		0.32	1.00		0.42	1.00		0.34
Lane Grp Cap(c), veh/h	121	912	866	111	902	890	122	339	326	131	348	341
V/C Ratio(X)	0.59	0.31	0.31	0.74	0.44	0.44	0.80	0.57	0.59	0.81	0.79	0.80
Avail Cap(c_a), veh/h	177	912	866	206	902	890	221	450	433	236	465	455
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	0.76	0.76	0.76	1.00	1.00	1.00	0.49	0.49	0.49
Uniform Delay (d), s/veh	54.3	16.9	17.0	55.3	18.7	18.7	55.1	44.1	44.2	54.8	45.9	46.0
Incr Delay (d2), s/veh	1.7	0.9	0.9	2.7	1.2	1.2	4.6	0.6	0.6	2.2	2.4	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	2.1	4.6	4.5	2.5	7.0	6.9	3.1	5.2	5.2	3.2	8.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.0	17.8	17.9	58.0	19.9	19.9	59.6	44.6	44.9	57.0	48.3	48.8
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		624			864			483			656	
Approach Delay, s/veh		22.2			23.5			47.8			49.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	68.0	12.3	28.1	12.3	67.3	12.9	27.5
Change Period (Y+Rc), s	4.1	6.4	4.1	4.6	4.1	6.4	4.1	4.6
Max Green Setting (Gmax), s	13.9	40.6	14.9	31.4	11.9	42.6	15.9	30.4
Max Q Clear Time (g_c+I1), s	7.4	13.2	8.5	20.0	6.6	18.8	9.0	14.3
Green Ext Time (p_c), s	0.0	2.2	0.1	1.7	0.0	3.2	0.1	1.3

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	289	68	77	574	214	74	267	20	197	633	81
Future Volume (veh/h)	79	289	68	77	574	214	74	267	20	197	633	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	304	72	81	604	225	78	281	21	207	666	85
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	1087	253	127	960	357	142	722	54	240	854	109
Arrive On Green	0.07	0.38	0.38	0.14	0.76	0.76	0.08	0.22	0.22	0.13	0.27	0.27
Sat Flow, veh/h	1781	2846	662	1781	2515	935	1781	3344	248	1781	3157	402
Grp Volume(v), veh/h	83	188	188	81	426	403	78	148	154	207	374	377
Grp Sat Flow(s),veh/h/ln	1781	1777	1731	1781	1777	1673	1781	1777	1815	1781	1777	1783
Q Serve(g_s), s	4.5	7.3	7.5	4.3	10.9	11.0	4.2	7.1	7.3	11.4	19.5	19.5
Cycle Q Clear(g_c), s	4.5	7.3	7.5	4.3	10.9	11.0	4.2	7.1	7.3	11.4	19.5	19.5
Prop In Lane	1.00		0.38	1.00		0.56	1.00		0.14	1.00		0.23
Lane Grp Cap(c), veh/h	128	679	661	127	678	639	142	383	392	240	481	482
V/C Ratio(X)	0.65	0.28	0.28	0.64	0.63	0.63	0.55	0.39	0.39	0.86	0.78	0.78
Avail Cap(c_a), veh/h	148	679	661	183	678	639	173	409	417	308	544	546
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	0.47	0.47	0.47
Uniform Delay (d), s/veh	45.2	21.3	21.4	41.6	8.6	8.6	44.3	33.5	33.6	42.4	33.7	33.7
Incr Delay (d2), s/veh	4.5	0.9	1.0	2.0	4.4	4.7	1.2	2.3	2.3	7.9	5.1	5.1
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	2.1	3.1	3.1	1.8	3.4	3.2	1.9	3.3	3.4	5.4	8.8	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.7	22.3	22.4	43.6	13.0	13.3	45.5	35.9	35.9	50.3	38.8	38.9
LnGrp LOS	D	C	C	D	B	B	D	D	D	D	D	D
Approach Vol, veh/h		459			910			380			958	
Approach Delay, s/veh		27.3			15.8			37.9			41.3	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	43.3	12.7	32.2	11.9	43.3	18.1	26.7
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 10	29.8	* 9.7	30.6	* 8.3	31.8	* 17	23.0
Max Q Clear Time (g_c+I1), s	6.3	9.5	6.2	21.5	6.5	13.0	13.4	9.3
Green Ext Time (p_c), s	0.0	4.8	0.0	5.5	0.0	10.6	0.1	3.0

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

Notes

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

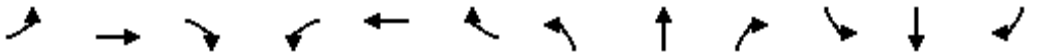
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	437	29	64	901	32	25	8	31	11	5	17
Future Vol, veh/h	6	437	29	64	901	32	25	8	31	11	5	17
Conflicting Peds, #/hr	20	0	18	18	0	20	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	460	31	67	948	34	26	8	33	12	5	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1002	0	0	509	0	0	1127	1642	274	1375	1640	521
Stage 1	-	-	-	-	-	-	506	506	-	1119	1119	-
Stage 2	-	-	-	-	-	-	621	1136	-	256	521	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	687	-	-	1052	-	-	159	99	724	104	99	500
Stage 1	-	-	-	-	-	-	517	538	-	220	280	-
Stage 2	-	-	-	-	-	-	442	275	-	726	530	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	674	-	-	1034	-	-	134	88	705	84	88	486
Mov Cap-2 Maneuver	-	-	-	-	-	-	134	88	-	84	88	-
Stage 1	-	-	-	-	-	-	502	522	-	213	257	-
Stage 2	-	-	-	-	-	-	386	252	-	667	515	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.6	32.1	36.6
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	199	674	-	-	1034	-	-	148
HCM Lane V/C Ratio	0.339	0.009	-	-	0.065	-	-	0.235
HCM Control Delay (s)	32.1	10.4	0.1	-	8.7	-	-	36.6
HCM Lane LOS	D	B	A	-	A	-	-	E
HCM 95th %tile Q(veh)	1.4	0	-	-	0.2	-	-	0.9



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	409	75	51	868	13	77	46	37	8	66	33
Future Volume (veh/h)	14	409	75	51	868	13	77	46	37	8	66	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	0.97		0.93	0.97		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	476	87	59	1009	15	90	53	43	9	77	38
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	1965	357	76	2405	36	245	139	113	47	170	79
Arrive On Green	0.06	1.00	1.00	0.08	1.00	1.00	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1781	2987	542	1781	3581	53	1242	923	749	53	1131	523
Grp Volume(v), veh/h	16	282	281	59	501	523	90	0	96	124	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1752	1781	1777	1857	1242	0	1672	1707	0	0
Q Serve(g_s), s	0.9	0.0	0.0	3.2	0.0	0.0	1.3	0.0	5.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.9	0.0	0.0	3.2	0.0	0.0	7.8	0.0	5.2	6.6	0.0	0.0
Prop In Lane	1.00		0.31	1.00		0.03	1.00		0.45	0.07		0.31
Lane Grp Cap(c), veh/h	51	1169	1152	76	1193	1247	245	0	252	296	0	0
V/C Ratio(X)	0.31	0.24	0.24	0.78	0.42	0.42	0.37	0.00	0.38	0.42	0.00	0.00
Avail Cap(c_a), veh/h	166	1169	1152	201	1193	1247	367	0	416	461	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.72	0.72	0.72	0.98	0.00	0.98	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.2	0.0	0.0	45.3	0.0	0.0	39.5	0.0	38.3	38.8	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.5	0.5	4.7	0.8	0.7	0.3	0.0	0.3	0.4	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	0.2	0.2	1.5	0.3	0.3	2.1	0.0	2.1	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.5	0.5	0.5	50.0	0.8	0.7	39.8	0.0	38.6	39.2	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	D	A	D	D	A	A
Approach Vol, veh/h		579			1083			186			124	
Approach Delay, s/veh		1.8			3.4			39.2			39.2	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	70.9		20.2	7.6	72.3		20.2				
Change Period (Y+Rc), s	* 4.7	5.1		5.1	* 4.7	5.1		5.1				
Max Green Setting (Gmax), s	* 11	48.9		24.9	* 9.3	50.9		24.9				
Max Q Clear Time (g_c+I1), s	5.2	2.0		8.6	2.9	2.0		9.8				
Green Ext Time (p_c), s	0.0	2.2		0.4	0.0	4.6		0.4				

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

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)	58	326	72	36	706	94	60	135	23	52	207	71
Future Volume (veh/h)	58	326	72	36	706	94	60	135	23	52	207	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.90	1.00		0.91
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	354	78	39	767	102	65	147	25	57	225	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	993	215	82	1022	136	106	239	267	76	300	292
Arrive On Green	0.13	0.70	0.70	0.05	0.33	0.33	0.19	0.19	0.19	0.07	0.07	0.07
Sat Flow, veh/h	1781	2851	617	1781	3111	414	565	1277	1428	374	1477	1438
Grp Volume(v), veh/h	63	218	214	39	438	431	212	0	25	282	0	77
Grp Sat Flow(s),veh/h/ln	1781	1777	1691	1781	1777	1748	1842	0	1428	1852	0	1438
Q Serve(g_s), s	3.3	4.9	5.1	2.1	22.0	22.0	10.6	0.0	1.4	15.0	0.0	5.1
Cycle Q Clear(g_c), s	3.3	4.9	5.1	2.1	22.0	22.0	10.6	0.0	1.4	15.0	0.0	5.1
Prop In Lane	1.00		0.36	1.00		0.24	0.31		1.00	0.20		1.00
Lane Grp Cap(c), veh/h	118	619	589	82	584	574	345	0	267	376	0	292
V/C Ratio(X)	0.54	0.35	0.36	0.47	0.75	0.75	0.61	0.00	0.09	0.75	0.00	0.26
Avail Cap(c_a), veh/h	143	619	589	125	584	574	442	0	343	426	0	331
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.98	0.98	0.98	0.67	0.67	0.67	0.91	0.00	0.91	0.69	0.00	0.69
Uniform Delay (d), s/veh	42.0	10.6	10.7	46.5	29.9	29.9	37.3	0.0	33.6	44.2	0.0	39.6
Incr Delay (d2), s/veh	1.4	1.5	1.7	1.0	5.9	6.0	1.6	0.0	0.1	3.6	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	1.4	1.9	1.9	1.0	10.0	9.9	4.8	0.0	0.5	7.8	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	12.2	12.3	47.5	35.8	35.9	38.9	0.0	33.8	47.8	0.0	39.7
LnGrp LOS	D	B	B	D	D	D	D	A	C	D	A	D
Approach Vol, veh/h		495			908			237			359	
Approach Delay, s/veh		16.2			36.4			38.4			46.1	
Approach LOS		B			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	40.9		25.9	11.3	39.0		23.8
Change Period (Y+Rc), s	* 4.7	6.1		5.6	* 4.7	6.1		5.1
Max Green Setting (Gmax), s	* 5	24.5		23.0	* 8	23.5		24.0
Max Q Clear Time (g_c+I1), s	4.1	7.1		17.0	5.3	24.0		12.6
Green Ext Time (p_c), s	0.0	1.5		0.6	0.0	0.0		0.9

Intersection Summary	
HCM 6th Ctrl Delay	33.3
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)	95	261	117	138	625	70	128	426	47	54	588	112
Future Volume (veh/h)	95	261	117	138	625	70	128	426	47	54	588	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	293	131	155	702	79	144	479	53	61	661	126
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	881	382	151	1206	136	134	571	467	109	862	164
Arrive On Green	0.08	0.37	0.37	0.08	0.38	0.38	0.08	0.31	0.31	0.06	0.29	0.29
Sat Flow, veh/h	1781	2380	1032	1781	3205	360	1781	1870	1530	1781	2958	563
Grp Volume(v), veh/h	107	216	208	155	389	392	144	479	53	61	397	390
Grp Sat Flow(s),veh/h/ln	1781	1777	1635	1781	1777	1788	1781	1870	1530	1781	1777	1745
Q Serve(g_s), s	6.5	9.6	10.1	9.3	19.2	19.3	8.3	26.3	2.7	3.7	22.4	22.5
Cycle Q Clear(g_c), s	6.5	9.6	10.1	9.3	19.2	19.3	8.3	26.3	2.7	3.7	22.4	22.5
Prop In Lane	1.00		0.63	1.00		0.20	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	140	658	606	151	668	673	134	571	467	109	518	508
V/C Ratio(X)	0.76	0.33	0.34	1.03	0.58	0.58	1.07	0.84	0.11	0.56	0.77	0.77
Avail Cap(c_a), veh/h	160	658	606	151	668	673	134	583	477	130	549	539
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)	0.96	0.96	0.96	0.93	0.93	0.93	0.80	0.80	0.80	0.72	0.72	0.72
Uniform Delay (d), s/veh	49.7	24.8	25.0	50.3	27.4	27.4	50.8	35.7	27.5	50.2	35.5	35.6
Incr Delay (d2), s/veh	13.7	1.3	1.5	78.6	3.4	3.4	89.7	11.3	0.4	11.1	7.6	7.8
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	3.4	4.2	4.1	7.4	8.6	8.7	7.0	13.5	1.0	2.0	10.6	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	26.1	26.5	129.0	30.8	30.8	140.6	47.0	27.9	61.3	43.2	43.4
LnGrp LOS	E	C	C	F	C	C	F	D	C	E	D	D
Approach Vol, veh/h		531			936			676			848	
Approach Delay, s/veh		33.7			47.1			65.4			44.6	
Approach LOS		C			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	45.8	13.0	37.2	13.4	46.5	11.5	38.7
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 9.3	38.8	* 8.3	34.0	* 9.9	38.2	* 8	34.3
Max Q Clear Time (g_c+I1), s	11.3	12.1	10.3	24.5	8.5	21.3	5.7	28.3
Green Ext Time (p_c), s	0.0	7.0	0.0	6.3	0.0	9.9	0.1	3.2

Intersection Summary	
HCM 6th Ctrl Delay	48.2
HCM 6th LOS	D

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)	17	303	45	45	691	28	38	74	31	27	169	134
Future Volume (veh/h)	17	303	45	45	691	28	38	74	31	27	169	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.98		0.95	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	356	53	53	813	33	45	87	36	32	199	158
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	1683	248	94	1978	80	225	310	249	39	432	321
Arrive On Green	0.03	0.54	0.54	0.05	0.57	0.57	0.17	0.17	0.17	0.02	0.23	0.23
Sat Flow, veh/h	1781	3097	457	1781	3475	141	1008	1870	1501	1781	1905	1414
Grp Volume(v), veh/h	20	203	206	53	416	430	45	87	36	32	185	172
Grp Sat Flow(s),veh/h/ln	1781	1777	1776	1781	1777	1839	1008	1870	1501	1781	1777	1542
Q Serve(g_s), s	0.8	4.5	4.6	2.2	10.0	10.1	3.1	3.1	1.6	1.4	6.8	7.4
Cycle Q Clear(g_c), s	0.8	4.5	4.6	2.2	10.0	10.1	5.9	3.1	1.6	1.4	6.8	7.4
Prop In Lane	1.00		0.26	1.00		0.08	1.00		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	48	966	965	94	1012	1047	225	310	249	39	403	350
V/C Ratio(X)	0.41	0.21	0.21	0.56	0.41	0.41	0.20	0.28	0.14	0.83	0.46	0.49
Avail Cap(c_a), veh/h	175	966	965	221	1012	1047	394	624	501	163	826	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	9.0	9.0	35.3	9.2	9.2	30.3	27.9	27.2	37.2	25.5	25.7
Incr Delay (d2), s/veh	4.1	0.5	0.5	3.8	1.2	1.2	0.3	0.4	0.2	14.9	0.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.6	1.7	1.0	3.6	3.7	0.7	1.4	0.6	0.7	2.8	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.7	9.5	9.5	39.1	10.5	10.4	30.6	28.2	27.4	52.1	26.1	26.5
LnGrp LOS	D	A	A	D	B	B	C	C	C	D	C	C
Approach Vol, veh/h		429			899			168			389	
Approach Delay, s/veh		11.0			12.2			28.7			28.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	46.0		21.8	6.6	48.0	4.7	17.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	3.0	4.5
Max Green Setting (Gmax), s	9.5	41.5		35.5	7.5	43.5	7.0	25.5
Max Q Clear Time (g_c+I1), s	4.2	6.6		9.4	2.8	12.1	3.4	7.9
Green Ext Time (p_c), s	0.0	2.0		1.8	0.0	4.6	0.0	0.5

Intersection Summary		
HCM 6th Ctrl Delay		16.7
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	265	54	112	625	42	73	283	64	55	429	34
Future Volume (veh/h)	15	265	54	112	625	42	73	283	64	55	429	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	1.00		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	327	67	138	772	52	90	349	79	68	530	42
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	1391	280	487	1603	108	215	612	138	310	713	56
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	663	2921	589	983	3368	227	837	1463	331	954	1704	135
Grp Volume(v), veh/h	19	197	197	138	407	417	90	0	428	68	0	572
Grp Sat Flow(s),veh/h/ln	663	1777	1733	983	1777	1817	837	0	1794	954	0	1839
Q Serve(g_s), s	1.7	5.6	5.7	8.2	13.2	13.3	8.7	0.0	15.5	5.0	0.0	22.3
Cycle Q Clear(g_c), s	15.0	5.6	5.7	13.9	13.2	13.3	31.0	0.0	15.5	20.5	0.0	22.3
Prop In Lane	1.00		0.34	1.00		0.12	1.00		0.18	1.00		0.07
Lane Grp Cap(c), veh/h	297	846	825	487	846	865	215	0	750	310	0	769
V/C Ratio(X)	0.06	0.23	0.24	0.28	0.48	0.48	0.42	0.00	0.57	0.22	0.00	0.74
Avail Cap(c_a), veh/h	297	846	825	487	846	865	362	0	1065	477	0	1092
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.2	13.1	13.2	17.3	15.1	15.1	34.0	0.0	18.9	26.7	0.0	20.9
Incr Delay (d2), s/veh	0.4	0.6	0.7	1.5	2.0	1.9	1.0	0.0	0.5	0.3	0.0	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	0.3	2.2	2.2	1.9	5.4	5.5	1.8	0.0	6.2	1.1	0.0	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	13.8	13.9	18.7	17.1	17.1	35.0	0.0	19.4	27.0	0.0	22.2
LnGrp LOS	C	B	B	B	B	B	C	A	B	C	A	C
Approach Vol, veh/h		413			962			518			640	
Approach Delay, s/veh		14.1			17.3			22.1			22.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.0	40.1	45.0	40.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	50.5	40.5	50.5
Max Q Clear Time (g_c+I1), s	17.0	24.3	15.9	33.0
Green Ext Time (p_c), s	2.0	3.4	4.9	2.6

Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	417	34	3	1148	137	18	8	2	109	22	129
Future Volume (veh/h)	59	417	34	3	1148	137	18	8	2	109	22	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.99		0.96	0.98		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	496	40	4	1367	0	21	10	2	130	26	154
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	2223	179	8	3181		270	252	50	308	314	254
Arrive On Green	0.05	0.67	0.67	0.01	1.00	0.00	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1781	3322	267	1781	5106	1585	1188	1501	300	1378	1870	1518
Grp Volume(v), veh/h	70	265	271	4	1367	0	21	0	12	130	26	154
Grp Sat Flow(s),veh/h/ln	1781	1777	1812	1781	1702	1585	1188	0	1801	1378	1870	1518
Q Serve(g_s), s	3.3	4.9	5.0	0.2	0.0	0.0	1.3	0.0	0.5	7.4	1.0	8.0
Cycle Q Clear(g_c), s	3.3	4.9	5.0	0.2	0.0	0.0	2.3	0.0	0.5	7.9	1.0	8.0
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	90	1189	1213	8	3181		270	0	302	308	314	254
V/C Ratio(X)	0.78	0.22	0.22	0.53	0.43		0.08	0.00	0.04	0.42	0.08	0.61
Avail Cap(c_a), veh/h	199	1189	1213	84	3181		469	0	604	539	627	509
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.85	0.85	0.00	1.00	0.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	39.9	5.5	5.5	42.1	0.0	0.0	30.8	0.0	29.6	33.0	29.9	32.8
Incr Delay (d2), s/veh	5.3	0.4	0.4	16.9	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.7	1.7	0.1	0.1	0.0	0.4	0.0	0.2	2.5	0.4	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	5.9	5.9	59.0	0.4	0.0	30.9	0.0	29.7	33.2	29.9	33.5
LnGrp LOS	D	A	A	E	A		C	A	C	C	C	C
Approach Vol, veh/h		606			1371	A		33			310	
Approach Delay, s/veh		10.4			0.5			30.4			33.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	61.4		18.7	8.8	57.4		18.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	4.0	39.0		28.5	9.5	33.5		28.5				
Max Q Clear Time (g_c+I1), s	2.2	7.0		10.0	5.3	2.0		4.3				
Green Ext Time (p_c), s	0.0	2.2		0.5	0.0	8.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Notes

Unsignalized Delay for [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)	48	423	13	21	1134	61	67	131	12	75	145	65
Future Volume (veh/h)	48	423	13	21	1134	61	67	131	12	75	145	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	455	14	23	1219	66	72	141	13	81	156	70
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	2	2	2	2	2	2
Cap, veh/h	308	2430	75	721	2365	128	197	361	33	259	259	116
Arrive On Green	1.00	1.00	1.00	0.69	0.69	0.69	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	430	3515	108	920	3421	185	1146	1681	155	1221	1207	542
Grp Volume(v), veh/h	52	230	239	23	632	653	72	0	154	81	0	226
Grp Sat Flow(s),veh/h/ln	430	1777	1847	920	1777	1830	1146	0	1836	1221	0	1749
Q Serve(g_s), s	3.1	0.0	0.0	0.7	14.5	14.5	5.1	0.0	6.1	5.2	0.0	9.9
Cycle Q Clear(g_c), s	17.6	0.0	0.0	0.7	14.5	14.5	15.0	0.0	6.1	11.3	0.0	9.9
Prop In Lane	1.00		0.06	1.00		0.10	1.00		0.08	1.00		0.31
Lane Grp Cap(c), veh/h	308	1228	1277	721	1228	1265	197	0	394	259	0	375
V/C Ratio(X)	0.17	0.19	0.19	0.03	0.51	0.52	0.37	0.00	0.39	0.31	0.00	0.60
Avail Cap(c_a), veh/h	308	1228	1277	721	1228	1265	288	0	540	356	0	514
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.88	0.88	0.88	1.00	0.00	1.00	0.58	0.00	0.58
Uniform Delay (d), s/veh	2.2	0.0	0.0	4.2	6.3	6.3	36.9	0.0	28.6	33.5	0.0	30.1
Incr Delay (d2), s/veh	1.1	0.3	0.3	0.1	1.4	1.3	0.4	0.0	0.2	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.1	0.1	4.6	4.7	1.5	0.0	2.7	1.5	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.3	0.3	0.3	4.2	7.6	7.6	37.3	0.0	28.9	33.6	0.0	30.4
LnGrp LOS	A	A	A	A	A	A	D	A	C	C	A	C
Approach Vol, veh/h		521			1308			226			307	
Approach Delay, s/veh		0.6			7.6			31.6			31.3	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	62.8	22.2	62.8	22.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	52.0	25.0	52.0	25.0
Max Q Clear Time (g_c+I1), s	19.6	13.3	16.5	17.0
Green Ext Time (p_c), s	2.4	0.8	6.5	0.4

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	362	32	48	1129	65	41	17	38	12	4	9
Future Volume (veh/h)	22	362	32	48	1129	65	41	17	38	12	4	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.97		0.94	0.97		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	393	35	52	1227	71	45	18	41	13	4	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	2221	197	68	2346	136	262	72	164	223	67	167
Arrive On Green	0.02	0.67	0.67	0.04	0.69	0.69	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1781	3291	291	1781	3407	197	1356	485	1106	1308	453	1132
Grp Volume(v), veh/h	24	211	217	52	639	659	45	0	59	13	0	14
Grp Sat Flow(s),veh/h/ln	1781	1777	1806	1781	1777	1827	1356	0	1591	1308	0	1584
Q Serve(g_s), s	1.3	4.4	4.4	2.9	17.5	17.6	2.9	0.0	3.3	0.9	0.0	0.8
Cycle Q Clear(g_c), s	1.3	4.4	4.4	2.9	17.5	17.6	3.7	0.0	3.3	4.2	0.0	0.8
Prop In Lane	1.00		0.16	1.00		0.11	1.00		0.69	1.00		0.71
Lane Grp Cap(c), veh/h	43	1199	1219	68	1224	1258	262	0	235	223	0	234
V/C Ratio(X)	0.55	0.18	0.18	0.76	0.52	0.52	0.17	0.00	0.25	0.06	0.00	0.06
Avail Cap(c_a), veh/h	109	1199	1219	137	1224	1258	470	0	479	423	0	477
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)	0.98	0.98	0.98	0.66	0.66	0.66	0.96	0.00	0.96	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.2	6.0	6.0	47.6	7.6	7.6	38.2	0.0	37.7	39.5	0.0	36.6
Incr Delay (d2), s/veh	4.0	0.3	0.3	4.4	1.1	1.0	0.3	0.0	0.5	0.1	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	0.6	1.5	1.6	1.3	5.9	6.1	1.0	0.0	1.3	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.2	6.3	6.3	52.0	8.6	8.6	38.5	0.0	38.2	39.7	0.0	36.7
LnGrp LOS	D	A	A	D	A	A	D	A	D	D	A	D
Approach Vol, veh/h		452			1350			104			27	
Approach Delay, s/veh		8.8			10.3			38.3			38.2	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	72.5		19.2	6.9	73.9		19.2
Change Period (Y+Rc), s	4.5	5.0		4.4	4.5	5.0		4.4
Max Green Setting (Gmax), s	7.5	48.3		30.1	6.1	49.9		30.1
Max Q Clear Time (g_c+I1), s	4.9	6.4		6.2	3.3	19.6		5.7
Green Ext Time (p_c), s	0.0	4.7		0.1	0.0	17.2		0.4

Intersection Summary		
HCM 6th Ctrl Delay	11.8	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	294	23	114	949	148	182	413	67	179	434	209
Future Volume (veh/h)	71	294	23	114	949	148	182	413	67	179	434	209
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	323	25	125	1043	163	200	454	74	197	477	230
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	1307	100	155	1410	605	195	790	338	224	848	364
Arrive On Green	0.08	0.39	0.39	0.09	0.40	0.40	0.11	0.22	0.22	0.13	0.24	0.24
Sat Flow, veh/h	1781	3333	256	1781	3554	1525	1781	3554	1521	1781	3554	1524
Grp Volume(v), veh/h	78	171	177	125	1043	163	200	454	74	197	477	230
Grp Sat Flow(s),veh/h/ln	1781	1777	1812	1781	1777	1525	1781	1777	1521	1781	1777	1524
Q Serve(g_s), s	5.3	8.1	8.2	8.6	31.3	9.0	13.7	14.2	5.0	13.6	14.8	16.9
Cycle Q Clear(g_c), s	5.3	8.1	8.2	8.6	31.3	9.0	13.7	14.2	5.0	13.6	14.8	16.9
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	697	711	155	1410	605	195	790	338	224	848	364
V/C Ratio(X)	0.53	0.25	0.25	0.81	0.74	0.27	1.02	0.57	0.22	0.88	0.56	0.63
Avail Cap(c_a), veh/h	157	697	711	175	1410	605	195	947	405	333	1222	524
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)	0.99	0.99	0.99	0.90	0.90	0.90	0.85	0.85	0.85	0.52	0.52	0.52
Uniform Delay (d), s/veh	55.1	25.6	25.6	56.0	32.2	25.5	55.7	43.3	39.7	53.7	41.9	42.7
Incr Delay (d2), s/veh	1.1	0.8	0.8	17.3	3.2	1.0	65.9	0.2	0.1	6.7	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.6	3.7	4.6	13.8	3.4	9.7	6.2	1.9	6.4	6.4	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	26.4	26.4	73.4	35.4	26.4	121.5	43.5	39.8	60.4	42.0	43.0
LnGrp LOS	E	C	C	E	D	C	F	D	D	E	D	D
Approach Vol, veh/h		426			1331			728			904	
Approach Delay, s/veh		31.9			37.8			64.6			46.2	
Approach LOS		C			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	55.1	18.4	35.9	15.0	55.7	20.4	33.9
Change Period (Y+Rc), s	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1
Max Green Setting (Gmax), s	* 13	34.4	* 14	43.0	* 11	35.7	* 23	33.3
Max Q Clear Time (g_c+I1), s	10.6	10.2	15.7	18.9	7.3	33.3	15.6	16.2
Green Ext Time (p_c), s	0.0	1.2	0.0	2.5	0.0	1.3	0.2	1.9

Intersection Summary	
HCM 6th Ctrl Delay	45.1
HCM 6th LOS	D

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)	20	412	61	54	970	56	99	68	31	36	88	105
Future Volume (veh/h)	20	412	61	54	970	56	99	68	31	36	88	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	0.98		0.95	0.98		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	443	66	58	1043	60	106	73	33	39	95	113
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	2	2	2	2	2	2
Cap, veh/h	26	2068	306	74	2375	137	209	196	89	210	307	246
Arrive On Green	0.01	0.67	0.67	0.08	1.00	1.00	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	3090	457	1781	3411	196	1152	1196	541	1261	1870	1500
Grp Volume(v), veh/h	22	253	256	58	543	560	106	0	106	39	95	113
Grp Sat Flow(s),veh/h/ln	1781	1777	1770	1781	1777	1830	1152	0	1737	1261	1870	1500
Q Serve(g_s), s	1.2	5.5	5.6	3.2	0.0	0.0	8.9	0.0	5.4	2.8	4.5	6.8
Cycle Q Clear(g_c), s	1.2	5.5	5.6	3.2	0.0	0.0	13.4	0.0	5.4	8.3	4.5	6.8
Prop In Lane	1.00		0.26	1.00		0.11	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	26	1190	1185	74	1237	1275	209	0	285	210	307	246
V/C Ratio(X)	0.84	0.21	0.22	0.78	0.44	0.44	0.51	0.00	0.37	0.19	0.31	0.46
Avail Cap(c_a), veh/h	125	1190	1185	196	1237	1275	285	0	399	293	430	345
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.10	0.10	0.10	1.00	0.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	49.1	6.4	6.4	45.4	0.0	0.0	42.7	0.0	37.2	40.9	36.8	37.8
Incr Delay (d2), s/veh	20.1	0.4	0.4	0.7	0.1	0.1	2.3	0.0	1.0	0.4	0.6	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.9	1.9	1.4	0.0	0.0	2.7	0.0	2.4	0.9	2.1	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.2	6.7	6.8	46.1	0.1	0.1	45.0	0.0	38.2	41.4	37.4	39.2
LnGrp LOS	E	A	A	D	A	A	D	A	D	D	D	D
Approach Vol, veh/h		531			1161			212			247	
Approach Delay, s/veh		9.3			2.4			41.6			38.9	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	71.4		21.4	4.5	74.1		21.4
Change Period (Y+Rc), s	3.0	4.5		5.0	3.0	4.5		5.0
Max Green Setting (Gmax), s	11.3	53.5		23.0	7.0	57.5		23.0
Max Q Clear Time (g_c+I1), s	15.2	7.6		10.3	3.2	2.0		15.4
Green Ext Time (p_c), s	0.0	4.1		1.0	0.0	11.7		0.6

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	449	41	96	1129	85	107	223	68	88	247	106
Future Volume (veh/h)	73	449	41	96	1129	85	107	223	68	88	247	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.95	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	561	51	120	1411	106	134	279	85	110	309	132
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	1344	122	149	1438	107	155	340	104	134	292	125
Arrive On Green	0.13	0.82	0.82	0.08	0.43	0.43	0.09	0.25	0.25	0.08	0.24	0.24
Sat Flow, veh/h	1781	3277	297	1781	3337	249	1781	1356	413	1781	1220	521
Grp Volume(v), veh/h	91	303	309	120	748	769	134	0	364	110	0	441
Grp Sat Flow(s),veh/h/ln	1781	1777	1797	1781	1777	1810	1781	0	1769	1781	0	1741
Q Serve(g_s), s	5.0	4.7	4.7	6.6	41.3	42.1	7.4	0.0	19.4	6.1	0.0	23.9
Cycle Q Clear(g_c), s	5.0	4.7	4.7	6.6	41.3	42.1	7.4	0.0	19.4	6.1	0.0	23.9
Prop In Lane	1.00		0.17	1.00		0.14	1.00		0.23	1.00		0.30
Lane Grp Cap(c), veh/h	112	729	737	149	766	780	155	0	444	134	0	416
V/C Ratio(X)	0.81	0.42	0.42	0.80	0.98	0.99	0.86	0.00	0.82	0.82	0.00	1.06
Avail Cap(c_a), veh/h	112	729	737	237	766	780	155	0	444	134	0	416
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.57	0.00	0.57	0.60	0.00	0.60
Uniform Delay (d), s/veh	43.1	5.7	5.7	45.0	27.9	28.2	45.1	0.0	35.3	45.6	0.0	38.1
Incr Delay (d2), s/veh	33.4	1.7	1.7	7.8	27.2	29.1	23.6	0.0	6.8	21.0	0.0	51.0
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	3.1	1.6	1.7	3.2	22.2	23.3	4.2	0.0	8.9	3.5	0.0	15.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.5	7.5	7.5	52.8	55.2	57.2	68.6	0.0	42.1	66.6	0.0	89.1
LnGrp LOS	E	A	A	D	E	E	E	A	D	E	A	F
Approach Vol, veh/h		703			1637			498			551	
Approach Delay, s/veh		16.4			56.0			49.2			84.6	
Approach LOS		B			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	45.5	13.2	28.4	10.8	47.6	12.0	29.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.3	36.1	8.7	23.9	6.3	43.1	7.5	25.1
Max Q Clear Time (g_c+I1), s	9.6	6.7	9.4	25.9	7.0	44.1	8.1	21.4
Green Ext Time (p_c), s	0.1	3.1	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	51.4
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	90	0	0	582	9	7	457	10	0	0	99
Future Volume (veh/h)	58	90	0	0	582	9	7	457	10	0	0	99
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		0.98	0.99		0.96	1.00		0.96
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	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	107	0	0	693	11	8	544	12	0	0	118
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	89	1293	0	0	2106	33	256	721	309	0	0	309
Arrive On Green	0.05	0.69	0.00	0.00	0.19	0.19	0.20	0.20	0.20	0.00	0.00	0.20
Sat Flow, veh/h	1781	1870	0	0	3672	57	1261	3554	1526	0	0	1526
Grp Volume(v), veh/h	69	107	0	0	344	360	8	544	12	0	0	118
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1859	1261	1777	1526	0	0	1526
Q Serve(g_s), s	3.3	1.6	0.0	0.0	14.2	14.2	0.5	12.2	0.5	0.0	0.0	5.7
Cycle Q Clear(g_c), s	3.3	1.6	0.0	0.0	14.2	14.2	6.1	12.2	0.5	0.0	0.0	5.7
Prop In Lane	1.00		0.00	0.00		0.03	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	89	1293	0	0	1046	1094	256	721	309	0	0	309
V/C Ratio(X)	0.77	0.08	0.00	0.00	0.33	0.33	0.03	0.75	0.04	0.00	0.00	0.38
Avail Cap(c_a), veh/h	262	1293	0	0	1046	1094	393	1108	476	0	0	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.89	0.89	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	39.9	4.3	0.0	0.0	19.8	19.8	31.9	31.9	27.2	0.0	0.0	29.3
Incr Delay (d2), s/veh	5.3	0.1	0.0	0.0	0.7	0.7	0.0	1.2	0.0	0.0	0.0	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	1.5	0.5	0.0	0.0	6.9	7.2	0.1	5.2	0.2	0.0	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	4.4	0.0	0.0	20.6	20.5	32.0	33.1	27.3	0.0	0.0	30.2
LnGrp LOS	D	A	A	A	C	C	C	C	C	A	A	C
Approach Vol, veh/h		176			704			564			118	
Approach Delay, s/veh		20.4			20.5			33.0			30.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		63.3		21.7	8.8	54.5		21.7				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		49.5		26.5	12.5	32.5		26.5				
Max Q Clear Time (g_c+I1), s		3.6		7.7	5.3	16.2		14.2				
Green Ext Time (p_c), s		0.5		0.7	0.0	3.5		2.5				

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	377	11	146	580	33	23	72	150	18	46	8
Future Volume (veh/h)	19	377	11	146	580	33	23	72	150	18	46	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.98		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	389	11	151	598	34	24	74	155	19	47	8
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	2046	58	186	1167	66	257	292	237	223	242	41
Arrive On Green	0.04	1.00	1.00	0.10	0.67	0.67	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	3526	99	1781	1749	99	1327	1870	1514	1137	1545	263
Grp Volume(v), veh/h	20	196	204	151	0	632	24	74	155	19	0	55
Grp Sat Flow(s),veh/h/ln	1781	1777	1848	1781	0	1848	1327	1870	1514	1137	0	1809
Q Serve(g_s), s	0.9	0.0	0.0	7.0	0.0	14.7	1.4	3.0	8.2	1.3	0.0	2.2
Cycle Q Clear(g_c), s	0.9	0.0	0.0	7.0	0.0	14.7	3.6	3.0	8.2	4.2	0.0	2.2
Prop In Lane	1.00		0.05	1.00		0.05	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	32	1031	1073	186	0	1233	257	292	237	223	0	283
V/C Ratio(X)	0.63	0.19	0.19	0.81	0.00	0.51	0.09	0.25	0.65	0.09	0.00	0.19
Avail Cap(c_a), veh/h	86	1031	1073	316	0	1233	416	517	419	360	0	500
HCM Platoon Ratio	2.00	2.00	2.00	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	0.00	1.00	1.00	1.00	1.00	0.95	0.00	0.95
Uniform Delay (d), s/veh	40.7	0.0	0.0	37.2	0.0	7.2	32.8	31.5	33.7	33.4	0.0	31.2
Incr Delay (d2), s/veh	7.6	0.4	0.4	3.2	0.0	1.5	0.1	0.2	1.1	0.1	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	0.5	0.1	0.1	3.1	0.0	5.1	0.4	1.3	3.0	0.3	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	0.4	0.4	40.4	0.0	8.7	32.8	31.7	34.9	33.4	0.0	31.3
LnGrp LOS	D	A	A	D	A	A	C	C	C	C	A	C
Approach Vol, veh/h		420			783			253			74	
Approach Delay, s/veh		2.7			14.8			33.7			31.9	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	53.8		17.8	6.0	61.2		17.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	15.1	32.9		23.5	4.1	43.9		23.5				
Max Q Clear Time (g_c+I1), s	10.0	2.0		6.2	2.9	16.7		10.2				
Green Ext Time (p_c), s	0.1	1.4		0.2	0.0	2.8		0.5				

Intersection Summary		
HCM 6th Ctrl Delay	15.4	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	338	97	168	465	98	163	474	109	70	430	54
Future Volume (veh/h)	58	338	97	168	465	98	163	474	109	70	430	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	389	111	193	534	113	187	545	125	80	494	62
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	963	271	226	1152	243	220	863	370	143	632	79
Arrive On Green	0.08	0.35	0.35	0.13	0.40	0.40	0.12	0.24	0.24	0.08	0.20	0.20
Sat Flow, veh/h	1781	2719	766	1781	2906	612	1781	3554	1525	1781	3160	395
Grp Volume(v), veh/h	67	252	248	193	325	322	187	545	125	80	277	279
Grp Sat Flow(s),veh/h/ln	1781	1777	1708	1781	1777	1742	1781	1777	1525	1781	1777	1778
Q Serve(g_s), s	3.6	10.7	11.0	10.6	13.5	13.7	10.3	13.7	6.8	4.3	14.8	14.9
Cycle Q Clear(g_c), s	3.6	10.7	11.0	10.6	13.5	13.7	10.3	13.7	6.8	4.3	14.8	14.9
Prop In Lane	1.00		0.45	1.00		0.35	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	150	629	605	226	704	690	220	863	370	143	355	355
V/C Ratio(X)	0.45	0.40	0.41	0.86	0.46	0.47	0.85	0.63	0.34	0.56	0.78	0.79
Avail Cap(c_a), veh/h	178	629	605	308	704	690	308	1034	444	180	389	389
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	0.77	0.77	0.77	1.00	1.00	1.00	0.72	0.72	0.72
Uniform Delay (d), s/veh	43.5	24.3	24.4	42.8	22.3	22.3	42.9	33.9	31.2	44.3	37.9	38.0
Incr Delay (d2), s/veh	0.8	1.9	2.0	9.9	1.7	1.7	11.2	2.8	1.9	0.9	10.2	10.6
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	1.6	4.7	4.6	5.2	5.8	5.7	5.1	6.0	2.6	1.9	7.3	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	26.2	26.4	52.6	24.0	24.1	54.1	36.7	33.2	45.2	48.1	48.6
LnGrp LOS	D	C	C	D	C	C	D	D	C	D	D	D
Approach Vol, veh/h		567			840			857			636	
Approach Delay, s/veh		28.4			30.6			40.0			48.0	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	40.5	17.0	25.1	13.1	44.7	12.7	29.4
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 13	23.9	* 17	21.9	* 10	31.2	* 10	29.1
Max Q Clear Time (g_c+I1), s	12.6	13.0	12.3	16.9	5.6	15.7	6.3	15.7
Green Ext Time (p_c), s	0.1	4.4	0.1	2.6	0.0	7.3	0.0	6.5

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.

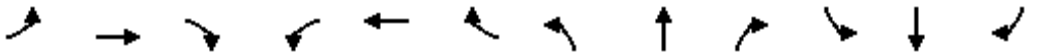
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	302	76	77	530	123	95	265	75	79	218	125
Future Volume (veh/h)	110	302	76	77	530	123	95	265	75	79	218	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	339	85	87	596	138	107	298	84	89	245	140
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1086	268	112	1032	238	136	372	105	114	280	160
Arrive On Green	0.09	0.39	0.39	0.06	0.36	0.36	0.08	0.27	0.27	0.06	0.26	0.26
Sat Flow, veh/h	1781	2797	689	1781	2838	655	1781	1387	391	1781	1095	626
Grp Volume(v), veh/h	124	213	211	87	372	362	107	0	382	89	0	385
Grp Sat Flow(s),veh/h/ln	1781	1777	1710	1781	1777	1716	1781	0	1778	1781	0	1721
Q Serve(g_s), s	5.8	7.1	7.3	4.1	14.4	14.5	5.0	0.0	17.1	4.2	0.0	18.3
Cycle Q Clear(g_c), s	5.8	7.1	7.3	4.1	14.4	14.5	5.0	0.0	17.1	4.2	0.0	18.3
Prop In Lane	1.00		0.40	1.00		0.38	1.00		0.22	1.00		0.36
Lane Grp Cap(c), veh/h	156	690	664	112	646	624	136	0	477	114	0	440
V/C Ratio(X)	0.80	0.31	0.32	0.78	0.58	0.58	0.79	0.00	0.80	0.78	0.00	0.87
Avail Cap(c_a), veh/h	230	690	664	209	646	624	209	0	657	167	0	606
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.2	18.1	18.2	39.4	21.8	21.9	38.7	0.0	29.1	39.3	0.0	30.4
Incr Delay (d2), s/veh	6.5	1.2	1.3	4.3	3.7	3.9	4.8	0.0	4.3	7.3	0.0	9.5
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	3.0	3.0	1.9	6.3	6.2	2.3	0.0	7.6	2.0	0.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.6	19.3	19.5	43.7	25.6	25.8	43.5	0.0	33.4	46.6	0.0	39.9
LnGrp LOS	D	B	B	D	C	C	D	A	C	D	A	D
Approach Vol, veh/h		548			821			489			474	
Approach Delay, s/veh		25.1			27.6			35.6			41.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	38.1	10.5	27.3	11.4	36.0	9.5	28.3
Change Period (Y+Rc), s	4.0	5.0	4.0	* 5.5	4.0	5.0	4.0	5.5
Max Green Setting (Gmax), s	10.3	32.0	10.0	* 30	11.0	31.0	8.0	31.5
Max Q Clear Time (g_c+I1), s	6.1	9.3	7.0	20.3	7.8	16.5	6.2	19.1
Green Ext Time (p_c), s	0.0	2.4	0.0	1.4	0.0	3.9	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	31.4
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)	41	942	201	160	654	160	366	654	307	190	247	30
Future Volume (veh/h)	41	942	201	160	654	160	366	654	307	190	247	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	971	207	165	674	165	377	674	316	196	255	31
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	1085	470	204	882	216	416	1479	644	264	1323	575
Arrive On Green	0.05	0.31	0.31	0.08	0.42	0.42	0.12	0.42	0.42	0.08	0.37	0.37
Sat Flow, veh/h	3456	3554	1539	3456	2812	688	3456	3554	1546	3456	3554	1544
Grp Volume(v), veh/h	42	971	207	165	426	413	377	674	316	196	255	31
Grp Sat Flow(s),veh/h/ln	1728	1777	1539	1728	1777	1723	1728	1777	1546	1728	1777	1544
Q Serve(g_s), s	2.0	44.4	18.3	8.0	34.8	34.9	18.3	23.2	25.5	9.4	8.2	2.2
Cycle Q Clear(g_c), s	2.0	44.4	18.3	8.0	34.8	34.9	18.3	23.2	25.5	9.4	8.2	2.2
Prop In Lane	1.00		1.00	1.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	1085	470	204	557	540	416	1479	644	264	1323	575
V/C Ratio(X)	0.24	0.89	0.44	0.81	0.76	0.76	0.91	0.46	0.49	0.74	0.19	0.05
Avail Cap(c_a), veh/h	203	1137	493	236	585	568	447	1479	644	305	1323	575
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.78	0.78	0.78	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	77.5	56.4	47.4	77.4	44.2	44.2	73.8	35.7	36.4	76.9	36.1	34.2
Incr Delay (d2), s/veh	0.5	9.6	1.1	11.5	5.1	5.3	20.1	1.0	2.7	6.4	0.3	0.2
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	0.9	21.0	7.2	3.8	15.2	14.8	9.3	10.5	10.1	4.5	3.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.1	66.0	48.5	88.9	49.3	49.5	93.9	36.8	39.1	83.2	36.4	34.4
LnGrp LOS	E	E	D	F	D	D	F	D	D	F	D	C
Approach Vol, veh/h		1220			1004			1367			482	
Approach Delay, s/veh		63.4			55.9			53.1			55.3	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	77.7	15.1	58.2	26.5	70.2	13.7	59.6
Change Period (Y+Rc), s	6.0	6.9	5.1	6.3	6.0	6.9	5.1	6.3
Max Green Setting (Gmax), s	15.0	64.7	11.6	54.4	22.0	57.7	10.0	56.0
Max Q Clear Time (g_c+I1), s	11.4	27.5	10.0	46.4	20.3	10.2	4.0	36.9
Green Ext Time (p_c), s	0.1	8.5	0.0	5.5	0.2	2.3	0.0	7.8

Intersection Summary	
HCM 6th Ctrl Delay	57.1
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	307	1240	120	138	771	97	150	440	301	87	296	162
Future Volume (veh/h)	307	1240	120	138	771	97	150	440	301	87	296	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.91
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	316	1278	124	142	795	100	155	454	310	90	305	167
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	1706	165	203	1510	190	175	486	329	109	459	241
Arrive On Green	0.10	0.52	0.52	0.06	0.48	0.48	0.13	0.33	0.33	0.06	0.21	0.21
Sat Flow, veh/h	3456	3264	316	3456	3164	398	1781	1954	1323	1781	2169	1141
Grp Volume(v), veh/h	316	693	709	142	446	449	155	413	351	90	248	224
Grp Sat Flow(s),veh/h/ln	1728	1777	1803	1728	1777	1785	1781	1777	1500	1781	1777	1533
Q Serve(g_s), s	15.3	51.9	52.5	6.9	29.8	29.8	14.5	38.2	38.7	8.5	21.7	23.0
Cycle Q Clear(g_c), s	15.3	51.9	52.5	6.9	29.8	29.8	14.5	38.2	38.7	8.5	21.7	23.0
Prop In Lane	1.00		0.17	1.00		0.22	1.00		0.88	1.00		0.74
Lane Grp Cap(c), veh/h	360	929	942	203	848	852	175	442	373	109	376	324
V/C Ratio(X)	0.88	0.75	0.75	0.70	0.53	0.53	0.89	0.93	0.94	0.83	0.66	0.69
Avail Cap(c_a), veh/h	457	929	942	238	848	852	248	466	394	167	385	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	0.95	0.95	0.95	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.1	31.8	31.9	78.5	31.0	31.0	73.0	55.5	55.7	78.9	61.4	61.9
Incr Delay (d2), s/veh	8.4	3.1	3.2	6.1	2.2	2.2	20.0	24.1	28.9	15.0	3.6	5.5
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	7.2	22.6	23.3	3.2	13.1	13.2	7.4	19.4	17.0	4.3	10.1	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.4	34.9	35.1	84.6	33.2	33.2	93.0	79.7	84.6	93.9	65.0	67.4
LnGrp LOS	F	C	D	F	C	C	F	E	F	F	E	E
Approach Vol, veh/h		1718			1037			919			562	
Approach Delay, s/veh		43.9			40.3			83.8			70.6	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	93.8	21.2	40.6	22.2	86.0	14.9	46.9
Change Period (Y+Rc), s	4.5	4.9	4.5	4.6	4.5	4.9	4.5	4.6
Max Green Setting (Gmax), s	11.7	79.3	23.7	36.8	22.5	68.5	15.9	44.6
Max Q Clear Time (g_c+I1), s	19.9	54.5	16.5	25.0	17.3	31.8	10.5	40.7
Green Ext Time (p_c), s	0.1	8.5	0.2	1.8	0.4	4.6	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	55.2
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1334	94	27	792	8	55	17	54	2	14	18
Future Volume (veh/h)	26	1334	94	27	792	8	55	17	54	2	14	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1390	98	28	825	8	57	18	56	2	15	19
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	2185	153	72	2348	23	73	254	204	5	70	89
Arrive On Green	0.04	0.65	0.65	0.04	0.65	0.65	0.04	0.14	0.14	0.00	0.10	0.10
Sat Flow, veh/h	1781	3359	236	1781	3605	35	1781	1870	1507	1781	720	912
Grp Volume(v), veh/h	27	733	755	28	407	426	57	18	56	2	0	34
Grp Sat Flow(s),veh/h/ln	1781	1777	1818	1781	1777	1863	1781	1870	1507	1781	0	1633
Q Serve(g_s), s	1.8	29.4	29.8	1.8	12.4	12.4	3.8	1.0	4.0	0.1	0.0	2.3
Cycle Q Clear(g_c), s	1.8	29.4	29.8	1.8	12.4	12.4	3.8	1.0	4.0	0.1	0.0	2.3
Prop In Lane	1.00		0.13	1.00		0.02	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	70	1156	1183	72	1157	1213	73	254	204	5	0	159
V/C Ratio(X)	0.38	0.63	0.64	0.39	0.35	0.35	0.78	0.07	0.27	0.42	0.00	0.21
Avail Cap(c_a), veh/h	120	1156	1183	120	1157	1213	89	444	358	76	0	369
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)	0.53	0.53	0.53	1.00	1.00	1.00	0.80	0.80	0.80	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.2	12.5	12.5	56.1	9.5	9.5	57.0	45.3	46.6	59.7	0.0	50.0
Incr Delay (d2), s/veh	0.7	1.4	1.4	1.3	0.8	0.8	19.5	0.1	0.7	20.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	10.5	10.9	0.8	4.5	4.7	2.1	0.5	1.5	0.1	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.9	13.9	14.0	57.4	10.3	10.3	76.4	45.4	47.3	79.9	0.0	50.8
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	A	D
Approach Vol, veh/h		1515			861			131			36	
Approach Delay, s/veh		14.7			11.8			59.7			52.4	
Approach LOS		B			B			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	83.6	9.4	17.7	9.2	83.7	4.8	22.3
Change Period (Y+Rc), s	4.5	5.5	4.5	6.0	4.5	* 5.5	4.5	* 6
Max Green Setting (Gmax), s	8.1	58.3	6.0	27.1	8.1	* 59	5.1	* 29
Max Q Clear Time (g_c+I1), s	3.8	31.8	5.8	4.3	3.8	14.4	2.1	6.0
Green Ext Time (p_c), s	0.0	17.6	0.0	0.1	0.0	10.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

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)	100	34	133	26	55	41	93	781	43	7	500	87
Future Volume (veh/h)	100	34	133	26	55	41	93	781	43	7	500	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.90	1.00		0.98	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	35	139	27	57	43	97	814	45	7	521	91
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	51	160	67	142	163	116	2072	115	84	1767	307
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.13	1.00	1.00	0.05	0.59	0.59
Sat Flow, veh/h	1349	454	1427	592	1249	1428	1781	3419	189	1781	3006	522
Grp Volume(v), veh/h	139	0	139	84	0	43	97	423	436	7	307	305
Grp Sat Flow(s),veh/h/ln	1803	0	1427	1841	0	1428	1781	1777	1831	1781	1777	1752
Q Serve(g_s), s	12.6	0.0	16.3	7.2	0.0	4.7	9.0	0.0	0.0	0.6	14.6	14.8
Cycle Q Clear(g_c), s	12.6	0.0	16.3	7.2	0.0	4.7	9.0	0.0	0.0	0.6	14.6	14.8
Prop In Lane	0.75		1.00	0.32		1.00	1.00		0.10	1.00		0.30
Lane Grp Cap(c), veh/h	203	0	160	210	0	163	116	1077	1110	84	1045	1030
V/C Ratio(X)	0.69	0.00	0.87	0.40	0.00	0.26	0.84	0.39	0.39	0.08	0.29	0.30
Avail Cap(c_a), veh/h	334	0	264	374	0	290	241	1077	1110	94	1045	1030
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.69	0.69	0.69	0.69	0.69	0.69
Uniform Delay (d), s/veh	72.5	0.0	74.2	69.9	0.0	68.8	73.0	0.0	0.0	77.5	17.5	17.5
Incr Delay (d2), s/veh	3.0	0.0	12.3	0.9	0.0	0.6	4.1	0.7	0.7	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	6.0	0.0	6.5	3.5	0.0	1.7	4.0	0.2	0.2	0.3	6.1	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.6	0.0	86.5	70.9	0.0	69.5	77.1	0.7	0.7	77.6	17.5	17.5
LnGrp LOS	E	A	F	E	A	E	E	A	A	E	B	B
Approach Vol, veh/h		278			127			956			619	
Approach Delay, s/veh		81.0			70.4			8.5			18.2	
Approach LOS		F			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	108.5		24.6	15.1	105.4		24.9				
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5				
Max Green Setting (Gmax), s	9.0	74.5		31.5	23.0	60.5		34.5				
Max Q Clear Time (g_c+I1), s	2.6	2.0		18.3	11.0	16.8		9.2				
Green Ext Time (p_c), s	0.0	4.9		0.8	0.0	1.8		0.4				

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	1087	118	61	656	8	147	185	43	11	145	24
Future Volume (veh/h)	67	1087	118	61	656	8	147	185	43	11	145	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	1132	123	64	683	8	153	193	45	11	151	25
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	2122	914	82	2132	25	216	281	65	14	215	36
Arrive On Green	0.05	0.60	0.60	0.05	0.59	0.59	0.06	0.19	0.19	0.01	0.14	0.14
Sat Flow, veh/h	1781	3554	1531	1781	3596	42	3456	1450	338	1781	1547	256
Grp Volume(v), veh/h	70	1132	123	64	337	354	153	0	238	11	0	176
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1861	1728	0	1788	1781	0	1803
Q Serve(g_s), s	3.9	18.8	3.5	3.6	9.5	9.5	4.3	0.0	12.4	0.6	0.0	9.3
Cycle Q Clear(g_c), s	3.9	18.8	3.5	3.6	9.5	9.5	4.3	0.0	12.4	0.6	0.0	9.3
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.19	1.00		0.14
Lane Grp Cap(c), veh/h	90	2122	914	82	1054	1104	216	0	346	14	0	251
V/C Ratio(X)	0.78	0.53	0.13	0.78	0.32	0.32	0.71	0.00	0.69	0.78	0.00	0.70
Avail Cap(c_a), veh/h	160	2122	914	160	1054	1104	276	0	411	53	0	325
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	0.77	0.77	0.77	0.56	0.00	0.56	0.98	0.00	0.98
Uniform Delay (d), s/veh	46.9	11.9	8.8	47.2	10.2	10.2	46.0	0.0	37.5	49.5	0.0	41.1
Incr Delay (d2), s/veh	5.4	1.0	0.3	4.5	0.6	0.6	2.0	0.0	2.4	28.0	0.0	5.2
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	1.8	6.6	1.2	1.6	3.5	3.7	1.9	0.0	5.5	0.4	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	12.9	9.1	51.7	10.8	10.8	47.9	0.0	39.9	77.5	0.0	46.3
LnGrp LOS	D	B	A	D	B	B	D	A	D	E	A	D
Approach Vol, veh/h		1325			755			391			187	
Approach Delay, s/veh		14.6			14.3			43.0			48.1	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	64.2	9.3	18.9	8.0	63.8	3.8	24.4
Change Period (Y+Rc), s	3.0	4.5	3.0	5.0	3.0	4.5	3.0	5.0
Max Green Setting (Gmax), s	4.6	49.5	8.0	18.0	9.0	49.5	3.0	23.0
Max Q Clear Time (g_c+I1), s	5.6	20.8	6.3	11.3	5.9	11.5	2.6	14.4
Green Ext Time (p_c), s	0.0	11.2	0.0	0.5	0.0	5.4	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	595	453	10	432	20	280	245	56	47	266	33
Future Volume (veh/h)	27	595	453	10	432	20	280	245	56	47	266	33
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		0.96	1.00		1.00	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	620	0	10	450	21	274	281	0	49	277	34
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	931		222	880	41	336	353		318	334	272
Arrive On Green	0.16	0.16	0.00	0.50	0.50	0.50	0.06	0.06	0.00	0.18	0.18	0.18
Sat Flow, veh/h	921	1870	1585	804	1769	83	1781	1870	1585	1781	1870	1521
Grp Volume(v), veh/h	28	620	0	10	0	471	274	281	0	49	277	34
Grp Sat Flow(s),veh/h/ln	921	1870	1585	804	0	1852	1781	1870	1585	1781	1870	1521
Q Serve(g_s), s	2.7	31.1	0.0	1.0	0.0	17.1	15.2	14.8	0.0	2.3	14.3	1.9
Cycle Q Clear(g_c), s	19.9	31.1	0.0	32.1	0.0	17.1	15.2	14.8	0.0	2.3	14.3	1.9
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	373	931		222	0	921	336	353		318	334	272
V/C Ratio(X)	0.08	0.67		0.05	0.00	0.51	0.82	0.80		0.15	0.83	0.13
Avail Cap(c_a), veh/h	373	931		222	0	921	410	430		410	430	350
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.00	1.00	0.00	1.00	0.90	0.90	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	34.0	0.0	33.5	0.0	16.9	45.2	45.0	0.0	34.7	39.6	34.5
Incr Delay (d2), s/veh	0.3	3.1	0.0	0.1	0.0	0.4	8.6	7.0	0.0	0.2	9.3	0.2
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	0.7	16.2	0.0	0.2	0.0	6.9	8.0	8.1	0.0	1.0	7.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.3	37.1	0.0	33.6	0.0	17.3	53.7	52.0	0.0	34.8	48.9	34.7
LnGrp LOS	D	D		C	A	B	D	D		C	D	C
Approach Vol, veh/h		648	A		481			555	A		360	
Approach Delay, s/veh		37.1			17.6			52.8			45.7	
Approach LOS		D			B			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	54.3	22.4	54.3	23.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	23.0	40.5	23.0
Max Q Clear Time (g_c+I1), s	33.1	16.3	34.1	17.2
Green Ext Time (p_c), s	2.0	0.8	1.3	1.0

Intersection Summary	
HCM 6th Ctrl Delay	38.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR] 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)	561	1345	660	71	889	47	503	337	144	77	285	324
Future Volume (veh/h)	561	1345	660	71	889	47	503	337	144	77	285	324
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	591	1416	695	75	936	49	529	355	152	81	277	356
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	636	2287	958	237	1697	512	578	923	396	123	302	485
Arrive On Green	0.18	0.45	0.45	0.07	0.33	0.33	0.17	0.26	0.26	0.07	0.16	0.16
Sat Flow, veh/h	3456	5106	1548	3456	5106	1542	3456	3554	1524	1781	1870	2998
Grp Volume(v), veh/h	591	1416	695	75	936	49	529	355	152	81	277	356
Grp Sat Flow(s),veh/h/ln	1728	1702	1548	1728	1702	1542	1728	1777	1524	1781	1870	1499
Q Serve(g_s), s	28.6	36.0	53.3	3.5	25.5	3.7	25.6	14.0	13.9	7.5	24.8	19.2
Cycle Q Clear(g_c), s	28.6	36.0	53.3	3.5	25.5	3.7	25.6	14.0	13.9	7.5	24.8	19.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	636	2287	958	237	1697	512	578	923	396	123	302	485
V/C Ratio(X)	0.93	0.62	0.73	0.32	0.55	0.10	0.92	0.38	0.38	0.66	0.92	0.73
Avail Cap(c_a), veh/h	738	2287	958	244	1697	512	779	1068	458	160	309	496
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	0.39	0.39	0.39	0.95	0.95	0.95
Uniform Delay (d), s/veh	68.3	35.9	22.8	75.4	46.4	39.1	69.6	51.7	51.7	77.2	70.1	67.8
Incr Delay (d2), s/veh	15.7	1.3	4.8	0.3	1.3	0.4	4.8	0.0	0.1	2.4	30.4	6.5
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	18.8	15.0	20.3	1.6	10.9	1.5	11.7	6.3	5.4	3.5	14.4	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.0	37.1	27.6	75.7	47.7	39.5	74.4	51.8	51.8	79.6	100.6	74.3
LnGrp LOS	F	D	C	E	D	D	E	D	D	E	F	E
Approach Vol, veh/h		2702			1060			1036			714	
Approach Delay, s/veh		44.9			49.3			63.3			85.1	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	84.1	34.1	34.4	37.0	64.5	17.4	51.1
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.9	* 5.7	8.0	* 5.7	6.9
Max Green Setting (Gmax), s	* 12	65.3	* 38	28.1	* 36	41.0	* 15	51.1
Max Q Clear Time (g_c+I1), s	15.5	55.3	27.6	26.8	30.6	27.5	9.5	16.0
Green Ext Time (p_c), s	0.0	9.9	0.8	0.7	0.7	10.9	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	54.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* 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)	126	806	154	125	473	62	230	394	191	94	228	119
Future Volume (veh/h)	126	806	154	125	473	62	230	394	191	94	228	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	831	159	129	488	64	237	406	197	97	235	123
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	1447	277	153	1536	200	262	524	251	119	332	166
Arrive On Green	0.09	0.49	0.49	0.09	0.49	0.49	0.15	0.23	0.23	0.07	0.15	0.15
Sat Flow, veh/h	1781	2963	567	1781	3151	411	1781	2302	1101	1781	2253	1126
Grp Volume(v), veh/h	130	498	492	129	274	278	237	312	291	97	183	175
Grp Sat Flow(s),veh/h/ln	1781	1777	1753	1781	1777	1785	1781	1777	1626	1781	1777	1603
Q Serve(g_s), s	9.7	26.9	26.9	9.6	12.6	12.8	17.7	22.2	22.7	7.3	13.2	14.1
Cycle Q Clear(g_c), s	9.7	26.9	26.9	9.6	12.6	12.8	17.7	22.2	22.7	7.3	13.2	14.1
Prop In Lane	1.00		0.32	1.00		0.23	1.00		0.68	1.00		0.70
Lane Grp Cap(c), veh/h	154	868	856	153	866	870	262	404	370	119	262	236
V/C Ratio(X)	0.84	0.57	0.57	0.84	0.32	0.32	0.90	0.77	0.79	0.81	0.70	0.74
Avail Cap(c_a), veh/h	241	868	856	210	866	870	355	499	456	199	344	310
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	0.63	0.63	0.63	0.44	0.44	0.44	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.7	24.6	24.6	60.8	21.0	21.0	56.6	48.8	49.0	62.1	54.7	55.1
Incr Delay (d2), s/veh	8.4	2.8	2.8	10.1	0.6	0.6	9.1	2.0	2.6	4.9	2.2	4.2
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	4.7	11.6	11.5	4.7	5.3	5.4	8.6	10.0	9.4	3.4	6.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.2	27.3	27.4	71.0	21.6	21.6	65.8	50.9	51.6	67.1	56.9	59.2
LnGrp LOS	E	C	C	E	C	C	E	D	D	E	E	E
Approach Vol, veh/h		1120			681			840			455	
Approach Delay, s/veh		32.2			30.9			55.3			60.0	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	70.8	24.0	24.5	15.8	70.7	13.2	35.3
Change Period (Y+Rc), s	4.1	4.9	4.1	4.6	4.1	4.9	4.1	4.6
Max Green Setting (Gmax), s	15.9	48.4	26.9	26.1	18.3	46.0	15.1	37.9
Max Q Clear Time (g_c+I1), s	11.6	28.9	19.7	16.1	11.7	14.8	9.3	24.7
Green Ext Time (p_c), s	0.1	3.8	0.2	1.0	0.1	2.0	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	42.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	700	186	105	420	202	149	746	128	245	710	92
Future Volume (veh/h)	210	700	186	105	420	202	149	746	128	245	710	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	221	737	196	111	442	213	157	785	135	258	747	97
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	943	251	136	780	372	139	996	171	144	1049	136
Arrive On Green	0.08	0.34	0.34	0.08	0.34	0.34	0.08	0.33	0.33	0.08	0.33	0.33
Sat Flow, veh/h	1781	2758	733	1781	2311	1102	1781	3018	519	1781	3151	409
Grp Volume(v), veh/h	221	475	458	111	339	316	157	462	458	258	421	423
Grp Sat Flow(s),veh/h/ln	1781	1777	1714	1781	1777	1636	1781	1777	1760	1781	1777	1783
Q Serve(g_s), s	9.3	27.6	27.6	7.1	17.9	18.3	9.0	27.1	27.1	9.3	23.8	23.9
Cycle Q Clear(g_c), s	9.3	27.6	27.6	7.1	17.9	18.3	9.0	27.1	27.1	9.3	23.8	23.9
Prop In Lane	1.00		0.43	1.00		0.67	1.00		0.29	1.00		0.23
Lane Grp Cap(c), veh/h	144	608	586	136	600	552	139	587	581	144	591	593
V/C Ratio(X)	1.53	0.78	0.78	0.81	0.56	0.57	1.13	0.79	0.79	1.79	0.71	0.71
Avail Cap(c_a), veh/h	144	608	586	139	600	552	139	644	638	144	649	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)	0.75	0.75	0.75	1.00	1.00	1.00	0.51	0.51	0.51	0.65	0.65	0.65
Uniform Delay (d), s/veh	52.8	34.0	34.0	52.3	31.2	31.3	53.0	34.9	34.9	52.8	33.5	33.6
Incr Delay (d2), s/veh	264.8	7.4	7.6	27.3	3.8	4.3	92.8	4.9	4.9	373.5	4.0	4.0
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	14.7	12.7	12.3	4.2	8.2	7.7	7.6	12.2	12.1	19.1	10.7	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	317.7	41.4	41.6	79.6	35.0	35.5	145.8	39.7	39.8	426.3	37.6	37.6
LnGrp LOS	F	D	D	E	C	D	F	D	D	F	D	D
Approach Vol, veh/h		1154			766			1077			1102	
Approach Delay, s/veh		94.4			41.7			55.2			128.6	
Approach LOS		F			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	44.4	13.7	43.4	14.0	43.9	14.0	43.1
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 9	35.4	* 9	42.0	* 9.3	35.1	* 9.3	41.7
Max Q Clear Time (g_c+I1), s	11.3	29.6	11.0	25.9	11.3	20.3	11.3	29.1
Green Ext Time (p_c), s	0.0	4.4	0.0	9.5	0.0	7.2	0.0	8.5

Intersection Summary	
HCM 6th Ctrl Delay	83.4
HCM 6th LOS	F

Notes

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

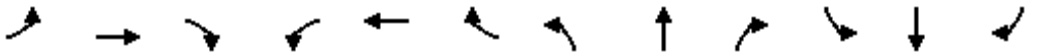
Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	947	54	22	471	35	45
Future Vol, veh/h	947	54	22	471	35	45
Conflicting Peds, #/hr	0	28	28	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	45	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1041	59	24	518	38	49

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1128	0	1416	588
Stage 1	-	-	-	-	1099	-
Stage 2	-	-	-	-	317	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	615	-	128	452
Stage 1	-	-	-	-	281	-
Stage 2	-	-	-	-	711	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	599	-	116	436
Mov Cap-2 Maneuver	-	-	-	-	217	-
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	665	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	217	436	-	-	599	-
HCM Lane V/C Ratio	0.177	0.113	-	-	0.04	-
HCM Control Delay (s)	25.1	14.3	-	-	11.3	0.3
HCM Lane LOS	D	B	-	-	B	A
HCM 95th %tile Q(veh)	0.6	0.4	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	441	96	35	267	44	99	489	47	139	561	23
Future Volume (veh/h)	51	441	96	35	267	44	99	489	47	139	561	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	450	98	36	272	45	101	499	48	142	572	23
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	494	108	56	510	84	128	1215	116	173	1384	56
Arrive On Green	0.04	0.33	0.33	0.03	0.33	0.33	0.07	0.37	0.37	0.10	0.40	0.40
Sat Flow, veh/h	1781	1479	322	1781	1557	258	1781	3261	312	1781	3478	140
Grp Volume(v), veh/h	52	0	548	36	0	317	101	271	276	142	292	303
Grp Sat Flow(s),veh/h/ln	1781	0	1801	1781	0	1815	1781	1777	1796	1781	1777	1841
Q Serve(g_s), s	2.9	0.0	29.1	2.0	0.0	14.2	5.6	11.3	11.4	7.8	11.8	11.9
Cycle Q Clear(g_c), s	2.9	0.0	29.1	2.0	0.0	14.2	5.6	11.3	11.4	7.8	11.8	11.9
Prop In Lane	1.00		0.18	1.00		0.14	1.00		0.17	1.00		0.08
Lane Grp Cap(c), veh/h	68	0	601	56	0	594	128	662	669	173	707	733
V/C Ratio(X)	0.76	0.00	0.91	0.64	0.00	0.53	0.79	0.41	0.41	0.82	0.41	0.41
Avail Cap(c_a), veh/h	130	0	685	98	0	657	212	662	669	240	707	733
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	0.00	1.00	1.00	0.00	1.00	0.36	0.36	0.36	0.87	0.87	0.87
Uniform Delay (d), s/veh	47.6	0.0	31.9	47.9	0.0	27.4	45.7	23.2	23.2	44.3	21.7	21.7
Incr Delay (d2), s/veh	6.5	0.0	15.6	4.4	0.0	0.9	1.5	0.7	0.7	9.3	1.5	1.5
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	1.4	0.0	14.7	0.9	0.0	6.1	2.5	4.7	4.8	3.8	5.1	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	0.0	47.5	52.3	0.0	28.3	47.2	23.9	23.9	53.6	23.2	23.2
LnGrp LOS	D	A	D	D	A	C	D	C	C	D	C	C
Approach Vol, veh/h		600			353			648			737	
Approach Delay, s/veh		48.1			30.8			27.5			29.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	41.8	6.7	38.4	10.7	44.3	7.3	37.7
Change Period (Y+Rc), s	3.5	4.5	3.5	5.0	3.5	4.5	3.5	5.0
Max Green Setting (Gmax), s	13.5	26.5	5.5	38.0	11.9	28.1	7.3	36.2
Max Q Clear Time (g_c+I1), s	9.8	13.4	4.0	31.1	7.6	13.9	4.9	16.2
Green Ext Time (p_c), s	0.1	3.1	0.0	2.3	0.0	3.5	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	33.8
HCM 6th LOS	C

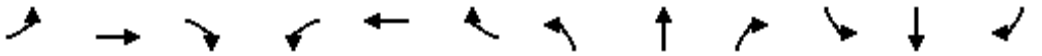
Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	28	508	66	26	260	6	38	61	41	14	58	39
Future Vol, veh/h	28	508	66	26	260	6	38	61	41	14	58	39
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	529	69	27	271	6	40	64	43	15	60	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	287	0	0	608	0	0	1021	973	584	1023	1004	294
Stage 1	-	-	-	-	-	-	632	632	-	338	338	-
Stage 2	-	-	-	-	-	-	389	341	-	685	666	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1275	-	-	970	-	-	215	252	512	214	242	745
Stage 1	-	-	-	-	-	-	468	474	-	676	641	-
Stage 2	-	-	-	-	-	-	635	639	-	438	457	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1263	-	-	961	-	-	149	231	502	144	221	731
Mov Cap-2 Maneuver	-	-	-	-	-	-	149	231	-	144	221	-
Stage 1	-	-	-	-	-	-	447	453	-	646	613	-
Stage 2	-	-	-	-	-	-	518	612	-	329	436	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.8	43.2	28.1
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	233	1263	-	-	961	-	-	269
HCM Lane V/C Ratio	0.626	0.023	-	-	0.028	-	-	0.43
HCM Control Delay (s)	43.2	7.9	0	-	8.9	0	-	28.1
HCM Lane LOS	E	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	3.7	0.1	-	-	0.1	-	-	2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	423	111	33	176	19	54	304	58	26	295	16
Future Volume (veh/h)	27	423	111	33	176	19	54	304	58	26	295	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	475	125	37	198	21	61	342	65	29	331	18
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	1008	824	47	898	95	78	382	73	39	404	22
Arrive On Green	0.02	0.54	0.54	0.03	0.54	0.54	0.04	0.25	0.25	0.02	0.23	0.23
Sat Flow, veh/h	1781	1870	1528	1781	1655	176	1781	1512	287	1781	1751	95
Grp Volume(v), veh/h	30	475	125	37	0	219	61	0	407	29	0	349
Grp Sat Flow(s),veh/h/ln	1781	1870	1528	1781	0	1831	1781	0	1799	1781	0	1846
Q Serve(g_s), s	1.7	15.7	4.1	2.1	0.0	6.2	3.4	0.0	21.8	1.6	0.0	17.9
Cycle Q Clear(g_c), s	1.7	15.7	4.1	2.1	0.0	6.2	3.4	0.0	21.8	1.6	0.0	17.9
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.16	1.00		0.05
Lane Grp Cap(c), veh/h	40	1008	824	47	0	994	78	0	455	39	0	426
V/C Ratio(X)	0.74	0.47	0.15	0.80	0.00	0.22	0.78	0.00	0.90	0.74	0.00	0.82
Avail Cap(c_a), veh/h	109	1008	824	116	0	994	162	0	603	105	0	559
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	0.00	1.00	0.57	0.00	0.57	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.6	14.2	11.6	48.4	0.0	11.9	47.3	0.0	36.1	48.6	0.0	36.5
Incr Delay (d2), s/veh	9.6	1.6	0.4	10.8	0.0	0.5	3.5	0.0	7.6	9.4	0.0	6.5
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	0.8	6.6	1.4	1.0	0.0	2.5	1.6	0.0	10.2	0.8	0.0	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	15.8	12.0	59.2	0.0	12.4	50.9	0.0	43.7	58.0	0.0	43.0
LnGrp LOS	E	B	B	E	A	B	D	A	D	E	A	D
Approach Vol, veh/h		630			256			468			378	
Approach Delay, s/veh		17.1			19.2			44.6			44.2	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	58.4	7.9	27.6	5.8	58.8	5.7	29.8
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	6.5	38.1	9.1	30.3	6.1	38.5	5.9	33.5
Max Q Clear Time (g_c+I1), s	4.1	17.7	5.4	19.9	3.7	8.2	3.6	23.8
Green Ext Time (p_c), s	0.0	2.6	0.0	1.2	0.0	1.0	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	824	148	135	406	120	120	428	153	115	265	46
Future Volume (veh/h)	131	824	148	135	406	120	120	428	153	115	265	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	858	154	141	423	125	125	446	159	120	276	48
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	1457	261	165	1318	385	149	505	178	144	588	101
Arrive On Green	0.09	0.49	0.49	0.09	0.49	0.49	0.08	0.20	0.20	0.08	0.20	0.20
Sat Flow, veh/h	1781	2998	538	1781	2696	788	1781	2546	898	1781	3015	516
Grp Volume(v), veh/h	136	509	503	141	277	271	125	310	295	120	161	163
Grp Sat Flow(s),veh/h/ln	1781	1777	1759	1781	1777	1707	1781	1777	1667	1781	1777	1753
Q Serve(g_s), s	10.2	27.8	27.8	10.5	12.8	13.0	9.3	22.9	23.3	9.0	10.8	11.2
Cycle Q Clear(g_c), s	10.2	27.8	27.8	10.5	12.8	13.0	9.3	22.9	23.3	9.0	10.8	11.2
Prop In Lane	1.00		0.31	1.00		0.46	1.00		0.54	1.00		0.29
Lane Grp Cap(c), veh/h	161	864	855	165	868	834	149	352	330	144	347	342
V/C Ratio(X)	0.85	0.59	0.59	0.85	0.32	0.32	0.84	0.88	0.89	0.83	0.46	0.48
Avail Cap(c_a), veh/h	248	864	855	236	868	834	236	413	388	210	387	382
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	0.67	0.67	0.67	1.00	1.00	1.00	0.66	0.66	0.66
Uniform Delay (d), s/veh	60.5	25.0	25.0	60.3	20.9	21.0	60.9	52.6	52.7	61.2	48.1	48.2
Incr Delay (d2), s/veh	9.3	2.9	3.0	9.5	0.6	0.7	7.6	15.6	18.5	8.0	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	12.2	12.1	5.2	5.4	5.3	4.5	11.6	11.4	4.4	4.8	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	27.9	28.0	69.8	21.6	21.7	68.5	68.2	71.2	69.2	48.3	48.5
LnGrp LOS	E	C	C	E	C	C	E	E	E	E	D	D
Approach Vol, veh/h		1148			689			730			444	
Approach Delay, s/veh		32.9			31.5			69.5			54.0	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	72.0	15.4	30.9	16.3	72.4	15.0	31.4
Change Period (Y+Rc), s	4.1	6.4	4.1	4.6	4.1	6.4	4.1	4.6
Max Green Setting (Gmax), s	12.5	50.6	17.9	29.4	18.8	49.7	15.9	31.4
Max Q Clear Time (g_c+I1), s	12.5	29.8	11.3	13.2	12.2	15.0	11.0	25.3
Green Ext Time (p_c), s	0.1	4.3	0.1	1.0	0.1	2.2	0.1	1.3

Intersection Summary	
HCM 6th Ctrl Delay	44.6
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	739	73	67	390	223	149	514	50	264	472	120
Future Volume (veh/h)	218	739	73	67	390	223	149	514	50	264	472	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	227	770	76	70	406	232	155	535	52	275	492	125
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1208	119	118	633	357	186	667	65	306	759	191
Arrive On Green	0.14	0.37	0.37	0.13	0.59	0.59	0.10	0.20	0.20	0.17	0.27	0.27
Sat Flow, veh/h	1781	3258	321	1781	2164	1220	1781	3260	316	1781	2790	704
Grp Volume(v), veh/h	227	420	426	70	332	306	155	291	296	275	312	305
Grp Sat Flow(s),veh/h/ln	1781	1777	1802	1781	1777	1607	1781	1777	1799	1781	1777	1717
Q Serve(g_s), s	13.1	20.4	20.5	3.9	13.0	13.4	9.0	16.3	16.5	15.9	16.3	16.5
Cycle Q Clear(g_c), s	13.1	20.4	20.5	3.9	13.0	13.4	9.0	16.3	16.5	15.9	16.3	16.5
Prop In Lane	1.00		0.18	1.00		0.76	1.00		0.18	1.00		0.41
Lane Grp Cap(c), veh/h	258	659	668	118	520	470	186	363	368	306	483	467
V/C Ratio(X)	0.88	0.64	0.64	0.59	0.64	0.65	0.83	0.80	0.80	0.90	0.65	0.65
Avail Cap(c_a), veh/h	300	659	668	137	520	470	290	389	394	361	483	467
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	1.00	1.00	1.00	1.00	1.00	1.00	0.62	0.62	0.62
Uniform Delay (d), s/veh	44.0	27.2	27.2	44.2	18.1	18.2	46.1	39.7	39.8	42.6	33.8	33.8
Incr Delay (d2), s/veh	15.7	3.3	3.3	2.1	5.9	6.8	6.5	15.1	15.3	14.0	3.5	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	9.0	9.1	1.7	4.7	4.4	4.2	8.5	8.7	8.0	7.3	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.7	30.5	30.5	46.3	24.0	25.0	52.6	54.8	55.1	56.6	37.3	37.6
LnGrp LOS	E	C	C	D	C	C	D	D	E	E	D	D
Approach Vol, veh/h		1073			708			742			892	
Approach Delay, s/veh		36.7			26.7			54.5			43.3	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	44.0	15.6	33.7	19.9	35.8	22.7	26.6
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 8.1	33.0	* 17	27.2	* 18	23.4	* 21	23.0
Max Q Clear Time (g_c+I1), s	15.9	22.5	11.0	18.5	15.1	15.4	17.9	18.5
Green Ext Time (p_c), s	0.0	6.9	0.1	4.5	0.1	4.4	0.1	2.5

Intersection Summary	
HCM 6th Ctrl Delay	40.2
HCM 6th LOS	D

Notes

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

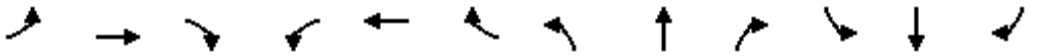
Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	848	68	44	526	18	28	3	43	12	7	15
Future Vol, veh/h	17	848	68	44	526	18	28	3	43	12	7	15
Conflicting Peds, #/hr	29	0	14	14	0	29	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	922	74	48	572	20	30	3	47	13	8	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	621	0	0	1010	0	0	1405	1726	522	1216	1753	335
Stage 1	-	-	-	-	-	-	1009	1009	-	707	707	-
Stage 2	-	-	-	-	-	-	396	717	-	509	1046	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	956	-	-	682	-	-	99	88	499	137	84	661
Stage 1	-	-	-	-	-	-	257	316	-	392	436	-
Stage 2	-	-	-	-	-	-	601	432	-	515	304	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	930	-	-	673	-	-	79	75	488	105	72	637
Mov Cap-2 Maneuver	-	-	-	-	-	-	79	75	-	105	72	-
Stage 1	-	-	-	-	-	-	242	298	-	365	394	-
Stage 2	-	-	-	-	-	-	528	390	-	436	287	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.8	52	38.1
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	153	930	-	-	673	-	-	145
HCM Lane V/C Ratio	0.526	0.02	-	-	0.071	-	-	0.255
HCM Control Delay (s)	52	8.9	0.2	-	10.8	-	-	38.1
HCM Lane LOS	F	A	A	-	B	-	-	E
HCM 95th %tile Q(veh)	2.6	0.1	-	-	0.2	-	-	1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	899	73	26	539	9	94	71	77	8	51	36
Future Volume (veh/h)	45	899	73	26	539	9	94	71	77	8	51	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	0.97		0.94	0.98		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	917	74	27	550	9	96	72	79	8	52	37
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	2255	182	46	2318	38	261	120	132	46	150	98
Arrive On Green	0.11	1.00	1.00	0.03	0.86	0.86	0.05	0.05	0.05	0.15	0.15	0.15
Sat Flow, veh/h	1781	3322	268	1781	3575	58	1271	785	861	56	979	638
Grp Volume(v), veh/h	46	491	500	27	273	286	96	0	151	97	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1813	1781	1777	1856	1271	0	1646	1673	0	0
Q Serve(g_s), s	2.5	0.0	0.0	1.6	2.8	2.8	2.5	0.0	9.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.5	0.0	0.0	1.6	2.8	2.8	7.9	0.0	9.4	5.4	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.03	1.00		0.52	0.08		0.38
Lane Grp Cap(c), veh/h	100	1206	1231	46	1152	1204	261	0	252	294	0	0
V/C Ratio(X)	0.46	0.41	0.41	0.58	0.24	0.24	0.37	0.00	0.60	0.33	0.00	0.00
Avail Cap(c_a), veh/h	192	1206	1231	141	1152	1204	392	0	422	462	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	0.97	0.00	0.97	1.00	0.00	0.00
Uniform Delay (d), s/veh	45.1	0.0	0.0	50.1	2.7	2.7	46.0	0.0	46.7	39.9	0.0	0.0
Incr Delay (d2), s/veh	1.2	1.0	1.0	3.9	0.4	0.4	0.3	0.0	0.8	0.2	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	1.1	0.3	0.3	0.7	1.0	1.0	2.6	0.0	4.2	2.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	1.0	1.0	54.0	3.2	3.2	46.3	0.0	47.5	40.2	0.0	0.0
LnGrp LOS	D	A	A	D	A	A	D	A	D	D	A	A
Approach Vol, veh/h		1037			586			247			97	
Approach Delay, s/veh		3.0			5.5			47.0			40.2	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	76.4		21.2	10.6	73.2		21.2				
Change Period (Y+Rc), s	* 4.7	5.1		5.1	* 4.7	5.1		5.1				
Max Green Setting (Gmax), s	* 8.3	54.9		26.9	* 11	51.9		26.9				
Max Q Clear Time (g_c+I1), s	3.6	2.0		7.4	4.5	4.8		11.4				
Green Ext Time (p_c), s	0.0	4.5		0.3	0.0	2.1		0.6				

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

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)	64	786	102	28	442	70	75	227	61	105	184	42
Future Volume (veh/h)	64	786	102	28	442	70	75	227	61	105	184	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.94	1.00		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	810	105	29	456	72	77	234	63	108	190	43
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1120	145	68	1006	157	94	286	305	129	227	287
Arrive On Green	0.02	0.12	0.12	0.04	0.33	0.33	0.07	0.07	0.07	0.19	0.19	0.19
Sat Flow, veh/h	1781	3136	406	1781	3045	477	457	1390	1482	666	1171	1477
Grp Volume(v), veh/h	66	459	456	29	264	264	311	0	63	298	0	43
Grp Sat Flow(s),veh/h/ln	1781	1777	1766	1781	1777	1745	1847	0	1482	1837	0	1477
Q Serve(g_s), s	3.9	26.1	26.2	1.7	12.3	12.5	17.4	0.0	4.2	16.4	0.0	2.5
Cycle Q Clear(g_c), s	3.9	26.1	26.2	1.7	12.3	12.5	17.4	0.0	4.2	16.4	0.0	2.5
Prop In Lane	1.00		0.23	1.00		0.27	0.25		1.00	0.36		1.00
Lane Grp Cap(c), veh/h	116	635	631	68	587	576	380	0	305	357	0	287
V/C Ratio(X)	0.57	0.72	0.72	0.43	0.45	0.46	0.82	0.00	0.21	0.84	0.00	0.15
Avail Cap(c_a), veh/h	159	635	631	119	587	576	424	0	340	406	0	326
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.90	0.90	0.90	0.78	0.00	0.78	0.88	0.00	0.88
Uniform Delay (d), s/veh	49.9	41.3	41.3	49.4	27.7	27.7	47.0	0.0	40.8	40.7	0.0	35.1
Incr Delay (d2), s/veh	1.5	6.5	6.5	1.4	2.2	2.3	8.7	0.0	0.3	10.1	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	1.8	13.5	13.5	0.8	5.5	5.5	9.5	0.0	1.6	8.3	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.4	47.8	47.8	50.8	29.9	30.1	55.7	0.0	41.1	50.8	0.0	35.2
LnGrp LOS	D	D	D	D	C	C	E	A	D	D	A	D
Approach Vol, veh/h		981			557			374			341	
Approach Delay, s/veh		48.0			31.1			53.2			48.9	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.7	43.6		26.0	11.5	40.8		26.7
Change Period (Y+Rc), s	* 4.7	6.1		5.6	* 4.7	6.1		5.1
Max Green Setting (Gmax), s	* 3	29.2		23.2	* 9.4	26.8		24.1
Max Q Clear Time (g_c+I1), s	3.7	28.2		18.4	5.9	14.5		19.4
Green Ext Time (p_c), s	0.0	0.5		0.5	0.0	1.6		0.8

Intersection Summary	
HCM 6th Ctrl Delay	44.8
HCM 6th LOS	D

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)	69	509	142	70	274	36	131	542	164	68	548	39
Future Volume (veh/h)	69	509	142	70	274	36	131	542	164	68	548	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	519	145	71	280	37	134	553	167	69	559	40
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	1007	280	129	1163	152	151	592	487	114	992	71
Arrive On Green	0.07	0.37	0.37	0.07	0.37	0.37	0.08	0.32	0.32	0.06	0.30	0.30
Sat Flow, veh/h	1781	2729	758	1781	3149	411	1781	1870	1539	1781	3356	240
Grp Volume(v), veh/h	70	337	327	71	157	160	134	553	167	69	295	304
Grp Sat Flow(s),veh/h/ln	1781	1777	1710	1781	1777	1783	1781	1870	1539	1781	1777	1818
Q Serve(g_s), s	4.2	16.2	16.4	4.2	6.7	6.9	8.2	31.6	9.2	4.1	15.4	15.5
Cycle Q Clear(g_c), s	4.2	16.2	16.4	4.2	6.7	6.9	8.2	31.6	9.2	4.1	15.4	15.5
Prop In Lane	1.00		0.44	1.00		0.23	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	129	656	631	129	656	659	151	592	487	114	526	538
V/C Ratio(X)	0.54	0.51	0.52	0.55	0.24	0.24	0.89	0.93	0.34	0.61	0.56	0.56
Avail Cap(c_a), veh/h	160	656	631	146	656	659	151	600	494	130	549	562
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)	0.70	0.70	0.70	0.99	0.99	0.99	0.71	0.71	0.71	0.91	0.91	0.91
Uniform Delay (d), s/veh	49.3	27.0	27.1	49.3	24.0	24.0	49.8	36.5	28.8	50.1	32.7	32.7
Incr Delay (d2), s/veh	0.9	2.0	2.1	1.3	0.8	0.9	32.9	18.8	1.4	16.2	3.9	3.9
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	1.9	7.1	6.9	1.9	2.9	3.0	5.0	17.0	3.5	2.3	7.1	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	29.0	29.2	50.6	24.8	24.9	82.7	55.3	30.2	66.4	36.6	36.6
LnGrp LOS	D	C	C	D	C	C	F	E	C	E	D	D
Approach Vol, veh/h		734			388			854			668	
Approach Delay, s/veh		31.1			29.6			54.7			39.7	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	45.7	14.0	37.6	12.6	45.7	11.7	39.9
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 8	38.1	* 9.3	34.0	* 9.9	37.2	* 8	35.3
Max Q Clear Time (g_c+I1), s	10.2	18.4	10.2	17.5	6.2	8.9	6.1	33.6
Green Ext Time (p_c), s	0.0	9.4	0.0	7.5	0.0	5.1	0.1	1.2

Intersection Summary	
HCM 6th Ctrl Delay	40.7
HCM 6th LOS	D

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)	40	615	76	37	279	18	66	124	95	25	118	36
Future Volume (veh/h)	40	615	76	37	279	18	66	124	95	25	118	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.98		0.95	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	661	82	40	300	19	71	133	102	27	127	39
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	2	2	2	2	2	2
Cap, veh/h	85	1798	223	81	1911	120	272	271	219	32	546	160
Arrive On Green	0.05	0.57	0.57	0.05	0.56	0.56	0.14	0.14	0.14	0.02	0.20	0.20
Sat Flow, veh/h	1781	3173	393	1781	3386	213	1200	1870	1510	1781	2682	788
Grp Volume(v), veh/h	43	370	373	40	157	162	71	133	102	27	82	84
Grp Sat Flow(s),veh/h/ln	1781	1777	1790	1781	1777	1823	1200	1870	1510	1781	1777	1693
Q Serve(g_s), s	1.7	8.3	8.4	1.6	3.1	3.1	3.9	4.8	4.5	1.1	2.8	3.0
Cycle Q Clear(g_c), s	1.7	8.3	8.4	1.6	3.1	3.1	3.9	4.8	4.5	1.1	2.8	3.0
Prop In Lane	1.00		0.22	1.00		0.12	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	85	1007	1014	81	1003	1029	272	271	219	32	362	345
V/C Ratio(X)	0.51	0.37	0.37	0.49	0.16	0.16	0.26	0.49	0.47	0.85	0.23	0.24
Avail Cap(c_a), veh/h	231	1007	1014	207	1003	1029	532	677	546	170	885	843
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	34.0	8.7	8.7	34.1	7.6	7.6	28.5	28.8	28.7	35.9	24.4	24.4
Incr Delay (d2), s/veh	3.4	1.0	1.0	3.4	0.3	0.3	0.4	1.0	1.1	19.3	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	3.0	3.0	0.7	1.1	1.1	1.1	2.1	1.6	0.6	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.5	9.7	9.7	37.5	8.0	8.0	28.9	29.9	29.9	55.1	24.6	24.7
LnGrp LOS	D	A	A	D	A	A	C	C	C	E	C	C
Approach Vol, veh/h		786			359			306			193	
Approach Delay, s/veh		11.2			11.3			29.6			28.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	46.0		19.4	8.0	45.8	4.3	15.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	3.0	4.5
Max Green Setting (Gmax), s	3.5	41.5		36.5	9.5	40.5	7.0	26.5
Max Q Clear Time (g_c+I1), s	3.6	10.4		5.0	3.7	5.1	3.1	6.8
Green Ext Time (p_c), s	0.0	3.9		0.7	0.0	1.5	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	527	101	51	239	27	72	363	129	46	375	22
Future Volume (veh/h)	40	527	101	51	239	27	72	363	129	46	375	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	0.99		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	549	105	53	249	28	75	378	134	48	391	23
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	608	1502	286	404	1630	181	280	484	171	198	646	38
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1096	2957	563	777	3210	357	966	1306	463	885	1745	103
Grp Volume(v), veh/h	42	329	325	53	136	141	75	0	512	48	0	414
Grp Sat Flow(s),veh/h/ln	1096	1777	1744	777	1777	1790	966	0	1768	885	0	1848
Q Serve(g_s), s	1.6	8.3	8.3	3.3	3.0	3.1	5.0	0.0	18.9	3.8	0.0	13.4
Cycle Q Clear(g_c), s	4.7	8.3	8.3	11.6	3.0	3.1	18.5	0.0	18.9	22.7	0.0	13.4
Prop In Lane	1.00		0.32	1.00		0.20	1.00		0.26	1.00		0.06
Lane Grp Cap(c), veh/h	608	902	885	404	902	909	280	0	655	198	0	684
V/C Ratio(X)	0.07	0.36	0.37	0.13	0.15	0.15	0.27	0.00	0.78	0.24	0.00	0.60
Avail Cap(c_a), veh/h	608	902	885	404	902	909	622	0	1281	511	0	1339
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.0	11.0	11.0	14.5	9.7	9.7	26.4	0.0	20.6	30.7	0.0	18.9
Incr Delay (d2), s/veh	0.2	1.1	1.2	0.7	0.4	0.4	0.4	0.0	1.6	0.5	0.0	0.6
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	3.1	3.1	0.6	1.1	1.2	1.1	0.0	7.5	0.8	0.0	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.2	12.1	12.2	15.2	10.0	10.1	26.7	0.0	22.2	31.1	0.0	19.5
LnGrp LOS	B	B	B	B	B	B	C	A	C	C	A	B
Approach Vol, veh/h		696			330			587			462	
Approach Delay, s/veh		12.1			10.9			22.7			20.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	42.0	31.9	42.0	31.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	37.5	53.5	37.5	53.5
Max Q Clear Time (g_c+I1), s	10.3	24.7	13.6	20.9
Green Ext Time (p_c), s	3.5	2.3	1.5	3.4

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	726	14	5	816	179	35	13	5	184	6	88
Future Volume (veh/h)	88	726	14	5	816	179	35	13	5	184	6	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	756	15	5	850	0	36	14	5	192	6	92
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	2404	48	9	3138		310	249	89	319	358	291
Arrive On Green	0.07	0.68	0.68	0.01	1.00	0.00	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1781	3561	71	1781	5106	1585	1280	1300	464	1373	1870	1524
Grp Volume(v), veh/h	92	377	394	5	850	0	36	0	19	192	6	92
Grp Sat Flow(s),veh/h/ln	1781	1777	1855	1781	1702	1585	1280	0	1765	1373	1870	1524
Q Serve(g_s), s	5.3	9.2	9.2	0.3	0.0	0.0	2.5	0.0	0.9	14.0	0.3	5.5
Cycle Q Clear(g_c), s	5.3	9.2	9.2	0.3	0.0	0.0	2.7	0.0	0.9	14.9	0.3	5.5
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	117	1200	1252	9	3138		310	0	337	319	358	291
V/C Ratio(X)	0.79	0.31	0.31	0.54	0.27		0.12	0.00	0.06	0.60	0.02	0.32
Avail Cap(c_a), veh/h	297	1200	1252	110	3138		522	0	630	547	668	544
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.88	0.88	0.00	1.00	0.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	48.3	7.0	7.0	51.8	0.0	0.0	35.6	0.0	34.7	40.8	34.5	36.6
Incr Delay (d2), s/veh	4.3	0.7	0.7	15.3	0.2	0.0	0.1	0.0	0.0	0.6	0.0	0.2
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	2.5	3.4	3.5	0.2	0.1	0.0	0.8	0.0	0.4	4.7	0.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.6	7.7	7.7	67.1	0.2	0.0	35.6	0.0	34.7	41.4	34.5	36.8
LnGrp LOS	D	A	A	E	A		D	A	C	D	C	D
Approach Vol, veh/h		863			855	A		55			290	
Approach Delay, s/veh		12.5			0.6			35.3			39.8	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	75.4		24.6	11.4	69.0		24.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	47.5		37.5	17.5	36.5		37.5				
Max Q Clear Time (g_c+I1), s	2.3	11.2		16.9	7.3	2.0		4.7				
Green Ext Time (p_c), s	0.0	3.4		0.4	0.1	4.5		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

Unsignalized Delay for [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)	63	839	12	22	835	114	111	179	28	102	142	55
Future Volume (veh/h)	63	839	12	22	835	114	111	179	28	102	142	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.98		0.94	0.98		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	922	13	24	918	125	122	197	31	112	156	60
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	2456	35	478	2142	292	219	373	59	215	302	116
Arrive On Green	1.00	1.00	1.00	0.69	0.69	0.69	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	541	3585	51	597	3127	426	1147	1563	246	1135	1263	486
Grp Volume(v), veh/h	69	457	478	24	522	521	122	0	228	112	0	216
Grp Sat Flow(s),veh/h/ln	541	1777	1859	597	1777	1776	1147	0	1809	1135	0	1749
Q Serve(g_s), s	3.1	0.0	0.0	1.4	13.7	13.7	10.9	0.0	11.5	10.0	0.0	11.3
Cycle Q Clear(g_c), s	16.9	0.0	0.0	1.4	13.7	13.7	22.1	0.0	11.5	21.5	0.0	11.3
Prop In Lane	1.00		0.03	1.00		0.24	1.00		0.14	1.00		0.28
Lane Grp Cap(c), veh/h	368	1217	1274	478	1217	1217	219	0	432	215	0	418
V/C Ratio(X)	0.19	0.38	0.38	0.05	0.43	0.43	0.56	0.00	0.53	0.52	0.00	0.52
Avail Cap(c_a), veh/h	368	1217	1274	478	1217	1217	339	0	620	333	0	600
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.95	0.95	0.95	1.00	0.00	1.00	0.51	0.00	0.51
Uniform Delay (d), s/veh	1.6	0.0	0.0	5.4	7.4	7.4	44.3	0.0	34.8	44.2	0.0	34.7
Incr Delay (d2), s/veh	1.0	0.8	0.8	0.2	1.0	1.0	0.8	0.0	0.4	0.4	0.0	0.2
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	0.2	0.3	0.3	0.2	4.8	4.8	3.1	0.0	5.1	2.8	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.6	0.8	0.8	5.6	8.4	8.4	45.1	0.0	35.2	44.6	0.0	34.9
LnGrp LOS	A	A	A	A	A	A	D	A	D	D	A	C
Approach Vol, veh/h		1004			1067			350			328	
Approach Delay, s/veh		0.9			8.4			38.7			38.2	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	75.9	29.1	75.9	29.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	61.0	36.0	61.0	36.0
Max Q Clear Time (g_c+I1), s	18.9	23.5	15.7	24.1
Green Ext Time (p_c), s	4.8	0.9	5.1	1.0

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	841	27	36	815	20	86	9	63	41	29	34
Future Volume (veh/h)	14	841	27	36	815	20	86	9	63	41	29	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.98		0.95	0.98		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	876	28	38	849	21	90	9	66	43	30	35
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	2262	72	58	2337	58	269	34	250	257	141	164
Arrive On Green	0.02	0.64	0.64	0.03	0.66	0.66	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1781	3510	112	1781	3540	88	1309	185	1360	1299	765	892
Grp Volume(v), veh/h	15	443	461	38	426	444	90	0	75	43	0	65
Grp Sat Flow(s),veh/h/ln	1781	1777	1846	1781	1777	1851	1309	0	1545	1299	0	1657
Q Serve(g_s), s	0.8	11.8	11.8	2.1	10.7	10.7	6.3	0.0	4.2	2.9	0.0	3.3
Cycle Q Clear(g_c), s	0.8	11.8	11.8	2.1	10.7	10.7	9.6	0.0	4.2	7.1	0.0	3.3
Prop In Lane	1.00		0.06	1.00		0.05	1.00		0.88	1.00		0.54
Lane Grp Cap(c), veh/h	30	1145	1189	58	1173	1222	269	0	284	257	0	305
V/C Ratio(X)	0.49	0.39	0.39	0.65	0.36	0.36	0.33	0.00	0.26	0.17	0.00	0.21
Avail Cap(c_a), veh/h	116	1145	1189	151	1173	1222	455	0	504	441	0	540
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)	0.90	0.90	0.90	0.83	0.83	0.83	0.96	0.00	0.96	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	8.4	8.4	47.8	7.6	7.6	38.7	0.0	35.0	38.0	0.0	34.7
Incr Delay (d2), s/veh	4.1	0.9	0.9	3.8	0.7	0.7	0.7	0.0	0.5	0.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.3	4.4	1.0	3.8	3.9	2.1	0.0	1.6	1.0	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	9.3	9.3	51.6	8.3	8.3	39.4	0.0	35.5	38.4	0.0	35.1
LnGrp LOS	D	A	A	D	A	A	D	A	D	D	A	D
Approach Vol, veh/h		919			908			165			108	
Approach Delay, s/veh		10.0			10.1			37.6			36.4	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	69.4		22.8	6.2	71.0		22.8				
Change Period (Y+Rc), s	4.5	5.0		4.4	4.5	5.0		4.4				
Max Green Setting (Gmax), s	8.5	45.0		32.6	6.5	47.0		32.6				
Max Q Clear Time (g_c+I1), s	4.1	13.8		9.1	2.8	12.7		11.6				
Green Ext Time (p_c), s	0.0	10.9		0.5	0.0	10.7		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		13.6
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	770	36	169	654	165	137	468	104	257	477	107
Future Volume (veh/h)	159	770	36	169	654	165	137	468	104	257	477	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	162	786	37	172	667	168	140	478	106	262	487	109
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	1231	58	197	1289	558	165	703	299	288	948	406
Arrive On Green	0.11	0.36	0.36	0.11	0.36	0.36	0.09	0.20	0.20	0.16	0.27	0.27
Sat Flow, veh/h	1781	3450	162	1781	3554	1540	1781	3554	1509	1781	3554	1524
Grp Volume(v), veh/h	162	405	418	172	667	168	140	478	106	262	487	109
Grp Sat Flow(s),veh/h/ln	1781	1777	1835	1781	1777	1540	1781	1777	1509	1781	1777	1524
Q Serve(g_s), s	11.2	23.7	23.7	11.9	18.4	9.8	9.7	15.6	7.6	18.1	14.6	7.1
Cycle Q Clear(g_c), s	11.2	23.7	23.7	11.9	18.4	9.8	9.7	15.6	7.6	18.1	14.6	7.1
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	634	655	197	1289	558	165	703	299	288	948	406
V/C Ratio(X)	0.86	0.64	0.64	0.87	0.52	0.30	0.85	0.68	0.36	0.91	0.51	0.27
Avail Cap(c_a), veh/h	190	634	655	204	1289	558	175	913	387	331	1222	524
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)	0.94	0.94	0.94	0.92	0.92	0.92	0.73	0.73	0.73	0.78	0.78	0.78
Uniform Delay (d), s/veh	55.1	33.5	33.5	54.7	31.3	28.5	55.8	46.5	43.3	51.5	38.9	36.2
Incr Delay (d2), s/veh	28.8	4.6	4.4	27.5	1.4	1.3	21.2	0.5	0.2	20.3	0.1	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	6.5	10.9	11.2	6.8	8.1	3.8	5.3	6.9	2.8	9.6	6.3	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.8	38.0	37.9	82.1	32.6	29.8	77.1	47.0	43.4	71.9	39.1	36.3
LnGrp LOS	F	D	D	F	C	C	E	D	D	E	D	D
Approach Vol, veh/h		985			1007			724			858	
Approach Delay, s/veh		45.5			40.6			52.3			48.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	50.7	16.3	39.4	17.8	51.4	24.9	30.8
Change Period (Y+Rc), s	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1
Max Green Setting (Gmax), s	* 14	33.8	* 12	43.0	* 13	34.8	* 23	32.1
Max Q Clear Time (g_c+I1), s	13.9	25.7	11.7	16.6	13.2	20.4	20.1	17.6
Green Ext Time (p_c), s	0.0	2.2	0.0	2.3	0.0	2.9	0.1	2.0

Intersection Summary	
HCM 6th Ctrl Delay	46.3
HCM 6th LOS	D

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)	57	868	116	89	779	93	114	137	58	68	137	46
Future Volume (veh/h)	57	868	116	89	779	93	114	137	58	68	137	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	0.97		0.93	0.98		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	886	118	91	795	95	116	140	59	69	140	47
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	1943	259	114	2047	245	219	233	98	172	358	283
Arrive On Green	0.04	0.62	0.62	0.13	1.00	1.00	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1781	3136	418	1781	3188	381	1166	1221	514	1160	1870	1481
Grp Volume(v), veh/h	58	502	502	91	443	447	116	0	199	69	140	47
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1781	1777	1792	1166	0	1735	1160	1870	1481
Q Serve(g_s), s	3.2	15.0	15.0	5.0	0.0	0.0	9.7	0.0	10.5	5.8	6.5	2.7
Cycle Q Clear(g_c), s	3.2	15.0	15.0	5.0	0.0	0.0	16.2	0.0	10.5	16.3	6.5	2.7
Prop In Lane	1.00		0.24	1.00		0.21	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	75	1101	1101	114	1141	1150	219	0	332	172	358	283
V/C Ratio(X)	0.78	0.46	0.46	0.80	0.39	0.39	0.53	0.00	0.60	0.40	0.39	0.17
Avail Cap(c_a), veh/h	196	1101	1101	232	1141	1150	276	0	416	229	449	355
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	0.62	0.62	0.62	1.00	0.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	47.4	10.1	10.1	43.0	0.0	0.0	42.4	0.0	36.9	44.4	35.4	33.8
Incr Delay (d2), s/veh	4.4	0.9	0.9	3.0	0.6	0.6	2.4	0.0	2.1	1.8	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.5	5.5	2.1	0.2	0.2	2.9	0.0	4.6	1.7	3.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.9	11.0	11.0	45.9	0.6	0.6	44.8	0.0	39.0	46.1	36.2	34.1
LnGrp LOS	D	B	B	D	A	A	D	A	D	D	D	C
Approach Vol, veh/h		1062			981			315			256	
Approach Delay, s/veh		13.2			4.8			41.2			38.5	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	66.5		24.1	7.2	68.7		24.1
Change Period (Y+Rc), s	3.0	4.5		5.0	3.0	4.5		5.0
Max Green Setting (Gmax), s	13.0	50.5		24.0	11.0	52.5		24.0
Max Q Clear Time (g_c+I1), s	7.0	17.0		18.3	5.2	2.0		18.2
Green Ext Time (p_c), s	0.0	9.3		0.7	0.0	8.4		0.9

Intersection Summary	
HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	859	67	116	755	101	89	265	121	132	267	87
Future Volume (veh/h)	166	859	67	116	755	101	89	265	121	132	267	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.94	1.00		0.94	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	169	877	68	118	770	103	91	270	123	135	272	89
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	1327	103	146	1153	154	116	293	133	165	364	119
Arrive On Green	0.15	0.53	0.53	0.08	0.37	0.37	0.06	0.25	0.25	0.09	0.27	0.27
Sat Flow, veh/h	1781	3326	258	1781	3125	418	1781	1189	542	1781	1327	434
Grp Volume(v), veh/h	169	469	476	118	438	435	91	0	393	135	0	361
Grp Sat Flow(s),veh/h/ln	1781	1777	1807	1781	1777	1766	1781	0	1731	1781	0	1762
Q Serve(g_s), s	9.2	19.1	19.1	6.5	20.6	20.6	5.0	0.0	22.1	7.4	0.0	18.7
Cycle Q Clear(g_c), s	9.2	19.1	19.1	6.5	20.6	20.6	5.0	0.0	22.1	7.4	0.0	18.7
Prop In Lane	1.00		0.14	1.00		0.24	1.00		0.31	1.00		0.25
Lane Grp Cap(c), veh/h	200	709	721	146	656	652	116	0	426	165	0	483
V/C Ratio(X)	0.85	0.66	0.66	0.81	0.67	0.67	0.79	0.00	0.92	0.82	0.00	0.75
Avail Cap(c_a), veh/h	244	709	721	180	656	652	151	0	459	205	0	520
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	0.72	0.00	0.72	0.78	0.00	0.78
Uniform Delay (d), s/veh	41.7	18.6	18.6	45.1	26.4	26.4	46.1	0.0	36.8	44.5	0.0	33.2
Incr Delay (d2), s/veh	17.1	4.3	4.2	17.9	5.3	5.4	12.2	0.0	18.0	14.0	0.0	4.1
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	4.8	7.3	7.4	3.6	9.3	9.3	2.6	0.0	11.2	3.9	0.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.8	22.9	22.8	63.0	31.7	31.8	58.2	0.0	54.8	58.5	0.0	37.2
LnGrp LOS	E	C	C	E	C	C	E	A	D	E	A	D
Approach Vol, veh/h		1114			991			484			496	
Approach Delay, s/veh		28.3			35.5			55.4			43.0	
Approach LOS		C			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	44.4	11.0	31.9	15.7	41.4	13.8	29.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.1	33.9	8.5	29.5	13.7	30.3	11.5	26.5
Max Q Clear Time (g_c+I1), s	8.5	21.1	7.0	20.7	11.2	22.6	9.4	24.1
Green Ext Time (p_c), s	0.0	4.1	0.0	1.2	0.1	2.8	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	37.2
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	190	0	0	413	8	19	660	20	0	0	76
Future Volume (veh/h)	171	190	0	0	413	8	19	660	20	0	0	76
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		0.98	0.99		0.97	1.00		0.97
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	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	202	0	0	439	9	20	702	21	0	0	81
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	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	215	1256	0	0	1810	37	330	862	372	0	0	372
Arrive On Green	0.12	0.67	0.00	0.00	0.51	0.51	0.24	0.24	0.24	0.00	0.00	0.24
Sat Flow, veh/h	1781	1870	0	0	3653	73	1305	3554	1533	0	0	1533
Grp Volume(v), veh/h	182	202	0	0	219	229	20	702	21	0	0	81
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1777	1855	1305	1777	1533	0	0	1533
Q Serve(g_s), s	10.5	4.2	0.0	0.0	7.3	7.3	1.3	19.6	1.1	0.0	0.0	4.4
Cycle Q Clear(g_c), s	10.5	4.2	0.0	0.0	7.3	7.3	5.7	19.6	1.1	0.0	0.0	4.4
Prop In Lane	1.00		0.00	0.00		0.04	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	215	1256	0	0	903	943	330	862	372	0	0	372
V/C Ratio(X)	0.85	0.16	0.00	0.00	0.24	0.24	0.06	0.81	0.06	0.00	0.00	0.22
Avail Cap(c_a), veh/h	433	1256	0	0	903	943	492	1303	562	0	0	562
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	0.96	0.96	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	45.2	6.3	0.0	0.0	14.5	14.5	34.1	37.5	30.5	0.0	0.0	31.8
Incr Delay (d2), s/veh	3.6	0.3	0.0	0.0	0.6	0.6	0.1	2.0	0.0	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	1.6	0.0	0.0	3.1	3.2	0.4	8.6	0.4	0.0	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	6.6	0.0	0.0	15.1	15.1	34.2	39.5	30.6	0.0	0.0	32.2
LnGrp LOS	D	A	A	A	B	B	C	D	C	A	A	C
Approach Vol, veh/h		384			448			743			81	
Approach Delay, s/veh		26.6			15.1			39.2			32.2	
Approach LOS		C			B			D			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		75.0		30.0	17.1	57.9		30.0				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		57.5		38.5	25.5	27.5		38.5				
Max Q Clear Time (g_c+I1), s		6.2		6.4	12.5	9.3		21.6				
Green Ext Time (p_c), s		1.0		0.6	0.2	2.2		3.9				

Intersection Summary												
HCM 6th Ctrl Delay			29.4									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	900	16	95	370	17	33	78	195	19	59	8
Future Volume (veh/h)	18	900	16	95	370	17	33	78	195	19	59	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	989	18	104	407	19	36	86	214	21	65	9
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	2023	37	133	1103	52	293	355	289	251	303	42
Arrive On Green	0.02	0.57	0.57	0.07	0.62	0.62	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1781	3568	65	1781	1769	83	1309	1870	1523	1069	1599	221
Grp Volume(v), veh/h	20	493	514	104	0	426	36	86	214	21	0	74
Grp Sat Flow(s),veh/h/ln	1781	1777	1856	1781	0	1852	1309	1870	1523	1069	0	1820
Q Serve(g_s), s	0.9	13.3	13.3	4.6	0.0	9.0	1.9	3.1	10.6	1.4	0.0	2.7
Cycle Q Clear(g_c), s	0.9	13.3	13.3	4.6	0.0	9.0	4.7	3.1	10.6	4.5	0.0	2.7
Prop In Lane	1.00		0.03	1.00		0.04	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	32	1007	1052	133	0	1155	293	355	289	251	0	345
V/C Ratio(X)	0.63	0.49	0.49	0.78	0.00	0.37	0.12	0.24	0.74	0.08	0.00	0.21
Avail Cap(c_a), veh/h	91	1007	1052	234	0	1155	429	549	447	362	0	535
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)	0.99	0.99	0.99	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.00	0.97
Uniform Delay (d), s/veh	39.0	10.4	10.4	36.4	0.0	7.4	29.3	27.5	30.6	29.4	0.0	27.4
Incr Delay (d2), s/veh	7.2	1.7	1.6	3.8	0.0	0.9	0.1	0.1	1.4	0.1	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	0.4	4.9	5.1	2.1	0.0	3.2	0.6	1.4	3.9	0.3	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.2	12.1	12.0	40.1	0.0	8.3	29.4	27.7	32.0	29.5	0.0	27.5
LnGrp LOS	D	B	B	D	A	A	C	C	C	C	A	C
Approach Vol, veh/h		1027			530			336			95	
Approach Delay, s/veh		12.7			14.5			30.6			27.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	49.9		19.7	5.9	54.4		19.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	32.5		23.5	4.1	38.9		23.5				
Max Q Clear Time (g_c+I1), s	6.6	15.3		6.5	2.9	11.0		12.6				
Green Ext Time (p_c), s	0.0	3.9		0.2	0.0	1.7		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	745	127	142	306	70	86	458	122	151	505	53
Future Volume (veh/h)	127	745	127	142	306	70	86	458	122	151	505	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	776	132	148	319	73	90	477	127	157	526	55
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	1219	207	177	1174	264	126	731	314	187	776	81
Arrive On Green	0.09	0.40	0.40	0.10	0.41	0.41	0.07	0.21	0.21	0.10	0.24	0.24
Sat Flow, veh/h	1781	3025	514	1781	2866	645	1781	3554	1527	1781	3236	337
Grp Volume(v), veh/h	132	456	452	148	196	196	90	477	127	157	288	293
Grp Sat Flow(s),veh/h/ln	1781	1777	1762	1781	1777	1735	1781	1777	1527	1781	1777	1796
Q Serve(g_s), s	7.6	21.6	21.6	8.6	7.7	7.9	5.2	12.9	7.6	9.1	15.4	15.6
Cycle Q Clear(g_c), s	7.6	21.6	21.6	8.6	7.7	7.9	5.2	12.9	7.6	9.1	15.4	15.6
Prop In Lane	1.00		0.29	1.00		0.37	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	166	716	710	177	728	711	126	731	314	187	426	431
V/C Ratio(X)	0.80	0.64	0.64	0.83	0.27	0.28	0.71	0.65	0.40	0.84	0.68	0.68
Avail Cap(c_a), veh/h	261	716	710	212	728	711	202	880	378	226	464	469
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	0.92	0.92	0.92	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	46.6	25.2	25.2	46.4	20.6	20.6	47.8	38.3	36.1	46.1	36.2	36.2
Incr Delay (d2), s/veh	3.6	4.3	4.3	17.0	0.8	0.9	2.8	3.6	3.0	14.3	5.5	5.5
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	3.5	9.6	9.5	4.6	3.3	3.3	2.4	5.8	3.0	4.7	7.2	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	29.4	29.5	63.4	21.4	21.5	50.6	41.9	39.2	60.5	41.7	41.8
LnGrp LOS	D	C	C	E	C	C	D	D	D	E	D	D
Approach Vol, veh/h		1040			540			694			738	
Approach Delay, s/veh		32.1			33.0			42.5			45.7	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	47.4	12.1	30.3	14.5	48.1	15.7	26.7
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 13	33.6	* 12	27.4	* 15	30.7	* 13	26.0
Max Q Clear Time (g_c+I1), s	10.6	23.6	7.2	17.6	9.6	9.9	11.1	14.9
Green Ext Time (p_c), s	0.0	6.9	0.0	4.7	0.1	5.1	0.0	5.1

Intersection Summary	
HCM 6th Ctrl Delay	38.0
HCM 6th LOS	D

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)	147	597	74	22	271	87	80	182	25	140	197	116
Future Volume (veh/h)	147	597	74	22	271	87	80	182	25	140	197	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.92	1.00		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	649	80	24	295	95	87	198	27	152	214	126
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	1380	170	46	921	289	112	333	45	188	270	159
Arrive On Green	0.11	0.44	0.44	0.03	0.35	0.35	0.06	0.21	0.21	0.11	0.25	0.25
Sat Flow, veh/h	1781	3166	390	1781	2625	823	1781	1592	217	1781	1072	631
Grp Volume(v), veh/h	160	364	365	24	197	193	87	0	225	152	0	340
Grp Sat Flow(s),veh/h/ln	1781	1777	1779	1781	1777	1671	1781	0	1809	1781	0	1702
Q Serve(g_s), s	7.3	12.0	12.0	1.1	6.7	7.0	4.0	0.0	9.3	6.9	0.0	15.4
Cycle Q Clear(g_c), s	7.3	12.0	12.0	1.1	6.7	7.0	4.0	0.0	9.3	6.9	0.0	15.4
Prop In Lane	1.00		0.22	1.00		0.49	1.00		0.12	1.00		0.37
Lane Grp Cap(c), veh/h	197	774	775	46	624	587	112	0	378	188	0	428
V/C Ratio(X)	0.81	0.47	0.47	0.53	0.32	0.33	0.78	0.00	0.60	0.81	0.00	0.79
Avail Cap(c_a), veh/h	345	774	775	108	624	587	216	0	537	345	0	639
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	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.9	16.5	16.5	39.7	19.6	19.7	38.1	0.0	29.5	36.1	0.0	28.9
Incr Delay (d2), s/veh	3.1	2.0	2.0	3.4	1.3	1.5	4.3	0.0	1.1	3.1	0.0	3.3
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	3.2	4.9	5.0	0.5	2.8	2.8	1.8	0.0	4.0	3.1	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	18.6	18.6	43.2	20.9	21.2	42.5	0.0	30.6	39.2	0.0	32.2
LnGrp LOS	D	B	B	D	C	C	D	A	C	D	A	C
Approach Vol, veh/h		889			414			312			492	
Approach Delay, s/veh		22.2			22.3			33.9			34.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	41.0	9.2	26.3	13.1	34.0	12.7	22.8
Change Period (Y+Rc), s	4.0	5.0	4.0	* 5.5	4.0	5.0	4.0	5.5
Max Green Setting (Gmax), s	5.0	36.0	10.0	* 31	16.0	25.0	16.0	24.5
Max Q Clear Time (g_c+I1), s	3.1	14.0	6.0	17.4	9.3	9.0	8.9	11.3
Green Ext Time (p_c), s	0.0	4.5	0.0	1.4	0.1	2.0	0.1	0.8

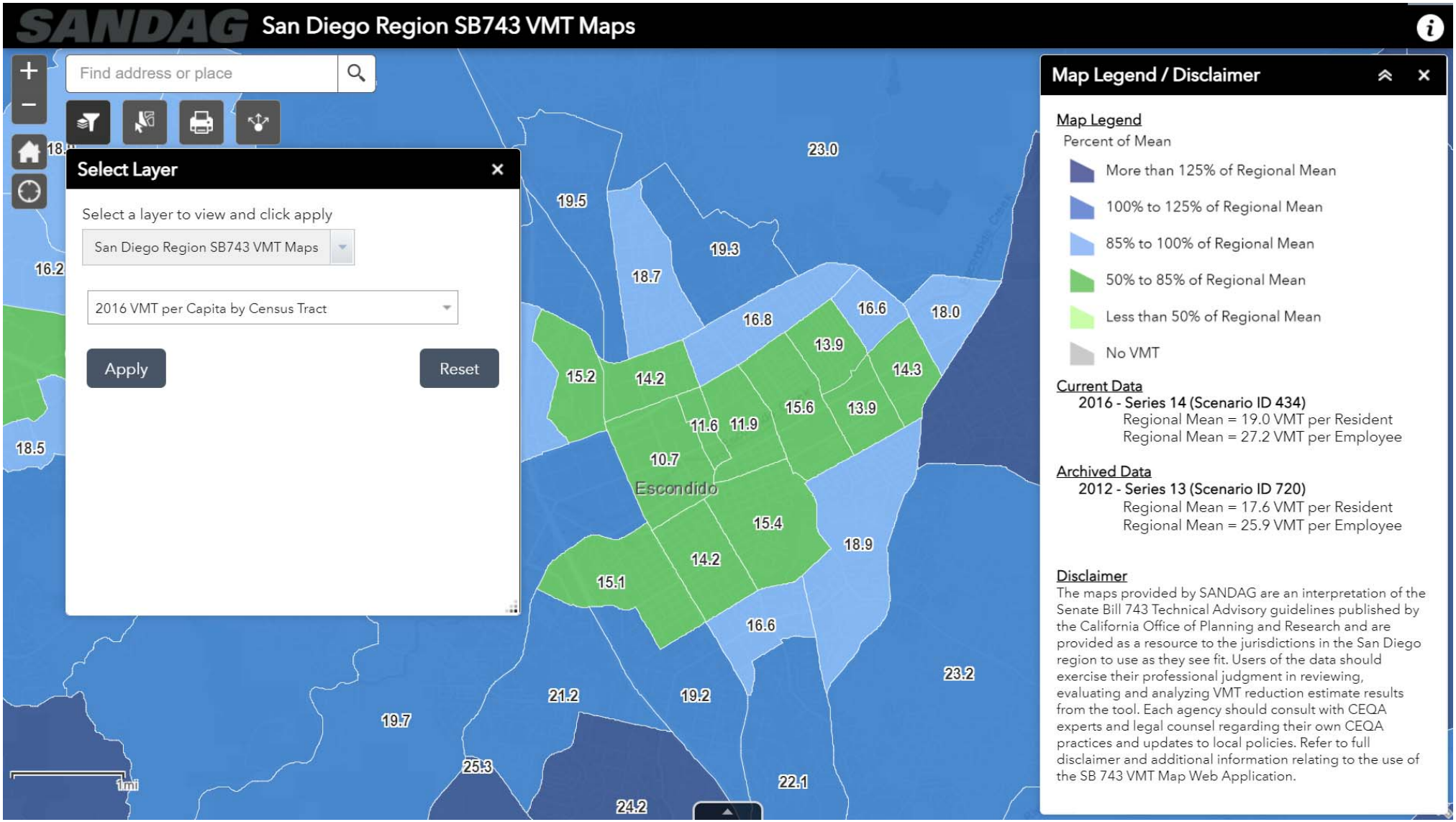
Intersection Summary	
HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

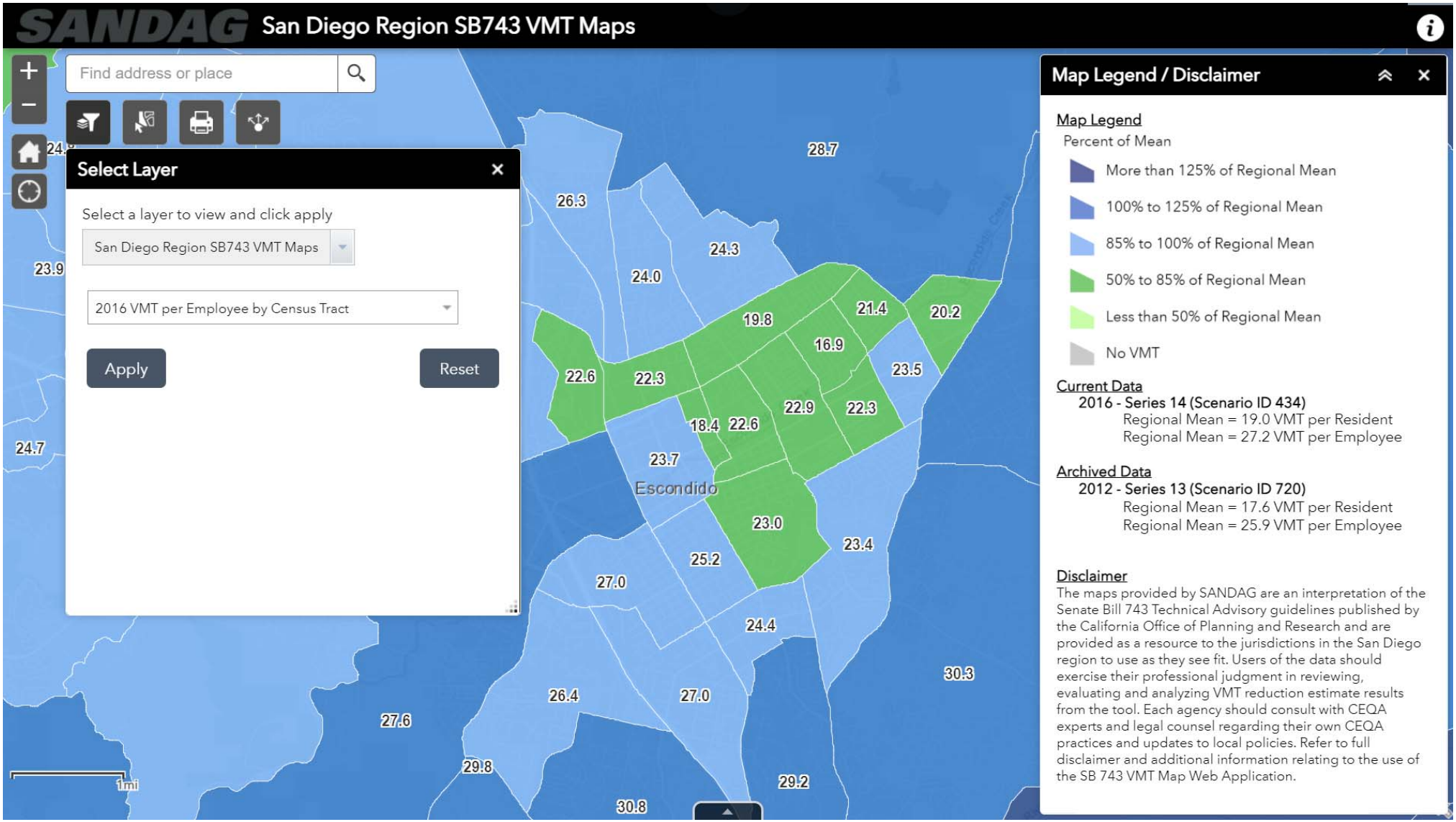
Notes

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

APPENDIX F

SANDAG SCREENING MAP AND SERIES 13 YEAR 2050 TRAVEL DEMAND MODEL RESULTS


SANDAG
San Diego Region SB743 VMT Maps
Find address or place
Select Layer
Select a layer to view and click apply
San Diego Region SB743 VMT Maps
2016 VMT per Capita by Census Tract
Apply
Reset
Map Legend / Disclaimer
Map Legend
Percent of Mean
More than 125% of Regional Mean
100% to 125% of Regional Mean
85% to 100% of Regional Mean
50% to 85% of Regional Mean
Less than 50% of Regional Mean
No VMT
Current Data
2016 - Series 14 (Scenario ID 434)
Regional Mean = 19.0 VMT per Resident
Regional Mean = 27.2 VMT per Employee
Archived Data
2012 - Series 13 (Scenario ID 720)
Regional Mean = 17.6 VMT per Resident
Regional Mean = 25.9 VMT per Employee
Disclaimer
The maps provided by SANDAG are an interpretation of the Senate Bill 743 Technical Advisory guidelines published by the California Office of Planning and Research and are provided as a resource to the jurisdictions in the San Diego region to use as they see fit. Users of the data should exercise their professional judgment in reviewing, evaluating and analyzing VMT reduction estimate results from the tool. Each agency should consult with CEQA experts and legal counsel regarding their own CEQA practices and updates to local policies. Refer to full disclaimer and additional information relating to the use of the SB 743 VMT Map Web Application.
Escondido
23.0
19.5
19.3
18.7
16.8
16.6
18.0
13.9
14.3
15.2
14.2
15.6
13.9
11.6
11.9
10.7
15.4
18.9
14.2
15.1
16.6
23.2
21.2
19.2
19.7
25.3
22.1
24.2
16.2
18.5
1mi


SANDAG
San Diego Region SB743 VMT Maps
Find address or place
Select Layer
Select a layer to view and click apply
San Diego Region SB743 VMT Maps
2016 VMT per Employee by Census Tract
Apply
Reset
Map Legend / Disclaimer
Map Legend
Percent of Mean
More than 125% of Regional Mean
100% to 125% of Regional Mean
85% to 100% of Regional Mean
50% to 85% of Regional Mean
Less than 50% of Regional Mean
No VMT
Current Data
2016 - Series 14 (Scenario ID 434)
Regional Mean = 19.0 VMT per Resident
Regional Mean = 27.2 VMT per Employee
Archived Data
2012 - Series 13 (Scenario ID 720)
Regional Mean = 17.6 VMT per Resident
Regional Mean = 25.9 VMT per Employee
Disclaimer
The maps provided by SANDAG are an interpretation of the Senate Bill 743 Technical Advisory guidelines published by the California Office of Planning and Research and are provided as a resource to the jurisdictions in the San Diego region to use as they see fit. Users of the data should exercise their professional judgment in reviewing, evaluating and analyzing VMT reduction estimate results from the tool. Each agency should consult with CEQA experts and legal counsel regarding their own CEQA practices and updates to local policies. Refer to full disclaimer and additional information relating to the use of the SB 743 VMT Map Web Application.
Escondido
28.7
26.3
24.3
24.0
23.9
24.7
19.8
21.4
20.2
16.9
22.6
22.3
23.5
22.9
22.3
18.4
22.6
23.7
23.0
23.4
25.2
27.0
24.4
30.3
26.4
27.0
27.6
29.8
29.2
30.8
1mi

Vehicle Miles of Travel Report

Scenario ID 1297 — **Escondido East Valley - 2050rc - Combined TAZs**

Aggregate VMT

Gross VMT

Geography	VMT
Regionwide	96,773,805
Clip 1	
Clip 2	

Distribution VMT

Query	Type	Description	VMT
1	Zone		
2	0	0	-
3	0	0	-
4	0	0	-

SB-743 VMT

VMT per Resident

	Geography	Scenario ID	Residents	Total Trips	Person Miles of Travel	Vehicle Miles of Travel	VMT per Resident
Regionwide		1297	4,088,646	14,580,550	86,189,175	59,909,603	14.7
Jurisdiction	ESCONDIDO	1297	193,145	656,281	3,212,308	2,138,968	11.1
Site	Combined TAZs	1297	21,370	66,434	234,105	123,526	**5.8**

VMT per Employee

	Geography	Scenario ID	Employees	Total Trips	Person Miles of Travel	Vehicle Miles of Travel	VMT per Employee
Regionwide		1297	1,717,664	5,598,317	43,471,721	37,535,280	21.9
Jurisdiction	ESCONDIDO	1297	58,451	184,171	1,303,685	1,113,110	19.0
Site	Combined TAZs	1297	4,067	9,945	62,544	51,827	**12.7**

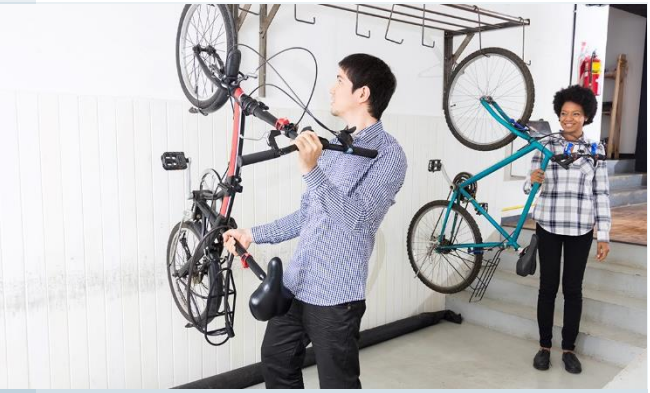
Report Generated: 03/15/21

SANDAG

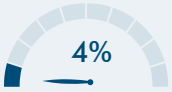
APPENDIX G

CAPCOA VMT REDUCTION EXCERPTS

T-5. Implement Commute Trip Reduction Program (Voluntary)



GHG Mitigation Potential



Up to 4.0% of GHG emissions from project/site employee commute VMT

Co-Benefits (icon key on pg. 34)

Climate Resilience

CTR programs could result in less traffic, potentially reducing congestion or delays on major roads during peak AM and PM traffic periods. When this reduction occurs during extreme weather events, it better allows emergency responders to access a hazard site. Lower transportation costs would also increase community resilience by freeing up resources for other purposes.

Health and Equity Considerations

Design of CTR programs need to ensure equitable access and benefits to all employees are provided considering disparate existing mobility options in diverse communities.

Measure Description

This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions. Voluntary implementation elements are described in this measure.

Subsector

Trip Reduction Programs

Locational Context

Urban, suburban

Scale of Application

Project/Site

Implementation Requirements

Voluntary CTR programs must include the following elements to apply the VMT reductions reported in literature.

- Employer-provided services, infrastructure, and incentives for alternative modes such as ridesharing (Measure T-8), discounted transit (Measure T-9), bicycling (Measure T-10), vanpool (Measure T-11), and guaranteed ride home.
- Information, coordination, and marketing for said services, infrastructure, and incentives (Measure T-7).

Cost Considerations

Employer costs may include recurring costs for transit subsidies, capital and maintenance costs for the alternative transportation infrastructure, and labor costs for staff to manage the program. Where the local municipality has a VMT reduction ordinance, costs may include the labor costs for government staff to track the efficacy of the program.

Expanded Mitigation Options

Other strategies may also be included as part of a voluntary CTR program, though they are not included in the VMT reductions reported by literature and thus are not incorporated in the VMT reductions for this measure.

This program typically serves as a complement to the more effective workplace CTR measures such as pricing workplace parking (Measure T-12) or implementing employee parking "cash-out" (Measure T-13).

GHG Reduction Formula

$A = B \times C$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project/site employee commute VMT	0–4.0	%	calculated
User Inputs				
B	Percent of employees eligible for program	0–100	%	user input
Constants, Assumptions, and Available Defaults				
C	Percent reduction in commute VMT from eligible employees	-4	%	Boarnet et al. 2014

Further explanation of key variables:

- (B) – This refers to the percent of employees that would be able to participate in the program. Employees who might not be able to participate could include those who work nighttime hours when transit and rideshare services are not available or employees who are required to drive to work as part of their job duties. This input does not refer to the percent of employees who participate in the program.
- (C) – A policy brief summarizing the results of employer-based trip reduction studies concluded that these programs reduce total commute VMT for employees at participating work sites by 4 to 6 percent (Boarnet et al. 2014). To be conservative, the low end of the range is cited.

GHG Calculation Caps or Maximums

Measure Maximum

(A_{max}) The maximum GHG reduction from this measure is 4 percent. This maximum scenario is presented in the below example quantification.

Subsector Maximum

($\sum A_{max_{T\text{-}5 \text{ through } T\text{-}13}} \leq 45\%$) This measure is in the Trip Reduction Programs subsector. This subcategory includes Measures T-5 through T-13. The employee commute VMT reduction from the combined implementation of all measures within this subsector is capped at 45 percent.

Mutually Exclusive Measures

If this measure is selected, the user may not also take credit for Measure T-6, which represents the same implementation activities as Measure T-5, except that the CTR program would be mandatory. Users should select either Measure T-5 or T-6.

If this measure is selected, the user may not also take credit for Measures T-7 through T-11. Measure T-5 accounts for the combined GHG reductions achieved by each of these individual measures. To combine the GHG reductions from T-5 with any of these measures would be considered double counting. However, the user may take credit for Measures T-12 through T-13 within the larger CTR subcategory, so long as the combined VMT reduction does not exceed 45 percent, as noted above.

Example GHG Reduction Quantification

The user reduces employee commute VMT by requiring that employers of a project offer a voluntary commute trip reduction program to their employees. In this example, the percent of employees eligible (B) is 100 percent, which would reduce GHG emissions from employee commute VMT by 4 percent.

$$A = 100\% \times -4\% = -4\%$$

Quantified Co-Benefits

Improved Local Air Quality

The percent reduction in GHG emissions (A) would be the same as the percent reduction in NO_X, CO, NO_2, SO_2, and PM. Reductions in ROG emissions can be calculated by multiplying the percent reduction in GHG emissions (A) by an adjustment factor of 87 percent. See *Adjusting VMT Reductions to Emission Reductions* above for further discussion.

Energy and Fuel Savings

The percent reduction in vehicle fuel consumption would be the same as the percent reduction in GHG emissions (A).

VMT Reductions

The percent reduction in VMT would be the same as the percent reduction in GHG emissions (A).

Sources

- Boarnet, M., H. Hsu, and S. Handy. 2014. *Impacts of Employer-Based Trip Reduction Programs and Vanpools on Passenger Vehicle Use and Greenhouse Gas Emissions*. September. Available: https://ww2.arb.ca.gov/sites/default/files/2020-06/Impacts_of_Employer-Based_Trip_Reduction_Programs_and_Vanpools_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Policy_Brief.pdf. Accessed: January 2021.

T-9. Implement Subsidized or Discounted Transit Program

GHG Mitigation Potential

Up to 5.5% of emissions from employee/resident vehicles accessing the site

Co-Benefits (icon key on pg. 34)

Climate Resilience

Subsidized and discounted transit programs increase the capacity of low-income populations to use transit to evacuate or access resources during an extreme weather event. They could also incentivize more people to use transit, resulting in less traffic and better allowing emergency responders to access a hazard site during an extreme weather event. Lower overall out-of-pocket costs would also help increase community resilience by freeing up resources for other purposes.

Health and Equity Considerations

Program should include all onsite workers, such as contractors, interns, and service workers.

Measure Description

This measure will provide subsidized or discounted, or free transit passes for employees and/or residents. Reducing the out-of-pocket cost for choosing transit improves the competitiveness of transit against driving, increasing the total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT and thus a reduction in GHG emissions.

Subsector

Trip Reduction Programs

Locational Context

Urban, suburban

Scale of Application

Project/Site

Implementation Requirements

The project should be accessible either within 1 mile of high-quality transit service (rail or bus with headways of less than 15 minutes), 0.5 mile of local or less frequent transit service, or along a designated shuttle route providing last-mile connections to rail service. If a well-established bikeshare service (Measure T-22-A) is available, the site may be located up to 2 miles from a high-quality transit service.

If more than one transit agency serves the site, subsidies should be provided that can be applied to each of the services available. If subsidies are applied for only one service, all variable inputs below should also pertain only to the service that is subsidized.

Cost Considerations

The employer cost is the recurring, direct cost for transit subsidies. The subsidies will lower the per capita income of the transit service, decreasing the revenue of the local transit agency. This cost may be offset by increased revenue from increased ridership. The beneficiaries include the program participants saving on commuting cost, the employer reducing onsite parking expenses, and the municipality reducing cars on the road, which leads to lower infrastructure and roadway maintenance costs.

Expanded Mitigation Options

This measure could be paired with any combination of the other commute trip reduction strategies (Measures T-7 through T-13) for increased reductions.

GHG Reduction Formula

$$A = \frac{C}{B} \times G \times D \times E \times F \times H \times I$$

GHG Calculation Variables

If subsidies or discounts target employees, the GHG reduction from this measure may be limited to work-related employee trips only (i.e., home-to- work) and work-to-other, where at least one trip end is work). If residents are targeted, the GHG reductions extend to all trips.

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from employee/resident vehicles accessing the site	0–5.5	%	calculated
User Inputs				
B	Average transit fare without subsidy	[ ]	$	user input
C	Subsidy amount	[ ]	$	user input
D	Percent of employees/residents eligible for subsidy	0–100	%	user input
E	Percent of project-generated VMT from employees/residents	0–100	%	user input
Constants, Assumptions, and Available Defaults				
F	Transit mode share of all trips or work trips	Table T-3.1 or Table T-9.1	%	FHWA 2017
G	Elasticity of transit boardings with respect to transit fare price	-0.43	unitless	Taylor et al. 2008
H	Percent of transit trips that would otherwise be made in a vehicle	50	%	Handy & Boarnet 2013
I	Conversion factor of vehicle trips to VMT	1.0	unitless	assumption

Further explanation of key variables:

- (B and C) – The average transit fare and subsidy amount can be presented as either a fare per ride, or the cost of a monthly pass for typical transit service near the site. Pricing should be based on the expected means of subsidy implementation; for instance, if a monthly pass is provided to all residents, prices should be input on a monthly basis.
- (D) – The percentage of employees/residents associated with the site who have access to the subsidy. If subsidy is provided as an employee benefit, care should be taken to account for any contract or temporary workers who do not receive such benefits.
- (E) – The percentage of project-generated VMT from employees/residents is used to adjust the percent reduction in GHG emissions from the scale of employee and/or resident-generated VMT to project-generated VMT. If subsidies or discounts target employees at an office development, this value would simply be 100 percent. If the project site is a multifamily development with no onsite workers, this value would also be

100 percent. If the project site is a retail development, this value would be less than 100 percent, as it does not account for retail shopper trips to the site. The share of total VMT generated by employees for visitor-intensive uses, such as retail or medical offices, can be roughly estimated by multiplying the total number of employees by two (to account for both arrival and departure), divided by the total number of daily trips.

- (F) – Ideally, the user will calculate transit mode share for work trips or all trips of a Project/Site at a scale no larger than a census tract. Potential data sources include the U.S. Census, California Household Travel Survey (preferred), or local survey efforts. Care should be taken *not* to present the reported commute mode share as retrieved from the American Community Survey (ACS), unless the land use is office or employment based and the tables are based on work location (rather than home location). If the subsidies or discounts target employees and their commute trips, then the mode share should use the home-to-work trip purpose. If the user is not able to provide a project-specific value using one of the data sources described above, they have the option to input the transit mode share for one of the six most populated CBSAs in California. The transit mode share for work trips by CBSA is presented in Table T-9.1 in Appendix C (FHWA 2017). The transit mode share for all trips is provided in Table T-3.1 in Appendix C.
- (G) – A cross-sectional analysis of transit use in 265 urbanized areas in the U.S. found that a 0.43 percent decrease in transit boardings occurs for every 1 percent increase in transit fare price (Taylor et al. 2008). A policy brief summarizing the results of transit service strategies found this analysis to fall in the mid-point of observed, short-term values (Handy & Boarnet 2013). Price elasticities of transit demand vary based on both long-term and short-term demand, service type, and service location (Litman 2020 and Handy & Boarnet 2013).
- (H) – Not all new transit trips replace a vehicle trip. The share of transit trips that would otherwise be made by private vehicle ranges from less than 5 percent to 50 percent across studies. This assumption is based on observed values for high quality BRT service under the assumption that this measure is implemented alongside marketing measures and is targeted primarily at reducing vehicle commute trips. (Handy & Boarnet 2013). Note that this study looked at service improvements rather than fare changes and is used as a proxy variable. If project-specific or location-specific information is available, it should be substituted for this assumptive variable.
- (I) – The adjustment factor from vehicle trips to VMT is 1. This assumes that all vehicle trips will average out to typical trip length ("assumes all trip lengths are equal"). Thus, it can be assumed that a percentage reduction in vehicle trips will equal the same percentage reduction in VMT. Subsidies or discounts targeting commute trips may have a higher factor as they are generally longer than the trip lengths for other purposes.

GHG Calculation Caps or Maximums

Measure Maximum

(A_{max}) The GHG reduction is capped at 5.5 percent, which is based on the following assumptions:

- (C=B) – The subsidy coverage is capped at 100 percent of the typical transit fare.
- (D) – All employees are eligible for the subsidy.

- (E) – All project-generated VMT is from employee-generated VMT.
- (F) – Employees at an office development in the San Francisco-Oakland-Hayward CBSA have a default transit mode share for work trips of 25.60 percent.

Subsector Maximum

$(\sum A_{max_{T\text{-}5 \text{ through } T\text{-}13}} \leq 45\%)$ This measure is in the Trip Reduction Programs subsector. This subcategory includes Measures T-5 through T-13. The employee commute VMT reduction from the combined implementation of all measures within this subsector is capped at 45 percent.

Mutually Exclusive Measures

If this measure is selected, the user may not also take credit for either Measure T-5 or T-6. However, this measure may be implemented alongside other individual CTR measures (Measures T-7, T-8, T-10 through T-13). The efficacy of individual programs may vary highly based on individual employers and local contexts.

Example GHG Reduction Quantification

In this example, the user reduces VMT by providing all employees (D) of a proposed office development in the San Francisco-Oakland-Hayward CBSA a 100 percent transit subsidy in the form of a $100 monthly transit pass (C=B). The user would reduce GHG emissions from VMT by 5.5 percent.

$$A = \left(\frac{\$100}{\$100} \times -0.43\right) \times 100\% \times 100\% \times 25.60\% \times 50\% \times 1 = -5.5\%$$

Quantified Co-Benefits

Improved Local Air Quality

The percent reduction in GHG emissions (A) would be the same as the percent reduction in NO_X, CO, NO_2, SO_2, and PM. Reductions in ROG emissions can be calculated by multiplying the percent reduction in GHG emissions (A) by an adjustment factor of 87 percent. See *Adjusting VMT Reductions to Emission Reductions* above for further discussion.

Energy and Fuel Savings

The percent reduction in vehicle fuel consumption would be the same as the percent reduction in GHG emissions (A).

VMT Reductions

The percent reduction in VMT would be the same as the percent reduction in GHG emissions (A).

Sources

- Federal Highway Administration (FHWA). 2017. *National Household Travel Survey–2017 Table Designer*. Travel Day PMT by TRPTRANS by HH_CBSA, Workers by WRKTRANS by HH_CBSA. Available: https://nhts.ornl.gov/. Accessed: January 2021.
- Handy, L. and S. Boarnet. 2013. *Impacts of Transit Service Strategies on Passenger Vehicle Use and Greenhouse Gas Emissions*. Available: http://www.arb.ca.gov/cc/sb375/policies/transitservice/transit_brief.pdf. Accessed: January 2021.
- Litman, T. 2020. *Transit Price Elasticities and Cross-elasticities*. Victoria Transport Policy Institute. April. Available: https://www.vtpi.org/tranelas.pdf. Accessed: January 2021.
- Taylor, B., D. Miller, H. Iseki, and C. Fink. 2008. *Nature and/or Nurture? Analyzing the Determinants of Transit Ridership Across US Urbanized Areas*. Transportation Research Part A: Policy and Practice, 43(1), 60-77. Available: https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.367.5311&rep=rep1&type=pdf. Accessed: January 2021.

T-41. Implement a School Pool Program

This measure requires projects create a ridesharing program for school children. Most school districts provide bussing services to public schools only. School pool helps match parents to transport students to private schools, or to schools where students cannot walk or bike but do not meet the requirements for bussing. A school pool program can help reduce onsite air pollutant emissions at the school by reducing private vehicle trips, especially if the pool vehicle is zero emissions.

T-42. Implement Telecommute and/or Alternative Work Schedule Program

This measure requires projects to permit employee telecommuting and/or alternative work schedules and monitor employee involvement to ensure forecasted participation matches observed participation. While this measure certainly reduces commute-related VMT, recent research has shown that total VMT from telecommuters can exceed VMT from non-telecommuters (Goulias et al. 2020). In addition, telecommuting affects commercial and residential electricity use, complicating the calculation of the net effect and attribution of emissions. More specifically, an office with fewer employees could result in a decrease in the project's energy used to operate equipment and provide space heating and air conditioning. Conversely, an increase in telecommuters using their private homes as workspaces could result in a residential increase in energy for those same end uses and appliances. While this measure is currently not quantified and, according to some studies, could result in total VMT increases and other disbenefits, it is recommended that users review the most recent literature at the time of their project initiation to see if new findings more conclusively support a quantifiable emissions reduction.

Transportation (Transit)

T-43. Provide Real-Time Transit Information

This measure requires projects provide real-time bus/train/ferry arrival time, travel time, alternative routings, or other transit information via electronic message signs, dedicated monitor or interactive electronic displays, websites, or mobile apps. This makes transit service more convenient and may result in a mode shift from auto to transit, which reduces VMT.

T-44. Provide Shuttles (Gas or Electric)

This measure will provide local shuttle service through coordination with the local transit operator or private contractor. The shuttles will provide service to and from commercial centers to nearby transit centers to help with first and last mile connectivity, thereby incentivizing a shift from private vehicles to transit, reducing associated GHG emissions. Electric shuttle vehicles provide a marginally more effective reduction to GHG emissions compared to gas- or diesel-fueled shuttles due to their use of less emissions-intensive electric power. Shuttles that serve only the project residents and/or employees may be seen as increasing gentrification and exclusionary. Consider allowing all people to use the shuttle, regardless of status. Note that this measure can also be implemented at the Project/Site scale by a large employer as part of a Trip Reduction Program.

T-45. Provide On-Demand Microtransit

This measure will provide small-scale, on-demand public transit services that can offer fixed routes and schedules or flexible routes and on-demand scheduling (e.g., Metro Micro) through coordination with the local transit operator or private contractor. Microtransit aims to offer shorter wait times and improved reliability compared to the bus and rail system to further incentivize alternative transportation modes that are less emissions-intensive than private vehicle trips. On-demand rides can be booked using smartphone applications or call centers. Note that this measure may also be applicable at the Project/Site scale for a large employer (e.g., Google's Via2G pilot) as part of a Trip Reduction Program.

APPENDIX H

TRAFFIC VOLUME FORECASTING TECHNICAL MEMORANDUM

MEMORANDUM

To:	Eddmond Alberto City of Escondido	Date:	December 16, 2022
From:	John Boarman, P.E. Renald Espiritu LLG, Engineers	LLG Ref:	3-21-3338
Subject:	East Valley Specific Plan (EVSP) – Traffic Volume Forecasting Methodology		

LINSCOTT LAW & GREENSPAN engineers

Engineers & Planners
Traffic
Transportation
Parking

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T

www.llgengineers.com

Pasadena
Irvine
San Diego

Linscott, Law & Greenspan (LLG) Engineers has prepared this technical memorandum for the proposed East Valley Specific Plan (EVSP) project. The following is a discussion of the Project's traffic volume forecasting methodology for the EVSP Project.

The SANDAG Series 13 Travel Demand Model was used to generate Year 2050 average daily volumes with the Project. Project traffic volumes were calculated by using the difference from the two SANDAG Series 13 Year 2050 models (SANDAG Series 13 Travel Demand Model minus SANDAG Series 2050 TFIC model). The Project traffic volumes were then added onto the Long-Term volumes (which were obtained from the City's Circulation Element model) to obtain Long-Term + Project traffic volumes.

Attachment 1 contains the SANDAG Series 13 Year 2050 TFIC model, the City of Escondido Circulation Element and SANDAG Series 13 model run.

Subsequent to the completion of the previous traffic study *(dated January 2022)*, the Project description was changed. The SANDAG Series 13 model had been archived and it was therefore not possible to rerun that model with the new Project description. In addition, the SANDAG Series 14 model could not be utilized since the model parameters are much different, and the Series 14 model did not have the capability to change land use inputs. Therefore, a multi-step manual approach was taken to determine the increase in traffic that would occur since the Series 13 model was obtained. First, a trip generation comparison was conducted between the previous traffic study and the now proposed Project to determine the overall trip increase on a daily and peak hour basis. Project trips were calculated for each land use using the corresponding rates provided in the *SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*.

Table 1 shows the Project trip comparison between the previous and current study. As shown in *Table 1*, the previous study analyzed approximately 72,830 ADT, 4,865 AM peak hour and 7,075 PM peak hour trips. The current project is calculated to generate approximately 93,666 ADT, 5,789 AM peak hour and 9,092 PM peak hour trips.

Table 1
Project Traffic Volume Comparison

Submittals	ADT	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Previous Study *(January 2022)*	72,830	2,254	2,611	4,865	3,669	3,405	7,075
Current Study *(December 2022)*	93,666	2,904	2,885	5,789	4,548	4,544	9,092

The next step was to review the trip generation by each land use. ***Table 2*** shows the difference in square footage for each land use between the original project and what is now proposed.

TABLE 2
PROJECT SIZE COMPARISON

Development Type	2035 Specific Plan Buildout (Previous Study)	2035 Specific Plan Buildout (Current Study)
Residential	6,164 DU	6,164 DU
Office[a]	644,972 SF	657,786 SF
Retail	571,169 SF	1,025,801 SF
Parks	25 acres	25 acres
Community Services	64,004 SF	123,084 SF

Footnotes:
a. Includes both Commercial Office and Medical Office.
General Note:
1. DU – dwelling unit
2. SF – square feet

The trip generation delta for each land use was calculated and the trips for each land use were manually distributed to the street system. The individual land use trip assumptions were then added and the total delta in trips were developed. The trips were added to the SANDAG model forecasted trips and these trips represented the 2050 traffic volumes.

In regards to the VMT analysis, it was completed based on the prior SANDAG model, which could not be rerun with the revised project as previously described. The main difference in the revised project was a large increase in retail. This results in a higher density and mix of land uses. Providing higher density and a greater mix of land uses would result in lower VMT which would be consistent with the EVSP's goals of reducing the overall number of VMT in the area. The amount of non-residential uses are more than analyzed in the previous traffic study. These types of uses will serve to capture a greater amount of residential trips and allow these trips to have shorter distances. These shorter distances translate to lower VMT.

The previous traffic study VMT results were 5.8 VMT/capita (for residential uses) and 12.7 VMT/employee (for office uses), and these were more than 50% lower than the Regional average. The increase in Project size and density would result in lower VMT for the reasons outlined above and would maintain a no significant VMT impact for residential and office uses.

As to retail, since the Project will maintain its purpose of providing local serving retail and less than 50,000 square feet in size, the retail portion is also presumed to have a less than significant VMT impact.

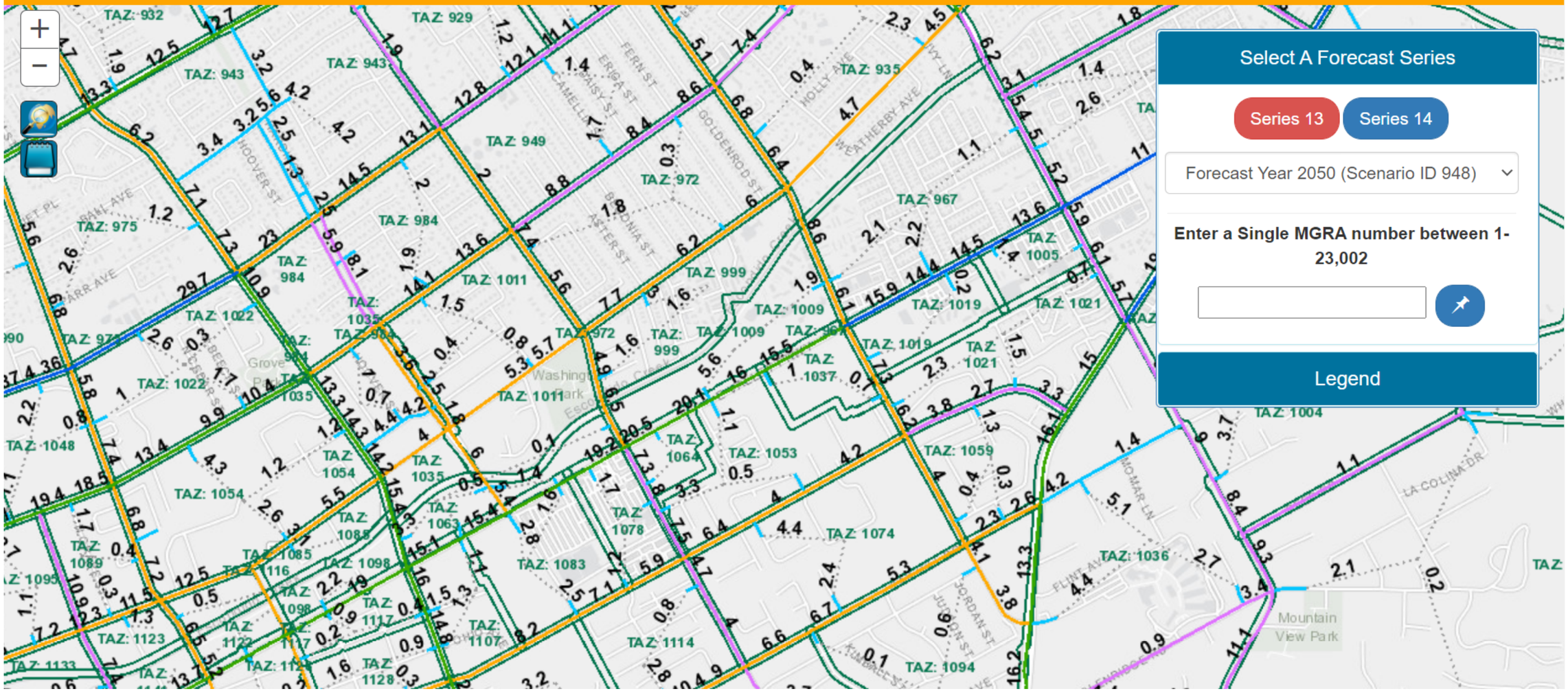
cc: File

ATTACHMENT 1

SANDAG SERIES 13 YEAR 2050 TFIC MODEL, CITY OF ESCONDIDO CIRCULATION ELEMENT AND SANDAG SERIES 13 MODEL RUN

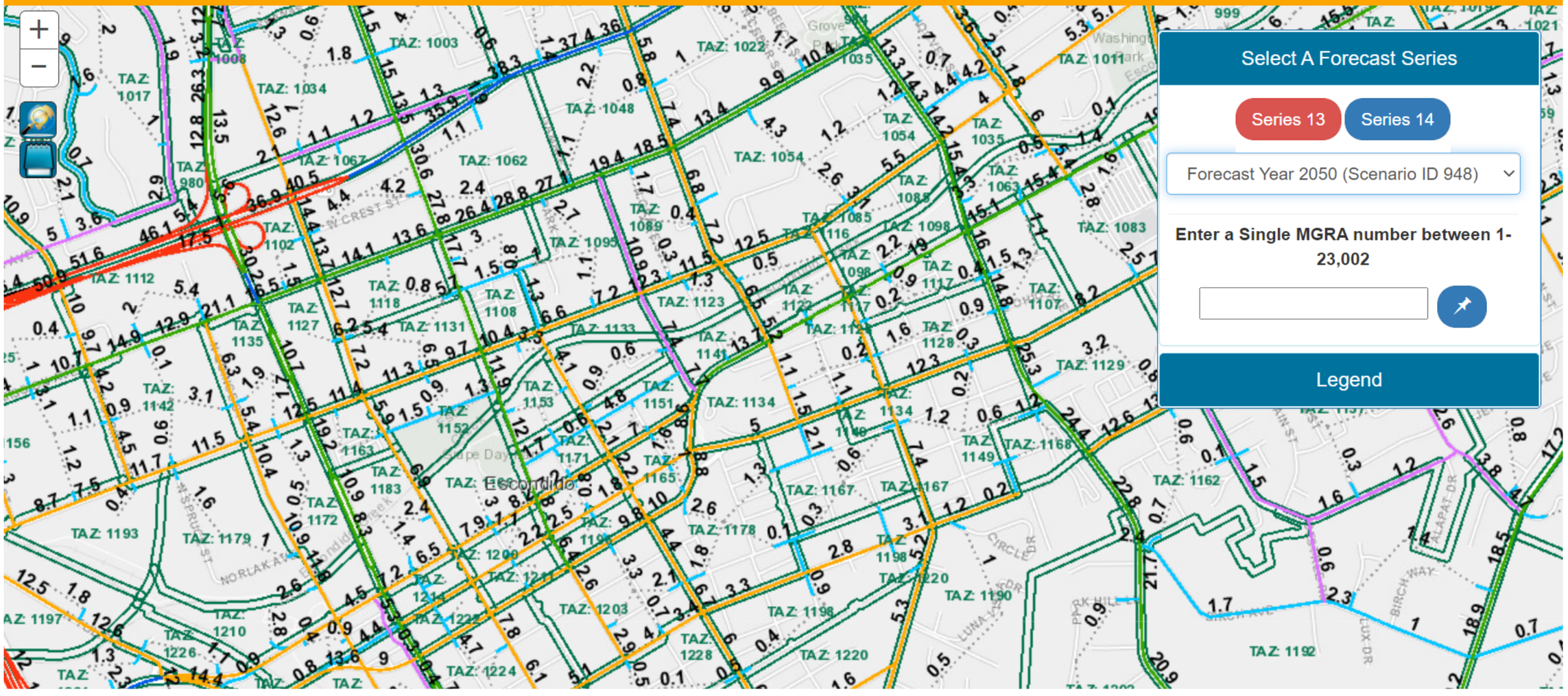
SANDAG Transportation Forecast Information Center

SB743-SR14 VMT Web App | Download Data | Map | Help | Contact



SANDAG Transportation Forecast Information Center

SB743-SR14 VMT Web App | Download Data | Map | Help | Contact



Functional Classifications

- Freeway
- Prime Arterial
- Major Arterial
- Collector
- Local Collector
- Rural Collector
- Local (non-circulation element) Road
- Freeway Connector Ramp
- Local Ramp
- Zone Connector

 # 2012 ADT (x1,000)
 # 2035 ADT (x1,000)

Source: City of Escondido GIS, SANDAG

0 0.5 1 Miles

Escondido Traffic Modeling
2012 vs 2035 ADT

ESCONDIDO City of Choice

S:\GIS\Projects\Engineering\20200922 traffic model craig williams\Traffic modeling working map.mxd

3/4/2021

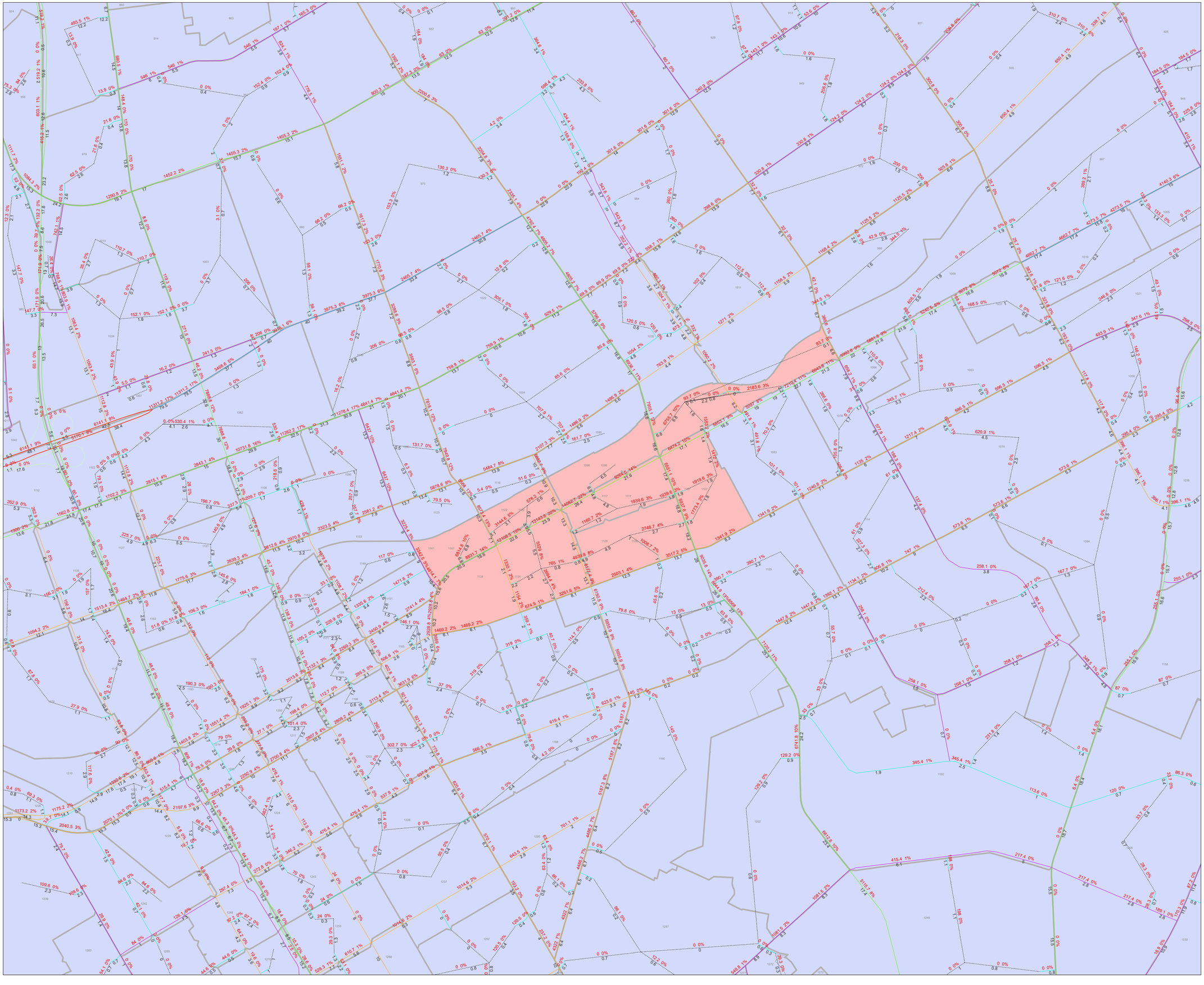
SANDAG
SR13

ABM version13_3_3
Scenario ID: 1297

Escondido East Valley

2050rc

Combined Select Zone Run



**Select Zone Vol and %**

**Model Estimated ADT x 1000**

SAN DIEGO ASSOCIATION OF GOVERNMENTS
401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org

N

0 0.045 0.09 0.135
Miles

SANDAG

Date: March 15, 2021

APPENDIX I

TRIP GENERATION TECHNICAL MEMORANDUM

MEMORANDUM

To:	Eddmond Alberto City of Escondido	Date:	December 9, 2022
From:	John Boarman, P.E. Renald Espiritu LLG, Engineers	LLG Ref:	3-21-3338
Subject:	East Valley Specific Plan (EVSP) – Trip Generation		

LINSCOTT LAW & GREENSPAN engineers

Engineers & Planners
Traffic
Transportation
Parking

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T

www.llgengineers.com

Pasadena
Irvine
San Diego

Linscott, Law & Greenspan (LLG) Engineers has prepared this technical memorandum for the proposed East Valley Specific Plan (EVSP) project. The following is a discussion of the Project's development potential as a result of the rezone of the existing 191-acre EVSP area, and the total project trip generation.

Table 1 shows the development potential of the Project.

SANDAG TRIP RATES

The land use trip generation rates associated with each developments shown in *Table 1* are based on the *SANDAG (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002*.

Table 2 shows the trip generation summary for the proposed developments. Based on the trip generation calculations, the project is calculated to generate a total of 110,195 gross average daily trips (ADT) with 6,811 trips during the AM peak hour (3,417 inbound / 3,394 outbound) and 10,697 trips during the PM peak hour (5,351 inbound / 5,346 outbound), if no mixed-use reduction was applied.

PROJECT MIXED-USE REDUCTION

Due to the large scale of the potential development in the area, it is reasonable to apply a mixed-use factor to account for area-specific mix of land uses (commercial, office, residential, parks, and community services), density, and walking and transit options. Therefore, the CAPCOA LUT-3 (Mixed-Use) formula was used. Unlike other methods that require very specific inputs that are not readily available for a Specific Plan level project, this method only requires the estimated square footage of the various land uses. LLG used this method in a recently prepared traffic study report for a large project in the City of Poway.

This method uses formulas that consider the different type of land uses in an integrated development project with functional interrelationships and a coherent physical design, thereby encouraging non-auto modes of transport and minimizing the need for external trips. The formula calculates a land use index based on the diversity of uses and translates that to a VMT reduction. Based on the Project's land

use mix, the VMT reduction is approximately 34.80% as compared to a single-use development. CAPCOA states the max percentage is 30%.

It should be noted that several of the CAPCOA measures work by directly inducing a mode shift and reduce vehicle trips. An example would be a transit subsidy program which incorporates the percent of vehicular trips in order to obtain a VMT percent reduction. For these measures, CAPCOA explicitly assumes a 1:1 conversion from vehicle trips to VMT. This is not empirical but rather an assumption that the external trips being substituted for internal trips (vehicular or non-vehicular) will average out to the typical trip length.

For the purpose of this Project's trip generation calculation, a reverse approach is taken by obtaining a mixed-use/ internal capture reduction from the calculated VMT percent reduction. The mixed-use / internal capture reduction is the decrease in external trips due to the diversity of land uses in the plan area. These are trips for which the users can meet their needs without leaving the area. However, some of them may still be vehicle trips. A comparison below further shows the relationship between the two.

External trip reduction =

A. Mode-shifted trips (ped/bike/transit) = NO VMT
B. Internal-Internal vehicle trips = SOME VMT (less)

Trip reduction = 100% of *A* + 100% of *B*
VMT reduction = 100% of *A* + *X*% of *B*, where X is less 100%.

Therefore, the external trip reduction is necessarily greater than or equal to the VMT reduction due to the amount of internal-internal vehicle trips considered, and assuming a 1:1 relationship means that using CAPCOA results in a conservative (slightly understated mixed-use reduction). To be conservative and to take into account any land uses not captured in the mixed-use/ internal capture reduction, it was deemed appropriate to use approximately half of the maximum percentage (30%) as a mixed-use reduction. Therefore, a 15% mixed-use reduction was applied to the gross trips to obtain the net Project trips. ***Attachment 1*** contains the mixed-use reduction calculation worksheets.

As shown in *Table 2*, with the mixed-use reduction, the project is calculated to generate 93,666 net Project ADT with 5,789 trips during the AM peak hour (2,904 inbound / 2,885 outbound) and 9,092 trips during the PM peak hour (4,548 inbound / 4,544 outbound).

Please let me know if you have any questions. Thank you.

cc: File

TABLE 1
DEVELOPMENT POTENTIAL

Land Use	Size
Single Family	648 dwelling units
Multifamily	5,516 dwelling units
Commercial Office	274,848 SF
Medical Office	382,938 SF
Retail	1,025,801 SF
City Parks	25 acres
Community Services	123,084 SF

LINSCOTT LAW & GREENSPAN engineers

TABLE 2
TRIP GENERATION - 2035 SPECIFIC PLAN BUILDOUT

Land Use	Quantity	Daily Volumes		AM Peak Hour					PM Peak Hour				
		Rate [a]	Volume	Rate	Split	In	Out	Total	Rate	Split	In	Out	Total
Single Family	648 DU	10/DU	6,480	8%	30%:70%	155	363	518	10%	70%:30%	454	194	648
Multifamily	5,516 DU	6/DU	33,096	8%	20%:80%	530	2,118	2,648	9%	70%:30%	2,085	894	2,979
Commercial Office	275 KSF	20/KSF	5,497	14%	90%:10%	693	77	770	13%	20%:80%	143	572	715
Medical Office	383 KSF	50/KSF	19,147	6%	80%:20%	919	230	1,149	11%	30%:70%	632	1,474	2,106
Retail	1,026 KSF	40/KSF	41,032	3%	60%:40%	739	492	1,231	9%	50%:50%	1,847	1,846	3,693
City Parks	25 acres	50/acre	1,250	13%	50%:50%	82	81	163	9%	50%:50%	57	56	113
Community Services [b]	123 KSF	30/KSF	3,693	9%	90%:10%	299	33	332	12%	30%:70%	133	310	443
Gross Project Trip Generation			**110,195**			**3,417**	**3,394**	**6,811**			**5,351**	**5,346**	**10,697**
Internal Capture [c]		**15%**	**16,529**			**513**	**509**	**1,022**			**803**	**802**	**1,605**
Net Project Trip Generation			**93,666**			**2,904**	**2,885**	**5,789**			**4,548**	**4,544**	**9,092**

Footnotes:
a. Trip generation rate from SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002. ("SANDAG Brief Guide")
b. Government (Civic Center) trip rate.
c. Project mixed use/internal capture reduction was calculated using CAPCOA (2010). Applied internal capture rate is one-half of the reduction calculated using the CAPCOA methods.

ATTACHMENT 1

MIXED-USE REDUCTION CALCULATION WORKSHEETS

3.1.3 Increase Diversity of Urban and Suburban Developments (Mixed Use)

Range of Effectiveness: 9-30% vehicle miles traveled (VMT) reduction and therefore 9-30% reduction in GHG emissions.

Measure Description:

Having different types of land uses near one another can decrease VMT since trips between land use types are shorter and may be accommodated by non-auto modes of transport. For example when residential areas are in the same neighborhood as retail and office buildings, a resident does not need to travel outside of the neighborhood to meet his/her trip needs. A description of diverse uses for urban and suburban areas is provided below.

Urban:

The urban project will be predominantly characterized by properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with functional interrelationships and a coherent physical design. The mixed-use development should encourage walking and other non-auto modes of transport from residential to office/commercial/institutional locations (and vice versa). The residential units should be within ¼-mile of parks, schools, or other civic uses. The project should minimize the need for external trips by including services/facilities for day care, banking/ATM, restaurants, vehicle refueling, and shopping.

Suburban:

The suburban project will have at least three of the following on site and/or offsite within ¼-mile: Residential Development, Retail Development, Park, Open Space, or Office. The mixed-use development should encourage walking and other non-auto modes of transport from residential to office/commercial locations (and vice versa). The project should minimize the need for external trips by including services/facilities for day care, banking/ATM, restaurants, vehicle refueling, and shopping.

Measure Applicability:

- Urban and suburban context
- Negligible impact in a rural context (unless the project is a master-planned community)
- Appropriate for mixed-use projects

Baseline Method:

See introduction to transportation section for a discussion of how to estimate trip rates and VMT. The CO_2 emissions are calculated from VMT as follows:

$CO_2 = VMT \times EF_{running}$

Where:

VMT = vehicle miles traveled

$EF_{running}$ = emission factor for running emissions

Inputs:

The following information needs to be provided by the Project Applicant:

- Percentage of each land use type in the project (to calculate land use index)

Mitigation Method:

% VMT Reduction = Land Use * B [not to exceed 30%]

Where

Land Use = Percentage increase in land use index versus single use development = (land use index – 0.15)/0.15 (see Appendix C for detail)

Land use index = -a / ln(6) (from [2])

$$a = \sum_{i=1}^{6} a_i \times \ln(a_i)$$

a_i = building floor area of land use i / total square feet of area considered

- a_1 = single family residential
- a_2 = multifamily residential
- a_3 = commercial
- a_4 = industrial
- a_5 = institutional
- a_6 = park

if land use is not present and a_i is equal to 0, set a_i equal to 0.01

B = elasticity of VMT with respect to land use index (0.09 from [1])

not to exceed 500% increase

Section:	3.1.3		**Increase Diversity of Urban and Suburban Developments (Mixed Use)**
Measure:	LUT-3		
Utilized:	☑		***Reduction Due to Diversity of Urban and Suburban Developments (Mixed Use)*** ***30.00%***

Calculations:

a = -(1,127,520/9,250,627) x ln(1,127,520/9,250,627) = -0.257
-(5,350,520/9,250,627) x ln(5,350,520/9,250,627) = -0.317
-(274,848/9,250,627) x ln(274,848/9,250,627) = -0.104
-(382,938/9,250,627) x ln(382,938/9,250,627) = -0.132
-(1,025,801/9,250,627) x ln(1,025,801/9,250,627) = -0.244
-(1,089,000/9,250,627) x ln(1,089,000/9,250,627) = -0.252

Land use index = -(0.257+0.317+0.104+0.132+0.244+0.252) / ln(6) = 0.73

A = (0.73 – 0.15)/0.15 = 387%

B = 0.09

VMT Reduction = 34.80%

		With Project Implementation			
		Min			9.0%
		Max			30.0%
		Square Footage of Single Family Residential Land Use	1,127,520	[a]	-0.257
		Square Footage of Multifamily Residential Land Use	5,350,520	[a]	-0.317
		Square Footage of Commercial Office Use	274,848		-0.104
		Square Footage of Medical Office Use	382,938		-0.132
		Square Footage of Retail	1,025,801		-0.244
		Square Footage of Park Land Use	1,089,000		-0.252
		Total Square Footage	9,250,627		
		Land Use Index[1]			0.73
	A	Percentage Increase in land Use Index vs Single Use Development [not to exceed 500%]			387%
	B	Elasticity of VMT with Respect to Land Use Index			0.09
		VMT Reduction = A x B			34.80% [b]
		VMT Reduction Utilized			***30.00%*** [b]

Footnotes:

1. See the formula utilized below to calculate this parameter per the CAPCOA Report:

$$a = \sum_{i=1}^{6} a_i * \ln(a_i)$$

$$Land\ Use\ Index = \frac{-a}{\ln(6)}$$

Footnotes:

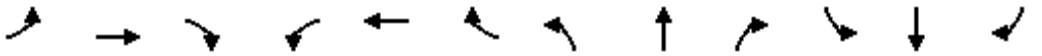
a. Per *Table 3–1* of the EVSP, Target Production Point of 25 du/ac (approximately 1,740 SF per dwelling unit) for single family and 45 du/ac (approximately 970 SF per dwelling unit) for multifamily were used.

Therefore,
648 single family dwelling units x 1,740 SF = 1,127,520 SF
5,516 multifamily dwelling units x 970 SF = 5,350,520 SF

b. A VMT reduction of 34.80% was calculated. Maximum VMT reduction for this measure is 30.00%. Per coordination with City staff, half of the CAPCOA reduction (**15%**) was assumed for the mixed-use reduction.

APPENDIX J

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – LONG-TERM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	750	320	390	860	170	200	290	110	270	1250	70
Future Volume (veh/h)	20	750	320	390	860	170	200	290	110	270	1250	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	815	348	424	935	185	217	315	120	293	1359	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	995	430	404	1526	301	293	1274	553	337	1318	573
Arrive On Green	0.04	0.28	0.28	0.23	0.72	0.72	0.08	0.36	0.36	0.10	0.37	0.37
Sat Flow, veh/h	3456	3554	1537	3456	4258	839	3456	3554	1543	3456	3554	1544
Grp Volume(v), veh/h	22	815	348	424	747	373	217	315	120	293	1359	76
Grp Sat Flow(s),veh/h/ln	1728	1777	1537	1728	1702	1693	1728	1777	1543	1728	1777	1544
Q Serve(g_s), s	1.0	35.4	34.8	19.3	18.3	18.4	10.1	10.3	8.9	13.8	61.2	5.4
Cycle Q Clear(g_c), s	1.0	35.4	34.8	19.3	18.3	18.4	10.1	10.3	8.9	13.8	61.2	5.4
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	995	430	404	1220	607	293	1274	553	337	1318	573
V/C Ratio(X)	0.17	0.82	0.81	1.05	0.61	0.62	0.74	0.25	0.22	0.87	1.03	0.13
Avail Cap(c_a), veh/h	209	1055	456	404	1220	607	293	1274	553	440	1318	573
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	76.8	55.5	55.3	63.2	17.6	17.6	73.7	37.3	36.8	73.4	51.9	34.3
Incr Delay (d2), s/veh	0.4	5.5	11.0	28.6	0.1	0.2	8.5	0.5	0.9	11.5	33.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	16.3	14.7	9.1	4.8	4.8	4.9	4.7	3.5	6.7	33.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	61.0	66.3	91.8	17.7	17.8	82.2	37.7	37.7	85.0	84.9	34.8
LnGrp LOS	E	E	E	F	B	B	F	D	D	F	F	C
Approach Vol, veh/h		1185			1544			652			1728	
Approach Delay, s/veh		62.9			38.1			52.5			82.7	
Approach LOS		E			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.1	66.0	24.4	52.5	20.0	68.1	11.5	65.4
Change Period (Y+Rc), s	6.0	6.9	5.1	6.3	6.0	6.9	5.1	6.3
Max Green Setting (Gmax), s	21.0	51.4	19.3	49.0	14.0	58.4	10.0	58.3
Max Q Clear Time (g_c+I1), s	15.8	12.3	21.3	37.4	12.1	63.2	3.0	20.4
Green Ext Time (p_c), s	0.3	3.3	0.0	7.1	0.1	0.0	0.0	15.2

Intersection Summary	
HCM 6th Ctrl Delay	60.8
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	770	140	210	1090	140	150	700	160	310	830	560
Future Volume (veh/h)	390	770	140	210	1090	140	150	700	160	310	830	560
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.89	1.00		0.92
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	811	147	221	1147	147	158	737	168	326	874	589
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	1530	275	263	1019	130	151	766	175	327	742	478
Arrive On Green	0.11	0.35	0.35	0.08	0.32	0.32	0.08	0.27	0.27	0.18	0.37	0.37
Sat Flow, veh/h	3456	4315	775	3456	3148	402	1781	2802	639	1781	1995	1284
Grp Volume(v), veh/h	411	638	320	221	646	648	158	467	438	326	774	689
Grp Sat Flow(s),veh/h/ln	1728	1702	1686	1728	1777	1773	1781	1777	1664	1781	1777	1502
Q Serve(g_s), s	17.7	24.6	24.9	10.4	53.4	53.4	14.0	42.8	42.8	30.2	61.4	61.4
Cycle Q Clear(g_c), s	17.7	24.6	24.9	10.4	53.4	53.4	14.0	42.8	42.8	30.2	61.4	61.4
Prop In Lane	1.00		0.46	1.00		0.23	1.00		0.38	1.00		0.86
Lane Grp Cap(c), veh/h	371	1207	598	263	575	574	151	486	455	327	661	559
V/C Ratio(X)	1.11	0.53	0.53	0.84	1.12	1.13	1.05	0.96	0.96	1.00	1.17	1.23
Avail Cap(c_a), veh/h	371	1207	598	329	575	574	151	486	455	327	661	559
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)	0.59	0.59	0.59	0.56	0.56	0.56	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.7	42.3	42.4	75.2	55.8	55.8	75.5	59.1	59.1	67.3	51.8	51.8
Incr Delay (d2), s/veh	69.5	1.0	2.0	8.1	68.4	70.9	83.9	30.2	31.5	48.8	92.4	119.5
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	11.4	10.5	10.7	4.9	34.2	34.6	9.9	23.2	21.9	18.0	43.7	41.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	143.1	43.3	44.4	83.3	124.2	126.7	159.4	89.3	90.6	116.1	144.2	171.3
LnGrp LOS	F	D	D	F	F	F	F	F	F	F	F	F
Approach Vol, veh/h		1369			1515			1063			1789	
Approach Delay, s/veh		73.5			119.3			100.3			149.5	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	63.4	18.5	66.0	22.2	58.3	34.8	49.7
Change Period (Y+Rc), s	4.5	4.9	4.5	4.6	4.5	4.9	4.5	4.6
Max Green Setting (Gmax), s	15.7	55.4	14.0	61.4	17.7	53.4	30.3	45.1
Max Q Clear Time (g_c+I1), s	12.4	26.9	16.0	63.4	19.7	55.4	32.2	44.8
Green Ext Time (p_c), s	0.2	5.4	0.0	0.0	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	114.3
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	870	130	100	1320	30	90	100	90	20	100	60
Future Volume (veh/h)	30	870	130	100	1320	30	90	100	90	20	100	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	946	141	109	1435	33	98	109	98	22	109	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	1539	229	136	1868	43	112	703	302	41	170	101
Arrive On Green	0.05	0.50	0.50	0.08	0.53	0.53	0.06	0.20	0.20	0.02	0.16	0.16
Sat Flow, veh/h	1781	3091	461	1781	3549	82	1781	3554	1525	1781	1077	642
Grp Volume(v), veh/h	33	544	543	109	718	750	98	109	98	22	0	174
Grp Sat Flow(s),veh/h/ln	1781	1777	1775	1781	1777	1854	1781	1777	1525	1781	0	1720
Q Serve(g_s), s	1.8	22.1	22.2	6.0	32.1	32.2	5.5	2.5	5.5	1.2	0.0	9.5
Cycle Q Clear(g_c), s	1.8	22.1	22.2	6.0	32.1	32.2	5.5	2.5	5.5	1.2	0.0	9.5
Prop In Lane	1.00		0.26	1.00		0.04	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	86	885	884	136	935	975	112	703	302	41	0	271
V/C Ratio(X)	0.39	0.61	0.61	0.80	0.77	0.77	0.87	0.16	0.32	0.54	0.00	0.64
Avail Cap(c_a), veh/h	143	885	884	169	935	975	112	984	422	98	0	454
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)	0.68	0.68	0.68	1.00	1.00	1.00	0.89	0.89	0.89	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.2	18.2	18.2	45.4	18.8	18.9	46.5	33.2	34.4	48.3	0.0	39.5
Incr Delay (d2), s/veh	0.7	2.2	2.2	15.6	6.0	5.8	43.0	0.1	0.7	4.1	0.0	3.0
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	0.8	8.7	8.7	3.2	13.1	13.7	3.7	1.1	2.1	0.6	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.9	20.3	20.4	61.0	24.8	24.7	89.5	33.3	35.0	52.4	0.0	42.5
LnGrp LOS	D	C	C	E	C	C	F	C	D	D	A	D
Approach Vol, veh/h		1120			1577			305			196	
Approach Delay, s/veh		21.1			27.3			51.9			43.6	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	55.3	10.8	21.8	9.3	58.1	6.8	25.8
Change Period (Y+Rc), s	4.5	5.5	4.5	6.0	4.5	* 5.5	4.5	* 6
Max Green Setting (Gmax), s	9.5	37.3	6.3	26.4	8.0	* 39	5.5	* 28
Max Q Clear Time (g_c+I1), s	3.8	24.2	7.5	11.5	3.8	34.2	3.2	7.5
Green Ext Time (p_c), s	0.0	7.9	0.0	0.9	0.0	4.3	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	28.5
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)	80	40	150	100	120	80	140	570	30	30	790	180
Future Volume (veh/h)	80	40	150	100	120	80	140	570	30	30	790	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.67	1.00		0.76	1.00		0.91	1.00		0.84
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	45	169	112	135	90	157	640	34	34	888	202
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	70	124	164	198	238	177	1691	90	95	1242	282
Arrive On Green	0.12	0.12	0.12	0.20	0.20	0.20	0.20	0.99	0.99	0.05	0.45	0.45
Sat Flow, veh/h	1207	603	1061	829	1000	1206	1781	3412	181	1781	2761	627
Grp Volume(v), veh/h	135	0	169	247	0	90	157	333	341	34	571	519
Grp Sat Flow(s),veh/h/ln	1810	0	1061	1829	0	1206	1781	1777	1816	1781	1777	1612
Q Serve(g_s), s	10.7	0.0	17.5	18.8	0.0	9.7	12.9	0.4	0.4	2.8	39.1	39.2
Cycle Q Clear(g_c), s	10.7	0.0	17.5	18.8	0.0	9.7	12.9	0.4	0.4	2.8	39.1	39.2
Prop In Lane	0.67		1.00	0.45		1.00	1.00		0.10	1.00		0.39
Lane Grp Cap(c), veh/h	211	0	124	361	0	238	177	881	900	95	799	725
V/C Ratio(X)	0.64	0.00	1.37	0.68	0.00	0.38	0.89	0.38	0.38	0.36	0.71	0.72
Avail Cap(c_a), veh/h	211	0	124	372	0	245	226	881	900	95	799	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.85	0.85	0.85	0.09	0.09	0.09
Uniform Delay (d), s/veh	63.2	0.0	66.3	55.8	0.0	52.2	59.3	0.3	0.3	68.5	33.5	33.5
Incr Delay (d2), s/veh	5.8	0.0	207.6	4.5	0.0	0.7	21.1	1.1	1.0	0.1	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	11.9	9.1	0.0	3.0	6.3	0.4	0.4	1.3	16.7	15.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	0.0	273.9	60.4	0.0	52.9	80.4	1.4	1.4	68.6	33.7	33.8
LnGrp LOS	E	A	F	E	A	D	F	A	A	E	C	C
Approach Vol, veh/h		304			337			831			1124	
Approach Delay, s/veh		182.9			58.4			16.3			34.8	
Approach LOS		F			E			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	79.9		23.0	18.9	72.9		35.1
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5
Max Green Setting (Gmax), s	8.0	73.5		17.5	19.0	62.5		30.5
Max Q Clear Time (g_c+I1), s	14.8	2.4		19.5	14.9	41.2		20.8
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	3.7		1.0

Intersection Summary	
HCM 6th Ctrl Delay	49.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	670	110	110	850	30	180	220	70	40	360	70
Future Volume (veh/h)	110	670	110	110	850	30	180	220	70	40	360	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.82	1.00		0.77
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	705	116	116	895	32	189	232	74	42	379	74
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	2652	796	144	2625	94	254	547	164	53	484	92
Arrive On Green	0.08	0.52	0.52	0.08	0.52	0.52	0.07	0.21	0.21	0.03	0.17	0.17
Sat Flow, veh/h	1781	5106	1533	1781	5054	180	3456	2543	763	1781	2827	537
Grp Volume(v), veh/h	116	705	116	116	602	325	189	158	148	42	234	219
Grp Sat Flow(s),veh/h/ln	1781	1702	1533	1781	1702	1831	1728	1777	1529	1781	1777	1587
Q Serve(g_s), s	6.4	7.7	3.9	6.4	10.3	10.4	5.4	7.6	8.4	2.3	12.6	13.2
Cycle Q Clear(g_c), s	6.4	7.7	3.9	6.4	10.3	10.4	5.4	7.6	8.4	2.3	12.6	13.2
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.50	1.00		0.34
Lane Grp Cap(c), veh/h	144	2652	796	144	1768	951	254	382	329	53	304	272
V/C Ratio(X)	0.81	0.27	0.15	0.81	0.34	0.34	0.74	0.41	0.45	0.79	0.77	0.80
Avail Cap(c_a), veh/h	267	2652	796	267	1768	951	415	498	428	125	409	365
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	0.86	0.86	0.86	0.78	0.78	0.78	0.77	0.77	0.77
Uniform Delay (d), s/veh	45.2	13.4	12.5	45.2	14.0	14.0	45.4	33.8	34.1	48.2	39.6	39.8
Incr Delay (d2), s/veh	4.0	0.2	0.4	3.4	0.5	0.8	1.3	0.7	0.9	7.2	5.3	7.9
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	2.9	2.7	1.4	2.9	3.8	4.2	2.3	3.3	3.2	1.1	5.8	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.2	13.6	12.9	48.6	14.5	14.9	46.7	34.5	35.0	55.4	44.9	47.7
LnGrp LOS	D	B	B	D	B	B	D	C	D	E	D	D
Approach Vol, veh/h		937			1043			495			495	
Approach Delay, s/veh		17.9			18.4			39.3			47.0	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	56.4	10.4	22.1	11.1	56.4	6.0	26.5
Change Period (Y+Rc), s	3.0	4.5	3.0	5.0	3.0	4.5	3.0	5.0
Max Green Setting (Gmax), s	15.0	34.5	12.0	23.0	15.0	34.5	7.0	28.0
Max Q Clear Time (g_c+I1), s	8.4	9.7	7.4	15.2	8.4	12.4	4.3	10.4
Green Ext Time (p_c), s	0.0	6.1	0.0	1.9	0.0	7.1	0.0	1.9

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	450	210	40	560	40	250	240	160	70	340	100
Future Volume (veh/h)	30	450	210	40	560	40	250	240	160	70	340	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.91	1.00		1.00	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	506	0	45	629	45	276	278	0	79	382	112
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	1637		393	1537	110	330	346		413	433	355
Arrive On Green	0.46	0.46	0.00	0.46	0.46	0.46	0.19	0.19	0.00	0.23	0.23	0.23
Sat Flow, veh/h	757	3554	1585	883	3338	238	1781	1870	1585	1781	1870	1531
Grp Volume(v), veh/h	34	506	0	45	334	340	276	278	0	79	382	112
Grp Sat Flow(s),veh/h/ln	757	1777	1585	883	1777	1799	1781	1870	1585	1781	1870	1531
Q Serve(g_s), s	3.4	9.9	0.0	3.7	13.8	13.8	16.4	15.6	0.0	3.9	21.7	6.7
Cycle Q Clear(g_c), s	17.3	9.9	0.0	13.6	13.8	13.8	16.4	15.6	0.0	3.9	21.7	6.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	1637		393	818	829	330	346		413	433	355
V/C Ratio(X)	0.11	0.31		0.11	0.41	0.41	0.84	0.80		0.19	0.88	0.32
Avail Cap(c_a), veh/h	319	1637		393	818	829	478	502		562	590	483
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)	0.96	0.96	0.00	1.00	1.00	1.00	0.91	0.91	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	18.7	0.0	22.9	19.7	19.7	43.2	42.9	0.0	34.0	40.8	35.0
Incr Delay (d2), s/veh	0.6	0.5	0.0	0.1	0.2	0.2	6.8	4.6	0.0	0.2	10.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.0	0.0	0.8	5.6	5.7	7.7	7.6	0.0	1.7	11.1	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	19.1	0.0	23.0	20.0	20.0	50.0	47.5	0.0	34.1	51.4	35.4
LnGrp LOS	C	B		C	B	B	D	D		C	D	D
Approach Vol, veh/h		540	A		719			554	A		573	
Approach Delay, s/veh		19.6			20.2			48.8			45.9	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	55.2	30.0	55.2	24.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	32.3	34.7	32.3	29.5
Max Q Clear Time (g_c+I1), s	19.3	23.7	15.8	18.4
Green Ext Time (p_c), s	2.3	1.8	3.2	1.5

Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR] 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)	280	770	750	140	1070	90	400	370	80	70	480	370
Future Volume (veh/h)	280	770	750	140	1070	90	400	370	80	70	480	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.90
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	811	789	147	1126	95	421	389	84	74	642	298
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	1802	763	276	1710	516	477	1122	458	136	950	362
Arrive On Green	0.10	0.35	0.35	0.08	0.33	0.33	0.14	0.32	0.32	0.08	0.25	0.25
Sat Flow, veh/h	3456	5106	1543	3456	5106	1542	3456	3554	1453	1781	3741	1426
Grp Volume(v), veh/h	295	811	789	147	1126	95	421	389	84	74	642	298
Grp Sat Flow(s),veh/h/ln	1728	1702	1543	1728	1702	1542	1728	1777	1453	1781	1870	1426
Q Serve(g_s), s	12.6	18.3	52.9	6.1	28.2	6.6	17.9	12.6	6.3	6.0	23.2	29.6
Cycle Q Clear(g_c), s	12.6	18.3	52.9	6.1	28.2	6.6	17.9	12.6	6.3	6.0	23.2	29.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	338	1802	763	276	1710	516	477	1122	458	136	950	362
V/C Ratio(X)	0.87	0.45	1.03	0.53	0.66	0.18	0.88	0.35	0.18	0.54	0.68	0.82
Avail Cap(c_a), veh/h	352	1802	763	276	1710	516	905	1341	548	152	950	362
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	0.84	0.84	0.84	0.66	0.66	0.66
Uniform Delay (d), s/veh	66.7	37.3	38.4	66.3	42.6	35.4	63.5	39.4	37.3	66.8	50.4	52.8
Incr Delay (d2), s/veh	19.1	0.8	41.6	1.0	2.0	0.8	1.9	0.1	0.1	0.8	1.7	10.9
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	6.4	7.7	36.0	2.7	11.9	2.6	8.0	5.6	0.0	2.8	11.1	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.9	38.1	80.0	67.4	44.6	36.1	65.3	39.5	37.3	67.6	52.1	63.6
LnGrp LOS	F	D	F	E	D	D	E	D	D	E	D	E
Approach Vol, veh/h		1895			1368			894			1014	
Approach Delay, s/veh		63.0			46.4			51.5			56.6	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	60.9	26.4	45.0	20.4	58.2	17.2	54.2
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.9	* 5.7	8.0	* 5.7	6.9
Max Green Setting (Gmax), s	* 13	42.3	* 39	30.1	* 15	39.0	* 13	56.6
Max Q Clear Time (g_c+I1), s	19.1	54.9	19.9	31.6	14.6	30.2	8.0	14.6
Green Ext Time (p_c), s	0.1	0.0	0.8	0.0	0.0	8.0	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	55.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* 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)	70	360	170	110	720	50	210	210	100	120	470	250
Future Volume (veh/h)	70	360	170	110	720	50	210	210	100	120	470	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	404	191	124	809	56	236	236	112	135	528	281
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	1243	552	150	1296	90	263	738	337	162	571	303
Arrive On Green	0.06	0.36	0.36	0.08	0.39	0.39	0.15	0.31	0.31	0.09	0.26	0.26
Sat Flow, veh/h	1781	3428	1524	1781	3365	233	1781	2347	1071	1781	2215	1175
Grp Volume(v), veh/h	79	401	194	124	427	438	236	176	172	135	423	386
Grp Sat Flow(s),veh/h/ln	1781	1702	1548	1781	1777	1821	1781	1777	1641	1781	1777	1613
Q Serve(g_s), s	5.2	10.2	11.0	8.2	23.3	23.4	15.6	9.1	9.6	8.9	27.9	28.0
Cycle Q Clear(g_c), s	5.2	10.2	11.0	8.2	23.3	23.4	15.6	9.1	9.6	8.9	27.9	28.0
Prop In Lane	1.00		0.98	1.00		0.13	1.00		0.65	1.00		0.73
Lane Grp Cap(c), veh/h	110	1234	561	150	684	701	263	559	516	162	458	416
V/C Ratio(X)	0.72	0.32	0.35	0.83	0.62	0.62	0.90	0.32	0.33	0.83	0.92	0.93
Avail Cap(c_a), veh/h	132	1234	561	238	684	701	325	559	516	260	480	436
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	0.38	0.38	0.38	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	27.6	27.9	54.1	29.9	29.9	50.2	31.3	31.5	53.7	43.4	43.5
Incr Delay (d2), s/veh	10.0	0.7	1.7	2.5	1.6	1.6	16.7	0.1	0.1	6.0	22.6	24.9
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	2.6	4.2	4.2	3.7	10.0	10.2	8.1	3.9	3.8	4.2	14.9	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.2	28.3	29.6	56.6	31.5	31.5	67.0	31.4	31.6	59.7	66.0	68.4
LnGrp LOS	E	C	C	E	C	C	E	C	C	E	E	E
Approach Vol, veh/h		674			989			584			944	
Approach Delay, s/veh		33.0			34.6			45.8			66.1	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	48.4	21.8	35.5	11.5	51.1	15.0	42.4
Change Period (Y+Rc), s	4.1	4.9	4.1	4.6	4.1	4.9	4.1	4.6
Max Green Setting (Gmax), s	10.0	32.0	21.9	32.4	8.9	39.1	17.5	36.8
Max Q Clear Time (g_c+I1), s	10.2	13.0	17.6	30.0	7.2	25.4	10.9	11.6
Green Ext Time (p_c), s	0.1	2.3	0.1	0.9	0.0	2.9	0.1	1.3

Intersection Summary	
HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	310	120	90	600	280	140	460	50	240	880	160
Future Volume (veh/h)	110	310	120	90	600	280	140	460	50	240	880	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	323	125	94	625	292	146	479	52	250	917	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	801	303	132	737	344	139	1085	117	175	1065	194
Arrive On Green	0.08	0.32	0.32	0.07	0.32	0.32	0.08	0.34	0.34	0.10	0.36	0.36
Sat Flow, veh/h	1781	2499	946	1781	2327	1087	1781	3224	348	1781	2988	544
Grp Volume(v), veh/h	115	227	221	94	477	440	146	263	268	250	545	539
Grp Sat Flow(s),veh/h/ln	1781	1777	1668	1781	1777	1637	1781	1777	1796	1781	1777	1755
Q Serve(g_s), s	7.3	11.5	11.9	5.9	28.9	28.9	9.0	13.3	13.4	11.3	32.7	32.8
Cycle Q Clear(g_c), s	7.3	11.5	11.9	5.9	28.9	28.9	9.0	13.3	13.4	11.3	32.7	32.8
Prop In Lane	1.00		0.57	1.00		0.66	1.00		0.19	1.00		0.31
Lane Grp Cap(c), veh/h	139	569	534	132	562	518	139	598	605	175	634	626
V/C Ratio(X)	0.82	0.40	0.41	0.71	0.85	0.85	1.05	0.44	0.44	1.43	0.86	0.86
Avail Cap(c_a), veh/h	139	569	534	139	562	518	139	613	620	175	649	641
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)	0.91	0.91	0.91	1.00	1.00	1.00	0.89	0.89	0.89	0.40	0.40	0.40
Uniform Delay (d), s/veh	52.2	30.5	30.6	52.0	36.7	36.7	53.0	29.7	29.7	51.9	34.3	34.4
Incr Delay (d2), s/veh	27.8	1.9	2.1	12.2	14.7	15.8	85.0	1.6	1.6	205.6	6.0	6.1
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	4.3	5.1	5.0	3.1	14.5	13.5	7.3	5.9	6.0	15.0	14.8	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.0	32.4	32.7	64.2	51.5	52.6	138.0	31.3	31.4	257.5	40.3	40.4
LnGrp LOS	E	C	C	E	D	D	F	C	C	F	D	D
Approach Vol, veh/h		563			1011			677			1334	
Approach Delay, s/veh		42.2			53.1			54.4			81.0	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	41.9	13.7	46.1	13.7	41.5	16.0	43.8
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 8	35.4	* 9	42.0	* 9	35.4	* 11	39.7
Max Q Clear Time (g_c+I1), s	7.9	13.9	11.0	34.8	9.3	30.9	13.3	15.4
Green Ext Time (p_c), s	0.0	5.9	0.0	5.8	0.0	3.5	0.0	7.6

Intersection Summary	
HCM 6th Ctrl Delay	62.0
HCM 6th LOS	E

Notes

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

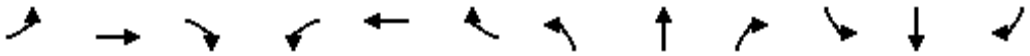
Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	470	60	60	1150	70	50
Future Vol, veh/h	470	60	60	1150	70	50
Conflicting Peds, #/hr	0	45	45	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	45	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	500	64	64	1223	74	53

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	609	0	1327	337
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	750	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	966	-	147	659
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	427	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	925	-	109	625
Mov Cap-2 Maneuver	-	-	-	-	229	-
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	332	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	21.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	229	625	-	-	925	-
HCM Lane V/C Ratio	0.325	0.085	-	-	0.069	-
HCM Control Delay (s)	28.1	11.3	-	-	9.2	0.9
HCM Lane LOS	D	B	-	-	A	A
HCM 95th %tile Q(veh)	1.4	0.3	-	-	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	290	120	80	460	60	190	420	20	70	460	90
Future Volume (veh/h)	150	290	120	80	460	60	190	420	20	70	460	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.82	1.00		0.79	1.00		0.96	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	167	322	133	89	511	67	211	467	22	78	511	100
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	601	237	113	640	83	244	1578	74	100	1108	215
Arrive On Green	0.11	0.26	0.26	0.06	0.21	0.21	0.14	0.46	0.46	0.06	0.38	0.38
Sat Flow, veh/h	1781	2332	919	1781	3053	396	1781	3448	162	1781	2940	572
Grp Volume(v), veh/h	167	242	213	89	295	283	211	240	249	78	308	303
Grp Sat Flow(s),veh/h/ln	1781	1777	1474	1781	1777	1673	1781	1777	1833	1781	1777	1735
Q Serve(g_s), s	9.2	11.7	12.6	4.9	15.7	16.1	11.6	8.5	8.5	4.3	13.0	13.2
Cycle Q Clear(g_c), s	9.2	11.7	12.6	4.9	15.7	16.1	11.6	8.5	8.5	4.3	13.0	13.2
Prop In Lane	1.00		0.62	1.00		0.24	1.00		0.09	1.00		0.33
Lane Grp Cap(c), veh/h	199	458	380	113	372	351	244	813	839	100	670	654
V/C Ratio(X)	0.84	0.53	0.56	0.78	0.79	0.81	0.87	0.30	0.30	0.78	0.46	0.46
Avail Cap(c_a), veh/h	276	460	382	189	373	351	330	813	839	178	670	654
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	0.52	0.52	0.52	0.83	0.83	0.83
Uniform Delay (d), s/veh	43.5	31.9	32.2	46.1	37.5	37.6	42.3	17.0	17.0	46.6	23.5	23.5
Incr Delay (d2), s/veh	11.2	1.3	2.1	4.4	11.4	13.2	7.4	0.5	0.5	4.1	1.9	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	5.1	4.6	2.3	7.9	7.7	5.5	3.4	3.6	2.0	5.6	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	33.2	34.3	50.6	48.8	50.8	49.7	17.5	17.5	50.6	25.4	25.5
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	C	C
Approach Vol, veh/h		622			667			700			689	
Approach Delay, s/veh		39.4			49.9			27.2			28.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	50.3	9.9	30.8	17.2	42.2	14.7	26.0
Change Period (Y+Rc), s	3.5	4.5	3.5	5.0	3.5	4.5	3.5	5.0
Max Green Setting (Gmax), s	10.0	37.0	10.6	25.9	18.5	28.5	15.5	21.0
Max Q Clear Time (g_c+I1), s	6.3	10.5	6.9	14.6	13.6	15.2	11.2	18.1
Green Ext Time (p_c), s	0.0	3.5	0.0	2.5	0.1	3.6	0.1	1.1

Intersection Summary	
HCM 6th Ctrl Delay	36.0
HCM 6th LOS	D

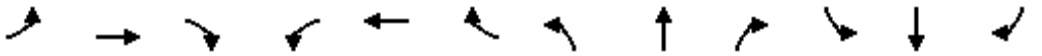
Intersection	
Int Delay, s/veh	61.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	270	20	110	420	40	20	60	30	20	140	130
Future Vol, veh/h	20	270	20	110	420	40	20	60	30	20	140	130
Conflicting Peds, #/hr	10	0	24	24	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	293	22	120	457	43	22	65	33	22	152	141

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	510	0	0	339	0	0	927	1122	192	962	1112	270
Stage 1	-	-	-	-	-	-	372	372	-	729	729	-
Stage 2	-	-	-	-	-	-	555	750	-	233	383	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1051	-	-	1217	-	-	223	205	817	210	207	728
Stage 1	-	-	-	-	-	-	621	617	-	380	426	-
Stage 2	-	-	-	-	-	-	484	417	-	749	610	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1041	-	-	1189	-	-	33	166	791	121	167	714
Mov Cap-2 Maneuver	-	-	-	-	-	-	33	166	-	121	167	-
Stage 1	-	-	-	-	-	-	591	587	-	367	362	-
Stage 2	-	-	-	-	-	-	191	354	-	616	581	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.9	189.4	196.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	109	1041	-	-	1189	-	-	245
HCM Lane V/C Ratio	1.097	0.021	-	-	0.101	-	-	1.287
HCM Control Delay (s)	189.4	8.5	0.1	-	8.4	0.4	-	196.7
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	7.4	0.1	-	-	0.3	-	-	16.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	170	160	90	340	100	140	390	40	30	520	30
Future Volume (veh/h)	100	170	160	90	340	100	140	390	40	30	520	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	110	187	176	99	374	110	154	429	44	33	571	33
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	593	484	125	835	242	184	1388	141	43	609	35
Arrive On Green	0.08	0.32	0.32	0.07	0.31	0.31	0.10	0.43	0.43	0.02	0.35	0.35
Sat Flow, veh/h	1781	1870	1526	1781	2692	779	1781	3237	330	1781	1744	101
Grp Volume(v), veh/h	110	187	176	99	245	239	154	234	239	33	0	604
Grp Sat Flow(s),veh/h/ln	1781	1870	1526	1781	1777	1694	1781	1777	1790	1781	0	1845
Q Serve(g_s), s	6.1	7.6	8.9	5.5	11.0	11.3	8.5	8.7	8.8	1.8	0.0	31.7
Cycle Q Clear(g_c), s	6.1	7.6	8.9	5.5	11.0	11.3	8.5	8.7	8.8	1.8	0.0	31.7
Prop In Lane	1.00		1.00	1.00		0.46	1.00		0.18	1.00		0.05
Lane Grp Cap(c), veh/h	137	593	484	125	551	525	184	762	768	43	0	645
V/C Ratio(X)	0.80	0.32	0.36	0.79	0.44	0.46	0.84	0.31	0.31	0.77	0.00	0.94
Avail Cap(c_a), veh/h	169	593	484	159	551	525	221	784	789	109	0	697
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	0.87	0.87	0.87	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.4	25.9	26.4	45.8	27.6	27.7	44.0	18.8	18.8	48.5	0.0	31.5
Incr Delay (d2), s/veh	16.1	1.4	2.1	14.8	2.6	2.8	15.8	0.1	0.1	10.3	0.0	19.2
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	3.3	3.5	3.4	2.9	5.0	4.9	4.5	3.5	3.5	0.9	0.0	16.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.5	27.3	28.5	60.6	30.2	30.5	59.8	18.9	19.0	58.9	0.0	50.7
LnGrp LOS	E	C	C	E	C	C	E	B	B	E	A	D
Approach Vol, veh/h		473			583			627			637	
Approach Delay, s/veh		35.7			35.5			29.0			51.1	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	36.2	13.8	39.4	11.2	35.5	5.9	47.4
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	8.9	24.9	12.4	37.8	9.5	24.3	6.1	44.1
Max Q Clear Time (g_c+I1), s	7.5	10.9	10.5	33.7	8.1	13.3	3.8	10.8
Green Ext Time (p_c), s	0.0	1.1	0.0	1.3	0.0	1.8	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	38.1
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	320	110	70	510	120	80	270	70	100	400	90
Future Volume (veh/h)	70	320	110	70	510	120	80	270	70	100	400	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	386	133	84	614	145	96	325	84	120	482	108
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	1307	444	112	1413	333	120	528	134	146	587	131
Arrive On Green	0.07	0.51	0.51	0.06	0.50	0.50	0.07	0.19	0.19	0.08	0.20	0.20
Sat Flow, veh/h	1781	2587	878	1781	2840	669	1781	2781	706	1781	2866	637
Grp Volume(v), veh/h	84	263	256	84	384	375	96	205	204	120	297	293
Grp Sat Flow(s),veh/h/ln	1781	1777	1689	1781	1777	1732	1781	1777	1710	1781	1777	1727
Q Serve(g_s), s	5.5	10.3	10.6	5.6	16.6	16.7	6.4	12.7	13.1	8.0	19.2	19.5
Cycle Q Clear(g_c), s	5.5	10.3	10.6	5.6	16.6	16.7	6.4	12.7	13.1	8.0	19.2	19.5
Prop In Lane	1.00		0.52	1.00		0.39	1.00		0.41	1.00		0.37
Lane Grp Cap(c), veh/h	125	898	853	112	884	862	120	338	325	146	364	354
V/C Ratio(X)	0.67	0.29	0.30	0.75	0.43	0.44	0.80	0.61	0.63	0.82	0.82	0.83
Avail Cap(c_a), veh/h	191	898	853	191	884	862	206	421	405	251	465	452
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	0.80	0.80	0.80	1.00	1.00	1.00	0.37	0.37	0.37
Uniform Delay (d), s/veh	54.4	17.2	17.3	55.3	19.3	19.3	55.2	44.5	44.7	54.2	45.6	45.7
Incr Delay (d2), s/veh	2.3	0.8	0.9	3.1	1.2	1.3	4.6	0.7	0.8	1.6	2.7	3.1
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	2.5	4.3	4.2	2.6	7.0	6.8	3.0	5.6	5.6	3.6	8.6	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	18.1	18.2	58.4	20.6	20.6	59.8	45.2	45.5	55.9	48.3	48.7
LnGrp LOS	E	B	B	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		603			843			505			710	
Approach Delay, s/veh		23.5			24.4			48.1			49.7	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	67.0	12.2	29.2	12.6	66.1	13.9	27.4
Change Period (Y+Rc), s	4.1	6.4	4.1	4.6	4.1	6.4	4.1	4.6
Max Green Setting (Gmax), s	12.9	42.6	13.9	31.4	12.9	42.6	16.9	28.4
Max Q Clear Time (g_c+I1), s	7.6	12.6	8.4	21.5	7.5	18.7	10.0	15.1
Green Ext Time (p_c), s	0.0	2.0	0.0	1.7	0.0	3.1	0.1	1.3

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	270	70	80	530	200	80	260	30	190	590	80
Future Volume (veh/h)	80	270	70	80	530	200	80	260	30	190	590	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	284	74	84	558	211	84	274	32	200	621	84
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	1081	276	129	971	366	145	681	79	233	823	111
Arrive On Green	0.07	0.39	0.39	0.14	0.78	0.78	0.08	0.21	0.21	0.13	0.26	0.26
Sat Flow, veh/h	1781	2786	711	1781	2505	944	1781	3196	369	1781	3132	423
Grp Volume(v), veh/h	84	179	179	84	395	374	84	151	155	200	352	353
Grp Sat Flow(s),veh/h/ln	1781	1777	1721	1781	1777	1672	1781	1777	1788	1781	1777	1778
Q Serve(g_s), s	4.6	6.9	7.1	4.5	9.0	9.1	4.5	7.3	7.5	11.0	18.2	18.3
Cycle Q Clear(g_c), s	4.6	6.9	7.1	4.5	9.0	9.1	4.5	7.3	7.5	11.0	18.2	18.3
Prop In Lane	1.00		0.41	1.00		0.56	1.00		0.21	1.00		0.24
Lane Grp Cap(c), veh/h	129	689	667	129	689	648	145	379	381	233	467	467
V/C Ratio(X)	0.65	0.26	0.27	0.65	0.57	0.58	0.58	0.40	0.41	0.86	0.75	0.76
Avail Cap(c_a), veh/h	166	689	667	183	689	648	183	409	411	326	551	551
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	0.40	0.40	0.40
Uniform Delay (d), s/veh	45.2	20.8	20.9	41.6	7.9	7.9	44.3	33.8	33.9	42.6	33.9	33.9
Incr Delay (d2), s/veh	2.2	0.9	0.9	2.1	3.5	3.7	1.4	2.5	2.5	5.0	3.9	3.9
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	2.1	2.9	3.0	1.9	2.9	2.7	2.0	3.3	3.5	5.1	8.1	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.4	21.7	21.8	43.7	11.3	11.6	45.7	36.3	36.4	47.6	37.7	37.8
LnGrp LOS	D	C	C	D	B	B	D	D	D	D	D	D
Approach Vol, veh/h		442			853			390			905	
Approach Delay, s/veh		26.6			14.6			38.4			40.0	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	43.9	12.8	31.4	11.9	43.9	17.8	26.4
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 10	28.8	* 10	31.0	* 9.3	29.8	* 18	23.0
Max Q Clear Time (g_c+I1), s	6.5	9.1	6.5	20.3	6.6	11.1	13.0	9.5
Green Ext Time (p_c), s	0.0	4.5	0.0	6.0	0.0	9.8	0.1	3.0

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	19.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	490	40	90	1000	50	40	20	50	30	20	30
Future Vol, veh/h	20	490	40	90	1000	50	40	20	50	30	20	30
Conflicting Peds, #/hr	20	0	18	18	0	20	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	516	42	95	1053	53	42	21	53	32	21	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1126	0	0	576	0	0	1334	1913	307	1611	1908	583
Stage 1	-	-	-	-	-	-	597	597	-	1290	1290	-
Stage 2	-	-	-	-	-	-	737	1316	-	321	618	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	616	-	-	993	-	-	112	67	689	70	68	456
Stage 1	-	-	-	-	-	-	456	490	-	173	232	-
Stage 2	-	-	-	-	-	-	376	226	-	665	479	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	604	-	-	976	-	-	64	55	671	39	56	443
Mov Cap-2 Maneuver	-	-	-	-	-	-	64	55	-	39	56	-
Stage 1	-	-	-	-	-	-	425	457	-	161	206	-
Stage 2	-	-	-	-	-	-	280	200	-	550	447	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.7	96.8	$ 300.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	62	234	604	-	-	976	-	-	67
HCM Lane V/C Ratio	0.849	0.27	0.035	-	-	0.097	-	-	1.257
HCM Control Delay (s)	181.8	26	11.2	0.3	-	9.1	-	-	$ 300.2
HCM Lane LOS	F	D	B	A	-	A	-	-	F
HCM 95th %tile Q(veh)	3.9	1.1	0.1	-	-	0.3	-	-	6.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	540	120	90	1150	30	130	70	60	20	100	50
Future Volume (veh/h)	30	540	120	90	1150	30	130	70	60	20	100	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	0.98		0.95	0.98		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	628	140	105	1337	35	151	81	70	23	116	58
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	1658	369	132	2128	56	259	179	155	62	215	99
Arrive On Green	0.02	0.19	0.19	0.07	0.60	0.60	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1781	2868	638	1781	3532	92	1188	900	778	111	1079	497
Grp Volume(v), veh/h	35	389	379	105	672	700	151	0	151	197	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1729	1781	1777	1847	1188	0	1678	1687	0	0
Q Serve(g_s), s	1.9	19.1	19.1	5.8	24.2	24.3	6.0	0.0	7.9	1.9	0.0	0.0
Cycle Q Clear(g_c), s	1.9	19.1	19.1	5.8	24.2	24.3	16.4	0.0	7.9	10.3	0.0	0.0
Prop In Lane	1.00		0.37	1.00		0.05	1.00		0.46	0.12		0.29
Lane Grp Cap(c), veh/h	89	1027	999	132	1071	1113	259	0	334	376	0	0
V/C Ratio(X)	0.40	0.38	0.38	0.79	0.63	0.63	0.58	0.00	0.45	0.52	0.00	0.00
Avail Cap(c_a), veh/h	148	1027	999	230	1071	1113	343	0	451	491	0	0
HCM Platoon Ratio	0.33	0.33	0.33	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	0.75	0.75	0.75	0.95	0.00	0.95	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.7	24.8	24.8	45.5	12.7	12.7	39.6	0.0	35.3	36.2	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.1	1.1	3.1	2.1	2.0	0.7	0.0	0.3	0.4	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	0.9	9.3	9.1	2.6	9.2	9.6	3.6	0.0	3.2	4.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	25.9	25.9	48.6	14.8	14.8	40.4	0.0	35.6	36.6	0.0	0.0
LnGrp LOS	D	C	C	D	B	B	D	A	D	D	A	A
Approach Vol, veh/h		803			1477			302			197	
Approach Delay, s/veh		26.9			17.2			38.0			36.6	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	62.9		25.0	9.7	65.3		25.0				
Change Period (Y+Rc), s	* 4.7	5.1		5.1	* 4.7	5.1		5.1				
Max Green Setting (Gmax), s	* 13	45.3		26.9	* 8.3	49.9		26.9				
Max Q Clear Time (g_c+I1), s	7.8	21.1		12.3	3.9	26.3		18.4				
Green Ext Time (p_c), s	0.0	3.1		0.6	0.0	6.6		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		23.6	
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)	70	410	90	50	880	120	80	170	40	70	260	90
Future Volume (veh/h)	70	410	90	50	880	120	80	170	40	70	260	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.88	1.00		0.89
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	446	98	54	957	130	87	185	43	76	283	98
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	1304	284	87	1377	187	171	392	220	118	467	228
Arrive On Green	0.06	0.45	0.45	0.05	0.44	0.44	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	2876	626	1781	3124	424	1091	2502	1401	729	2882	1407
Grp Volume(v), veh/h	76	274	270	54	544	543	145	127	43	191	168	98
Grp Sat Flow(s),veh/h/ln	1781	1777	1725	1781	1777	1771	1816	1777	1401	1834	1777	1407
Q Serve(g_s), s	5.0	12.0	12.2	3.6	29.6	29.7	8.8	7.8	3.2	11.7	10.5	7.5
Cycle Q Clear(g_c), s	5.0	12.0	12.2	3.6	29.6	29.7	8.8	7.8	3.2	11.7	10.5	7.5
Prop In Lane	1.00		0.36	1.00		0.24	0.60		1.00	0.40		1.00
Lane Grp Cap(c), veh/h	109	806	782	87	783	781	285	279	220	297	288	228
V/C Ratio(X)	0.70	0.34	0.35	0.62	0.69	0.70	0.51	0.46	0.20	0.64	0.58	0.43
Avail Cap(c_a), veh/h	123	806	782	174	783	781	365	357	281	356	345	273
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)	0.93	0.93	0.93	0.44	0.44	0.44	0.98	0.98	0.98	0.76	0.76	0.76
Uniform Delay (d), s/veh	55.2	21.2	21.3	56.0	27.1	27.1	46.4	45.9	44.0	47.0	46.5	45.3
Incr Delay (d2), s/veh	9.6	1.1	1.1	1.2	2.3	2.3	1.4	1.1	0.4	1.2	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	5.1	5.1	1.6	12.7	12.7	4.0	3.5	1.1	5.4	4.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.8	22.3	22.4	57.2	29.3	29.3	47.7	47.1	44.4	48.3	47.1	45.7
LnGrp LOS	E	C	C	E	C	C	D	D	D	D	D	D
Approach Vol, veh/h		620			1141			315			457	
Approach Delay, s/veh		27.5			30.7			47.0			47.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	60.5		25.0	12.1	59.0		23.9
Change Period (Y+Rc), s	* 4.7	6.1		5.6	* 4.7	6.1		5.1
Max Green Setting (Gmax), s	* 13	39.4		23.3	* 8.3	42.8		24.1
Max Q Clear Time (g_c+I1), s	15.6	14.2		13.7	7.0	31.7		10.8
Green Ext Time (p_c), s	0.0	2.1		1.1	0.0	3.7		1.3

Intersection Summary	
HCM 6th Ctrl Delay	34.9
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)	110	330	130	160	780	80	150	420	60	70	570	130
Future Volume (veh/h)	110	330	130	160	780	80	150	420	60	70	570	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	371	146	180	876	90	169	472	67	79	640	146
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	897	347	151	1174	121	147	577	472	118	832	190
Arrive On Green	0.08	0.36	0.36	0.08	0.36	0.36	0.08	0.31	0.31	0.07	0.29	0.29
Sat Flow, veh/h	1781	2473	955	1781	3238	333	1781	1870	1531	1781	2852	650
Grp Volume(v), veh/h	124	265	252	180	481	485	169	472	67	79	398	388
Grp Sat Flow(s),veh/h/ln	1781	1777	1652	1781	1777	1794	1781	1870	1531	1781	1777	1725
Q Serve(g_s), s	7.5	12.3	12.6	9.3	26.0	26.0	9.1	25.7	3.5	4.8	22.5	22.6
Cycle Q Clear(g_c), s	7.5	12.3	12.6	9.3	26.0	26.0	9.1	25.7	3.5	4.8	22.5	22.6
Prop In Lane	1.00		0.58	1.00		0.19	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	151	645	599	151	644	651	147	577	472	118	518	503
V/C Ratio(X)	0.82	0.41	0.42	1.20	0.75	0.75	1.15	0.82	0.14	0.67	0.77	0.77
Avail Cap(c_a), veh/h	160	645	599	151	644	651	147	583	477	143	549	533
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)	0.96	0.96	0.96	0.68	0.68	0.68	0.87	0.87	0.87	0.84	0.84	0.84
Uniform Delay (d), s/veh	49.5	26.2	26.4	50.3	30.6	30.6	50.5	35.2	27.5	50.2	35.6	35.6
Incr Delay (d2), s/veh	23.7	1.9	2.1	123.3	5.3	5.3	114.1	10.8	0.5	18.7	8.9	9.3
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	4.3	5.4	5.2	9.2	11.7	11.8	8.7	13.1	1.3	2.7	10.8	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.2	28.1	28.4	173.6	36.0	35.9	164.6	46.0	28.1	68.9	44.5	44.8
LnGrp LOS	E	C	C	F	D	D	F	D	C	E	D	D
Approach Vol, veh/h		641			1146			708			865	
Approach Delay, s/veh		37.0			57.6			72.6			46.9	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	45.0	13.8	37.2	14.0	45.0	12.0	39.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	9.3	38.0	* 9.1	34.0	* 9.9	37.4	* 8.8	34.3
Max Q Clear Time (g_c+I1), s	11.3	14.6	11.1	24.6	9.5	28.0	6.8	27.7
Green Ext Time (p_c), s	0.0	8.1	0.0	6.3	0.0	7.2	0.1	3.5

Intersection Summary	
HCM 6th Ctrl Delay	54.1
HCM 6th LOS	D

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)	30	530	70	70	1210	40	60	90	50	40	200	190
Future Volume (veh/h)	30	530	70	70	1210	40	60	90	50	40	200	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.99		0.95	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	624	82	82	1424	47	71	106	59	47	235	224
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	1666	219	106	1926	63	203	362	292	60	463	397
Arrive On Green	0.04	0.53	0.53	0.06	0.55	0.55	0.19	0.19	0.19	0.03	0.26	0.26
Sat Flow, veh/h	1781	3149	413	1781	3506	116	922	1870	1510	1781	1777	1524
Grp Volume(v), veh/h	35	352	354	82	720	751	71	106	59	47	235	224
Grp Sat Flow(s),veh/h/ln	1781	1777	1785	1781	1777	1845	922	1870	1510	1781	1777	1524
Q Serve(g_s), s	1.7	10.4	10.4	4.1	27.5	27.6	6.5	4.3	2.9	2.3	10.1	11.4
Cycle Q Clear(g_c), s	1.7	10.4	10.4	4.1	27.5	27.6	11.9	4.3	2.9	2.3	10.1	11.4
Prop In Lane	1.00		0.23	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	940	945	106	976	1014	203	362	292	60	463	397
V/C Ratio(X)	0.50	0.37	0.38	0.78	0.74	0.74	0.35	0.29	0.20	0.79	0.51	0.56
Avail Cap(c_a), veh/h	122	940	945	209	976	1014	265	488	394	100	622	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	12.4	12.4	41.4	15.3	15.3	36.4	30.8	30.2	42.9	28.2	28.6
Incr Delay (d2), s/veh	4.1	1.1	1.1	8.7	5.0	4.9	0.8	0.3	0.2	8.3	0.6	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	0.8	4.1	4.1	2.0	11.1	11.6	1.5	1.9	1.1	1.1	4.2	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.2	13.5	13.5	50.2	20.2	20.2	37.1	31.1	30.5	51.2	28.8	29.6
LnGrp LOS	D	B	B	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		741			1553			236			506	
Approach Delay, s/veh		15.0			21.8			32.8			31.2	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	51.8		27.8	8.0	53.6	6.0	21.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	3.0	4.5
Max Green Setting (Gmax), s	10.5	44.7		31.3	6.1	49.1	5.0	23.3
Max Q Clear Time (g_c+I1), s	6.1	12.4		13.4	3.7	29.6	4.3	13.9
Green Ext Time (p_c), s	0.0	3.7		2.1	0.0	8.6	0.0	0.6

Intersection Summary		
HCM 6th Ctrl Delay		22.6
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	330	70	140	780	60	90	350	80	70	540	50
Future Volume (veh/h)	30	330	70	140	780	60	90	350	80	70	540	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	407	86	173	963	74	111	432	99	86	667	62
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1537	322	490	1762	135	232	1047	237	302	1202	112
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	544	2911	609	901	3337	256	721	2849	646	865	3272	304
Grp Volume(v), veh/h	37	247	246	173	513	524	111	268	263	86	362	367
Grp Sat Flow(s),veh/h/ln	544	1777	1743	901	1777	1817	721	1777	1719	865	1777	1799
Q Serve(g_s), s	4.2	6.6	6.7	11.2	16.5	16.5	12.5	9.7	9.9	7.1	13.9	14.0
Cycle Q Clear(g_c), s	20.7	6.6	6.7	17.9	16.5	16.5	26.4	9.7	9.9	17.0	13.9	14.0
Prop In Lane	1.00		0.35	1.00		0.14	1.00		0.38	1.00		0.17
Lane Grp Cap(c), veh/h	267	938	920	490	938	959	232	653	632	302	653	661
V/C Ratio(X)	0.14	0.26	0.27	0.35	0.55	0.55	0.48	0.41	0.42	0.28	0.55	0.56
Avail Cap(c_a), veh/h	267	938	920	490	938	959	348	938	908	441	938	950
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	20.3	11.1	11.2	16.1	13.5	13.5	32.2	20.3	20.4	26.7	21.6	21.7
Incr Delay (d2), s/veh	1.1	0.7	0.7	2.0	2.3	2.2	1.1	0.3	0.3	0.4	0.5	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	0.6	2.5	2.5	2.4	6.5	6.6	2.2	3.9	3.9	1.4	5.6	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.4	11.8	11.9	18.1	15.8	15.7	33.3	20.6	20.7	27.1	22.2	22.2
LnGrp LOS	C	B	B	B	B	B	C	C	C	C	C	C
Approach Vol, veh/h		530			1210			642			815	
Approach Delay, s/veh		12.5			16.1			22.8			22.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	50.0	36.2	50.0	36.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	45.5	45.5	45.5	45.5
Max Q Clear Time (g_c+I1), s	22.7	19.0	19.9	28.4
Green Ext Time (p_c), s	2.7	4.3	6.9	3.2

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	300	120	20	800	220	60	30	20	180	70	210
Future Volume (veh/h)	100	300	120	20	800	220	60	30	20	180	70	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.99		0.97	0.99		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	357	143	24	952	0	71	36	24	214	83	250
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	1434	563	36	2644		296	246	164	365	447	366
Arrive On Green	0.08	0.58	0.58	0.04	1.00	0.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1781	2464	968	1781	5106	1585	1039	1031	687	1328	1870	1532
Grp Volume(v), veh/h	119	255	245	24	952	0	71	0	60	214	83	250
Grp Sat Flow(s),veh/h/ln	1781	1777	1655	1781	1702	1585	1039	0	1719	1328	1870	1532
Q Serve(g_s), s	5.6	6.0	6.2	1.1	0.0	0.0	5.0	0.0	2.3	12.9	3.0	12.6
Cycle Q Clear(g_c), s	5.6	6.0	6.2	1.1	0.0	0.0	8.0	0.0	2.3	15.2	3.0	12.6
Prop In Lane	1.00		0.58	1.00		1.00	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	150	1034	963	36	2644		296	0	410	365	447	366
V/C Ratio(X)	0.79	0.25	0.25	0.66	0.36		0.24	0.00	0.15	0.59	0.19	0.68
Avail Cap(c_a), veh/h	283	1034	963	136	2644		421	0	617	525	671	550
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.00	1.00	0.00	1.00	0.78	0.78	0.78
Uniform Delay (d), s/veh	38.2	8.7	8.7	40.5	0.0	0.0	28.9	0.0	25.5	31.5	25.8	29.4
Incr Delay (d2), s/veh	3.5	0.6	0.6	7.0	0.4	0.0	0.2	0.0	0.1	0.4	0.1	0.7
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	2.5	2.2	2.2	0.6	0.1	0.0	1.2	0.0	0.9	4.1	1.3	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.7	9.2	9.3	47.5	0.4	0.0	29.1	0.0	25.6	31.9	25.8	30.1
LnGrp LOS	D	A	A	D	A		C	A	C	C	C	C
Approach Vol, veh/h		619			976	A		131			547	
Approach Delay, s/veh		15.5			1.5			27.5			30.2	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	54.0		24.8	11.7	48.5		24.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	34.5		30.5	13.5	27.5		30.5				
Max Q Clear Time (g_c+I1), s	3.1	8.2		17.2	7.6	2.0		10.0				
Green Ext Time (p_c), s	0.0	2.1		1.0	0.1	5.0		0.3				

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

Notes

Unsignalized Delay for [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)	50	330	20	30	860	60	60	110	20	70	120	60
Future Volume (veh/h)	50	330	20	30	860	60	60	110	20	70	120	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	355	22	32	925	65	65	118	22	75	129	65
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	2	2	2	2	2	2
Cap, veh/h	454	2534	156	833	2510	176	209	476	86	237	368	173
Arrive On Green	1.00	1.00	1.00	0.75	0.75	0.75	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	568	3395	209	1003	3363	236	1175	2981	539	1232	2308	1085
Grp Volume(v), veh/h	54	185	192	32	489	501	65	69	71	75	97	97
Grp Sat Flow(s),veh/h/ln	568	1777	1828	1003	1777	1822	1175	1777	1744	1232	1777	1616
Q Serve(g_s), s	1.2	0.0	0.0	0.7	8.2	8.2	4.5	2.9	3.0	4.8	4.1	4.6
Cycle Q Clear(g_c), s	9.4	0.0	0.0	0.7	8.2	8.2	9.0	2.9	3.0	7.9	4.1	4.6
Prop In Lane	1.00		0.11	1.00		0.13	1.00		0.31	1.00		0.67
Lane Grp Cap(c), veh/h	454	1326	1364	833	1326	1360	209	284	278	237	284	258
V/C Ratio(X)	0.12	0.14	0.14	0.04	0.37	0.37	0.31	0.24	0.26	0.32	0.34	0.38
Avail Cap(c_a), veh/h	454	1326	1364	833	1326	1360	381	544	533	417	544	494
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.81	0.81	0.81	1.00	1.00	1.00	0.67	0.67	0.67
Uniform Delay (d), s/veh	0.6	0.0	0.0	2.8	3.8	3.8	35.9	31.2	31.3	34.7	31.7	31.9
Incr Delay (d2), s/veh	0.5	0.2	0.2	0.1	0.6	0.6	0.3	0.2	0.2	0.2	0.2	0.2
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	0.1	0.1	0.1	0.1	2.2	2.2	1.3	1.2	1.3	1.4	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1.1	0.2	0.2	2.9	4.4	4.4	36.3	31.4	31.5	34.9	31.9	32.2
LnGrp LOS	A	A	A	A	A	A	D	C	C	C	C	C
Approach Vol, veh/h		431			1022			205			269	
Approach Delay, s/veh		0.3			4.4			33.0			32.8	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	67.4	17.6	67.4	17.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	51.0	26.0	51.0	26.0
Max Q Clear Time (g_c+I1), s	11.4	9.9	10.2	11.0
Green Ext Time (p_c), s	1.9	0.8	4.5	0.5

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	300	40	60	920	260	50	50	50	50	20	40
Future Volume (veh/h)	90	300	40	60	920	260	50	50	50	50	20	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.95	0.98		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	326	43	65	1000	283	54	54	54	54	22	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	2022	264	84	1686	475	252	306	259	250	94	183
Arrive On Green	0.07	0.64	0.64	0.05	0.62	0.62	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1781	3151	412	1781	2723	766	1306	1778	1502	1257	545	1065
Grp Volume(v), veh/h	98	182	187	65	651	632	54	54	54	54	0	65
Grp Sat Flow(s),veh/h/ln	1781	1777	1786	1781	1777	1713	1306	1777	1503	1257	0	1610
Q Serve(g_s), s	5.4	4.1	4.2	3.6	22.0	22.3	3.7	2.6	3.1	3.9	0.0	3.5
Cycle Q Clear(g_c), s	5.4	4.1	4.2	3.6	22.0	22.3	7.2	2.6	3.1	6.9	0.0	3.5
Prop In Lane	1.00		0.23	1.00		0.45	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	124	1140	1146	84	1100	1061	252	306	259	250	0	277
V/C Ratio(X)	0.79	0.16	0.16	0.78	0.59	0.60	0.21	0.18	0.21	0.22	0.00	0.23
Avail Cap(c_a), veh/h	187	1140	1146	169	1100	1061	420	535	453	412	0	485
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)	0.99	0.99	0.99	0.81	0.81	0.81	0.94	0.94	0.94	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.8	7.2	7.2	47.1	11.4	11.5	38.8	35.3	35.5	38.5	0.0	35.7
Incr Delay (d2), s/veh	6.3	0.3	0.3	4.6	1.9	2.0	0.4	0.3	0.4	0.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	1.5	1.5	1.7	8.2	8.1	1.2	1.1	1.2	1.2	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	7.4	7.5	51.8	13.3	13.5	39.2	35.6	35.9	39.0	0.0	36.2
LnGrp LOS	D	A	A	D	B	B	D	D	D	D	A	D
Approach Vol, veh/h		467			1348			162			119	
Approach Delay, s/veh		16.8			15.3			36.9			37.5	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	69.2		21.6	11.5	66.9		21.6				
Change Period (Y+Rc), s	4.5	5.0		4.4	4.5	5.0		4.4				
Max Green Setting (Gmax), s	9.5	46.5		30.1	10.5	45.5		30.1				
Max Q Clear Time (g_c+I1), s	5.6	6.2		8.9	7.4	24.3		9.2				
Green Ext Time (p_c), s	0.0	3.9		0.6	0.0	13.6		0.7				

Intersection Summary		
HCM 6th Ctrl Delay	18.6	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	210	30	90	650	130	160	390	60	150	410	190
Future Volume (veh/h)	70	210	30	90	650	130	160	390	60	150	410	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	231	33	99	714	143	176	429	66	165	451	209
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	1307	184	152	1504	646	164	763	326	191	818	350
Arrive On Green	0.08	0.42	0.42	0.09	0.42	0.42	0.09	0.21	0.21	0.11	0.23	0.23
Sat Flow, veh/h	1781	3111	437	1781	3554	1527	1781	3554	1520	1781	3554	1523
Grp Volume(v), veh/h	77	130	134	99	714	143	176	429	66	165	451	209
Grp Sat Flow(s),veh/h/ln	1781	1777	1772	1781	1777	1527	1781	1777	1520	1781	1777	1523
Q Serve(g_s), s	5.2	5.7	5.9	6.7	18.1	7.4	11.5	13.5	4.5	11.4	14.0	15.3
Cycle Q Clear(g_c), s	5.2	5.7	5.9	6.7	18.1	7.4	11.5	13.5	4.5	11.4	14.0	15.3
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	746	744	152	1504	646	164	763	326	191	818	350
V/C Ratio(X)	0.53	0.17	0.18	0.65	0.47	0.22	1.07	0.56	0.20	0.86	0.55	0.60
Avail Cap(c_a), veh/h	157	746	744	192	1504	646	164	1075	460	238	1222	524
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)	0.99	0.99	0.99	0.92	0.92	0.92	0.77	0.77	0.77	0.47	0.47	0.47
Uniform Delay (d), s/veh	55.1	22.7	22.7	55.4	26.0	22.9	56.7	43.8	40.3	54.9	42.4	42.9
Incr Delay (d2), s/veh	1.1	0.5	0.5	2.2	1.0	0.7	82.7	0.2	0.1	10.4	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.5	2.6	3.1	7.8	2.8	8.9	5.9	1.7	5.6	6.1	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.1	23.2	23.3	57.6	27.0	23.7	139.5	44.0	40.4	65.3	42.5	43.2
LnGrp LOS	E	C	C	E	C	C	F	D	D	E	D	D
Approach Vol, veh/h		341			956			671			825	
Approach Delay, s/veh		30.7			29.7			68.7			47.3	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	58.6	16.2	34.9	14.9	59.0	18.1	32.9
Change Period (Y+Rc), s	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1
Max Green Setting (Gmax), s	* 14	35.4	* 12	43.0	* 11	37.9	* 17	37.8
Max Q Clear Time (g_c+I1), s	10.7	7.9	13.5	17.3	7.2	20.1	13.4	15.5
Green Ext Time (p_c), s	0.0	0.9	0.0	2.3	0.0	3.3	0.1	1.9

Intersection Summary	
HCM 6th Ctrl Delay	44.4
HCM 6th LOS	D

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)	30	250	100	90	580	70	170	110	50	50	150	130
Future Volume (veh/h)	30	250	100	90	580	70	170	110	50	50	150	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	269	108	97	624	75	183	118	54	54	161	140
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	2	2	2	2	2	2
Cap, veh/h	40	1327	516	121	1856	223	287	324	148	301	505	412
Arrive On Green	0.02	0.54	0.54	0.14	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1781	2471	961	1781	3187	382	1070	1198	548	1203	1870	1526
Grp Volume(v), veh/h	32	191	186	97	347	352	183	0	172	54	161	140
Grp Sat Flow(s),veh/h/ln	1781	1777	1655	1781	1777	1792	1070	0	1747	1203	1870	1526
Q Serve(g_s), s	1.8	5.6	5.9	5.3	0.0	0.0	16.5	0.0	8.0	3.8	6.9	7.4
Cycle Q Clear(g_c), s	1.8	5.6	5.9	5.3	0.0	0.0	23.3	0.0	8.0	11.8	6.9	7.4
Prop In Lane	1.00		0.58	1.00		0.21	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	40	954	889	121	1035	1044	287	0	472	301	505	412
V/C Ratio(X)	0.80	0.20	0.21	0.80	0.34	0.34	0.64	0.00	0.36	0.18	0.32	0.34
Avail Cap(c_a), veh/h	143	954	889	285	1035	1044	394	0	646	421	692	565
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.20	0.20	0.20	1.00	0.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	48.7	12.0	12.1	42.5	0.0	0.0	38.5	0.0	29.5	34.3	29.1	29.3
Incr Delay (d2), s/veh	12.2	0.4	0.5	0.9	0.2	0.2	2.8	0.0	0.6	0.3	0.3	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	0.9	2.2	2.2	2.2	0.1	0.1	4.5	0.0	3.4	1.1	3.1	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.9	12.5	12.6	43.5	0.2	0.2	41.3	0.0	30.1	34.6	29.5	29.8
LnGrp LOS	E	B	B	D	A	A	D	A	C	C	C	C
Approach Vol, veh/h		409			796			355			355	
Approach Delay, s/veh		16.3			5.5			35.9			30.4	
Approach LOS		B			A			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	58.2		32.0	5.2	62.8		32.0
Change Period (Y+Rc), s	3.0	4.5		5.0	3.0	4.5		5.0
Max Green Setting (Gmax), s	16.0	34.5		37.0	8.0	42.5		37.0
Max Q Clear Time (g_c+I1), s	7.3	7.9		13.8	3.8	2.0		25.3
Green Ext Time (p_c), s	0.0	2.7		1.9	0.0	5.9		1.7

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	360	60	140	880	150	150	400	100	150	440	180
Future Volume (veh/h)	130	360	60	140	880	150	150	400	100	150	440	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.94	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	162	450	75	175	1100	188	188	500	125	188	550	225
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	1126	186	208	1169	199	205	593	147	212	524	213
Arrive On Green	0.20	0.74	0.74	0.12	0.39	0.39	0.12	0.21	0.21	0.12	0.22	0.22
Sat Flow, veh/h	1781	3034	502	1781	3020	514	1781	2782	690	1781	2415	984
Grp Volume(v), veh/h	162	262	263	175	646	642	188	318	307	188	404	371
Grp Sat Flow(s),veh/h/ln	1781	1777	1759	1781	1777	1757	1781	1777	1695	1781	1777	1622
Q Serve(g_s), s	8.9	5.4	5.5	9.6	35.0	35.3	10.4	17.2	17.4	10.4	21.7	21.7
Cycle Q Clear(g_c), s	8.9	5.4	5.5	9.6	35.0	35.3	10.4	17.2	17.4	10.4	21.7	21.7
Prop In Lane	1.00		0.29	1.00		0.29	1.00		0.41	1.00		0.61
Lane Grp Cap(c), veh/h	180	659	653	208	688	680	205	378	361	212	386	352
V/C Ratio(X)	0.90	0.40	0.40	0.84	0.94	0.94	0.92	0.84	0.85	0.89	1.05	1.05
Avail Cap(c_a), veh/h	180	659	653	322	688	680	205	378	361	212	386	352
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.34	0.34	0.34	0.75	0.75	0.75
Uniform Delay (d), s/veh	39.4	8.8	8.8	43.2	29.5	29.6	43.8	37.7	37.8	43.4	39.2	39.2
Incr Delay (d2), s/veh	39.6	1.8	1.8	9.3	22.2	23.3	19.0	5.8	6.6	26.6	52.9	56.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	2.0	2.0	4.7	18.3	18.5	5.6	7.9	7.7	6.1	15.0	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.0	10.6	10.7	52.5	51.7	53.0	62.8	43.5	44.4	70.0	92.0	95.6
LnGrp LOS	E	B	B	D	D	D	E	D	D	E	F	F
Approach Vol, veh/h		687			1463			813			963	
Approach Delay, s/veh		26.7			52.4			48.3			89.1	
Approach LOS		C			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	41.6	16.0	26.2	14.6	43.2	16.4	25.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.1	30.7	11.5	21.7	10.1	38.7	11.9	21.3
Max Q Clear Time (g_c+I1), s	11.6	7.5	12.4	23.7	10.9	37.3	12.4	19.4
Green Ext Time (p_c), s	0.2	2.5	0.0	0.0	0.0	0.9	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	100	0	0	650	20	20	390	20	0	0	110
Future Volume (veh/h)	70	100	0	0	650	20	20	390	20	0	0	110
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		0.98	0.99		0.96	1.00		0.96
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	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	119	0	0	774	24	24	464	24	0	0	131
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	107	2531	0	0	2107	65	215	646	277	0	0	277
Arrive On Green	0.06	0.71	0.00	0.00	0.20	0.20	0.18	0.18	0.18	0.00	0.00	0.18
Sat Flow, veh/h	1781	3647	0	0	3609	109	1245	3554	1522	0	0	1522
Grp Volume(v), veh/h	83	119	0	0	391	407	24	464	24	0	0	131
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1848	1245	1777	1522	0	0	1522
Q Serve(g_s), s	3.9	0.8	0.0	0.0	16.2	16.2	1.5	10.4	1.1	0.0	0.0	6.6
Cycle Q Clear(g_c), s	3.9	0.8	0.0	0.0	16.2	16.2	8.0	10.4	1.1	0.0	0.0	6.6
Prop In Lane	1.00		0.00	0.00		0.06	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	107	2531	0	0	1065	1107	215	646	277	0	0	277
V/C Ratio(X)	0.78	0.05	0.00	0.00	0.37	0.37	0.11	0.72	0.09	0.00	0.00	0.47
Avail Cap(c_a), veh/h	262	2531	0	0	1065	1107	333	982	421	0	0	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.96	0.96	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	39.4	3.6	0.0	0.0	20.2	20.2	34.7	32.7	28.9	0.0	0.0	31.1
Incr Delay (d2), s/veh	4.5	0.0	0.0	0.0	0.9	0.9	0.2	1.1	0.1	0.0	0.0	1.5
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	1.8	0.3	0.0	0.0	7.9	8.2	0.5	4.5	0.4	0.0	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	3.7	0.0	0.0	21.1	21.1	34.9	33.8	29.0	0.0	0.0	32.6
LnGrp LOS	D	A	A	A	C	C	C	C	C	A	A	C
Approach Vol, veh/h		202			798			512			131	
Approach Delay, s/veh		20.2			21.1			33.7			32.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		65.0		20.0	9.6	55.4		20.0				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		52.5		23.5	12.5	35.5		23.5				
Max Q Clear Time (g_c+I1), s		2.8		8.6	5.9	18.2		12.4				
Green Ext Time (p_c), s		0.7		0.7	0.0	4.2		2.1				

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	470	20	180	730	50	40	90	190	30	60	20
Future Volume (veh/h)	30	470	20	180	730	50	40	90	190	30	60	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	485	21	186	753	52	41	93	196	31	62	21
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	1864	81	224	2152	149	288	332	270	230	466	149
Arrive On Green	0.05	1.00	1.00	0.13	0.64	0.64	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1781	3467	150	1781	3367	232	1296	1870	1521	1079	2619	836
Grp Volume(v), veh/h	31	248	258	186	397	408	41	93	196	31	41	42
Grp Sat Flow(s),veh/h/ln	1781	1777	1839	1781	1777	1823	1296	1870	1521	1079	1777	1678
Q Serve(g_s), s	1.5	0.0	0.0	8.7	8.8	8.8	2.3	3.7	10.3	2.2	1.6	1.8
Cycle Q Clear(g_c), s	1.5	0.0	0.0	8.7	8.8	8.8	4.1	3.7	10.3	5.8	1.6	1.8
Prop In Lane	1.00		0.08	1.00		0.13	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	44	955	989	224	1135	1165	288	332	270	230	316	298
V/C Ratio(X)	0.71	0.26	0.26	0.83	0.35	0.35	0.14	0.28	0.73	0.13	0.13	0.14
Avail Cap(c_a), veh/h	136	955	989	409	1135	1165	431	539	438	349	512	484
HCM Platoon Ratio	2.00	2.00	2.00	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	0.94	0.94	0.94
Uniform Delay (d), s/veh	40.1	0.0	0.0	36.3	7.1	7.1	31.2	30.2	33.0	32.8	29.4	29.5
Incr Delay (d2), s/veh	7.8	0.7	0.6	3.0	0.9	0.8	0.1	0.2	1.4	0.1	0.1	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	0.7	0.2	0.2	3.8	3.0	3.1	0.7	1.6	3.8	0.6	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	0.7	0.6	39.3	8.0	8.0	31.3	30.4	34.4	32.9	29.5	29.6
LnGrp LOS	D	A	A	D	A	A	C	C	C	C	C	C
Approach Vol, veh/h		537			991			330			114	
Approach Delay, s/veh		3.4			13.9			32.9			30.4	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.2	50.2		19.6	6.6	58.8		19.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.5	27.5		24.5	6.5	40.5		24.5
Max Q Clear Time (g_c+I1), s	10.7	2.0		7.8	3.5	10.8		12.3
Green Ext Time (p_c), s	0.2	1.9		0.3	0.0	3.3		0.6

Intersection Summary		
HCM 6th Ctrl Delay	15.1	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	420	120	210	580	120	200	590	140	90	540	70
Future Volume (veh/h)	70	420	120	210	580	120	200	590	140	90	540	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	483	138	241	667	138	230	678	161	103	621	80
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	752	213	273	996	206	261	1026	442	151	714	92
Arrive On Green	0.09	0.28	0.28	0.15	0.34	0.34	0.15	0.29	0.29	0.08	0.23	0.23
Sat Flow, veh/h	1781	2712	769	1781	2916	603	1781	3554	1532	1781	3150	405
Grp Volume(v), veh/h	80	315	306	241	406	399	230	678	161	103	350	351
Grp Sat Flow(s),veh/h/ln	1781	1777	1703	1781	1777	1742	1781	1777	1532	1781	1777	1778
Q Serve(g_s), s	4.3	15.6	15.8	13.2	19.5	19.6	12.7	16.8	8.4	5.6	18.9	19.0
Cycle Q Clear(g_c), s	4.3	15.6	15.8	13.2	19.5	19.6	12.7	16.8	8.4	5.6	18.9	19.0
Prop In Lane	1.00		0.45	1.00		0.35	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	159	493	472	273	607	595	261	1026	442	151	403	403
V/C Ratio(X)	0.50	0.64	0.65	0.88	0.67	0.67	0.88	0.66	0.36	0.68	0.87	0.87
Avail Cap(c_a), veh/h	180	493	472	319	607	595	283	1026	442	201	418	418
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	0.55	0.55	0.55	1.00	1.00	1.00	0.81	0.81	0.81
Uniform Delay (d), s/veh	43.4	31.8	31.8	41.5	28.1	28.1	41.8	31.3	28.3	44.4	37.2	37.3
Incr Delay (d2), s/veh	0.9	6.3	6.7	12.2	3.2	3.3	23.1	2.9	1.8	2.1	17.2	17.5
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	7.4	7.2	6.6	8.5	8.4	7.1	7.3	3.2	2.5	9.9	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.4	38.0	38.5	53.7	31.4	31.5	64.9	34.1	30.1	46.5	54.4	54.8
LnGrp LOS	D	D	D	D	C	C	E	C	C	D	D	D
Approach Vol, veh/h		701			1046			1069			804	
Approach Delay, s/veh		39.0			36.5			40.2			53.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	32.8	19.4	27.8	13.6	39.2	13.2	34.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 18	23.1	* 16	23.5	* 10	30.9	* 11	28.1
Max Q Clear Time (g_c+I1), s	15.2	17.8	14.7	21.0	6.3	21.6	7.6	18.8
Green Ext Time (p_c), s	0.1	3.0	0.0	1.6	0.0	6.0	0.0	6.0

Intersection Summary	
HCM 6th Ctrl Delay	41.9
HCM 6th LOS	D

Notes

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

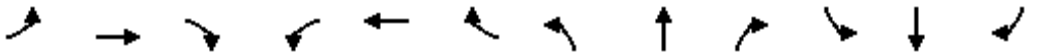
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	380	100	100	660	150	120	330	90	100	270	160
Future Volume (veh/h)	140	380	100	100	660	150	120	330	90	100	270	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	427	112	112	742	169	135	371	101	112	303	180
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	1053	273	141	1008	230	148	402	109	111	568	327
Arrive On Green	0.11	0.38	0.38	0.08	0.35	0.35	0.08	0.29	0.29	0.06	0.27	0.27
Sat Flow, veh/h	1781	2774	720	1781	2858	651	1781	1400	381	1781	2132	1225
Grp Volume(v), veh/h	157	272	267	112	461	450	135	0	472	112	251	232
Grp Sat Flow(s),veh/h/ln	1781	1777	1718	1781	1777	1732	1781	0	1782	1781	1777	1581
Q Serve(g_s), s	8.3	10.8	11.0	6.0	21.9	21.9	7.2	0.0	24.8	6.0	11.6	12.2
Cycle Q Clear(g_c), s	8.3	10.8	11.0	6.0	21.9	21.9	7.2	0.0	24.8	6.0	11.6	12.2
Prop In Lane	1.00		0.42	1.00		0.38	1.00		0.21	1.00		0.78
Lane Grp Cap(c), veh/h	188	675	652	141	627	611	148	0	512	111	473	421
V/C Ratio(X)	0.83	0.40	0.41	0.80	0.74	0.74	0.91	0.00	0.92	1.01	0.53	0.55
Avail Cap(c_a), veh/h	203	675	652	240	627	611	148	0	564	111	535	476
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	21.9	22.0	43.6	27.3	27.3	43.8	0.0	33.3	45.2	30.2	30.4
Incr Delay (d2), s/veh	21.6	1.8	1.9	3.9	7.5	7.7	48.1	0.0	19.5	88.1	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	4.7	4.6	2.7	10.2	9.9	5.1	0.0	13.2	5.3	4.9	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.8	23.7	23.9	47.5	34.8	35.0	91.9	0.0	52.8	133.3	30.9	31.2
LnGrp LOS	E	C	C	D	C	C	F	A	D	F	C	C
Approach Vol, veh/h		696			1023			607			595	
Approach Delay, s/veh		32.8			36.3			61.5			50.3	
Approach LOS		C			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	41.6	12.0	31.2	14.2	39.0	10.0	33.2
Change Period (Y+Rc), s	4.0	5.0	4.0	* 5.5	4.0	5.0	4.0	5.5
Max Green Setting (Gmax), s	13.6	32.0	8.0	* 29	11.0	34.0	6.0	30.5
Max Q Clear Time (g_c+I1), s	10.0	13.0	9.2	14.2	10.3	23.9	8.0	26.8
Green Ext Time (p_c), s	0.1	3.1	0.0	2.1	0.0	4.1	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	43.5
HCM 6th LOS	D

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	1060	240	210	740	170	440	740	410	200	280	40
Future Volume (veh/h)	50	1060	240	210	740	170	440	740	410	200	280	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	1093	247	216	763	175	454	763	423	206	289	41
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	1118	485	252	1381	313	468	1397	607	264	1188	515
Arrive On Green	0.05	0.31	0.31	0.15	0.67	0.67	0.14	0.39	0.39	0.08	0.33	0.33
Sat Flow, veh/h	3456	3554	1540	3456	4136	938	3456	3554	1545	3456	3554	1542
Grp Volume(v), veh/h	52	1093	247	216	626	312	454	763	423	206	289	41
Grp Sat Flow(s),veh/h/ln	1728	1777	1540	1728	1702	1670	1728	1777	1545	1728	1777	1542
Q Serve(g_s), s	2.5	51.7	22.3	10.4	16.5	16.8	22.2	28.2	38.9	10.0	10.0	3.1
Cycle Q Clear(g_c), s	2.5	51.7	22.3	10.4	16.5	16.8	22.2	28.2	38.9	10.0	10.0	3.1
Prop In Lane	1.00		1.00	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	1118	485	252	1136	557	468	1397	607	264	1188	515
V/C Ratio(X)	0.28	0.98	0.51	0.86	0.55	0.56	0.97	0.55	0.70	0.78	0.24	0.08
Avail Cap(c_a), veh/h	203	1118	485	254	1136	557	468	1397	607	325	1188	515
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	77.3	57.6	47.5	71.8	21.6	21.6	73.2	39.9	43.1	77.1	41.0	38.7
Incr Delay (d2), s/veh	0.6	21.6	1.5	7.1	0.2	0.5	33.9	1.5	6.5	7.3	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	26.1	8.7	4.5	4.9	4.9	12.1	12.8	15.8	4.7	4.6	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.9	79.3	49.0	78.8	21.8	22.1	107.1	41.4	49.6	84.4	41.5	39.0
LnGrp LOS	E	E	D	E	C	C	F	D	D	F	D	D
Approach Vol, veh/h		1392			1154			1640			536	
Approach Delay, s/veh		73.8			32.5			61.7			57.8	
Approach LOS		E			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	73.7	17.5	59.8	29.0	63.7	14.2	63.0
Change Period (Y+Rc), s	6.0	6.9	5.1	6.3	6.0	6.9	5.1	6.3
Max Green Setting (Gmax), s	16.0	63.7	12.5	53.5	23.0	56.7	10.0	56.0
Max Q Clear Time (g_c+I1), s	12.0	40.9	12.4	53.7	24.2	12.0	4.5	18.8
Green Ext Time (p_c), s	0.1	9.0	0.0	0.0	0.0	2.7	0.0	12.0

Intersection Summary	
HCM 6th Ctrl Delay	57.7
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	500	1370	140	160	850	160	170	690	340	140	460	260
Future Volume (veh/h)	500	1370	140	160	850	160	170	690	340	140	460	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	1.00		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	515	1412	144	165	876	165	175	711	351	144	474	268
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	552	2014	205	205	975	184	193	698	344	164	627	352
Arrive On Green	0.16	0.43	0.43	0.06	0.33	0.33	0.22	0.62	0.62	0.09	0.29	0.29
Sat Flow, veh/h	3456	4692	478	3456	2964	558	1781	2248	1109	1781	2133	1196
Grp Volume(v), veh/h	515	1024	532	165	525	516	175	562	500	144	394	348
Grp Sat Flow(s),veh/h/ln	1728	1702	1766	1728	1777	1745	1781	1777	1580	1781	1777	1552
Q Serve(g_s), s	25.0	41.8	41.8	8.0	47.9	47.9	16.3	52.8	52.8	13.6	34.2	34.6
Cycle Q Clear(g_c), s	25.0	41.8	41.8	8.0	47.9	47.9	16.3	52.8	52.8	13.6	34.2	34.6
Prop In Lane	1.00		0.27	1.00		0.32	1.00		0.70	1.00		0.77
Lane Grp Cap(c), veh/h	552	1461	758	205	585	574	193	552	491	164	523	456
V/C Ratio(X)	0.93	0.70	0.70	0.80	0.90	0.90	0.91	1.02	1.02	0.88	0.75	0.76
Avail Cap(c_a), veh/h	565	1461	758	258	585	574	240	552	491	183	523	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.40	0.40	0.40	0.92	0.92	0.92	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.5	39.6	39.6	79.0	54.3	54.3	65.8	32.2	32.2	76.3	54.4	54.6
Incr Delay (d2), s/veh	11.2	1.1	2.2	11.5	18.0	18.3	26.9	40.7	43.3	32.4	5.9	7.1
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	11.9	17.5	18.4	3.9	23.9	23.5	8.1	23.2	21.0	7.7	16.1	14.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.7	40.7	41.8	90.4	72.3	72.6	92.6	72.9	75.5	108.6	60.3	61.7
LnGrp LOS	F	D	D	F	E	E	F	F	F	F	E	E
Approach Vol, veh/h		2071			1206			1237			886	
Approach Delay, s/veh		51.2			74.9			76.8			68.7	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	77.9	22.9	54.6	31.7	60.8	20.1	57.4
Change Period (Y+Rc), s	4.5	4.9	4.5	4.6	4.5	4.9	4.5	4.6
Max Green Setting (Gmax), s	12.7	68.5	22.9	47.4	27.8	53.4	17.5	52.8
Max Q Clear Time (g_c+I1), s	10.0	43.8	18.3	36.6	27.0	49.9	15.6	54.8
Green Ext Time (p_c), s	0.1	9.7	0.1	2.8	0.2	1.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.2
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1350	120	40	810	20	70	30	70	10	30	30
Future Volume (veh/h)	40	1350	120	40	810	20	70	30	70	10	30	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.95	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	1406	125	42	844	21	73	31	73	10	31	31
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	2063	182	89	2216	55	93	502	213	21	84	84
Arrive On Green	0.05	0.63	0.63	0.05	0.63	0.63	0.05	0.14	0.14	0.01	0.10	0.10
Sat Flow, veh/h	1781	3296	291	1781	3541	88	1781	3554	1509	1781	828	828
Grp Volume(v), veh/h	42	754	777	42	423	442	73	31	73	10	0	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1811	1781	1777	1852	1781	1777	1509	1781	0	1657
Q Serve(g_s), s	2.8	33.1	33.7	2.8	14.0	14.0	4.9	0.9	5.2	0.7	0.0	4.2
Cycle Q Clear(g_c), s	2.8	33.1	33.7	2.8	14.0	14.0	4.9	0.9	5.2	0.7	0.0	4.2
Prop In Lane	1.00		0.16	1.00		0.05	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	89	1112	1133	89	1112	1159	93	502	213	21	0	167
V/C Ratio(X)	0.47	0.68	0.69	0.47	0.38	0.38	0.79	0.06	0.34	0.48	0.00	0.37
Avail Cap(c_a), veh/h	120	1112	1133	120	1112	1159	96	868	368	76	0	378
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)	0.55	0.55	0.55	1.00	1.00	1.00	0.88	0.88	0.88	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.4	14.6	14.7	55.4	11.0	11.0	56.2	44.6	46.5	58.9	0.0	50.4
Incr Delay (d2), s/veh	0.8	1.9	1.9	1.4	1.0	1.0	27.0	0.1	1.0	6.1	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	12.2	12.7	1.2	5.3	5.5	2.9	0.4	2.0	0.3	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	16.4	16.6	56.9	12.0	12.0	83.2	44.7	47.5	65.0	0.0	52.0
LnGrp LOS	E	B	B	E	B	B	F	D	D	E	A	D
Approach Vol, veh/h		1573			907			177			72	
Approach Delay, s/veh		17.6			14.1			61.7			53.8	
Approach LOS		B			B			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	80.6	10.8	18.1	10.5	80.6	5.9	22.9
Change Period (Y+Rc), s	4.5	5.5	4.5	6.0	4.5	* 5.5	4.5	* 6
Max Green Setting (Gmax), s	8.1	57.5	6.5	27.4	8.1	* 58	5.1	* 29
Max Q Clear Time (g_c+I1), s	4.8	35.7	6.9	6.2	4.8	16.0	2.7	7.2
Green Ext Time (p_c), s	0.0	15.7	0.0	0.3	0.0	10.5	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	20.2
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)	110	50	150	40	70	60	110	920	60	20	590	100
Future Volume (veh/h)	110	50	150	40	70	60	110	920	60	20	590	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.98	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	52	156	42	73	62	115	958	62	21	615	104
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	70	178	82	143	177	134	1981	128	84	1684	284
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.15	1.00	1.00	0.05	0.56	0.56
Sat Flow, veh/h	1245	563	1439	671	1166	1438	1781	3383	219	1781	3021	510
Grp Volume(v), veh/h	167	0	156	115	0	62	115	503	517	21	361	358
Grp Sat Flow(s),veh/h/ln	1808	0	1439	1837	0	1438	1781	1777	1825	1781	1777	1754
Q Serve(g_s), s	15.2	0.0	18.1	10.0	0.0	6.7	10.7	0.0	0.0	1.9	19.2	19.3
Cycle Q Clear(g_c), s	15.2	0.0	18.1	10.0	0.0	6.7	10.7	0.0	0.0	1.9	19.2	19.3
Prop In Lane	0.69		1.00	0.37		1.00	1.00		0.12	1.00		0.29
Lane Grp Cap(c), veh/h	224	0	178	226	0	177	134	1041	1069	84	991	978
V/C Ratio(X)	0.75	0.00	0.88	0.51	0.00	0.35	0.86	0.48	0.48	0.25	0.36	0.37
Avail Cap(c_a), veh/h	335	0	267	362	0	283	241	1041	1069	84	991	978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.69	0.69	0.69	0.60	0.60	0.60
Uniform Delay (d), s/veh	71.9	0.0	73.2	69.8	0.0	68.3	71.4	0.0	0.0	78.1	20.9	20.9
Incr Delay (d2), s/veh	3.7	0.0	16.6	1.3	0.0	0.9	4.3	1.1	1.1	0.3	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	7.3	0.0	7.5	4.8	0.0	2.5	4.7	0.3	0.3	0.9	8.1	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.6	0.0	89.8	71.1	0.0	69.2	75.6	1.1	1.1	78.5	20.9	21.0
LnGrp LOS	E	A	F	E	A	E	E	A	A	E	C	C
Approach Vol, veh/h		323			177			1135			740	
Approach Delay, s/veh		82.4			70.4			8.6			22.6	
Approach LOS		F			E			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	105.1		26.5	16.8	100.3		26.4				
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5				
Max Green Setting (Gmax), s	8.0	76.5		31.5	23.0	61.5		33.5				
Max Q Clear Time (g_c+I1), s	13.9	2.0		20.1	12.7	21.3		12.0				
Green Ext Time (p_c), s	0.0	6.3		0.9	0.1	2.2		0.6				

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1100	130	70	670	20	160	220	60	20	170	40
Future Volume (veh/h)	80	1100	130	70	670	20	160	220	60	20	170	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.95	1.00		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	1146	135	73	698	21	167	229	62	21	177	42
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	3078	936	94	3034	91	231	482	127	25	346	79
Arrive On Green	0.06	0.60	0.60	0.05	0.60	0.60	0.07	0.18	0.18	0.01	0.12	0.12
Sat Flow, veh/h	1781	5106	1553	1781	5090	153	3456	2747	721	1781	2825	647
Grp Volume(v), veh/h	83	1146	135	73	466	253	167	146	145	21	109	110
Grp Sat Flow(s),veh/h/ln	1781	1702	1553	1781	1702	1839	1728	1777	1692	1781	1777	1695
Q Serve(g_s), s	4.6	11.5	3.8	4.0	6.4	6.4	4.7	7.4	7.8	1.2	5.7	6.1
Cycle Q Clear(g_c), s	4.6	11.5	3.8	4.0	6.4	6.4	4.7	7.4	7.8	1.2	5.7	6.1
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.43	1.00		0.38
Lane Grp Cap(c), veh/h	106	3078	936	94	2029	1096	231	312	297	25	218	208
V/C Ratio(X)	0.78	0.37	0.14	0.78	0.23	0.23	0.72	0.47	0.49	0.84	0.50	0.53
Avail Cap(c_a), veh/h	214	3078	936	196	2029	1096	380	426	406	125	355	339
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	0.93	0.93	0.93	0.68	0.68	0.68	0.95	0.95	0.95
Uniform Delay (d), s/veh	46.4	10.2	8.6	46.8	9.5	9.5	45.7	37.0	37.2	49.2	41.0	41.2
Incr Delay (d2), s/veh	4.7	0.3	0.3	4.8	0.2	0.5	1.1	0.9	1.0	22.0	2.0	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	2.1	3.8	1.3	1.9	2.2	2.5	2.0	3.2	3.2	0.7	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	10.5	9.0	51.6	9.7	9.9	46.8	37.9	38.2	71.1	43.0	43.6
LnGrp LOS	D	B	A	D	A	A	D	D	D	E	D	D
Approach Vol, veh/h		1364			792			458			240	
Approach Delay, s/veh		12.8			13.6			41.3			45.7	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	64.8	9.7	17.3	8.9	64.1	4.4	22.6
Change Period (Y+Rc), s	3.0	4.5	3.0	5.0	3.0	4.5	3.0	5.0
Max Green Setting (Gmax), s	11.3	42.5	11.0	20.0	12.0	41.5	7.0	24.0
Max Q Clear Time (g_c+I1), s	6.0	13.5	6.7	8.1	6.6	8.4	3.2	9.8
Green Ext Time (p_c), s	0.0	11.1	0.0	1.0	0.0	5.8	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	690	350	20	500	30	220	220	60	60	240	40
Future Volume (veh/h)	40	690	350	20	500	30	220	220	60	60	240	40
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		0.96	1.00		1.00	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	719	0	21	521	31	229	229	0	62	250	42
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	450	1879		349	1798	107	300	315		299	314	255
Arrive On Green	0.35	0.35	0.00	0.53	0.53	0.53	0.06	0.06	0.00	0.17	0.17	0.17
Sat Flow, veh/h	854	3554	1585	733	3400	202	1781	1870	1585	1781	1870	1518
Grp Volume(v), veh/h	42	719	0	21	272	280	229	229	0	62	250	42
Grp Sat Flow(s),veh/h/ln	854	1777	1585	733	1777	1825	1781	1870	1585	1781	1870	1518
Q Serve(g_s), s	3.6	15.1	0.0	1.8	8.5	8.6	12.7	12.1	0.0	3.0	12.8	2.4
Cycle Q Clear(g_c), s	12.1	15.1	0.0	16.9	8.5	8.6	12.7	12.1	0.0	3.0	12.8	2.4
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	450	1879		349	940	965	300	315		299	314	255
V/C Ratio(X)	0.09	0.38		0.06	0.29	0.29	0.76	0.73		0.21	0.80	0.16
Avail Cap(c_a), veh/h	450	1879		349	940	965	472	496		454	477	387
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.00	1.00	1.00	1.00	0.95	0.95	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	20.1	0.0	19.9	13.1	13.1	45.3	45.0	0.0	35.9	40.0	35.6
Incr Delay (d2), s/veh	0.4	0.6	0.0	0.1	0.1	0.1	2.9	2.3	0.0	0.3	4.3	0.2
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	0.8	6.7	0.0	0.3	3.2	3.3	6.3	6.2	0.0	1.3	6.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	20.6	0.0	20.0	13.2	13.2	48.1	47.2	0.0	36.1	44.3	35.8
LnGrp LOS	C	C		B	B	B	D	D		D	D	D
Approach Vol, veh/h		761	A		573			458	A		354	
Approach Delay, s/veh		20.8			13.5			47.7			41.8	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	57.4	21.3	57.4	21.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	34.5	25.5	34.5	26.5
Max Q Clear Time (g_c+I1), s	17.1	14.8	18.9	14.7
Green Ext Time (p_c), s	3.8	1.0	2.5	1.2

Intersection Summary	
HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR] 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)	580	1390	760	90	920	60	580	360	160	90	310	340
Future Volume (veh/h)	580	1390	760	90	920	60	580	360	160	90	310	340
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	611	1463	800	95	968	63	611	379	168	95	293	380
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	654	2163	958	241	1553	468	661	1003	431	124	300	481
Arrive On Green	0.19	0.42	0.42	0.07	0.30	0.30	0.19	0.28	0.28	0.07	0.16	0.16
Sat Flow, veh/h	3456	5106	1547	3456	5106	1539	3456	3554	1527	1781	1870	2998
Grp Volume(v), veh/h	611	1463	800	95	968	63	611	379	168	95	293	380
Grp Sat Flow(s),veh/h/ln	1728	1702	1547	1728	1702	1539	1728	1777	1527	1781	1870	1499
Q Serve(g_s), s	29.6	39.4	70.1	4.5	27.7	5.0	29.5	14.6	15.1	8.9	26.5	20.7
Cycle Q Clear(g_c), s	29.6	39.4	70.1	4.5	27.7	5.0	29.5	14.6	15.1	8.9	26.5	20.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	654	2163	958	241	1553	468	661	1003	431	124	300	481
V/C Ratio(X)	0.93	0.68	0.83	0.39	0.62	0.13	0.92	0.38	0.39	0.76	0.98	0.79
Avail Cap(c_a), veh/h	718	2163	958	244	1553	468	860	1106	475	175	300	481
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	0.27	0.27	0.27	0.92	0.92	0.92
Uniform Delay (d), s/veh	67.9	39.6	26.1	75.6	50.8	42.9	67.5	49.0	49.2	77.7	71.0	68.6
Incr Delay (d2), s/veh	17.9	1.7	8.5	0.4	1.9	0.6	3.8	0.0	0.1	6.5	43.3	9.1
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	14.5	16.5	27.2	2.0	11.9	2.0	13.4	6.5	5.8	4.3	16.3	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.8	41.3	34.6	76.0	52.7	43.5	71.3	49.1	49.3	84.2	114.4	77.7
LnGrp LOS	F	D	C	E	D	D	E	D	D	F	F	E
Approach Vol, veh/h		2874			1126			1158			768	
Approach Delay, s/veh		48.9			54.1			60.8			92.5	
Approach LOS		D			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	80.0	38.2	34.2	37.8	59.7	17.6	54.9
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.9	* 5.7	8.0	* 5.7	6.9
Max Green Setting (Gmax), s	* 12	62.1	* 42	27.3	* 35	38.8	* 17	52.9
Max Q Clear Time (g_c+I1), s	10.5	72.1	31.5	28.5	31.6	29.7	10.9	17.1
Green Ext Time (p_c), s	0.1	0.0	1.0	0.0	0.5	7.8	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	57.9
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* 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)	170	950	200	150	560	80	300	520	230	120	300	160
Future Volume (veh/h)	170	950	200	150	560	80	300	520	230	120	300	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	175	979	206	155	577	82	309	536	237	124	309	165
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	1725	362	179	1241	176	334	653	287	148	380	197
Arrive On Green	0.11	0.41	0.41	0.10	0.40	0.40	0.19	0.27	0.27	0.08	0.17	0.17
Sat Flow, veh/h	1781	4207	883	1781	3113	441	1781	2374	1046	1781	2227	1153
Grp Volume(v), veh/h	175	792	393	155	329	330	309	401	372	124	245	229
Grp Sat Flow(s),veh/h/ln	1781	1702	1685	1781	1777	1778	1781	1777	1643	1781	1777	1603
Q Serve(g_s), s	13.1	24.1	24.2	11.6	18.4	18.5	23.0	28.5	28.7	9.3	17.9	18.7
Cycle Q Clear(g_c), s	13.1	24.1	24.2	11.6	18.4	18.5	23.0	28.5	28.7	9.3	17.9	18.7
Prop In Lane	1.00		0.52	1.00		0.25	1.00		0.64	1.00		0.72
Lane Grp Cap(c), veh/h	200	1396	691	179	708	709	334	488	452	148	303	273
V/C Ratio(X)	0.88	0.57	0.57	0.86	0.46	0.47	0.92	0.82	0.82	0.84	0.81	0.84
Avail Cap(c_a), veh/h	276	1396	691	236	708	709	434	548	506	228	342	309
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	0.46	0.46	0.46	0.44	0.44	0.44	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.0	30.6	30.6	59.8	29.9	30.0	53.9	45.8	45.9	61.0	53.9	54.2
Incr Delay (d2), s/veh	16.1	1.7	3.4	9.3	1.0	1.0	10.5	3.6	4.0	8.9	10.6	15.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	10.0	10.3	5.6	7.9	8.0	11.2	12.9	12.1	4.5	8.8	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.1	32.3	34.0	69.1	31.0	31.0	64.4	49.4	49.9	69.9	64.4	69.2
LnGrp LOS	E	C	C	E	C	C	E	D	D	E	E	E
Approach Vol, veh/h		1360			814			1082			598	
Approach Delay, s/veh		38.3			38.2			53.9			67.4	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	60.3	29.4	27.6	19.2	58.7	15.3	41.7
Change Period (Y+Rc), s	4.1	4.9	4.1	4.6	4.1	4.9	4.1	4.6
Max Green Setting (Gmax), s	13.6	40.5	32.9	26.0	20.9	37.5	17.3	41.6
Max Q Clear Time (g_c+I1), s	13.6	26.2	25.0	20.7	15.1	20.5	11.3	30.7
Green Ext Time (p_c), s	0.1	4.5	0.3	0.9	0.1	2.2	0.1	2.5

Intersection Summary	
HCM 6th Ctrl Delay	47.2
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	830	200	120	500	250	160	780	140	300	740	110
Future Volume (veh/h)	230	830	200	120	500	250	160	780	140	300	740	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	242	874	211	126	526	263	168	821	147	316	779	116
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	942	227	139	753	375	139	1009	181	144	1048	156
Arrive On Green	0.08	0.33	0.33	0.08	0.33	0.33	0.08	0.34	0.34	0.08	0.34	0.34
Sat Flow, veh/h	1781	2821	681	1781	2273	1132	1781	2996	537	1781	3089	460
Grp Volume(v), veh/h	242	550	535	126	411	378	168	487	481	316	448	447
Grp Sat Flow(s),veh/h/ln	1781	1777	1725	1781	1777	1629	1781	1777	1756	1781	1777	1772
Q Serve(g_s), s	9.3	34.4	34.4	8.1	23.1	23.3	9.0	28.8	28.8	9.3	25.6	25.6
Cycle Q Clear(g_c), s	9.3	34.4	34.4	8.1	23.1	23.3	9.0	28.8	28.8	9.3	25.6	25.6
Prop In Lane	1.00		0.39	1.00		0.70	1.00		0.31	1.00		0.26
Lane Grp Cap(c), veh/h	144	593	576	139	588	539	139	598	591	144	603	601
V/C Ratio(X)	1.68	0.93	0.93	0.90	0.70	0.70	1.21	0.81	0.81	2.19	0.74	0.74
Avail Cap(c_a), veh/h	144	593	576	139	588	539	139	644	637	144	649	647
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)	0.76	0.76	0.76	1.00	1.00	1.00	0.55	0.55	0.55	0.52	0.52	0.52
Uniform Delay (d), s/veh	52.8	37.0	37.0	52.6	33.5	33.5	53.0	34.8	34.8	52.8	33.6	33.6
Incr Delay (d2), s/veh	327.9	18.8	19.3	47.6	6.7	7.4	123.5	6.0	6.1	548.8	3.8	3.8
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	17.2	17.4	17.0	5.4	10.9	10.1	8.8	13.1	13.0	26.1	11.4	11.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	380.7	55.8	56.3	100.1	40.2	40.9	176.5	40.9	40.9	601.7	37.3	37.3
LnGrp LOS	F	E	E	F	D	D	F	D	D	F	D	D
Approach Vol, veh/h		1327			915			1136			1211	
Approach Delay, s/veh		115.3			48.8			61.0			184.6	
Approach LOS		F			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	43.5	13.7	44.1	14.0	43.2	14.0	43.8
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 9	35.4	* 9	42.0	* 9.3	35.1	* 9.3	41.7
Max Q Clear Time (g_c+I1), s	11.3	36.4	11.0	27.6	11.3	25.3	11.3	30.8
Green Ext Time (p_c), s	0.0	0.0	0.0	9.2	0.0	6.2	0.0	7.8

Intersection Summary	
HCM 6th Ctrl Delay	106.9
HCM 6th LOS	F

Notes

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

Intersection	
Int Delay, s/veh	2.4

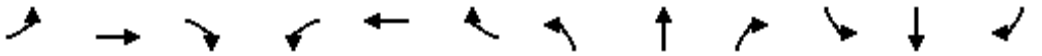
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1310	70	40	650	50	60
Future Vol, veh/h	1310	70	40	650	50	60
Conflicting Peds, #/hr	0	28	28	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	45	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1440	77	44	714	55	66

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1545	0	1962	797
Stage 1	-	-	-	-	1507	-
Stage 2	-	-	-	-	455	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	426	-	55	329
Stage 1	-	-	-	-	170	-
Stage 2	-	-	-	-	606	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	415	-	~ 44	317
Mov Cap-2 Maneuver	-	-	-	-	127	-
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	494	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	34.8
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	127	317	-	-	415	-
HCM Lane V/C Ratio	0.433	0.208	-	-	0.106	-
HCM Control Delay (s)	53.4	19.3	-	-	14.7	1.2
HCM Lane LOS	F	C	-	-	B	A
HCM 95th %tile Q(veh)	1.9	0.8	-	-	0.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	570	130	40	350	50	130	370	60	130	430	40
Future Volume (veh/h)	70	570	130	40	350	50	130	370	60	130	430	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	582	133	41	357	51	133	378	61	133	439	41
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	703	160	61	713	101	164	1414	226	164	1517	141
Arrive On Green	0.05	0.25	0.25	0.03	0.23	0.23	0.09	0.46	0.46	0.09	0.46	0.46
Sat Flow, veh/h	1781	2853	650	1781	3109	440	1781	3056	488	1781	3278	305
Grp Volume(v), veh/h	71	362	353	41	202	206	133	218	221	133	237	243
Grp Sat Flow(s),veh/h/ln	1781	1777	1726	1781	1777	1772	1781	1777	1768	1781	1777	1806
Q Serve(g_s), s	3.9	19.3	19.4	2.3	9.9	10.1	7.3	7.5	7.7	7.3	8.3	8.4
Cycle Q Clear(g_c), s	3.9	19.3	19.4	2.3	9.9	10.1	7.3	7.5	7.7	7.3	8.3	8.4
Prop In Lane	1.00		0.38	1.00		0.25	1.00		0.28	1.00		0.17
Lane Grp Cap(c), veh/h	91	438	426	61	407	406	164	822	818	164	822	836
V/C Ratio(X)	0.78	0.83	0.83	0.68	0.50	0.51	0.81	0.27	0.27	0.81	0.29	0.29
Avail Cap(c_a), veh/h	187	533	518	134	480	478	294	822	818	294	822	836
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	0.40	0.40	0.40	0.91	0.91	0.91
Uniform Delay (d), s/veh	46.9	35.6	35.7	47.8	33.5	33.6	44.6	16.5	16.5	44.6	16.7	16.7
Incr Delay (d2), s/veh	5.2	9.2	9.7	4.8	1.1	1.2	1.5	0.3	0.3	3.4	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	9.2	9.1	1.1	4.3	4.4	3.2	3.0	3.1	3.3	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	44.8	45.4	52.6	34.7	34.8	46.1	16.8	16.8	47.9	17.5	17.5
LnGrp LOS	D	D	D	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		786			449			572			613	
Approach Delay, s/veh		45.7			36.4			23.6			24.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	50.8	6.9	29.7	12.7	50.8	8.6	27.9
Change Period (Y+Rc), s	3.5	4.5	3.5	5.0	3.5	4.5	3.5	5.0
Max Green Setting (Gmax), s	16.5	29.5	7.5	30.0	16.5	29.5	10.5	27.0
Max Q Clear Time (g_c+I1), s	9.3	9.7	4.3	21.4	9.3	10.4	5.9	12.1
Green Ext Time (p_c), s	0.1	2.9	0.0	3.3	0.1	3.2	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	19.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	530	70	40	270	20	50	80	50	30	70	50
Future Vol, veh/h	40	530	70	40	270	20	50	80	50	30	70	50
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	552	73	42	281	21	52	83	52	31	73	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	312	0	0	635	0	0	954	1079	333	798	1105	171
Stage 1	-	-	-	-	-	-	683	683	-	386	386	-
Stage 2	-	-	-	-	-	-	271	396	-	412	719	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1245	-	-	944	-	-	213	217	663	277	209	843
Stage 1	-	-	-	-	-	-	405	447	-	609	609	-
Stage 2	-	-	-	-	-	-	712	602	-	588	431	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1233	-	-	935	-	-	125	191	650	153	184	827
Mov Cap-2 Maneuver	-	-	-	-	-	-	125	191	-	153	184	-
Stage 1	-	-	-	-	-	-	380	419	-	571	571	-
Stage 2	-	-	-	-	-	-	545	564	-	406	404	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.3	95.8	46.3
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	201	1233	-	-	935	-	-	235
HCM Lane V/C Ratio	0.933	0.034	-	-	0.045	-	-	0.665
HCM Control Delay (s)	95.8	8	0.2	-	9	0.2	-	46.3
HCM Lane LOS	F	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	7.6	0.1	-	-	0.1	-	-	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	440	170	50	190	30	80	490	80	40	470	30
Future Volume (veh/h)	40	440	170	50	190	30	80	490	80	40	470	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	494	191	56	213	34	90	551	90	45	528	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	766	633	72	1280	201	114	1091	178	57	566	36
Arrive On Green	0.03	0.41	0.41	0.04	0.42	0.42	0.06	0.36	0.36	0.03	0.33	0.33
Sat Flow, veh/h	1781	1870	1546	1781	3066	481	1781	3046	496	1781	1735	112
Grp Volume(v), veh/h	45	494	191	56	122	125	90	320	321	45	0	562
Grp Sat Flow(s),veh/h/ln	1781	1870	1546	1781	1777	1770	1781	1777	1765	1781	0	1846
Q Serve(g_s), s	2.5	21.2	8.3	3.1	4.3	4.4	5.0	14.1	14.2	2.5	0.0	29.5
Cycle Q Clear(g_c), s	2.5	21.2	8.3	3.1	4.3	4.4	5.0	14.1	14.2	2.5	0.0	29.5
Prop In Lane	1.00		1.00	1.00		0.27	1.00		0.28	1.00		0.06
Lane Grp Cap(c), veh/h	57	766	633	72	742	739	114	636	632	57	0	602
V/C Ratio(X)	0.79	0.65	0.30	0.78	0.16	0.17	0.79	0.50	0.51	0.79	0.00	0.93
Avail Cap(c_a), veh/h	121	766	633	109	742	739	151	661	657	121	0	656
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	0.69	0.69	0.69	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.0	23.7	19.9	47.5	18.2	18.3	46.1	25.1	25.2	48.0	0.0	32.6
Incr Delay (d2), s/veh	8.4	4.2	1.2	8.8	0.5	0.5	9.4	0.3	0.3	8.4	0.0	19.3
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	1.2	9.8	3.1	1.5	1.8	1.9	2.5	5.8	5.8	1.2	0.0	15.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	27.9	21.1	56.3	18.7	18.7	55.5	25.5	25.5	56.5	0.0	51.9
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	A	D
Approach Vol, veh/h		730			303			731			607	
Approach Delay, s/veh		27.9			25.7			29.2			52.3	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	45.4	9.9	37.1	6.7	46.3	6.7	40.3
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	6.1	33.9	8.5	35.5	6.8	33.2	6.8	37.2
Max Q Clear Time (g_c+I1), s	5.1	23.2	7.0	31.5	4.5	6.4	4.5	16.2
Green Ext Time (p_c), s	0.0	2.3	0.0	1.1	0.0	1.1	0.0	3.1

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	760	130	120	380	140	110	450	140	130	280	60
Future Volume (veh/h)	150	760	130	120	380	140	110	450	140	130	280	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	156	792	135	125	396	146	115	469	146	135	292	62
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	1465	250	149	1182	430	139	530	164	159	616	128
Arrive On Green	0.10	0.48	0.48	0.08	0.47	0.47	0.08	0.20	0.20	0.09	0.21	0.21
Sat Flow, veh/h	1781	3025	516	1781	2534	921	1781	2646	816	1781	2906	606
Grp Volume(v), veh/h	156	465	462	125	276	266	115	314	301	135	176	178
Grp Sat Flow(s),veh/h/ln	1781	1777	1763	1781	1777	1679	1781	1777	1686	1781	1777	1735
Q Serve(g_s), s	11.6	24.7	24.7	9.3	13.2	13.6	8.6	23.1	23.5	10.1	11.7	12.1
Cycle Q Clear(g_c), s	11.6	24.7	24.7	9.3	13.2	13.6	8.6	23.1	23.5	10.1	11.7	12.1
Prop In Lane	1.00		0.29	1.00		0.55	1.00		0.48	1.00		0.35
Lane Grp Cap(c), veh/h	181	860	854	149	829	783	139	356	338	159	377	368
V/C Ratio(X)	0.86	0.54	0.54	0.84	0.33	0.34	0.83	0.88	0.89	0.85	0.47	0.48
Avail Cap(c_a), veh/h	278	860	854	238	829	783	220	432	410	245	457	446
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	0.74	0.74	0.74	1.00	1.00	1.00	0.47	0.47	0.47
Uniform Delay (d), s/veh	59.7	24.3	24.3	60.9	22.8	22.8	61.4	52.4	52.6	60.5	46.5	46.7
Incr Delay (d2), s/veh	10.2	2.4	2.5	5.5	0.8	0.9	7.0	14.6	16.9	4.7	0.2	0.2
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	5.7	10.8	10.7	4.4	5.7	5.5	4.1	11.7	11.5	4.7	5.2	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.9	26.8	26.8	66.5	23.6	23.7	68.3	67.0	69.5	65.3	46.7	46.9
LnGrp LOS	E	C	C	E	C	C	E	E	E	E	D	D
Approach Vol, veh/h		1083			667			730			489	
Approach Delay, s/veh		33.0			31.7			68.2			51.9	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	71.8	14.6	33.2	17.8	69.4	16.2	31.6
Change Period (Y+Rc), s	4.1	6.4	4.1	4.6	4.1	6.4	4.1	4.6
Max Green Setting (Gmax), s	11.3	46.4	16.7	34.7	21.1	43.3	18.6	32.8
Max Q Clear Time (g_c+I1), s	11.3	26.7	10.6	14.1	13.6	15.6	12.1	25.5
Green Ext Time (p_c), s	0.1	3.7	0.1	1.2	0.1	2.1	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	44.5
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	680	80	70	360	210	150	480	60	250	440	120
Future Volume (veh/h)	210	680	80	70	360	210	150	480	60	250	440	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	708	83	73	375	219	156	500	62	260	458	125
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	1218	143	120	662	380	187	638	79	291	713	193
Arrive On Green	0.14	0.38	0.38	0.13	0.62	0.62	0.10	0.20	0.20	0.16	0.26	0.26
Sat Flow, veh/h	1781	3194	374	1781	2149	1233	1781	3168	391	1781	2743	742
Grp Volume(v), veh/h	219	394	397	73	309	285	156	279	283	260	295	288
Grp Sat Flow(s),veh/h/ln	1781	1777	1791	1781	1777	1606	1781	1777	1782	1781	1777	1708
Q Serve(g_s), s	12.7	18.5	18.5	4.1	10.7	11.1	9.0	15.6	15.8	15.0	15.5	15.7
Cycle Q Clear(g_c), s	12.7	18.5	18.5	4.1	10.7	11.1	9.0	15.6	15.8	15.0	15.5	15.7
Prop In Lane	1.00		0.21	1.00		0.77	1.00		0.22	1.00		0.43
Lane Grp Cap(c), veh/h	250	678	683	120	547	495	187	358	359	291	462	444
V/C Ratio(X)	0.88	0.58	0.58	0.61	0.56	0.58	0.84	0.78	0.79	0.89	0.64	0.65
Avail Cap(c_a), veh/h	310	678	683	141	547	495	295	389	390	361	462	444
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	0.57	0.57	0.57
Uniform Delay (d), s/veh	44.2	25.8	25.8	44.2	16.0	16.1	46.1	39.7	39.8	43.0	34.5	34.6
Incr Delay (d2), s/veh	14.0	2.7	2.7	2.7	4.2	4.8	6.0	13.8	14.3	11.5	3.3	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.1	8.1	1.8	3.9	3.7	4.2	8.1	8.2	7.4	7.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	28.5	28.5	46.8	20.2	20.9	52.1	53.5	54.0	54.5	37.7	38.1
LnGrp LOS	E	C	C	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h		1010			667			718			843	
Approach Delay, s/veh		35.0			23.4			53.4			43.0	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	45.1	15.7	32.4	19.4	37.4	21.9	26.2
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 8.3	32.8	* 17	26.9	* 18	22.8	* 21	23.0
Max Q Clear Time (g_c+I1), s	10.1	20.5	11.0	17.7	14.7	13.1	17.0	17.8
Green Ext Time (p_c), s	0.0	7.3	0.1	4.5	0.1	4.8	0.2	2.7

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

Notes

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

Intersection	
Int Delay, s/veh	22.8

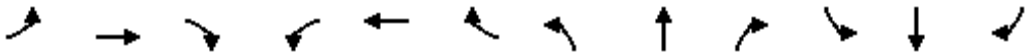
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	940	90	60	590	30	40	10	60	30	20	30
Future Vol, veh/h	30	940	90	60	590	30	40	10	60	30	20	30
Conflicting Peds, #/hr	29	0	14	14	0	29	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	1022	98	65	641	33	43	11	65	33	22	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	703	0	0	1134	0	0	1623	1984	584	1410	2017	376
Stage 1	-	-	-	-	-	-	1151	1151	-	817	817	-
Stage 2	-	-	-	-	-	-	472	833	-	593	1200	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	890	-	-	612	-	-	68	61	455	98	58	622
Stage 1	-	-	-	-	-	-	211	271	-	337	388	-
Stage 2	-	-	-	-	-	-	542	382	-	459	256	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	865	-	-	604	-	-	~ 33	47	445	56	44	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 33	47	-	56	44	-
Stage 1	-	-	-	-	-	-	187	240	-	294	336	-
Stage 2	-	-	-	-	-	-	424	331	-	332	226	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1	213.9	237.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	34	269	865	-	-	604	-	-	77
HCM Lane V/C Ratio	1.439	0.263	0.038	-	-	0.108	-	-	1.129
HCM Control Delay (s)	$ 489.4	23.1	9.3	0.5	-	11.7	-	-	237.7
HCM Lane LOS	F	C	A	A	-	B	-	-	F
HCM 95th %tile Q(veh)	5.3	1	0.1	-	-	0.4	-	-	6.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1190	120	40	710	20	160	110	130	20	80	50
Future Volume (veh/h)	60	1190	120	40	710	20	160	110	130	20	80	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	0.99		0.95	0.99		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	1214	122	41	724	20	163	112	133	20	82	51
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	1907	191	59	1962	54	261	181	214	59	203	111
Arrive On Green	0.06	0.59	0.59	0.03	0.56	0.56	0.08	0.08	0.08	0.24	0.24	0.24
Sat Flow, veh/h	1781	3251	326	1781	3526	97	1243	758	900	84	852	468
Grp Volume(v), veh/h	61	662	674	41	365	379	163	0	245	153	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1800	1781	1777	1846	1243	0	1658	1403	0	0
Q Serve(g_s), s	3.5	25.8	26.0	2.4	12.0	12.0	7.0	0.0	15.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	3.5	25.8	26.0	2.4	12.0	12.0	22.4	0.0	15.0	15.4	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.05	1.00		0.54	0.13		0.33
Lane Grp Cap(c), veh/h	113	1042	1056	59	989	1027	261	0	395	373	0	0
V/C Ratio(X)	0.54	0.64	0.64	0.69	0.37	0.37	0.62	0.00	0.62	0.41	0.00	0.00
Avail Cap(c_a), veh/h	165	1042	1056	124	989	1027	307	0	456	432	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.92	0.92	0.92	0.91	0.00	0.91	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.7	14.3	14.3	50.2	13.0	13.0	49.4	0.0	43.8	33.5	0.0	0.0
Incr Delay (d2), s/veh	1.5	3.0	3.0	4.9	1.0	0.9	1.4	0.0	1.0	0.3	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	1.6	10.3	10.5	1.1	4.8	5.0	4.7	0.0	6.8	3.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.2	17.3	17.3	55.1	14.0	13.9	50.8	0.0	44.8	33.8	0.0	0.0
LnGrp LOS	D	B	B	E	B	B	D	A	D	C	A	A
Approach Vol, veh/h		1397			785			408			153	
Approach Delay, s/veh		18.7			16.1			47.2			33.8	
Approach LOS		B			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	66.7		30.1	11.3	63.5		30.1				
Change Period (Y+Rc), s	* 4.7	5.1		5.1	* 4.7	5.1		5.1				
Max Green Setting (Gmax), s	* 7.3	53.9		28.9	* 9.7	51.5		28.9				
Max Q Clear Time (g_c+I1), s	4.4	28.0		17.4	5.5	14.0		24.4				
Green Ext Time (p_c), s	0.0	6.5		0.4	0.0	3.0		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		23.0	
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)	80	980	130	40	550	90	90	280	80	130	230	60
Future Volume (veh/h)	80	980	130	40	550	90	90	280	80	130	230	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.92
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	1010	134	41	567	93	93	289	82	134	237	62
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	1451	192	77	1348	220	135	447	236	189	362	224
Arrive On Green	0.06	0.46	0.46	0.04	0.44	0.44	0.16	0.16	0.16	0.15	0.15	0.15
Sat Flow, veh/h	1781	3140	416	1781	3041	497	836	2769	1460	1231	2354	1454
Grp Volume(v), veh/h	82	571	573	41	330	330	203	179	82	197	174	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1780	1781	1777	1761	1829	1777	1460	1809	1777	1454
Q Serve(g_s), s	5.4	30.6	30.6	2.7	15.3	15.4	12.6	11.3	6.0	12.4	11.0	4.5
Cycle Q Clear(g_c), s	5.4	30.6	30.6	2.7	15.3	15.4	12.6	11.3	6.0	12.4	11.0	4.5
Prop In Lane	1.00		0.23	1.00		0.28	0.46		1.00	0.68		1.00
Lane Grp Cap(c), veh/h	111	821	822	77	788	781	295	287	236	278	273	224
V/C Ratio(X)	0.74	0.70	0.70	0.53	0.42	0.42	0.69	0.62	0.35	0.71	0.64	0.28
Avail Cap(c_a), veh/h	183	821	822	105	788	781	370	360	296	350	344	281
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)	0.77	0.77	0.77	0.86	0.86	0.86	0.95	0.95	0.95	0.92	0.92	0.92
Uniform Delay (d), s/veh	55.3	25.6	25.6	56.2	22.8	22.9	47.5	46.9	44.7	48.2	47.6	44.9
Incr Delay (d2), s/veh	2.8	3.8	3.8	1.8	1.4	1.4	3.7	2.1	0.8	2.8	1.0	0.2
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	2.5	13.3	13.4	1.2	6.6	6.6	6.0	5.1	2.2	5.8	4.9	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.1	29.3	29.4	58.0	24.3	24.3	51.1	49.0	45.5	51.0	48.6	45.1
LnGrp LOS	E	C	C	E	C	C	D	D	D	D	D	D
Approach Vol, veh/h		1226			701			464			433	
Approach Delay, s/veh		31.3			26.3			49.3			49.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	61.6		24.0	12.2	59.3		24.5
Change Period (Y+Rc), s	* 4.7	6.1		5.6	* 4.7	6.1		5.1
Max Green Setting (Gmax), s	* 7.1	43.9		23.2	* 12	38.7		24.3
Max Q Clear Time (g_c+I1), s	14.7	32.6		14.4	7.4	17.4		14.6
Green Ext Time (p_c), s	0.0	3.9		1.0	0.0	2.5		1.7

Intersection Summary	
HCM 6th Ctrl Delay	35.7
HCM 6th LOS	D

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)	80	640	160	80	340	50	150	530	190	80	530	50
Future Volume (veh/h)	80	640	160	80	340	50	150	530	190	80	530	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	653	163	82	347	51	153	541	194	82	541	51
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	1025	255	134	1134	165	151	587	483	119	970	91
Arrive On Green	0.08	0.37	0.37	0.08	0.37	0.37	0.08	0.31	0.31	0.07	0.30	0.30
Sat Flow, veh/h	1781	2801	698	1781	3101	451	1781	1870	1539	1781	3273	308
Grp Volume(v), veh/h	82	414	402	82	197	201	153	541	194	82	293	299
Grp Sat Flow(s),veh/h/ln	1781	1777	1723	1781	1777	1775	1781	1870	1539	1781	1777	1804
Q Serve(g_s), s	4.9	21.2	21.2	4.9	8.7	8.9	9.3	30.7	10.9	5.0	15.3	15.4
Cycle Q Clear(g_c), s	4.9	21.2	21.2	4.9	8.7	8.9	9.3	30.7	10.9	5.0	15.3	15.4
Prop In Lane	1.00		0.41	1.00		0.25	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	134	650	630	134	650	649	151	587	483	119	526	534
V/C Ratio(X)	0.61	0.64	0.64	0.61	0.30	0.31	1.02	0.92	0.40	0.69	0.56	0.56
Avail Cap(c_a), veh/h	188	650	630	146	650	649	151	600	494	130	549	557
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)	0.70	0.70	0.70	0.95	0.95	0.95	0.80	0.80	0.80	0.95	0.95	0.95
Uniform Delay (d), s/veh	49.3	28.8	28.9	49.3	24.9	24.9	50.3	36.4	29.6	50.2	32.6	32.7
Incr Delay (d2), s/veh	1.2	3.3	3.5	3.9	1.1	1.2	69.8	18.7	2.0	23.1	4.0	4.0
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	2.2	9.4	9.1	2.3	3.8	3.9	7.0	16.6	4.2	2.9	7.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.5	32.2	32.3	53.2	26.0	26.1	120.1	55.2	31.6	73.3	36.6	36.6
LnGrp LOS	D	C	C	D	C	C	F	E	C	E	D	D
Approach Vol, veh/h		898			480			888			674	
Approach Delay, s/veh		33.9			30.7			61.2			41.1	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	45.3	14.0	37.7	13.0	45.3	12.0	39.6
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 8	38.1	* 9.3	34.0	* 12	35.5	* 8	35.3
Max Q Clear Time (g_c+I1), s	6.9	23.2	11.3	17.4	6.9	10.9	7.0	32.7
Green Ext Time (p_c), s	0.0	9.3	0.0	7.5	0.0	6.2	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	43.3
HCM 6th LOS	D

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)	60	1080	120	60	490	30	110	140	150	40	140	50
Future Volume (veh/h)	60	1080	120	60	490	30	110	140	150	40	140	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.99		0.96	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	1161	129	65	527	32	118	151	161	43	151	54
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	2	2	2	2	2	2
Cap, veh/h	98	1792	199	98	1891	115	275	308	250	54	592	202
Arrive On Green	0.06	0.56	0.56	0.06	0.56	0.56	0.16	0.16	0.16	0.03	0.23	0.23
Sat Flow, veh/h	1781	3217	357	1781	3396	206	1161	1870	1517	1781	2573	879
Grp Volume(v), veh/h	65	640	650	65	275	284	118	151	161	43	102	103
Grp Sat Flow(s),veh/h/ln	1781	1777	1797	1781	1777	1824	1161	1870	1517	1781	1777	1675
Q Serve(g_s), s	3.1	21.4	21.5	3.1	7.0	7.0	8.1	6.3	8.5	2.1	4.0	4.3
Cycle Q Clear(g_c), s	3.1	21.4	21.5	3.1	7.0	7.0	8.1	6.3	8.5	2.1	4.0	4.3
Prop In Lane	1.00		0.20	1.00		0.11	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	98	990	1001	98	990	1016	275	308	250	54	409	386
V/C Ratio(X)	0.66	0.65	0.65	0.66	0.28	0.28	0.43	0.49	0.64	0.80	0.25	0.27
Avail Cap(c_a), veh/h	193	990	1001	177	990	1016	400	509	413	83	629	593
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	39.7	13.1	13.2	39.7	9.9	9.9	33.2	32.5	33.4	41.3	26.9	27.0
Incr Delay (d2), s/veh	5.5	3.3	3.3	5.5	0.7	0.7	0.8	0.9	2.1	12.7	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	8.3	8.5	1.5	2.6	2.7	2.3	2.8	3.2	1.1	1.7	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	16.4	16.4	45.2	10.6	10.6	34.0	33.4	35.5	53.9	27.2	27.3
LnGrp LOS	D	B	B	D	B	B	C	C	D	D	C	C
Approach Vol, veh/h		1355			624			430			248	
Approach Delay, s/veh		17.8			14.2			34.3			31.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	52.2		24.2	9.2	52.2	5.6	18.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	3.0	4.5
Max Green Setting (Gmax), s	8.5	47.7		30.3	9.3	46.9	4.0	23.3
Max Q Clear Time (g_c+I1), s	5.1	23.5		6.3	5.1	9.0	4.1	10.5
Green Ext Time (p_c), s	0.0	7.9		0.9	0.0	2.8	0.0	1.2

Intersection Summary		
HCM 6th Ctrl Delay		20.9
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	660	130	70	300	40	90	450	160	60	470	40
Future Volume (veh/h)	50	660	130	70	300	40	90	450	160	60	470	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	688	135	73	312	42	94	469	167	62	490	42
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	644	1746	342	395	1860	248	241	771	272	197	1000	85
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1025	2950	578	665	3143	419	866	2546	898	788	3302	282
Grp Volume(v), veh/h	52	414	409	73	175	179	94	326	310	62	263	269
Grp Sat Flow(s),veh/h/ln	1025	1777	1752	665	1777	1785	866	1777	1667	788	1777	1807
Q Serve(g_s), s	2.1	10.6	10.6	5.6	3.8	3.9	8.5	13.4	13.6	6.2	10.3	10.4
Cycle Q Clear(g_c), s	6.0	10.6	10.6	16.2	3.8	3.9	18.9	13.4	13.6	19.8	10.3	10.4
Prop In Lane	1.00		0.33	1.00		0.23	1.00		0.54	1.00		0.16
Lane Grp Cap(c), veh/h	644	1051	1037	395	1051	1056	241	538	505	197	538	547
V/C Ratio(X)	0.08	0.39	0.39	0.18	0.17	0.17	0.39	0.61	0.61	0.31	0.49	0.49
Avail Cap(c_a), veh/h	644	1051	1037	395	1051	1056	390	843	791	333	843	857
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	9.3	9.3	9.3	13.6	7.9	7.9	32.1	25.4	25.5	34.0	24.3	24.4
Incr Delay (d2), s/veh	0.2	1.1	1.1	1.0	0.3	0.3	0.8	0.8	0.9	0.7	0.5	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	0.5	3.9	3.8	0.9	1.4	1.4	1.8	5.6	5.3	1.2	4.2	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.5	10.4	10.4	14.6	8.2	8.3	32.9	26.2	26.4	34.6	24.9	24.9
LnGrp LOS	A	B	B	B	A	A	C	C	C	C	C	C
Approach Vol, veh/h		875			427			730			594	
Approach Delay, s/veh		10.3			9.3			27.2			25.9	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	55.0	30.3	55.0	30.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	50.5	40.5	50.5	40.5
Max Q Clear Time (g_c+I1), s	12.6	21.8	18.2	20.9
Green Ext Time (p_c), s	4.9	2.7	2.3	3.8

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	510	50	20	570	290	120	40	20	300	20	150
Future Volume (veh/h)	150	510	50	20	570	290	120	40	20	300	20	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.99		0.97	0.99		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	156	531	52	21	594	0	125	42	21	312	21	156
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	1863	182	31	2472		397	328	164	407	528	434
Arrive On Green	0.11	0.57	0.57	0.03	0.97	0.00	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	3258	318	1781	5106	1585	1198	1163	581	1327	1870	1537
Grp Volume(v), veh/h	156	289	294	21	594	0	125	0	63	312	21	156
Grp Sat Flow(s),veh/h/ln	1781	1777	1800	1781	1702	1585	1198	0	1744	1327	1870	1537
Q Serve(g_s), s	9.0	8.7	8.8	1.2	0.5	0.0	8.9	0.0	2.8	24.0	0.9	8.5
Cycle Q Clear(g_c), s	9.0	8.7	8.8	1.2	0.5	0.0	9.7	0.0	2.8	26.9	0.9	8.5
Prop In Lane	1.00		0.18	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	187	1016	1029	31	2472		397	0	492	407	528	434
V/C Ratio(X)	0.83	0.28	0.29	0.68	0.24		0.31	0.00	0.13	0.77	0.04	0.36
Avail Cap(c_a), veh/h	331	1016	1029	110	2472		544	0	706	570	757	622
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.00	1.00	0.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	46.1	11.5	11.5	50.4	0.9	0.0	30.9	0.0	28.1	38.1	27.3	30.1
Incr Delay (d2), s/veh	3.7	0.7	0.7	8.7	0.2	0.0	0.2	0.0	0.0	2.0	0.0	0.2
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	4.2	3.5	3.6	0.6	0.2	0.0	2.6	0.0	1.2	7.9	0.4	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.8	12.2	12.2	59.1	1.1	0.0	31.0	0.0	28.1	40.1	27.4	30.3
LnGrp LOS	D	B	B	E	A		C	A	C	D	C	C
Approach Vol, veh/h		739			615	A		188			489	
Approach Delay, s/veh		20.1			3.1			30.1			36.4	
Approach LOS		C			A			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	64.5		34.1	15.5	55.3		34.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	42.5		42.5	19.5	29.5		42.5				
Max Q Clear Time (g_c+I1), s	3.2	10.8		28.9	11.0	2.5		11.7				
Green Ext Time (p_c), s	0.0	2.4		0.8	0.1	2.9		0.5				

Intersection Summary		
HCM 6th Ctrl Delay	19.8	
HCM 6th LOS	B	

Notes

Unsignalized Delay for [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)	60	640	20	30	640	100	90	150	30	90	120	50
Future Volume (veh/h)	60	640	20	30	640	100	90	150	30	90	120	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.97		0.93	0.97		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	703	22	33	703	110	99	165	33	99	132	55
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	514	2606	82	608	2276	356	222	534	104	220	445	174
Arrive On Green	1.00	1.00	1.00	0.74	0.74	0.74	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	671	3515	110	728	3070	480	1160	2928	567	1149	2442	952
Grp Volume(v), veh/h	66	355	370	33	407	406	99	98	100	99	94	93
Grp Sat Flow(s),veh/h/ln	671	1777	1848	728	1777	1773	1160	1777	1719	1149	1777	1617
Q Serve(g_s), s	1.2	0.0	0.0	1.3	8.1	8.1	8.5	5.0	5.3	8.6	4.8	5.3
Cycle Q Clear(g_c), s	9.3	0.0	0.0	1.3	8.1	8.1	13.8	5.0	5.3	13.9	4.8	5.3
Prop In Lane	1.00		0.06	1.00		0.27	1.00		0.33	1.00		0.59
Lane Grp Cap(c), veh/h	514	1317	1370	608	1317	1314	222	324	314	220	324	295
V/C Ratio(X)	0.13	0.27	0.27	0.05	0.31	0.31	0.45	0.30	0.32	0.45	0.29	0.32
Avail Cap(c_a), veh/h	514	1317	1370	608	1317	1314	408	609	589	404	609	554
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.92	0.92	0.92	1.00	1.00	1.00	0.65	0.65	0.65
Uniform Delay (d), s/veh	0.5	0.0	0.0	3.7	4.6	4.6	43.2	37.1	37.3	43.3	37.0	37.2
Incr Delay (d2), s/veh	0.5	0.4	0.4	0.2	0.6	0.6	0.5	0.2	0.2	0.3	0.1	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	0.1	0.2	0.2	0.2	2.5	2.5	2.5	2.2	2.3	2.5	2.1	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.9	0.4	0.4	3.8	5.1	5.1	43.7	37.3	37.5	43.6	37.2	37.4
LnGrp LOS	A	A	A	A	A	A	D	D	D	D	D	D
Approach Vol, veh/h		791			846			297			286	
Approach Delay, s/veh		0.5			5.1			39.5			39.5	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	81.8	23.2	81.8	23.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	61.0	36.0	61.0	36.0
Max Q Clear Time (g_c+I1), s	11.3	15.9	10.1	15.8
Green Ext Time (p_c), s	3.4	0.9	3.7	0.9

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	690	40	50	670	80	100	30	70	160	90	130
Future Volume (veh/h)	50	690	40	50	670	80	100	30	70	160	90	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	719	42	52	698	83	104	31	73	167	94	135
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	1929	113	68	1806	215	228	456	392	351	174	250
Arrive On Green	0.04	0.57	0.57	0.04	0.57	0.57	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1781	3407	199	1781	3190	379	1140	1777	1525	1272	677	973
Grp Volume(v), veh/h	52	375	386	52	388	393	104	31	73	167	0	229
Grp Sat Flow(s),veh/h/ln	1781	1777	1829	1781	1777	1793	1140	1777	1525	1272	0	1650
Q Serve(g_s), s	2.9	11.6	11.6	2.9	12.1	12.2	8.7	1.3	3.7	11.8	0.0	12.0
Cycle Q Clear(g_c), s	2.9	11.6	11.6	2.9	12.1	12.2	20.6	1.3	3.7	15.5	0.0	12.0
Prop In Lane	1.00		0.11	1.00		0.21	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	68	1006	1035	68	1006	1015	228	456	392	351	0	424
V/C Ratio(X)	0.76	0.37	0.37	0.76	0.39	0.39	0.46	0.07	0.19	0.48	0.00	0.54
Avail Cap(c_a), veh/h	169	1006	1035	169	1006	1015	341	633	543	477	0	588
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)	0.96	0.96	0.96	0.92	0.92	0.92	0.94	0.94	0.94	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.6	11.9	11.9	47.6	12.1	12.1	41.0	28.1	29.0	35.1	0.0	32.1
Incr Delay (d2), s/veh	6.2	1.0	1.0	6.0	1.0	1.0	1.3	0.1	0.2	1.2	0.0	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	1.4	4.5	4.7	1.4	4.7	4.8	2.5	0.6	1.4	3.7	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	13.0	12.9	53.6	13.1	13.1	42.3	28.2	29.2	36.3	0.0	33.4
LnGrp LOS	D	B	B	D	B	B	D	C	C	D	A	C
Approach Vol, veh/h		813			833			208			396	
Approach Delay, s/veh		15.6			15.6			35.6			34.6	
Approach LOS		B			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	61.6		30.1	8.3	61.6		30.1				
Change Period (Y+Rc), s	4.5	5.0		4.4	4.5	5.0		4.4				
Max Green Setting (Gmax), s	9.5	41.0		35.6	9.5	41.0		35.6				
Max Q Clear Time (g_c+I1), s	4.9	13.6		17.5	4.9	14.2		22.6				
Green Ext Time (p_c), s	0.0	8.4		2.3	0.0	8.6		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	530	40	130	450	140	120	440	90	210	450	100
Future Volume (veh/h)	150	530	40	130	450	140	120	440	90	210	450	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	153	541	41	133	459	143	122	449	92	214	459	102
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	1388	105	159	1437	624	154	711	302	218	838	358
Arrive On Green	0.10	0.42	0.42	0.09	0.40	0.40	0.09	0.20	0.20	0.12	0.24	0.24
Sat Flow, veh/h	1781	3341	253	1781	3554	1542	1781	3554	1510	1781	3554	1518
Grp Volume(v), veh/h	153	287	295	133	459	143	122	449	92	214	459	102
Grp Sat Flow(s),veh/h/ln	1781	1777	1817	1781	1777	1542	1781	1777	1510	1781	1777	1518
Q Serve(g_s), s	10.6	14.1	14.2	9.2	11.0	7.6	8.4	14.5	6.5	15.0	14.2	6.9
Cycle Q Clear(g_c), s	10.6	14.1	14.2	9.2	11.0	7.6	8.4	14.5	6.5	15.0	14.2	6.9
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	738	755	159	1437	624	154	711	302	218	838	358
V/C Ratio(X)	0.86	0.39	0.39	0.84	0.32	0.23	0.79	0.63	0.30	0.98	0.55	0.28
Avail Cap(c_a), veh/h	204	738	755	249	1437	624	161	1109	471	218	1222	522
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)	0.91	0.91	0.91	0.91	0.91	0.91	0.64	0.64	0.64	0.78	0.78	0.78
Uniform Delay (d), s/veh	55.3	25.5	25.5	56.0	25.5	24.4	56.0	45.8	42.6	54.7	41.9	39.1
Incr Delay (d2), s/veh	22.1	1.4	1.4	6.8	0.5	0.8	13.6	0.2	0.1	48.4	0.2	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	5.8	6.2	6.3	4.4	4.7	2.9	4.3	6.4	2.4	9.6	6.2	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.4	26.9	26.9	62.9	26.0	25.2	69.5	46.0	42.7	103.1	42.1	39.2
LnGrp LOS	E	C	C	E	C	C	E	D	D	F	D	D
Approach Vol, veh/h		735			735			663			775	
Approach Delay, s/veh		37.4			32.5			49.9			58.6	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	58.0	15.5	35.6	17.2	56.6	20.0	31.1
Change Period (Y+Rc), s	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1
Max Green Setting (Gmax), s	* 13	31.6	* 11	43.0	* 14	34.8	* 15	39.0
Max Q Clear Time (g_c+I1), s	11.2	16.2	10.4	16.2	12.6	13.0	17.0	16.5
Green Ext Time (p_c), s	0.1	2.0	0.0	2.2	0.0	2.2	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	44.6
HCM 6th LOS	D

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)	70	520	190	150	470	120	190	230	100	90	230	60
Future Volume (veh/h)	70	520	190	150	470	120	190	230	100	90	230	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	0.99		0.95	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	531	194	153	480	122	194	235	102	92	235	61
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	1164	423	181	1431	361	301	380	165	225	583	472
Arrive On Green	0.05	0.46	0.46	0.20	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	2520	916	1781	2795	705	1075	1217	528	1043	1870	1513
Grp Volume(v), veh/h	71	374	351	153	304	298	194	0	337	92	235	61
Grp Sat Flow(s),veh/h/ln	1781	1777	1659	1781	1777	1723	1075	0	1746	1043	1870	1513
Q Serve(g_s), s	3.9	14.3	14.5	8.3	0.0	0.0	17.3	0.0	16.5	8.3	9.9	2.9
Cycle Q Clear(g_c), s	3.9	14.3	14.5	8.3	0.0	0.0	27.2	0.0	16.5	24.7	9.9	2.9
Prop In Lane	1.00		0.55	1.00		0.41	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	91	821	766	181	910	882	301	0	544	225	583	472
V/C Ratio(X)	0.78	0.46	0.46	0.85	0.33	0.34	0.64	0.00	0.62	0.41	0.40	0.13
Avail Cap(c_a), veh/h	160	821	766	285	910	882	353	0	628	276	673	545
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.51	0.51	0.51	1.00	0.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	46.9	18.3	18.4	39.1	0.0	0.0	37.8	0.0	29.3	39.9	27.1	24.7
Incr Delay (d2), s/veh	4.4	1.5	1.6	3.9	0.5	0.5	3.6	0.0	1.7	1.4	0.5	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	1.8	5.9	5.6	3.4	0.1	0.1	4.8	0.0	7.0	2.2	4.5	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	19.8	20.0	43.0	0.5	0.5	41.4	0.0	31.0	41.3	27.6	24.8
LnGrp LOS	D	B	B	D	A	A	D	A	C	D	C	C
Approach Vol, veh/h		796			755			531			388	
Approach Delay, s/veh		22.7			9.1			34.8			30.4	
Approach LOS		C			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.1	50.7		36.2	8.1	55.7		36.2				
Change Period (Y+Rc), s	3.0	4.5		5.0	3.0	4.5		5.0				
Max Green Setting (Gmax), s	10.0	35.5		36.0	9.0	42.5		36.0				
Max Q Clear Time (g_c+I1), s	10.3	16.5		26.7	5.9	2.0		29.2				
Green Ext Time (p_c), s	0.0	5.2		1.6	0.0	5.0		2.0				

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	670	100	170	590	180	130	470	180	230	480	150
Future Volume (veh/h)	290	670	100	170	590	180	130	470	180	230	480	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.93	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	296	684	102	173	602	184	133	480	184	235	490	153
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	325	1082	161	205	751	229	163	505	192	266	691	214
Arrive On Green	0.24	0.47	0.47	0.11	0.28	0.28	0.09	0.20	0.20	0.15	0.26	0.26
Sat Flow, veh/h	1781	3086	460	1781	2653	809	1781	2461	934	1781	2628	814
Grp Volume(v), veh/h	296	394	392	173	403	383	133	345	319	235	330	313
Grp Sat Flow(s),veh/h/ln	1781	1777	1768	1781	1777	1686	1781	1777	1618	1781	1777	1665
Q Serve(g_s), s	16.2	16.8	16.8	9.5	21.0	21.1	7.3	19.2	19.5	12.9	16.8	17.1
Cycle Q Clear(g_c), s	16.2	16.8	16.8	9.5	21.0	21.1	7.3	19.2	19.5	12.9	16.8	17.1
Prop In Lane	1.00		0.26	1.00		0.48	1.00		0.58	1.00		0.49
Lane Grp Cap(c), veh/h	325	623	620	205	503	477	163	364	332	266	467	438
V/C Ratio(X)	0.91	0.63	0.63	0.84	0.80	0.80	0.82	0.95	0.96	0.88	0.71	0.71
Avail Cap(c_a), veh/h	347	623	620	246	503	477	198	364	332	276	467	438
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	0.56	0.56	0.56	0.81	0.81	0.81
Uniform Delay (d), s/veh	37.1	21.8	21.8	43.4	33.2	33.3	44.6	39.2	39.4	41.7	33.3	33.4
Incr Delay (d2), s/veh	23.7	4.3	4.3	18.9	12.6	13.4	11.0	23.1	27.3	21.9	3.7	4.2
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	8.6	6.7	6.7	5.2	10.5	10.1	3.7	10.5	10.0	7.2	7.6	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	26.1	26.2	62.3	45.8	46.6	55.6	62.3	66.7	63.6	37.0	37.7
LnGrp LOS	E	C	C	E	D	D	E	E	E	E	D	D
Approach Vol, veh/h		1082			959			797			878	
Approach Delay, s/veh		35.6			49.1			62.9			44.4	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	39.6	13.6	30.8	22.8	32.8	19.4	25.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.8	32.2	11.1	24.9	19.5	26.5	15.5	20.5
Max Q Clear Time (g_c+I1), s	11.5	18.8	9.3	19.1	18.2	23.1	14.9	21.5
Green Ext Time (p_c), s	0.1	3.4	0.0	1.7	0.1	1.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.0
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	210	0	0	460	20	30	550	30	0	0	80
Future Volume (veh/h)	180	210	0	0	460	20	30	550	30	0	0	80
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		0.98	0.99		0.96	1.00		0.96
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	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	223	0	0	489	21	32	585	32	0	0	85
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	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	224	2520	0	0	1875	80	274	729	313	0	0	313
Arrive On Green	0.13	0.71	0.00	0.00	0.54	0.54	0.21	0.21	0.21	0.00	0.00	0.21
Sat Flow, veh/h	1781	3647	0	0	3561	149	1298	3554	1527	0	0	1527
Grp Volume(v), veh/h	191	223	0	0	250	260	32	585	32	0	0	85
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1840	1298	1777	1527	0	0	1527
Q Serve(g_s), s	11.0	2.0	0.0	0.0	7.9	7.9	2.2	16.4	1.8	0.0	0.0	4.9
Cycle Q Clear(g_c), s	11.0	2.0	0.0	0.0	7.9	7.9	7.2	16.4	1.8	0.0	0.0	4.9
Prop In Lane	1.00		0.00	0.00		0.08	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	224	2520	0	0	961	995	274	729	313	0	0	313
V/C Ratio(X)	0.85	0.09	0.00	0.00	0.26	0.26	0.12	0.80	0.10	0.00	0.00	0.27
Avail Cap(c_a), veh/h	450	2520	0	0	961	995	422	1134	487	0	0	487
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	0.98	0.98	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	45.0	4.7	0.0	0.0	12.9	12.9	38.1	39.7	33.9	0.0	0.0	35.1
Incr Delay (d2), s/veh	3.6	0.1	0.0	0.0	0.6	0.6	0.1	1.8	0.1	0.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.7	0.0	0.0	3.3	3.4	0.7	7.3	0.7	0.0	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.5	4.8	0.0	0.0	13.5	13.5	38.3	41.6	34.0	0.0	0.0	35.7
LnGrp LOS	D	A	A	A	B	B	D	D	C	A	A	D
Approach Vol, veh/h		414			510			649			85	
Approach Delay, s/veh		25.0			13.5			41.0			35.7	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	79.0		26.0	17.7	61.3		26.0					
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5					
Max Green Setting (Gmax), s	62.5		33.5	26.5	31.5		33.5					
Max Q Clear Time (g_c+I1), s	4.0		6.9	13.0	9.9		18.4					
Green Ext Time (p_c), s	1.3		0.5	0.2	2.6		3.1					

Intersection Summary		
HCM 6th Ctrl Delay	28.3	
HCM 6th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1130	30	120	460	30	50	100	240	30	70	20
Future Volume (veh/h)	30	1130	30	120	460	30	50	100	240	30	70	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	1242	33	132	505	33	55	110	264	33	77	22
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	1848	49	165	1994	130	336	403	330	257	590	161
Arrive On Green	0.03	0.52	0.52	0.09	0.59	0.59	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	3534	94	1781	3382	220	1281	1870	1528	1001	2735	745
Grp Volume(v), veh/h	33	624	651	132	265	273	55	110	264	33	49	50
Grp Sat Flow(s),veh/h/ln	1781	1777	1851	1781	1777	1825	1281	1870	1528	1001	1777	1704
Q Serve(g_s), s	1.5	20.7	20.7	5.8	5.7	5.8	2.9	3.9	13.1	2.3	1.8	1.9
Cycle Q Clear(g_c), s	1.5	20.7	20.7	5.8	5.7	5.8	4.8	3.9	13.1	6.2	1.8	1.9
Prop In Lane	1.00		0.05	1.00		0.12	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	46	929	968	165	1048	1076	336	403	330	257	383	367
V/C Ratio(X)	0.71	0.67	0.67	0.80	0.25	0.25	0.16	0.27	0.80	0.13	0.13	0.14
Avail Cap(c_a), veh/h	127	929	968	212	1048	1076	429	540	441	330	513	492
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	0.82	0.82	0.82
Uniform Delay (d), s/veh	38.7	14.0	14.0	35.6	7.9	7.9	27.3	26.1	29.7	28.7	25.3	25.4
Incr Delay (d2), s/veh	7.3	3.9	3.7	11.8	0.6	0.6	0.1	0.1	5.4	0.1	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	0.7	8.2	8.5	3.0	2.0	2.1	0.9	1.7	5.1	0.5	0.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	17.9	17.8	47.4	8.5	8.5	27.4	26.3	35.2	28.8	25.3	25.4
LnGrp LOS	D	B	B	D	A	A	C	C	D	C	C	C
Approach Vol, veh/h		1308			670			429			132	
Approach Delay, s/veh		18.5			16.2			31.9			26.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	46.3		21.8	6.6	51.7		21.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	33.9		23.1	5.7	37.7		23.1				
Max Q Clear Time (g_c+I1), s	7.8	22.7		8.2	3.5	7.8		15.1				
Green Ext Time (p_c), s	0.0	4.4		0.3	0.0	2.0		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	930	160	180	380	90	110	570	150	190	630	70
Future Volume (veh/h)	160	930	160	180	380	90	110	570	150	190	630	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	167	969	167	188	396	94	115	594	156	198	656	73
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	1107	191	202	1050	246	136	836	360	175	826	92
Arrive On Green	0.11	0.37	0.37	0.11	0.37	0.37	0.08	0.24	0.24	0.10	0.26	0.26
Sat Flow, veh/h	1781	3018	520	1781	2840	666	1781	3554	1532	1781	3212	357
Grp Volume(v), veh/h	167	570	566	188	246	244	115	594	156	198	362	367
Grp Sat Flow(s),veh/h/ln	1781	1777	1760	1781	1777	1730	1781	1777	1532	1781	1777	1792
Q Serve(g_s), s	9.7	31.4	31.5	11.0	10.6	10.9	6.7	16.1	9.1	10.3	20.0	20.1
Cycle Q Clear(g_c), s	9.7	31.4	31.5	11.0	10.6	10.9	6.7	16.1	9.1	10.3	20.0	20.1
Prop In Lane	1.00		0.30	1.00		0.39	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	197	652	646	202	657	639	136	836	360	175	457	461
V/C Ratio(X)	0.85	0.87	0.88	0.93	0.37	0.38	0.85	0.71	0.43	1.13	0.79	0.80
Avail Cap(c_a), veh/h	209	652	646	202	657	639	136	944	407	175	511	515
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	0.84	0.84	0.84	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	45.8	31.0	31.0	46.1	24.2	24.3	47.9	36.9	34.2	47.4	36.4	36.4
Incr Delay (d2), s/veh	24.1	15.2	15.5	39.1	1.4	1.5	35.1	4.3	3.0	101.4	9.6	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	15.6	15.6	7.0	4.6	4.6	4.2	7.3	3.6	9.4	9.7	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	46.2	46.5	85.3	25.6	25.7	83.0	41.2	37.2	148.7	46.0	46.1
LnGrp LOS	E	D	D	F	C	C	F	D	D	F	D	D
Approach Vol, veh/h		1303			678			865			927	
Approach Delay, s/veh		49.4			42.2			46.0			68.0	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	43.6	12.7	32.1	16.3	43.9	15.0	29.8
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 12	35.3	* 8	30.2	* 12	34.9	* 10	27.9
Max Q Clear Time (g_c+I1), s	13.0	33.5	8.7	22.1	11.7	12.9	12.3	18.1
Green Ext Time (p_c), s	0.0	1.6	0.0	4.9	0.0	6.7	0.0	5.7

Intersection Summary	
HCM 6th Ctrl Delay	51.9
HCM 6th LOS	D

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)	180	750	90	40	340	110	100	230	40	180	250	150
Future Volume (veh/h)	180	750	90	40	340	110	100	230	40	180	250	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	196	815	98	43	370	120	109	250	43	196	272	163
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	1303	157	66	829	265	138	326	56	233	562	322
Arrive On Green	0.13	0.41	0.41	0.04	0.32	0.32	0.08	0.21	0.21	0.13	0.27	0.27
Sat Flow, veh/h	1781	3183	383	1781	2626	838	1781	1533	264	1781	2116	1213
Grp Volume(v), veh/h	196	455	458	43	248	242	109	0	293	196	226	209
Grp Sat Flow(s),veh/h/ln	1781	1777	1789	1781	1777	1687	1781	0	1797	1781	1777	1552
Q Serve(g_s), s	9.5	17.9	17.9	2.1	9.8	10.1	5.3	0.0	13.5	9.5	9.4	10.0
Cycle Q Clear(g_c), s	9.5	17.9	17.9	2.1	9.8	10.1	5.3	0.0	13.5	9.5	9.4	10.0
Prop In Lane	1.00		0.21	1.00		0.50	1.00		0.15	1.00		0.78
Lane Grp Cap(c), veh/h	233	728	732	66	561	533	138	0	382	233	472	412
V/C Ratio(X)	0.84	0.63	0.63	0.65	0.44	0.45	0.79	0.00	0.77	0.84	0.48	0.51
Avail Cap(c_a), veh/h	344	728	732	101	561	533	243	0	480	344	586	512
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	20.6	20.6	41.8	23.9	24.0	39.8	0.0	32.6	37.3	27.2	27.4
Incr Delay (d2), s/veh	7.7	4.0	4.0	4.0	2.5	2.8	3.7	0.0	5.1	7.7	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	7.7	7.8	1.0	4.3	4.2	2.4	0.0	6.3	4.5	3.9	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.1	24.6	24.6	45.8	26.4	26.8	43.6	0.0	37.7	45.1	27.7	28.1
LnGrp LOS	D	C	C	D	C	C	D	A	D	D	C	C
Approach Vol, veh/h		1109			533			402			631	
Approach Delay, s/veh		28.2			28.2			39.3			33.2	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	41.0	10.8	28.8	15.5	32.8	15.5	24.2
Change Period (Y+Rc), s	4.0	5.0	4.0	* 5.5	4.0	5.0	4.0	5.5
Max Green Setting (Gmax), s	5.3	36.0	12.0	* 29	17.0	24.0	17.0	23.5
Max Q Clear Time (g_c+I1), s	4.1	19.9	7.3	12.0	11.5	12.1	11.5	15.5
Green Ext Time (p_c), s	0.0	5.2	0.0	2.0	0.1	2.3	0.1	0.9

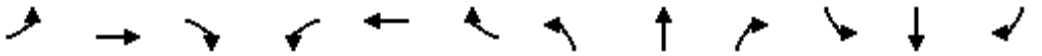
Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C

Notes

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

APPENDIX K

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – LONG-TERM + PROJECT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	761	320	401	871	170	200	290	110	270	1261	70
Future Volume (veh/h)	20	761	320	401	871	170	200	290	110	270	1261	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	827	337	436	947	185	217	315	120	293	1371	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	999	432	404	1535	299	293	1269	551	337	1314	571
Arrive On Green	0.04	0.28	0.28	0.23	0.72	0.72	0.08	0.36	0.36	0.10	0.37	0.37
Sat Flow, veh/h	3456	3554	1537	3456	4268	831	3456	3554	1543	3456	3554	1544
Grp Volume(v), veh/h	22	827	337	436	755	377	217	315	120	293	1371	76
Grp Sat Flow(s),veh/h/ln	1728	1777	1537	1728	1702	1694	1728	1777	1543	1728	1777	1544
Q Serve(g_s), s	1.0	36.0	33.3	19.3	18.4	18.6	10.1	10.3	8.9	13.8	61.0	5.4
Cycle Q Clear(g_c), s	1.0	36.0	33.3	19.3	18.4	18.6	10.1	10.3	8.9	13.8	61.0	5.4
Prop In Lane	1.00		1.00	1.00		0.49	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	999	432	404	1224	609	293	1269	551	337	1314	571
V/C Ratio(X)	0.17	0.83	0.78	1.08	0.62	0.62	0.74	0.25	0.22	0.87	1.04	0.13
Avail Cap(c_a), veh/h	209	1055	456	404	1224	609	293	1269	551	440	1314	571
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	76.8	55.6	54.6	63.2	17.4	17.4	73.7	37.4	37.0	73.4	52.0	34.5
Incr Delay (d2), s/veh	0.4	5.8	9.1	40.2	0.1	0.2	8.5	0.5	0.9	11.5	37.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	16.6	13.9	9.8	4.8	4.8	4.9	4.7	3.5	6.7	33.8	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	61.4	63.6	103.4	17.5	17.7	82.2	37.9	37.9	85.0	89.0	35.0
LnGrp LOS	E	E	E	F	B	B	F	D	D	F	F	C
Approach Vol, veh/h		1186			1568			652			1740	
Approach Delay, s/veh		62.3			41.4			52.6			86.0	
Approach LOS		E			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.1	65.8	24.4	52.7	20.0	67.9	11.5	65.6
Change Period (Y+Rc), s	6.0	6.9	5.1	6.3	6.0	6.9	5.1	6.3
Max Green Setting (Gmax), s	21.0	51.4	19.3	49.0	14.0	58.4	10.0	58.3
Max Q Clear Time (g_c+I1), s	15.8	12.3	21.3	38.0	12.1	63.0	3.0	20.6
Green Ext Time (p_c), s	0.3	3.3	0.0	6.9	0.1	0.0	0.0	15.3

Intersection Summary			
HCM 6th Ctrl Delay		62.7	
HCM 6th LOS		E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	781	140	210	1111	140	150	700	160	310	841	571
Future Volume (veh/h)	390	781	140	210	1111	140	150	700	160	310	841	571
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.88	1.00		0.92
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	822	147	221	1169	147	158	737	168	326	885	601
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	1570	278	270	1054	132	110	703	160	348	767	496
Arrive On Green	0.11	0.36	0.36	0.08	0.33	0.33	0.06	0.25	0.25	0.20	0.38	0.38
Sat Flow, veh/h	3456	4326	767	3456	3156	395	1781	2796	637	1781	1994	1288
Grp Volume(v), veh/h	411	645	324	221	656	660	158	468	437	326	784	702
Grp Sat Flow(s),veh/h/ln	1728	1702	1689	1728	1777	1775	1781	1777	1657	1781	1777	1505
Q Serve(g_s), s	17.7	24.6	24.9	10.4	55.1	55.1	10.2	41.5	41.5	29.7	63.5	63.5
Cycle Q Clear(g_c), s	17.7	24.6	24.9	10.4	55.1	55.1	10.2	41.5	41.5	29.7	63.5	63.5
Prop In Lane	1.00		0.45	1.00		0.22	1.00		0.38	1.00		0.86
Lane Grp Cap(c), veh/h	371	1236	613	270	593	593	110	447	417	348	684	579
V/C Ratio(X)	1.11	0.52	0.53	0.82	1.11	1.11	1.43	1.05	1.05	0.94	1.15	1.21
Avail Cap(c_a), veh/h	371	1236	613	744	593	593	110	447	417	430	684	579
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)	0.58	0.58	0.58	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.7	41.3	41.4	74.9	55.0	55.0	77.4	61.8	61.8	65.4	50.7	50.8
Incr Delay (d2), s/veh	69.2	0.9	1.9	2.6	61.2	63.9	237.8	54.6	56.2	24.6	82.3	110.7
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	11.4	10.4	10.7	4.7	34.1	34.5	12.0	25.4	23.9	15.8	43.3	41.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	142.9	42.2	43.3	77.5	116.2	118.9	315.2	116.3	118.0	90.1	133.1	161.5
LnGrp LOS	F	D	D	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h		1380			1537			1063			1812	
Approach Delay, s/veh		72.4			111.8			146.6			136.3	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	64.8	14.7	68.1	22.2	60.0	36.7	46.1
Change Period (Y+Rc), s	4.5	4.9	4.5	4.6	4.5	4.9	4.5	4.6
Max Green Setting (Gmax), s	35.5	37.3	10.2	63.5	17.7	55.1	39.8	33.9
Max Q Clear Time (g_c+I1), s	12.4	26.9	12.2	65.5	19.7	57.1	31.7	43.5
Green Ext Time (p_c), s	0.5	3.8	0.0	0.0	0.0	0.0	0.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	116.5
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	881	130	100	1331	30	90	100	90	20	100	60
Future Volume (veh/h)	30	881	130	100	1331	30	90	100	90	20	100	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	958	141	109	1447	33	98	109	98	22	109	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	1530	225	136	1854	42	119	717	308	41	170	101
Arrive On Green	0.05	0.49	0.49	0.08	0.52	0.52	0.07	0.20	0.20	0.02	0.16	0.16
Sat Flow, veh/h	1781	3097	456	1781	3550	81	1781	3554	1526	1781	1077	642
Grp Volume(v), veh/h	33	549	550	109	723	757	98	109	98	22	0	174
Grp Sat Flow(s),veh/h/ln	1781	1777	1776	1781	1777	1854	1781	1777	1526	1781	0	1720
Q Serve(g_s), s	1.8	22.7	22.7	6.0	32.8	32.9	5.4	2.5	5.5	1.2	0.0	9.5
Cycle Q Clear(g_c), s	1.8	22.7	22.7	6.0	32.8	32.9	5.4	2.5	5.5	1.2	0.0	9.5
Prop In Lane	1.00		0.26	1.00		0.04	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	86	878	877	136	928	968	119	717	308	41	0	271
V/C Ratio(X)	0.39	0.63	0.63	0.80	0.78	0.78	0.82	0.15	0.32	0.54	0.00	0.64
Avail Cap(c_a), veh/h	143	878	877	169	928	968	119	984	423	98	0	447
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)	0.72	0.72	0.72	1.00	1.00	1.00	0.88	0.88	0.88	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.2	18.5	18.5	45.4	19.2	19.3	46.1	32.9	34.0	48.3	0.0	39.5
Incr Delay (d2), s/veh	0.8	2.4	2.4	15.6	6.4	6.2	29.8	0.1	0.6	4.1	0.0	3.0
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	0.8	8.9	8.9	3.2	13.5	14.1	3.4	1.1	2.0	0.6	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.9	21.0	21.0	61.0	25.7	25.5	75.9	33.0	34.7	52.4	0.0	42.5
LnGrp LOS	D	C	C	E	C	C	E	C	C	D	A	D
Approach Vol, veh/h		1132			1589			305			196	
Approach Delay, s/veh		21.7			28.0			47.3			43.6	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	54.9	11.2	21.8	9.3	57.7	6.8	26.2
Change Period (Y+Rc), s	4.5	5.5	4.5	6.0	4.5	* 5.5	4.5	* 6
Max Green Setting (Gmax), s	9.5	37.3	6.7	26.0	8.0	* 39	5.5	* 28
Max Q Clear Time (g_c+I1), s	3.8	24.7	7.4	11.5	3.8	34.9	3.2	7.5
Green Ext Time (p_c), s	0.0	7.7	0.0	0.9	0.0	3.8	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	28.6
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)	80	40	150	100	120	80	140	570	30	30	790	180
Future Volume (veh/h)	80	40	150	100	120	80	140	570	30	30	790	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.67	1.00		0.76	1.00		0.91	1.00		0.84
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	45	169	112	135	90	157	640	34	34	888	202
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	70	124	164	198	238	177	1691	90	95	1242	282
Arrive On Green	0.12	0.12	0.12	0.20	0.20	0.20	0.20	0.99	0.99	0.05	0.45	0.45
Sat Flow, veh/h	1207	603	1061	829	1000	1206	1781	3412	181	1781	2761	627
Grp Volume(v), veh/h	135	0	169	247	0	90	157	333	341	34	571	519
Grp Sat Flow(s),veh/h/ln	1810	0	1061	1829	0	1206	1781	1777	1816	1781	1777	1612
Q Serve(g_s), s	10.7	0.0	17.5	18.8	0.0	9.7	12.9	0.4	0.4	2.8	39.1	39.2
Cycle Q Clear(g_c), s	10.7	0.0	17.5	18.8	0.0	9.7	12.9	0.4	0.4	2.8	39.1	39.2
Prop In Lane	0.67		1.00	0.45		1.00	1.00		0.10	1.00		0.39
Lane Grp Cap(c), veh/h	211	0	124	361	0	238	177	881	900	95	799	725
V/C Ratio(X)	0.64	0.00	1.37	0.68	0.00	0.38	0.89	0.38	0.38	0.36	0.71	0.72
Avail Cap(c_a), veh/h	211	0	124	372	0	245	226	881	900	95	799	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.09	0.09	0.09
Uniform Delay (d), s/veh	63.2	0.0	66.3	55.8	0.0	52.2	59.3	0.3	0.3	68.5	33.5	33.5
Incr Delay (d2), s/veh	5.8	0.0	207.6	4.5	0.0	0.7	21.9	1.1	1.1	0.1	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	11.9	9.1	0.0	3.0	6.3	0.4	0.4	1.3	16.7	15.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	0.0	273.9	60.4	0.0	52.9	81.1	1.4	1.4	68.6	33.7	33.8
LnGrp LOS	E	A	F	E	A	D	F	A	A	E	C	C
Approach Vol, veh/h		304			337			831			1124	
Approach Delay, s/veh		182.9			58.4			16.5			34.8	
Approach LOS		F			E			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	79.9		23.0	18.9	72.9		35.1
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5
Max Green Setting (Gmax), s	8.0	73.5		17.5	19.0	62.5		30.5
Max Q Clear Time (g_c+I1), s	14.8	2.4		19.5	14.9	41.2		20.8
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	3.7		1.0

Intersection Summary	
HCM 6th Ctrl Delay	49.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	702	121	121	893	30	201	241	81	40	392	70
Future Volume (veh/h)	110	702	121	121	893	30	201	241	81	40	392	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.83	1.00		0.78
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	739	127	127	940	32	212	254	85	42	413	74
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	2542	763	156	2555	87	277	577	183	53	517	91
Arrive On Green	0.08	0.50	0.50	0.09	0.50	0.50	0.08	0.23	0.23	0.03	0.18	0.18
Sat Flow, veh/h	1781	5106	1532	1781	5064	172	3456	2512	795	1781	2884	506
Grp Volume(v), veh/h	116	739	127	127	631	341	212	175	164	42	251	236
Grp Sat Flow(s),veh/h/ln	1781	1702	1532	1781	1702	1832	1728	1777	1530	1781	1777	1613
Q Serve(g_s), s	6.4	8.5	4.5	7.0	11.3	11.3	6.0	8.4	9.2	2.3	13.5	14.1
Cycle Q Clear(g_c), s	6.4	8.5	4.5	7.0	11.3	11.3	6.0	8.4	9.2	2.3	13.5	14.1
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.52	1.00		0.31
Lane Grp Cap(c), veh/h	144	2542	763	156	1718	925	277	408	351	53	319	289
V/C Ratio(X)	0.81	0.29	0.17	0.81	0.37	0.37	0.76	0.43	0.47	0.79	0.79	0.82
Avail Cap(c_a), veh/h	267	2542	763	267	1718	925	415	498	428	125	409	371
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	0.81	0.81	0.81	0.60	0.60	0.60	0.76	0.76	0.76
Uniform Delay (d), s/veh	45.2	14.7	13.7	44.8	15.1	15.1	45.1	32.9	33.2	48.2	39.2	39.4
Incr Delay (d2), s/veh	4.0	0.3	0.5	3.2	0.5	0.9	1.3	0.5	0.7	7.1	6.4	8.7
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	2.9	3.1	1.6	3.1	4.2	4.6	2.6	3.6	3.4	1.1	6.3	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.2	15.0	14.2	48.0	15.6	16.0	46.3	33.4	33.9	55.3	45.6	48.2
LnGrp LOS	D	B	B	D	B	B	D	C	C	E	D	D
Approach Vol, veh/h		982			1099			551			529	
Approach Delay, s/veh		19.0			19.4			38.5			47.5	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	54.3	11.0	22.9	11.1	55.0	6.0	28.0
Change Period (Y+Rc), s	3.0	4.5	3.0	5.0	3.0	4.5	3.0	5.0
Max Green Setting (Gmax), s	15.0	34.5	12.0	23.0	15.0	34.5	7.0	28.0
Max Q Clear Time (g_c+I1), s	9.0	10.5	8.0	16.1	8.4	13.3	4.3	11.2
Green Ext Time (p_c), s	0.0	6.4	0.0	1.9	0.0	7.3	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	461	242	40	571	40	282	272	181	70	383	111
Future Volume (veh/h)	30	461	242	40	571	40	282	272	181	70	383	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.90	1.00		1.00	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	518	0	45	642	45	312	314	0	79	430	125
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1472		340	1384	97	361	379		464	487	400
Arrive On Green	0.41	0.41	0.00	0.41	0.41	0.41	0.20	0.20	0.00	0.26	0.26	0.26
Sat Flow, veh/h	748	3554	1585	874	3341	234	1781	1870	1585	1781	1870	1535
Grp Volume(v), veh/h	34	518	0	45	341	346	312	314	0	79	430	125
Grp Sat Flow(s),veh/h/ln	748	1777	1585	874	1777	1798	1781	1870	1585	1781	1870	1535
Q Serve(g_s), s	3.8	11.0	0.0	4.1	15.3	15.4	18.6	17.7	0.0	3.8	24.3	7.2
Cycle Q Clear(g_c), s	19.2	11.0	0.0	15.1	15.3	15.4	18.6	17.7	0.0	3.8	24.3	7.2
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	1472		340	736	745	361	379		464	487	400
V/C Ratio(X)	0.13	0.35		0.13	0.46	0.46	0.86	0.83		0.17	0.88	0.31
Avail Cap(c_a), veh/h	271	1472		340	736	745	478	502		688	723	593
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)	0.96	0.96	0.00	1.00	1.00	1.00	0.87	0.87	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	22.1	0.0	27.3	23.4	23.4	42.4	42.0	0.0	31.5	39.1	32.8
Incr Delay (d2), s/veh	0.9	0.6	0.0	0.1	0.3	0.3	9.9	6.8	0.0	0.1	7.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.5	0.0	0.9	6.3	6.4	9.0	8.7	0.0	1.6	11.9	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	22.7	0.0	27.4	23.7	23.7	52.3	48.8	0.0	31.6	46.8	33.1
LnGrp LOS	C	C		C	C	C	D	D		C	D	C
Approach Vol, veh/h		552	A		732			626	A		634	
Approach Delay, s/veh		23.3			23.9			50.6			42.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	50.1	33.1	50.1	26.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	24.5	42.5	24.5	29.5
Max Q Clear Time (g_c+I1), s	21.2	26.3	17.4	20.6
Green Ext Time (p_c), s	1.0	2.4	2.2	1.5

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

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR] 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)	280	813	793	151	1124	90	421	381	80	70	491	370
Future Volume (veh/h)	280	813	793	151	1124	90	421	381	80	70	491	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.90
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	856	835	159	1183	95	443	401	84	74	648	302
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	345	1801	773	276	1699	513	499	1122	459	136	927	352
Arrive On Green	0.10	0.35	0.35	0.08	0.33	0.33	0.14	0.32	0.32	0.08	0.25	0.25
Sat Flow, veh/h	3456	5106	1543	3456	5106	1542	3456	3554	1453	1781	3741	1422
Grp Volume(v), veh/h	295	856	835	159	1183	95	443	401	84	74	648	302
Grp Sat Flow(s),veh/h/ln	1728	1702	1543	1728	1702	1542	1728	1777	1453	1781	1870	1422
Q Serve(g_s), s	12.6	19.6	52.9	6.7	30.2	6.6	18.9	13.1	6.3	6.0	23.6	30.4
Cycle Q Clear(g_c), s	12.6	19.6	52.9	6.7	30.2	6.6	18.9	13.1	6.3	6.0	23.6	30.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	345	1801	773	276	1699	513	499	1122	459	136	927	352
V/C Ratio(X)	0.85	0.48	1.08	0.58	0.70	0.19	0.89	0.36	0.18	0.54	0.70	0.86
Avail Cap(c_a), veh/h	560	1801	773	276	1699	513	905	1341	548	152	927	352
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	0.82	0.82	0.82	0.66	0.66	0.66
Uniform Delay (d), s/veh	66.4	37.8	37.9	66.6	43.5	35.6	63.0	39.6	37.3	66.8	51.3	53.9
Incr Delay (d2), s/veh	3.8	0.9	56.2	1.9	2.4	0.8	1.8	0.1	0.1	0.8	2.0	14.1
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	5.7	8.2	39.6	3.0	12.8	2.6	8.4	5.8	0.0	2.8	11.3	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.2	38.7	94.1	68.5	45.9	36.4	64.8	39.6	37.3	67.6	53.3	68.0
LnGrp LOS	E	D	F	E	D	D	E	D	D	E	D	E
Approach Vol, veh/h		1986			1437			928			1024	
Approach Delay, s/veh		66.7			47.7			51.4			58.7	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	60.9	27.4	44.1	20.7	57.9	17.2	54.3
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.9	* 5.7	8.0	* 5.7	6.9
Max Green Setting (Gmax), s	* 12	42.3	* 39	30.1	* 24	30.0	* 13	56.6
Max Q Clear Time (g_c+I1), s	10.7	54.9	20.9	32.4	14.6	32.2	8.0	15.1
Green Ext Time (p_c), s	0.1	0.0	0.8	0.0	0.4	0.0	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	57.5
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* 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)	70	381	170	110	763	50	210	210	100	131	481	261
Future Volume (veh/h)	70	381	170	110	763	50	210	210	100	131	481	261
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	428	191	124	857	56	236	236	112	147	540	293
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	1247	527	150	1284	84	263	734	335	174	577	313
Arrive On Green	0.06	0.36	0.36	0.08	0.38	0.38	0.15	0.31	0.31	0.10	0.26	0.26
Sat Flow, veh/h	1781	3489	1473	1781	3380	221	1781	2347	1071	1781	2198	1190
Grp Volume(v), veh/h	79	417	202	124	451	462	236	176	172	147	436	397
Grp Sat Flow(s),veh/h/ln	1781	1702	1558	1781	1777	1824	1781	1777	1641	1781	1777	1611
Q Serve(g_s), s	5.2	10.8	11.5	8.2	25.3	25.3	15.6	9.1	9.6	9.7	28.8	28.9
Cycle Q Clear(g_c), s	5.2	10.8	11.5	8.2	25.3	25.3	15.6	9.1	9.6	9.7	28.8	28.9
Prop In Lane	1.00		0.95	1.00		0.12	1.00		0.65	1.00		0.74
Lane Grp Cap(c), veh/h	110	1217	557	150	675	693	263	556	513	174	467	423
V/C Ratio(X)	0.72	0.34	0.36	0.83	0.67	0.67	0.90	0.32	0.33	0.84	0.93	0.94
Avail Cap(c_a), veh/h	132	1217	557	238	675	693	325	556	513	260	480	435
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	0.21	0.21	0.21	0.77	0.77	0.77	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	28.2	28.5	54.1	30.9	30.9	50.2	31.5	31.6	53.2	43.2	43.3
Incr Delay (d2), s/veh	10.0	0.8	1.8	1.4	1.1	1.1	16.6	0.1	0.1	9.9	24.9	27.2
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	2.6	4.4	4.5	3.7	10.7	10.9	8.1	3.9	3.8	4.8	15.6	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.2	29.0	30.3	55.5	32.0	32.0	66.8	31.5	31.7	63.1	68.1	70.4
LnGrp LOS	E	C	C	E	C	C	E	C	C	E	E	E
Approach Vol, veh/h		698			1037			584			980	
Approach Delay, s/veh		33.5			34.8			45.8			68.3	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	47.8	21.8	36.1	11.5	50.5	15.8	42.1
Change Period (Y+Rc), s	4.1	4.9	4.1	4.6	4.1	4.9	4.1	4.6
Max Green Setting (Gmax), s	10.0	32.0	21.9	32.4	8.9	39.1	17.5	36.8
Max Q Clear Time (g_c+I1), s	10.2	13.5	17.6	30.9	7.2	27.3	11.7	11.6
Green Ext Time (p_c), s	0.1	2.4	0.1	0.6	0.0	2.9	0.1	1.3

Intersection Summary	
HCM 6th Ctrl Delay	46.4
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	345	120	90	659	315	140	472	50	264	892	172
Future Volume (veh/h)	122	345	120	90	659	315	140	472	50	264	892	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	359	125	94	686	328	146	492	52	275	929	179
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	820	281	132	726	347	139	1095	115	175	1060	204
Arrive On Green	0.08	0.32	0.32	0.07	0.31	0.31	0.08	0.34	0.34	0.10	0.36	0.36
Sat Flow, veh/h	1781	2577	881	1781	2308	1103	1781	3234	340	1781	2957	569
Grp Volume(v), veh/h	127	246	238	94	528	486	146	269	275	275	558	550
Grp Sat Flow(s),veh/h/ln	1781	1777	1682	1781	1777	1634	1781	1777	1798	1781	1777	1750
Q Serve(g_s), s	8.1	12.6	13.0	5.9	33.3	33.4	9.0	13.6	13.7	11.3	33.8	33.8
Cycle Q Clear(g_c), s	8.1	12.6	13.0	5.9	33.3	33.4	9.0	13.6	13.7	11.3	33.8	33.8
Prop In Lane	1.00		0.52	1.00		0.68	1.00		0.19	1.00		0.33
Lane Grp Cap(c), veh/h	139	566	535	132	559	514	139	602	609	175	637	627
V/C Ratio(X)	0.91	0.43	0.45	0.71	0.95	0.95	1.05	0.45	0.45	1.57	0.88	0.88
Avail Cap(c_a), veh/h	139	566	535	139	559	514	139	613	621	175	649	639
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)	0.90	0.90	0.90	1.00	1.00	1.00	0.89	0.89	0.89	0.32	0.32	0.32
Uniform Delay (d), s/veh	52.6	31.0	31.1	52.0	38.5	38.5	53.0	29.6	29.7	51.9	34.5	34.5
Incr Delay (d2), s/veh	46.2	2.2	2.4	12.2	26.7	28.3	85.0	1.7	1.7	265.8	5.5	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	5.6	5.5	3.1	18.3	17.0	7.3	6.0	6.1	17.9	15.1	14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.8	33.2	33.5	64.2	65.2	66.7	138.0	31.3	31.4	317.6	39.9	40.1
LnGrp LOS	F	C	C	E	E	E	F	C	C	F	D	D
Approach Vol, veh/h		611			1108			690			1383	
Approach Delay, s/veh		47.0			65.8			53.9			95.2	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	41.7	13.7	46.3	13.7	41.3	16.0	44.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 9	35.4	* 9	42.0	* 9	35.4	* 11	39.7
Max Q Clear Time (g_c+I1), s	17.9	15.0	11.0	35.8	10.1	35.4	13.3	15.7
Green Ext Time (p_c), s	0.0	6.2	0.0	5.1	0.0	0.0	0.0	7.8

Intersection Summary	
HCM 6th Ctrl Delay	71.3
HCM 6th LOS	E

Notes

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

Intersection	
Int Delay, s/veh	3.8

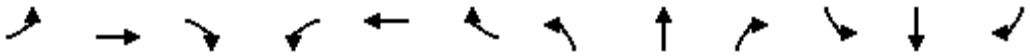
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	517	72	72	1268	94	62
Future Vol, veh/h	517	72	72	1268	94	62
Conflicting Peds, #/hr	0	45	45	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	45	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	550	77	77	1349	100	66

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	672	0	1473	369
Stage 1	-	-	-	-	634	-
Stage 2	-	-	-	-	839	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	915	-	118	628
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	384	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	876	-	~ 73	595
Mov Cap-2 Maneuver	-	-	-	-	177	-
Stage 1	-	-	-	-	470	-
Stage 2	-	-	-	-	247	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	34.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	177	595	-	-	876	-
HCM Lane V/C Ratio	0.565	0.111	-	-	0.087	-
HCM Control Delay (s)	48.9	11.8	-	-	9.5	1.5
HCM Lane LOS	E	B	-	-	A	A
HCM 95th %tile Q(veh)	3	0.4	-	-	0.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	290	132	80	460	72	202	491	20	82	543	102
Future Volume (veh/h)	174	290	132	80	460	72	202	491	20	82	543	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.79	1.00		0.96	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	322	147	89	511	80	224	546	22	91	603	113
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	614	268	113	621	96	257	1508	61	116	1051	196
Arrive On Green	0.13	0.27	0.27	0.06	0.21	0.21	0.14	0.43	0.43	0.06	0.35	0.35
Sat Flow, veh/h	1781	2256	982	1781	2961	458	1781	3475	140	1781	2961	553
Grp Volume(v), veh/h	193	250	219	89	304	287	224	279	289	91	361	355
Grp Sat Flow(s),veh/h/ln	1781	1777	1461	1781	1777	1642	1781	1777	1838	1781	1777	1737
Q Serve(g_s), s	10.6	11.9	12.8	4.9	16.3	16.7	12.3	10.5	10.6	5.0	16.5	16.6
Cycle Q Clear(g_c), s	10.6	11.9	12.8	4.9	16.3	16.7	12.3	10.5	10.6	5.0	16.5	16.6
Prop In Lane	1.00		0.67	1.00		0.28	1.00		0.08	1.00		0.32
Lane Grp Cap(c), veh/h	225	484	398	113	373	344	257	771	798	116	631	617
V/C Ratio(X)	0.86	0.52	0.55	0.78	0.82	0.83	0.87	0.36	0.36	0.79	0.57	0.58
Avail Cap(c_a), veh/h	276	484	398	189	373	345	330	771	798	178	631	617
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	0.27	0.27	0.27	0.82	0.82	0.82
Uniform Delay (d), s/veh	42.8	30.8	31.1	46.1	37.7	37.8	41.9	19.0	19.0	46.1	26.1	26.2
Incr Delay (d2), s/veh	17.0	1.1	1.8	4.4	13.5	16.1	4.9	0.4	0.3	4.5	3.1	3.2
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	5.6	5.1	4.6	2.3	8.3	8.1	5.6	4.2	4.4	2.3	7.3	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.8	31.9	33.0	50.6	51.1	53.9	46.8	19.4	19.4	50.6	29.2	29.3
LnGrp LOS	E	C	C	D	D	D	D	B	B	D	C	C
Approach Vol, veh/h		662			680			792			807	
Approach Delay, s/veh		40.4			52.2			27.1			31.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	47.9	9.9	32.2	17.9	40.0	16.1	26.0
Change Period (Y+Rc), s	3.5	4.5	3.5	5.0	3.5	4.5	3.5	5.0
Max Green Setting (Gmax), s	10.0	37.0	10.6	25.9	18.5	28.5	15.5	21.0
Max Q Clear Time (g_c+I1), s	7.0	12.6	6.9	14.8	14.3	18.6	12.6	18.7
Green Ext Time (p_c), s	0.0	4.1	0.0	2.5	0.1	3.6	0.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	37.2
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	94.1

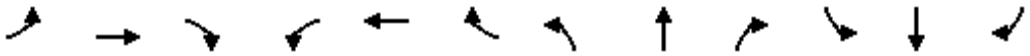
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	270	20	134	432	40	20	72	42	20	175	130
Future Vol, veh/h	20	270	20	134	432	40	20	72	42	20	175	130
Conflicting Peds, #/hr	10	0	24	24	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	293	22	146	470	43	22	78	46	22	190	141

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	523	0	0	339	0	0	1004	1187	192	1034	1177	277
Stage 1	-	-	-	-	-	-	372	372	-	794	794	-
Stage 2	-	-	-	-	-	-	632	815	-	240	383	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1040	-	-	1217	-	-	196	187	817	186	~ 190	720
Stage 1	-	-	-	-	-	-	621	617	-	348	398	-
Stage 2	-	-	-	-	-	-	435	389	-	742	610	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1030	-	-	1189	-	-	-	146	791	86	~ 148	706
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	146	-	86	~ 148	-
Stage 1	-	-	-	-	-	-	591	587	-	336	326	-
Stage 2	-	-	-	-	-	-	119	319	-	585	581	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	2.2		$ 393.3
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1030	-	-	1189	-	-	203
HCM Lane V/C Ratio	-	0.021	-	-	0.122	-	-	1.74
HCM Control Delay (s)	-	8.6	0.1	-	8.4	0.5	-	$ 393.3
HCM Lane LOS	-	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	-	0.1	-	-	0.4	-	-	24.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	182	160	90	352	112	140	414	40	30	555	30
Future Volume (veh/h)	112	182	160	90	352	112	140	414	40	30	555	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	200	176	99	387	123	154	455	44	33	610	33
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	562	458	125	752	235	184	1451	140	43	641	35
Arrive On Green	0.09	0.30	0.30	0.07	0.29	0.29	0.10	0.45	0.45	0.02	0.37	0.37
Sat Flow, veh/h	1781	1870	1524	1781	2634	824	1781	3258	313	1781	1752	95
Grp Volume(v), veh/h	123	200	176	99	259	251	154	247	252	33	0	643
Grp Sat Flow(s),veh/h/ln	1781	1870	1524	1781	1777	1681	1781	1777	1794	1781	0	1846
Q Serve(g_s), s	6.8	8.4	9.1	5.5	12.2	12.5	8.5	9.0	9.1	1.8	0.0	33.9
Cycle Q Clear(g_c), s	6.8	8.4	9.1	5.5	12.2	12.5	8.5	9.0	9.1	1.8	0.0	33.9
Prop In Lane	1.00		1.00	1.00		0.49	1.00		0.17	1.00		0.05
Lane Grp Cap(c), veh/h	151	562	458	125	507	480	184	791	799	43	0	676
V/C Ratio(X)	0.81	0.36	0.38	0.79	0.51	0.52	0.84	0.31	0.32	0.77	0.00	0.95
Avail Cap(c_a), veh/h	169	562	458	159	507	480	221	791	799	109	0	698
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	0.87	0.87	0.87	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.0	27.4	27.7	45.8	29.9	30.0	44.0	17.9	17.9	48.5	0.0	30.8
Incr Delay (d2), s/veh	20.6	1.8	2.4	14.8	3.6	4.0	15.8	0.1	0.1	10.3	0.0	22.4
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	3.8	3.9	3.6	2.9	5.6	5.5	4.5	3.6	3.6	0.9	0.0	18.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.5	29.1	30.1	60.6	33.5	34.0	59.8	18.0	18.0	58.9	0.0	53.3
LnGrp LOS	E	C	C	E	C	C	E	B	B	E	A	D
Approach Vol, veh/h		499			609			653			676	
Approach Delay, s/veh		38.4			38.1			27.9			53.5	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	34.6	13.8	41.1	12.0	33.1	5.9	49.0
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	8.9	24.9	12.4	37.8	9.5	24.3	6.1	44.1
Max Q Clear Time (g_c+I1), s	7.5	11.1	10.5	35.9	8.8	14.5	3.8	11.1
Green Ext Time (p_c), s	0.0	1.1	0.0	0.7	0.0	1.8	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	39.7
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	331	110	70	521	120	80	270	70	100	400	90
Future Volume (veh/h)	70	331	110	70	521	120	80	270	70	100	400	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	399	133	84	628	145	96	325	84	120	482	108
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	1322	435	112	1422	328	120	526	133	146	584	130
Arrive On Green	0.07	0.51	0.51	0.06	0.50	0.50	0.07	0.19	0.19	0.08	0.20	0.20
Sat Flow, veh/h	1781	2611	859	1781	2854	658	1781	2781	705	1781	2866	637
Grp Volume(v), veh/h	84	270	262	84	391	382	96	205	204	120	297	293
Grp Sat Flow(s),veh/h/ln	1781	1777	1693	1781	1777	1734	1781	1777	1710	1781	1777	1727
Q Serve(g_s), s	5.5	10.6	10.9	5.6	17.0	17.0	6.4	12.7	13.2	8.0	19.2	19.5
Cycle Q Clear(g_c), s	5.5	10.6	10.9	5.6	17.0	17.0	6.4	12.7	13.2	8.0	19.2	19.5
Prop In Lane	1.00		0.51	1.00		0.38	1.00		0.41	1.00		0.37
Lane Grp Cap(c), veh/h	125	900	857	112	886	864	120	336	323	146	362	352
V/C Ratio(X)	0.67	0.30	0.31	0.75	0.44	0.44	0.80	0.61	0.63	0.82	0.82	0.83
Avail Cap(c_a), veh/h	191	900	857	191	886	864	236	406	390	266	435	423
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	0.77	0.77	0.77	1.00	1.00	1.00	0.35	0.35	0.35
Uniform Delay (d), s/veh	54.4	17.2	17.3	55.3	19.3	19.4	55.2	44.6	44.8	54.2	45.7	45.8
Incr Delay (d2), s/veh	2.3	0.9	0.9	3.0	1.2	1.3	4.6	0.8	1.1	1.5	3.2	3.7
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	2.5	4.5	4.4	2.6	7.1	7.0	3.0	5.6	5.6	3.6	8.7	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	18.1	18.2	58.3	20.6	20.6	59.7	45.4	45.9	55.8	48.9	49.5
LnGrp LOS	E	B	B	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		616			857			505			710	
Approach Delay, s/veh		23.4			24.3			48.3			50.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	67.2	12.2	29.0	12.6	66.2	14.0	27.3
Change Period (Y+Rc), s	4.1	6.4	4.1	4.6	4.1	6.4	4.1	4.6
Max Green Setting (Gmax), s	12.9	42.6	15.9	29.4	12.9	42.6	17.9	27.4
Max Q Clear Time (g_c+I1), s	7.5	12.9	8.4	21.5	7.5	19.0	10.0	15.2
Green Ext Time (p_c), s	0.0	2.1	0.1	1.5	0.0	3.1	0.1	1.2

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	282	70	80	554	212	80	260	30	202	590	80
Future Volume (veh/h)	80	282	70	80	554	212	80	260	30	202	590	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	297	74	84	583	223	84	274	32	213	621	84
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	1102	270	129	977	373	145	646	75	246	811	109
Arrive On Green	0.07	0.39	0.39	0.14	0.78	0.78	0.08	0.20	0.20	0.14	0.26	0.26
Sat Flow, veh/h	1781	2814	688	1781	2495	952	1781	3195	369	1781	3132	423
Grp Volume(v), veh/h	84	185	186	84	415	391	84	151	155	213	352	353
Grp Sat Flow(s),veh/h/ln	1781	1777	1726	1781	1777	1670	1781	1777	1787	1781	1777	1778
Q Serve(g_s), s	4.6	7.1	7.3	4.5	9.5	9.5	4.5	7.4	7.6	11.7	18.3	18.4
Cycle Q Clear(g_c), s	4.6	7.1	7.3	4.5	9.5	9.5	4.5	7.4	7.6	11.7	18.3	18.4
Prop In Lane	1.00		0.40	1.00		0.57	1.00		0.21	1.00		0.24
Lane Grp Cap(c), veh/h	129	696	676	129	696	654	145	359	361	246	460	460
V/C Ratio(X)	0.65	0.27	0.27	0.65	0.60	0.60	0.58	0.42	0.43	0.87	0.76	0.77
Avail Cap(c_a), veh/h	166	696	676	183	696	654	201	409	411	326	533	533
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	0.37	0.37	0.37
Uniform Delay (d), s/veh	45.2	20.7	20.7	41.6	7.6	7.6	44.3	34.8	34.9	42.2	34.3	34.3
Incr Delay (d2), s/veh	2.2	0.9	0.9	2.1	3.7	4.0	1.4	2.8	2.9	5.8	3.9	3.9
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	2.1	3.0	3.0	1.9	2.9	2.8	2.0	3.4	3.5	5.4	8.2	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.4	21.5	21.7	43.7	11.4	11.6	45.7	37.6	37.8	48.0	38.1	38.2
LnGrp LOS	D	C	C	D	B	B	D	D	D	D	D	D
Approach Vol, veh/h		455			890			390			918	
Approach Delay, s/veh		26.4			14.5			39.4			40.5	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	44.3	12.8	31.0	11.9	44.3	18.5	25.3
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 16	28.8	* 11	30.0	* 9.3	29.8	* 18	23.0
Max Q Clear Time (g_c+I1), s	6.5	9.3	6.5	20.4	6.6	11.5	13.7	9.6
Green Ext Time (p_c), s	0.0	4.6	0.0	5.5	0.0	10.1	0.1	3.0

Intersection Summary	
HCM 6th Ctrl Delay	29.2
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	142.2

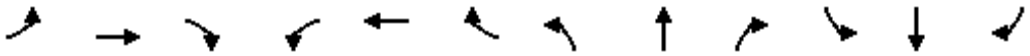
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	525	52	102	1059	62	52	32	62	42	32	42
Future Vol, veh/h	32	525	52	102	1059	62	52	32	62	42	32	42
Conflicting Peds, #/hr	20	0	18	18	0	20	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	553	55	107	1115	65	55	34	65	44	34	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1200	0	0	626	0	0	1466	2081	332	1754	2076	620
Stage 1	-	-	-	-	-	-	667	667	-	1382	1382	-
Stage 2	-	-	-	-	-	-	799	1414	-	372	694	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	577	-	-	952	-	-	89	53	664	54	53	431
Stage 1	-	-	-	-	-	-	414	455	-	151	210	-
Stage 2	-	-	-	-	-	-	345	202	-	621	442	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	566	-	-	936	-	-	~ 21	41	646	~ 13	41	419
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 21	41	-	~ 13	41	-
Stage 1	-	-	-	-	-	-	369	406	-	135	182	-
Stage 2	-	-	-	-	-	-	221	176	-	460	395	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.8	$ 600.8	$ 1797.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	24	160	566	-	-	936	-	-	28
HCM Lane V/C Ratio	2.982	0.513	0.06	-	-	0.115	-	-	4.361
HCM Control Delay (s)	$ 1233.7	49.1	11.8	0.5	-	9.3	-	-	$ 1797.6
HCM Lane LOS	F	E	B	A	-	A	-	-	F
HCM 95th %tile Q(veh)	8.9	2.5	0.2	-	-	0.4	-	-	14.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	587	155	114	1244	42	165	94	72	20	135	62
Future Volume (veh/h)	42	587	155	114	1244	42	165	94	72	20	135	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	0.99		0.95	0.99		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	683	180	133	1447	49	192	109	84	23	157	72
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	1407	371	163	1897	64	286	239	184	60	282	121
Arrive On Green	0.02	0.17	0.17	0.09	0.54	0.54	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	2757	726	1781	3499	118	1139	958	738	85	1133	487
Grp Volume(v), veh/h	49	440	423	133	733	763	192	0	193	252	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1707	1781	1777	1840	1139	0	1696	1705	0	0
Q Serve(g_s), s	2.7	22.4	22.4	7.3	32.2	32.4	9.9	0.0	9.6	1.7	0.0	0.0
Cycle Q Clear(g_c), s	2.7	22.4	22.4	7.3	32.2	32.4	22.6	0.0	9.6	12.7	0.0	0.0
Prop In Lane	1.00		0.43	1.00		0.06	1.00		0.44	0.09		0.29
Lane Grp Cap(c), veh/h	106	907	871	163	964	998	286	0	423	464	0	0
V/C Ratio(X)	0.46	0.49	0.49	0.82	0.76	0.76	0.67	0.00	0.46	0.54	0.00	0.00
Avail Cap(c_a), veh/h	148	907	871	230	964	998	308	0	456	497	0	0
HCM Platoon Ratio	0.33	0.33	0.33	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	0.39	0.39	0.39	0.88	0.00	0.88	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.4	29.7	29.7	44.6	17.8	17.9	38.5	0.0	31.8	32.9	0.0	0.0
Incr Delay (d2), s/veh	1.2	1.9	1.9	4.1	2.3	2.2	3.4	0.0	0.3	0.4	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	1.2	11.0	10.6	3.4	12.6	13.1	4.8	0.0	3.9	5.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	31.5	31.6	48.7	20.1	20.1	41.9	0.0	32.1	33.3	0.0	0.0
LnGrp LOS	D	C	C	D	C	C	D	A	C	C	A	A
Approach Vol, veh/h		912			1629			385			252	
Approach Delay, s/veh		32.5			22.4			36.9			33.3	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.8	56.1		30.0	10.6	59.3		30.0				
Change Period (Y+Rc), s	* 4.7	5.1		5.1	* 4.7	5.1		5.1				
Max Green Setting (Gmax), s	* 13	45.3		26.9	* 8.3	49.9		26.9				
Max Q Clear Time (g_c+I1), s	9.3	24.4		14.7	4.7	34.4		24.6				
Green Ext Time (p_c), s	0.1	3.5		0.8	0.0	6.3		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		28.0	
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)	94	445	137	74	963	167	127	276	64	94	425	125
Future Volume (veh/h)	94	445	137	74	963	167	127	276	64	94	425	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.90	1.00		0.90
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	484	149	80	1047	182	138	300	70	102	462	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	1054	322	102	1159	201	193	450	254	117	559	267
Arrive On Green	0.07	0.40	0.40	0.06	0.39	0.39	0.18	0.18	0.18	0.19	0.19	0.19
Sat Flow, veh/h	1781	2647	808	1781	3002	520	1078	2515	1421	625	2991	1428
Grp Volume(v), veh/h	102	324	309	80	619	610	232	206	70	300	264	136
Grp Sat Flow(s),veh/h/ln	1781	1777	1678	1781	1777	1746	1816	1777	1421	1839	1777	1428
Q Serve(g_s), s	6.8	16.1	16.3	5.3	39.3	39.6	14.5	12.9	5.1	19.0	17.0	10.3
Cycle Q Clear(g_c), s	6.8	16.1	16.3	5.3	39.3	39.6	14.5	12.9	5.1	19.0	17.0	10.3
Prop In Lane	1.00		0.48	1.00		0.30	0.59		1.00	0.34		1.00
Lane Grp Cap(c), veh/h	123	707	668	102	686	674	325	318	254	344	332	267
V/C Ratio(X)	0.83	0.46	0.46	0.79	0.90	0.91	0.72	0.65	0.28	0.87	0.79	0.51
Avail Cap(c_a), veh/h	123	707	668	174	686	674	365	357	285	357	345	277
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)	0.85	0.85	0.85	0.29	0.29	0.29	0.93	0.93	0.93	0.74	0.74	0.74
Uniform Delay (d), s/veh	55.1	26.6	26.6	55.9	34.7	34.8	46.4	45.8	42.6	47.4	46.6	43.8
Incr Delay (d2), s/veh	29.5	1.8	2.0	1.5	6.1	6.5	5.4	3.2	0.5	15.0	8.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	7.1	6.8	2.4	17.6	17.5	7.0	5.9	1.8	10.0	8.2	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.7	28.4	28.6	57.4	40.8	41.3	51.8	48.9	43.1	62.4	54.6	44.3
LnGrp LOS	F	C	C	E	D	D	D	D	D	E	D	D
Approach Vol, veh/h		735			1309			508			700	
Approach Delay, s/veh		36.3			42.1			49.4			55.9	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.5	53.9		28.0	13.0	52.4		26.6
Change Period (Y+Rc), s	* 4.7	6.1		5.6	* 4.7	6.1		5.1
Max Green Setting (Gmax), s	* 12	39.4		23.3	* 8.3	42.8		24.1
Max Q Clear Time (g_c+I1), s	17.3	18.3		21.0	8.8	41.6		16.5
Green Ext Time (p_c), s	0.0	2.4		0.7	0.0	0.7		1.7

Intersection Summary	
HCM 6th Ctrl Delay	44.9
HCM 6th LOS	D

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)	123	355	143	173	844	93	175	496	60	83	672	143
Future Volume (veh/h)	123	355	143	173	844	93	175	496	60	83	672	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	399	153	194	948	48	197	557	67	93	755	46
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	864	326	175	1221	62	170	595	488	118	980	60
Arrive On Green	0.09	0.35	0.35	0.10	0.36	0.36	0.10	0.32	0.32	0.07	0.29	0.29
Sat Flow, veh/h	1781	2490	940	1781	3433	174	1781	1870	1532	1781	3394	207
Grp Volume(v), veh/h	138	283	269	194	491	505	197	557	67	93	395	406
Grp Sat Flow(s),veh/h/ln	1781	1777	1654	1781	1777	1830	1781	1870	1532	1781	1777	1824
Q Serve(g_s), s	8.8	14.2	14.6	11.3	28.3	28.3	11.0	33.2	3.6	5.9	23.4	23.4
Cycle Q Clear(g_c), s	8.8	14.2	14.6	11.3	28.3	28.3	11.0	33.2	3.6	5.9	23.4	23.4
Prop In Lane	1.00		0.57	1.00		0.09	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	160	617	574	175	632	651	170	595	488	118	513	526
V/C Ratio(X)	0.86	0.46	0.47	1.11	0.78	0.78	1.16	0.94	0.14	0.79	0.77	0.77
Avail Cap(c_a), veh/h	160	617	574	175	632	651	170	607	497	124	530	544
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)	0.91	0.91	0.91	0.59	0.59	0.59	0.79	0.79	0.79	0.75	0.75	0.75
Uniform Delay (d), s/veh	51.7	29.2	29.3	51.9	33.0	33.0	52.0	38.1	27.9	52.9	37.4	37.4
Incr Delay (d2), s/veh	32.3	2.2	2.5	84.6	5.5	5.4	109.8	20.4	0.5	29.6	8.2	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	6.3	6.1	9.1	12.8	13.2	10.1	18.2	1.4	3.6	11.1	11.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.9	31.4	31.8	136.4	38.5	38.3	161.8	58.5	28.4	82.5	45.6	45.4
LnGrp LOS	F	C	C	F	D	D	F	E	C	F	D	D
Approach Vol, veh/h		690			1190			821			894	
Approach Delay, s/veh		42.1			54.4			80.8			49.4	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	45.0	15.7	38.3	15.0	46.0	12.3	41.7
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 11	38.8	* 11	34.3	* 10	39.8	* 8	37.3
Max Q Clear Time (g_c+I1), s	13.3	16.6	13.0	25.4	10.8	30.3	7.9	35.2
Green Ext Time (p_c), s	0.0	8.5	0.0	6.0	0.0	7.4	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	56.8
HCM 6th LOS	E

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)	30	554	82	82	1257	52	72	114	50	52	247	225
Future Volume (veh/h)	30	554	82	82	1257	52	72	114	50	52	247	225
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.99		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	652	96	96	1479	61	85	134	59	61	291	265
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	1538	226	122	1830	75	196	399	324	78	515	443
Arrive On Green	0.04	0.50	0.50	0.07	0.53	0.53	0.21	0.21	0.21	0.04	0.29	0.29
Sat Flow, veh/h	1781	3098	455	1781	3472	143	845	1870	1515	1781	1777	1528
Grp Volume(v), veh/h	35	374	374	96	755	785	85	134	59	61	291	265
Grp Sat Flow(s),veh/h/ln	1781	1777	1776	1781	1777	1838	845	1870	1515	1781	1777	1528
Q Serve(g_s), s	1.8	12.5	12.5	4.9	32.5	32.9	8.9	5.7	3.0	3.2	13.0	13.9
Cycle Q Clear(g_c), s	1.8	12.5	12.5	4.9	32.5	32.9	15.7	5.7	3.0	3.2	13.0	13.9
Prop In Lane	1.00		0.26	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	882	882	122	936	969	196	399	324	78	515	443
V/C Ratio(X)	0.51	0.42	0.42	0.78	0.81	0.81	0.43	0.34	0.18	0.78	0.57	0.60
Avail Cap(c_a), veh/h	117	882	882	201	936	969	227	468	379	96	597	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	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	43.9	14.9	15.0	42.7	18.1	18.2	38.2	31.0	30.0	44.1	28.1	28.4
Incr Delay (d2), s/veh	4.3	1.5	1.5	7.9	7.4	7.3	1.1	0.4	0.2	22.2	0.7	1.1
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	0.9	5.1	5.1	2.4	13.9	14.5	1.9	2.5	1.1	1.8	5.4	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	16.4	16.5	50.6	25.5	25.5	39.4	31.4	30.2	66.3	28.8	29.6
LnGrp LOS	D	B	B	D	C	C	D	C	C	E	C	C
Approach Vol, veh/h		783			1636			278			617	
Approach Delay, s/veh		17.9			27.0			33.6			32.8	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	50.8		31.5	8.1	53.6	7.1	24.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	3.0	4.5
Max Green Setting (Gmax), s	10.5	44.7		31.3	6.1	49.1	5.0	23.3
Max Q Clear Time (g_c+I1), s	6.9	14.5		15.9	3.8	34.9	5.2	17.7
Green Ext Time (p_c), s	0.0	4.0		2.5	0.0	7.6	0.0	0.5

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	342	70	140	804	60	90	362	80	70	552	50
Future Volume (veh/h)	30	342	70	140	804	60	90	362	80	70	552	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	422	86	173	993	74	111	447	99	86	681	62
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	1537	310	477	1754	131	231	1068	234	300	1220	111
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	529	2931	592	889	3346	249	712	2870	630	853	3279	298
Grp Volume(v), veh/h	37	254	254	173	527	540	111	275	271	86	369	374
Grp Sat Flow(s),veh/h/ln	529	1777	1746	889	1777	1818	712	1777	1723	853	1777	1801
Q Serve(g_s), s	4.4	6.9	7.0	11.7	17.4	17.4	12.7	10.0	10.2	7.2	14.3	14.3
Cycle Q Clear(g_c), s	21.8	6.9	7.0	18.7	17.4	17.4	27.0	10.0	10.2	17.4	14.3	14.3
Prop In Lane	1.00		0.34	1.00		0.14	1.00		0.37	1.00		0.17
Lane Grp Cap(c), veh/h	254	932	916	477	932	953	231	661	641	300	661	670
V/C Ratio(X)	0.15	0.27	0.28	0.36	0.57	0.57	0.48	0.42	0.42	0.29	0.56	0.56
Avail Cap(c_a), veh/h	254	932	916	477	932	953	339	932	903	430	932	944
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	21.4	11.5	11.5	16.7	14.0	14.0	32.3	20.2	20.3	26.8	21.6	21.6
Incr Delay (d2), s/veh	1.2	0.7	0.8	2.1	2.5	2.4	1.2	0.3	0.3	0.4	0.5	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	0.6	2.7	2.7	2.5	6.9	7.1	2.2	4.0	4.0	1.5	5.7	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	12.2	12.2	18.8	16.5	16.4	33.5	20.6	20.6	27.2	22.1	22.1
LnGrp LOS	C	B	B	B	B	B	C	C	C	C	C	C
Approach Vol, veh/h		545			1240			657			829	
Approach Delay, s/veh		12.9			16.8			22.8			22.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	50.0	36.8	50.0	36.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	45.5	45.5	45.5	45.5
Max Q Clear Time (g_c+I1), s	23.8	19.4	20.7	29.0
Green Ext Time (p_c), s	2.8	4.3	7.1	3.3

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	402	171	33	1092	309	85	43	33	256	95	286
Future Volume (veh/h)	138	402	171	33	1092	309	85	43	33	256	95	286
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		0.97	0.99		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	479	204	39	1300	0	101	51	39	305	113	340
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	1218	514	50	2160		329	297	227	432	573	471
Arrive On Green	0.11	0.51	0.51	0.06	0.85	0.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1781	2403	1015	1781	5106	1585	933	970	741	1296	1870	1539
Grp Volume(v), veh/h	164	353	330	39	1300	0	101	0	90	305	113	340
Grp Sat Flow(s),veh/h/ln	1781	1777	1642	1781	1702	1585	933	0	1711	1296	1870	1539
Q Serve(g_s), s	7.7	10.4	10.5	1.8	6.8	0.0	7.6	0.0	3.3	19.2	3.8	16.7
Cycle Q Clear(g_c), s	7.7	10.4	10.5	1.8	6.8	0.0	11.4	0.0	3.3	22.4	3.8	16.7
Prop In Lane	1.00		0.62	1.00		1.00	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	200	900	832	50	2160		329	0	524	432	573	471
V/C Ratio(X)	0.82	0.39	0.40	0.77	0.60		0.31	0.00	0.17	0.71	0.20	0.72
Avail Cap(c_a), veh/h	283	900	832	136	2160		378	0	614	500	671	552
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.80	0.00	1.00	0.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	36.9	12.9	12.9	39.8	4.3	0.0	26.0	0.0	21.6	29.8	21.8	26.3
Incr Delay (d2), s/veh	8.5	1.3	1.4	7.3	1.0	0.0	0.2	0.0	0.1	2.1	0.0	2.1
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	3.7	4.2	3.9	0.9	1.5	0.0	1.7	0.0	1.3	6.0	1.6	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.4	14.2	14.4	47.1	5.3	0.0	26.2	0.0	21.7	31.9	21.8	28.4
LnGrp LOS	D	B	B	D	A		C	A	C	C	C	C
Approach Vol, veh/h		847			1339	A		191			758	
Approach Delay, s/veh		20.3			6.5			24.0			28.8	
Approach LOS		C			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	47.6		30.5	14.0	40.4		30.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	6.5	34.5		30.5	13.5	27.5		30.5
Max Q Clear Time (g_c+I1), s	3.8	12.5		24.4	9.7	8.8		13.4
Green Ext Time (p_c), s	0.0	2.9		1.1	0.1	6.6		0.6

Intersection Summary		
HCM 6th Ctrl Delay	16.7	
HCM 6th LOS	B	

Notes

Unsignalized Delay for [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)	88	495	20	43	1279	98	73	161	20	121	171	98
Future Volume (veh/h)	88	495	20	43	1279	98	73	161	20	121	171	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	532	22	46	1375	105	78	173	22	130	184	105
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	2	2	2	2	2	2
Cap, veh/h	262	2448	101	685	2355	179	218	636	80	266	442	238
Arrive On Green	1.00	1.00	1.00	0.70	0.70	0.70	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	357	3475	143	853	3341	254	1081	3163	395	1176	2198	1183
Grp Volume(v), veh/h	95	272	282	46	729	751	78	96	99	130	147	142
Grp Sat Flow(s),veh/h/ln	357	1777	1841	853	1777	1819	1081	1777	1781	1176	1777	1603
Q Serve(g_s), s	10.7	0.0	0.0	1.4	17.4	17.7	5.8	3.9	4.0	8.9	6.1	6.6
Cycle Q Clear(g_c), s	28.4	0.0	0.0	1.4	17.4	17.7	12.4	3.9	4.0	12.9	6.1	6.6
Prop In Lane	1.00		0.08	1.00		0.14	1.00		0.22	1.00		0.74
Lane Grp Cap(c), veh/h	262	1252	1297	685	1252	1282	218	357	358	266	357	323
V/C Ratio(X)	0.36	0.22	0.22	0.07	0.58	0.59	0.36	0.27	0.28	0.49	0.41	0.44
Avail Cap(c_a), veh/h	262	1252	1297	685	1252	1282	331	544	545	389	544	490
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.38	0.38	0.38	1.00	1.00	1.00	0.43	0.43	0.43
Uniform Delay (d), s/veh	4.2	0.0	0.0	3.9	6.3	6.3	35.2	28.7	28.7	34.2	29.6	29.8
Incr Delay (d2), s/veh	3.3	0.3	0.3	0.1	0.8	0.8	0.4	0.1	0.2	0.2	0.1	0.2
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	0.6	0.1	0.1	0.2	5.1	5.2	1.5	1.7	1.7	2.5	2.6	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	0.3	0.3	4.0	7.0	7.1	35.6	28.8	28.9	34.4	29.7	29.9
LnGrp LOS	A	A	A	A	A	A	D	C	C	C	C	C
Approach Vol, veh/h		649			1526			273			419	
Approach Delay, s/veh		1.4			7.0			30.8			31.2	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	63.9	21.1	63.9	21.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	51.0	26.0	51.0	26.0
Max Q Clear Time (g_c+I1), s	30.4	14.9	19.7	14.4
Green Ext Time (p_c), s	3.5	1.1	8.3	0.7

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)	115	440	78	124	1339	336	101	101	101	63	33	53
Future Volume (veh/h)	115	440	78	124	1339	336	101	101	101	63	33	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	478	85	135	1455	365	110	110	110	68	36	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	1674	296	164	1589	384	281	376	321	244	133	214
Arrive On Green	0.09	0.56	0.56	0.09	0.56	0.56	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	3006	531	1781	2823	683	1279	1777	1515	1145	626	1008
Grp Volume(v), veh/h	125	281	282	135	896	924	110	110	110	68	0	94
Grp Sat Flow(s),veh/h/ln	1781	1777	1760	1781	1777	1729	1279	1777	1515	1145	0	1634
Q Serve(g_s), s	6.9	8.3	8.4	7.4	44.4	50.2	7.9	5.2	6.2	5.4	0.0	4.8
Cycle Q Clear(g_c), s	6.9	8.3	8.4	7.4	44.4	50.2	12.7	5.2	6.2	11.5	0.0	4.8
Prop In Lane	1.00		0.30	1.00		0.39	1.00		1.00	1.00		0.62
Lane Grp Cap(c), veh/h	154	990	980	164	1000	973	281	376	321	244	0	346
V/C Ratio(X)	0.81	0.28	0.29	0.82	0.90	0.95	0.39	0.29	0.34	0.28	0.00	0.27
Avail Cap(c_a), veh/h	187	990	980	169	1000	973	395	535	456	346	0	492
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)	0.96	0.96	0.96	0.64	0.64	0.64	0.80	0.80	0.80	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.9	11.7	11.7	44.6	19.3	20.5	38.3	33.1	33.5	38.4	0.0	33.0
Incr Delay (d2), s/veh	15.9	0.7	0.7	16.8	8.4	13.9	0.7	0.3	0.5	0.7	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	3.3	3.3	4.0	18.7	21.7	2.5	2.3	2.3	1.5	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	12.4	12.4	61.4	27.7	34.4	39.0	33.4	34.0	39.1	0.0	33.5
LnGrp LOS	E	B	B	E	C	C	D	C	C	D	A	C
Approach Vol, veh/h		688			1955			330			162	
Approach Delay, s/veh		21.2			33.2			35.5			35.8	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.7	60.7		25.6	13.1	61.3		25.6				
Change Period (Y+Rc), s	4.5	5.0		4.4	4.5	5.0		4.4				
Max Green Setting (Gmax), s	9.5	46.5		30.1	10.5	45.5		30.1				
Max Q Clear Time (g_c+I1), s	10.4	10.4		13.5	8.9	52.2		14.7				
Green Ext Time (p_c), s	0.0	6.4		0.8	0.0	0.0		1.4				

Intersection Summary		
HCM 6th Ctrl Delay	30.9	
HCM 6th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	261	43	103	815	155	211	454	73	175	474	254
Future Volume (veh/h)	95	261	43	103	815	155	211	454	73	175	474	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	104	287	47	113	896	170	232	499	80	192	521	279
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1101	178	154	1288	551	215	911	392	219	918	395
Arrive On Green	0.09	0.36	0.36	0.09	0.36	0.36	0.12	0.26	0.26	0.12	0.26	0.26
Sat Flow, veh/h	1781	3043	491	1781	3554	1521	1781	3554	1527	1781	3554	1528
Grp Volume(v), veh/h	104	166	168	113	896	170	232	499	80	192	521	279
Grp Sat Flow(s),veh/h/ln	1781	1777	1757	1781	1777	1521	1781	1777	1527	1781	1777	1528
Q Serve(g_s), s	7.1	8.2	8.4	7.7	26.9	10.0	15.1	15.2	5.1	13.2	15.9	20.7
Cycle Q Clear(g_c), s	7.1	8.2	8.4	7.7	26.9	10.0	15.1	15.2	5.1	13.2	15.9	20.7
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	643	636	154	1288	551	215	911	392	219	918	395
V/C Ratio(X)	0.68	0.26	0.26	0.74	0.70	0.31	1.08	0.55	0.20	0.88	0.57	0.71
Avail Cap(c_a), veh/h	157	643	636	192	1288	551	215	1075	462	292	1228	528
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)	0.97	0.97	0.97	0.89	0.89	0.89	0.67	0.67	0.67	0.27	0.27	0.27
Uniform Delay (d), s/veh	55.5	28.1	28.2	55.7	34.0	28.6	55.0	40.2	36.5	53.9	40.3	42.1
Incr Delay (d2), s/veh	8.8	0.9	1.0	6.6	2.8	1.3	72.6	0.1	0.1	5.4	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.6	3.7	3.7	11.9	3.8	11.0	6.6	1.9	6.2	6.9	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.3	29.0	29.1	62.3	36.8	29.9	127.6	40.3	36.5	59.3	40.3	42.5
LnGrp LOS	E	C	C	E	D	C	F	D	D	E	D	D
Approach Vol, veh/h		438			1179			811			992	
Approach Delay, s/veh		37.4			38.2			64.9			44.6	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	51.3	19.8	38.4	15.4	51.4	20.0	38.1
Change Period (Y+Rc), s	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1
Max Green Setting (Gmax), s	* 11	31.6	* 15	43.2	* 11	34.1	* 21	37.8
Max Q Clear Time (g_c+I1), s	9.7	10.4	17.1	22.7	9.1	28.9	15.2	17.2
Green Ext Time (p_c), s	0.0	1.1	0.0	2.7	0.0	2.2	0.1	2.2

Intersection Summary	
HCM 6th Ctrl Delay	46.3
HCM 6th LOS	D

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)	30	288	113	103	656	83	183	123	50	63	163	155
Future Volume (veh/h)	30	288	113	103	656	83	183	123	50	63	163	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	310	122	111	705	89	197	132	54	68	175	167
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	2	2	2	2	2	2
Cap, veh/h	40	1274	489	137	1798	227	290	355	145	310	533	435
Arrive On Green	0.02	0.51	0.51	0.15	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	2481	952	1781	3166	399	1032	1246	510	1189	1870	1528
Grp Volume(v), veh/h	32	220	212	111	395	399	197	0	186	68	175	167
Grp Sat Flow(s),veh/h/ln	1781	1777	1656	1781	1777	1788	1032	0	1756	1189	1870	1528
Q Serve(g_s), s	1.8	6.9	7.2	6.0	0.0	0.0	18.6	0.0	8.5	4.9	7.4	8.8
Cycle Q Clear(g_c), s	1.8	6.9	7.2	6.0	0.0	0.0	26.0	0.0	8.5	13.3	7.4	8.8
Prop In Lane	1.00		0.57	1.00		0.22	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	40	912	851	137	1009	1016	290	0	500	310	533	435
V/C Ratio(X)	0.80	0.24	0.25	0.81	0.39	0.39	0.68	0.00	0.37	0.22	0.33	0.38
Avail Cap(c_a), veh/h	143	912	851	285	1009	1016	305	0	527	328	561	458
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.09	0.09	0.09	1.00	0.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	48.7	13.5	13.6	41.6	0.0	0.0	38.5	0.0	28.6	33.9	28.2	28.7
Incr Delay (d2), s/veh	12.0	0.6	0.6	0.4	0.1	0.1	6.0	0.0	0.6	0.3	0.3	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	0.9	2.7	2.7	2.4	0.0	0.0	5.1	0.0	3.6	1.4	3.3	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	14.1	14.2	42.0	0.1	0.1	44.5	0.0	29.2	34.3	28.5	29.2
LnGrp LOS	E	B	B	D	A	A	D	A	C	C	C	C
Approach Vol, veh/h		464			905			383			410	
Approach Delay, s/veh		17.3			5.2			37.1			29.8	
Approach LOS		B			A			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	55.9		33.5	5.2	61.3		33.5
Change Period (Y+Rc), s	3.0	4.5		5.0	3.0	4.5		5.0
Max Green Setting (Gmax), s	16.0	41.5		30.0	8.0	49.5		30.0
Max Q Clear Time (g_c+I1), s	8.0	9.2		15.3	3.8	2.0		28.0
Green Ext Time (p_c), s	0.0	3.3		1.9	0.0	7.1		0.5

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	395	72	152	974	150	162	424	112	150	464	192
Future Volume (veh/h)	142	395	72	152	974	150	162	424	112	150	464	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.94	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	494	90	190	1218	188	202	530	140	188	580	240
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	1082	196	224	1189	182	205	584	153	212	522	215
Arrive On Green	0.20	0.72	0.72	0.13	0.39	0.39	0.12	0.21	0.21	0.12	0.22	0.22
Sat Flow, veh/h	1781	2986	541	1781	3072	471	1781	2744	720	1781	2404	992
Grp Volume(v), veh/h	178	293	291	190	701	705	202	342	328	188	428	392
Grp Sat Flow(s),veh/h/ln	1781	1777	1750	1781	1777	1767	1781	1777	1687	1781	1777	1619
Q Serve(g_s), s	10.0	6.8	6.9	10.4	38.7	38.7	11.3	18.8	19.0	10.4	21.7	21.7
Cycle Q Clear(g_c), s	10.0	6.8	6.9	10.4	38.7	38.7	11.3	18.8	19.0	10.4	21.7	21.7
Prop In Lane	1.00		0.31	1.00		0.27	1.00		0.43	1.00		0.61
Lane Grp Cap(c), veh/h	180	644	634	224	688	684	205	378	359	212	386	351
V/C Ratio(X)	0.99	0.45	0.46	0.85	1.02	1.03	0.99	0.90	0.91	0.89	1.11	1.11
Avail Cap(c_a), veh/h	180	644	634	322	688	684	205	378	359	212	386	351
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	0.27	0.27	0.27	0.74	0.74	0.74
Uniform Delay (d), s/veh	39.8	9.7	9.7	42.8	30.6	30.6	44.2	38.4	38.4	43.4	39.2	39.2
Incr Delay (d2), s/veh	63.1	2.3	2.3	12.0	39.4	42.6	29.1	8.5	9.7	26.3	73.4	76.4
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	6.9	2.4	2.4	5.3	23.1	23.6	6.5	8.8	8.6	6.1	17.1	15.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	103.0	12.0	12.1	54.8	70.0	73.2	73.3	46.8	48.1	69.7	112.6	115.6
LnGrp LOS	F	B	B	D	F	F	E	D	D	E	F	F
Approach Vol, veh/h		762			1596			872			1008	
Approach Delay, s/veh		33.3			69.6			53.4			105.7	
Approach LOS		C			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	40.7	16.0	26.2	14.6	43.2	16.4	25.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	18.1	30.7	11.5	21.7	10.1	38.7	11.9	21.3
Max Q Clear Time (g_c+I1), s	12.4	8.9	13.3	23.7	12.0	40.7	12.4	21.0
Green Ext Time (p_c), s	0.2	2.8	0.0	0.0	0.0	0.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	68.3
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	113	0	0	701	20	20	479	20	0	0	135
Future Volume (veh/h)	83	113	0	0	701	20	20	479	20	0	0	135
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		0.98	0.99		0.96	1.00		0.96
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	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	135	0	0	835	24	24	570	24	0	0	161
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	127	2445	0	0	1988	57	221	733	315	0	0	315
Arrive On Green	0.07	0.69	0.00	0.00	0.19	0.19	0.21	0.21	0.21	0.00	0.00	0.21
Sat Flow, veh/h	1781	3647	0	0	3619	101	1214	3554	1527	0	0	1527
Grp Volume(v), veh/h	99	135	0	0	421	438	24	570	24	0	0	161
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1849	1214	1777	1527	0	0	1527
Q Serve(g_s), s	4.6	1.0	0.0	0.0	17.8	17.8	1.5	12.9	1.1	0.0	0.0	8.0
Cycle Q Clear(g_c), s	4.6	1.0	0.0	0.0	17.8	17.8	9.5	12.9	1.1	0.0	0.0	8.0
Prop In Lane	1.00		0.00	0.00		0.05	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	127	2445	0	0	1002	1043	221	733	315	0	0	315
V/C Ratio(X)	0.78	0.06	0.00	0.00	0.42	0.42	0.11	0.78	0.08	0.00	0.00	0.51
Avail Cap(c_a), veh/h	262	2445	0	0	1002	1043	307	982	422	0	0	422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.91	0.91	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	38.8	4.3	0.0	0.0	22.3	22.3	34.1	31.9	27.2	0.0	0.0	29.9
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.0	1.2	1.1	0.2	2.5	0.1	0.0	0.0	1.6
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	2.1	0.3	0.0	0.0	8.7	9.0	0.5	5.6	0.4	0.0	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	4.3	0.0	0.0	23.5	23.5	34.3	34.4	27.3	0.0	0.0	31.5
LnGrp LOS	D	A	A	A	C	C	C	C	C	A	A	C
Approach Vol, veh/h		234			859			618			161	
Approach Delay, s/veh		20.6			23.5			34.1			31.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		63.0		22.0	10.5	52.4		22.0				
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s		52.5		23.5	12.5	35.5		23.5				
Max Q Clear Time (g_c+I1), s		3.0		10.0	6.6	19.8		14.9				
Green Ext Time (p_c), s		0.7		0.9	0.0	4.4		2.2				

Intersection Summary		
HCM 6th Ctrl Delay		27.3
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	508	20	231	794	101	53	179	241	55	124	45
Future Volume (veh/h)	68	508	20	231	794	101	53	179	241	55	124	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	524	21	238	819	104	55	185	248	57	128	46
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	1668	67	277	1850	235	279	386	315	198	530	181
Arrive On Green	0.10	0.96	0.96	0.16	0.58	0.58	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1781	3479	139	1781	3163	402	1198	1870	1527	949	2571	878
Grp Volume(v), veh/h	70	267	278	238	460	463	55	185	248	57	86	88
Grp Sat Flow(s),veh/h/ln	1781	1777	1841	1781	1777	1788	1198	1870	1527	949	1777	1673
Q Serve(g_s), s	3.3	0.7	0.8	11.1	12.3	12.3	3.4	7.4	13.1	4.8	3.4	3.7
Cycle Q Clear(g_c), s	3.3	0.7	0.8	11.1	12.3	12.3	7.2	7.4	13.1	12.2	3.4	3.7
Prop In Lane	1.00		0.08	1.00		0.22	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	89	852	883	277	1039	1046	279	386	315	198	366	345
V/C Ratio(X)	0.78	0.31	0.31	0.86	0.44	0.44	0.20	0.48	0.79	0.29	0.24	0.25
Avail Cap(c_a), veh/h	136	852	883	409	1039	1046	378	539	440	276	512	482
HCM Platoon Ratio	2.00	2.00	2.00	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	0.84	0.84	0.84
Uniform Delay (d), s/veh	37.8	0.9	0.9	35.0	9.9	9.9	31.3	29.7	32.0	35.1	28.1	28.3
Incr Delay (d2), s/veh	7.2	1.0	0.9	8.2	1.4	1.4	0.1	0.3	4.0	0.2	0.1	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	1.5	0.4	0.4	5.2	4.5	4.6	1.0	3.3	5.0	1.1	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	1.9	1.9	43.2	11.3	11.2	31.4	30.1	36.0	35.3	28.2	28.4
LnGrp LOS	D	A	A	D	B	B	C	C	D	D	C	C
Approach Vol, veh/h		615			1161			488			231	
Approach Delay, s/veh		6.8			17.8			33.2			30.0	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.7	45.3		22.0	8.8	54.2		22.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	27.5		24.5	6.5	40.5		24.5				
Max Q Clear Time (g_c+I1), s	13.1	2.8		14.2	5.3	14.3		15.1				
Green Ext Time (p_c), s	0.2	2.0		0.6	0.0	3.9		1.0				

Intersection Summary		
HCM 6th Ctrl Delay		19.2
HCM 6th LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	433	133	223	593	133	213	666	153	103	616	83
Future Volume (veh/h)	83	433	133	223	593	133	213	666	153	103	616	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	498	153	256	682	153	245	766	176	118	708	95
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	641	196	273	864	194	276	1148	496	154	798	107
Arrive On Green	0.09	0.24	0.24	0.15	0.30	0.30	0.15	0.32	0.32	0.09	0.25	0.25
Sat Flow, veh/h	1781	2658	811	1781	2866	642	1781	3554	1535	1781	3133	420
Grp Volume(v), veh/h	95	332	319	256	423	412	245	766	176	118	401	402
Grp Sat Flow(s),veh/h/ln	1781	1777	1692	1781	1777	1732	1781	1777	1535	1781	1777	1776
Q Serve(g_s), s	5.1	17.4	17.6	14.2	21.8	21.8	13.5	18.6	8.8	6.5	21.7	21.8
Cycle Q Clear(g_c), s	5.1	17.4	17.6	14.2	21.8	21.8	13.5	18.6	8.8	6.5	21.7	21.8
Prop In Lane	1.00		0.48	1.00		0.37	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	165	429	408	273	536	522	276	1148	496	154	453	452
V/C Ratio(X)	0.57	0.77	0.78	0.94	0.79	0.79	0.89	0.67	0.35	0.76	0.89	0.89
Avail Cap(c_a), veh/h	180	429	408	273	536	522	290	1148	496	219	464	464
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	0.36	0.36	0.36	1.00	1.00	1.00	0.70	0.70	0.70
Uniform Delay (d), s/veh	43.5	35.4	35.5	41.9	32.0	32.0	41.4	29.2	25.9	44.7	35.9	35.9
Incr Delay (d2), s/veh	1.9	12.8	13.9	19.2	4.3	4.5	24.7	2.6	1.6	3.9	15.7	15.8
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	2.3	8.8	8.6	7.6	9.7	9.5	7.6	8.0	3.3	3.0	11.1	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.4	48.2	49.3	61.1	36.3	36.5	66.1	31.9	27.4	48.5	51.5	51.7
LnGrp LOS	D	D	D	E	D	D	E	C	C	D	D	D
Approach Vol, veh/h		746			1091			1187			921	
Approach Delay, s/veh		48.3			42.2			38.3			51.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	29.2	20.2	30.6	14.0	35.2	13.4	37.4
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 5	22.7	* 16	26.1	* 10	27.9	* 12	30.1
Max Q Clear Time (g_c+I1), s	6.2	19.6	15.5	23.8	7.1	23.8	8.5	20.6
Green Ext Time (p_c), s	0.0	1.9	0.0	1.7	0.0	3.0	0.0	6.6

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

Notes

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

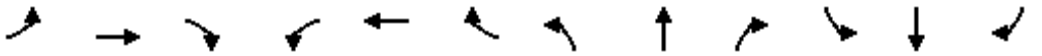
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	392	112	112	684	162	132	365	102	112	305	172
Future Volume (veh/h)	152	392	112	112	684	162	132	365	102	112	305	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	171	440	126	126	769	182	148	410	115	126	343	193
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	857	243	156	850	201	180	441	124	155	660	362
Arrive On Green	0.10	0.32	0.32	0.09	0.30	0.30	0.10	0.32	0.32	0.09	0.30	0.30
Sat Flow, veh/h	1781	2713	769	1781	2832	670	1781	1391	390	1781	2176	1195
Grp Volume(v), veh/h	171	287	279	126	482	469	148	0	525	126	278	258
Grp Sat Flow(s),veh/h/ln	1781	1777	1705	1781	1777	1725	1781	0	1781	1781	1777	1594
Q Serve(g_s), s	9.2	12.7	12.9	6.7	25.2	25.2	7.9	0.0	27.6	6.7	12.5	13.0
Cycle Q Clear(g_c), s	9.2	12.7	12.9	6.7	25.2	25.2	7.9	0.0	27.6	6.7	12.5	13.0
Prop In Lane	1.00		0.45	1.00		0.39	1.00		0.22	1.00		0.75
Lane Grp Cap(c), veh/h	184	562	539	156	534	518	180	0	565	155	539	484
V/C Ratio(X)	0.93	0.51	0.52	0.81	0.90	0.90	0.82	0.00	0.93	0.81	0.52	0.53
Avail Cap(c_a), veh/h	184	562	539	277	534	518	314	0	618	166	539	484
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	26.9	27.0	43.2	32.4	32.5	42.5	0.0	31.9	43.3	27.8	28.0
Incr Delay (d2), s/veh	45.2	3.3	3.5	3.7	21.3	21.8	3.5	0.0	19.4	22.0	0.7	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	6.3	5.7	5.6	3.1	13.5	13.2	3.6	0.0	14.5	3.8	5.2	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.1	30.2	30.6	46.9	53.8	54.2	46.0	0.0	51.3	65.3	28.5	28.9
LnGrp LOS	F	C	C	D	D	D	D	A	D	E	C	C
Approach Vol, veh/h		737			1077			673			662	
Approach Delay, s/veh		43.8			53.2			50.1			35.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	35.5	13.8	34.8	14.0	34.0	12.4	36.1
Change Period (Y+Rc), s	4.0	5.0	4.0	* 5.5	4.0	5.0	4.0	5.5
Max Green Setting (Gmax), s	15.0	24.0	17.0	* 26	10.0	29.0	9.0	33.5
Max Q Clear Time (g_c+I1), s	10.7	14.9	9.9	15.0	11.2	27.2	8.7	29.6
Green Ext Time (p_c), s	0.1	2.3	0.1	2.1	0.0	1.1	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	46.6
HCM 6th LOS	D

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	1072	240	210	752	170	440	752	422	200	280	40
Future Volume (veh/h)	50	1072	240	210	752	170	440	752	422	200	280	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	1105	247	216	775	175	454	775	435	206	289	41
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	1123	487	250	1388	310	468	1394	606	264	1185	514
Arrive On Green	0.05	0.32	0.32	0.14	0.67	0.67	0.14	0.39	0.39	0.08	0.33	0.33
Sat Flow, veh/h	3456	3554	1540	3456	4150	927	3456	3554	1545	3456	3554	1542
Grp Volume(v), veh/h	52	1105	247	216	634	316	454	775	435	206	289	41
Grp Sat Flow(s),veh/h/ln	1728	1777	1540	1728	1702	1673	1728	1777	1545	1728	1777	1542
Q Serve(g_s), s	2.5	52.5	22.2	10.4	16.7	17.1	22.2	28.8	40.5	10.0	10.0	3.1
Cycle Q Clear(g_c), s	2.5	52.5	22.2	10.4	16.7	17.1	22.2	28.8	40.5	10.0	10.0	3.1
Prop In Lane	1.00		1.00	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	1123	487	250	1139	559	468	1394	606	264	1185	514
V/C Ratio(X)	0.28	0.98	0.51	0.86	0.56	0.56	0.97	0.56	0.72	0.78	0.24	0.08
Avail Cap(c_a), veh/h	203	1123	487	250	1139	559	468	1394	606	325	1185	514
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.23	0.23	0.23	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	77.3	57.7	47.4	71.9	21.5	21.6	73.2	40.1	43.7	77.1	41.1	38.8
Incr Delay (d2), s/veh	0.6	23.1	1.4	7.1	0.2	0.4	33.9	1.6	7.1	7.3	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	26.6	8.7	4.5	4.9	4.9	12.1	13.1	16.5	4.7	4.6	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.9	80.8	48.8	78.9	21.7	22.0	107.1	41.7	50.8	84.4	41.6	39.1
LnGrp LOS	E	F	D	E	C	C	F	D	D	F	D	D
Approach Vol, veh/h		1404			1166			1664			536	
Approach Delay, s/veh		75.1			32.4			61.9			57.8	
Approach LOS		E			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	73.6	17.4	60.0	29.0	63.6	14.2	63.2
Change Period (Y+Rc), s	6.0	6.9	5.1	6.3	6.0	6.9	5.1	6.3
Max Green Setting (Gmax), s	16.0	63.7	12.3	53.7	23.0	56.7	10.0	56.0
Max Q Clear Time (g_c+I1), s	12.0	42.5	12.4	54.5	24.2	12.0	4.5	19.1
Green Ext Time (p_c), s	0.1	8.9	0.0	0.0	0.0	2.7	0.0	12.2

Intersection Summary	
HCM 6th Ctrl Delay	58.1
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	512	1393	140	160	862	160	170	690	340	140	460	260
Future Volume (veh/h)	512	1393	140	160	862	160	170	690	340	140	460	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	1.00		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	528	1436	144	165	889	165	175	711	351	144	474	268
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	563	2018	202	205	968	180	194	698	344	164	626	351
Arrive On Green	0.16	0.43	0.43	0.06	0.33	0.33	0.22	0.62	0.62	0.09	0.29	0.29
Sat Flow, veh/h	3456	4701	471	3456	2972	551	1781	2248	1109	1781	2133	1196
Grp Volume(v), veh/h	528	1040	540	165	531	523	175	562	500	144	394	348
Grp Sat Flow(s),veh/h/ln	1728	1702	1768	1728	1777	1746	1781	1777	1580	1781	1777	1552
Q Serve(g_s), s	25.7	42.7	42.7	8.0	48.9	48.9	16.3	52.8	52.8	13.6	34.2	34.7
Cycle Q Clear(g_c), s	25.7	42.7	42.7	8.0	48.9	48.9	16.3	52.8	52.8	13.6	34.2	34.7
Prop In Lane	1.00		0.27	1.00		0.32	1.00		0.70	1.00		0.77
Lane Grp Cap(c), veh/h	563	1461	759	205	579	569	194	552	491	164	522	456
V/C Ratio(X)	0.94	0.71	0.71	0.80	0.92	0.92	0.90	1.02	1.02	0.88	0.76	0.76
Avail Cap(c_a), veh/h	565	1461	759	258	579	569	309	552	491	183	522	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.38	0.92	0.92	0.92	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.3	39.9	39.9	79.0	55.1	55.1	65.6	32.2	32.2	76.3	54.5	54.7
Incr Delay (d2), s/veh	11.6	1.1	2.2	11.5	20.5	20.9	15.4	40.7	43.3	32.4	6.0	7.2
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	12.2	17.9	18.8	3.9	24.8	24.4	7.5	23.2	21.0	7.7	16.1	14.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.9	41.0	42.0	90.4	75.6	76.0	81.0	72.9	75.5	108.6	60.5	61.9
LnGrp LOS	F	D	D	F	E	E	F	F	F	F	E	E
Approach Vol, veh/h		2108			1219			1237			886	
Approach Delay, s/veh		51.5			77.8			75.1			68.9	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	77.9	23.0	54.5	32.2	60.3	20.1	57.4
Change Period (Y+Rc), s	4.5	4.9	4.5	4.6	4.5	4.9	4.5	4.6
Max Green Setting (Gmax), s	12.7	68.5	29.5	40.8	27.8	53.4	17.5	52.8
Max Q Clear Time (g_c+I1), s	10.0	44.7	18.3	36.7	27.7	50.9	15.6	54.8
Green Ext Time (p_c), s	0.1	9.8	0.2	1.5	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.6
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	1362	120	40	822	20	70	30	70	10	30	30
Future Volume (veh/h)	40	1362	120	40	822	20	70	30	70	10	30	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.95	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	1419	125	42	856	21	73	31	73	10	31	31
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	2065	181	89	2217	54	93	502	213	21	84	84
Arrive On Green	0.05	0.63	0.63	0.05	0.63	0.63	0.05	0.14	0.14	0.01	0.10	0.10
Sat Flow, veh/h	1781	3299	289	1781	3543	87	1781	3554	1509	1781	828	828
Grp Volume(v), veh/h	42	760	784	42	429	448	73	31	73	10	0	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1811	1781	1777	1853	1781	1777	1509	1781	0	1657
Q Serve(g_s), s	2.8	33.6	34.2	2.8	14.3	14.3	4.9	0.9	5.2	0.7	0.0	4.2
Cycle Q Clear(g_c), s	2.8	33.6	34.2	2.8	14.3	14.3	4.9	0.9	5.2	0.7	0.0	4.2
Prop In Lane	1.00		0.16	1.00		0.05	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	89	1112	1134	89	1112	1160	93	502	213	21	0	167
V/C Ratio(X)	0.47	0.68	0.69	0.47	0.39	0.39	0.79	0.06	0.34	0.48	0.00	0.37
Avail Cap(c_a), veh/h	120	1112	1134	120	1112	1160	96	868	368	76	0	378
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)	0.53	0.53	0.53	1.00	1.00	1.00	0.87	0.87	0.87	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.4	14.7	14.8	55.4	11.1	11.1	56.2	44.6	46.5	58.9	0.0	50.4
Incr Delay (d2), s/veh	0.8	1.8	1.9	1.4	1.0	1.0	26.7	0.1	1.0	6.1	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	12.4	12.9	1.2	5.3	5.6	2.9	0.4	2.0	0.3	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	16.5	16.7	56.9	12.1	12.0	82.9	44.7	47.5	65.0	0.0	52.0
LnGrp LOS	E	B	B	E	B	B	F	D	D	E	A	D
Approach Vol, veh/h		1586			919			177			72	
Approach Delay, s/veh		17.6			14.1			61.6			53.8	
Approach LOS		B			B			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	80.6	10.8	18.1	10.5	80.6	5.9	22.9
Change Period (Y+Rc), s	4.5	5.5	4.5	6.0	4.5	* 5.5	4.5	* 6
Max Green Setting (Gmax), s	8.1	57.5	6.5	27.4	8.1	* 58	5.1	* 29
Max Q Clear Time (g_c+I1), s	4.8	36.2	6.9	6.2	4.8	16.3	2.7	7.2
Green Ext Time (p_c), s	0.0	15.5	0.0	0.3	0.0	10.7	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	20.2
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)	110	50	150	40	70	60	110	920	60	20	590	100
Future Volume (veh/h)	110	50	150	40	70	60	110	920	60	20	590	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.91	1.00		0.98	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	52	156	42	73	62	115	958	62	21	615	104
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	70	178	82	143	177	134	1981	128	84	1684	284
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.15	1.00	1.00	0.05	0.56	0.56
Sat Flow, veh/h	1245	563	1439	671	1166	1438	1781	3383	219	1781	3021	510
Grp Volume(v), veh/h	167	0	156	115	0	62	115	503	517	21	361	358
Grp Sat Flow(s),veh/h/ln	1808	0	1439	1837	0	1438	1781	1777	1825	1781	1777	1754
Q Serve(g_s), s	15.2	0.0	18.1	10.0	0.0	6.7	10.7	0.0	0.0	1.9	19.2	19.3
Cycle Q Clear(g_c), s	15.2	0.0	18.1	10.0	0.0	6.7	10.7	0.0	0.0	1.9	19.2	19.3
Prop In Lane	0.69		1.00	0.37		1.00	1.00		0.12	1.00		0.29
Lane Grp Cap(c), veh/h	224	0	178	226	0	177	134	1041	1069	84	991	978
V/C Ratio(X)	0.75	0.00	0.88	0.51	0.00	0.35	0.86	0.48	0.48	0.25	0.36	0.37
Avail Cap(c_a), veh/h	335	0	267	362	0	283	241	1041	1069	84	991	978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.69	0.69	0.69	0.57	0.57	0.57
Uniform Delay (d), s/veh	71.9	0.0	73.2	69.8	0.0	68.3	71.4	0.0	0.0	78.1	20.9	20.9
Incr Delay (d2), s/veh	3.7	0.0	16.6	1.3	0.0	0.9	4.3	1.1	1.1	0.3	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	7.3	0.0	7.5	4.8	0.0	2.5	4.7	0.3	0.3	0.9	8.1	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.6	0.0	89.8	71.1	0.0	69.2	75.6	1.1	1.1	78.4	20.9	21.0
LnGrp LOS	E	A	F	E	A	E	E	A	A	E	C	C
Approach Vol, veh/h		323			177			1135			740	
Approach Delay, s/veh		82.4			70.4			8.6			22.6	
Approach LOS		F			E			A			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	105.1		26.5	16.8	100.3		26.4
Change Period (Y+Rc), s	4.0	5.5		5.5	4.0	5.5		5.5
Max Green Setting (Gmax), s	8.0	76.5		31.5	23.0	61.5		33.5
Max Q Clear Time (g_c+I1), s	13.9	2.0		20.1	12.7	21.3		12.0
Green Ext Time (p_c), s	0.0	6.3		0.9	0.1	2.2		0.6

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1159	153	82	705	20	183	243	72	20	193	40
Future Volume (veh/h)	80	1159	153	82	705	20	183	243	72	20	193	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.95	1.00		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	1207	159	85	734	21	191	253	75	21	201	42
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	2978	905	108	2981	85	256	502	144	25	368	75
Arrive On Green	0.06	0.58	0.58	0.06	0.58	0.58	0.07	0.19	0.19	0.01	0.13	0.13
Sat Flow, veh/h	1781	5106	1552	1781	5099	146	3456	2686	773	1781	2901	588
Grp Volume(v), veh/h	83	1207	159	85	489	266	191	165	163	21	121	122
Grp Sat Flow(s),veh/h/ln	1781	1702	1552	1781	1702	1841	1728	1777	1682	1781	1777	1712
Q Serve(g_s), s	4.6	12.9	4.8	4.7	7.0	7.0	5.4	8.3	8.7	1.2	6.4	6.7
Cycle Q Clear(g_c), s	4.6	12.9	4.8	4.7	7.0	7.0	5.4	8.3	8.7	1.2	6.4	6.7
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.46	1.00		0.34
Lane Grp Cap(c), veh/h	106	2978	905	108	1990	1076	256	332	314	25	225	217
V/C Ratio(X)	0.78	0.41	0.18	0.78	0.25	0.25	0.75	0.50	0.52	0.84	0.54	0.56
Avail Cap(c_a), veh/h	214	2978	905	196	1990	1076	380	426	404	125	355	342
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	0.90	0.90	0.90	0.36	0.36	0.36	0.95	0.95	0.95
Uniform Delay (d), s/veh	46.4	11.4	9.7	46.3	10.1	10.1	45.4	36.4	36.6	49.2	40.9	41.0
Incr Delay (d2), s/veh	4.7	0.4	0.4	4.2	0.3	0.5	0.6	0.5	0.6	22.0	2.3	2.6
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	2.1	4.3	1.6	2.2	2.4	2.7	2.3	3.6	3.6	0.7	2.9	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	11.8	10.1	50.5	10.3	10.6	46.0	36.9	37.2	71.1	43.2	43.6
LnGrp LOS	D	B	B	D	B	B	D	D	D	E	D	D
Approach Vol, veh/h		1449			840			519			264	
Approach Delay, s/veh		13.9			14.5			40.4			45.6	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	62.8	10.4	17.7	8.9	63.0	4.4	23.7
Change Period (Y+Rc), s	3.0	4.5	3.0	5.0	3.0	4.5	3.0	5.0
Max Green Setting (Gmax), s	11.0	42.5	11.0	20.0	12.0	41.5	7.0	24.0
Max Q Clear Time (g_c+I1), s	6.6	14.9	7.4	8.7	6.6	9.0	3.2	10.7
Green Ext Time (p_c), s	0.0	11.7	0.0	1.1	0.0	6.2	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	702	409	20	512	30	255	243	72	60	275	40
Future Volume (veh/h)	40	702	409	20	512	30	255	243	72	60	275	40
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		0.96	1.00		1.00	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	731	0	21	533	31	260	262	0	62	286	42
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	412	1764		316	1690	98	328	345		329	345	281
Arrive On Green	0.33	0.33	0.00	0.50	0.50	0.50	0.06	0.06	0.00	0.18	0.18	0.18
Sat Flow, veh/h	844	3554	1585	724	3405	198	1781	1870	1585	1781	1870	1522
Grp Volume(v), veh/h	42	731	0	21	278	286	260	262	0	62	286	42
Grp Sat Flow(s),veh/h/ln	844	1777	1585	724	1777	1826	1781	1870	1585	1781	1870	1522
Q Serve(g_s), s	3.8	15.9	0.0	2.0	9.3	9.4	14.4	13.8	0.0	2.9	14.7	2.3
Cycle Q Clear(g_c), s	13.1	15.9	0.0	17.9	9.3	9.4	14.4	13.8	0.0	2.9	14.7	2.3
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	412	1764		316	882	906	328	345		329	345	281
V/C Ratio(X)	0.10	0.41		0.07	0.31	0.32	0.79	0.76		0.19	0.83	0.15
Avail Cap(c_a), veh/h	412	1764		316	882	906	472	496		454	477	388
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.00	1.00	1.00	1.00	0.93	0.93	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	22.1	0.0	22.6	15.0	15.0	45.1	44.8	0.0	34.5	39.3	34.2
Incr Delay (d2), s/veh	0.5	0.7	0.0	0.1	0.2	0.1	4.6	3.1	0.0	0.2	7.5	0.2
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	0.8	7.1	0.0	0.3	3.6	3.7	7.3	7.2	0.0	1.3	7.3	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	22.8	0.0	22.7	15.2	15.2	49.6	47.9	0.0	34.7	46.8	34.4
LnGrp LOS	C	C		C	B	B	D	D		C	D	C
Approach Vol, veh/h		773	A		585			522	A		390	
Approach Delay, s/veh		22.9			15.5			48.8			43.5	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	54.1	22.9	54.1	22.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	34.5	25.5	34.5	26.5
Max Q Clear Time (g_c+I1), s	17.9	16.7	19.9	16.4
Green Ext Time (p_c), s	3.8	1.0	2.5	1.3

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, EBR] 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)	592	1472	807	102	979	60	615	372	172	90	322	340
Future Volume (veh/h)	592	1472	807	102	979	60	615	372	172	90	322	340
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	623	1549	849	107	1031	63	647	392	181	95	295	387
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	664	2109	958	242	1485	447	697	1039	447	124	300	481
Arrive On Green	0.19	0.41	0.41	0.07	0.29	0.29	0.20	0.29	0.29	0.07	0.16	0.16
Sat Flow, veh/h	3456	5106	1546	3456	5106	1538	3456	3554	1529	1781	1870	2998
Grp Volume(v), veh/h	623	1549	849	107	1031	63	647	392	181	95	295	387
Grp Sat Flow(s),veh/h/ln	1728	1702	1546	1728	1702	1538	1728	1777	1529	1781	1870	1499
Q Serve(g_s), s	30.2	43.5	70.2	5.1	30.5	5.1	31.3	14.9	16.2	8.9	26.7	21.2
Cycle Q Clear(g_c), s	30.2	43.5	70.2	5.1	30.5	5.1	31.3	14.9	16.2	8.9	26.7	21.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	664	2109	958	242	1485	447	697	1039	447	124	300	481
V/C Ratio(X)	0.94	0.73	0.89	0.44	0.69	0.14	0.93	0.38	0.40	0.76	0.98	0.80
Avail Cap(c_a), veh/h	718	2109	958	244	1485	447	860	1106	476	175	300	481
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	0.13	0.13	0.13	0.92	0.92	0.92
Uniform Delay (d), s/veh	67.7	42.0	28.0	75.8	53.6	44.6	66.7	47.8	48.3	77.7	71.1	68.8
Incr Delay (d2), s/veh	18.6	2.3	11.9	0.5	2.7	0.7	2.2	0.0	0.0	6.5	45.0	10.0
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	14.9	18.4	31.6	2.2	13.2	2.1	14.0	6.7	6.2	4.3	16.5	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.2	44.4	39.9	76.3	56.3	45.2	68.9	47.8	48.3	84.2	116.1	78.8
LnGrp LOS	F	D	D	E	E	D	E	D	D	F	F	E
Approach Vol, veh/h		3021			1201			1220			777	
Approach Delay, s/veh		51.7			57.5			59.1			93.6	
Approach LOS		D			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	78.2	40.0	34.2	38.4	57.4	17.6	56.6
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.9	* 5.7	8.0	* 5.7	6.9
Max Green Setting (Gmax), s	* 12	62.1	* 42	27.3	* 35	38.8	* 17	52.9
Max Q Clear Time (g_c+I1), s	7.1	72.2	33.3	28.7	32.2	32.5	10.9	18.2
Green Ext Time (p_c), s	0.1	0.0	1.0	0.0	0.5	5.6	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	59.5
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* 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)	182	1009	200	162	595	80	300	532	242	132	312	172
Future Volume (veh/h)	182	1009	200	162	595	80	300	532	242	132	312	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	1040	206	167	613	82	309	548	249	136	322	177
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	1696	335	191	1214	162	334	641	291	160	386	206
Arrive On Green	0.12	0.40	0.40	0.11	0.39	0.39	0.19	0.27	0.27	0.09	0.18	0.18
Sat Flow, veh/h	1781	4256	842	1781	3140	419	1781	2351	1065	1781	2200	1176
Grp Volume(v), veh/h	188	831	415	167	346	349	309	414	383	136	258	241
Grp Sat Flow(s),veh/h/ln	1781	1702	1694	1781	1777	1782	1781	1777	1639	1781	1777	1599
Q Serve(g_s), s	14.0	26.2	26.3	12.5	20.0	20.1	23.0	29.8	30.0	10.2	18.9	19.7
Cycle Q Clear(g_c), s	14.0	26.2	26.3	12.5	20.0	20.1	23.0	29.8	30.0	10.2	18.9	19.7
Prop In Lane	1.00		0.50	1.00		0.24	1.00		0.65	1.00		0.74
Lane Grp Cap(c), veh/h	213	1357	675	191	687	689	334	485	447	160	311	280
V/C Ratio(X)	0.88	0.61	0.61	0.87	0.50	0.51	0.92	0.85	0.86	0.85	0.83	0.86
Avail Cap(c_a), veh/h	276	1357	675	236	687	689	434	548	505	228	342	308
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	0.36	0.36	0.36	0.44	0.44	0.44	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	32.3	32.3	59.3	31.5	31.6	53.9	46.5	46.6	60.5	53.7	54.0
Incr Delay (d2), s/veh	19.5	2.1	4.1	9.2	1.0	1.0	10.5	4.9	5.4	13.4	13.2	18.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	10.9	11.3	6.0	8.6	8.7	11.2	13.7	12.8	5.2	9.5	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.0	34.4	36.5	68.5	32.5	32.5	64.4	51.4	52.0	74.0	66.9	72.2
LnGrp LOS	E	C	D	E	C	C	E	D	D	E	E	E
Approach Vol, veh/h		1434			862			1106			635	
Approach Delay, s/veh		40.7			39.5			55.3			70.4	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	58.7	29.4	28.3	20.2	57.1	16.3	41.4
Change Period (Y+Rc), s	4.1	4.9	4.1	4.6	4.1	4.9	4.1	4.6
Max Green Setting (Gmax), s	17.9	40.5	32.9	26.0	20.9	37.5	17.3	41.6
Max Q Clear Time (g_c+I1), s	14.5	28.3	25.0	21.7	16.0	22.1	12.2	32.0
Green Ext Time (p_c), s	0.1	4.5	0.3	0.8	0.1	2.3	0.1	2.4

Intersection Summary	
HCM 6th Ctrl Delay	49.1
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	920	213	133	551	276	160	793	153	338	753	123
Future Volume (veh/h)	256	920	213	133	551	276	160	793	153	338	753	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	269	968	224	140	580	291	168	835	161	356	793	129
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	940	217	139	742	372	139	1007	194	144	1046	170
Arrive On Green	0.08	0.33	0.33	0.08	0.33	0.33	0.08	0.34	0.34	0.08	0.34	0.34
Sat Flow, veh/h	1781	2849	658	1781	2268	1137	1781	2956	570	1781	3046	496
Grp Volume(v), veh/h	269	603	589	140	454	417	168	502	494	356	463	459
Grp Sat Flow(s),veh/h/ln	1781	1777	1730	1781	1777	1628	1781	1777	1749	1781	1777	1765
Q Serve(g_s), s	9.3	37.9	37.9	9.0	26.6	26.6	9.0	29.9	29.9	9.3	26.6	26.6
Cycle Q Clear(g_c), s	9.3	37.9	37.9	9.0	26.6	26.6	9.0	29.9	29.9	9.3	26.6	26.6
Prop In Lane	1.00		0.38	1.00		0.70	1.00		0.33	1.00		0.28
Lane Grp Cap(c), veh/h	144	586	571	139	581	533	139	605	596	144	610	606
V/C Ratio(X)	1.87	1.03	1.03	1.00	0.78	0.78	1.21	0.83	0.83	2.47	0.76	0.76
Avail Cap(c_a), veh/h	144	586	571	139	581	533	139	644	634	144	649	645
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)	0.70	0.70	0.70	1.00	1.00	1.00	0.54	0.54	0.54	0.46	0.46	0.46
Uniform Delay (d), s/veh	52.8	38.5	38.5	53.0	35.0	35.0	53.0	34.8	34.8	52.8	33.5	33.5
Incr Delay (d2), s/veh	408.3	38.6	40.2	77.4	10.0	10.9	123.0	6.5	6.6	671.6	3.6	3.6
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	20.4	22.1	21.8	7.0	12.8	11.9	8.7	13.7	13.5	31.0	11.8	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	461.2	77.2	78.7	130.4	45.0	45.9	176.0	41.4	41.5	724.5	37.1	37.2
LnGrp LOS	F	F	F	F	D	D	F	D	D	F	D	D
Approach Vol, veh/h		1461			1011			1164			1278	
Approach Delay, s/veh		148.5			57.2			60.8			228.6	
Approach LOS		F			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	43.0	13.7	44.6	14.0	42.7	14.0	44.3
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 9	35.4	* 9	42.0	* 9.3	35.1	* 9.3	41.7
Max Q Clear Time (g_c+I1), s	11.3	39.9	11.0	28.6	11.3	28.6	11.3	31.9
Green Ext Time (p_c), s	0.0	0.0	0.0	8.9	0.0	4.7	0.0	7.3

Intersection Summary	
HCM 6th Ctrl Delay	129.8
HCM 6th LOS	F

Notes

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

Intersection	
Int Delay, s/veh	4.3

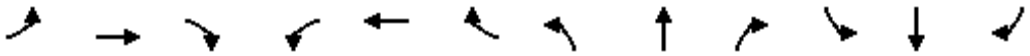
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1464	96	53	727	63	73
Future Vol, veh/h	1464	96	53	727	63	73
Conflicting Peds, #/hr	0	28	28	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	45	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1609	105	58	799	69	80

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1742	0	2216	895
Stage 1	-	-	-	-	1690	-
Stage 2	-	-	-	-	526	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	357	-	~ 37	284
Stage 1	-	-	-	-	135	-
Stage 2	-	-	-	-	557	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	347	-	~ 25	274
Mov Cap-2 Maneuver	-	-	-	-	98	-
Stage 1	-	-	-	-	131	-
Stage 2	-	-	-	-	385	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	60
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	98	274	-	-	347	-
HCM Lane V/C Ratio	0.706	0.293	-	-	0.168	-
HCM Control Delay (s)	102.3	23.5	-	-	17.5	2.3
HCM Lane LOS	F	C	-	-	C	A
HCM 95th %tile Q(veh)	3.6	1.2	-	-	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	583	143	40	350	50	143	447	60	143	520	40
Future Volume (veh/h)	83	583	143	40	350	50	143	447	60	143	520	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	595	146	41	357	51	146	456	61	146	531	41
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	704	172	61	696	98	177	1416	188	177	1504	116
Arrive On Green	0.06	0.25	0.25	0.03	0.22	0.22	0.10	0.45	0.45	0.10	0.45	0.45
Sat Flow, veh/h	1781	2808	687	1781	3109	440	1781	3141	418	1781	3336	257
Grp Volume(v), veh/h	85	376	365	41	202	206	146	257	260	146	282	290
Grp Sat Flow(s),veh/h/ln	1781	1777	1719	1781	1777	1772	1781	1777	1782	1781	1777	1816
Q Serve(g_s), s	4.7	20.1	20.2	2.3	10.0	10.2	8.0	9.3	9.4	8.0	10.4	10.4
Cycle Q Clear(g_c), s	4.7	20.1	20.2	2.3	10.0	10.2	8.0	9.3	9.4	8.0	10.4	10.4
Prop In Lane	1.00		0.40	1.00		0.25	1.00		0.23	1.00		0.14
Lane Grp Cap(c), veh/h	109	445	431	61	398	396	177	801	803	177	801	819
V/C Ratio(X)	0.78	0.84	0.85	0.68	0.51	0.52	0.82	0.32	0.32	0.82	0.35	0.35
Avail Cap(c_a), veh/h	187	515	498	151	480	478	294	801	803	294	801	819
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	0.09	0.09	0.09	0.88	0.88	0.88
Uniform Delay (d), s/veh	46.3	35.6	35.6	47.8	34.0	34.1	44.2	17.6	17.7	44.2	17.9	18.0
Incr Delay (d2), s/veh	4.6	11.3	12.0	4.8	1.2	1.3	0.3	0.1	0.1	3.2	1.1	1.1
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	2.2	9.8	9.6	1.1	4.4	4.4	3.5	3.7	3.7	3.6	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.9	46.9	47.6	52.6	35.2	35.4	44.5	17.7	17.8	47.4	19.0	19.0
LnGrp LOS	D	D	D	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		826			449			663			718	
Approach Delay, s/veh		47.6			36.9			23.6			24.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	49.6	6.9	30.1	13.5	49.6	9.6	27.4
Change Period (Y+Rc), s	3.5	4.5	3.5	5.0	3.5	4.5	3.5	5.0
Max Green Setting (Gmax), s	16.5	29.5	8.5	29.0	16.5	29.5	10.5	27.0
Max Q Clear Time (g_c+I1), s	10.0	11.4	4.3	22.2	10.0	12.4	6.7	12.2
Green Ext Time (p_c), s	0.1	3.4	0.0	2.9	0.1	3.7	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	33.6
HCM 6th LOS	C

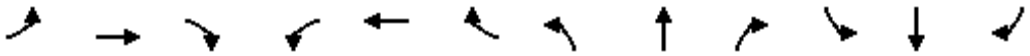
Intersection	
Int Delay, s/veh	46.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	543	83	53	270	20	63	93	63	30	83	50
Future Vol, veh/h	40	543	83	53	270	20	63	93	63	30	83	50
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	566	86	55	281	21	66	97	66	31	86	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	312	0	0	662	0	0	1007	1125	346	838	1158	171
Stage 1	-	-	-	-	-	-	703	703	-	412	412	-
Stage 2	-	-	-	-	-	-	304	422	-	426	746	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1245	-	-	922	-	-	195	204	650	259	195	843
Stage 1	-	-	-	-	-	-	394	438	-	588	593	-
Stage 2	-	-	-	-	-	-	681	587	-	577	419	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1233	-	-	913	-	-	98	175	638	117	168	827
Mov Cap-2 Maneuver	-	-	-	-	-	-	98	175	-	117	168	-
Stage 1	-	-	-	-	-	-	369	410	-	551	544	-
Stage 2	-	-	-	-	-	-	493	539	-	370	393	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.6	233.1	77.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	172	1233	-	-	913	-	-	201
HCM Lane V/C Ratio	1.326	0.034	-	-	0.06	-	-	0.845
HCM Control Delay (s)	233.1	8	0.2	-	9.2	0.2	-	77.6
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	13.4	0.1	-	-	0.2	-	-	6.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	466	170	50	203	30	80	528	80	40	496	30
Future Volume (veh/h)	40	466	170	50	203	30	80	528	80	40	496	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	524	191	56	228	34	90	593	90	45	557	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	742	613	72	1254	184	114	1143	173	57	590	36
Arrive On Green	0.03	0.40	0.40	0.04	0.40	0.40	0.06	0.37	0.37	0.03	0.34	0.34
Sat Flow, veh/h	1781	1870	1546	1781	3097	455	1781	3082	467	1781	1741	106
Grp Volume(v), veh/h	45	524	191	56	129	133	90	341	342	45	0	591
Grp Sat Flow(s),veh/h/ln	1781	1870	1546	1781	1777	1775	1781	1777	1772	1781	0	1848
Q Serve(g_s), s	2.5	23.5	8.5	3.1	4.7	4.8	5.0	15.0	15.0	2.5	0.0	31.1
Cycle Q Clear(g_c), s	2.5	23.5	8.5	3.1	4.7	4.8	5.0	15.0	15.0	2.5	0.0	31.1
Prop In Lane	1.00		1.00	1.00		0.26	1.00		0.26	1.00		0.06
Lane Grp Cap(c), veh/h	57	742	613	72	719	719	114	659	657	57	0	626
V/C Ratio(X)	0.79	0.71	0.31	0.78	0.18	0.18	0.79	0.52	0.52	0.79	0.00	0.94
Avail Cap(c_a), veh/h	121	742	613	109	719	719	151	661	659	121	0	656
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	0.68	0.68	0.68	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.0	25.3	20.8	47.5	19.1	19.1	46.1	24.5	24.5	48.0	0.0	32.1
Incr Delay (d2), s/veh	8.4	5.6	1.3	8.8	0.5	0.6	9.2	0.4	0.4	8.4	0.0	21.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	11.1	3.2	1.5	2.0	2.0	2.5	6.1	6.2	1.2	0.0	17.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.5	30.9	22.1	56.3	19.6	19.7	55.4	24.9	24.9	56.5	0.0	53.9
LnGrp LOS	E	C	C	E	B	B	E	C	C	E	A	D
Approach Vol, veh/h		760			318			773			636	
Approach Delay, s/veh		30.2			26.1			28.4			54.0	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	44.2	9.9	38.4	6.7	45.0	6.7	41.6
Change Period (Y+Rc), s	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5
Max Green Setting (Gmax), s	6.1	33.9	8.5	35.5	6.8	33.2	6.8	37.2
Max Q Clear Time (g_c+I1), s	5.1	25.5	7.0	33.1	4.5	6.8	4.5	17.0
Green Ext Time (p_c), s	0.0	2.2	0.0	0.8	0.0	1.2	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	783	130	120	392	140	110	450	140	130	280	60
Future Volume (veh/h)	150	783	130	120	392	140	110	450	140	130	280	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	156	816	135	125	408	146	115	469	146	135	292	62
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	1472	244	149	1192	421	139	530	164	159	616	128
Arrive On Green	0.10	0.48	0.48	0.08	0.47	0.47	0.08	0.20	0.20	0.09	0.21	0.21
Sat Flow, veh/h	1781	3040	503	1781	2557	903	1781	2646	816	1781	2906	606
Grp Volume(v), veh/h	156	477	474	125	282	272	115	314	301	135	176	178
Grp Sat Flow(s),veh/h/ln	1781	1777	1766	1781	1777	1683	1781	1777	1686	1781	1777	1735
Q Serve(g_s), s	11.6	25.5	25.5	9.3	13.6	13.9	8.6	23.1	23.5	10.1	11.7	12.1
Cycle Q Clear(g_c), s	11.6	25.5	25.5	9.3	13.6	13.9	8.6	23.1	23.5	10.1	11.7	12.1
Prop In Lane	1.00		0.28	1.00		0.54	1.00		0.48	1.00		0.35
Lane Grp Cap(c), veh/h	181	860	855	149	829	785	139	356	338	159	377	368
V/C Ratio(X)	0.86	0.55	0.55	0.84	0.34	0.35	0.83	0.88	0.89	0.85	0.47	0.48
Avail Cap(c_a), veh/h	278	860	855	238	829	785	197	432	410	245	480	469
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	0.69	0.69	0.69	1.00	1.00	1.00	0.47	0.47	0.47
Uniform Delay (d), s/veh	59.7	24.5	24.5	60.9	22.8	22.9	61.4	52.4	52.6	60.5	46.5	46.7
Incr Delay (d2), s/veh	10.2	2.6	2.6	5.2	0.8	0.8	12.9	14.6	16.9	4.7	0.2	0.2
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	5.7	11.2	11.1	4.4	5.8	5.7	4.4	11.7	11.5	4.7	5.2	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.9	27.1	27.1	66.1	23.6	23.8	74.2	67.0	69.5	65.3	46.7	46.9
LnGrp LOS	E	C	C	E	C	C	E	E	E	E	D	D
Approach Vol, veh/h		1107			679			730			489	
Approach Delay, s/veh		33.2			31.5			69.2			51.9	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	71.8	14.6	33.2	17.8	69.4	16.2	31.6
Change Period (Y+Rc), s	4.1	6.4	4.1	4.6	4.1	6.4	4.1	4.6
Max Green Setting (Gmax), s	18.0	46.4	14.9	36.5	21.1	43.3	18.6	32.8
Max Q Clear Time (g_c+I1), s	11.3	27.5	10.6	14.1	13.6	15.9	12.1	25.5
Green Ext Time (p_c), s	0.1	3.8	0.0	1.2	0.1	2.2	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	44.6
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	718	80	70	386	223	150	480	60	263	440	120
Future Volume (veh/h)	210	718	80	70	386	223	150	480	60	263	440	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	748	83	73	402	232	156	500	62	274	458	125
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	1202	133	120	648	369	187	638	79	305	734	199
Arrive On Green	0.14	0.37	0.37	0.13	0.60	0.60	0.10	0.20	0.20	0.17	0.27	0.27
Sat Flow, veh/h	1781	3215	357	1781	2156	1227	1781	3168	391	1781	2743	742
Grp Volume(v), veh/h	219	413	418	73	330	304	156	279	283	274	295	288
Grp Sat Flow(s),veh/h/ln	1781	1777	1795	1781	1777	1606	1781	1777	1782	1781	1777	1709
Q Serve(g_s), s	12.7	19.9	19.9	4.1	12.4	12.7	9.0	15.6	15.8	15.8	15.3	15.6
Cycle Q Clear(g_c), s	12.7	19.9	19.9	4.1	12.4	12.7	9.0	15.6	15.8	15.8	15.3	15.6
Prop In Lane	1.00		0.20	1.00		0.76	1.00		0.22	1.00		0.43
Lane Grp Cap(c), veh/h	250	664	671	120	534	483	187	358	359	305	476	457
V/C Ratio(X)	0.88	0.62	0.62	0.61	0.62	0.63	0.84	0.78	0.79	0.90	0.62	0.63
Avail Cap(c_a), veh/h	310	664	671	141	534	483	295	389	390	361	476	457
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00	1.00	0.54	0.54	0.54
Uniform Delay (d), s/veh	44.2	26.8	26.8	44.2	17.1	17.2	46.1	39.7	39.8	42.6	33.8	33.9
Incr Delay (d2), s/veh	13.8	3.2	3.2	2.7	5.3	6.1	6.0	13.8	14.3	12.4	2.8	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	8.8	8.9	1.8	4.4	4.2	4.2	8.1	8.2	7.9	6.8	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.0	30.1	30.1	46.8	22.4	23.3	52.1	53.5	54.0	55.0	36.5	36.8
LnGrp LOS	E	C	C	D	C	C	D	D	D	E	D	D
Approach Vol, veh/h		1050			707			718			857	
Approach Delay, s/veh		35.9			25.3			53.4			42.5	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	44.3	15.7	33.2	19.4	36.6	22.7	26.2
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 8.3	32.8	* 17	26.9	* 18	22.8	* 21	23.0
Max Q Clear Time (g_c+I1), s	10.1	21.9	11.0	17.6	14.7	14.7	17.8	17.8
Green Ext Time (p_c), s	0.0	6.9	0.1	4.6	0.1	4.4	0.1	2.7

Intersection Summary	
HCM 6th Ctrl Delay	39.1
HCM 6th LOS	D

Notes

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

Intersection	
Int Delay, s/veh	53.1

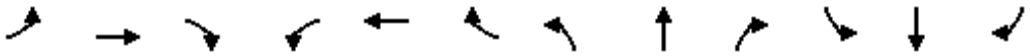
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	1004	116	73	628	43	53	10	73	43	33	43
Future Vol, veh/h	43	1004	116	73	628	43	53	10	73	43	33	43
Conflicting Peds, #/hr	29	0	14	14	0	29	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	1091	126	79	683	47	58	11	79	47	36	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	759	0	0	1231	0	0	1790	2179	633	1549	2219	404
Stage 1	-	-	-	-	-	-	1262	1262	-	894	894	-
Stage 2	-	-	-	-	-	-	528	917	-	655	1325	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	848	-	-	562	-	-	~ 51	46	422	77	43	596
Stage 1	-	-	-	-	-	-	180	239	-	302	358	-
Stage 2	-	-	-	-	-	-	502	349	-	421	223	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	825	-	-	555	-	-	-	31	412	~ 34	~ 29	574
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	31	-	~ 34	~ 29	-
Stage 1	-	-	-	-	-	-	145	192	-	239	299	-
Stage 2	-	-	-	-	-	-	345	291	-	259	180	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	1.2		$ 947.5
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	230	825	-	-	555	-	-	48
HCM Lane V/C Ratio	-	0.369	0.057	-	-	0.143	-	-	2.695
HCM Control Delay (s)	-	29.5	9.6	0.8	-	12.6	-	-	$ 947.5
HCM Lane LOS	-	D	A	A	-	B	-	-	F
HCM 95th %tile Q(veh)	-	1.6	0.2	-	-	0.5	-	-	13.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	1292	158	53	774	20	198	148	168	20	106	63
Future Volume (veh/h)	73	1292	158	53	774	20	198	148	168	20	106	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	1318	161	54	790	20	202	151	171	20	108	64
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	1728	210	69	1822	46	247	215	244	53	230	123
Arrive On Green	0.05	0.36	0.36	0.04	0.52	0.52	0.09	0.09	0.09	0.28	0.28	0.28
Sat Flow, veh/h	1781	3177	385	1781	3535	89	1210	781	885	54	837	445
Grp Volume(v), veh/h	74	733	746	54	397	413	202	0	322	192	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1786	1781	1777	1848	1210	0	1666	1335	0	0
Q Serve(g_s), s	4.3	38.1	38.7	3.2	14.6	14.6	8.4	0.0	19.7	0.8	0.0	0.0
Cycle Q Clear(g_c), s	4.3	38.1	38.7	3.2	14.6	14.6	28.9	0.0	19.7	20.5	0.0	0.0
Prop In Lane	1.00		0.22	1.00		0.05	1.00		0.53	0.10		0.33
Lane Grp Cap(c), veh/h	120	966	971	69	916	953	247	0	459	405	0	0
V/C Ratio(X)	0.62	0.76	0.77	0.78	0.43	0.43	0.82	0.00	0.70	0.47	0.00	0.00
Avail Cap(c_a), veh/h	165	966	971	124	916	953	247	0	459	405	0	0
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	0.80	0.00	0.80	1.00	0.00	0.00
Uniform Delay (d), s/veh	48.8	27.3	27.5	50.0	15.9	15.9	52.7	0.0	43.6	31.2	0.0	0.0
Incr Delay (d2), s/veh	1.9	5.6	5.8	5.3	1.1	1.1	14.9	0.0	3.3	0.3	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	2.0	18.2	18.6	1.5	5.9	6.2	6.7	0.0	9.2	4.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.7	32.9	33.3	55.3	17.0	17.0	67.5	0.0	46.8	31.5	0.0	0.0
LnGrp LOS	D	C	C	E	B	B	E	A	D	C	A	A
Approach Vol, veh/h		1553			864			524			192	
Approach Delay, s/veh		33.9			19.4			54.8			31.5	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	62.2		34.0	11.8	59.2		34.0				
Change Period (Y+Rc), s	* 4.7	5.1		5.1	* 4.7	5.1		5.1				
Max Green Setting (Gmax), s	* 7.3	53.9		28.9	* 9.7	51.5		28.9				
Max Q Clear Time (g_c+I1), s	5.2	40.7		22.5	6.3	16.6		30.9				
Green Ext Time (p_c), s	0.0	5.8		0.4	0.0	3.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	33.3
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)	118	1082	207	66	614	128	141	472	131	181	384	86
Future Volume (veh/h)	118	1082	207	66	614	128	141	472	131	181	384	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.93	1.00		0.93
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	1115	182	68	633	132	145	487	135	187	396	89
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	1158	188	93	1017	212	158	562	295	207	470	278
Arrive On Green	0.08	0.38	0.38	0.05	0.35	0.35	0.20	0.20	0.20	0.19	0.19	0.19
Sat Flow, veh/h	1781	3042	495	1781	2906	605	791	2817	1480	1099	2493	1475
Grp Volume(v), veh/h	122	649	648	68	387	378	336	296	135	309	274	89
Grp Sat Flow(s),veh/h/ln	1781	1777	1760	1781	1777	1734	1831	1777	1480	1815	1777	1475
Q Serve(g_s), s	8.1	42.8	43.3	4.5	21.7	21.8	21.6	19.2	9.6	20.0	17.8	6.3
Cycle Q Clear(g_c), s	8.1	42.8	43.3	4.5	21.7	21.8	21.6	19.2	9.6	20.0	17.8	6.3
Prop In Lane	1.00		0.28	1.00		0.35	0.43		1.00	0.61		1.00
Lane Grp Cap(c), veh/h	148	676	670	93	622	607	365	355	295	342	335	278
V/C Ratio(X)	0.83	0.96	0.97	0.73	0.62	0.62	0.92	0.84	0.46	0.90	0.82	0.32
Avail Cap(c_a), veh/h	183	676	670	105	622	607	371	360	300	351	344	285
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)	0.61	0.61	0.61	0.77	0.77	0.77	0.92	0.92	0.92	0.90	0.90	0.90
Uniform Delay (d), s/veh	54.2	36.3	36.4	56.0	32.4	32.4	47.1	46.1	42.3	47.6	46.7	42.1
Incr Delay (d2), s/veh	11.9	19.0	20.2	12.7	3.6	3.7	25.7	14.4	1.0	22.6	12.0	0.2
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	4.1	21.5	21.7	2.3	9.8	9.6	12.3	9.8	3.6	11.1	8.9	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.1	55.3	56.6	68.7	36.0	36.1	72.8	60.5	43.3	70.2	58.8	42.3
LnGrp LOS	E	E	E	E	D	D	E	E	D	E	E	D
Approach Vol, veh/h		1419			833			767			672	
Approach Delay, s/veh		56.8			38.7			62.8			61.9	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	51.8		28.2	14.6	48.1		29.0
Change Period (Y+Rc), s	* 4.7	6.1		5.6	* 4.7	6.1		5.1
Max Green Setting (Gmax), s	* 7.1	43.9		23.2	* 12	38.7		24.3
Max Q Clear Time (g_c+I1), s	10.5	45.3		22.0	10.1	23.8		23.6
Green Ext Time (p_c), s	0.0	0.0		0.4	0.0	2.7		0.3

Intersection Summary		
HCM 6th Ctrl Delay	54.9	
HCM 6th LOS	D	

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)	94	695	187	94	367	50	177	640	204	94	640	64
Future Volume (veh/h)	94	695	187	94	367	50	177	640	204	94	640	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	709	191	96	374	51	181	653	208	96	653	65
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	975	263	138	1111	150	151	600	494	123	993	99
Arrive On Green	0.08	0.35	0.35	0.08	0.35	0.35	0.08	0.32	0.32	0.07	0.31	0.31
Sat Flow, veh/h	1781	2750	741	1781	3134	424	1781	1870	1539	1781	3254	323
Grp Volume(v), veh/h	96	458	442	96	211	214	181	653	208	96	356	362
Grp Sat Flow(s),veh/h/ln	1781	1777	1713	1781	1777	1781	1781	1870	1539	1781	1777	1800
Q Serve(g_s), s	5.8	24.7	24.7	5.8	9.5	9.7	9.3	35.3	11.7	5.8	19.2	19.2
Cycle Q Clear(g_c), s	5.8	24.7	24.7	5.8	9.5	9.7	9.3	35.3	11.7	5.8	19.2	19.2
Prop In Lane	1.00		0.43	1.00		0.24	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	138	630	608	138	630	631	151	600	494	123	542	550
V/C Ratio(X)	0.70	0.73	0.73	0.70	0.33	0.34	1.20	1.09	0.42	0.78	0.66	0.66
Avail Cap(c_a), veh/h	188	630	608	146	630	631	151	600	494	130	549	557
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)	0.29	0.29	0.29	0.93	0.93	0.93	0.67	0.67	0.67	0.93	0.93	0.93
Uniform Delay (d), s/veh	49.5	30.9	30.9	49.5	26.0	26.0	50.3	37.3	29.3	50.4	33.2	33.2
Incr Delay (d2), s/veh	0.9	2.2	2.3	9.6	1.3	1.4	125.4	56.9	1.8	32.8	5.7	5.7
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	2.6	10.6	10.3	2.9	4.2	4.3	9.3	25.1	4.5	3.7	8.9	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	33.0	33.1	59.1	27.3	27.4	175.7	94.2	31.1	83.2	38.9	38.9
LnGrp LOS	D	C	C	E	C	C	F	F	C	F	D	D
Approach Vol, veh/h		996			521			1042			814	
Approach Delay, s/veh		34.7			33.2			95.8			44.1	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	44.1	14.0	38.7	13.2	44.1	12.3	40.4
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 8	38.1	* 9.3	34.0	* 12	35.5	* 8	35.3
Max Q Clear Time (g_c+I1), s	7.8	26.7	11.3	21.2	7.8	11.7	7.8	37.3
Green Ext Time (p_c), s	0.0	8.1	0.0	7.4	0.0	6.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.6
HCM 6th LOS	E

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)	73	1131	133	60	516	30	123	178	163	53	178	63
Future Volume (veh/h)	73	1131	133	60	516	30	123	178	163	53	178	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.99		0.96	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	1216	143	65	555	32	132	191	175	57	191	68
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	2	2	2	2	2	2
Cap, veh/h	103	1733	203	97	1835	106	275	327	266	73	643	220
Arrive On Green	0.06	0.54	0.54	0.05	0.54	0.54	0.17	0.17	0.17	0.04	0.25	0.25
Sat Flow, veh/h	1781	3196	374	1781	3407	196	1107	1870	1520	1781	2573	881
Grp Volume(v), veh/h	78	674	685	65	289	298	132	191	175	57	130	129
Grp Sat Flow(s),veh/h/ln	1781	1777	1793	1781	1777	1826	1107	1870	1520	1781	1777	1677
Q Serve(g_s), s	3.8	24.6	24.9	3.1	7.9	7.9	9.8	8.3	9.4	2.8	5.2	5.5
Cycle Q Clear(g_c), s	3.8	24.6	24.9	3.1	7.9	7.9	9.8	8.3	9.4	2.8	5.2	5.5
Prop In Lane	1.00		0.21	1.00		0.11	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	103	964	973	97	957	984	275	327	266	73	444	419
V/C Ratio(X)	0.75	0.70	0.70	0.67	0.30	0.30	0.48	0.58	0.66	0.78	0.29	0.31
Avail Cap(c_a), veh/h	188	964	973	172	957	984	375	496	403	81	612	578
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	40.8	14.8	14.9	40.8	11.2	11.2	34.0	33.3	33.8	41.8	26.7	26.8
Incr Delay (d2), s/veh	8.0	4.2	4.3	5.9	0.8	0.8	1.0	1.2	2.1	30.7	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	9.9	10.1	1.5	3.0	3.1	2.6	3.7	3.5	1.8	2.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	19.1	19.2	46.7	12.0	12.0	35.0	34.6	35.9	72.5	27.0	27.1
LnGrp LOS	D	B	B	D	B	B	C	C	D	E	C	C
Approach Vol, veh/h		1437			652			498			316	
Approach Delay, s/veh		20.7			15.4			35.1			35.2	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	52.2		26.5	9.6	51.9	6.6	19.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	3.0	4.5
Max Green Setting (Gmax), s	8.5	47.7		30.3	9.3	46.9	4.0	23.3
Max Q Clear Time (g_c+I1), s	5.1	26.9		7.5	5.8	9.9	4.8	11.8
Green Ext Time (p_c), s	0.0	8.0		1.1	0.0	3.0	0.0	1.4

Intersection Summary		
HCM 6th Ctrl Delay		23.6
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	686	130	70	313	40	90	463	160	60	483	40
Future Volume (veh/h)	50	686	130	70	313	40	90	463	160	60	483	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	715	135	73	326	42	94	482	167	62	503	42
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	632	1752	331	382	1864	238	238	783	269	195	1010	84
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1012	2972	561	648	3161	403	856	2566	882	778	3310	275
Grp Volume(v), veh/h	52	427	423	73	182	186	94	333	316	62	269	276
Grp Sat Flow(s),veh/h/ln	1012	1777	1755	648	1777	1788	856	1777	1671	778	1777	1808
Q Serve(g_s), s	2.1	11.1	11.1	5.9	4.0	4.1	8.7	13.7	13.9	6.4	10.6	10.7
Cycle Q Clear(g_c), s	6.2	11.1	11.1	17.0	4.0	4.1	19.4	13.7	13.9	20.3	10.6	10.7
Prop In Lane	1.00		0.32	1.00		0.23	1.00		0.53	1.00		0.15
Lane Grp Cap(c), veh/h	632	1048	1035	382	1048	1054	238	542	510	195	542	552
V/C Ratio(X)	0.08	0.41	0.41	0.19	0.17	0.18	0.39	0.61	0.62	0.32	0.50	0.50
Avail Cap(c_a), veh/h	632	1048	1035	382	1048	1054	382	840	790	326	840	855
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	9.5	9.5	9.5	14.1	8.0	8.0	32.3	25.4	25.5	34.2	24.4	24.4
Incr Delay (d2), s/veh	0.3	1.2	1.2	1.1	0.4	0.4	0.8	0.8	0.9	0.7	0.5	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	0.5	4.1	4.1	0.9	1.5	1.5	1.8	5.7	5.4	1.2	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.7	10.7	10.7	15.2	8.4	8.4	33.1	26.3	26.4	34.9	24.9	24.9
LnGrp LOS	A	B	B	B	A	A	C	C	C	C	C	C
Approach Vol, veh/h		902			441			743			607	
Approach Delay, s/veh		10.6			9.5			27.2			25.9	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	55.0	30.6	55.0	30.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	50.5	40.5	50.5	40.5
Max Q Clear Time (g_c+I1), s	13.1	22.3	19.0	21.4
Green Ext Time (p_c), s	5.1	2.8	2.4	3.8

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	702	77	34	789	427	175	54	34	437	34	205
Future Volume (veh/h)	205	702	77	34	789	427	175	54	34	437	34	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	0.99		0.98	0.99		0.98
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	214	731	80	35	822	0	182	56	35	455	35	214
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	1444	158	44	1715		503	424	265	541	744	615
Arrive On Green	0.14	0.45	0.45	0.05	0.67	0.00	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1781	3215	352	1781	5106	1585	1125	1065	666	1298	1870	1546
Grp Volume(v), veh/h	214	404	407	35	822	0	182	0	91	455	35	214
Grp Sat Flow(s),veh/h/ln	1781	1777	1790	1781	1702	1585	1125	0	1730	1298	1870	1546
Q Serve(g_s), s	12.4	17.0	17.0	2.0	8.2	0.0	12.4	0.0	3.5	36.0	1.2	10.2
Cycle Q Clear(g_c), s	12.4	17.0	17.0	2.0	8.2	0.0	13.6	0.0	3.5	39.5	1.2	10.2
Prop In Lane	1.00		0.20	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	246	798	804	44	1715		503	0	688	541	744	615
V/C Ratio(X)	0.87	0.51	0.51	0.80	0.48		0.36	0.00	0.13	0.84	0.05	0.35
Avail Cap(c_a), veh/h	331	798	804	110	1715		511	0	700	550	757	626
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.00	1.00	0.00	1.00	0.81	0.81	0.81
Uniform Delay (d), s/veh	44.4	20.6	20.6	49.7	12.8	0.0	23.6	0.0	20.1	32.7	19.4	22.1
Incr Delay (d2), s/veh	14.0	2.3	2.3	9.7	0.8	0.0	0.2	0.0	0.0	8.6	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	6.4	7.4	7.5	1.0	2.6	0.0	3.3	0.0	1.4	12.3	0.5	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.4	22.9	22.9	59.4	13.6	0.0	23.8	0.0	20.1	41.3	19.4	22.2
LnGrp LOS	E	C	C	E	B		C	A	C	D	B	C
Approach Vol, veh/h		1025			857	A		273			704	
Approach Delay, s/veh		30.3			15.5			22.5			34.4	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	51.7		46.3	19.0	39.8		46.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	42.5		42.5	19.5	29.5		42.5				
Max Q Clear Time (g_c+I1), s	4.0	19.0		41.5	14.4	10.2		15.6				
Green Ext Time (p_c), s	0.0	3.5		0.2	0.1	3.9		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	26.1
HCM 6th LOS	C

Notes

Unsignalized Delay for [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)	101	969	20	44	969	169	117	219	44	159	175	91
Future Volume (veh/h)	101	969	20	44	969	169	117	219	44	159	175	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.95	0.98		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	1065	22	48	1065	186	129	241	48	175	192	100
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	2373	49	414	2010	350	265	755	147	271	581	286
Arrive On Green	1.00	1.00	1.00	0.67	0.67	0.67	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	444	3559	74	518	3015	525	1070	2936	572	1072	2262	1112
Grp Volume(v), veh/h	111	532	555	48	627	624	129	144	145	175	148	144
Grp Sat Flow(s),veh/h/ln	444	1777	1855	518	1777	1763	1070	1777	1730	1072	1777	1598
Q Serve(g_s), s	11.5	0.0	0.0	3.6	19.1	19.2	11.8	6.9	7.2	16.6	7.1	7.7
Cycle Q Clear(g_c), s	30.7	0.0	0.0	3.6	19.1	19.2	19.5	6.9	7.2	23.8	7.1	7.7
Prop In Lane	1.00		0.04	1.00		0.30	1.00		0.33	1.00		0.70
Lane Grp Cap(c), veh/h	284	1185	1237	414	1185	1175	265	457	445	271	457	411
V/C Ratio(X)	0.39	0.45	0.45	0.12	0.53	0.53	0.49	0.31	0.33	0.65	0.32	0.35
Avail Cap(c_a), veh/h	284	1185	1237	414	1185	1175	357	609	593	363	609	548
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	0.55	0.55	0.55	1.00	1.00	1.00	0.36	0.36	0.36
Uniform Delay (d), s/veh	4.2	0.0	0.0	6.4	9.0	9.0	39.8	31.5	31.6	41.3	31.6	31.8
Incr Delay (d2), s/veh	2.9	0.9	0.8	0.3	0.9	1.0	0.5	0.1	0.2	0.3	0.1	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	0.8	0.3	0.3	0.4	6.7	6.7	3.1	3.0	3.0	4.4	3.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.1	0.9	0.8	6.7	9.9	10.0	40.3	31.7	31.8	41.6	31.7	31.9
LnGrp LOS	A	A	A	A	A	A	D	C	C	D	C	C
Approach Vol, veh/h		1198			1299			418			467	
Approach Delay, s/veh		1.4			9.8			34.4			35.5	
Approach LOS		A			A			C			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	74.0	31.0	74.0	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	61.0	36.0	61.0	36.0
Max Q Clear Time (g_c+I1), s	32.7	25.8	21.2	21.5
Green Ext Time (p_c), s	6.5	1.2	7.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1033	81	105	999	107	223	57	152	215	172	171
Future Volume (veh/h)	64	1033	81	105	999	107	223	57	152	215	172	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	0.99		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	1076	84	109	1041	111	232	59	158	224	179	178
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	1428	111	136	1475	157	259	633	547	398	301	300
Arrive On Green	0.05	0.43	0.43	0.08	0.46	0.46	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1781	3333	260	1781	3231	344	1020	1777	1537	1155	846	841
Grp Volume(v), veh/h	67	573	587	109	572	580	232	59	158	224	0	357
Grp Sat Flow(s),veh/h/ln	1781	1777	1816	1781	1777	1799	1020	1777	1537	1155	0	1688
Q Serve(g_s), s	3.7	27.2	27.3	6.0	25.8	25.9	18.3	2.2	7.4	17.3	0.0	17.3
Cycle Q Clear(g_c), s	3.7	27.2	27.3	6.0	25.8	25.9	35.6	2.2	7.4	24.6	0.0	17.3
Prop In Lane	1.00		0.14	1.00		0.19	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	86	761	778	136	811	821	259	633	547	398	0	601
V/C Ratio(X)	0.78	0.75	0.75	0.80	0.71	0.71	0.90	0.09	0.29	0.56	0.00	0.59
Avail Cap(c_a), veh/h	169	761	778	169	811	821	259	633	547	398	0	601
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)	0.86	0.86	0.86	0.79	0.79	0.79	0.77	0.77	0.77	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.0	24.1	24.1	45.4	21.8	21.8	42.6	21.4	23.1	32.0	0.0	26.3
Incr Delay (d2), s/veh	4.8	5.9	5.8	12.7	4.1	4.0	25.2	0.0	0.2	2.0	0.0	1.7
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	1.7	12.1	12.3	3.1	11.0	11.2	7.6	0.9	2.7	5.0	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.8	30.0	29.9	58.1	25.8	25.8	67.8	21.5	23.3	34.0	0.0	28.0
LnGrp LOS	D	C	C	E	C	C	E	C	C	C	A	C
Approach Vol, veh/h		1227			1261			449			581	
Approach Delay, s/veh		31.1			28.6			46.1			30.3	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	47.9		40.0	9.3	50.7		40.0				
Change Period (Y+Rc), s	4.5	5.0		4.4	4.5	5.0		4.4				
Max Green Setting (Gmax), s	9.5	41.0		35.6	9.5	41.0		35.6				
Max Q Clear Time (g_c+I1), s	8.0	29.3		26.6	5.7	27.9		37.6				
Green Ext Time (p_c), s	0.0	7.9		2.6	0.0	8.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	32.0	
HCM 6th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	681	54	144	573	167	161	522	104	251	532	127
Future Volume (veh/h)	205	681	54	144	573	167	161	522	104	251	532	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	209	695	55	147	585	170	164	533	106	256	543	130
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	1215	96	173	1237	535	161	734	312	282	975	418
Arrive On Green	0.11	0.37	0.37	0.10	0.35	0.35	0.09	0.21	0.21	0.16	0.27	0.27
Sat Flow, veh/h	1781	3328	263	1781	3554	1539	1781	3554	1511	1781	3554	1525
Grp Volume(v), veh/h	209	371	379	147	585	170	164	533	106	256	543	130
Grp Sat Flow(s),veh/h/ln	1781	1777	1814	1781	1777	1539	1781	1777	1511	1781	1777	1525
Q Serve(g_s), s	14.3	20.9	21.0	10.1	16.1	10.1	11.3	17.5	7.5	17.7	16.4	8.5
Cycle Q Clear(g_c), s	14.3	20.9	21.0	10.1	16.1	10.1	11.3	17.5	7.5	17.7	16.4	8.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	204	649	662	173	1237	535	161	734	312	282	975	418
V/C Ratio(X)	1.03	0.57	0.57	0.85	0.47	0.32	1.02	0.73	0.34	0.91	0.56	0.31
Avail Cap(c_a), veh/h	204	649	662	249	1237	535	161	881	375	332	1222	525
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)	0.58	0.58	0.58	0.88	0.88	0.88	0.56	0.56	0.56	0.70	0.70	0.70
Uniform Delay (d), s/veh	55.3	31.8	31.8	55.5	31.8	29.9	56.8	46.3	42.3	51.7	38.8	36.0
Incr Delay (d2), s/veh	54.7	2.1	2.1	10.8	1.1	1.4	57.9	1.0	0.1	17.8	0.1	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	9.5	9.3	9.5	5.0	7.0	3.9	7.6	7.8	2.8	9.2	7.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	110.1	34.0	33.9	66.3	32.9	31.2	114.7	47.3	42.5	69.5	39.0	36.1
LnGrp LOS	F	C	C	E	C	C	F	D	D	E	D	D
Approach Vol, veh/h		959			902			803			929	
Approach Delay, s/veh		50.5			38.1			60.4			47.0	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	51.7	16.0	40.4	19.0	49.6	24.5	31.9
Change Period (Y+Rc), s	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1	* 4.7	6.1
Max Green Setting (Gmax), s	* 13	31.6	* 11	43.0	* 14	34.8	* 23	31.0
Max Q Clear Time (g_c+I1), s	12.1	23.0	13.3	18.4	16.3	18.1	19.7	19.5
Green Ext Time (p_c), s	0.1	2.1	0.0	2.6	0.0	2.7	0.1	2.0

Intersection Summary	
HCM 6th Ctrl Delay	48.7
HCM 6th LOS	D

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)	84	602	204	164	539	134	204	257	114	104	257	74
Future Volume (veh/h)	84	602	204	164	539	134	204	257	114	104	257	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	0.99		0.96	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	614	208	167	550	137	208	262	116	106	262	76
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	1106	374	195	1340	332	308	407	180	225	629	510
Arrive On Green	0.06	0.43	0.43	0.22	0.96	0.96	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1781	2574	870	1781	2805	696	1036	1210	536	1005	1870	1517
Grp Volume(v), veh/h	86	424	398	167	347	340	208	0	378	106	262	76
Grp Sat Flow(s),veh/h/ln	1781	1777	1667	1781	1777	1724	1036	0	1746	1005	1870	1517
Q Serve(g_s), s	4.8	17.8	17.9	9.0	1.4	1.5	19.4	0.0	18.4	10.0	10.8	3.5
Cycle Q Clear(g_c), s	4.8	17.8	17.9	9.0	1.4	1.5	30.2	0.0	18.4	28.3	10.8	3.5
Prop In Lane	1.00		0.52	1.00		0.40	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	109	763	716	195	848	823	308	0	587	225	629	510
V/C Ratio(X)	0.79	0.55	0.56	0.86	0.41	0.41	0.67	0.00	0.64	0.47	0.42	0.15
Avail Cap(c_a), veh/h	160	763	716	285	848	823	333	0	628	249	673	546
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	0.30	0.30	0.30	1.00	0.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	46.3	21.4	21.4	38.3	1.2	1.2	37.3	0.0	28.1	40.1	25.6	23.2
Incr Delay (d2), s/veh	6.1	2.1	2.3	3.8	0.4	0.5	5.2	0.0	2.3	1.7	0.5	0.2
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	2.3	7.5	7.1	3.7	0.5	0.4	5.3	0.0	7.9	2.6	4.8	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.4	23.5	23.6	42.1	1.6	1.7	42.5	0.0	30.4	41.9	26.1	23.4
LnGrp LOS	D	C	C	D	A	A	D	A	C	D	C	C
Approach Vol, veh/h		908			854			586			444	
Approach Delay, s/veh		26.3			9.6			34.7			29.4	
Approach LOS		C			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.9	47.5		38.6	9.1	52.3		38.6
Change Period (Y+Rc), s	3.0	4.5		5.0	3.0	4.5		5.0
Max Green Setting (Gmax), s	10.9	35.5		36.0	9.0	42.5		36.0
Max Q Clear Time (g_c+I1), s	11.0	19.9		30.3	6.8	3.5		32.2
Green Ext Time (p_c), s	0.0	5.5		1.3	0.0	5.8		1.4

Intersection Summary		
HCM 6th Ctrl Delay	23.4	
HCM 6th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	747	113	183	654	193	143	496	193	243	506	163
Future Volume (veh/h)	316	747	113	183	654	193	143	496	193	243	506	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.93	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	322	762	115	187	667	197	146	506	197	248	516	166
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	347	1038	157	219	709	209	176	502	194	276	680	217
Arrive On Green	0.19	0.34	0.34	0.12	0.27	0.27	0.10	0.20	0.20	0.16	0.26	0.26
Sat Flow, veh/h	1781	3079	465	1781	2676	790	1781	2447	945	1781	2605	832
Grp Volume(v), veh/h	322	440	437	187	443	421	146	366	337	248	351	331
Grp Sat Flow(s),veh/h/ln	1781	1777	1767	1781	1777	1688	1781	1777	1615	1781	1777	1660
Q Serve(g_s), s	17.8	21.8	21.8	10.3	24.4	24.4	8.0	20.5	20.5	13.7	18.2	18.4
Cycle Q Clear(g_c), s	17.8	21.8	21.8	10.3	24.4	24.4	8.0	20.5	20.5	13.7	18.2	18.4
Prop In Lane	1.00		0.26	1.00		0.47	1.00		0.59	1.00		0.50
Lane Grp Cap(c), veh/h	347	599	596	219	471	447	176	364	331	276	464	433
V/C Ratio(X)	0.93	0.73	0.73	0.86	0.94	0.94	0.83	1.01	1.02	0.90	0.76	0.76
Avail Cap(c_a), veh/h	347	599	596	246	471	447	198	364	331	276	464	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)	0.83	0.83	0.83	1.00	1.00	1.00	0.50	0.50	0.50	0.80	0.80	0.80
Uniform Delay (d), s/veh	39.6	29.2	29.2	43.0	36.0	36.0	44.2	39.7	39.8	41.5	34.0	34.1
Incr Delay (d2), s/veh	26.5	6.5	6.6	21.8	29.0	30.2	11.9	34.8	39.2	24.8	5.4	6.2
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	10.1	10.0	10.0	5.8	14.0	13.5	4.1	12.2	11.5	7.8	8.4	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.1	35.7	35.8	64.8	65.0	66.2	56.2	74.5	78.9	66.2	39.5	40.3
LnGrp LOS	E	D	D	E	E	E	E	F	F	E	D	D
Approach Vol, veh/h		1199			1051			849			930	
Approach Delay, s/veh		43.9			65.4			73.1			46.9	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	38.2	14.4	30.6	24.0	31.0	20.0	25.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.8	32.2	11.1	24.9	19.5	26.5	15.5	20.5
Max Q Clear Time (g_c+I1), s	12.3	23.8	10.0	20.4	19.8	26.4	15.7	22.5
Green Ext Time (p_c), s	0.1	3.0	0.0	1.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	56.3
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	224	0	0	501	20	30	687	30	0	0	94
Future Volume (veh/h)	221	224	0	0	501	20	30	687	30	0	0	94
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		0.98	0.99		0.97	1.00		0.97
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	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	235	238	0	0	533	21	32	731	32	0	0	100
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	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	268	2374	0	0	1652	65	317	876	378	0	0	378
Arrive On Green	0.15	0.67	0.00	0.00	0.47	0.47	0.25	0.25	0.25	0.00	0.00	0.25
Sat Flow, veh/h	1781	3647	0	0	3575	137	1284	3554	1533	0	0	1533
Grp Volume(v), veh/h	235	238	0	0	272	282	32	731	32	0	0	100
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1842	1284	1777	1533	0	0	1533
Q Serve(g_s), s	13.6	2.5	0.0	0.0	10.0	10.0	2.2	20.5	1.7	0.0	0.0	5.5
Cycle Q Clear(g_c), s	13.6	2.5	0.0	0.0	10.0	10.0	7.7	20.5	1.7	0.0	0.0	5.5
Prop In Lane	1.00		0.00	0.00		0.07	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	268	2374	0	0	843	874	317	876	378	0	0	378
V/C Ratio(X)	0.88	0.10	0.00	0.00	0.32	0.32	0.10	0.83	0.08	0.00	0.00	0.26
Avail Cap(c_a), veh/h	450	2374	0	0	843	874	411	1134	489	0	0	489
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	0.96	0.96	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	43.7	6.2	0.0	0.0	17.1	17.1	35.0	37.5	30.5	0.0	0.0	31.9
Incr Delay (d2), s/veh	5.3	0.1	0.0	0.0	1.0	0.9	0.1	4.0	0.1	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.9	0.0	0.0	4.3	4.4	0.7	9.3	0.6	0.0	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.0	6.3	0.0	0.0	18.1	18.1	35.1	41.5	30.5	0.0	0.0	32.3
LnGrp LOS	D	A	A	A	B	B	D	D	C	A	A	C
Approach Vol, veh/h		473			554			795			100	
Approach Delay, s/veh		27.5			18.1			40.8			32.3	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	74.6		30.4	20.3	54.3		30.4					
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5					
Max Green Setting (Gmax), s	62.5		33.5	26.5	31.5		33.5					
Max Q Clear Time (g_c+I1), s	4.5		7.5	15.6	12.0		22.5					
Green Ext Time (p_c), s	1.4		0.7	0.3	2.8		3.4					

Intersection Summary												
HCM 6th Ctrl Delay		30.5										
HCM 6th LOS		C										

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	1240	44	147	501	57	64	210	309	57	152	47
Future Volume (veh/h)	71	1240	44	147	501	57	64	210	309	57	152	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	1363	48	162	551	63	70	231	340	63	167	52
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	1627	57	198	1667	190	325	477	392	216	682	204
Arrive On Green	0.06	0.47	0.47	0.11	0.52	0.52	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1781	3499	123	1781	3206	365	1153	1870	1534	837	2671	801
Grp Volume(v), veh/h	78	691	720	162	305	309	70	231	340	63	109	110
Grp Sat Flow(s),veh/h/ln	1781	1777	1845	1781	1777	1795	1153	1870	1534	837	1777	1695
Q Serve(g_s), s	3.5	27.3	27.4	7.1	7.9	8.0	4.1	8.4	17.0	5.5	3.9	4.1
Cycle Q Clear(g_c), s	3.5	27.3	27.4	7.1	7.9	8.0	8.3	8.4	17.0	13.9	3.9	4.1
Prop In Lane	1.00		0.07	1.00		0.20	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	100	826	858	198	924	933	325	477	392	216	454	433
V/C Ratio(X)	0.78	0.84	0.84	0.82	0.33	0.33	0.22	0.48	0.87	0.29	0.24	0.25
Avail Cap(c_a), veh/h	127	826	858	212	924	933	363	540	443	244	513	489
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	0.77	0.77	0.77
Uniform Delay (d), s/veh	37.3	18.7	18.8	34.8	11.1	11.1	27.0	25.3	28.5	31.2	23.6	23.7
Incr Delay (d2), s/veh	15.9	9.8	9.6	19.1	1.0	1.0	0.1	0.3	14.0	0.2	0.1	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	1.9	12.2	12.7	4.0	3.0	3.1	1.1	3.6	7.5	1.1	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.2	28.6	28.4	53.9	12.1	12.1	27.1	25.6	42.5	31.4	23.7	23.8
LnGrp LOS	D	C	C	D	B	B	C	C	D	C	C	C
Approach Vol, veh/h		1489			776			641			282	
Approach Delay, s/veh		29.8			20.8			34.7			25.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	41.7		24.9	9.0	46.1		24.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	33.9		23.1	5.7	37.7		23.1				
Max Q Clear Time (g_c+I1), s	10.1	29.4		15.9	5.5	10.0		19.0				
Green Ext Time (p_c), s	0.0	2.6		0.6	0.0	2.4		0.8				

Intersection Summary		
HCM 6th Ctrl Delay		28.2
HCM 6th LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	957	174	194	394	104	124	652	164	204	712	84
Future Volume (veh/h)	174	957	174	194	394	104	124	652	164	204	712	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	181	997	173	202	410	108	129	679	171	212	742	88
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	1054	183	192	936	244	158	842	363	212	851	101
Arrive On Green	0.12	0.35	0.35	0.11	0.34	0.34	0.09	0.24	0.24	0.12	0.27	0.27
Sat Flow, veh/h	1781	3014	522	1781	2772	722	1781	3554	1532	1781	3187	378
Grp Volume(v), veh/h	181	587	583	202	261	257	129	679	171	212	414	416
Grp Sat Flow(s),veh/h/ln	1781	1777	1759	1781	1777	1717	1781	1777	1532	1781	1777	1788
Q Serve(g_s), s	10.5	33.7	33.8	11.3	12.0	12.2	7.5	18.9	10.1	12.5	23.3	23.4
Cycle Q Clear(g_c), s	10.5	33.7	33.8	11.3	12.0	12.2	7.5	18.9	10.1	12.5	23.3	23.4
Prop In Lane	1.00		0.30	1.00		0.42	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	213	622	616	192	600	580	158	842	363	212	475	478
V/C Ratio(X)	0.85	0.94	0.95	1.05	0.43	0.44	0.82	0.81	0.47	1.00	0.87	0.87
Avail Cap(c_a), veh/h	378	622	616	192	600	580	277	880	379	212	475	478
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	0.80	0.80	0.80	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	45.3	33.1	33.2	46.8	27.0	27.1	47.0	37.8	34.4	46.2	36.8	36.8
Incr Delay (d2), s/veh	3.6	24.8	25.3	73.0	1.8	2.0	3.9	7.4	3.4	54.1	14.9	14.9
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	4.8	18.2	18.1	8.8	5.3	5.2	3.4	8.8	4.0	8.6	11.8	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.9	57.9	58.5	119.8	28.8	29.0	50.8	45.2	37.8	100.4	51.6	51.7
LnGrp LOS	D	E	E	F	C	C	D	D	D	F	D	D
Approach Vol, veh/h		1351			720			979			1042	
Approach Delay, s/veh		57.0			54.4			44.7			61.6	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	41.8	14.0	33.1	17.3	40.6	17.2	30.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 11	35.6	* 16	22.2	* 22	24.6	* 13	26.0
Max Q Clear Time (g_c+I1), s	13.3	35.8	9.5	25.4	12.5	14.2	14.5	20.9
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.2	4.4	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	54.7
HCM 6th LOS	D

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)	193	776	103	40	353	123	113	256	40	193	288	163
Future Volume (veh/h)	193	776	103	40	353	123	113	256	40	193	288	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	210	843	112	43	384	134	123	278	43	210	313	177
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	1264	168	65	774	266	154	337	52	246	578	316
Arrive On Green	0.14	0.40	0.40	0.04	0.30	0.30	0.09	0.22	0.22	0.14	0.27	0.27
Sat Flow, veh/h	1781	3141	417	1781	2570	883	1781	1562	242	1781	2159	1180
Grp Volume(v), veh/h	210	477	478	43	264	254	123	0	321	210	256	234
Grp Sat Flow(s),veh/h/ln	1781	1777	1781	1781	1777	1676	1781	0	1803	1781	1777	1562
Q Serve(g_s), s	10.3	19.6	19.6	2.1	10.9	11.2	6.1	0.0	15.2	10.3	11.0	11.6
Cycle Q Clear(g_c), s	10.3	19.6	19.6	2.1	10.9	11.2	6.1	0.0	15.2	10.3	11.0	11.6
Prop In Lane	1.00		0.23	1.00		0.53	1.00		0.13	1.00		0.76
Lane Grp Cap(c), veh/h	246	715	717	65	535	504	154	0	389	246	475	418
V/C Ratio(X)	0.85	0.67	0.67	0.66	0.49	0.50	0.80	0.00	0.83	0.85	0.54	0.56
Avail Cap(c_a), veh/h	339	715	717	100	535	504	239	0	474	339	576	506
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	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	21.8	21.8	42.5	25.7	25.8	40.1	0.0	33.5	37.7	28.0	28.2
Incr Delay (d2), s/veh	11.0	4.9	4.9	4.1	3.2	3.6	4.7	0.0	9.0	11.0	0.7	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	5.1	8.6	8.6	1.0	4.9	4.8	2.8	0.0	7.5	5.1	4.6	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	26.7	26.7	46.7	28.9	29.3	44.8	0.0	42.4	48.6	28.7	29.1
LnGrp LOS	D	C	C	D	C	C	D	A	D	D	C	C
Approach Vol, veh/h		1165			561			444			700	
Approach Delay, s/veh		30.7			30.5			43.1			34.8	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	41.0	11.7	29.4	16.4	31.9	16.4	24.8
Change Period (Y+Rc), s	4.0	5.0	4.0	* 5.5	4.0	5.0	4.0	5.5
Max Green Setting (Gmax), s	5.3	36.0	12.0	* 29	17.0	24.0	17.0	23.5
Max Q Clear Time (g_c+I1), s	4.1	21.6	8.1	13.6	12.3	13.2	12.3	17.2
Green Ext Time (p_c), s	0.0	5.2	0.1	2.2	0.1	2.3	0.1	0.8

Intersection Summary	
HCM 6th Ctrl Delay	33.6
HCM 6th LOS	C

Notes

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

APPENDIX L

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – LONG-TERM WITH DEVELOPMENT AT THE TRIGGER THRESHOLD

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	780	140	210	1109	140	150	700	160	310	840	570
Future Volume (veh/h)	390	780	140	210	1109	140	150	700	160	310	840	570
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.88	1.00		0.92
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	821	147	221	1167	147	158	737	168	326	884	600
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	1570	279	270	1054	132	110	703	160	348	767	496
Arrive On Green	0.11	0.36	0.36	0.08	0.33	0.33	0.06	0.25	0.25	0.20	0.38	0.38
Sat Flow, veh/h	3456	4325	768	3456	3156	396	1781	2796	637	1781	1994	1288
Grp Volume(v), veh/h	411	645	323	221	655	659	158	468	437	326	783	701
Grp Sat Flow(s),veh/h/ln	1728	1702	1688	1728	1777	1775	1781	1777	1657	1781	1777	1505
Q Serve(g_s), s	17.7	24.6	24.9	10.4	55.1	55.1	10.2	41.5	41.5	29.7	63.5	63.5
Cycle Q Clear(g_c), s	17.7	24.6	24.9	10.4	55.1	55.1	10.2	41.5	41.5	29.7	63.5	63.5
Prop In Lane	1.00		0.45	1.00		0.22	1.00		0.38	1.00		0.86
Lane Grp Cap(c), veh/h	371	1236	613	270	593	593	110	447	417	348	684	579
V/C Ratio(X)	1.11	0.52	0.53	0.82	1.10	1.11	1.43	1.05	1.05	0.94	1.14	1.21
Avail Cap(c_a), veh/h	371	1236	613	744	593	593	110	447	417	430	684	579
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)	0.58	0.58	0.58	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.7	41.3	41.4	74.9	55.0	55.0	77.4	61.8	61.8	65.4	50.7	50.8
Incr Delay (d2), s/veh	69.2	0.9	1.9	2.6	60.6	63.3	237.8	54.6	56.2	24.6	81.8	110.0
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	11.4	10.4	10.6	4.7	34.0	34.4	12.0	25.4	23.9	15.8	43.2	41.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	142.9	42.2	43.3	77.5	115.6	118.2	315.2	116.3	118.0	90.1	132.6	160.7
LnGrp LOS	F	D	D	E	F	F	F	F	F	F	F	F
Approach Vol, veh/h		1379			1535			1063			1810	
Approach Delay, s/veh		72.5			111.2			146.6			135.8	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	64.8	14.7	68.1	22.2	60.0	36.7	46.1
Change Period (Y+Rc), s	4.5	4.9	4.5	4.6	4.5	4.9	4.5	4.6
Max Green Setting (Gmax), s	35.5	37.3	10.2	63.5	17.7	55.1	39.8	33.9
Max Q Clear Time (g_c+I1), s	12.4	26.9	12.2	65.5	19.7	57.1	31.7	43.5
Green Ext Time (p_c), s	0.5	3.8	0.0	0.0	0.0	0.0	0.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	116.2
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	809	789	150	1119	90	419	380	80	70	490	370
Future Volume (veh/h)	280	809	789	150	1119	90	419	380	80	70	490	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.90
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	852	831	158	1178	95	441	400	84	74	647	302
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	345	1801	772	276	1699	513	497	1122	459	136	929	353
Arrive On Green	0.10	0.35	0.35	0.08	0.33	0.33	0.14	0.32	0.32	0.08	0.25	0.25
Sat Flow, veh/h	3456	5106	1543	3456	5106	1542	3456	3554	1453	1781	3741	1422
Grp Volume(v), veh/h	295	852	831	158	1178	95	441	400	84	74	647	302
Grp Sat Flow(s),veh/h/ln	1728	1702	1543	1728	1702	1542	1728	1777	1453	1781	1870	1422
Q Serve(g_s), s	12.6	19.4	52.9	6.6	30.0	6.6	18.8	13.0	6.3	6.0	23.6	30.4
Cycle Q Clear(g_c), s	12.6	19.4	52.9	6.6	30.0	6.6	18.8	13.0	6.3	6.0	23.6	30.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	345	1801	772	276	1699	513	497	1122	459	136	929	353
V/C Ratio(X)	0.85	0.47	1.08	0.57	0.69	0.19	0.89	0.36	0.18	0.54	0.70	0.86
Avail Cap(c_a), veh/h	560	1801	772	276	1699	513	905	1341	548	152	929	353
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	0.84	0.84	0.84	0.66	0.66	0.66
Uniform Delay (d), s/veh	66.4	37.7	38.0	66.5	43.4	35.6	63.0	39.6	37.3	66.8	51.2	53.8
Incr Delay (d2), s/veh	3.8	0.9	54.9	1.8	2.4	0.8	1.9	0.1	0.1	0.8	2.0	13.8
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	5.7	8.1	39.2	2.9	12.7	2.6	8.4	5.7	0.0	2.8	11.3	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.2	38.6	92.8	68.4	45.8	36.4	64.9	39.6	37.3	67.6	53.2	67.6
LnGrp LOS	E	D	F	E	D	D	E	D	D	E	D	E
Approach Vol, veh/h		1978			1431			925			1023	
Approach Delay, s/veh		66.1			47.6			51.5			58.5	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	60.9	27.3	44.1	20.7	57.9	17.2	54.3
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.9	* 5.7	8.0	* 5.7	6.9
Max Green Setting (Gmax), s	* 13	42.3	* 39	30.1	* 24	30.0	* 13	56.6
Max Q Clear Time (g_c+I1), s	8.6	54.9	20.8	32.4	14.6	32.0	8.0	15.0
Green Ext Time (p_c), s	0.1	0.0	0.8	0.0	0.4	0.0	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	57.2
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* 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)	112	317	120	90	612	287	140	462	50	245	882	162
Future Volume (veh/h)	112	317	120	90	612	287	140	462	50	245	882	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	330	125	94	638	299	146	481	52	255	919	169
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	805	298	132	735	344	139	1087	117	175	1065	196
Arrive On Green	0.08	0.32	0.32	0.07	0.32	0.32	0.08	0.34	0.34	0.10	0.36	0.36
Sat Flow, veh/h	1781	2515	932	1781	2325	1089	1781	3226	347	1781	2983	548
Grp Volume(v), veh/h	117	231	224	94	488	449	146	264	269	255	547	541
Grp Sat Flow(s),veh/h/ln	1781	1777	1671	1781	1777	1637	1781	1777	1796	1781	1777	1754
Q Serve(g_s), s	7.5	11.7	12.1	5.9	29.7	29.8	9.0	13.3	13.4	11.3	32.9	33.0
Cycle Q Clear(g_c), s	7.5	11.7	12.1	5.9	29.7	29.8	9.0	13.3	13.4	11.3	32.9	33.0
Prop In Lane	1.00		0.56	1.00		0.67	1.00		0.19	1.00		0.31
Lane Grp Cap(c), veh/h	139	569	535	132	562	517	139	599	605	175	634	626
V/C Ratio(X)	0.84	0.41	0.42	0.71	0.87	0.87	1.05	0.44	0.44	1.46	0.86	0.86
Avail Cap(c_a), veh/h	139	569	535	139	562	517	139	613	620	175	649	641
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)	0.90	0.90	0.90	1.00	1.00	1.00	0.89	0.89	0.89	0.33	0.33	0.33
Uniform Delay (d), s/veh	52.3	30.6	30.7	52.0	37.1	37.1	53.0	29.7	29.7	51.9	34.4	34.4
Incr Delay (d2), s/veh	30.2	1.9	2.2	12.2	16.5	17.7	85.0	1.6	1.7	215.9	5.1	5.2
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	4.4	5.2	5.1	3.1	15.2	14.1	7.3	5.9	6.0	15.5	14.7	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.4	32.5	32.9	64.2	53.6	54.7	138.0	31.3	31.4	267.8	39.4	39.5
LnGrp LOS	F	C	C	E	D	D	F	C	C	F	D	D
Approach Vol, veh/h		572			1031			679			1343	
Approach Delay, s/veh		42.9			55.1			54.3			82.8	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	41.9	13.7	46.1	13.7	41.5	16.0	43.8
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 9	35.4	* 9	42.0	* 9	35.4	* 11	39.7
Max Q Clear Time (g_c+I1), s	7.9	14.1	11.0	35.0	9.5	31.8	13.3	15.4
Green Ext Time (p_c), s	0.0	6.0	0.0	5.7	0.0	2.9	0.0	7.6

Intersection Summary	
HCM 6th Ctrl Delay	63.3
HCM 6th LOS	E

Notes

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

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	489	65	65	1197	80	55
Future Vol, veh/h	489	65	65	1197	80	55
Conflicting Peds, #/hr	0	45	45	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	45	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	520	69	69	1273	85	59

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	634	0	1385	350
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	785	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	945	-	134	646
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	410	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	905	-	94	612
Mov Cap-2 Maneuver	-	-	-	-	209	-
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	300	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	24.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	209	612	-	-	905	-
HCM Lane V/C Ratio	0.407	0.096	-	-	0.076	-
HCM Control Delay (s)	33.6	11.5	-	-	9.3	1.1
HCM Lane LOS	D	B	-	-	A	A
HCM 95th %tile Q(veh)	1.8	0.3	-	-	0.2	-

Intersection	
Int Delay, s/veh	61.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	270	20	110	420	40	20	60	30	20	140	130
Future Vol, veh/h	20	270	20	110	420	40	20	60	30	20	140	130
Conflicting Peds, #/hr	10	0	24	24	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	293	22	120	457	43	22	65	33	22	152	141

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	510	0	0	339	0	0	927	1122	192	962	1112	270
Stage 1	-	-	-	-	-	-	372	372	-	729	729	-
Stage 2	-	-	-	-	-	-	555	750	-	233	383	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1051	-	-	1217	-	-	223	205	817	210	207	728
Stage 1	-	-	-	-	-	-	621	617	-	380	426	-
Stage 2	-	-	-	-	-	-	484	417	-	749	610	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1041	-	-	1189	-	-	33	166	791	121	167	714
Mov Cap-2 Maneuver	-	-	-	-	-	-	33	166	-	121	167	-
Stage 1	-	-	-	-	-	-	591	587	-	367	362	-
Stage 2	-	-	-	-	-	-	191	354	-	616	581	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	1.9	189.4	196.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	109	1041	-	-	1189	-	-	245
HCM Lane V/C Ratio	1.097	0.021	-	-	0.101	-	-	1.287
HCM Control Delay (s)	189.4	8.5	0.1	-	8.4	0.4	-	196.7
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	7.4	0.1	-	-	0.3	-	-	16.1

Intersection	
Int Delay, s/veh	19.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	490	40	90	1000	50	40	20	50	30	20	30
Future Vol, veh/h	20	490	40	90	1000	50	40	20	50	30	20	30
Conflicting Peds, #/hr	20	0	18	18	0	20	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	516	42	95	1053	53	42	21	53	32	21	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1126	0	0	576	0	0	1334	1913	307	1611	1908	583
Stage 1	-	-	-	-	-	-	597	597	-	1290	1290	-
Stage 2	-	-	-	-	-	-	737	1316	-	321	618	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	616	-	-	993	-	-	112	67	689	70	68	456
Stage 1	-	-	-	-	-	-	456	490	-	173	232	-
Stage 2	-	-	-	-	-	-	376	226	-	665	479	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	604	-	-	976	-	-	64	55	671	39	56	443
Mov Cap-2 Maneuver	-	-	-	-	-	-	64	55	-	39	56	-
Stage 1	-	-	-	-	-	-	425	457	-	161	206	-
Stage 2	-	-	-	-	-	-	280	200	-	550	447	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.7	96.8	$ 300.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	62	234	604	-	-	976	-	-	67
HCM Lane V/C Ratio	0.849	0.27	0.035	-	-	0.097	-	-	1.257
HCM Control Delay (s)	181.8	26	11.2	0.3	-	9.1	-	-	$ 300.2
HCM Lane LOS	F	D	B	A	-	A	-	-	F
HCM 95th %tile Q(veh)	3.9	1.1	0.1	-	-	0.3	-	-	6.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	350	140	170	831	90	170	481	60	80	652	140
Future Volume (veh/h)	120	350	140	170	831	90	170	481	60	80	652	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	393	149	191	934	45	191	540	67	90	733	42
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	880	328	175	1242	60	170	587	480	117	967	55
Arrive On Green	0.09	0.35	0.35	0.10	0.36	0.36	0.10	0.31	0.31	0.07	0.28	0.28
Sat Flow, veh/h	1781	2500	933	1781	3443	166	1781	1870	1531	1781	3408	195
Grp Volume(v), veh/h	135	277	265	191	482	497	191	540	67	90	382	393
Grp Sat Flow(s),veh/h/ln	1781	1777	1656	1781	1777	1832	1781	1870	1531	1781	1777	1827
Q Serve(g_s), s	8.6	13.8	14.2	11.3	27.4	27.4	11.0	32.0	3.6	5.7	22.6	22.6
Cycle Q Clear(g_c), s	8.6	13.8	14.2	11.3	27.4	27.4	11.0	32.0	3.6	5.7	22.6	22.6
Prop In Lane	1.00		0.56	1.00		0.09	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	160	625	583	175	641	661	170	587	480	117	504	518
V/C Ratio(X)	0.85	0.44	0.45	1.09	0.75	0.75	1.12	0.92	0.14	0.77	0.76	0.76
Avail Cap(c_a), veh/h	160	625	583	175	641	661	170	607	497	124	530	545
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)	0.91	0.91	0.91	0.59	0.59	0.59	0.79	0.79	0.79	0.75	0.75	0.75
Uniform Delay (d), s/veh	51.6	28.6	28.7	51.9	32.3	32.3	52.0	38.1	28.3	52.9	37.6	37.6
Incr Delay (d2), s/veh	28.6	2.1	2.3	78.8	4.8	4.7	97.6	18.5	0.5	27.0	7.8	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	6.1	5.9	8.8	12.3	12.7	9.5	17.3	1.4	3.4	10.7	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.2	30.7	31.1	130.7	37.1	36.9	149.6	56.5	28.8	79.9	45.4	45.2
LnGrp LOS	F	C	C	F	D	D	F	E	C	E	D	D
Approach Vol, veh/h		677			1170			798			865	
Approach Delay, s/veh		40.7			52.3			76.5			48.9	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	45.6	15.7	37.7	15.0	46.6	12.2	41.2
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 11	38.8	* 11	34.3	* 10	39.8	* 8	37.3
Max Q Clear Time (g_c+I1), s	13.3	16.2	13.0	24.6	10.6	29.4	7.7	34.0
Green Ext Time (p_c), s	0.0	8.4	0.0	6.3	0.0	7.9	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	54.7
HCM 6th LOS	D

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)	132	367	62	142	899	150	152	405	102	150	445	182
Future Volume (veh/h)	132	367	62	142	899	150	152	405	102	150	445	182
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.94	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	165	459	78	178	1124	188	190	506	128	188	556	228
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	1117	188	212	1173	195	205	591	148	212	523	214
Arrive On Green	0.20	0.74	0.74	0.12	0.39	0.39	0.12	0.21	0.21	0.12	0.22	0.22
Sat Flow, veh/h	1781	3024	510	1781	3031	505	1781	2774	697	1781	2412	986
Grp Volume(v), veh/h	165	268	269	178	657	655	190	323	311	188	409	375
Grp Sat Flow(s),veh/h/ln	1781	1777	1757	1781	1777	1759	1781	1777	1693	1781	1777	1621
Q Serve(g_s), s	9.1	5.7	5.8	9.8	36.0	36.4	10.6	17.5	17.7	10.4	21.7	21.7
Cycle Q Clear(g_c), s	9.1	5.7	5.8	9.8	36.0	36.4	10.6	17.5	17.7	10.4	21.7	21.7
Prop In Lane	1.00		0.29	1.00		0.29	1.00		0.41	1.00		0.61
Lane Grp Cap(c), veh/h	180	656	649	212	688	681	205	378	361	212	386	352
V/C Ratio(X)	0.92	0.41	0.41	0.84	0.96	0.96	0.93	0.85	0.86	0.89	1.06	1.07
Avail Cap(c_a), veh/h	180	656	649	322	688	681	205	378	361	212	386	352
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	0.27	0.27	0.27	0.74	0.74	0.74
Uniform Delay (d), s/veh	39.5	9.0	9.0	43.1	29.8	29.9	43.8	37.8	37.9	43.4	39.2	39.2
Incr Delay (d2), s/veh	43.2	1.8	1.9	9.8	25.0	26.4	17.4	5.2	5.9	26.3	56.5	60.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	2.0	2.1	4.8	19.3	19.5	5.6	7.9	7.7	6.1	15.3	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.7	10.8	10.9	53.0	54.8	56.3	61.2	43.0	43.9	69.7	95.7	99.2
LnGrp LOS	F	B	B	D	D	E	E	D	D	E	F	F
Approach Vol, veh/h		702			1490			824			972	
Approach Delay, s/veh		27.8			55.2			47.6			92.0	
Approach LOS		C			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	41.4	16.0	26.2	14.6	43.2	16.4	25.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.9	30.7	11.5	21.7	10.1	38.7	11.9	21.3
Max Q Clear Time (g_c+I1), s	11.8	7.8	12.6	23.7	11.1	38.4	12.4	19.7
Green Ext Time (p_c), s	0.2	2.6	0.0	0.0	0.0	0.2	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	57.8
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	839	201	121	505	253	160	781	141	304	741	111
Future Volume (veh/h)	233	839	201	121	505	253	160	781	141	304	741	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	245	883	212	127	532	266	168	822	148	320	780	117
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	942	226	139	752	375	139	1009	182	144	1048	157
Arrive On Green	0.08	0.33	0.33	0.08	0.33	0.33	0.08	0.34	0.34	0.08	0.34	0.34
Sat Flow, veh/h	1781	2825	678	1781	2273	1133	1781	2993	539	1781	3086	463
Grp Volume(v), veh/h	245	555	540	127	416	382	168	488	482	320	449	448
Grp Sat Flow(s),veh/h/ln	1781	1777	1726	1781	1777	1629	1781	1777	1756	1781	1777	1772
Q Serve(g_s), s	9.3	34.8	34.9	8.1	23.5	23.6	9.0	28.9	28.9	9.3	25.7	25.7
Cycle Q Clear(g_c), s	9.3	34.8	34.9	8.1	23.5	23.6	9.0	28.9	28.9	9.3	25.7	25.7
Prop In Lane	1.00		0.39	1.00		0.70	1.00		0.31	1.00		0.26
Lane Grp Cap(c), veh/h	144	592	575	139	588	539	139	599	592	144	603	602
V/C Ratio(X)	1.70	0.94	0.94	0.91	0.71	0.71	1.21	0.81	0.81	2.22	0.74	0.74
Avail Cap(c_a), veh/h	144	592	575	139	588	539	139	644	637	144	649	647
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)	0.70	0.70	0.70	1.00	1.00	1.00	0.54	0.54	0.54	0.46	0.46	0.46
Uniform Delay (d), s/veh	52.8	37.2	37.2	52.6	33.6	33.6	53.0	34.8	34.8	52.8	33.6	33.6
Incr Delay (d2), s/veh	335.3	19.0	19.5	49.5	7.0	7.7	123.0	6.0	6.0	559.9	3.4	3.4
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	17.5	17.6	17.2	5.5	11.0	10.3	8.7	13.2	13.0	26.5	11.4	11.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	388.2	56.1	56.7	102.1	40.6	41.4	176.0	40.8	40.9	612.7	36.9	36.9
LnGrp LOS	F	E	E	F	D	D	F	D	D	F	D	D
Approach Vol, veh/h		1340			925			1138			1217	
Approach Delay, s/veh		117.1			49.4			60.8			188.3	
Approach LOS		F			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	43.4	13.7	44.2	14.0	43.1	14.0	43.9
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 9	35.4	* 9	42.0	* 9.3	35.1	* 9.3	41.7
Max Q Clear Time (g_c+I1), s	10.1	36.9	11.0	27.7	11.3	25.6	11.3	30.9
Green Ext Time (p_c), s	0.0	0.0	0.0	9.2	0.0	6.1	0.0	7.8

Intersection Summary	
HCM 6th Ctrl Delay	108.4
HCM 6th LOS	F

Notes

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

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1325	73	41	658	51	61
Future Vol, veh/h	1325	73	41	658	51	61
Conflicting Peds, #/hr	0	28	28	0	10	10
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	45	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1456	80	45	723	56	67

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1564	0	1986	806
Stage 1	-	-	-	-	1524	-
Stage 2	-	-	-	-	462	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	418	-	~ 53	325
Stage 1	-	-	-	-	166	-
Stage 2	-	-	-	-	601	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	407	-	~ 42	313
Mov Cap-2 Maneuver	-	-	-	-	125	-
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	485	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	35.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	125	313	-	-	407	-
HCM Lane V/C Ratio	0.448	0.214	-	-	0.111	-
HCM Control Delay (s)	55.3	19.6	-	-	14.9	1.2
HCM Lane LOS	F	C	-	-	B	A
HCM 95th %tile Q(veh)	2	0.8	-	-	0.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	19.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	530	70	40	270	20	50	80	50	30	70	50
Future Vol, veh/h	40	530	70	40	270	20	50	80	50	30	70	50
Conflicting Peds, #/hr	10	0	10	10	0	10	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	552	73	42	281	21	52	83	52	31	73	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	312	0	0	635	0	0	954	1079	333	798	1105	171
Stage 1	-	-	-	-	-	-	683	683	-	386	386	-
Stage 2	-	-	-	-	-	-	271	396	-	412	719	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1245	-	-	944	-	-	213	217	663	277	209	843
Stage 1	-	-	-	-	-	-	405	447	-	609	609	-
Stage 2	-	-	-	-	-	-	712	602	-	588	431	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1233	-	-	935	-	-	125	191	650	153	184	827
Mov Cap-2 Maneuver	-	-	-	-	-	-	125	191	-	153	184	-
Stage 1	-	-	-	-	-	-	380	419	-	571	571	-
Stage 2	-	-	-	-	-	-	545	564	-	406	404	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1.3	95.8	46.3
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	201	1233	-	-	935	-	-	235
HCM Lane V/C Ratio	0.933	0.034	-	-	0.045	-	-	0.665
HCM Control Delay (s)	95.8	8	0.2	-	9	0.2	-	46.3
HCM Lane LOS	F	A	A	-	A	A	-	E
HCM 95th %tile Q(veh)	7.6	0.1	-	-	0.1	-	-	4.2

Intersection	
Int Delay, s/veh	22.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	940	90	60	590	30	40	10	60	30	20	30
Future Vol, veh/h	30	940	90	60	590	30	40	10	60	30	20	30
Conflicting Peds, #/hr	29	0	14	14	0	29	10	0	10	10	0	10
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	1022	98	65	641	33	43	11	65	33	22	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	703	0	0	1134	0	0	1623	1984	584	1410	2017	376
Stage 1	-	-	-	-	-	-	1151	1151	-	817	817	-
Stage 2	-	-	-	-	-	-	472	833	-	593	1200	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	890	-	-	612	-	-	68	61	455	98	58	622
Stage 1	-	-	-	-	-	-	211	271	-	337	388	-
Stage 2	-	-	-	-	-	-	542	382	-	459	256	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	865	-	-	604	-	-	~ 33	47	445	56	44	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 33	47	-	56	44	-
Stage 1	-	-	-	-	-	-	187	240	-	294	336	-
Stage 2	-	-	-	-	-	-	424	331	-	332	226	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	1	213.9	237.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	34	269	865	-	-	604	-	-	77
HCM Lane V/C Ratio	1.439	0.263	0.038	-	-	0.108	-	-	1.129
HCM Control Delay (s)	$ 489.4	23.1	9.3	0.5	-	11.7	-	-	237.7
HCM Lane LOS	F	C	A	A	-	B	-	-	F
HCM 95th %tile Q(veh)	5.3	1	0.1	-	-	0.4	-	-	6.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	690	184	93	364	50	174	629	203	93	629	63
Future Volume (veh/h)	93	690	184	93	364	50	174	629	203	93	629	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	704	188	95	371	51	178	642	207	95	642	64
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	978	261	138	1111	151	151	600	494	122	993	99
Arrive On Green	0.08	0.35	0.35	0.08	0.35	0.35	0.08	0.32	0.32	0.07	0.31	0.31
Sat Flow, veh/h	1781	2756	736	1781	3130	427	1781	1870	1539	1781	3253	324
Grp Volume(v), veh/h	95	454	438	95	209	213	178	642	207	95	350	356
Grp Sat Flow(s),veh/h/ln	1781	1777	1714	1781	1777	1780	1781	1870	1539	1781	1777	1800
Q Serve(g_s), s	5.7	24.3	24.4	5.7	9.5	9.6	9.3	35.3	11.6	5.8	18.8	18.8
Cycle Q Clear(g_c), s	5.7	24.3	24.4	5.7	9.5	9.6	9.3	35.3	11.6	5.8	18.8	18.8
Prop In Lane	1.00		0.43	1.00		0.24	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	138	631	608	138	631	632	151	600	494	122	542	549
V/C Ratio(X)	0.69	0.72	0.72	0.69	0.33	0.34	1.18	1.07	0.42	0.78	0.65	0.65
Avail Cap(c_a), veh/h	188	631	608	146	631	632	151	600	494	130	549	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.29	0.29	0.29	0.93	0.93	0.93	0.67	0.67	0.67	0.93	0.93	0.93
Uniform Delay (d), s/veh	49.5	30.7	30.8	49.5	25.9	26.0	50.3	37.3	29.3	50.4	33.1	33.1
Incr Delay (d2), s/veh	0.8	2.1	2.2	9.1	1.3	1.3	118.0	50.5	1.7	31.9	5.4	5.4
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	2.5	10.5	10.1	2.9	4.2	4.2	9.0	24.0	4.5	3.6	8.7	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	32.8	32.9	58.6	27.3	27.3	168.3	87.8	31.1	82.3	38.5	38.5
LnGrp LOS	D	C	C	E	C	C	F	F	C	F	D	D
Approach Vol, veh/h		987			517			1027			801	
Approach Delay, s/veh		34.5			33.0			90.3			43.7	
Approach LOS		C			C			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	44.1	14.0	38.7	13.2	44.1	12.3	40.4
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 8	38.1	* 9.3	34.0	* 12	35.5	* 8	35.3
Max Q Clear Time (g_c+I1), s	7.7	26.4	11.3	20.8	7.7	11.6	7.8	37.3
Green Ext Time (p_c), s	0.0	8.3	0.0	7.5	0.0	6.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.7
HCM 6th LOS	D

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)	311	732	110	180	641	190	140	491	190	240	501	160
Future Volume (veh/h)	311	732	110	180	641	190	140	491	190	240	501	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.93	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	317	747	112	184	654	194	143	501	194	245	511	163
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	1046	157	216	711	211	173	503	193	275	685	217
Arrive On Green	0.19	0.34	0.34	0.12	0.27	0.27	0.10	0.20	0.20	0.15	0.26	0.26
Sat Flow, veh/h	1781	3082	462	1781	2673	792	1781	2452	942	1781	2611	827
Grp Volume(v), veh/h	317	430	429	184	435	413	143	362	333	245	347	327
Grp Sat Flow(s),veh/h/ln	1781	1777	1768	1781	1777	1688	1781	1777	1616	1781	1777	1661
Q Serve(g_s), s	17.4	21.1	21.1	10.1	23.8	23.8	7.9	20.3	20.5	13.5	17.9	18.1
Cycle Q Clear(g_c), s	17.4	21.1	21.1	10.1	23.8	23.8	7.9	20.3	20.5	13.5	17.9	18.1
Prop In Lane	1.00		0.26	1.00		0.47	1.00		0.58	1.00		0.50
Lane Grp Cap(c), veh/h	346	603	600	216	473	449	173	364	331	275	466	436
V/C Ratio(X)	0.92	0.71	0.71	0.85	0.92	0.92	0.83	0.99	1.00	0.89	0.74	0.75
Avail Cap(c_a), veh/h	347	603	600	246	473	449	198	364	331	276	466	436
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)	0.83	0.83	0.83	1.00	1.00	1.00	0.50	0.50	0.50	0.80	0.80	0.80
Uniform Delay (d), s/veh	39.5	28.8	28.8	43.1	35.7	35.7	44.3	39.7	39.8	41.4	33.8	33.9
Incr Delay (d2), s/veh	24.3	5.9	6.0	21.2	25.6	26.7	11.5	31.7	36.2	23.2	4.9	5.5
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	9.8	9.6	9.6	5.6	13.3	12.8	4.0	11.8	11.2	7.6	8.2	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.8	34.7	34.8	64.2	61.2	62.4	55.8	71.4	75.9	64.7	38.7	39.4
LnGrp LOS	E	C	C	E	E	E	E	E	F	E	D	D
Approach Vol, veh/h		1176			1032			838			919	
Approach Delay, s/veh		42.6			62.2			70.5			45.9	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	38.4	14.2	30.7	23.9	31.1	20.0	25.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.8	32.2	11.1	24.9	19.5	26.5	15.5	20.5
Max Q Clear Time (g_c+I1), s	12.1	23.1	9.9	20.1	19.4	25.8	15.5	22.5
Green Ext Time (p_c), s	0.1	3.0	0.0	1.6	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.4
HCM 6th LOS	D

APPENDIX M

PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – LONG-TERM + PROJECT WITH RECOMMENDATIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	781	140	210	1111	140	150	700	160	310	841	571
Future Volume (veh/h)	390	781	140	210	1111	140	150	700	160	310	841	571
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.87	1.00		0.91
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	411	822	147	221	1169	147	158	737	168	326	885	481
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	1689	300	270	1141	143	124	799	310	347	1242	506
Arrive On Green	0.11	0.39	0.39	0.08	0.36	0.36	0.07	0.22	0.22	0.19	0.35	0.35
Sat Flow, veh/h	3456	4328	767	3456	3158	396	1781	3554	1381	1781	3554	1447
Grp Volume(v), veh/h	411	645	324	221	656	660	158	737	168	326	885	481
Grp Sat Flow(s),veh/h/ln	1728	1702	1691	1728	1777	1776	1781	1777	1381	1781	1777	1447
Q Serve(g_s), s	17.7	23.5	23.8	10.4	59.6	59.6	11.5	33.5	17.7	29.8	35.6	53.5
Cycle Q Clear(g_c), s	17.7	23.5	23.8	10.4	59.6	59.6	11.5	33.5	17.7	29.8	35.6	53.5
Prop In Lane	1.00		0.45	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	1329	660	270	642	642	124	799	310	347	1242	506
V/C Ratio(X)	1.11	0.49	0.49	0.82	1.02	1.03	1.27	0.92	0.54	0.94	0.71	0.95
Avail Cap(c_a), veh/h	371	1329	660	744	642	642	124	799	310	397	1275	519
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)	0.58	0.58	0.58	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.7	37.8	37.9	74.9	52.7	52.7	76.8	62.6	56.5	65.5	46.5	52.3
Incr Delay (d2), s/veh	69.2	0.7	1.5	2.6	32.0	33.8	169.3	15.4	1.5	28.0	1.7	27.2
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	11.4	9.9	10.1	4.7	31.5	31.9	11.1	16.8	6.3	16.1	15.9	23.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	142.9	38.6	39.4	77.5	84.7	86.5	246.0	78.0	57.9	93.5	48.2	79.4
LnGrp LOS	F	D	D	E	F	F	F	E	E	F	D	E
Approach Vol, veh/h		1380			1537			1063			1692	
Approach Delay, s/veh		69.8			84.5			99.8			65.8	
Approach LOS		E			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	69.3	16.0	62.3	22.2	64.5	36.6	41.7
Change Period (Y+Rc), s	4.5	4.9	4.5	4.6	4.5	4.9	4.5	4.6
Max Green Setting (Gmax), s	35.5	40.3	11.5	59.2	17.7	58.1	36.8	33.9
Max Q Clear Time (g_c+I1), s	12.4	25.8	13.5	55.5	19.7	61.6	31.8	35.5
Green Ext Time (p_c), s	0.5	4.5	0.0	2.2	0.0	0.0	0.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	78.2
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	813	793	151	1124	90	421	381	80	70	491	370
Future Volume (veh/h)	280	813	793	151	1124	90	421	381	80	70	491	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.90
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	856	835	159	1183	95	443	401	84	74	648	302
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	345	1801	773	276	1699	513	499	1122	459	136	927	511
Arrive On Green	0.10	0.35	0.35	0.08	0.33	0.33	0.14	0.32	0.32	0.08	0.25	0.25
Sat Flow, veh/h	3456	5106	1543	3456	5106	1542	3456	3554	1453	1781	3741	1422
Grp Volume(v), veh/h	295	856	835	159	1183	95	443	401	84	74	648	302
Grp Sat Flow(s),veh/h/ln	1728	1702	1543	1728	1702	1542	1728	1777	1453	1781	1870	1422
Q Serve(g_s), s	12.6	19.6	52.9	6.7	30.2	6.6	18.9	13.1	6.3	6.0	23.6	26.4
Cycle Q Clear(g_c), s	12.6	19.6	52.9	6.7	30.2	6.6	18.9	13.1	6.3	6.0	23.6	26.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	345	1801	773	276	1699	513	499	1122	459	136	927	511
V/C Ratio(X)	0.85	0.48	1.08	0.58	0.70	0.19	0.89	0.36	0.18	0.54	0.70	0.59
Avail Cap(c_a), veh/h	560	1801	773	276	1699	513	905	1341	548	152	927	511
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	0.79	0.79	0.79	0.66	0.66	0.66
Uniform Delay (d), s/veh	66.4	37.8	37.9	66.6	43.5	35.6	63.0	39.6	37.3	66.8	51.3	40.5
Incr Delay (d2), s/veh	3.8	0.9	56.2	1.9	2.4	0.8	1.7	0.1	0.1	0.8	2.0	1.9
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	5.7	8.2	39.6	3.0	12.8	2.6	8.4	5.8	0.0	2.8	11.3	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.2	38.7	94.1	68.5	45.9	36.4	64.7	39.6	37.3	67.6	53.3	42.4
LnGrp LOS	E	D	F	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1986			1437			928			1024	
Approach Delay, s/veh		66.7			47.7			51.4			51.1	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	60.9	27.4	44.1	20.7	57.9	17.2	54.3
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.9	* 5.7	8.0	* 5.7	6.9
Max Green Setting (Gmax), s	* 12	42.3	* 39	30.1	* 24	30.0	* 13	56.6
Max Q Clear Time (g_c+I1), s	10.7	54.9	20.9	28.4	14.6	32.2	8.0	15.1
Green Ext Time (p_c), s	0.1	0.0	0.8	1.3	0.4	0.0	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	56.0
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* 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)	122	345	120	90	659	315	140	472	50	264	892	172
Future Volume (veh/h)	122	345	120	90	659	315	140	472	50	264	892	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	359	125	94	686	328	146	492	52	275	929	179
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	1290	560	115	794	380	168	895	94	294	1027	198
Arrive On Green	0.08	0.36	0.36	0.06	0.34	0.34	0.09	0.28	0.28	0.33	0.69	0.69
Sat Flow, veh/h	1781	3554	1544	1781	2309	1104	1781	3233	340	1781	2957	569
Grp Volume(v), veh/h	127	359	125	94	528	486	146	269	275	275	558	550
Grp Sat Flow(s),veh/h/ln	1781	1777	1544	1781	1777	1636	1781	1777	1796	1781	1777	1749
Q Serve(g_s), s	10.6	10.7	8.4	7.8	41.6	41.6	12.1	19.4	19.6	22.5	38.7	38.8
Cycle Q Clear(g_c), s	10.6	10.7	8.4	7.8	41.6	41.6	12.1	19.4	19.6	22.5	38.7	38.8
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.19	1.00		0.33
Lane Grp Cap(c), veh/h	149	1290	560	115	611	562	168	492	498	294	617	608
V/C Ratio(X)	0.85	0.28	0.22	0.82	0.86	0.86	0.87	0.55	0.55	0.94	0.90	0.91
Avail Cap(c_a), veh/h	194	1290	560	184	611	562	229	492	498	409	662	652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.90	0.90	0.90	0.68	0.68	0.68	0.89	0.89	0.89	0.32	0.32	0.32
Uniform Delay (d), s/veh	67.8	33.8	33.1	69.3	45.9	45.9	67.0	46.2	46.3	49.5	20.8	20.9
Incr Delay (d2), s/veh	18.2	0.5	0.8	4.6	10.8	11.6	16.3	3.1	3.2	8.8	7.0	7.2
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	5.5	4.7	3.3	3.7	20.0	18.6	6.3	9.0	9.2	9.3	10.9	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.0	34.3	33.9	73.9	56.8	57.6	83.2	49.4	49.4	58.3	27.9	28.1
LnGrp LOS	F	C	C	E	E	E	F	D	D	E	C	C
Approach Vol, veh/h		611			1108			690			1383	
Approach Delay, s/veh		45.0			58.6			56.6			34.0	
Approach LOS		D			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	59.6	18.9	57.2	17.2	56.7	29.4	46.6
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 16	39.7	* 19	55.9	* 16	38.9	* 34	40.8
Max Q Clear Time (g_c+I1), s	9.8	12.7	14.1	40.8	12.6	43.6	24.5	21.6
Green Ext Time (p_c), s	0.0	6.8	0.1	11.3	0.0	0.0	0.3	6.9

Intersection Summary	
HCM 6th Ctrl Delay	47.1
HCM 6th LOS	D

Notes

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	517	72	72	1268	94	62
Future Volume (veh/h)	517	72	72	1268	94	62
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.94	0.99		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	550	77	77	1349	100	66
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2057	287	166	2143	215	191
Arrive On Green	0.66	0.66	0.66	0.66	0.12	0.12
Sat Flow, veh/h	3198	433	106	3320	1781	1585
Grp Volume(v), veh/h	314	313	745	681	100	66
Grp Sat Flow(s),veh/h/ln	1777	1761	1725	1617	1781	1585
Q Serve(g_s), s	3.0	3.0	0.0	10.2	2.2	1.6
Cycle Q Clear(g_c), s	3.0	3.0	9.3	10.2	2.2	1.6
Prop In Lane		0.25	0.10		1.00	1.00
Lane Grp Cap(c), veh/h	1177	1166	1238	1071	215	191
V/C Ratio(X)	0.27	0.27	0.60	0.64	0.47	0.35
Avail Cap(c_a), veh/h	2977	2950	2898	2709	923	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.9	2.9	3.9	4.1	17.0	16.7
Incr Delay (d2), s/veh	0.1	0.1	0.5	0.6	1.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.3	1.1	1.1	0.9	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.0	3.0	4.4	4.7	18.6	17.8
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h	627			1426	166	
Approach Delay, s/veh	3.0			4.5	18.3	
Approach LOS	A			A	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	9.5	32.0	32.0
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	21.5	69.5	69.5
Max Q Clear Time (g_c+I1), s	4.2	5.0	12.2
Green Ext Time (p_c), s	0.4	4.3	15.3

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	270	20	134	432	40	20	72	42	20	175	130
Future Volume (veh/h)	20	270	20	134	432	40	20	72	42	20	175	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.94	1.00		0.97	0.99		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	293	22	146	470	43	22	78	46	22	190	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	1245	91	356	963	87	161	340	173	132	320	223
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	81	3122	227	498	2415	217	108	1038	527	47	975	680
Grp Volume(v), veh/h	177	0	160	333	0	326	146	0	0	353	0	0
Grp Sat Flow(s),veh/h/ln	1779	0	1651	1484	0	1647	1672	0	0	1702	0	0
Q Serve(g_s), s	0.0	0.0	2.1	2.7	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.1	0.0	2.1	5.1	0.0	4.9	2.0	0.0	0.0	5.7	0.0	0.0
Prop In Lane	0.12		0.14	0.44		0.13	0.15		0.32	0.06		0.40
Lane Grp Cap(c), veh/h	832	0	658	749	0	657	674	0	0	674	0	0
V/C Ratio(X)	0.21	0.00	0.24	0.44	0.00	0.50	0.22	0.00	0.00	0.52	0.00	0.00
Avail Cap(c_a), veh/h	2545	0	2383	2206	0	2377	2241	0	0	2340	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	6.6	7.3	0.0	7.4	8.1	0.0	0.0	9.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.4	0.0	0.6	0.2	0.0	0.0	0.6	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	0.5	0.0	0.5	1.0	0.0	1.1	0.5	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.7	0.0	6.8	7.8	0.0	8.0	8.3	0.0	0.0	10.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		337			659			146			353	
Approach Delay, s/veh		6.7			7.9			8.3			10.0	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.3	17.6	15.3	17.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	43.5	47.5	43.5	47.5
Max Q Clear Time (g_c+I1), s	4.0	4.1	7.7	7.1
Green Ext Time (p_c), s	0.9	2.1	2.4	4.8

Intersection Summary	
HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	525	52	102	1059	62	52	32	62	42	32	42
Future Volume (veh/h)	32	525	52	102	1059	62	52	32	62	42	32	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	553	55	107	1115	65	55	34	65	44	34	44
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	1718	166	586	1973	115	295	144	240	202	106	98
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	65	2967	287	810	3407	198	779	831	1383	389	609	563
Grp Volume(v), veh/h	327	0	315	107	581	599	89	0	65	122	0	0
Grp Sat Flow(s),veh/h/ln	1678	0	1641	810	1777	1828	1610	0	1383	1561	0	0
Q Serve(g_s), s	0.0	0.0	3.6	2.9	7.4	7.5	0.0	0.0	1.5	0.6	0.0	0.0
Cycle Q Clear(g_c), s	3.2	0.0	3.6	6.5	7.4	7.5	1.5	0.0	1.5	2.4	0.0	0.0
Prop In Lane	0.10		0.17	1.00		0.11	0.62		1.00	0.36		0.36
Lane Grp Cap(c), veh/h	1081	0	951	586	1029	1059	439	0	240	405	0	0
V/C Ratio(X)	0.30	0.00	0.33	0.18	0.56	0.57	0.20	0.00	0.27	0.30	0.00	0.00
Avail Cap(c_a), veh/h	2792	0	2910	1553	3151	3242	1258	0	1007	1236	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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.9	0.0	4.0	5.7	4.8	4.8	13.0	0.0	13.0	13.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.1	0.5	0.5	0.2	0.0	0.6	0.4	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	0.5	0.0	0.5	0.3	1.1	1.2	0.6	0.0	0.4	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.1	0.0	4.2	5.8	5.3	5.3	13.3	0.0	13.6	13.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	A
Approach Vol, veh/h		642			1287			154			122	
Approach Delay, s/veh		4.1			5.3			13.4			13.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	10.8	25.6	10.8	25.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.5	64.5	26.5	64.5
Max Q Clear Time (g_c+I1), s	3.5	5.6	4.4	9.5
Green Ext Time (p_c), s	0.9	4.9	0.7	11.6

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	355	143	173	844	93	175	496	60	83	672	143
Future Volume (veh/h)	123	355	143	173	844	93	175	496	60	83	672	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	399	153	194	948	48	197	557	67	93	755	46
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	843	318	218	1270	64	221	606	497	114	896	55
Arrive On Green	0.09	0.34	0.34	0.12	0.37	0.37	0.12	0.32	0.32	0.06	0.26	0.26
Sat Flow, veh/h	1781	2490	940	1781	3434	174	1781	1870	1532	1781	3394	207
Grp Volume(v), veh/h	138	283	269	194	491	505	197	557	67	93	395	406
Grp Sat Flow(s),veh/h/ln	1781	1777	1653	1781	1777	1831	1781	1870	1532	1781	1777	1824
Q Serve(g_s), s	9.9	16.3	16.7	13.9	31.2	31.2	14.2	37.3	4.0	6.7	27.4	27.4
Cycle Q Clear(g_c), s	9.9	16.3	16.7	13.9	31.2	31.2	14.2	37.3	4.0	6.7	27.4	27.4
Prop In Lane	1.00		0.57	1.00		0.09	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	162	602	560	218	657	677	221	606	497	114	469	481
V/C Ratio(X)	0.85	0.47	0.48	0.89	0.75	0.75	0.89	0.92	0.13	0.82	0.84	0.84
Avail Cap(c_a), veh/h	169	602	560	223	657	677	223	632	517	114	491	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.59	0.59	0.59	0.79	0.79	0.79	0.75	0.75	0.75
Uniform Delay (d), s/veh	58.2	33.8	34.0	56.2	35.6	35.6	56.1	42.3	31.0	60.1	45.3	45.3
Incr Delay (d2), s/veh	27.2	2.4	2.7	20.8	4.6	4.4	26.6	17.8	0.4	34.6	13.0	12.8
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	5.7	7.4	7.1	7.5	14.2	14.6	7.9	19.9	1.6	4.1	13.6	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.4	36.2	36.7	76.9	40.2	40.1	82.6	60.0	31.5	94.7	58.3	58.1
LnGrp LOS	F	D	D	E	D	D	F	E	C	F	E	E
Approach Vol, veh/h		690			1190			821			894	
Approach Delay, s/veh		46.2			46.1			63.1			62.0	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	49.1	20.8	39.4	16.5	53.2	13.0	47.3
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 16	41.9	* 16	35.9	* 12	45.9	* 8.3	43.9
Max Q Clear Time (g_c+I1), s	15.9	18.7	16.2	29.4	11.9	33.2	8.7	39.3
Green Ext Time (p_c), s	0.0	8.7	0.0	4.6	0.0	9.5	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	54.0
HCM 6th LOS	D

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)	142	395	72	152	974	150	162	424	112	150	464	192
Future Volume (veh/h)	142	395	72	152	974	150	162	424	112	150	464	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.95	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	494	90	190	1218	188	202	530	140	188	580	240
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	1001	181	224	1251	539	219	665	175	208	568	235
Arrive On Green	0.22	0.67	0.67	0.13	0.35	0.35	0.12	0.24	0.24	0.12	0.24	0.24
Sat Flow, veh/h	1781	2986	541	1781	3554	1530	1781	2748	721	1781	2407	994
Grp Volume(v), veh/h	178	293	291	190	1218	188	202	342	328	188	428	392
Grp Sat Flow(s),veh/h/ln	1781	1777	1749	1781	1777	1530	1781	1777	1692	1781	1777	1624
Q Serve(g_s), s	9.8	8.1	8.2	10.4	33.8	9.1	11.2	18.0	18.2	10.4	23.6	23.6
Cycle Q Clear(g_c), s	9.8	8.1	8.2	10.4	33.8	9.1	11.2	18.0	18.2	10.4	23.6	23.6
Prop In Lane	1.00		0.31	1.00		1.00	1.00		0.43	1.00		0.61
Lane Grp Cap(c), veh/h	194	596	587	224	1251	539	219	430	410	208	419	383
V/C Ratio(X)	0.92	0.49	0.50	0.85	0.97	0.35	0.92	0.79	0.80	0.90	1.02	1.02
Avail Cap(c_a), veh/h	194	596	587	335	1251	539	219	430	410	208	419	383
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	0.27	0.27	0.27	0.74	0.74	0.74
Uniform Delay (d), s/veh	38.7	12.3	12.3	42.8	31.9	23.9	43.4	35.6	35.6	43.6	38.2	38.2
Incr Delay (d2), s/veh	41.1	2.8	2.9	10.7	19.9	1.8	15.7	2.8	3.1	29.5	43.0	45.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	2.9	2.9	5.2	17.2	3.5	5.8	7.9	7.7	6.2	15.1	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.7	15.1	15.2	53.4	51.8	25.7	59.1	38.3	38.7	73.1	81.2	83.8
LnGrp LOS	E	B	B	D	D	C	E	D	D	E	F	F
Approach Vol, veh/h		762			1596			872			1008	
Approach Delay, s/veh		30.2			48.9			43.3			80.7	
Approach LOS		C			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	38.0	16.8	28.1	15.4	39.7	16.2	28.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.6	27.3	12.3	23.6	10.9	35.2	11.7	24.2
Max Q Clear Time (g_c+I1), s	12.4	10.2	13.2	25.6	11.8	35.8	12.4	20.2
Green Ext Time (p_c), s	0.2	2.6	0.0	0.0	0.0	0.0	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	52.0
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	512	1393	140	160	862	160	170	690	340	140	460	260
Future Volume (veh/h)	512	1393	140	160	862	160	170	690	340	140	460	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.92	1.00		0.92
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	528	1436	144	165	889	165	175	711	351	144	474	268
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	563	2263	227	205	1123	208	194	919	379	164	859	352
Arrive On Green	0.16	0.48	0.48	0.06	0.38	0.38	0.22	0.52	0.52	0.09	0.24	0.24
Sat Flow, veh/h	3456	4702	471	3456	2974	552	1781	3554	1465	1781	3554	1458
Grp Volume(v), veh/h	528	1040	540	165	531	523	175	711	351	144	474	268
Grp Sat Flow(s),veh/h/ln	1728	1702	1769	1728	1777	1749	1781	1777	1465	1781	1777	1458
Q Serve(g_s), s	25.7	38.8	38.8	8.0	45.1	45.1	16.3	27.4	37.7	13.6	19.8	29.0
Cycle Q Clear(g_c), s	25.7	38.8	38.8	8.0	45.1	45.1	16.3	27.4	37.7	13.6	19.8	29.0
Prop In Lane	1.00		0.27	1.00		0.32	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	563	1638	851	205	671	661	194	919	379	164	859	352
V/C Ratio(X)	0.94	0.63	0.63	0.80	0.79	0.79	0.90	0.77	0.93	0.88	0.55	0.76
Avail Cap(c_a), veh/h	565	1638	851	258	671	661	309	1104	455	183	859	352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.39	0.39	0.92	0.92	0.92	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.3	32.9	32.9	79.0	46.9	46.9	65.6	37.0	39.5	76.3	56.4	59.9
Incr Delay (d2), s/veh	11.8	0.7	1.4	11.5	8.6	8.7	15.4	2.3	20.2	32.4	0.6	8.9
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	12.2	16.0	16.8	3.9	21.2	20.8	7.5	10.1	13.3	7.7	9.0	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.1	33.7	34.4	90.4	55.5	55.7	81.0	39.4	59.8	108.6	57.0	68.8
LnGrp LOS	F	C	C	F	E	E	F	D	E	F	E	E
Approach Vol, veh/h		2108			1219			1237			886	
Approach Delay, s/veh		46.0			60.3			51.0			69.0	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	86.7	23.0	45.7	32.2	69.1	20.1	48.6
Change Period (Y+Rc), s	4.5	4.9	4.5	4.6	4.5	4.9	4.5	4.6
Max Green Setting (Gmax), s	12.7	68.5	29.5	40.8	27.8	53.4	17.5	52.8
Max Q Clear Time (g_c+I1), s	10.0	40.8	18.3	31.0	27.7	47.1	15.6	39.7
Green Ext Time (p_c), s	0.1	10.4	0.2	2.4	0.0	2.8	0.0	4.3

Intersection Summary	
HCM 6th Ctrl Delay	54.1
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	592	1472	807	102	979	60	615	372	172	90	322	340
Future Volume (veh/h)	592	1472	807	102	979	60	615	372	172	90	322	340
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.95
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	623	1549	849	107	1031	63	647	392	181	95	295	387
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	664	2109	958	242	1485	447	697	1039	447	124	300	1091
Arrive On Green	0.19	0.41	0.41	0.07	0.29	0.29	0.20	0.29	0.29	0.07	0.16	0.16
Sat Flow, veh/h	3456	5106	1546	3456	5106	1538	3456	3554	1529	1781	1870	2998
Grp Volume(v), veh/h	623	1549	849	107	1031	63	647	392	181	95	295	387
Grp Sat Flow(s),veh/h/ln	1728	1702	1546	1728	1702	1538	1728	1777	1529	1781	1870	1499
Q Serve(g_s), s	30.2	43.5	70.2	5.1	30.5	5.1	31.3	14.9	16.2	8.9	26.7	16.3
Cycle Q Clear(g_c), s	30.2	43.5	70.2	5.1	30.5	5.1	31.3	14.9	16.2	8.9	26.7	16.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	664	2109	958	242	1485	447	697	1039	447	124	300	1091
V/C Ratio(X)	0.94	0.73	0.89	0.44	0.69	0.14	0.93	0.38	0.40	0.76	0.98	0.35
Avail Cap(c_a), veh/h	718	2109	958	244	1485	447	860	1106	476	175	300	1091
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	0.26	0.26	0.26	0.92	0.92	0.92
Uniform Delay (d), s/veh	67.7	42.0	28.0	75.8	53.6	44.6	66.7	47.8	48.3	77.7	71.1	40.9
Incr Delay (d2), s/veh	18.6	2.3	11.9	0.5	2.7	0.7	4.2	0.0	0.1	6.5	45.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	18.4	31.6	2.2	13.2	2.1	14.2	6.7	6.2	4.3	16.5	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.2	44.4	39.9	76.3	56.3	45.2	70.9	47.9	48.3	84.2	116.1	41.3
LnGrp LOS	F	D	D	E	E	D	E	D	D	F	F	D
Approach Vol, veh/h		3021			1201			1220			777	
Approach Delay, s/veh		51.7			57.5			60.1			74.9	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	78.2	40.0	34.2	38.4	57.4	17.6	56.6
Change Period (Y+Rc), s	* 5.7	8.0	* 5.7	6.9	* 5.7	8.0	* 5.7	6.9
Max Green Setting (Gmax), s	* 12	62.1	* 42	27.3	* 35	38.8	* 17	52.9
Max Q Clear Time (g_c+I1), s	7.1	72.2	33.3	28.7	32.2	32.5	10.9	18.2
Green Ext Time (p_c), s	0.1	0.0	1.0	0.0	0.5	5.6	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	57.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* 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)	256	920	213	133	551	276	160	793	153	338	753	123
Future Volume (veh/h)	256	920	213	133	551	276	160	793	153	338	753	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	269	968	3	140	580	280	168	835	3	196	793	3
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1328	577	164	738	356	191	982	4	220	1041	4
Arrive On Green	0.14	0.37	0.37	0.09	0.32	0.32	0.11	0.27	0.27	0.12	0.29	0.29
Sat Flow, veh/h	1781	3554	1544	1781	2301	1109	1781	3631	13	1781	3630	14
Grp Volume(v), veh/h	269	968	3	140	448	412	168	409	429	196	388	408
Grp Sat Flow(s),veh/h/ln	1781	1777	1544	1781	1777	1633	1781	1777	1868	1781	1777	1867
Q Serve(g_s), s	20.3	32.8	0.2	10.8	32.0	32.1	13.0	30.5	30.5	15.2	27.9	27.9
Cycle Q Clear(g_c), s	20.3	32.8	0.2	10.8	32.0	32.1	13.0	30.5	30.5	15.2	27.9	27.9
Prop In Lane	1.00		1.00	1.00		0.68	1.00		0.01	1.00		0.01
Lane Grp Cap(c), veh/h	258	1328	577	164	570	524	191	480	505	220	509	535
V/C Ratio(X)	1.04	0.73	0.01	0.85	0.79	0.79	0.88	0.85	0.85	0.89	0.76	0.76
Avail Cap(c_a), veh/h	258	1328	577	271	570	524	226	495	520	327	595	626
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)	0.70	0.70	0.70	0.89	0.89	0.89	0.54	0.54	0.54	0.45	0.45	0.45
Uniform Delay (d), s/veh	59.8	37.7	27.5	62.6	43.2	43.2	61.6	48.4	48.4	60.4	45.6	45.6
Incr Delay (d2), s/veh	58.0	2.5	0.0	5.8	9.4	10.2	15.0	9.3	8.9	6.8	4.2	4.0
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	18.2	14.4	0.1	5.2	15.4	14.3	6.7	14.7	15.3	7.2	12.8	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	117.9	40.2	27.5	68.4	52.5	53.4	76.6	57.7	57.3	67.2	49.7	49.5
LnGrp LOS	F	D	C	E	D	D	E	E	E	E	D	D
Approach Vol, veh/h		1240			1000			1006			992	
Approach Delay, s/veh		57.0			55.1			60.7			53.1	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	57.4	19.7	45.2	25.0	50.0	22.0	43.0
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 21	34.4	* 18	46.9	* 20	35.4	* 26	39.0
Max Q Clear Time (g_c+I1), s	12.8	34.8	15.0	29.9	22.3	34.1	17.2	32.5
Green Ext Time (p_c), s	0.1	0.0	0.1	9.3	0.0	1.0	0.2	4.5

Intersection Summary	
HCM 6th Ctrl Delay	56.5
HCM 6th LOS	E

Notes

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

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1464	96	53	727	63	73
Future Volume (veh/h)	1464	96	53	727	63	73
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.96	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1609	105	58	799	69	80
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2434	158	154	1953	178	158
Arrive On Green	0.72	0.72	0.72	0.72	0.10	0.10
Sat Flow, veh/h	3471	219	99	2795	1781	1585
Grp Volume(v), veh/h	840	874	379	478	69	80
Grp Sat Flow(s),veh/h/ln	1777	1819	1192	1617	1781	1585
Q Serve(g_s), s	12.6	12.9	1.5	5.9	1.8	2.4
Cycle Q Clear(g_c), s	12.6	12.9	14.4	5.9	1.8	2.4
Prop In Lane		0.12	0.15		1.00	1.00
Lane Grp Cap(c), veh/h	1281	1311	942	1165	178	158
V/C Ratio(X)	0.66	0.67	0.40	0.41	0.39	0.51
Avail Cap(c_a), veh/h	2498	2558	1633	2273	728	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.7	3.8	2.5	2.8	21.1	21.4
Incr Delay (d2), s/veh	0.6	0.6	0.3	0.2	1.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.5	0.4	0.6	0.8	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.3	4.4	2.8	3.0	22.5	23.9
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h	1714			857	149	
Approach Delay, s/veh	4.3			2.9	23.3	
Approach LOS	A			A	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	9.5	40.6	40.6
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	20.5	70.5	70.5
Max Q Clear Time (g_c+I1), s	4.4	14.9	16.4
Green Ext Time (p_c), s	0.4	21.2	8.4

Intersection Summary	
HCM 6th Ctrl Delay	4.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	543	83	53	270	20	63	93	63	30	83	50
Future Volume (veh/h)	40	543	83	53	270	20	63	93	63	30	83	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.96	0.99		0.97	0.99		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	566	86	55	281	21	66	97	66	31	86	52
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	1187	176	271	1110	82	248	224	125	196	265	138
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	98	2884	427	254	2697	199	311	836	464	165	990	514
Grp Volume(v), veh/h	369	0	325	182	0	175	229	0	0	169	0	0
Grp Sat Flow(s),veh/h/ln	1797	0	1613	1493	0	1656	1611	0	0	1669	0	0
Q Serve(g_s), s	0.0	0.0	4.2	0.0	0.0	2.0	0.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.1	0.0	4.2	4.2	0.0	2.0	3.2	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.11		0.26	0.30		0.12	0.29		0.29	0.18		0.31
Lane Grp Cap(c), veh/h	882	0	664	781	0	682	597	0	0	599	0	0
V/C Ratio(X)	0.42	0.00	0.49	0.23	0.00	0.26	0.38	0.00	0.00	0.28	0.00	0.00
Avail Cap(c_a), veh/h	3269	0	2897	2600	0	2976	2411	0	0	2480	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.1	0.0	6.1	5.4	0.0	5.4	8.7	0.0	0.0	8.3	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.2	0.0	0.2	0.4	0.0	0.0	0.3	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	0.8	0.0	0.7	0.3	0.0	0.3	0.8	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.4	0.0	6.7	5.5	0.0	5.6	9.1	0.0	0.0	8.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		694			357			229			169	
Approach Delay, s/veh		6.5			5.6			9.1			8.6	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	12.0	16.1	12.0	16.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	50.5	40.5	50.5
Max Q Clear Time (g_c+I1), s	5.2	6.2	4.2	6.2
Green Ext Time (p_c), s	1.5	4.9	1.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1004	116	73	628	43	53	10	73	43	33	43
Future Volume (veh/h)	43	1004	116	73	628	43	53	10	73	43	33	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		0.96
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	1091	126	79	683	47	58	11	79	47	36	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	1796	204	348	2013	138	378	58	240	191	104	97
Arrive On Green	0.60	0.60	0.60	0.60	0.60	0.60	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	61	3002	340	458	3366	231	1210	333	1383	386	600	558
Grp Volume(v), veh/h	661	0	603	79	360	370	69	0	79	130	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1628	458	1777	1820	1543	0	1383	1544	0	0
Q Serve(g_s), s	0.0	0.0	9.3	5.2	4.0	4.0	0.0	0.0	2.0	0.9	0.0	0.0
Cycle Q Clear(g_c), s	8.7	0.0	9.3	14.6	4.0	4.0	1.3	0.0	2.0	2.9	0.0	0.0
Prop In Lane	0.07		0.21	1.00		0.13	0.84		1.00	0.36		0.36
Lane Grp Cap(c), veh/h	1159	0	974	348	1063	1089	436	0	240	393	0	0
V/C Ratio(X)	0.57	0.00	0.62	0.23	0.34	0.34	0.16	0.00	0.33	0.33	0.00	0.00
Avail Cap(c_a), veh/h	3028	0	2785	858	3039	3113	1012	0	823	1025	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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.9	0.0	5.1	9.7	4.0	4.0	14.0	0.0	14.3	14.6	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.6	0.3	0.2	0.2	0.2	0.0	0.8	0.5	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	1.5	0.0	1.4	0.4	0.6	0.7	0.5	0.0	0.6	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.4	0.0	5.7	10.0	4.2	4.2	14.2	0.0	15.1	15.1	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		1264			809			148			130	
Approach Delay, s/veh		5.5			4.8			14.7			15.1	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	11.4	28.1	11.4	28.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	23.5	67.5	23.5	67.5
Max Q Clear Time (g_c+I1), s	4.0	11.3	4.9	16.6
Green Ext Time (p_c), s	0.8	12.3	0.7	6.7

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	695	187	94	367	50	177	640	204	94	640	64
Future Volume (veh/h)	94	695	187	94	367	50	177	640	204	94	640	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	709	191	96	374	51	181	653	208	96	653	65
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	909	245	119	1036	140	207	720	594	119	1091	108
Arrive On Green	0.07	0.33	0.33	0.07	0.33	0.33	0.12	0.38	0.38	0.07	0.34	0.34
Sat Flow, veh/h	1781	2749	740	1781	3133	424	1781	1870	1544	1781	3254	323
Grp Volume(v), veh/h	96	458	442	96	211	214	181	653	208	96	356	362
Grp Sat Flow(s),veh/h/ln	1781	1777	1712	1781	1777	1780	1781	1870	1544	1781	1777	1801
Q Serve(g_s), s	6.9	30.2	30.3	6.9	11.7	11.9	13.0	42.9	12.5	6.9	21.7	21.7
Cycle Q Clear(g_c), s	6.9	30.2	30.3	6.9	11.7	11.9	13.0	42.9	12.5	6.9	21.7	21.7
Prop In Lane	1.00		0.43	1.00		0.24	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	119	588	566	119	588	589	207	720	594	119	596	604
V/C Ratio(X)	0.80	0.78	0.78	0.80	0.36	0.36	0.87	0.91	0.35	0.81	0.60	0.60
Avail Cap(c_a), veh/h	186	588	566	127	588	589	311	747	616	127	596	604
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)	0.29	0.29	0.29	0.93	0.93	0.93	0.67	0.67	0.67	0.93	0.93	0.93
Uniform Delay (d), s/veh	59.8	39.2	39.2	59.8	33.0	33.1	56.5	37.8	28.4	59.9	35.9	36.0
Incr Delay (d2), s/veh	1.9	3.1	3.2	24.5	1.6	1.6	8.1	12.6	1.1	37.4	4.1	4.1
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	3.2	13.5	13.0	3.9	5.3	5.4	6.3	21.7	4.8	4.3	10.0	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	42.3	42.4	84.3	34.6	34.7	64.7	50.4	29.5	97.3	40.0	40.0
LnGrp LOS	E	D	D	F	C	C	E	D	C	F	D	D
Approach Vol, veh/h		996			521			1042			814	
Approach Delay, s/veh		44.2			43.8			48.7			46.8	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	48.1	19.8	48.7	13.4	48.1	13.4	55.1
Change Period (Y+Rc), s	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1	* 4.7	5.1
Max Green Setting (Gmax), s	* 9.3	39.9	* 23	38.5	* 14	35.6	* 9.3	51.9
Max Q Clear Time (g_c+I1), s	8.9	32.3	15.0	23.7	8.9	13.9	8.9	44.9
Green Ext Time (p_c), s	0.0	5.7	0.1	8.3	0.0	6.2	0.0	5.1

Intersection Summary	
HCM 6th Ctrl Delay	46.1
HCM 6th LOS	D

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)	316	747	113	183	654	193	143	496	193	243	506	163
Future Volume (veh/h)	316	747	113	183	654	193	143	496	193	243	506	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.93	1.00		0.94
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	322	762	115	187	667	197	146	506	197	248	516	166
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	352	1034	156	218	926	396	177	502	194	279	684	219
Arrive On Green	0.20	0.34	0.34	0.12	0.26	0.26	0.10	0.21	0.21	0.16	0.26	0.26
Sat Flow, veh/h	1781	3079	465	1781	3554	1519	1781	2447	945	1781	2605	832
Grp Volume(v), veh/h	322	440	437	187	667	197	146	366	337	248	351	331
Grp Sat Flow(s),veh/h/ln	1781	1777	1767	1781	1777	1519	1781	1777	1615	1781	1777	1660
Q Serve(g_s), s	17.7	21.8	21.8	10.3	17.1	11.0	8.0	20.5	20.5	13.6	18.1	18.4
Cycle Q Clear(g_c), s	17.7	21.8	21.8	10.3	17.1	11.0	8.0	20.5	20.5	13.6	18.1	18.4
Prop In Lane	1.00		0.26	1.00		1.00	1.00		0.59	1.00		0.50
Lane Grp Cap(c), veh/h	352	597	593	218	926	396	177	364	331	279	467	436
V/C Ratio(X)	0.91	0.74	0.74	0.86	0.72	0.50	0.83	1.01	1.02	0.89	0.75	0.76
Avail Cap(c_a), veh/h	365	597	593	223	926	396	208	364	331	294	467	436
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)	0.83	0.83	0.83	1.00	1.00	1.00	0.50	0.50	0.50	0.80	0.80	0.80
Uniform Delay (d), s/veh	39.3	29.3	29.3	43.0	33.7	31.4	44.2	39.8	39.8	41.3	33.9	34.0
Incr Delay (d2), s/veh	22.8	6.6	6.7	26.0	4.8	4.4	10.7	34.8	39.2	21.2	5.2	5.9
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	9.8	10.1	10.0	6.0	7.8	4.4	4.0	12.2	11.5	7.6	8.4	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.1	35.9	36.0	69.0	38.5	35.8	54.9	74.5	78.9	62.5	39.1	39.9
LnGrp LOS	E	D	D	E	D	D	D	F	F	E	D	D
Approach Vol, veh/h		1199			1051			849			930	
Approach Delay, s/veh		43.0			43.4			72.9			45.6	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	38.1	14.4	30.8	24.3	30.6	20.2	25.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	32.5	11.7	25.3	20.5	24.5	16.5	20.5
Max Q Clear Time (g_c+I1), s	12.3	23.8	10.0	20.4	19.7	19.1	15.6	22.5
Green Ext Time (p_c), s	0.0	3.0	0.0	1.6	0.1	2.1	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.0
HCM 6th LOS	D

Arterial Level of Service: NB Ash St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Grand Ave	III	40	12.8	33.3	46.1	0.11	8.7	F
Valley Pkwy	III	35	29.8	47.1	76.9	0.25	11.6	E
Washington Ave	III	35	22.0	45.7	67.7	0.18	9.8	F
Mission Ave	III	35	30.5	20.9	51.4	0.25	17.8	D
Lincoln Ave	III	35	29.8	57.2	87.0	0.25	10.3	E
Total	III		124.9	204.2	329.1	1.05	11.4	E

Arterial Level of Service: SB Ash St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lincoln Ave	III	35	8.1	53.1	61.2	0.06	3.3	F
Mission Ave	III	35	29.8	28.3	58.1	0.25	15.4	D
Washington Ave	III	35	30.5	39.9	70.4	0.25	13.0	E
Valley Pkwy	III	35	22.0	43.4	65.4	0.18	10.1	E
Grand Ave	III	35	29.8	47.9	77.7	0.25	11.5	E
Total	III		120.2	212.6	332.8	0.99	10.7	E

Arterial Level of Service: NB Broadway

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington Ave	III	35	9.4	34.3	43.7	0.06	5.3	F
Mission Ave	III	35	30.0	30.3	60.3	0.25	14.9	D
Lincoln Pkwy	III	35	23.3	35.7	59.0	0.19	11.9	E
Lincoln Ave	III	35	7.7	8.3	16.0	0.05	11.9	E
El Norte Pkwy	III	35	53.3	80.8	134.1	0.44	11.9	E
Total	III		123.7	189.4	313.1	1.01	11.6	E

Arterial Level of Service: SB Broadway

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
El Norte Pkwy	III	40	7.9	132.2	140.1	0.07	1.8	F
Lincoln Ave	III	35	53.3	34.1	87.4	0.44	18.3	C
Lincoln Pkwy	III	35	7.7	70.9	78.6	0.05	2.4	F
Mission Ave	III	35	23.3	42.5	65.8	0.19	10.6	E
Washington Ave	III	35	30.0	35.1	65.1	0.25	13.8	E
Total	III		122.2	314.8	437.0	1.01	8.3	F

Arterial Level of Service: NB Centre City Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Decatur Way	III	30	8.9	14.4	23.3	0.06	8.9	F
El Norte Pkwy	III	30	37.1	45.4	82.5	0.29	12.7	E
Total	III		46.0	59.8	105.8	0.35	11.9	E

Arterial Level of Service: SB Centre City Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
El Norte Pkwy	III	30	13.0	87.6	100.6	0.09	3.3	F
Decatur Way	III	30	37.1	18.6	55.7	0.29	18.9	C
Total	III		50.1	106.2	156.3	0.38	8.9	F

Arterial Level of Service: EB Mission Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Escondido Blvd	II	40	6.7	27.0	33.7	0.06	6.3	F
Broadway	II	40	27.4	28.8	56.2	0.25	16.0	E
Ash St	II	35	97.9	29.0	126.9	0.95	27.0	C
Rose St	II	35	51.4	24.7	76.1	0.50	23.6	C
Total	II		183.4	109.5	292.9	1.76	21.6	D

Arterial Level of Service: WB Mission Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rose St	II	35	8.7	29.9	38.6	0.07	6.5	F
Ash St	II	35	51.4	60.1	111.5	0.50	16.1	E
Broadway	II	35	97.9	42.0	139.9	0.95	24.5	C
Escondido Blvd	II	40	27.4	34.4	61.8	0.25	14.5	E
Total	II		185.4	166.4	351.8	1.77	18.1	D

Arterial Level of Service: NB Ash St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Grand Ave	III	40	12.8	39.6	52.4	0.11	7.7	F
Valley Pkwy	III	35	29.8	46.8	76.6	0.25	11.7	E
Washington Ave	III	35	22.0	56.6	78.6	0.18	8.4	F
Mission Ave	III	35	30.5	21.8	52.3	0.25	17.5	D
Lincoln Ave	III	35	29.8	43.4	73.2	0.25	12.2	E
Total	III		124.9	208.2	333.1	1.05	11.3	E

Arterial Level of Service: SB Ash St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lincoln Ave	III	35	8.1	50.9	59.0	0.06	3.4	F
Mission Ave	III	35	29.8	39.0	68.8	0.25	13.0	E
Washington Ave	III	35	30.5	35.4	65.9	0.25	13.9	E
Valley Pkwy	III	35	22.0	42.2	64.2	0.18	10.3	E
Grand Ave	III	35	29.8	40.6	70.4	0.25	12.7	E
Total	III		120.2	208.1	328.3	0.99	10.9	E

Arterial Level of Service: NB Broadway

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington Ave	III	35	9.4	45.0	54.4	0.06	4.3	F
Mission Ave	III	35	30.0	39.9	69.9	0.25	12.9	E
Lincoln Pkwy	III	35	23.3	47.7	71.0	0.19	9.9	F
Lincoln Ave	III	35	7.7	8.0	15.7	0.05	12.2	E
El Norte Pkwy	III	35	53.3	50.4	103.7	0.44	15.4	D
Total	III		123.7	191.0	314.7	1.01	11.5	E

Arterial Level of Service: SB Broadway

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
El Norte Pkwy	III	40	7.9	55.3	63.2	0.07	3.9	F
Lincoln Ave	III	35	53.3	35.5	88.8	0.44	18.0	D
Lincoln Pkwy	III	35	7.7	81.0	88.7	0.05	2.2	F
Mission Ave	III	35	23.3	33.7	57.0	0.19	12.3	E
Washington Ave	III	35	30.0	36.0	66.0	0.25	13.6	E
Total	III		122.2	241.5	363.7	1.01	10.0	E

Arterial Level of Service: NB Centre City Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Decatur Way	III	30	8.9	24.1	33.0	0.06	6.3	F
El Norte Pkwy	III	30	37.1	58.8	95.9	0.29	11.0	E
Total	III		46.0	82.9	128.9	0.35	9.8	F

Arterial Level of Service: SB Centre City Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
El Norte Pkwy	III	30	13.0	41.8	54.8	0.09	6.1	F
Decatur Way	III	30	37.1	9.1	46.2	0.29	22.8	C
Total	III		50.1	50.9	101.0	0.38	13.7	E

Arterial Level of Service: EB Mission Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Escondido Blvd	II	40	6.7	34.8	41.5	0.06	5.1	F
Broadway	II	40	27.4	158.7	186.1	0.25	4.8	F
Ash St	II	35	97.9	38.0	135.9	0.95	25.2	C
Rose St	II	35	51.4	32.4	83.8	0.50	21.5	D
Total	II		183.4	263.9	447.3	1.76	14.2	E

Arterial Level of Service: WB Mission Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rose St	II	35	8.7	19.5	28.2	0.07	8.9	F
Ash St	II	35	51.4	30.0	81.4	0.50	22.1	C
Broadway	II	35	97.9	60.8	158.7	0.95	21.6	D
Escondido Blvd	II	40	27.4	35.0	62.4	0.25	14.4	E
Total	II		185.4	145.3	330.7	1.77	19.3	D

Arterial Level of Service: NB Ash St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Grand Ave	III	40	12.8	34.6	47.4	0.11	8.5	F
Valley Pkwy	III	35	29.8	50.7	80.5	0.25	11.1	E
Washington Ave	III	35	22.0	61.5	83.5	0.18	7.9	F
Mission Ave	III	35	30.5	22.1	52.6	0.25	17.4	D
Lincoln Ave	III	35	29.8	56.6	86.4	0.25	10.3	E
Total	III		124.9	225.5	350.4	1.05	10.7	E

Arterial Level of Service: SB Ash St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lincoln Ave	III	35	8.1	48.8	56.9	0.06	3.5	F
Mission Ave	III	35	29.8	31.3	61.1	0.25	14.6	D
Washington Ave	III	35	30.5	49.1	79.6	0.25	11.5	E
Valley Pkwy	III	35	22.0	48.0	70.0	0.18	9.4	F
Grand Ave	III	35	29.8	47.6	77.4	0.25	11.5	E
Total	III		120.2	224.8	345.0	0.99	10.3	E

Arterial Level of Service: NB Broadway

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington Ave	III	35	9.4	34.6	44.0	0.06	5.3	F
Mission Ave	III	35	30.0	38.8	68.8	0.25	13.1	E
Lincoln Pkwy	III	35	23.3	40.1	63.4	0.19	11.0	E
Lincoln Ave	III	35	7.7	11.7	19.4	0.05	9.8	F
El Norte Pkwy	III	35	53.3	83.0	136.3	0.44	11.7	E
Total	III		123.7	208.2	331.9	1.01	10.9	E

Arterial Level of Service: SB Broadway

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
El Norte Pkwy	III	40	7.9	49.4	57.3	0.07	4.3	F
Lincoln Ave	III	35	53.3	34.1	87.4	0.44	18.3	C
Lincoln Pkwy	III	35	7.7	84.1	91.8	0.05	2.1	F
Mission Ave	III	35	23.3	47.3	70.6	0.19	9.9	F
Washington Ave	III	35	30.0	34.9	64.9	0.25	13.9	E
Total	III		122.2	249.8	372.0	1.01	9.8	F

Arterial Level of Service: NB Centre City Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Decatur Way	III	30	8.9	16.1	25.0	0.06	8.3	F
El Norte Pkwy	III	30	37.1	44.4	81.5	0.29	12.9	E
Total	III		46.0	60.5	106.5	0.35	11.8	E

Arterial Level of Service: SB Centre City Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
El Norte Pkwy	III	30	13.0	91.5	104.5	0.09	3.2	F
Decatur Way	III	30	37.1	21.0	58.1	0.29	18.1	C
Total	III		50.1	112.5	162.6	0.38	8.5	F

Arterial Level of Service: EB Mission Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Escondido Blvd	II	40	6.7	28.0	34.7	0.06	6.1	F
Broadway	II	40	27.4	20.3	47.7	0.25	18.8	D
Hickory St	II	35	37.0	4.0	41.0	0.34	30.1	B
Ash St	II	35	62.6	28.2	90.8	0.61	24.1	C
Harding St	II	35	20.7	8.5	29.2	0.17	20.4	D
Rose St	II	35	36.0	32.5	68.5	0.33	17.5	D
Total	II		190.4	121.5	311.9	1.76	20.3	D

Arterial Level of Service: WB Mission Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rose St	II	35	8.7	31.3	40.0	0.07	6.3	F
Harding St	II	35	36.0	11.7	47.7	0.33	25.2	C
Ash St	II	35	20.7	49.4	70.1	0.17	8.5	F
Hickory St	II	35	62.6	8.2	70.8	0.61	30.9	B
Broadway	II	35	37.0	14.5	51.5	0.34	24.0	C
Escondido Blvd	II	40	27.4	35.7	63.1	0.25	14.2	E
Total	II		192.4	150.8	343.2	1.77	18.6	D

Arterial Level of Service: NB Ash St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Grand Ave	III	40	12.8	40.1	52.9	0.11	7.6	F
Valley Pkwy	III	35	29.8	56.4	86.2	0.25	10.4	E
Washington Ave	III	35	22.0	101.3	123.3	0.18	5.4	F
Mission Ave	III	35	30.5	23.3	53.8	0.25	17.0	D
Lincoln Ave	III	35	29.8	41.3	71.1	0.25	12.6	E
Total	III		124.9	262.4	387.3	1.05	9.7	F

Arterial Level of Service: SB Ash St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Lincoln Ave	III	35	8.1	52.3	60.4	0.06	3.3	F
Mission Ave	III	35	29.8	42.0	71.8	0.25	12.4	E
Washington Ave	III	35	30.5	36.1	66.6	0.25	13.7	E
Valley Pkwy	III	35	22.0	41.0	63.0	0.18	10.5	E
Grand Ave	III	35	29.8	51.5	81.3	0.25	11.0	E
Total	III		120.2	222.9	343.1	0.99	10.4	E

Arterial Level of Service: NB Broadway

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington Ave	III	35	9.4	45.5	54.9	0.06	4.2	F
Mission Ave	III	35	30.0	72.9	102.9	0.25	8.8	F
Lincoln Pkwy	III	35	23.3	45.3	68.6	0.19	10.2	E
Lincoln Ave	III	35	7.7	7.4	15.1	0.05	12.6	E
El Norte Pkwy	III	35	53.3	41.1	94.4	0.44	16.9	D
Total	III		123.7	212.2	335.9	1.01	10.8	E

Arterial Level of Service: SB Broadway

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
El Norte Pkwy	III	40	7.9	64.1	72.0	0.07	3.4	F
Lincoln Ave	III	35	53.3	36.2	89.5	0.44	17.9	D
Lincoln Pkwy	III	35	7.7	71.6	79.3	0.05	2.4	F
Mission Ave	III	35	23.3	36.8	60.1	0.19	11.7	E
Washington Ave	III	35	30.0	35.6	65.6	0.25	13.7	E
Total	III		122.2	244.3	366.5	1.01	9.9	F

Arterial Level of Service: NB Centre City Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Decatur Way	III	30	8.9	24.5	33.4	0.06	6.2	F
El Norte Pkwy	III	30	37.1	59.9	97.0	0.29	10.8	E
Total	III		46.0	84.4	130.4	0.35	9.6	F

Arterial Level of Service: SB Centre City Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
El Norte Pkwy	III	30	13.0	41.8	54.8	0.09	6.1	F
Decatur Way	III	30	37.1	9.1	46.2	0.29	22.8	C
Total	III		50.1	50.9	101.0	0.38	13.7	E

Arterial Level of Service: EB Mission Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Escondido Blvd	II	40	6.7	37.3	44.0	0.06	4.8	F
Broadway	II	40	27.4	29.7	57.1	0.25	15.7	E
Hickory St	II	35	37.0	6.8	43.8	0.34	28.2	B
Ash St	II	35	62.6	39.1	101.7	0.61	21.5	D
Harding St	II	35	20.7	9.1	29.8	0.17	20.0	D
Rose St	II	35	36.0	33.8	69.8	0.33	17.2	D
Total	II		190.4	155.8	346.2	1.76	18.3	D

Arterial Level of Service: WB Mission Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rose St	II	35	8.7	20.0	28.7	0.07	8.7	F
Harding St	II	35	36.0	7.6	43.6	0.33	27.6	C
Ash St	II	35	20.7	33.9	54.6	0.17	10.9	F
Hickory St	II	35	62.6	4.7	67.3	0.61	32.5	B
Broadway	II	35	37.0	22.0	59.0	0.34	20.9	D
Escondido Blvd	II	40	27.4	37.1	64.5	0.25	13.9	E
Total	II		192.4	125.3	317.7	1.77	20.1	D