APPENDIX F

TRAFFIC IMPACT STUDY

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TRAFFIC IMPACT STUDY

TRACT MAP 6360 PROJECT

FRESNO, FRESNO COUNTY, CALIFORNIA

LSA

June 2023

TRAFFIC IMPACT STUDY

TRACT MAP 6360 PROJECT

FRESNO, FRESNO COUNTY, CALIFORNIA

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Project No. HAA2103

LSA

June 2023

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LIST OF ABBREVIATIONS AND ACRONYMS

ABM	Activity-Based Model
AWSC	All-Way Stop Control
Caltrans	California Department of Transportation
City	City of Fresno
COG	(Fresno) Council of Governments
CUSD	Clovis Unified School District
FAX	Fresno Area Express
HCM	*Highway Capacity Manual*
HCM 6	*Highway Capacity Manual 6th Edition*
HDM	(Caltrans) *Highway Design Manual*
ITE	Institute of Transportation Engineers
LOS	Level of Service
mph	Miles Per Hour
MUTCD	*Manual of Uniform Traffic Control Devices*
NCHRP	National Cooperative Highway Research Program
RS-3	Residential Single-Family District
SR-180	(State of California) State Route 180
SWITRS	(State of California) Statewide Integrated Traffic Records System
TASAS	(Caltrans) Traffic Accident Surveillance and Analysis System
TIMS	(University of California, Berkeley) Transportation Injury Mapping System
TIS	Traffic Impact Study
TIZ	Traffic Impact Zone
TSMI	(City of Fresno) Traffic Signal Mitigation Impact
TWSC	Two-Way Stop Control
v/c	Volume to Capacity
VMT	Vehicle Miles Traveled

1.0 INTRODUCTION

The Traffic Impact Study (TIS) has been prepared to assess the potential circulation impacts associated with the proposed Tract Map 6360 Project (project) in Fresno, Fresno County. The project site is located at the northeast corner of the intersection between Armstrong Avenue and the future extension of McKinley Avenue in the City. The project site is currently vacant. Figure 1-1 illustrates the regional and project location. (Figures and tables are provided at the end of each chapter.)

This report has been prepared based on the City of Fresno (City) *Traffic Impact Study Report Guidelines* (TIS Guidelines), dated February 2, 2009, the *City of Fresno CEQA Guidelines for Vehicle Miles Traveled Thresholds* (adopted on June 25, 2020), County of Fresno, the California Department of Transportation (Caltrans), as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to the California Environmental Quality Act (CEQA). The scope of work for this TIS, including trip generation, trip distribution, study area, and analysis methodologies, has been approved by City staff, as well as County of Fresno and Caltrans, via the Scoping Agreement process. A copy of the Scoping Agreement is included as Appendix A.

This study examines traffic operations in the vicinity of the proposed project under the following five scenarios:

- Existing Conditions;
- Existing Plus Project Conditions;
- Near-Term Plus Project Conditions;
- Cumulative Year (2046) No Project Conditions; and
- Cumulative Year (2046) Plus Project Conditions.

Traffic conditions at study intersections and roadway segments were examined for weekday a.m. and p.m. peak-hour conditions. The a.m. peak hour is defined as the 1 hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is the 1 hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

1.1 PROJECT DESCRIPTION

The proposed project will include 326 single-family residential units. Access to the project will be provided via two full-access driveways, one located on Armstrong Avenue and the other located on the future extension of McKinley Avenue, between Armstrong Avenue and Temperance Avenue. Based on discussion with City staff, this section of McKinley Avenue along the project frontage from Armstrong Avenue will be completed prior to the completion of the project. As such, the segment of McKinley Avenue, between Fowler Avenue and Temperance Avenue, is planned to be constructed prior to the completion of the project. Additionally, as per the City's General Plan, McKinley Avenue is planned to be extended west of Fowler Avenue to connect to Sunnyside Avenue. Therefore, for purposes of this analysis, this extension of McKinley Avenue has been considered under cumulative year conditions. Figure 1-2 illustrates the conceptual site plan for the project.

The project site is zoned within the Residential Single-Family District (RS-3). The RS district is intended to provide for a variety of single-family residences built to urban or suburban standards to suit a spectrum of individual lifestyles and needs. This district is also meant to enhance the City's residential neighborhoods while providing new opportunities for the development of a range of housing types throughout the City. The project site is designated Low-Density Residential in the Fresno General Plan (General Plan).

1.2 STUDY AREA

Based on the City's TIS Guidelines, the study intersections for the TIS were identified on a case-by-case basis for each project. Study intersections and roadway segments considered for the analysis were finalized during the TIS scoping agreement process and based on the discussion with City staff.

1.2.1 Study Intersections

Per the Scoping Agreement (Appendix A), intersections analyzed in this study and their jurisdictions are as follows:

1. Fowler Avenue/McKinley Avenue (City of Fresno/Fresno County – future intersection);
2. Fowler Avenue/Floradora Avenue (Fresno County);
3. Fowler Avenue/Olive Avenue (Fresno County);
4. Fowler Avenue/State Route 180 (SR-180) Westbound Ramps (Caltrans);
5. Fowler Avenue/SR-180 Eastbound Ramps (Caltrans);
6. Fowler Avenue/Belmont Avenue (City of Fresno/Fresno County);
7. Armstrong Avenue/McKinley Avenue (City of Fresno/Fresno County – future intersection);
8. Armstrong Avenue/Floradora Avenue (City of Fresno/Fresno County);
9. Armstrong Avenue/Olive Avenue (City of Fresno/Fresno County);
10. Temperance Avenue/McKinley Avenue (City of Fresno/Fresno County);
11. Temperance Avenue/Floradora Avenue (Fresno County);
12. Armstrong Avenue/Project Driveway 1 (City of Fresno); and
13. Project Driveway 2/McKinley Avenue (City of Fresno).

Figure 1-3 illustrates the study area intersections.

1.2.2 Roadway Segments

Per the Scoping Agreement (Appendix A), roadway segments analyzed in this study are as follows:

Fowler Avenue

1. Between McKinley Avenue and Floradora Avenue (Fresno County);
2. Between Floradora Avenue and Olive Avenue (Fresno County);
3. Between Olive Avenue and SR-180 Westbound Ramps (Fresno County);
4. Between SR-180 Eastbound Ramps and Belmont Avenue (Fresno County);

Armstrong Avenue

5. Between Project Driveway 1 and McKinley Avenue (City of Fresno);
6. Between McKinley Avenue and Floradora Avenue (City of Fresno/Fresno County);
7. Between Floradora and Olive Avenue (City of Fresno);

Temperance Avenue

8. Between McKinley Avenue and Floradora Avenue (Fresno County);

McKinley Avenue

9. Between Fowler Avenue and Armstrong Avenue (City of Fresno/Fresno County – future segment);
10. Between Armstrong Avenue and Project Driveway 2 (City of Fresno – future segment);
11. Between Project Driveway 2 and Temperance Avenue (City of Fresno/Fresno County – future segment);

Floradora Avenue

12. Between Fowler Avenue and Armstrong Avenue (City of Fresno/Fresno County); and

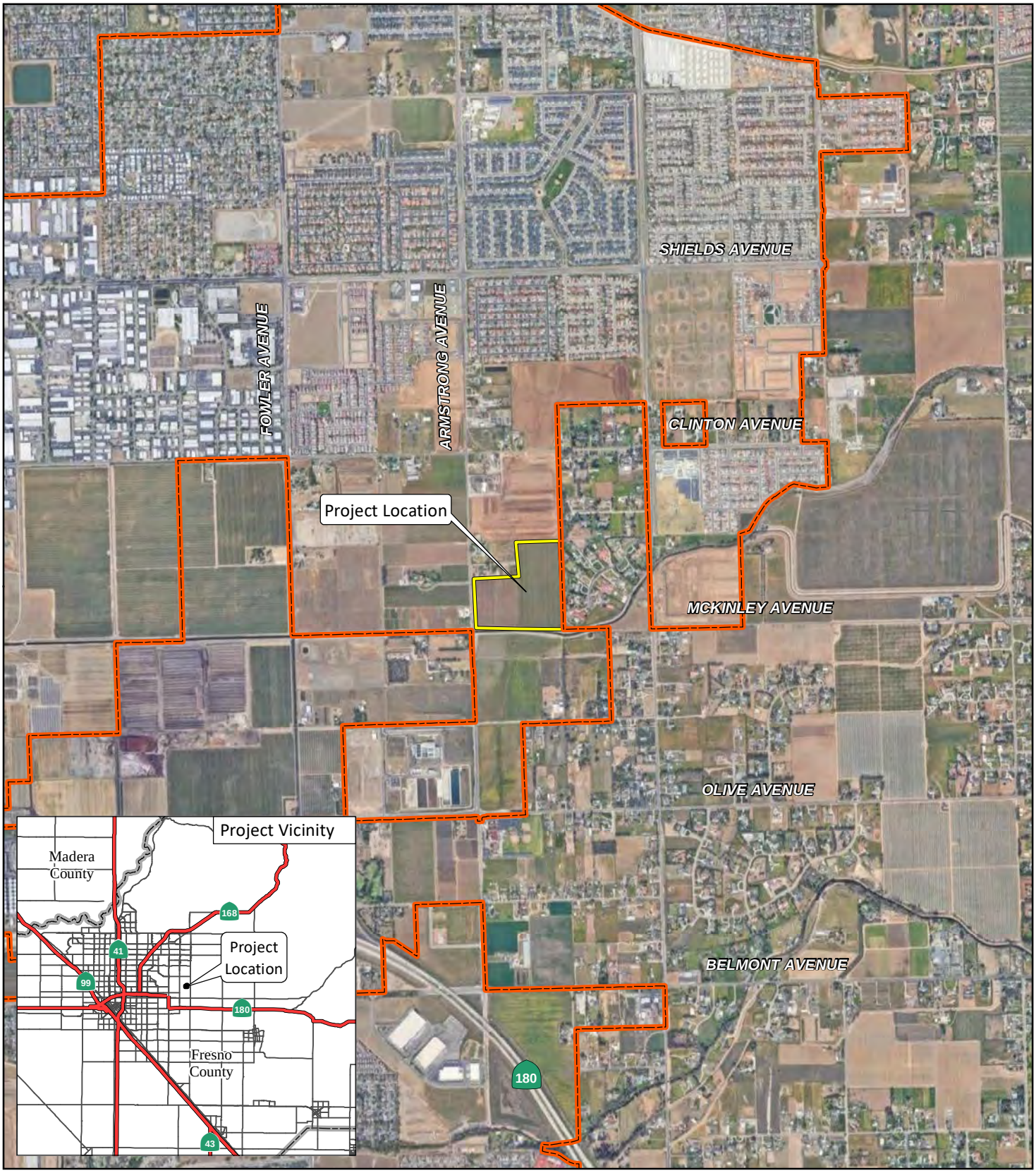
Olive Avenue

13. Between Fowler Avenue and Armstrong Avenue (City of Fresno/Fresno County).

For each roadway segment, the highest volume on any part of the segment will be considered as the analysis volume for the entire segment.

1.3 LIST OF CHAPTER 1.0 FIGURES

- Figure 1-1: Regional and Project Location
- Figure 1-2: Conceptual Site Plan
- Figure 1-3: Study Area Intersections



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LEGEND

City of Fresno Boundary

Project Location

FIGURE 1-1

N

0 1000 2000

FEET

SOURCE: Google Earth, 2018; County of Fresno Streets Data, 2021.

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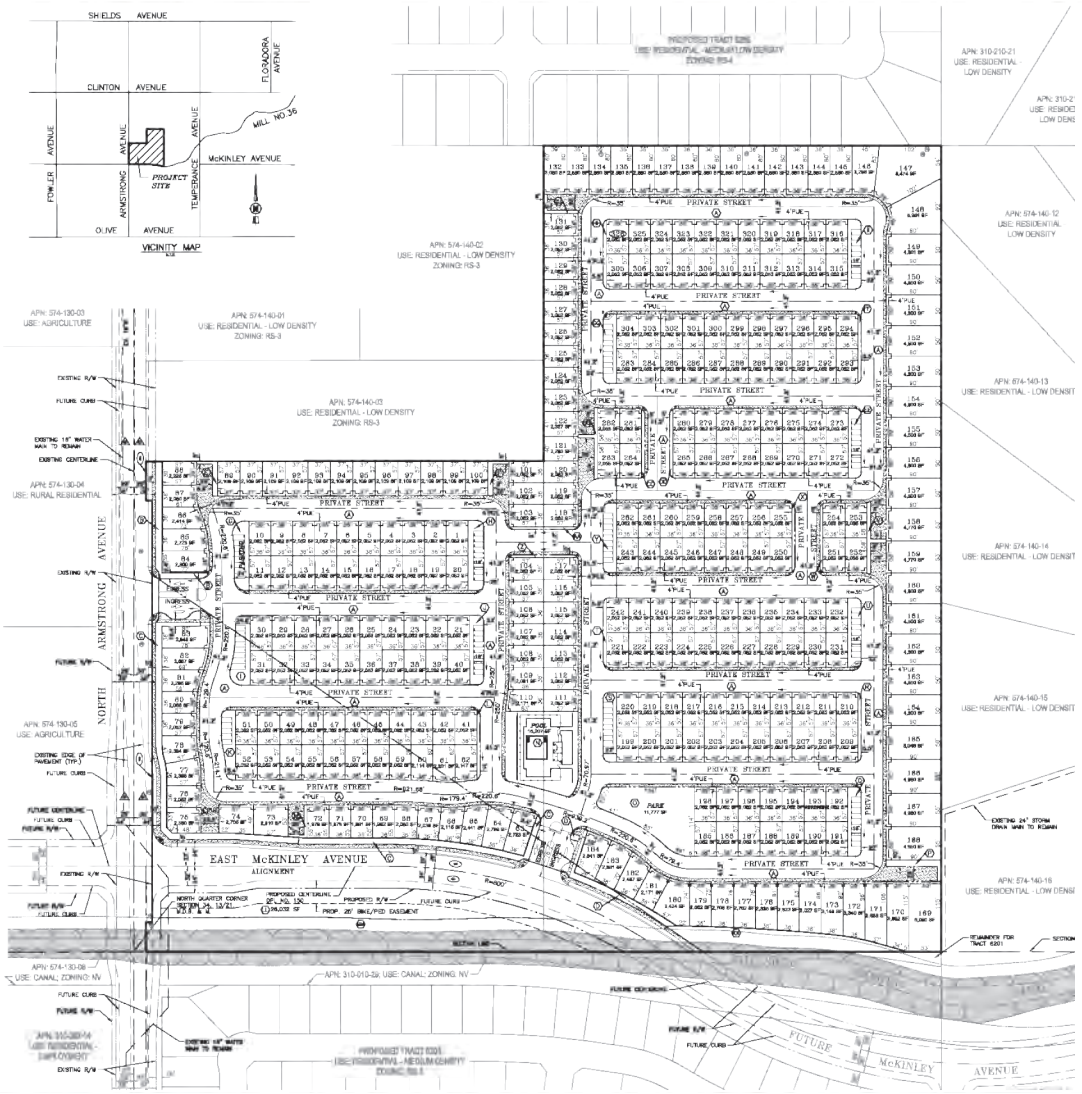
Tract Map 6360 Project
Traffic Impact Study

Regional and Project Location



LSA

FIGURE 1-2

0 170 340
FEET

Tract Map 6360 Project
Traffic Impact Study

Conceptual Site Plan

SOURCE: Harbour & Associates, November 2022
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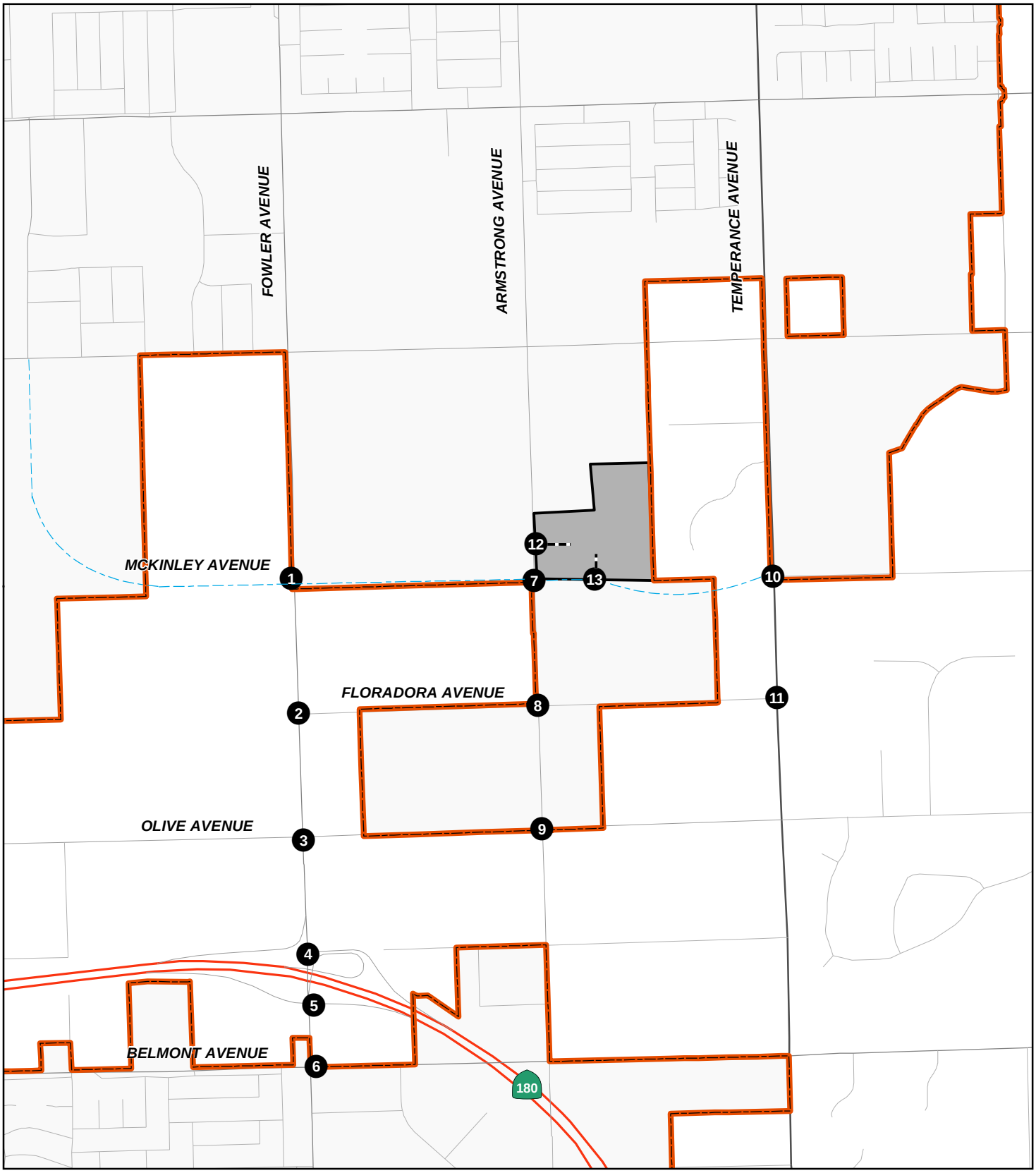

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FIGURE 1-3

LEGEND

- Project Site
- City of Fresno Boundary
- Study Intersections
- Project Driveway
- Future Roadway

N

0 750 1500

FEET

SOURCE: County of Fresno Streets Data, 2021.

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Tract Map 6360 Project
Traffic Impact Study

Study Area Intersections

2.0 ANALYSIS METHODOLOGY

2.1 LEVEL OF SERVICE DEFINITIONS

LOS can be characterized for the whole intersection, each intersection approach, and by each lane group. Control delay alone is used to characterize LOS for the entire intersection. Control delay quantifies the increase in travel time due to the traffic signal control and is a surrogate measure of driver discomfort and fuel consumption.

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual* (HCM). The HCM establishes LOS A through F for intersections. A description of LOS for signalized and unsignalized intersections is summarized in Table 2-A. A description of LOS for roadway segments is summarized in Table 2-B.

Table 2-C shows the LOS criteria for unsignalized and signalized intersections. For all study area intersections, the *Highway Capacity Manual 6th Edition* (HCM 6) analysis methodologies were used to determine intersection LOS. Intersection LOS was calculated using the Synchro 11 software, which uses the HCM 6 methodologies.

The TIS Guidelines recommend using Florida LOS tables for roadway segment analysis. Table 2-D summarizes the LOS criteria used to evaluate roadway segments based on the Florida LOS Tables for urbanized areas, which was adapted from Table 1 of the *2020 Quality/Level of Service Handbook*, dated June 2020. The daily traffic volumes represent the total vehicles (both directions) traveling on a roadway segment within 24 hours.

2.2 LEVEL OF SERVICE PROCEDURES AND STANDARDS

Study intersections and roadway segments analyzed in this report are completely under the jurisdiction of the City of Fresno and the County of Fresno. However, intersections located at freeway on-ramps and off-ramps are under the jurisdiction of Caltrans.

Per the City of Fresno *Traffic Impact Study Report Guidelines*, updated February 2009, LOS D is considered as the level of service standard for study intersections and roadway segments under near-term conditions. The same criterion holds for cumulative year conditions, except for roadway segments that are adopted in the City's Master General Plan to operate at LOS E or F. The City's TIS Guidelines do not define an LOS standard under Existing Plus Project conditions.

It should be noted that all City of Fresno study intersections and roadway segments are located within the City of Fresno Traffic Impact Zone (TIZ) III. Per the City of Fresno's General Plan, all intersections and roadway segments within TIZ III should maintain a peak hour LOS standard of D or better. Therefore, a LOS standard of D has been considered for intersections and roadway segments within the City of Fresno for all analysis conditions. The City considers the following operational deficiency criteria for study intersections:

- An operational deficiency is created if the addition of the project traffic results in any one of the following:

a) Causes the intersection LOS to change from acceptable to unacceptable levels; OR
b) Causes the intersection LOS to change from an unacceptable LOS (LOS E) to LOS F; OR
c) Increases the average delay at a study intersection that is already operating at an unacceptable LOS.

The City's TIS Guidelines do not define an operational deficiency criteria for roadway segments. For purposes of this analysis, at intersections under the City of Fresno jurisdiction, an operational deficiency has been considered when the project causes an unsatisfactory condition (deterioration from LOS A through D to E or F) or when the project contributes to an existing or forecast deficiency.

The County of Fresno considers LOS D as the level of service standard on urban roadways within the spheres of influence of the Cities of Fresno and Clovis. The level of service standard on all other roadways in the County is LOS C. The County considers the following operational deficiency criteria for study intersections and roadway segments:

- **Signalized Intersections**

  a) If the project causes an intersection that is operating at an acceptable LOS to deteriorate to an unacceptable LOS; OR

  b) If the project causes the average delay to increase by more than 5.0 seconds at a signalized intersection that is operating at an unacceptable LOS. It is to be noted that a decrease from an unacceptable LOS to a lesser LOS (e.g., from LOS D to LOS E in County areas) is not considered a deficiency unless the corresponding delay increase is greater than 5.0 seconds.

- **Unsignalized Intersections**

  a) If the project causes a movement or approach that is operating at an acceptable LOS to deteriorate to an unacceptable LOS; OR

  b) If the project causes the average delay to increase by more than 5.0 seconds on a movement or approach that is operating at an unacceptable LOS. It is to be noted that a decrease from an unacceptable LOS to a lesser LOS (e.g., from LOS D to LOS E in County areas) is not considered a deficiency unless the corresponding delay increase is greater than 5.0 seconds.

- **Roadway Segments**

  a) If the project causes a roadway that is operating at an acceptable LOS to deteriorate to an unacceptable LOS; OR

  b) If the project causes the V/C ratio (on a directional peak hour basis) to increase by more than 0.05 on a roadway that is already operating at an unacceptable LOS. It is to be noted that a decrease from an unacceptable LOS to a lesser LOS (e.g., from LOS D to LOS E in County areas) is not considered a deficiency unless the corresponding V/C ratio increase is greater than 0.05.

Caltrans considers an acceptable LOS to be between LOS C and D at all intersections under its jurisdiction (delay of 45 seconds at signalized intersections). Caltrans does not have any operational deficiency criteria for study intersections. Therefore, an operational deficiency occurs when the

project causes an unsatisfactory condition (deterioration from LOS A through D to E or F) for intersections or when the project contributes to an existing or forecast deficiency. The project needs to identify improvements to improve the intersection LOS to an acceptable level.

2.3 LIST OF CHAPTER 2.0 TABLES

- Table 2-A: Intersection Level of Service Definitions
- Table 2-B: Roadway Segment Level of Service Definitions
- Table 2-C: Level of Service Criteria for Unsignalized and Signalized Intersections
- Table 2-D: Roadway Segment Capacity and Levels of Service

Table 2-A: Intersection Level of Service Definitions

LOS	Description
A	Traffic operations with a control delay of 10 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
B	Traffic operations with control delay between 10 seconds per vehicle and 20 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
C	Traffic operations with control delay between 20 and 35 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of the insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	Traffic operations with control delay between 35 and 55 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
E	Traffic operations with control delay between 55 and 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
F	Traffic operations with control delay exceeding 80 seconds per vehicle or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: *Highway Capacity Manual* (6th Edition)

Table 2-B: Roadway Segment Level of Service Definitions

LOS	Description
A	Describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control Delay at the boundary intersection is minimal. The travel speed exceeds 80% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
B	Describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted, and control delay at the boundary is not significant. The travel speed is between 67% and 80% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
C	Describes stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersection may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
D	Indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.
E	Characterized by unstable operation and significant delay. Such operations may be due to some combination of adverse progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed, and the volume-to-capacity ratio is no greater than 1.0.

Table 2-B: Roadway Segment Level of Service Definitions

LOS	Description
F	Characterized by flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is between 30% or less of the base free-flow speed, and the volume-to-capacity ratio is greater than 1.0.

Source: *Highway Capacity Manual* (6th Edition)

Table 2-C: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: *Highway Capacity Manual* (6th Edition)

Table 2-D: Roadway Segment Capacity and Levels of Service

Class I (40 MPH or Higher Posted Speed Limit)					
		Level of Service			
Lanes	Median	B	C	D	E
2	Undivided	*	15,120	15,930	*
4	Divided	*	34,110	35,820	*
6	Divided	*	52,560	53,910	*
8	Divided	*	70,920	72,090	*
Class II (35 MPH or Slower Posted Speed Limit)					
2	Undivided	*	6,570	13,320	14,040
4	Divided	*	13,050	29,160	30,420
6	Divided	*	20,970	45,000	45,810
8	Divided	*	28,800	60,570	61,290

[1] The Florida LOS Tables includes the LOS capacities for State Signalized Arterials, and recommends a 10% adjustment for non-state signalized roadway system. Therefore, the roadway capacities have been calculated using a 10% adjustment to the values provided within the Florida LOS Table for urbanized area for State Signalized arterials.

Source: State of Florida *2020 Quality/level of Service Handbook, June 2020*.

3.0 CIRCULATION NETWORK SETTING

3.1 STUDY AREA CIRCULATION NETWORK

The project study area includes the following major roadways as classified based on the roadway classification provided in the Circulation Element of the City's General Plan. Figure 3-1 summarizes the classifications of major roadways within the study area. Following is a brief description of these roadways:

- **Fowler Avenue:** Within the study area, Fowler Avenue is designated as an Arterial in the City's General Plan. Between McKinley Avenue and Olive Avenue, Fowler Avenue is a two-lane, undivided Arterial with a posted speed limit of 50 miles per hour. There are no bike facilities nor provision for on-street parking along either direction of this segment. Between Olive Avenue and Belmont Avenue, Fowler Avenue is mostly a four-lane, divided Arterial with a raised median and a posted speed limit of 45 miles per hour. There are bicycle lanes along both directions of this segment. However, there is no provision for on-street parking along either direction of this segment.
- **Armstrong Avenue:** Within the study area, Armstrong Avenue is designated as a Collector in the City's General Plan. Between Yale Avenue and Floradora Avenue, Armstrong Avenue is a two-lane, undivided Collector with a posted speed limit of 45 miles per hour. There are no bike facilities nor provision for on-street parking along either direction of this segment. Between Floradora Avenue and Olive Avenue, Armstrong Avenue is a two-lane, divided Collector with a painted median and a posted speed limit of 45 miles per hour. There is a bicycle lane along the southbound direction of this segment. There is no provision for on-street parking along either direction of this segment.
- **Temperance Avenue:** Within the study area, Temperance Avenue is designated as a Super Arterial in the City's General Plan. Between McKinley Avenue and Floradora Avenue, Temperance Avenue is a two-lane, undivided Super Arterial with a posted speed limit of 45 miles per hour. There are no bicycle facilities nor provision for on-street parking along either direction of this segment.
- **McKinley Avenue:** Within the study area, McKinley Avenue is designated as a Collector in the City's General Plan. Per discussion with City staff, McKinley Avenue will be constructed as a two-lane, undivided Collector between Fowler Avenue and Temperance Avenue. As previously mentioned, McKinley Avenue does not currently exist between Fowler Avenue and Temperance Avenue. The segment of McKinley Avenue, between Fowler Avenue and Temperance Avenue, is planned to be constructed prior to the completion of the project. Additionally, as per the City's General Plan, McKinley Avenue is planned to be extended west of Fowler Avenue to connect to Sunnyside Avenue. Therefore, for purposes of this analysis, this extension has been considered under cumulative year conditions. Detailed alignment plans for the McKinley Avenue extension are included in Appendix B.
- **Floradora Avenue:** Within the study area, Floradora Avenue is a local street and has no designation in the City's General Plan. Between Fowler Avenue and Temperance Avenue,

Floradora Avenue is a two-lane, undivided road. There are no bicycle facilities nor provision for on-street parking along either direction of this segment.

- **Olive Avenue:** Within the study area, Olive Avenue is designated as a Collector in the City's General Plan. Between Fowler Avenue and Armstrong Avenue, Olive Avenue is mostly a two-lane, divided Collector with a painted median and posted speed limit of 45 miles per hour. There is a bicycle lane on the westbound direction on this segment between the Southeast Surface Water Treatment Plant driveway and Armstrong Avenue. There is no provision for on-street parking on either direction of this segment.

Figure 3-2 illustrates existing study intersection geometrics and traffic control. Figure 3-3 illustrates study intersection geometrics and traffic control under existing plus project and near-term plus project scenarios. Figure 3-4 illustrates study intersection geometrics and traffic control under cumulative year plus project conditions.

3.2 BICYCLE, PEDESTRIAN, AND TRANSIT FACILITIES

3.2.1 Bicycle Network

The City of Fresno is committed to improving non-motorized travel. Bicycling can be a viable alternative to local work commutes and offers children a healthy way to get to school. To facilitate and encourage bicycle trips among other non-motorized modes of travel, the City has adopted its Active Transportation Plan in 2016 that includes a network of proposed facilities and implementation plan for the future. The *City of Fresno Active Transportation Plan* (adopted December 2016) provides an inventory of all existing bicycle infrastructure improvements to be implemented in the future.

According to the *City of Fresno Active Transportation Plan*, the bikeway network within the City is classified into four categories: Class I – Bike Paths, Class II – Bike Lanes, Class III – Bike Routes, and Class IV – Separated Bikeways. Class I bikeways provide bicycle travel on a paved right-of-way completely separated from any street or highway. Class II bikeways provide a stripped and stenciled lane for one-way travel on a street or highway. Class III bikeways provide shared use with motor vehicle traffic and are identified only by signage. Class IV bikeways are physically separated bikeway facilities distinct from the sidewalks and designated for exclusive bicyclist use.

Currently, Class II bikeways exist on parts of Fowler Avenue, Armstrong Avenue, and Olive Avenue within the study area. Proposed Class I bikeways are planned to be added along McKinley Avenue within the study area. Proposed Class II bikeways are planned to be added along Fowler Avenue, Armstrong Avenue, Temperance Avenue, and Olive Avenue within the study area. Figure 3-5 illustrates the existing and proposed bikeway network within the City.

3.2.2 Pedestrian Network

The implementation of enhanced pedestrian linkage with a comprehensive trails system links residential areas, schools, parks, and commercial centers so that residents can travel within the community without driving. Safe and attractive sidewalks and walkways improve the walkability of the City. Sidewalks are generally provided on both sides of the streets throughout the City. Additionally, standard paved trails and non-standard unpaved trails are frequently used by bicyclists

and pedestrians in the City. The existence of trails and sidewalks provides accessible facilities, increases safety features, and improves walkability in the City.

Paved sidewalks are present on the southbound direction of Fowler Avenue south of Olive Avenue, on both sides of Armstrong Avenue south of Floradora Avenue, intermittently on the eastbound direction of Floradora Avenue, and intermittently on the westbound direction of Olive Avenue within the study area. Proposed paved sidewalks are planned to be added to the remainder of Fowler Avenue, Armstrong Avenue, Temperance Avenue, and Olive Avenue within the study area. Additionally, the project will be constructing paved sidewalks along the project site frontage on Armstrong Avenue and McKinley Avenue. Figure 3-6 illustrates the existing and proposed sidewalk network within the City.

According to the City's General Plan, the Old Town Clovis Trail currently runs alongside the Mill Ditch canal directly adjacent to the project site. The McKinley Avenue extension between Armstrong Avenue and Temperance Avenue is planned to intersect with the Mill Ditch canal and the Old Town Clovis Trail. The roadway extension is planned to be built over the canal and trail via an overpassing bridge. Therefore, the trail may still be used by pedestrians and bicyclists after the completion of the McKinley Avenue extension. Figure 3-7 illustrates the network of paths and trails within the City.

3.2.3 Transit Network

Fresno Area Express (FAX) is the Transportation Service Agency within the City and is responsible for coordinating transit services within its service area. FAX provides services via Route 1/Q (Bus Rapid Transit) as well as 17 other routes throughout the City and four routes for Clovis Transit. There are currently no transit routes present within the study area.

3.3 LIST OF CHAPTER 3.0 FIGURES

LSA

FIGURE 3-1

N

Tract Map 6360 Project
Traffic Impact Study

City of Fresno Roadway Classification

SOURCE: City of Fresno General Plan, 2014

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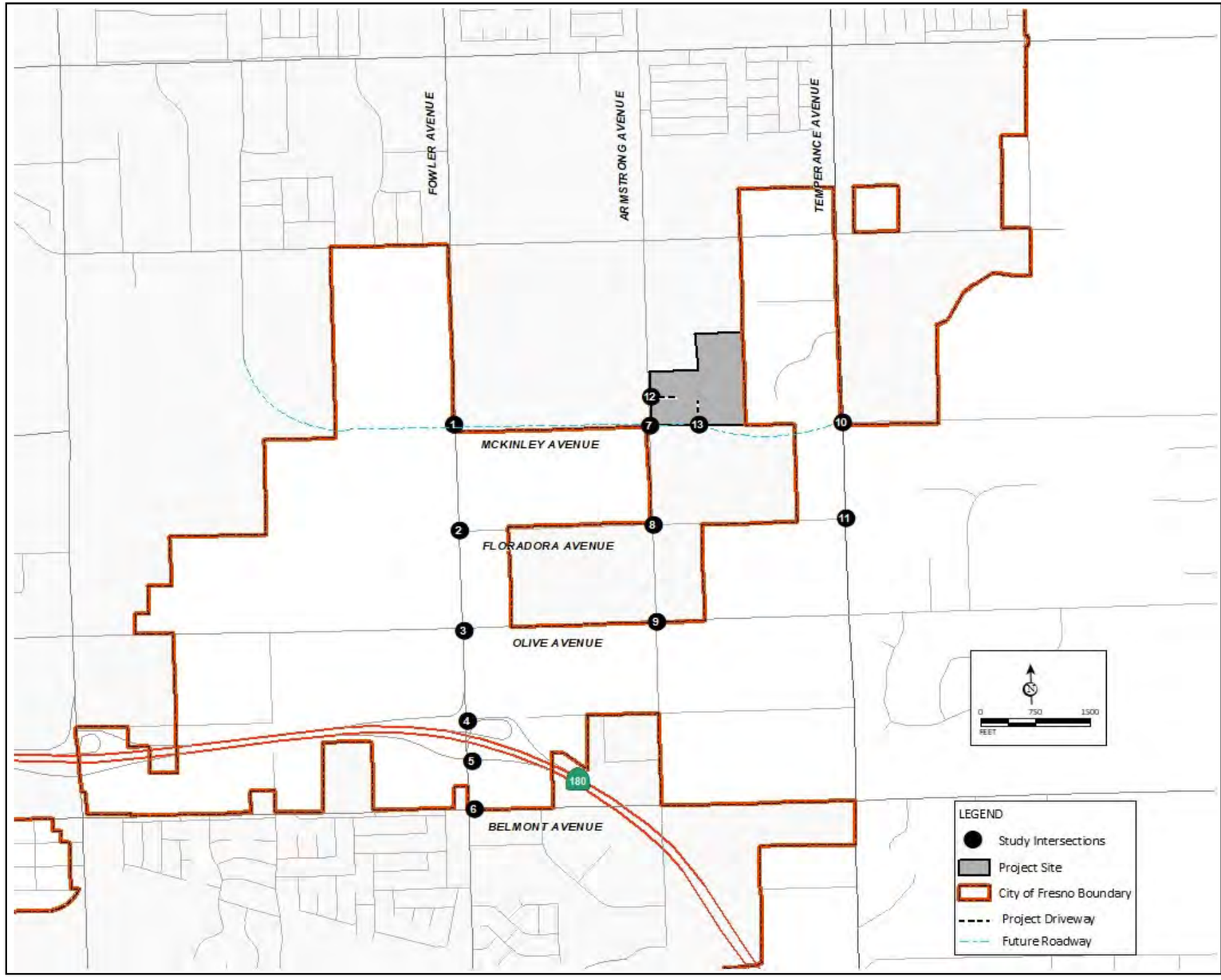

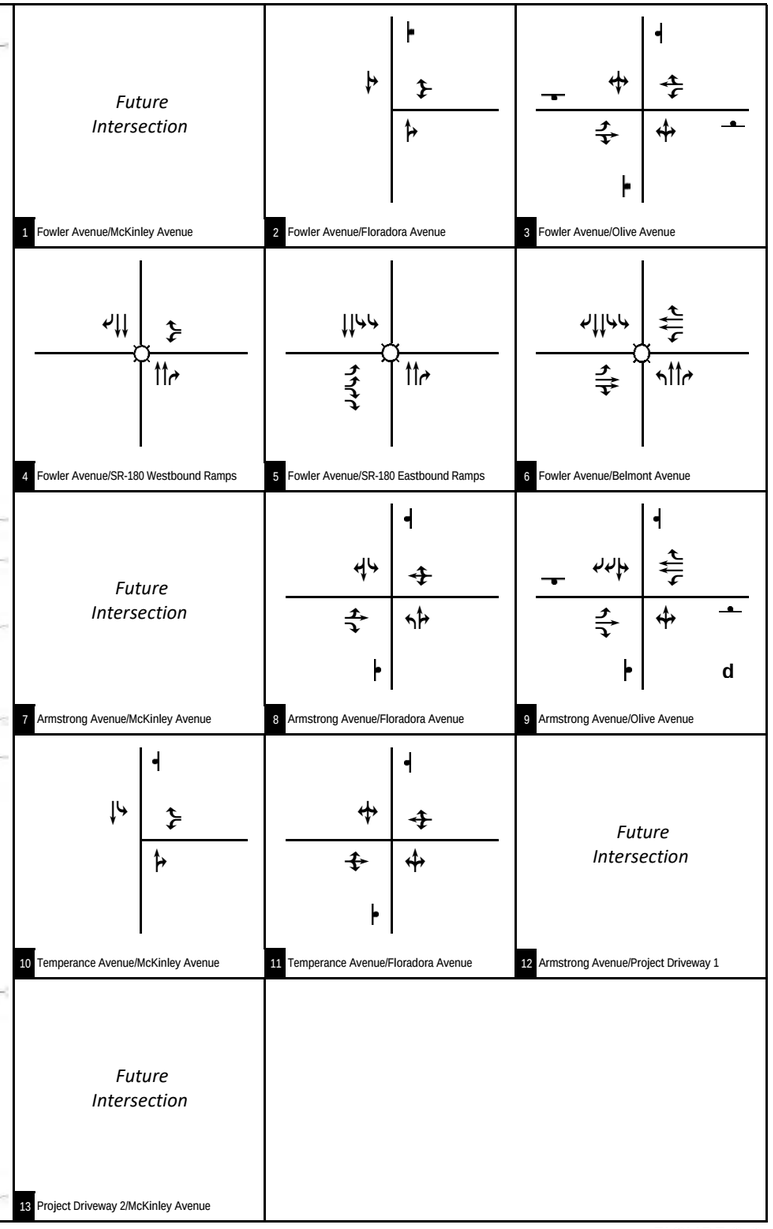

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FIGURE 3-2

Legend

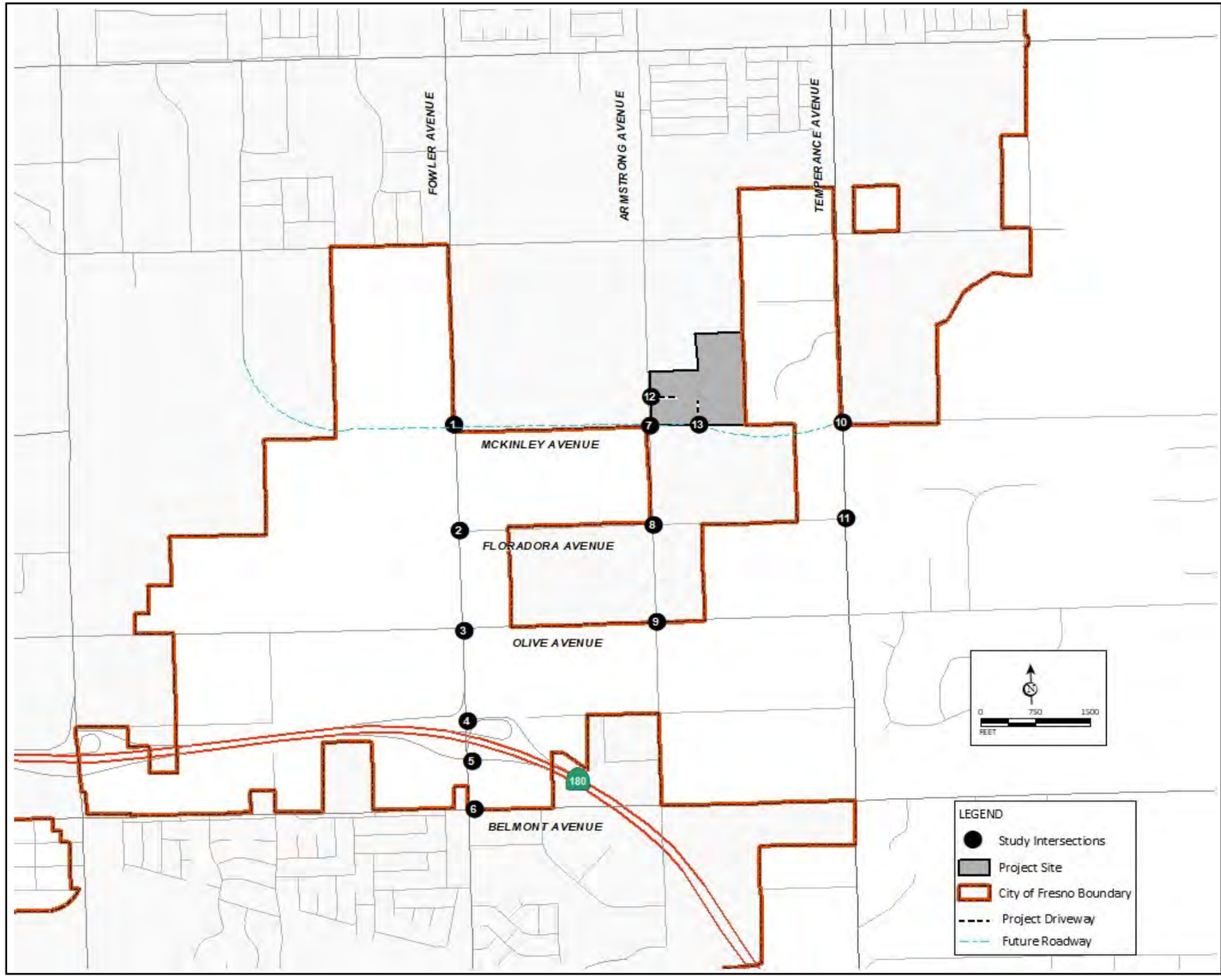
Signal

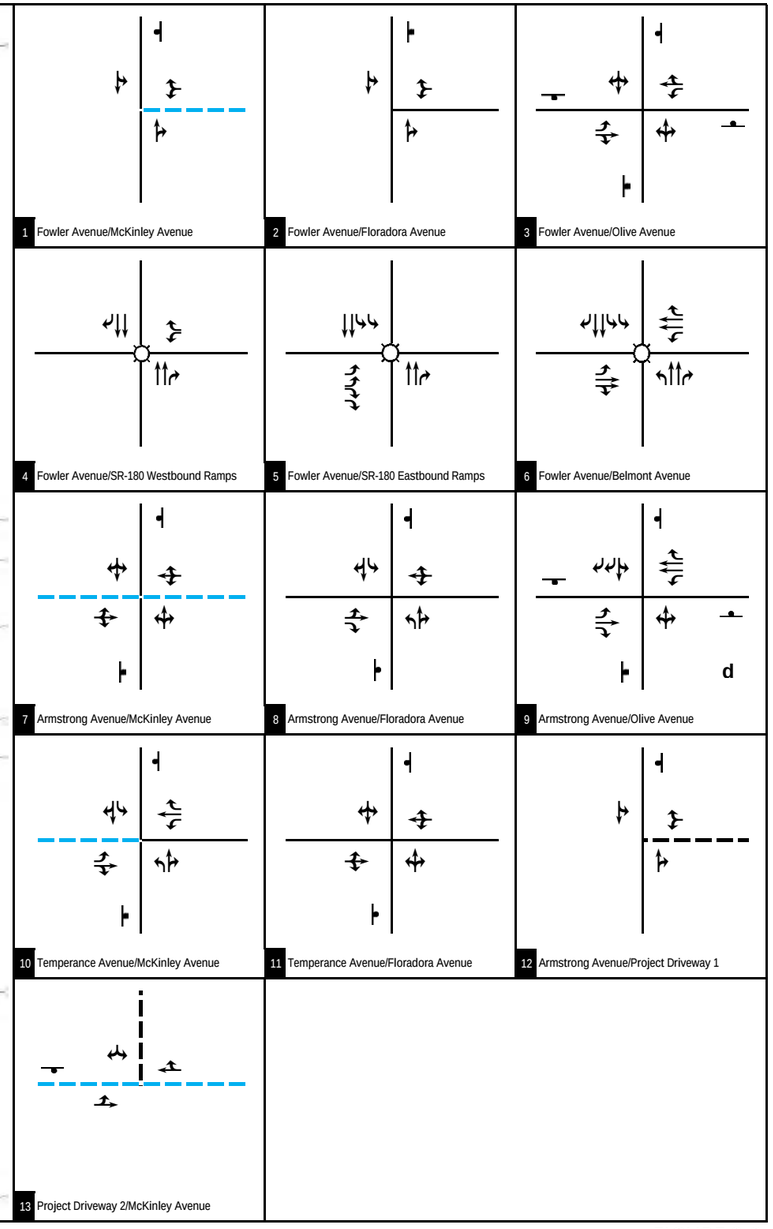
Stop Sign

d De-facto Right Turn

Tract Map 6360 Project
Traffic Impact Study

Existing Study Intersection Geometrics and Traffic Control





LSA

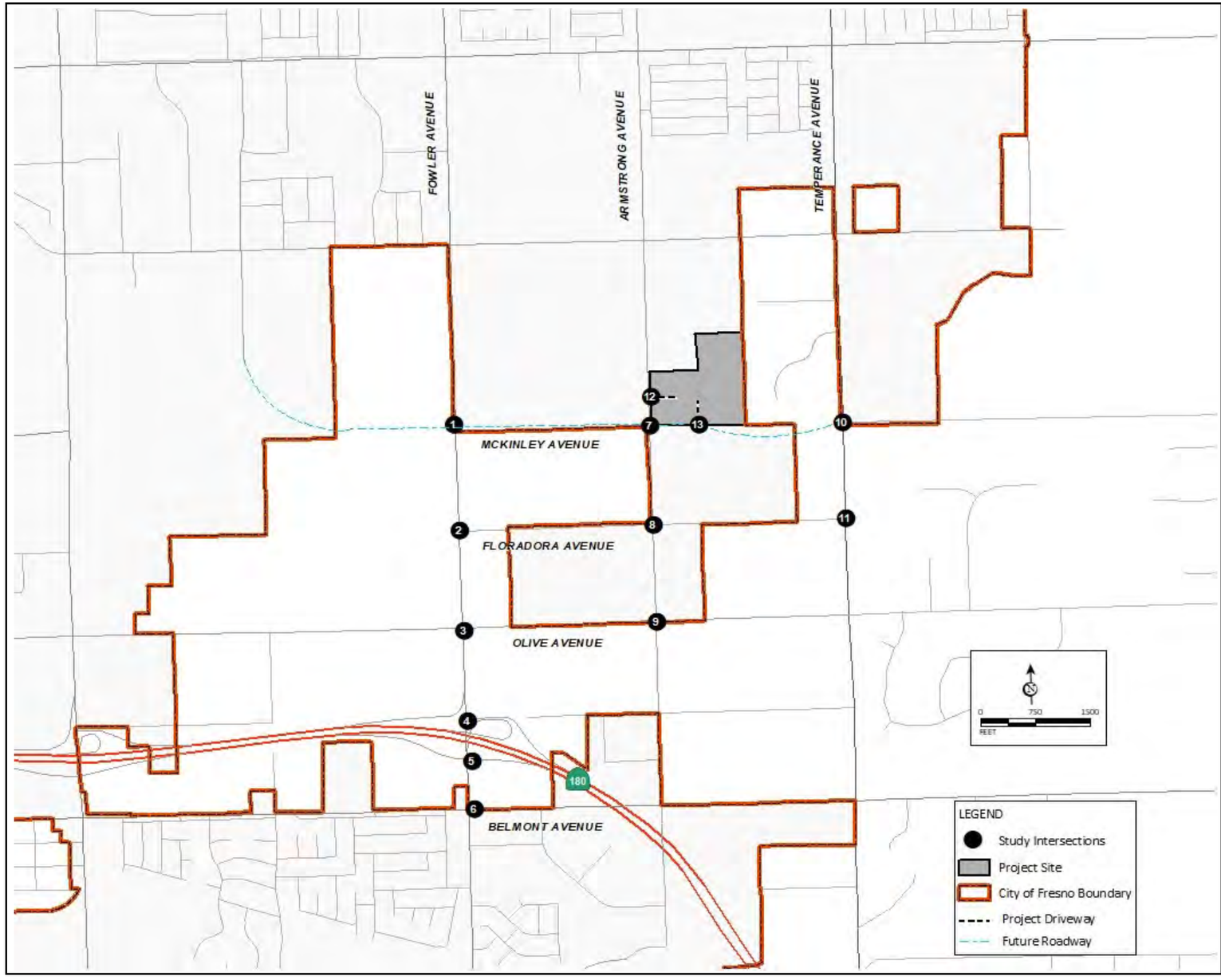
FIGURE 3-3

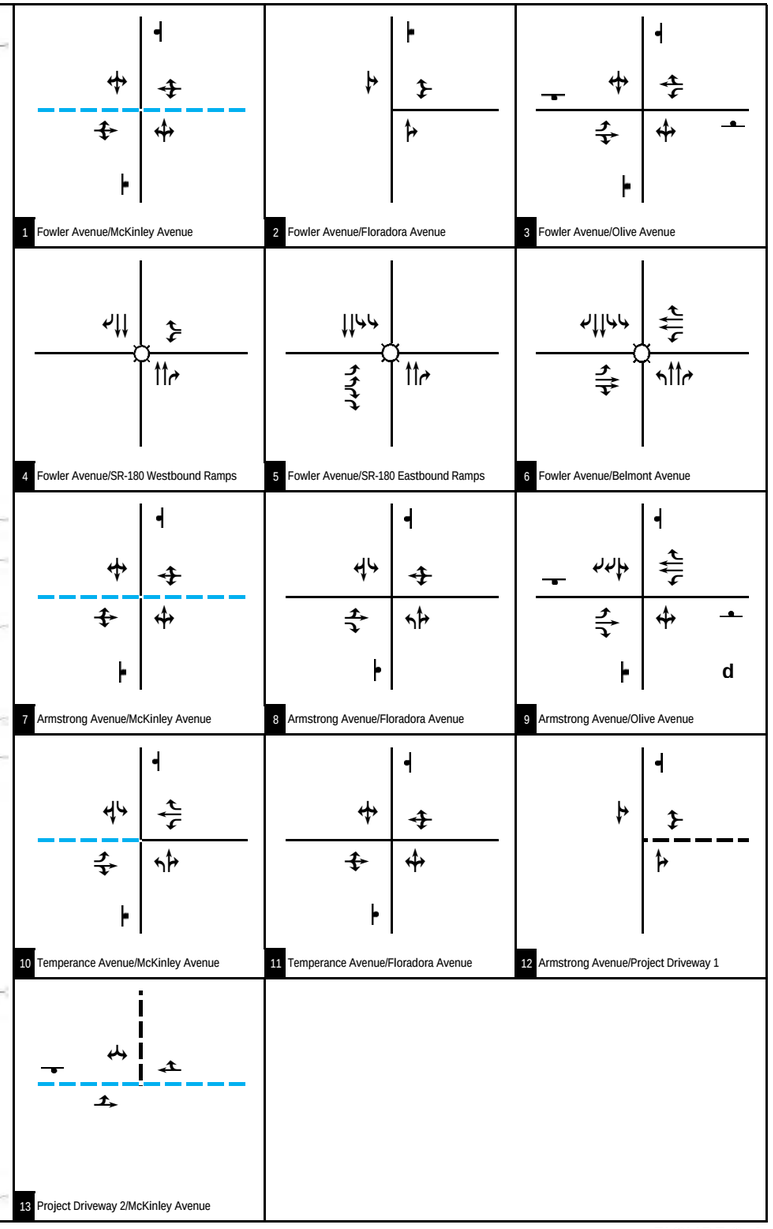
Legend

Signal
Stop Sign
d De-facto Right Turn
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study

Existing and Near-Term Plus Project Study Intersection Geometrics and Traffic Control





LSA

FIGURE 3-4

Legend

Signal
Stop Sign
d De-facto Right Turn
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study

Cumulative Year (2046) Plus Project Study Intersection Geometrics and Traffic Control

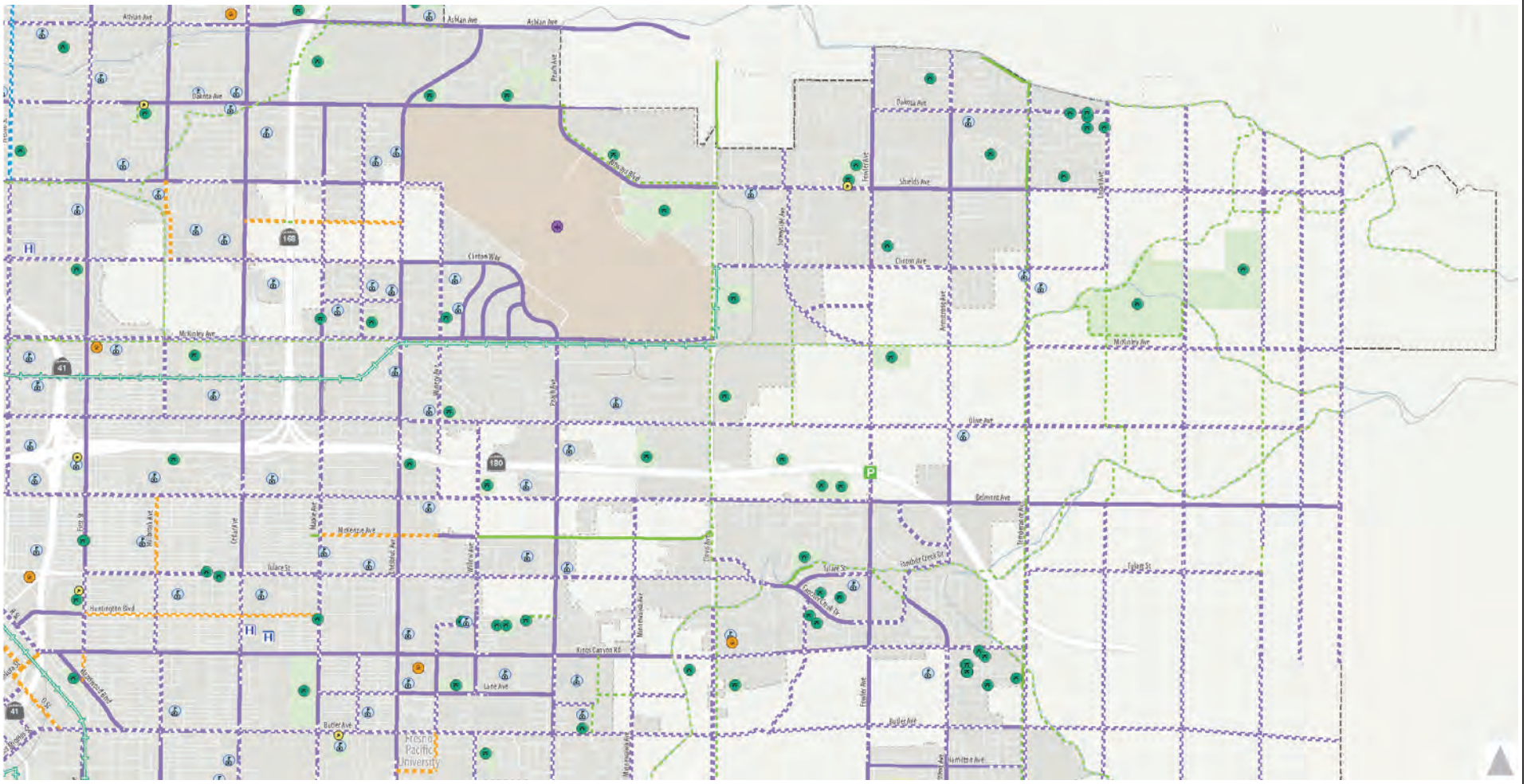


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FIGURE 3-5

Tract Map 6360 Project
Traffic Impact Study

City of Fresno Existing and Proposed Bikeway Network

SOURCE: Fresno Active Transportation Plan, December 2016

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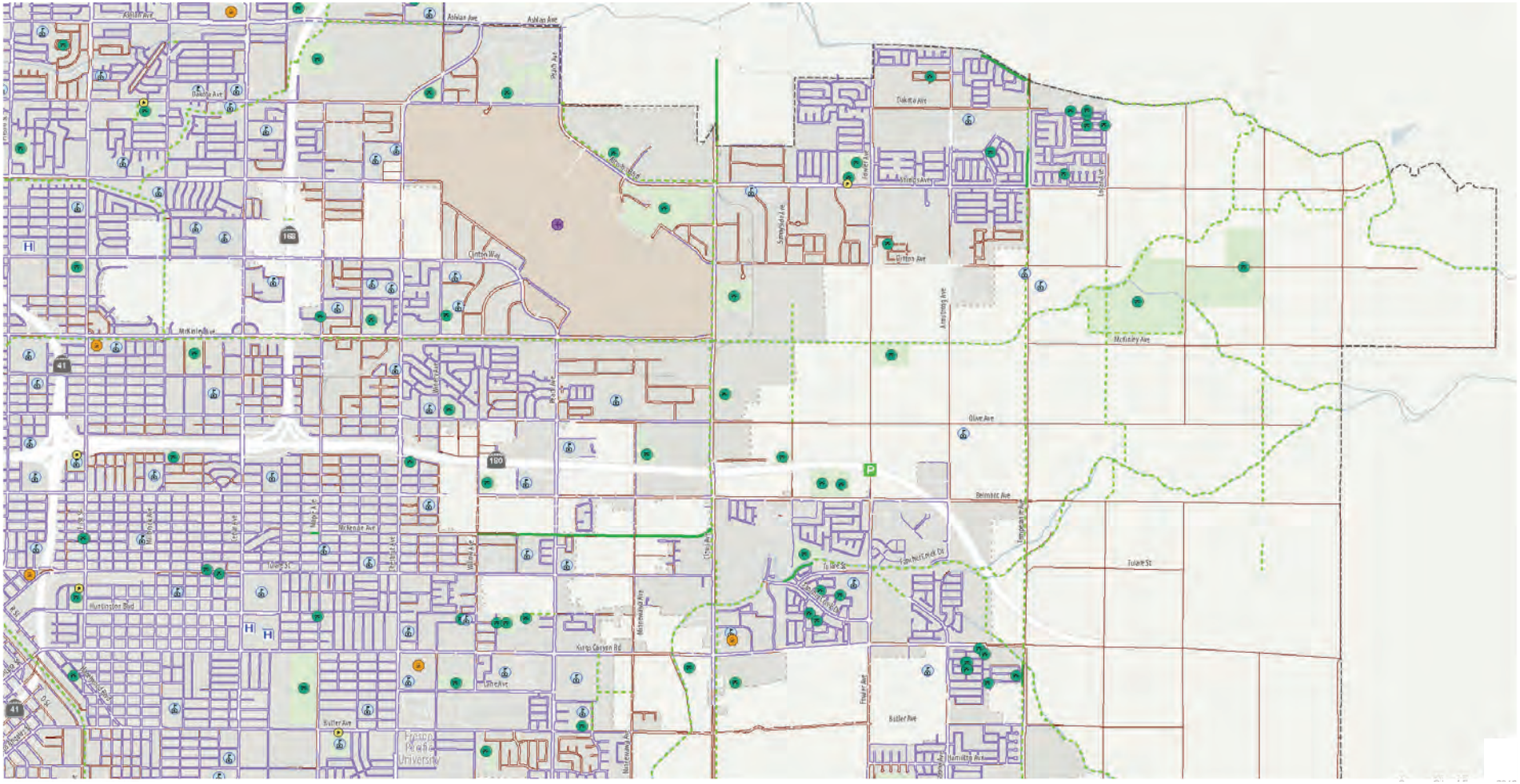

LSA

Legend

- Class I Bike Path
- Class I Bike Path
- Existing Sidewalk
- Planned Sidewalks

N

FIGURE 3-6

Tract Map 6360 Project
Traffic Impact Study

City of Fresno Existing and Proposed Sidewalks

SOURCE: Fresno Active Transportation Plan, December 2016

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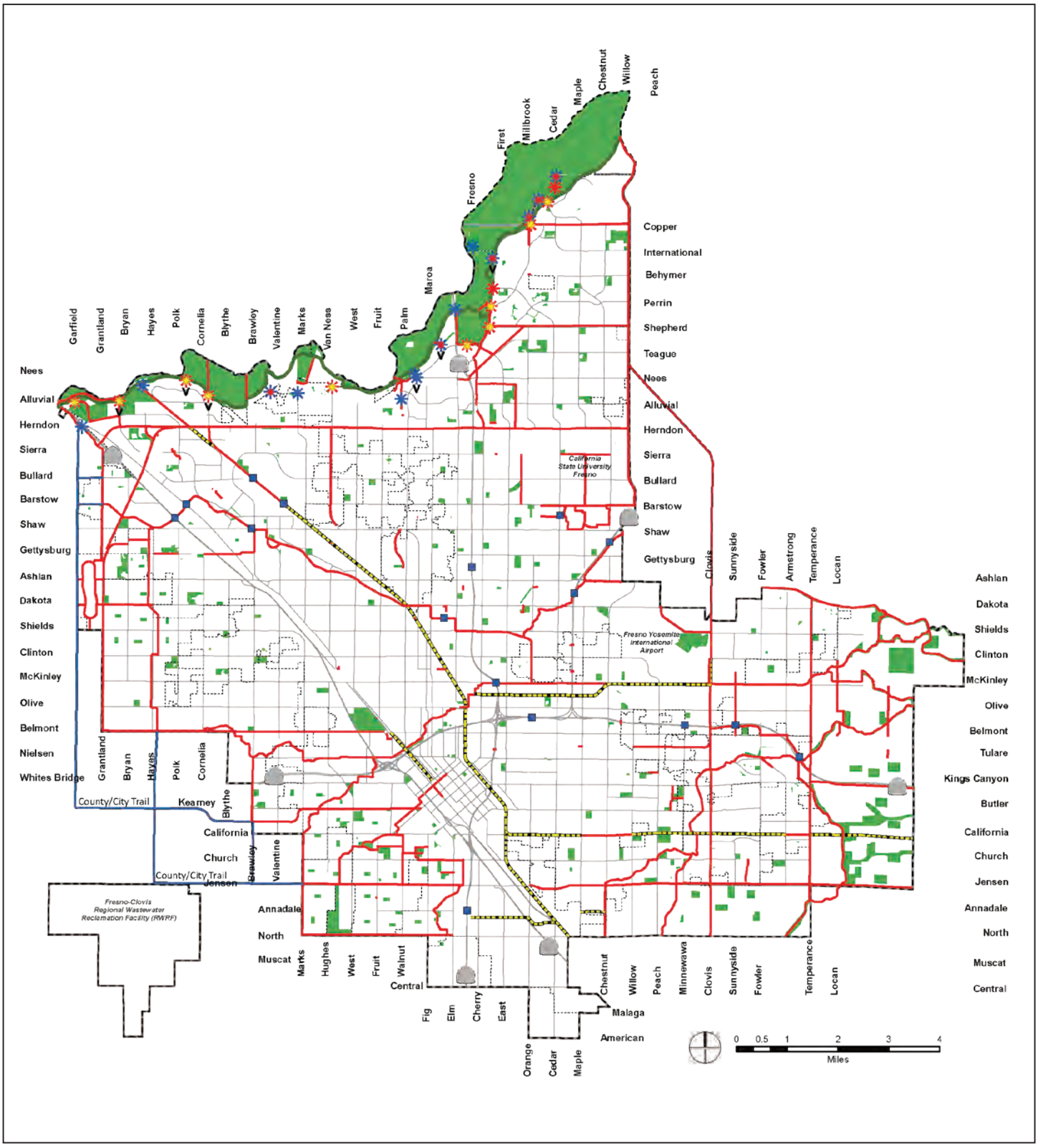

LSA

LEGEND

- Old Town Clovis Trail
- San Joaquin River Parkway Path and Trail[1]
- Rails to Trails[2]
- County/City Trail[3]
- Class I Bicycle/Pedestrian Path

FIGURE 3-7

Tract Map 6360 Project
Traffic Impact Study

City of Fresno Network of Paths and Trails

SOURCE: Fresno Active Transportation Plan, December 2016

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4.0 TRAFFIC VOLUMES FOR NO PROJECT SCENARIOS

4.1 EXISTING TRAFFIC VOLUMES

Traffic volumes for existing conditions were developed using existing count data collected by Counts Unlimited in November 2022 at study intersections and roadway segments. Daily tube counts were collected for roadway segments while a.m. and p.m. peak hour turning movement counts were collected at study intersections.

However, due to construction activities on Armstrong Avenue north of Floradora Avenue, the roadway segment of Armstrong Avenue, north of Floradora Avenue, was closed for public use. Therefore, the volumes along Armstrong Avenue were adjusted to account for this roadway closure. Following is a brief summary for the adjustment procedure:

- Intersection (8) of Armstrong Avenue/Floradora Avenue – Year 2018 count data for this intersection was obtained from the Tentative Tract 6201 (Single-Family Housing) Traffic Impact Analysis, dated October 2018, by JLB Traffic Engineering, Inc. These traffic counts were further adjusted by applying an annual growth rate to historical count data. The annual growth rate was obtained from the Fresno COG ABM for this intersection.

- Intersection (9) of Armstrong Avenue/Olive Avenue – Traffic volumes for this intersection were developed using count data collected by Counts Unlimited in November 2022, and further adjusted in accordance with the adjusted traffic volumes at Armstrong Avenue/Floradora Avenue.

- Intersection (10) of Temperance Avenue/Floradora Avenue – Traffic volumes for this intersection were developed using count data collected by Counts Unlimited in November 2022, and further adjusted in accordance with the adjusted traffic volumes at Armstrong Avenue/Floradora Avenue.

- Segment of Armstrong Avenue between McKinley Avenue and Floradora Avenue – Year 2018 count data for this segment was obtained from the Tentative Tract 6201 Traffic Impact Analysis, dated October 2018, by JLB Traffic Engineering, Inc. and adjusted by applying an annual growth rate obtained from Fresno COG ABM.

- Segment of Armstrong Avenue between Floradora Avenue and Olive Avenue – Traffic volumes for this segment were developed using count data collected by Counts Unlimited in November 2022, and further adjusted in accordance with the adjusted traffic volumes at the segment of Armstrong Avenue between McKinley Avenue and Floradora Avenue.

Vehicle classification counts were collected at all study area intersections. Truck percentages for every approach at all intersections were obtained from the classification counts.

Figure 4-1 illustrates peak hour traffic volumes at study intersections under existing conditions. Table 4-A shows peak hour traffic volumes at roadway segments under existing conditions.

Detailed count sheets are included in Appendix C.

4.2 NEAR-TERM NO PROJECT TRAFFIC VOLUMES

As approved during the City's scoping agreement process (Appendix A), traffic volumes for near-term conditions were developed by adding trips from cumulative projects in the area to existing traffic volumes. The segment of McKinley Avenue, between Fowler Avenue and Temperance Avenue, is planned to be constructed prior to the completion of the project. Therefore, for purposes of this analysis, this extension has been considered under near-term conditions.

Information concerning cumulative projects in the vicinity of the proposed project was obtained from City staff and from the adjacent jurisdictions of City of Clovis and Fresno County. Figure 4-2 illustrates the cumulative project locations. Trip generations for cumulative projects were either obtained from the respective traffic studies prepared for the projects or developed using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition). Table 4-B summarizes the cumulative project trip generation. As shown in Table 4-C, the cumulative projects are expected to generate 5,107 a.m. peak hour trips, 3,723 p.m. peak hour trips, and 40,266 daily trips.

Cumulative project trips were assigned to the roadway network based on either the distributions provided in the respective traffic studies for these projects or their locations in relation to surrounding land uses and regional arterials. It should be noted that the McKinley Avenue extension between Fowler Avenue and Temperance Avenue was considered completed for the cumulative project trip distribution and assignments. Figure 4-3 illustrates the peak hour cumulative project trip assignment at study area intersections. Figure 4-4 illustrates the peak hour traffic volumes at study intersections under near-term conditions. Table 4-C shows the peak hour traffic volumes at roadway segments under near-term conditions.

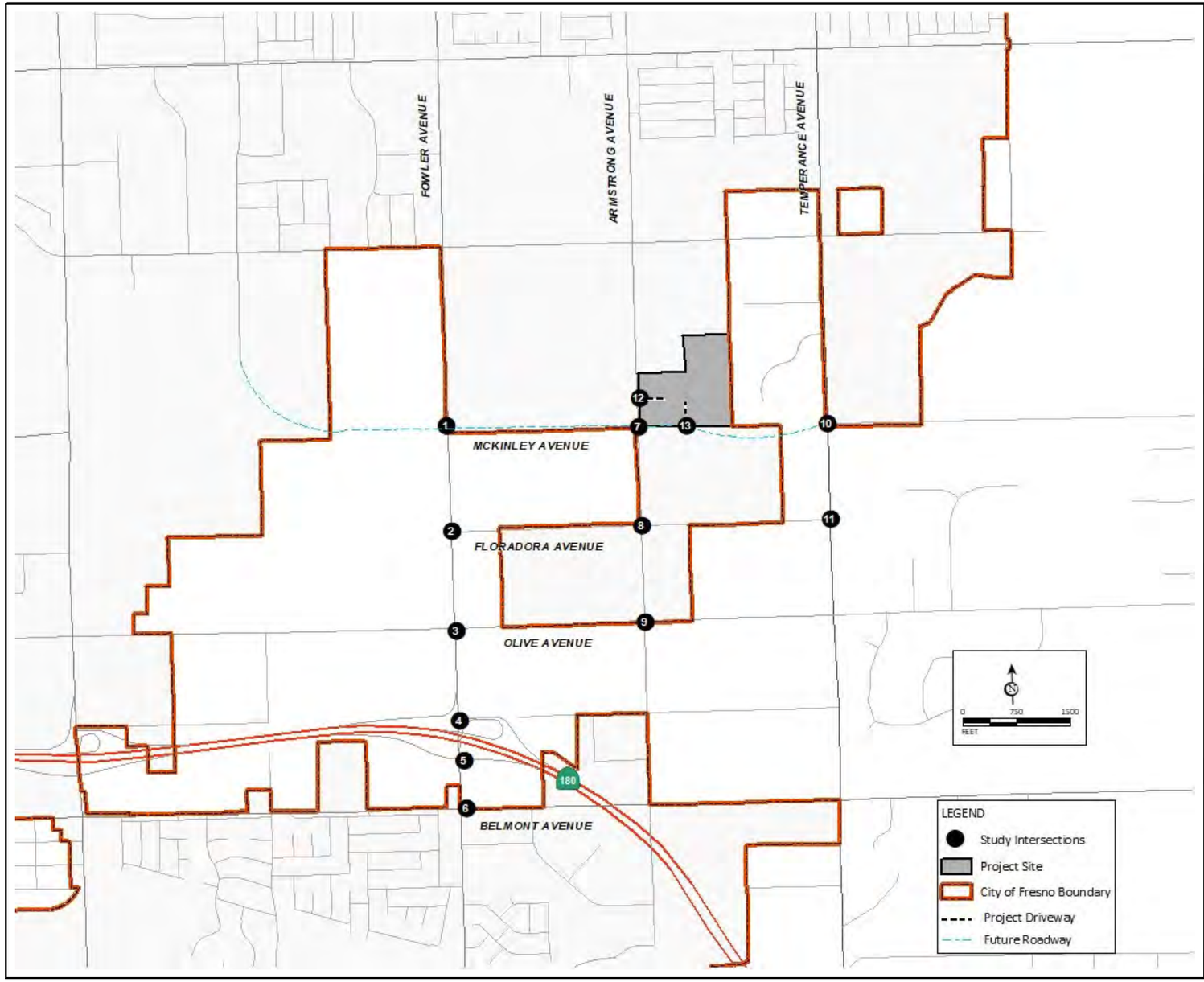
It should be noted that traffic volumes for this scenario have been developed as an intermediate step to develop traffic volumes for the near-term plus project scenario. As such, an LOS analysis was not conducted for this scenario.

4.3 CUMULATIVE YEAR (2046) NO PROJECT TRAFFIC VOLUMES

Traffic volumes for cumulative year conditions were developed using the Fresno Council of Governments' (Fresno COG's) Activity-Based Model (ABM). The methodology used to develop cumulative year traffic volumes at all study intersections is consistent with the National Cooperative Highway Research Program (NCHRP) and Fresno COG's procedures for post-processing of modeled traffic volumes. It should be noted that the entire McKinley Avenue extension between Sunnyside Avenue and Temperance Avenue is integrated into the Fresno COG's ABM. Figure 4-5 illustrates the peak hour traffic volumes at study intersections under cumulative year conditions. Table 4-D shows the peak hour traffic volumes at roadway segments under cumulative year conditions.

Detailed volume development worksheets are included in Appendix D.

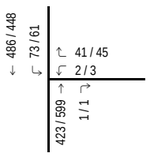
4.4 LIST OF CHAPTER 4.0 FIGURES AND TABLES



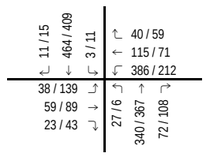
1 Fowler Avenue/McKinley Avenue

Future Intersection

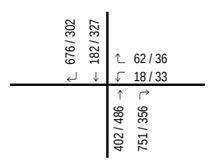
2 Fowler Avenue/Floradora Avenue



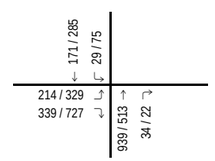
3 Fowler Avenue/Olive Avenue



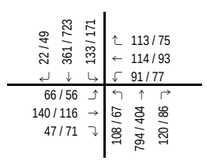
4 Fowler Avenue/SR-180 Westbound Ramps



5 Fowler Avenue/SR-180 Eastbound Ramps



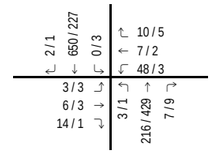
6 Fowler Avenue/Belmont Avenue



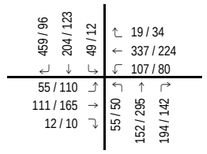
7 Armstrong Avenue/McKinley Avenue

Future Intersection

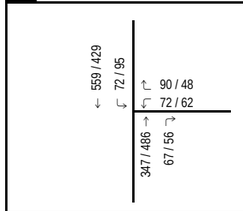
8 Armstrong Avenue/Floradora Avenue



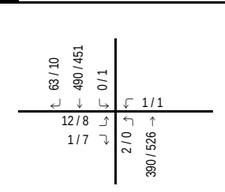
9 Armstrong Avenue/Olive Avenue



10 Temperance Avenue/McKinley Avenue



11 Temperance Avenue/Floradora Avenue



12 Armstrong Avenue/Project Driveway 1

Future Intersection

13 Project Driveway 2/McKinley Avenue

Future Intersection

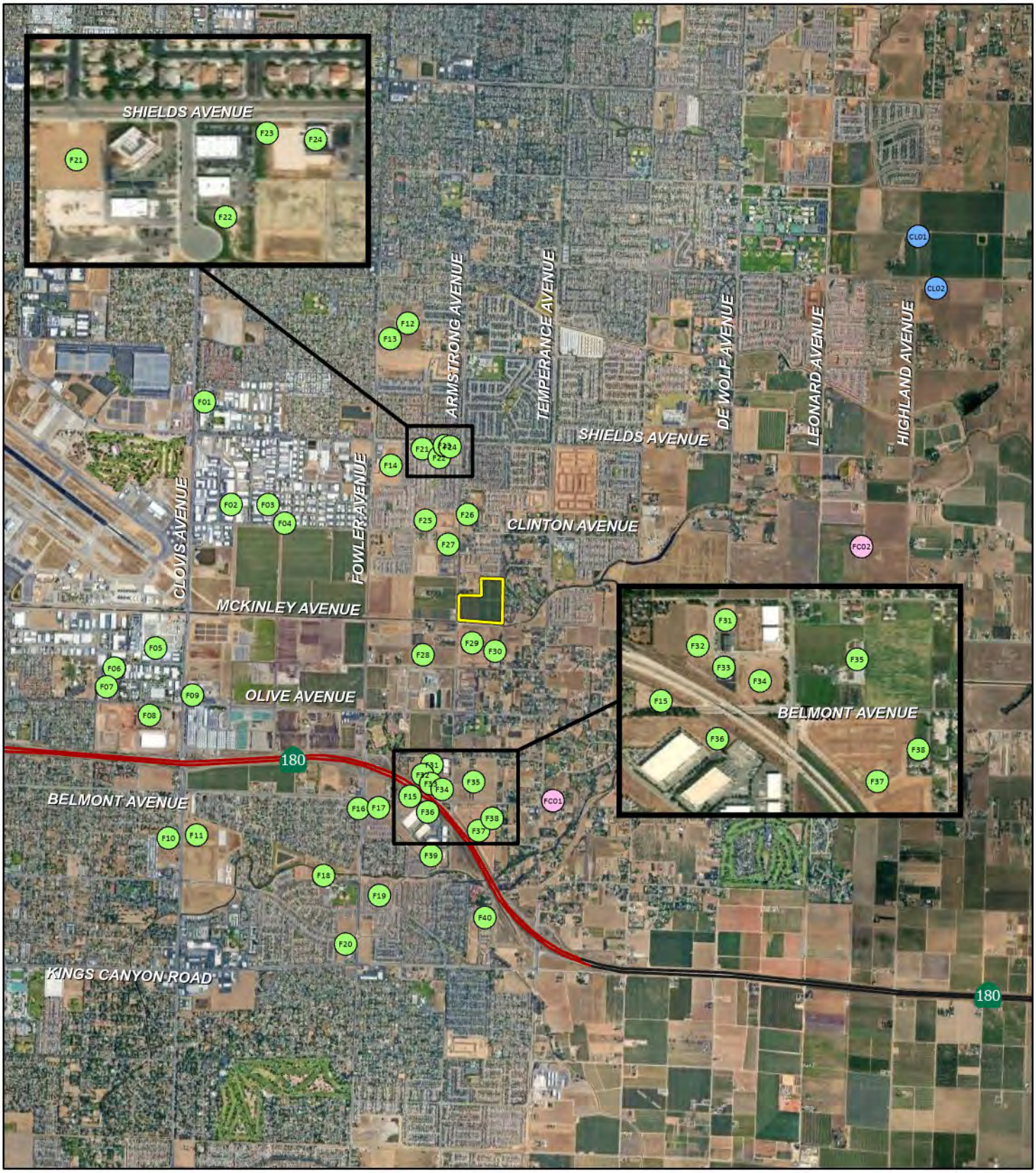
LSA

FIGURE 4-1

XXX / YYY
AM / PM Peak Hour Traffic Volumes
--- Project Driveway

Tract Map 6360 Project
Traffic Impact Study

Existing Peak Hour Traffic Volumes



LSA

LEGEND

Project Site

Cumulative Projects

City of Clovis

City of Fresno

Fresno County

0 2000 4000

FEET

FIGURE 4-2

Tract Map 6360 Project
Traffic Impact Study
Cumulative Project Locations

SOURCE: Google Imagery, 2021; ESRI Streetmap, 2021

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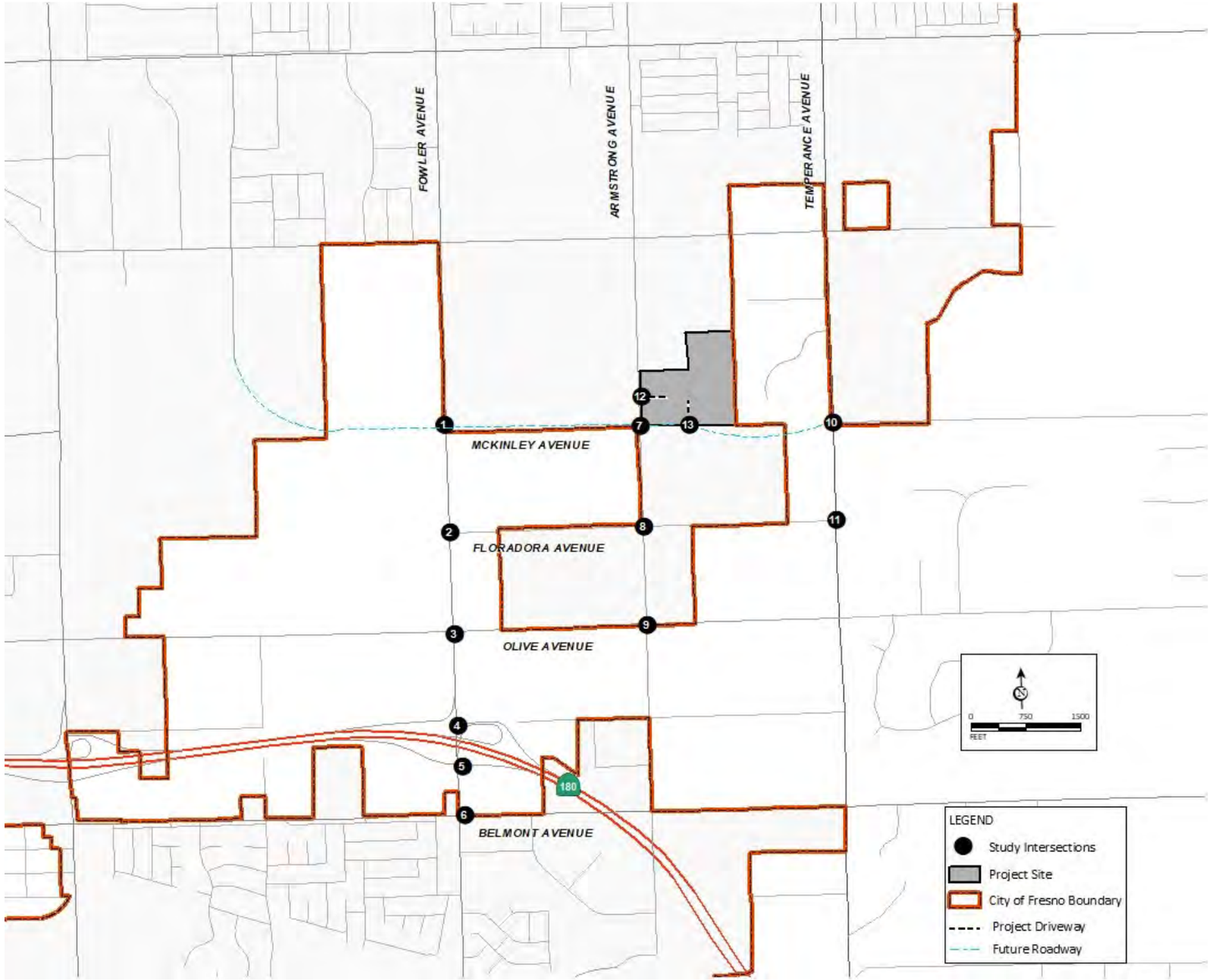
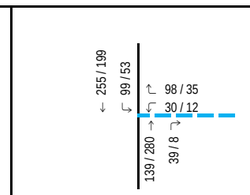
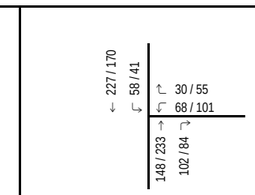
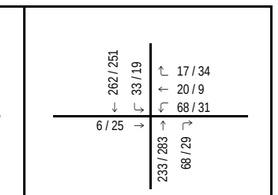




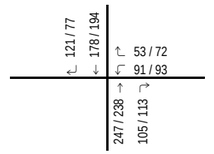
1 Fowler Avenue/McKinley Avenue



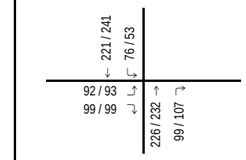
2 Fowler Avenue/Floradora Avenue



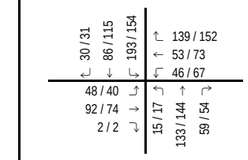
3 Fowler Avenue/Olive Avenue



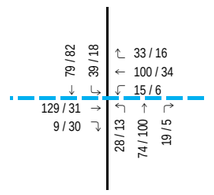
4 Fowler Avenue/State Route 180 (SR-180) Westbound Ramps



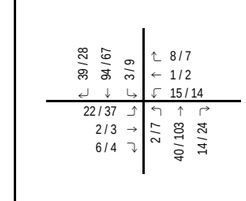
5 Fowler Avenue/SR-180 Eastbound Ramps



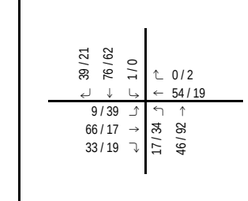
6 Fowler Avenue/Belmont Avenue



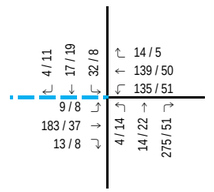
7 Armstrong Avenue/McKinley Avenue



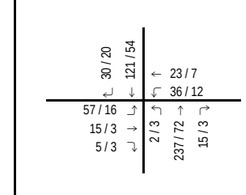
8 Armstrong Avenue/Floradora Avenue



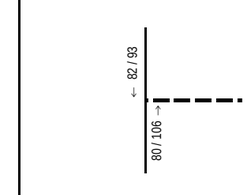
9 Armstrong Avenue/Olive Avenue



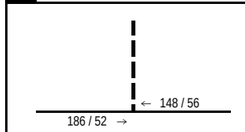
10 Temperance Avenue/McKinley Avenue



11 Temperance Avenue/Floradora Avenue



12 Armstrong Avenue/Project Driveway 1



13 Project Driveway 2/McKinley Avenue

LSA

FIGURE 4-3

XXX / YYY
AM / PM Peak Hour Trips
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study

Cumulative Projects Trip Assignment

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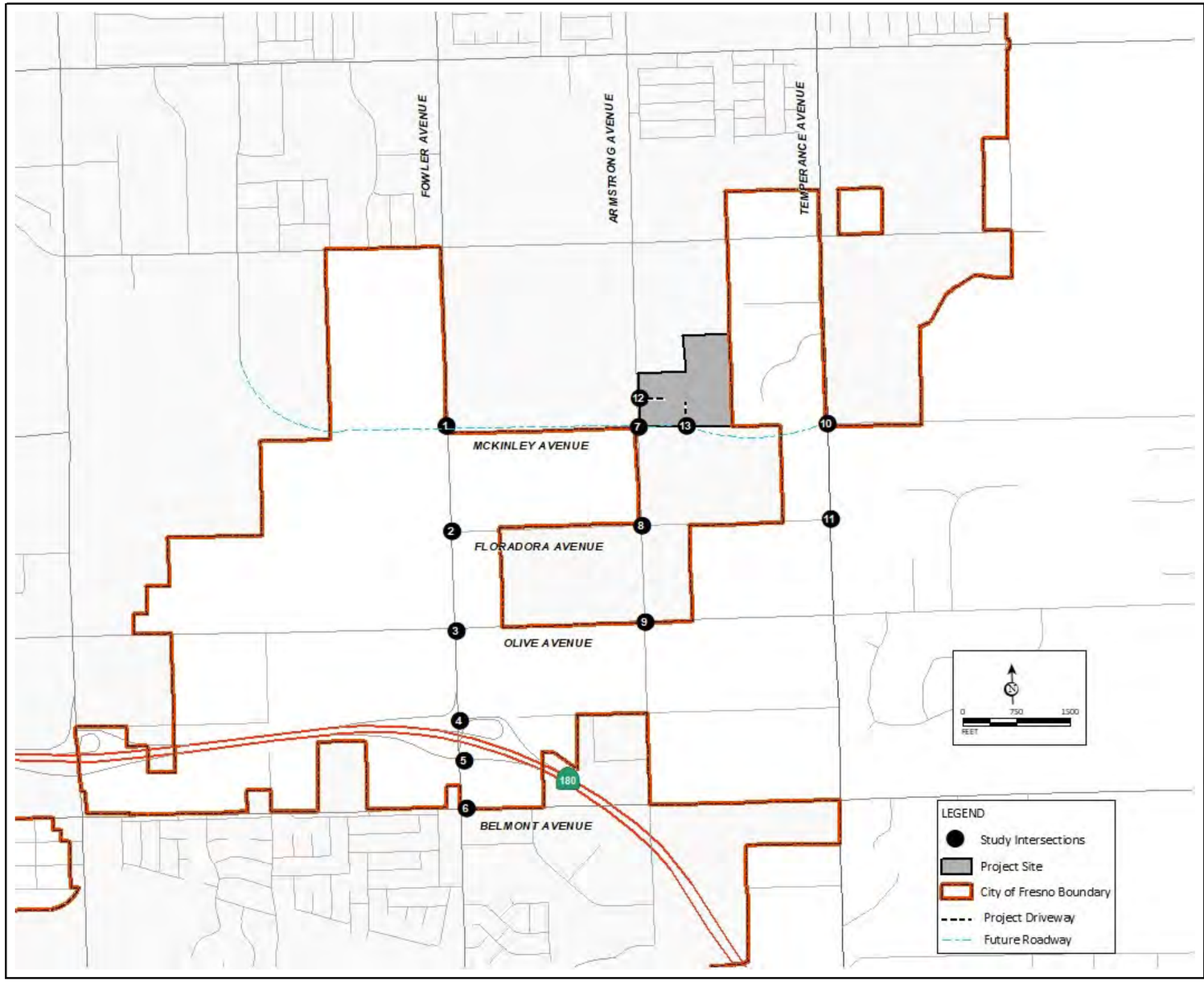

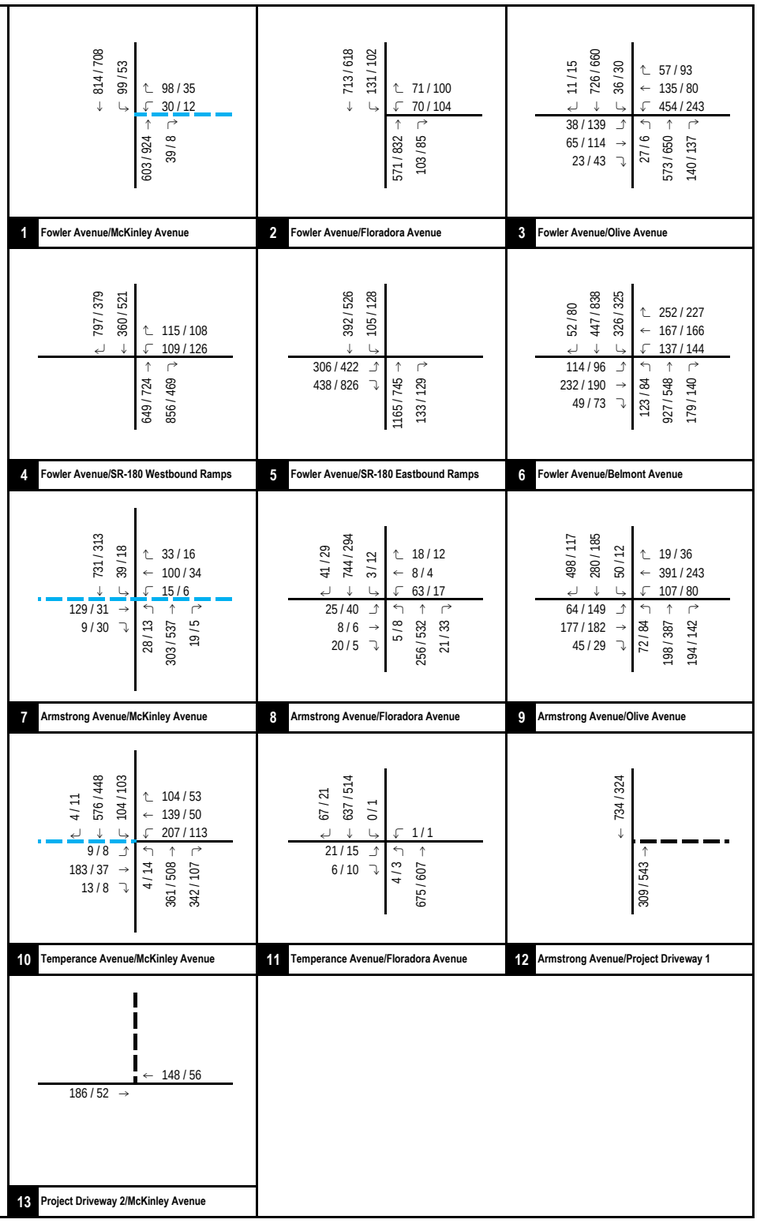

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FIGURE 4-4

XXXX / YYYY
AM / PM Peak Hour Traffic Volumes
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study

Near-Term No Project Peak Hour Traffic Volumes

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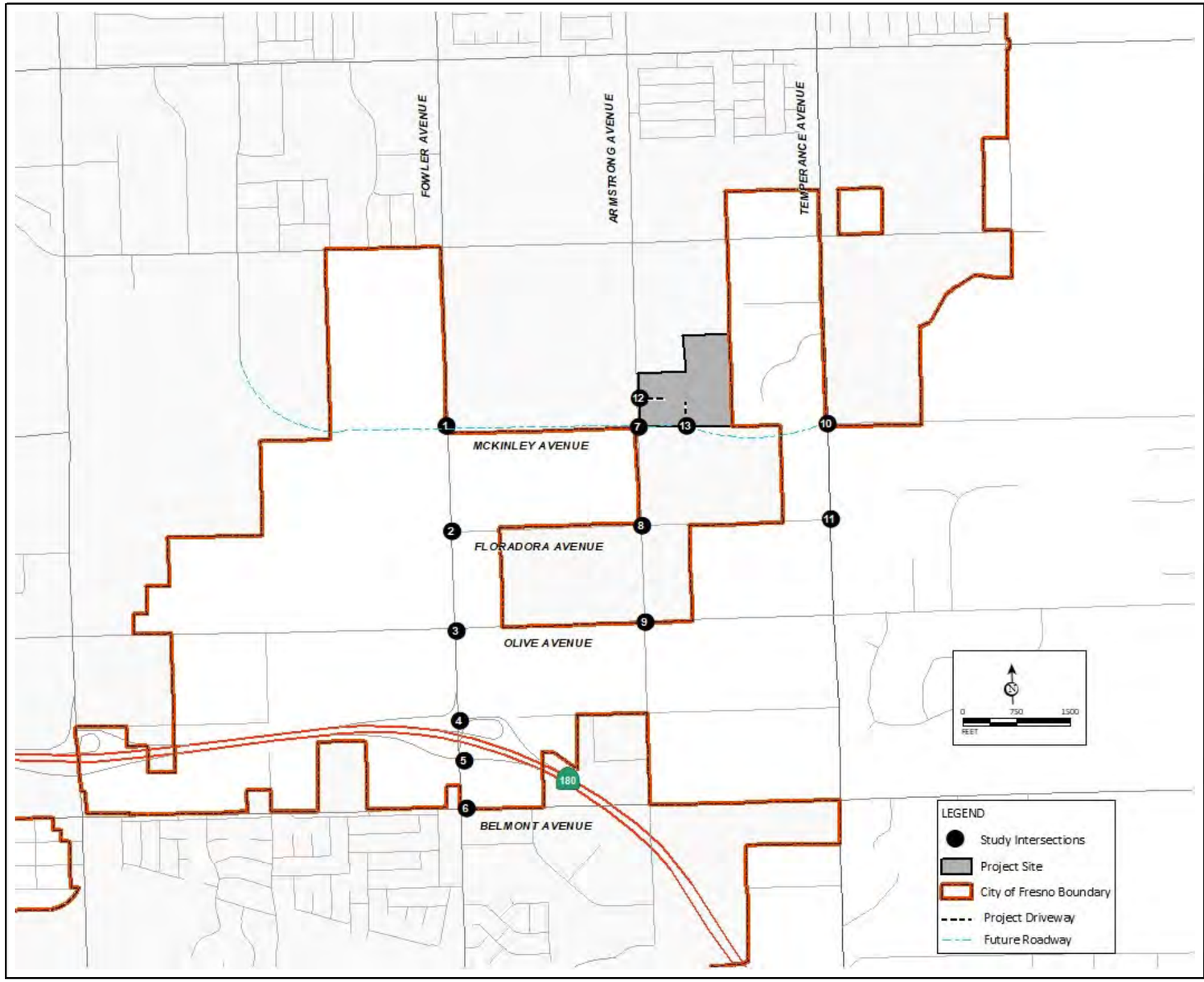

1 Fowler Avenue/McKinley Avenue

26 / 68	826 / 743	104 / 56
49 / 112		103 / 37
31 / 50		141 / 73
144 / 307		362 / 76
		273 / 318
		633 / 970
		47 / 158

2 Fowler Avenue/Floradora Avenue

749 / 649	138 / 107	
		75 / 105
		74 / 109
		600 / 874
		108 / 89

3 Fowler Avenue/Olive Avenue

48 / 16	762 / 693	38 / 32
39 / 166		78 / 105
98 / 332		314 / 121
24 / 46		477 / 339
		33 / 6
		602 / 683
		147 / 363

4 Fowler Avenue/SR-180 Westbound Ramps

837 / 447	401 / 553	
		121 / 113
		121 / 133
		665 / 815
		879 / 486

5 Fowler Avenue/SR-180 Eastbound Ramps

412 / 552	110 / 134	
321 / 443		
487 / 867		
		1223 / 858
		140 / 135

6 Fowler Avenue/Belmont Avenue

55 / 88	469 / 880	342 / 341
120 / 230		266 / 223
244 / 200		258 / 174
53 / 106		144 / 151
		155 / 88
		977 / 540
		188 / 147

7 Armstrong Avenue/McKinley Avenue

112 / 51	767 / 329	41 / 25
26 / 76		35 / 23
135 / 73		294 / 61
9 / 32		117 / 27
		29 / 14
		318 / 563
		20 / 167

8 Armstrong Avenue/Floradora Avenue

43 / 30	835 / 357	3 / 13
26 / 42		19 / 13
8 / 6		8 / 4
21 / 5		107 / 23
		5 / 8
		269 / 561
		22 / 74

9 Armstrong Avenue/Olive Avenue

576 / 163	284 / 194	67 / 20
67 / 289		23 / 46
186 / 501		411 / 355
47 / 30		131 / 106
		76 / 88
		208 / 406
		244 / 167

10 Temperance Avenue/McKinley Avenue

169 / 35	1350 / 889	109 / 108
40 / 120		109 / 56
192 / 39		146 / 53
14 / 68		217 / 119
		102 / 49
		472 / 1505
		359 / 112

11 Temperance Avenue/Floradora Avenue

70 / 24	951 / 779	0 / 1
23 / 16		1 / 1
6 / 12		4 / 3
		709 / 1091

12 Armstrong Avenue/Project Driveway 1

Intersection Does Not Exist

13 Project Driveway 2/McKinley Avenue

Intersection Does Not Exist

LSA

FIGURE 4-5

XXXX / YYYY
AM / PM Peak Hour Traffic Volumes
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study
Cumulative Year (2046) No Project Peak Hour Traffic Volumes

LSA

Table 4-A - Existing Roadway Segment Daily Traffic Volumes

Roadway	#	Segment	Existing ADT	Project Trips	Existing With Project ADT
Fowler Avenue	1	between McKinley Avenue and Floradora Avenue	15,111	30	15,141
	2	between Floradora Avenue and Olive Avenue	14,452	30	14,482
	3	between Olive Avenue and SR-180 Westbound Ramps	17,454	830	18,284
	4	between SR-180 Eastbound Ramps and Belmont Avenue	17,660	338	17,998
Armstrong Avenue	5	between Project Driveway 1 and McKinley Avenue	6,282	1,260	7,542
	6	between McKinley Avenue and Floradora Avenue	6,282	1,290	7,572
	7	between Floradora Avenue and Olive Avenue	6,507	1,260	7,767
Temperance Avenue	8	between McKinley Avenue and Floradora Avenue	11,543	154	11,697
McKinley Avenue	9	between Fowler Avenue and Armstrong Avenue	*Future Segment*	30	30
	10	between Armstrong Avenue and Project Driveway 2	*Future Segment*	1,230	1,230
	11	between Project Driveway 2 and Temperance Avenue	*Future Segment*	276	276
Floradora Avenue	12	between Fowler Avenue and Armstrong Avenue	793	30	823
Olive Avenue	13	between Fowler Avenue and Armstrong Avenue	5,755	1,014	6,769

LSA

Table 4-B - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
F01 . P21-01732										
	3515 Sabre Drive									
	Church[1]	30.760	TSF							
	Trips/Unit			0.20	0.12	0.32	0.22	0.27	0.49	7.60
	Trip Generation			6	4	10	7	8	15	234
F02 . P21-00627										
	2636 North Larkin Avenue									
	Strip Retail Plaza (<40k)[2]	0.733	TSF							
	Trips/Unit			1.42	0.94	2.36	3.30	3.29	6.59	54.45
	Trip Generation			1	1	2	2	2	4	40
	Pass-by Trips[3]			0	0	0	(1)	(1)	(2)	(16)
	Net New Trips			1	1	2	1	1	2	24
F03 . P21-02820										
	2587 North Sunnyside Avenue									
	General Light Industrial[4,5]	15.360	TSF							
	Truck Trips			1	1	2	1	1	2	16
	Auto Trips			8	1	9	1	7	8	59
	Total Net Trip Generation			9	2	11	2	8	10	75
F04 . P22-03086										
	North of Clinton Avenue and East of Sunnyside Avenue									
	Warehousing[6,7]	8.500	TSF							
	Truck Trips			0	0	0	0	0	0	5
	Auto Trips			1	0	1	0	1	1	10
	Total Net Trip Generation			1	0	1	0	1	1	15
F05 . P22-01905										
	1441 North Clovis Avenue									
	Mini Warehouse[8]	146.875	TSF							
	Trips/Unit			0.05	0.04	0.09	0.07	0.08	0.15	1.45
	Trip Generation			7	6	13	10	12	22	213
F06 . P21-03610										
	5434 East Lamona Avenue									
	General Office Building[9]	12.115	TSF							
	Trips/Unit			1.34	0.18	1.52	0.24	1.20	1.44	10.84
	Trip Generation			16	2	18	3	15	18	131
F07 . P22-01573										
	5420 East Hedges Avenue									
	General Office Building[9]	3.496	TSF							
	Trips/Unit			1.34	0.18	1.52	0.24	1.20	1.44	10.84
	Trip Generation			5	1	6	1	4	5	38
F08 . P21-01082										
	5400 East Olive Avenue									
	Warehousing[6,7]	184.000	TSF							
	Truck Trips			5	5	10	5	5	10	97
	Auto Trips			17	5	22	6	17	23	217
	Total Net Trip Generation			22	10	32	11	22	33	314
F09 . P21-06100										
	Northeast quadrant of Olive Avenue and Clovis Avenue									
	Manufacturing[10,11]	8.804	TSF							
	Truck Trips			0	1	1	0	1	1	9
	Auto Trips			4	1	5	2	3	5	33
	Total Net Trip Generation			4	2	6	2	4	6	42
F10 . P21-06497										
	295 North Clovis Avenue									
	Multifamily Housing (Low-Rise) Not Close to Rail Transit[12]	59	DU							
	Trips/Unit			0.10	0.30	0.40	0.32	0.19	0.51	6.74
	Trip Generation			6	18	24	19	11	30	398

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Table 4-B - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
F11 . P21-00561										
	North of Tulare Avenue and East of Clovis Avenue									
	Affordable Housing[13]	240	Bedrooms							
	Trips/Unit			0.12	0.33	0.45	0.16	0.11	0.27	3.60
	Trip Generation			29	79	108	38	26	64	864
F12 . P22-02309										
	3600 North Fowler Avenue									
	Church[1]	47.500	TSF							
	Trips/Unit			0.20	0.12	0.32	0.22	0.27	0.49	7.60
	Trip Generation			10	6	16	10	13	23	361
F13 . P21-04848										
	North of Dakota Avenue and East of Fowler Avenue									
	Single-Family Detached Housing[14]	145	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			26	75	101	86	51	137	1,367
F14 . P21-02308										
	West side of North Bliss Avenue between Princeton Avenue and Shields Avenue									
	Single-Family Detached Housing[14]	49	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			9	25	34	29	17	46	462
F15 . P20-04866										
	North of Belmont Avenue and East of Laverne Avenue									
	Business Park[15]	18.940	TSF							
	Trips/Unit			1.15	0.20	1.35	0.32	0.90	1.22	12.44
	Trip Generation			22	4	26	6	17	23	236
F16 . P21-02155										
	979 North Fowler Avenue									
	Fast-Food Restaurant with Drive-Through Window[16]	1.800	TSF							
	Trips/Unit			22.75	21.86	44.61	17.18	15.85	33.03	467.48
	Trip Generation			41	39	80	31	29	60	841
	Pass-by Trips[17]			(21)	(20)	(40)	(17)	(16)	(33)	(442)
	Net New Trips			21	20	40	14	13	27	399
	Strip Retail Plaza (<40k)[2]	1.458	TSF							
	Trips/Unit			1.42	0.94	2.36	3.30	3.29	6.59	54.45
	Trip Generation			2	1	3	5	5	10	79
	Pass-by Trips[3]			0	0	0	(2)	(2)	(4)	(32)
	Net New Trips			2	1	3	3	3	6	47
	Total Trip Generation			43	40	83	36	34	70	920
	Total Pass-By Reduction			(21)	(20)	(40)	(19)	(18)	(37)	(473)
	Total Net Trip Generation			23	21	43	17	16	33	447

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Table 4-B - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
F17 .	**P22-03022**									
	960 North Fowler Avenue									
	Fast-Food Restaurant with Drive-Through Window[16]	7.865	TSF							
	Trips/Unit			22.75	21.86	44.61	17.18	15.85	33.03	467.48
	Trip Generation			179	172	351	135	125	260	3,677
	Pass-by Trips[17]			(90)	(86)	(176)	(74)	(69)	(143)	(1,930)
	Net New Trips			90	86	176	61	56	117	1,747
	General Office Building[9]	22.185	TSF							
	Trips/Unit			1.34	0.18	1.52	0.24	1.20	1.44	10.84
	Trip Generation			30	4	34	5	27	32	240
	Business Park[15]	42.000	TSF							
	Trips/Unit			1.15	0.20	1.35	0.32	0.90	1.22	12.44
	Trip Generation			48	8	56	13	38	51	522
	Total Trip Generation			257	184	441	153	190	343	4,439
	Total Pass-By Reduction			(90)	(86)	(176)	(74)	(69)	(143)	(1,930)
	Total Net Trip Generation			168	98	266	79	121	200	2,509
F18 .	**P20-04902**									
	5925 East Tulare Street									
	Single-Family Detached Housing[14]	42	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			8	22	30	25	15	40	396
F19 .	**P21-00079**									
	460 North Fowler Avenue									
	Single-Family Detached Housing[14]	20	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			4	10	14	12	7	19	189
F20 .	**P21-04613**									
	South of Fancher Creek Drive and West of Fowler Avenue									
	Automated Car Wash[18]	5.490	TSF							
	Trips/Unit			5.66	3.32	8.98	7.10	7.10	14.20	163.09
	Trip Generation			31	18	49	39	39	78	895
F21 .	**P21-02587**									
	6249 East Shield Avenue									
	Warehousing[6,7]	19.800	TSF							
	Truck Trips			0	1	1	0	1	1	10
	Auto Trips			2	0	2	1	1	2	23
	Total Net Trip Generation			2	1	3	1	2	3	33
F22 .	**P22-01091**									
	2920 North Burl Avenue									
	Health/Fitness Club[19]	10.094	TSF							
	Trips/Unit			0.67	0.64	1.31	1.97	1.48	3.45	23.80
	Trip Generation			7	6	13	20	15	35	240
F23 .	**P20-03480**									
	6383 East Shield Avenue									
	Recreational Community Center[20]	9.500	TSF							
	Trips/Unit			1.26	0.65	1.91	1.18	1.32	2.50	28.82
	Trip Generation			12	6	18	11	13	24	274
	Strip Retail Plaza (<40k)[2]	11.250	TSF							
	Trips/Unit			1.42	0.94	2.36	3.30	3.29	6.59	54.45
	Trip Generation			16	11	27	37	37	74	613
	Pass-by Trips[3]			0	0	0	(15)	(15)	(30)	(245)
	Net New Trips			16	11	27	22	22	44	368
	Total Trip Generation			28	17	45	48	50	98	887
	Total Pass-By Reduction			0	0	0	(15)	(15)	(30)	(245)
	Total Net Trip Generation			28	17	45	33	35	68	642

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Table 4-B - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
F24 .	**P21-04317**									
	6407 East Shield Avenue									
	High-Turnover (Sit-Down) Restaurant[21]	0.511	TSF							
	Trips/Unit			5.26	4.31	9.57	5.52	3.53	9.05	107.20
	Trip Generation			3	2	5	3	2	5	55
	Pass-by Trips[22]			0	0	0	(1)	(1)	(2)	(24)
	Net New Trips			3	2	5	2	1	3	31
F25 .	**P21-02805**									
	North of Clinton Avenue and East of Laverna Avenue									
	Single-Family Detached Housing[14]	90	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			16	47	63	53	32	85	849
F26 .	**P22-02376**									
	2594 North Armstrong Avenue									
	Multifamily Housing (Low-Rise) Not Close to Rail Transit[12]	64	DU							
	Trips/Unit			0.10	0.30	0.40	0.32	0.19	0.51	6.74
	Trip Generation			6	19	25	20	12	32	431
F27 .	**P21-03484**									
	Southwest quadrant of Clinton Avenue and Armstrong Avenue									
	Single-Family Detached Housing[14]	102	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			18	53	71	60	36	96	962
F28 .	**P22-02424**									
	North of Floradora Avenue and West of Armstrong Avenue									
	Single-Family Detached Housing[14]	206	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			37	107	144	122	72	194	1,943
	Business Park[15]	142.255	TSF							
	Trips/Unit			1.15	0.20	1.35	0.32	0.90	1.22	12.44
	Trip Generation			164	28	192	46	128	174	1,770
	Total Trip Generation			201	135	336	168	200	368	3,713
F29 .	**Tentative Tract 6201[23]**									
	North of Floradora Avenue and East of Armstrong Avenue									
	Single-Family Detached Housing	257	DU							
	Trips/Unit			0.19	0.56	0.74	0.62	0.37	0.99	9.44
	Trip Generation			48	143	190	160	94	254	2,426
F30 .	**P22-00417**									
	North of Floradora Avenue and West of Temperance Avenue									
	Single-Family Detached Housing[14]	27	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			5	14	19	16	9	25	255
F31 .	**P22-03496**									
	1190 North Cypress Avenue									
	Warehousing[6,7]	15.150	TSF							
	Truck Trips			0	0	0	0	1	1	8
	Auto Trips			1	1	2	1	1	2	18
	Total Net Trip Generation			1	1	2	1	2	3	26
F32 .	**P21-02767**									
	1143 North Cypress Avenue									
	Warehousing[6,7]	15.520	TSF							
	Truck Trips			0	0	0	0	1	1	8
	Auto Trips			1	1	2	1	1	2	18
	Total Net Trip Generation			1	1	2	1	2	3	26

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Table 4-B - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
F33 .	**P21-01573**									
	6373 East Turner Avenue									
	Warehousing[6,7]	29.000	TSF							
	Truck Trips			0	1	1	1	0	1	15
	Auto Trips			3	0	3	1	3	4	34
	Total Net Trip Generation			3	1	4	2	3	5	49
F34 .	**P21-06620**									
	6427 East Turner Avenue									
	General Light Industrial[4,5]	100.000	TSF							
	Truck Trips			10	6	16	6	8	14	104
	Auto Trips			51	7	58	7	44	51	383
	Total Net Trip Generation			61	13	74	13	52	65	487
F35 .	**P21-05723**									
	North of Belmont Avenue and East of Armstrong Avenue									
	Single-Family Detached Housing[14]	105	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			19	55	74	62	37	99	990
	Industrial Park[24,25]	605.484	TSF							
	Truck Trips			43	55	98	37	61	98	963
	Auto Trips			88	21	109	24	85	109	1,077
	Total Net Trip Generation			131	76	207	61	146	207	2,040
	Total Net PCE Trip Generation			229	230	459	190	294	484	4,766
F36 .	**P21-06621**									
	6362 East Washington Avenue									
	General Light Industrial[4,5]	35.000	TSF							
	Truck Trips			4	2	6	2	3	5	37
	Auto Trips			18	2	20	3	15	18	134
	Total Net Trip Generation			22	4	26	5	18	23	171
F37 .	**P20-00577/P20-00845**									
	South of Belmont Avenue and East of Armstrong Avenue									
	Single-Family Detached Housing[14]	218	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			39	113	152	129	76	205	2,056
F38 .	**P22-01349**									
	6709 East Belmont Avenue									
	Single-Family Detached Housing[14]	30	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			5	16	21	18	11	29	283
F39 .	**P21-02781**									
	691 North Laverne Avenue									
	Warehousing[6,7]	52.000	TSF							
	Truck Trips			1	2	3	1	3	4	28
	Auto Trips			5	1	6	2	4	6	61
	Total Net Trip Generation			6	3	9	3	7	10	89
F40 .	**P21-03504**									
	North of Kings Canyon Road and East of Armstrong Avenue									
	Assisted Living[26]	9.785	TSF							
	Trips/Unit			0.29	0.09	0.38	0.15	0.33	0.48	4.19
	Trip Generation			3	1	4	1	3	4	41
FC01 .	**CUP 3716**									
	7064 Belmont Avenue									
	Gasoline/Service Station[27]	4	VFP							
	Trips/Unit			5.14	5.14	10.28	6.96	6.95	13.91	172.01
	Trip Generation			21	21	42	28	28	56	688
	Pass-by Trips[28]			(13)	(13)	(26)	(16)	(16)	(32)	(413)
	Net New Trips			8	8	16	12	12	24	275

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Table 4-B - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units		A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
FC02 .	**Clovis Unified's Bradley Education Center[29]**									
	Southeast quadrant of Leonard Avenue and Shields Avenue									
	Middle School/Junior High School Trip Generation	1,400	Students	507	431	938	101	109	210	2,940
	High School Trip Generation	2,900	Students	1,025	483	1,508	195	211	406	5,625
	Total Trip Generation			1,532	914	2,446	296	320	616	8,565
CL01 .	**TM 6364**									
	West side of Leonard Avenue, South of Gettysburg Avenue, East of Thompson Avenue, and North of Ashlan Avenue									
	Single-Family Detached Housing[14]	294	DU							
	Trips/Unit			0.18	0.52	0.70	0.59	0.35	0.94	9.43
	Trip Generation			53	153	206	173	103	276	2,768
CL02 .	**TM 6023[30]**	379	DU							
	Southeast corner of Ashlan Avenue and Highland Avenue									
	Trip Generation			71	214	285	239	140	379	3,608
	Gross Trip Generation			**2,818**	**2,532**	**5,349**	**2,072**	**1,896**	**3,968**	**43,367**
	Pass-By Trips Reduction			**(123)**	**(119)**	**(242)**	**(126)**	**(119)**	**(245)**	**(3,101)**
	Total Net Trip Generation			**2,695**	**2,413**	**5,107**	**1,946**	**1,777**	**3,723**	**40,266**

Notes:

DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

[1] Rates from Institute of Transportation Engineers (ITE) Trip Generation Manual, (11th Edition) Land Use 560 - "Church" , Setting/Location - 'General Urban/Suburban'.

[2] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 822 - "Strip Retail Plaza (<40k)" , Setting/Location - 'General Urban/Suburban'.

[3] Since pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 822 - 'Strip Retail Plaza (<40k)' do not exist. Pass-by rates were taken from Land Use 821 - 'Shopping Plaza (40-150k).' A pass-by rate of 40% was used for the p.m. peak hour. Since daily pass-by rates are not available for this land use in the ITE *Trip Generation Manual* , the p.m. pass-by rate was used as the daily pass-by rate.

[4] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 110 - "General Light Industrial" , Setting/Location - 'General Urban/Suburban'.

[5] The resulting trips were converted to passenger vehicles and trucks based on the City of Fontana Truck Trip Generation Study, dated August 2003. As such, 21.4 percent of the traffic will be trucks.

[6] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 150 - "Warehousing" , Setting/Location - 'General Urban/Suburban'.

[7] The truck mix percentages were obtained from South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, The truck mix was considered as 6.8% 2-axle trucks, 5.5% 3-axle trucks, and 18.7% 4 or more axle trucks.

[8] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 151 - "Mini Warehouse" , Setting/Location - 'General Urban/Suburban'.

[9] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 710 - "General Office Building" , Setting/Location - 'General Urban/Suburban'.

[10] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 140 - "Manufacturing" , Setting/Location - 'General Urban/Suburban'.

[11] The resulting trips were converted to passenger vehicles and trucks based on the City of Fontana Truck Trip Generation Study, dated August 2003. As such, 21.4 percent of the traffic will be trucks.

[12] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 220 - "Multifamily Housing (Low-Rise) Not Close to Rail Transit" , Setting/Location - 'General Urban/Suburban'.

[13] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 223 - "Affordable Housing" , Setting/Location - 'General Urban/Suburban'.

[14] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 210 - "Single-Family Detached Housing " , Setting/Location - 'General Urban/Suburban'.

[15] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 770 - "Business Park" , Setting/Location - 'General Urban/Suburban'.

[16] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" , Setting/Location - 'General Urban/Suburban'.

[17] Pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 934 - 'Fast-Food Restaurant with Drive-Through Window.' A pass-by rate of 50% was used for the a.m. peak hour and a pass-by rate of 55% was used for the p.m. peak hour. Since daily pass-by rates are not available for this land use in the ITE *Trip Generation Manual* , the average of a.m and p.m. pass-by rate was used as the daily pass-by rate.

[18] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 948 - "Automated Car Wash" , Setting/Location - 'General Urban/Suburban'.

[19] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 492 - "Health/Fitness Club" , Setting/Location - 'General Urban/Suburban'.

[20] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 495 - "Recreational Community Center" , Setting/Location - 'General Urban/Suburban'.

[21] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 932 - "High-Turnover (Sit-Down) Restaurant" , Setting/Location - 'General Urban/Suburban'.

[22] Pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 932 - 'High-Turnover (Sit-Down) Restaurant.' A pass-by rate of 43% was used for the p.m. peak hour. Since daily pass-by rates are not available for this land use in the ITE *Trip Generation Manual* , the p.m. pass-by rate was used as the daily pass-by rate.

[23] Trip generation taken from "Tentative Tract 6201" Traffic Impact Analysis by JLB Traffic Engineering, Inc (October 2018).

[24] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 130 - "Industrial Park" , Setting/Location - 'General Urban/Suburban'.

[25] The resulting trips were converted to passenger vehicles and trucks based on the City of Fontana Truck Trip Generation Study, dated August 2003. As such, 21.4 percent of the traffic will be trucks.

[26] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 254 - "Assisted Living" , Setting/Location - 'General Urban/Suburban'.

[27] Rates from ITE *Trip Generation Manual* , (11th Edition), Land Use 944 - "Gasoline/Service Station" , Setting/Location - 'General Urban/Suburban'.

[28] Pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 944 - 'Gasoline/Service Station.' A pass-by rate of 63% was used for the a.m. peak hour and a pass-by rate of 57% was used for the p.m. peak hour. Since daily pass-by rates are not available for this land use in the ITE *Trip Generation Manual* , the average of a.m and p.m. pass-by rate was used as the daily pass-by rate.

[29] Trip generation taken from "Terry Bradley Educational Center" traffic study by JLB Traffic Engineering, Inc (August 2022).

[30] Trip generation taken from "Proposed Tentative Tract No. 6023" revised traffic study by Peters Engineering Group (July 2016).

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Table 4-C - Near-Term Roadway Segment Daily Traffic Volumes

Roadway	#	Segment	Existing ADT	Cumulative Projects Trips	Near-term ADT	Project Trips	Near-term With Project ADT
Fowler Avenue	1	between McKinley Avenue and Floradora Avenue	15,111	5,216	20,327	30	20,357
	2	between Floradora Avenue and Olive Avenue	14,452	6,144	20,596	30	20,626
	3	between Olive Avenue and SR-180 Westbound Ramps	17,454	6,421	23,875	830	24,705
	4	between SR-180 Eastbound Ramps and Belmont Avenue	17,660	6,892	24,552	338	24,890
Armstrong Avenue	5	between Project Driveway 1 and McKinley Avenue	6,282	1,907	8,189	1,260	9,449
	6	between McKinley Avenue and Floradora Avenue	6,282	1,896	8,178	1,290	9,468
	7	between Floradora Avenue and Olive Avenue	6,507	1,064	7,571	1,260	8,831
Temperance Avenue	8	between McKinley Avenue and Floradora Avenue	11,543	2,914	14,457	154	14,611
McKinley Avenue	9	between Fowler Avenue and Armstrong Avenue	*Future Segment*	1,594	1,594	30	1,624
	10	between Armstrong Avenue and Project Driveway 2	*Future Segment*	1,995	1,995	1,230	3,225
	11	between Project Driveway 2 and Temperance Avenue	*Future Segment*	1,995	1,995	276	2,271
Floradora Avenue	12	between Fowler Avenue and Armstrong Avenue	793	2,812	3,605	30	3,635
Olive Avenue	13	between Fowler Avenue and Armstrong Avenue	5,755	1,369	7,124	1,014	8,138

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Table 4-D - Cumulative Year (2046) Roadway Segment Daily Traffic Volumes

Roadway	#	Segment	Cumulative Year (2046) ADT	Project Trips	Cumulative Year (2046) With Project ADT
Fowler Avenue	1	between McKinley Avenue and Floradora Avenue	21,343	30	21,373
	2	between Floradora Avenue and Olive Avenue	21,626	30	21,656
	3	between Olive Avenue and SR-180 Westbound Ramps	25,069	830	25,899
	4	between SR-180 Eastbound Ramps and Belmont Avenue	25,780	338	26,118
Armstrong Avenue	5	between Project Driveway 1 and McKinley Avenue	8,598	1,260	9,858
	6	between McKinley Avenue and Floradora Avenue	8,587	1,290	9,877
	7	between Floradora Avenue and Olive Avenue	8,359	1,260	9,619
Temperance Avenue	8	between McKinley Avenue and Floradora Avenue	15,246	154	15,400
McKinley Avenue	9	between Fowler Avenue and Armstrong Avenue	1,737	30	1,767
	10	between Armstrong Avenue and Project Driveway 2	2,095	1,230	3,325
	11	between Project Driveway 2 and Temperance Avenue	2,095	276	2,371
Floradora Avenue	12	between Fowler Avenue and Armstrong Avenue	3,785	30	3,815
Olive Avenue	13	between Fowler Avenue and Armstrong Avenue	8,269	1,014	9,283

5.0 PROJECT TRAFFIC

5.1 PROJECT TRIP GENERATION

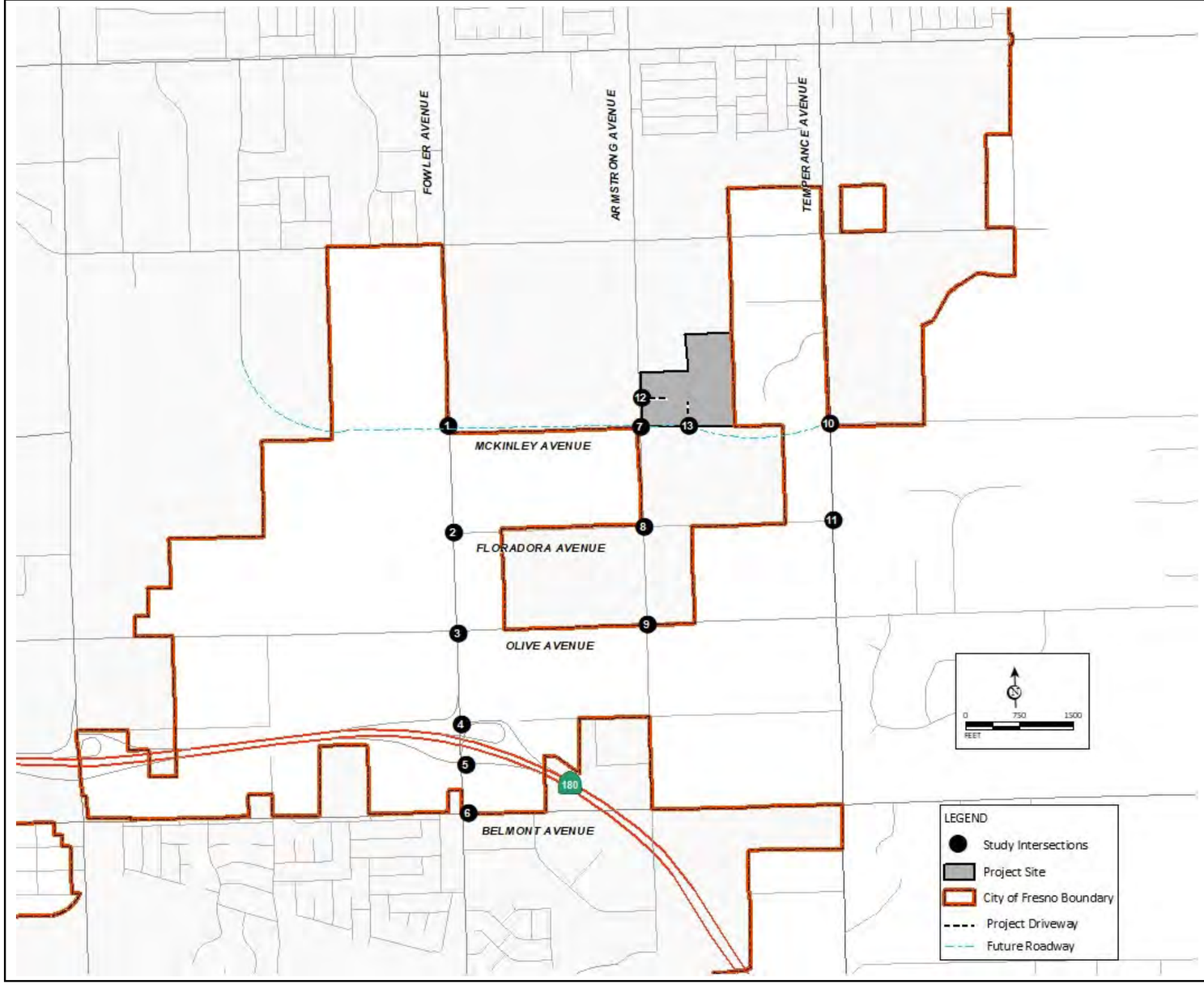
The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition) for Land Use 210 – "Single-Family Detached Housing". Table 5-A summarizes the project trip generation. As shown in Table 5-A, the proposed project is anticipated to generate 3,074 daily trips, with 229 trips occurring during the a.m. peak hour and 306 trips occurring during the p.m. peak hour.

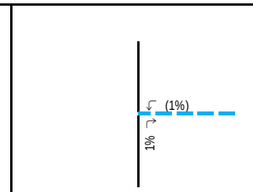
5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The project trip distribution was developed using the select zone model run obtained from the Fresno Council of Governments' (COG) Activity-Based Model (ABM). As previously mentioned in Section 4.3, the Fresno COG's ABM includes the McKinley Avenue extension under future conditions. As such, distributions were developed to include the McKinley Avenue extension from Fowler Avenue to Temperance Avenue and from Sunnyside Avenue to Temperance Avenue for near-term and cumulative year conditions, respectively. The select zone distribution plot is included in Appendix A. Figure 5-1 illustrates the project trip distribution. The project trip assignment at the study intersections is the product of the project trip generation and the corresponding trip distribution percentages. Figure 5-2 illustrates the project trip assignment.

5.3 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Project Trip Distribution
- Figure 5-2: Project Trip Assignment
- Table 5-A: Project Trip Generation





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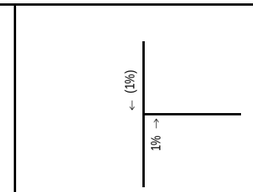
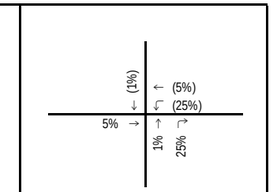
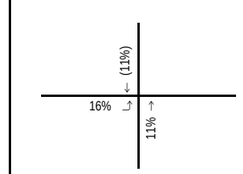


2 Fowler Avenue/Floradora Avenue

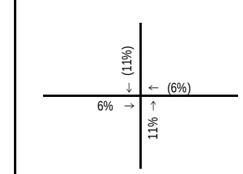


3 Fowler Avenue/Olive Avenue

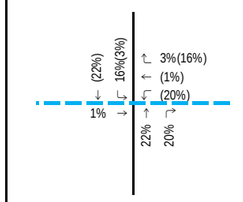
4 Fowler Avenue/State Route 180 (SR-180) Westbound Ramps



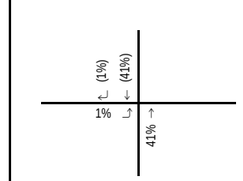
5 Fowler Avenue/SR-180 Eastbound Ramps



6 Fowler Avenue/Belmont Avenue



7 Armstrong Avenue/McKinley Avenue



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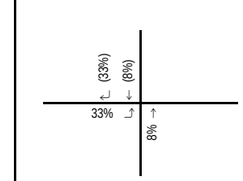

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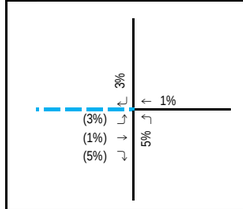

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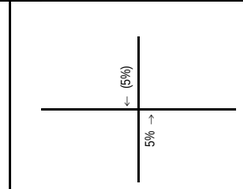

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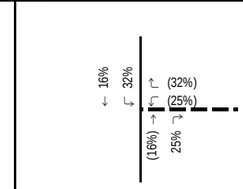
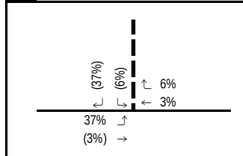


12 Armstrong Avenue/Project Driveway 1



13 Project Driveway 2/McKinley Avenue

LSA

FIGURE 5-1

XX% (YY%)
Inbound (Outbound) Trip Distribution
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study

Project Trip Distribution

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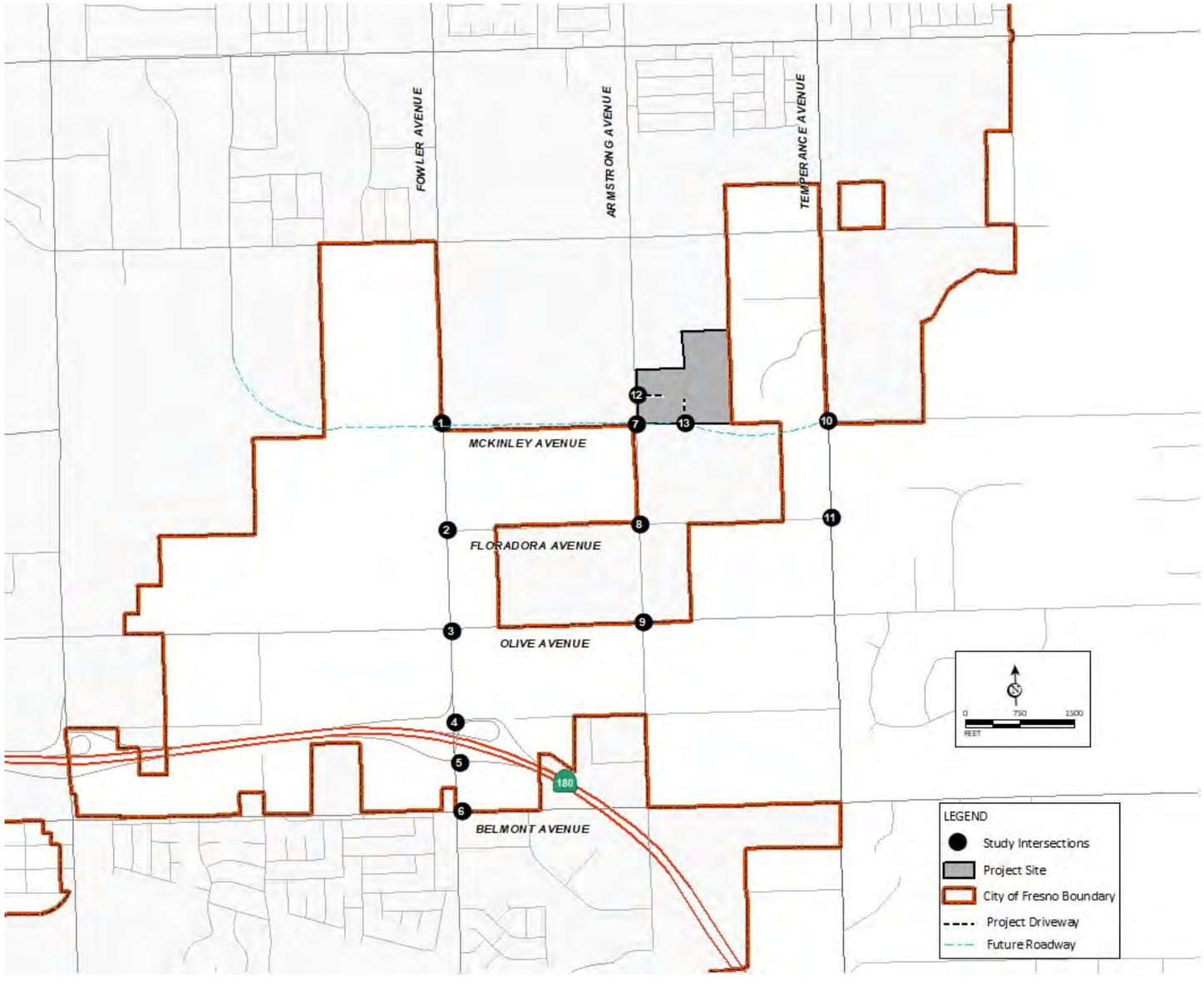
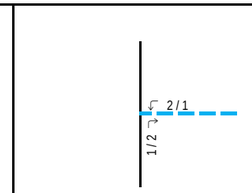
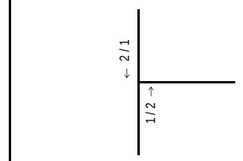




1 Fowler Avenue/McKinley Avenue



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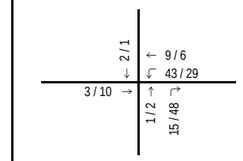
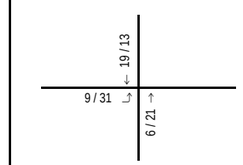
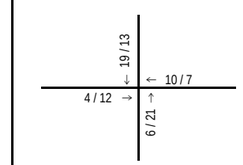


3 Fowler Avenue/Olive Avenue

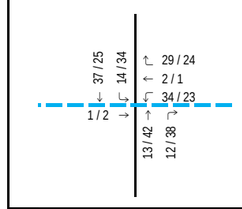
4 Fowler Avenue/SR-180 Westbound Ramps



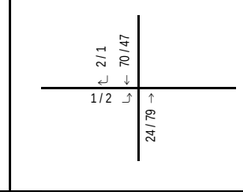
5 Fowler Avenue/SR-180 Eastbound Ramps



6 Fowler Avenue/Belmont Avenue



7 Armstrong Avenue/McKinley Avenue



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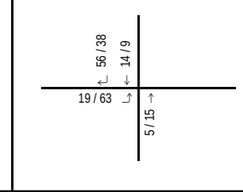

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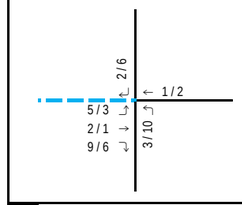
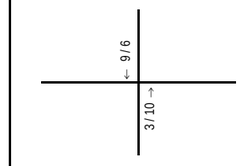


10 Temperance Avenue/McKinley Avenue



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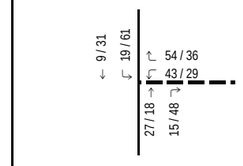
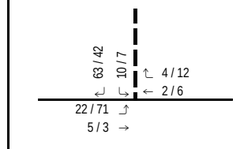


12 Armstrong Avenue/Project Driveway 1



13 Project Driveway 2/McKinley Avenue

LSA

FIGURE 5-2

XX / YY
AM / PM Peak Hour Trips
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study
Project Trip Assignment

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Table 5-A - Project Trip Generation

Land Use		Units	A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
Single-Family Detached Housing	326	DU							
Trips/Unit[1]			0.18	0.52	0.70	0.59	0.35	0.94	9.43
Trip Generation			59	170	229	192	114	306	3,074

Note:

DU = Dwelling Units

[1] Rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition), Land Use 210 - "Single-Family Detached Housing", Setting/Location - "General Urban/Suburban."

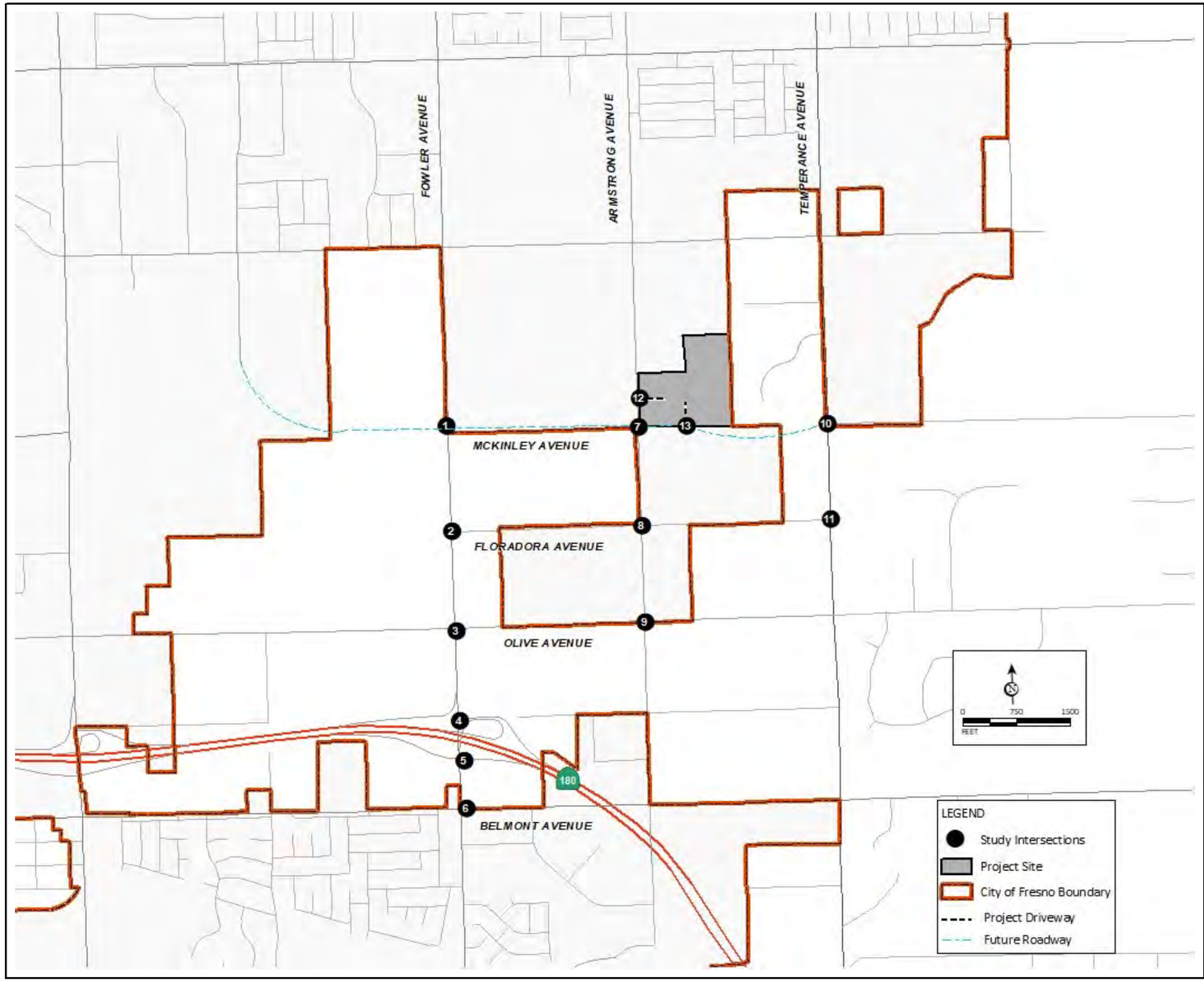
6.0 TRAFFIC VOLUMES FOR PLUS PROJECT SCENARIOS

Existing, near-term, and cumulative year plus project traffic volumes were developed by adding project traffic to the traffic for the corresponding no project scenarios. Figures 6-1, 6-2 and 6-3 illustrate "plus project" peak hour traffic volumes at study intersections under existing, near-term, and cumulative year conditions, respectively.

Detailed volume development worksheets are included in Appendix D.

6.1 LIST OF CHAPTER 6.0 FIGURES

- Figure 6-1: Existing Plus Project Peak Hour Traffic Volumes
- Figure 6-2: Near-Term Plus Project Peak Hour Traffic Volumes
- Figure 6-3: Cumulative Year (2046) Plus Project Peak Hour Traffic Volumes



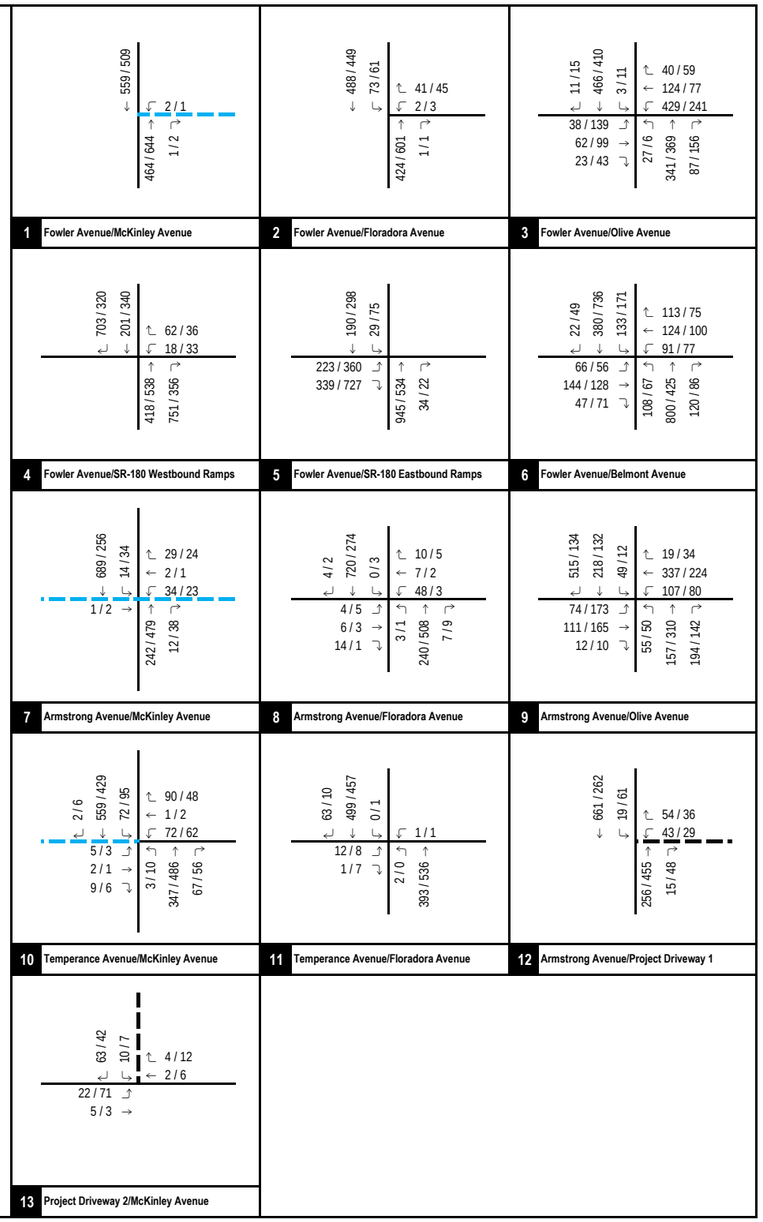


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FIGURE 6-1

XXX / YYY
AM / PM Peak Hour Traffic Volumes
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study

Existing Plus Project Peak Hour Traffic Volumes

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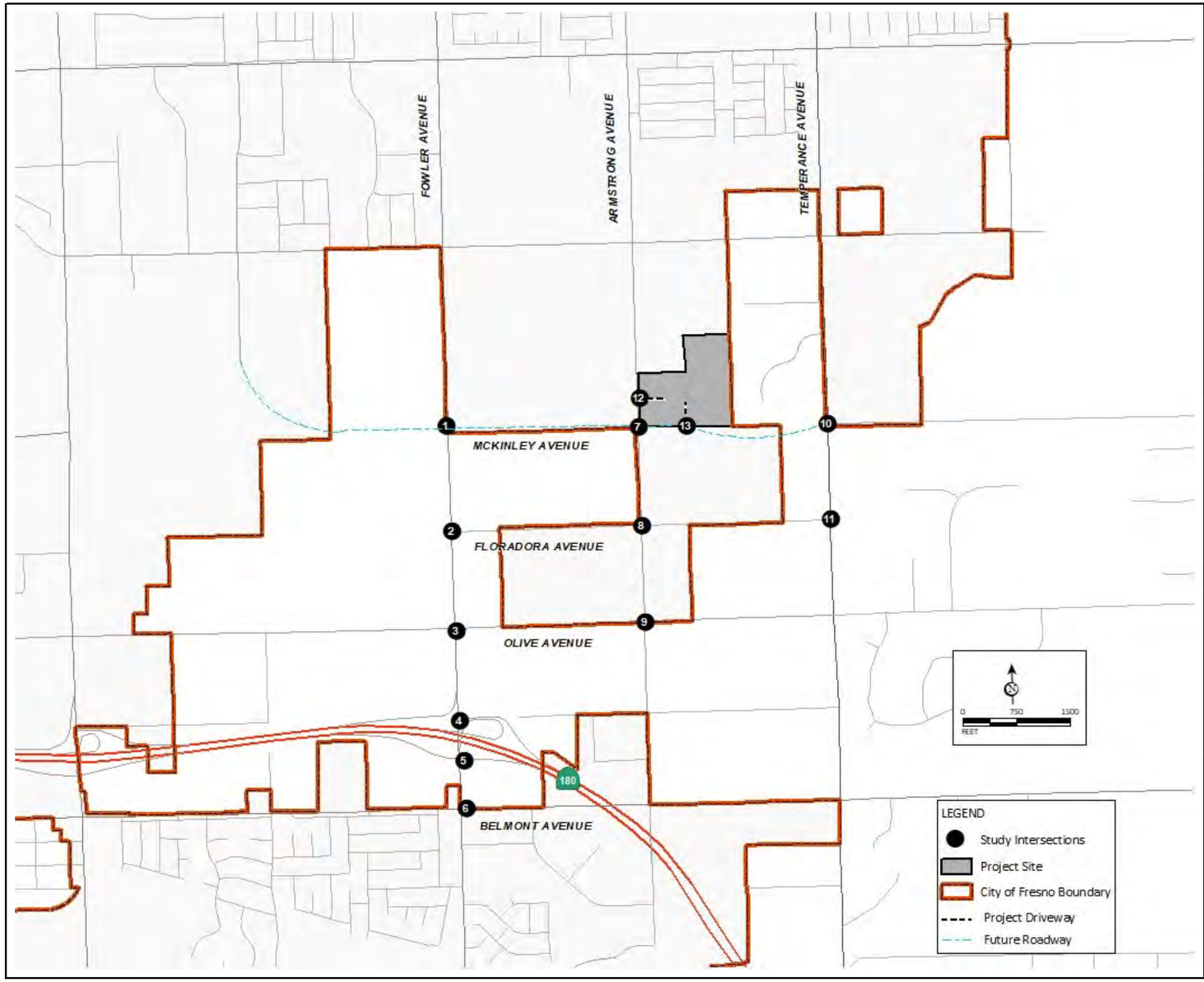
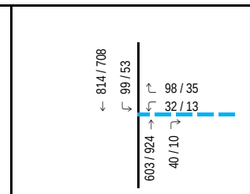
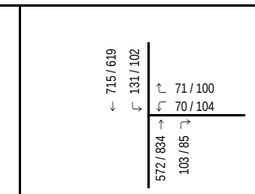
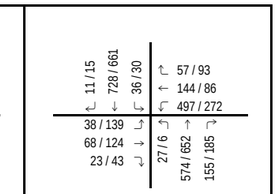




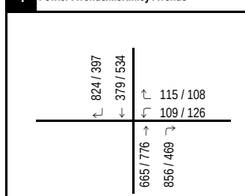
1 Fowler Avenue/McKinley Avenue



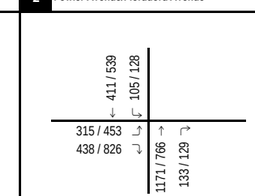
2 Fowler Avenue/Floradora Avenue



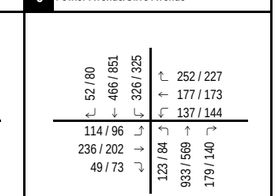
3 Fowler Avenue/Olive Avenue



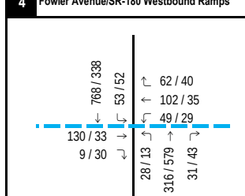
4 Fowler Avenue/SR-180 Westbound Ramps



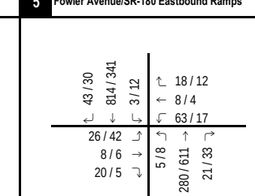
5 Fowler Avenue/SR-180 Eastbound Ramps



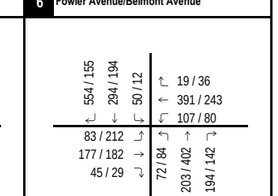
6 Fowler Avenue/Belmont Avenue



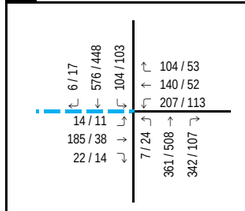
7 Armstrong Avenue/McKinley Avenue



8 Armstrong Avenue/Floradora Avenue



9 Armstrong Avenue/Olive Avenue



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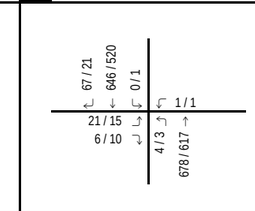

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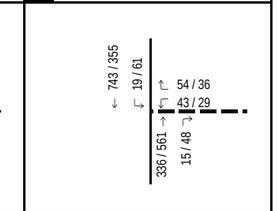
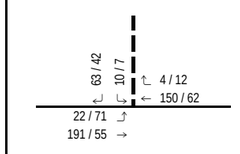


12 Armstrong Avenue/Project Driveway 1



13 Project Driveway 2/McKinley Avenue

LSA

FIGURE 6-2

XXXX / YYYY
AM / PM Peak Hour Traffic Volumes
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study

Near-Term Plus Project Peak Hour Traffic Volumes

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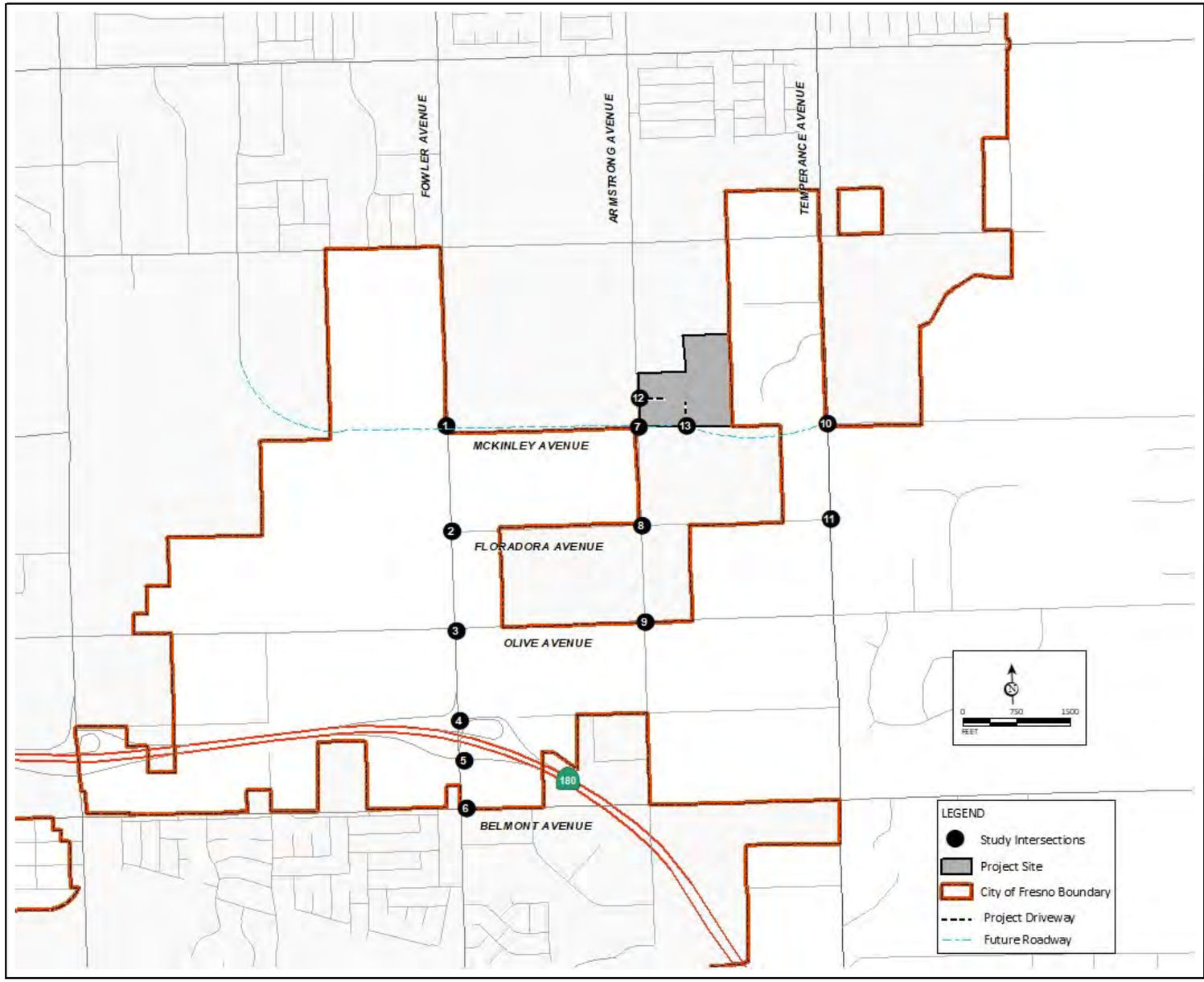
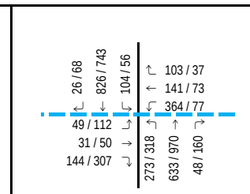
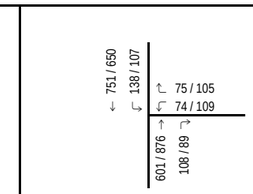
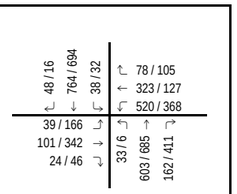




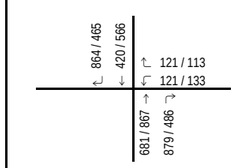
1 Fowler Avenue/McKinley Avenue



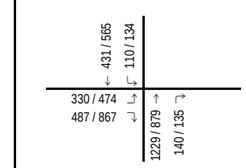
2 Fowler Avenue/Floradora Avenue



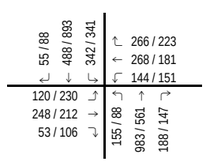
3 Fowler Avenue/Olive Avenue



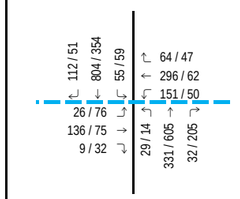
4 Fowler Avenue/SR-180 Westbound Ramps



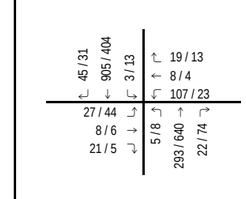
5 Fowler Avenue/SR-180 Eastbound Ramps



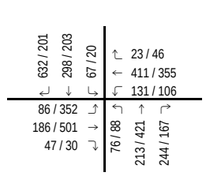
6 Fowler Avenue/Belmont Avenue



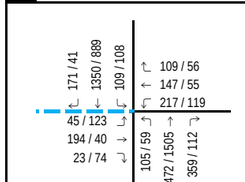
7 Armstrong Avenue/McKinley Avenue



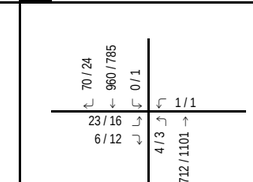
8 Armstrong Avenue/Floradora Avenue



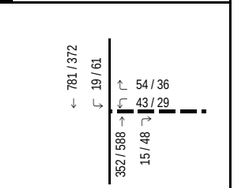
9 Armstrong Avenue/Olive Avenue



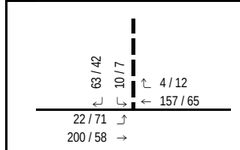
10 Temperance Avenue/McKinley Avenue



11 Temperance Avenue/Floradora Avenue



12 Armstrong Avenue/Project Driveway 1



13 Project Driveway 2/McKinley Avenue

LSA

FIGURE 6-3

XXXX / YYYY
AM / PM Peak Hour Traffic Volumes
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study
Cumulative Year (2046) Plus Project Peak Hour Traffic Volumes

7.0 INTERSECTION LEVELS OF SERVICE

7.1 EXISTING LEVELS OF SERVICE

Figure 3-1 illustrates existing study intersection geometrics and traffic control.

7.1.1 Study Intersections

An intersection LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that the following intersections are forecast to operate at a deficient LOS under existing conditions:

- Fowler Avenue/Olive Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/SR-180 Eastbound Ramps (p.m. peak hour only); and
- Temperance Avenue/McKinley Avenue (a.m. and p.m. peak hours).

All other study intersections currently operate at a satisfactory LOS under existing conditions.

7.1.2 Roadway Segments

A roadway segment LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 7-B summarizes the results of this analysis and shows that the following roadway segment is forecast to operate at a deficient LOS under existing conditions:

- Fowler Avenue, between Olive Avenue and SR-180 Westbound Ramps.

All other roadway segments currently operate at a satisfactory LOS under existing conditions.

7.2 EXISTING PLUS PROJECT LEVELS OF SERVICE

Analysis of the existing with project scenario is provided to identify direct project-related operational deficiency if the project were to be built and in operation today. This scenario eliminates the effects of ambient growth and other cumulative projects and deals specifically with operational deficiencies only due to the project traffic. Figure 3-3 illustrates the study intersection geometrics and traffic control under existing plus project conditions.

7.2.1 Study Intersections

An intersection LOS analysis was conducted for existing plus project conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that the following intersection is forecast to operate at a deficient LOS under existing plus project conditions:

- Fowler Avenue/Olive Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/SR-180 Eastbound Ramps (p.m. peak hour only); and
- Temperance Avenue/McKinley Avenue (a.m. and p.m. peak hours).

All these intersections are currently operating at a deficient LOS. As such, the project is forecast to add to the existing deficiencies at these locations. All other study intersections are forecast to operate at a satisfactory LOS under existing plus project conditions.

7.2.2 Roadway Segments

A roadway segment LOS analysis was conducted for existing plus project conditions using the methodologies previously discussed. Table 7-B summarizes the results of this analysis and shows that the following roadway segment is forecast to operate at a deficient LOS under existing plus project conditions:

- Fowler Avenue, between Olive Avenue and SR-180 Westbound Ramps.

This study segment is currently operating at a deficient LOS. As such, the project is forecast to add to the existing deficiency at this segment. All other roadway segments are forecast to operate at a satisfactory LOS under existing plus project conditions.

7.3 NEAR-TERM PLUS PROJECT LEVELS OF SERVICE

7.3.1 Study Intersections

An intersection LOS analysis was conducted for near-term plus project conditions using the methodologies previously discussed. Table 7-C summarizes the results of this analysis and shows that the following intersection is forecast to operate at a deficient LOS under near-term plus project conditions:

- Fowler Avenue/McKinley Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/Floradora Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/Olive Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/SR-180 Eastbound Ramps (p.m. peak hour only)
- Armstrong Avenue/McKinley Avenue (a.m. and p.m. peak hours);
- Armstrong Avenue/Floradora Avenue (a.m. peak hour only)
- Armstrong Avenue/Olive Avenue (a.m. and p.m. peak hours);
- Temperance Avenue/McKinley Avenue (a.m. and p.m. peak hours); and
- Temperance Avenue/Floradora Avenue (a.m. peak hour only).

All other study intersections are forecast to operate at a satisfactory LOS under near-term plus project conditions.

7.3.2 Roadway Segments

A roadway segment LOS analysis was conducted for near-term plus project conditions using the methodologies previously discussed. Table 7-D summarizes the results of this analysis and shows that the following roadway segments are forecast to operate at a deficient LOS under near-term plus project conditions:

- Fowler Avenue, between McKinley Avenue and Floradora Avenue;
- Fowler Avenue, between Floradora Avenue and Olive Avenue; and

- Fowler Avenue, between Olive Avenue and SR-180 Westbound Ramps.

All other roadway segments are forecast to operate at a satisfactory LOS under near-term plus project conditions.

7.4 CUMULATIVE YEAR (2046) NO PROJECT LEVELS OF SERVICE

7.4.1 Study Intersections

An intersection LOS analysis was conducted for cumulative year no project conditions using the methodologies previously discussed. Table 7-E summarizes the results of this analysis and shows that the following intersections are forecast to operate at a deficient LOS under cumulative year no project conditions:

- Fowler Avenue/McKinley Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/Floradora Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/Olive Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/SR-180 Eastbound Ramps (p.m. peak hour only)
- Armstrong Avenue/McKinley Avenue (a.m. and p.m. peak hours);
- Armstrong Avenue/Floradora Avenue (a.m. peak hour only);
- Armstrong Avenue/Olive Avenue (a.m. and p.m. peak hours);
- Temperance Avenue/McKinley Avenue (a.m. and p.m. peak hours); and
- Temperance Avenue/Floradora Avenue (a.m. and p.m. peak hours).

All other study intersections are forecast to operate at a satisfactory LOS under cumulative year no project conditions.

7.4.2 Roadway Segments

A roadway segment LOS analysis was conducted for cumulative year no project conditions using the methodologies previously discussed. Table 7-F summarizes the results of this analysis and shows that the following roadway segments are forecast to operate at a deficient LOS under cumulative year no project conditions:

- Fowler Avenue, between McKinley Avenue and Floradora Avenue;
- Fowler Avenue, between Floradora Avenue and Olive Avenue; and
- Fowler Avenue, between Olive Avenue and SR-180 Westbound Ramps.

All other roadway segments are forecast to operate at a satisfactory LOS under cumulative year no project conditions.

7.5 CUMULATIVE YEAR (2046) PLUS PROJECT LEVELS OF SERVICE

7.5.1 Study Intersections

An intersection LOS analysis was conducted for cumulative year plus project conditions using the methodologies previously discussed. Table 7-E summarizes the results of this analysis and shows

that the following intersection is forecast to operate at a deficient LOS under cumulative year plus project conditions:

- Fowler Avenue/McKinley Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/Floradora Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/Olive Avenue (a.m. and p.m. peak hours);
- Fowler Avenue/SR-180 Eastbound Ramps (p.m. peak hour only)
- Armstrong Avenue/McKinley Avenue (a.m. and p.m. peak hours);
- Armstrong Avenue/Floradora Avenue (a.m. and p.m. peak hours);
- Armstrong Avenue/Olive Avenue (a.m. and p.m. peak hours);
- Temperance Avenue/McKinley Avenue (a.m. and p.m. peak hours); and
- Temperance Avenue/Floradora Avenue (a.m. and p.m. peak hours).

All these intersections are forecast to operate at a deficient LOS under cumulative no project conditions. As such, the project is forecast to add to the forecasted deficiencies at these locations. All other study intersections are forecast to operate at a satisfactory LOS under cumulative year plus project conditions.

7.5.2 Roadway Segments

A roadway segment LOS analysis was conducted for cumulative year plus project conditions using the methodologies previously discussed. Table 7-F summarizes the results of this analysis and shows that the following roadway segments are forecast to operate at a deficient LOS under cumulative year plus project conditions:

- Fowler Avenue, between McKinley Avenue and Floradora Avenue;
- Fowler Avenue, between Floradora Avenue and Olive Avenue; and
- Fowler Avenue, between Olive Avenue and SR-180 Westbound Ramps.

All these roadway segments are forecast to operate at a deficient LOS under cumulative no project conditions. As such, the project is forecast to add to the forecasted deficiencies at these segments. All other roadway segments are forecast to operate at a satisfactory LOS under cumulative year plus project conditions.

Detailed intersection level of service worksheets are included in Appendix E.

7.6 LIST OF CHAPTER 7.0 TABLES

LSA

Table 7-A - Existing Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	No Project					Plus Project					Improvement Required?
				A.M. Peak Hour		P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour		
			Control	Delay (sec.)	LOS	Delay (sec.)	LOS	Control	Delay (sec.)	LOS	Delay (sec.)	LOS	
1 . Fowler Avenue/McKinley Avenue	Fresno/Fresno County	D	-	*Future Intersection*		*Future Intersection*		OWSC	20.7	C	24.1	C	No
2 . Fowler Avenue/Floradora Avenue	Fresno County	D	OWSC	11.9	B	14.2	B	OWSC	11.9	B	14.2	B	No
3 . Fowler Avenue/Olive Avenue	Fresno County	D	AWSC	59.2	**F** *	49.5	**E** *	AWSC	69.8	**F** *	67.1	**F** *	**Yes**
4 . Fowler Avenue/SR-180 Westbound Ramps	Caltrans	45 sec	Signal	6.5	A	5.3	A	Signal	6.6	A	5.8	A	No
5 . Fowler Avenue/SR-180 Eastbound Ramps	Caltrans	45 sec	Signal	20.4	C	66.0	**E** *	Signal	20.4	C	69.5	**E** *	**Yes**
6 . Fowler Avenue/Belmont Avenue	Fresno/Fresno County	D	Signal	34.1	C	31.9	C	Signal	34.1	C	32.0	C	No
7 . Armstrong Avenue/McKinley Avenue	Fresno/Fresno County	D	-	*Future Intersection*		*Future Intersection*		TWSC	21.4	C	18.9	C	No
8 . Armstrong Avenue/Floradora Avenue	Fresno	D	TWSC	24.1	C	15.6	C	TWSC	28.6	D	18.2	C	No
9 . Armstrong Avenue/Olive Avenue[1]	Fresno	D	AWSC	11.3	B	28.7	D	AWSC	14.2	B	14.1	B	No
10 . Temperance Avenue/McKinley Avenue	Fresno/Fresno County	D	OWSC	40.0	**E** *	43.3	**E** *	TWSC	63.4	**F** *	70.8	**F** *	**Yes**
11 . Temperance Avenue/Floradora Avenue	Fresno County	D	TWSC	20.4	C	22.5	C	TWSC	20.7	C	22.9	C	No
12 . Armstrong Avenue/Project Driveway 1	Fresno	D	-	*Future Intersection*		*Future Intersection*		OWSC	17.3	C	16.6	C	No
13 . Project Driveway 2/McKinley Avenue	Fresno	D	-	*Future Intersection*		*Future Intersection*		OWSC	8.7	A	8.7	A	No

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

[1] Due to the road configuration at this intersection, Synchro does not report an LOS using HCM metholodiges for this intersection. Therefore, the LOS was determined using SimTraffic simulation.

* Exceeds LOS Standard

LSA

Table 7-B - Existing Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Functional Classification[1]	Roadway Capacity[2]	No Project		Plus Project	
				Daily Volume	LOS	Daily Volume	LOS
Segments on Fowler Avenue							
1 . between McKinley Avenue and Floradora Avenue	Fresno County	2-Lane Undivided Arterial	15,930	15,111	C	15,141	D
2 . between Floradora Avenue and Olive Avenue	Fresno County	2-Lane Undivided Arterial	15,930	14,452	C	14,482	C
3 . between Olive Avenue and SR-180 Westbound Ramps	Fresno County	2-Lane Undivided Arterial	15,930	17,454	E *	18,284	E *
4 . between SR-180 Eastbound Ramps and Belmont Avenue	Fresno/Fresno County	4-Lane Divided Arterial	35,820	17,660	C	17,998	C
Segments on Armstrong Avenue							
5 . between Project Driveway 1 and McKinley Avenue	Fresno	2-Lane Undivided Collector	15,930	6,282	C	7,542	C
6 . between McKinley Avenue and Floradora Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	6,282	C	7,572	C
7 . between Floradora Avenue and Olive Avenue	Fresno	2-Lane Divided Collector[3]	17,910	6,507	C	7,767	C
Segments on Temperance Avenue							
8 . between McKinley Avenue and Floradora Avenue	Fresno/Fresno County	2-Lane Undivided Super Arterial	15,930	11,543	C	11,697	C
Segments on McKinley Avenue							
9 . between Fowler Avenue and Armstrong Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	*Future Segment*		30	C
10 . between Armstrong Avenue and Project Driveway 2	Fresno/Fresno County	2-Lane Undivided Collector	15,930	*Future Segment*		1,230	C
11 . between Project Driveway 2 and Temperance Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	*Future Segment*		276	C
Segments on Floradora Avenue							
12 . between Fowler Avenue and Armstrong Avenue	Fresno/Fresno County	2-Lane Undivided Collector	14,040	793	C	823	C
Segments on Olive Avenue							
13 . between Fowler Avenue and Armstrong Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	5,755	C	6,769	C

Notes:

LOS = Level of Service.

[1] Classification obtained from the Figure MT-1 Major Street Circulation Diagram, City of Fresno 2014 General Plan.

[2] Roadway Capacity obtained from Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Since the facilities ate Non-State, a 10% reduction factor was applied for the roadway capacities.

[3] This classification is not listed in Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Roadway Capacity for this classification are interpolated from capacities of similar classifications.

* Exceeds LOS Standard

LSA

Table 7-C - Near-Term Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Plus Project						Improvement Required?
			Control	A.M. Peak Hour Delay (sec.)	A.M. Peak Hour LOS		P.M. Peak Hour Delay (sec.)	P.M. Peak Hour LOS	
1 . Fowler Avenue/McKinley Avenue	Fresno/Fresno County	D	OWSC	62.3	**F**	*	41.3	**E**	*	**Yes**
2 . Fowler Avenue/Floradora Avenue	Fresno County	D	OWSC	157.9	**F**	*	>200	**F**	*	**Yes**
3 . Fowler Avenue/Olive Avenue	Fresno County	D	AWSC	>200	**F**	*	>200	**F**	*	**Yes**
4 . Fowler Avenue/SR-180 Westbound Ramps	Caltrans	45 sec	Signal	9.0	A		8.7	A		No
5 . Fowler Avenue/SR-180 Eastbound Ramps	Caltrans	45 sec	Signal	23.0	C		76.8	**E**	*	**Yes**
6 . Fowler Avenue/Belmont Avenue	Fresno/Fresno County	D	Signal	47.5	D		41.3	D		No
7 . Armstrong Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	194.9	**F**	*	44.9	**E**	*	**Yes**
8 . Armstrong Avenue/Floradora Avenue	Fresno	D	TWSC	58.4	**F**	*	33.1	D		**Yes**
9 . Armstrong Avenue/Olive Avenue[2]	Fresno	D	AWSC	76.1	**F**	*	188.9	**F**	*	**Yes**
10 . Temperance Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	-	**F**	*	>200	**F**	*	**Yes**
11 . Temperance Avenue/Floradora Avenue	Fresno County	D	TWSC	53.1	**F**	*	28.5	D		**Yes**
12 . Armstrong Avenue/Project Driveway 1	Fresno	D	OWSC	21.5	C		20.9	C		No
13 . Project Driveway 2/McKinley Avenue	Fresno	D	OWSC	9.8	A		9.1	A		No

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

[1] Based on Synchro results, intersections where the delay is represented with a dash (-) has through volumes that block the turn movements throughout the peak hour. As such, Synchro does not report a delay at these intersections for the blocked turn movements. Therefore, the worst-case movements at these intersections operate at LOS F.

[2] Due to the road configuration at this intersection, Synchro does not report an LOS using HCM metholodiges for this intersection. Therefore, the LOS was determined using SimTraffic simulation.

* Exceeds LOS Standard

LSA

Table 7-D - Near-Term Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Functional Classification[1]	Roadway Capacity[2]	Plus Project	
				Daily Volume	LOS
Segments on Fowler Avenue					
1 . between McKinley Avenue and Floradora Avenue	Fresno County	2-Lane Undivided Arterial	15,930	20,357	E *
2 . between Floradora Avenue and Olive Avenue	Fresno County	2-Lane Undivided Arterial	15,930	20,626	E *
3 . between Olive Avenue and SR-180 Westbound Ramps	Fresno County	2-Lane Undivided Arterial	15,930	24,705	E *
4 . between SR-180 Eastbound Ramps and Belmont Avenue	Fresno/Fresno County	4-Lane Divided Arterial	35,820	24,890	C
Segments on Armstrong Avenue					
5 . between Project Driveway 1 and McKinley Avenue	Fresno	2-Lane Undivided Collector	15,930	9,449	C
6 . between McKinley Avenue and Floradora Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	9,468	C
7 . between Floradora Avenue and Olive Avenue	Fresno	2-Lane Divided Collector[3]	17,910	8,831	C
Segments on Temperance Avenue					
8 . between McKinley Avenue and Floradora Avenue	Fresno/Fresno County	2-Lane Undivided Super Arterial	15,930	14,611	C
Segments on McKinley Avenue					
9 . between Fowler Avenue and Armstrong Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	1,624	C
10 . between Armstrong Avenue and Project Driveway 2	Fresno/Fresno County	2-Lane Undivided Collector	15,930	3,225	C
11 . between Project Driveway 2 and Temperance Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	2,271	C
Segments on Floradora Avenue					
12 . between Fowler Avenue and Armstrong Avenue	Fresno/Fresno County	2-Lane Undivided Collector	14,040	3,635	C
Segments on Olive Avenue					
13 . between Fowler Avenue and Armstrong Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	8,138	C

Notes:

LOS = Level of Service.

[1] Classification obtained from the Figure MT-1 Major Street Circulation Diagram, City of Fresno 2014 General Plan.

[2] Roadway Capacity obtained from Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Since the facilities ate Non-State, a 10% reduction factor was applied for the roadway capacities.

[3] This classification is not listed in Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Roadway Capacity for this classification are interpolated from capacities of similar classifications.

* Exceeds LOS Standard

LSA

Table 7-E - Cumulative Year (2046) Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	No Project						Plus Project						Improvement Required?
			Control	A.M. Peak Hour Delay (sec.)	A.M. Peak Hour LOS		P.M. Peak Hour Delay (sec.)	P.M. Peak Hour LOS		Control	A.M. Peak Hour Delay (sec.)	A.M. Peak Hour LOS		P.M. Peak Hour Delay (sec.)	P.M. Peak Hour LOS		
1 . Fowler Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	-	**F**	*	-	**F**	*	TWSC	-	**F**	*	-	**F**	*	**Yes**
2 . Fowler Avenue/Floradora Avenue	Fresno County	D	OWSC	>200	**F**	*	>200	**F**	*	OWSC	>200	**F**	*	>200	**F**	*	**Yes**
3 . Fowler Avenue/Olive Avenue	Fresno County	D	AWSC	>200	**F**	*	>200	**F**	*	AWSC	>200	**F**	*	>200	**F**	*	**Yes**
4 . Fowler Avenue/SR-180 Westbound Ramps	Caltrans	45 sec	Signal	9.3	A		8.9	A		Signal	12.5	B		9.4	A		No
5 . Fowler Avenue/SR-180 Eastbound Ramps	Caltrans	45 sec	Signal	24.6	C		83.2	**F**	*	Signal	24.6	C		97.0	**F**	*	**Yes**
6 . Fowler Avenue/Belmont Avenue	Fresno/Fresno County	D	Signal	47.7	D		47.8	D		Signal	47.7	D		47.8	D		No
7 . Armstrong Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	-	**F**	*	>200	**F**	*	TWSC	-	**F**	*	>200	**F**	*	**Yes**
8 . Armstrong Avenue/Floradora Avenue	Fresno	D	TWSC	129.6	**F**	*	32.6	D		TWSC	199.4	**F**	*	43.8	**E**	*	**Yes**
9 . Armstrong Avenue/Olive Avenue[2]	Fresno	D	AWSC	>200	**F**	*	>200	**F**	*	AWSC	108.6	**F**	*	>200	**F**	*	**Yes**
10 . Temperance Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	-	**F**	*	-	**F**	*	TWSC	-	**F**	*	-	**F**	*	**Yes**
11 . Temperance Avenue/Floradora Avenue	Fresno County	D	TWSC	99.5	**F**	*	88.8	**F**	*	TWSC	101.8	**F**	*	92.9	**F**	*	**Yes**
12 . Armstrong Avenue/Project Driveway 1	Fresno	D	OWSC	*Future Intersection*			*Future Intersection*			OWSC	23.4	C		22.2	C		No
13 . Project Driveway 2/McKinley Avenue	Fresno	D	OWSC	*Future Intersection*			*Future Intersection*			OWSC	9.9	A		9.1	A		No

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

[1] Based on Synchro results, intersections where the delay is represented with a dash (-) has through volumes that block the turn movements throughout the peak hour. As such, Synchro does not report a delay at these intersections for the blocked turn movements. Therefore, the worst-case movements at these intersections operate at LOS F.

[2] Due to the road configuration at this intersection, Synchro does not report an LOS using HCM metholodiges for this intersection. Therefore, the LOS was determined using SimTraffic simulation.

* Exceeds LOS Standard

LSA

Table 7-F - Cumulative Year (2046) Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Functional Classification[1]	Roadway Capacity[2]	No Project		Plus Project	
				Daily Volume	LOS	Daily Volume	LOS
Segments on Fowler Avenue							
1 . between McKinley Avenue and Floradora Avenue	Fresno County	2-Lane Undivided Arterial	15,930	21,343	E *	21,373	E *
2 . between Floradora Avenue and Olive Avenue	Fresno County	2-Lane Undivided Arterial	15,930	21,626	E *	21,656	E *
3 . between Olive Avenue and SR-180 Westbound Ramps	Fresno County	2-Lane Undivided Arterial	15,930	25,069	E *	25,899	E *
4 . between SR-180 Eastbound Ramps and Belmont Avenue	Fresno/Fresno County	4-Lane Divided Arterial	35,820	25,780	C	26,118	C
Segments on Armstrong Avenue							
5 . between Project Driveway 1 and McKinley Avenue	Fresno	2-Lane Undivided Collector	15,930	8,598	C	9,858	C
6 . between McKinley Avenue and Floradora Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	8,587	C	9,877	C
7 . between Floradora Avenue and Olive Avenue	Fresno	2-Lane Divided Collector[3]	17,910	8,359	C	9,619	C
Segments on Temperance Avenue							
8 . between McKinley Avenue and Floradora Avenue	Fresno/Fresno County	2-Lane Undivided Super Arterial	15,930	15,246	D	15,400	D
Segments on McKinley Avenue							
9 . between Fowler Avenue and Armstrong Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	1,737	C	1,767	C
10 . between Armstrong Avenue and Project Driveway 2	Fresno/Fresno County	2-Lane Undivided Collector	15,930	2,095	C	3,325	C
11 . between Project Driveway 2 and Temperance Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	2,095	C	2,371	C
Segments on Floradora Avenue							
12 . between Fowler Avenue and Armstrong Avenue	Fresno/Fresno County	2-Lane Undivided Collector	14,040	3,785	C	3,815	C
Segments on Olive Avenue							
13 . between Fowler Avenue and Armstrong Avenue	Fresno/Fresno County	2-Lane Undivided Collector	15,930	8,269	C	9,283	C

Notes:

LOS = Level of Service.

[1] Classification obtained from the Figure MT-1 Major Street Circulation Diagram, City of Fresno 2014 General Plan.

[2] Roadway Capacity obtained from Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Since the facilities ate Non-State, a 10% reduction factor was applied for the roadway capacities.

[3] This classification is not listed in Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Roadway Capacity for this classification are interpolated from capacities of similar classifications.

* Exceeds LOS Standard

8.0 SIGNAL WARRANT ANALYSIS

As recommended during the scoping agreement process, signal warrant analysis was conducted at all unsignalized study intersections. Intersection approach volumes for the study intersections was examined to determine whether signalization is warranted per the criteria defined in the California supplement of the *Manual on Uniform Traffic Control Devices* (CA-MUTCD). As recommended by City staff, three separate signal warrant analysis was conducted for the unsignalized study intersections as follows:

1. Warrant 1: 8 hour Vehicular Volume
2. Warrant 2: 4 hour Vehicular Volume
3. Warrant 3: Peak Hour

Specifically, warrant 1 and 2 was conducted for all the unsignalized intersections under existing scenario, and an analysis with signal warrant 3 was conducted for the unsignalized intersections under all scenarios. Following is a brief summary of signal warrant analysis for each intersection:

8.1 FOWLER AVENUE/MCKINLEY AVENUE

As mentioned previously in the TIS, the McKinley extension was considered built in the existing plus project, near term and cumulative scenarios. Therefore, this intersection is anticipated to exist in the near term and cumulative scenarios only.

Figures 8-1, and 8-2 illustrate the Warrant 3 (peak hour signal warrant) for this intersection under Near-term and Cumulative Year (2046) scenario. As shown in these figures, the intersection meets the signal warrant under both scenarios.

8.2 FOWLER AVENUE/FLORADORA AVENUE

Based on the traffic volumes for this intersection, a combination of Condition A and Condition B was evaluated for this intersection. Tables 8-A and 8-B shows the Warrant 1 – Eight Hour Vehicular Volume Condition A, and Condition B, respectively for the intersection under existing scenario. As shown in these tables, the intersection does not meet the signal warrant. As such, this intersection does not meet either Condition A or Condition B.

Figure 8-3 illustrates the Warrant 2- 4 hour for the study intersection under existing scenario. As shown in Figure 8-3, the intersection does not meet the signal warrant.

Figures 8-4, 8-5, and 8-6 illustrate the Warrant 3 (peak hour signal warrant) for this intersection under existing, Near-term and Cumulative Year (2046) scenario. As shown in these figures, the intersection meets the signal warrant under Near-term and Cumulative Year (2046) conditions.

8.3 FOWLER AVENUE/OLIVE AVENUE

Table 8-C shows the Warrant 1 – Eight Hour Vehicular Volume Condition A for the intersection under existing scenario. Additionally, since the posted speed limit on Fowler Avenue (Major Street) is 45 mph, the 70% traffic volume condition was used for this analysis. As shown in Table 8-C, the

intersection meets the signal warrant. Since Condition A is already met, Condition B was not analyzed for this intersection.

Figure 8-7 illustrates the Warrant 2- 4 hour for the study intersection. As shown in Figure 8-7, the intersection meets the signal warrant.

Figures 8-8, 8-9, and 8-10 illustrate the Warrant 3 (peak hour signal warrant) for this intersection under existing, Near-term and Cumulative Year (2046) scenario. As shown in these figures, the intersection meets the signal warrant under all scenarios.

8.4 ARMSTRONG AVENUE/MCKINLEY AVENUE

As mentioned previously in the TIS, the McKinley extension was considered built in the existing plus project, near term and cumulative scenarios. Therefore, this intersection is anticipated to exist in the existing plus project, near term and cumulative scenarios.

Figures 8-11, 8-12, and 8-13 illustrate the Warrant 3 (peak hour signal warrant) for this intersection under existing plus project, Near-term and Cumulative Year (2046) scenario. As shown in these figures, the intersection meets the signal warrant under Near-term and Cumulative Year (2046) conditions.

8.5 ARMSTRONG AVENUE/FLORADORA AVENUE

Based on the traffic volumes for this intersection, a combination of Condition A and Condition B was evaluated for this intersection. Tables 8-D and 8-E shows the Warrant 1 – Eight Hour Vehicular Volume Condition A, and Condition B, respectively for the intersection under existing scenario. As shown in these tables, the intersection does not meet the signal warrant. As such, this intersection does not meet either Condition A or Condition B.

Figure 8-14 illustrates the Warrant 2- 4 hour for the study intersection. As shown in Figure 8-14, the intersection does meet the signal warrant.

Figures 8-15, 8-16, and 8-17 illustrate the Warrant 3 (peak hour signal warrant) for this intersection under existing, Near-term and Cumulative Year (2046) scenario. As shown in these figures, the intersection meets the signal warrant under Near-term and Cumulative Year (2046) conditions.

8.6 ARMSTRONG AVENUE/OLIVE AVENUE

Figures 8-18, 8-19, and 8-20 illustrate the Warrant 3 (peak hour signal warrant) for this intersection under existing, Near-term and Cumulative Year (2046) scenario. As shown in these figures, the intersection meets the signal warrant under all scenarios.

8.7 TEMPERANCE AVENUE/MCKINLEY AVENUE

Based on the traffic volumes for this intersection, a combination of Condition A and Condition B was evaluated for this intersection. Tables 8-F and 8-G shows the Warrant 1 – Eight Hour Vehicular Volume Condition A, and Condition B, respectively for the intersection under existing scenario. As

shown in these tables, the intersection does not meet Condition A. However, this intersection does meet Condition B and satisfies the criteria for Warrant 1.

Figure 8-21 illustrates the Warrant 2- 4 hour for the study intersection. As shown in Figure 8-21, the intersection meets the signal warrant.

Figures 8-22, 8-23, and 8-24 illustrate the Warrant 3 (peak hour signal warrant) for this intersection under existing, Near-term and Cumulative Year (2046) scenario. As shown in these figures, the intersection meets the signal warrant under all scenarios.

8.8 TEMPERANCE AVENUE/FLORADORA AVENUE

Based on the traffic volumes for this intersection, a combination of Condition A and Condition B was evaluated for this intersection. Tables 8-H and 8-I shows the Warrant 1 – Eight Hour Vehicular Volume Condition A, and Condition B, respectively for the intersection under existing scenario. As shown in these tables, the intersection does not meet the signal warrant. As such, this intersection does not meet either Condition A or Condition B.

Figure 8-25 illustrates the Warrant 2- 4 hour for the study intersection. As shown in Figure 8-25, the intersection does not meet the signal warrant.

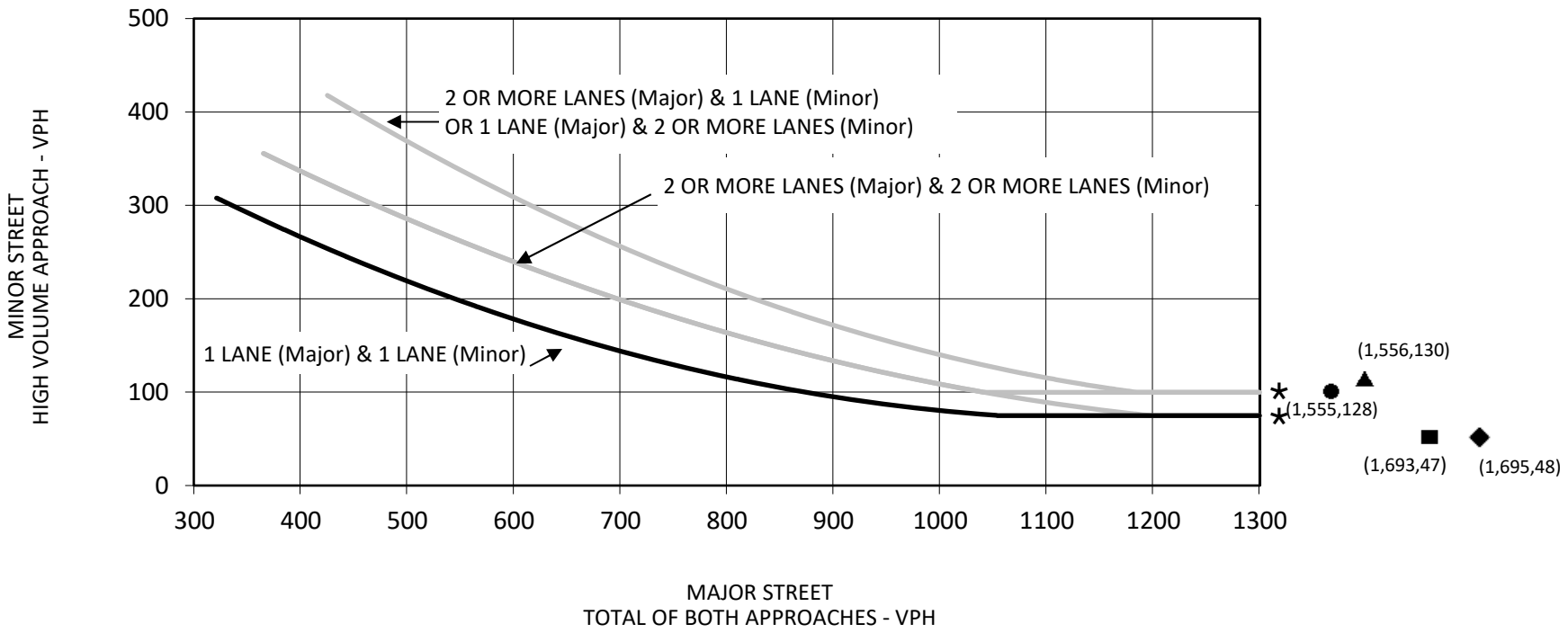
Figures 8-26, 8-27, and 8-28 illustrate the Warrant 3 (peak hour signal warrant) for this intersection under existing, Near-term and Cumulative Year (2046) scenario. As shown in these figures, the intersection does not meet the signal warrant under all scenarios.

8.9 LIST OF CHAPTER 8.0 FIGURES AND TABLES

- Figure 8-1: Warrant 3: Peak Hour - Fowler Avenue/McKinley Avenue - Near Term Conditions
- Figure 8-2: Warrant 3: Peak Hour - Fowler Avenue/McKinley Avenue - Cumulative Year (2046) Conditions
- Figure 8-3: Warrant 2: 4 Hour - Fowler Avenue/Floradora Avenue - Existing Conditions
- Figure 8-4: Warrant 3: Peak Hour - Fowler Avenue/Floradora Avenue - Existing Conditions
- Figure 8-5: Warrant 3: Peak Hour - Fowler Avenue/Floradora Avenue - Near Term Conditions
- Figure 8-6: Warrant 3: Peak Hour - Fowler Avenue/Floradora Avenue - Cumulative Year (2046) Conditions
- Figure 8-7: Warrant 2: 4 Hour - Fowler Avenue/Olive Avenue - Existing Conditions
- Figure 8-8: Warrant 3: Peak Hour - Fowler Avenue/Olive Avenue - Existing Conditions
- Figure 8-9: Warrant 3: Peak Hour - Fowler Avenue/Olive Avenue - Near Term Conditions
- Figure 8-10: Warrant 3: Peak Hour - Fowler Avenue/Olive Avenue - Cumulative Year (2046) Conditions
- Figure 8-11: Warrant 3: Peak Hour - Armstrong Avenue/McKinley Avenue - Existing Conditions
- Figure 8-12: Warrant 3: Peak Hour - Armstrong Avenue/McKinley Avenue - Near Term Conditions
- Figure 8-13: Warrant 3: Peak Hour - Armstrong Avenue/McKinley Avenue - Cumulative Year (2046) Conditions
- Figure 8-14: Warrant 2: 4 Hour -Armstrong Avenue/Floradora Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-1

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

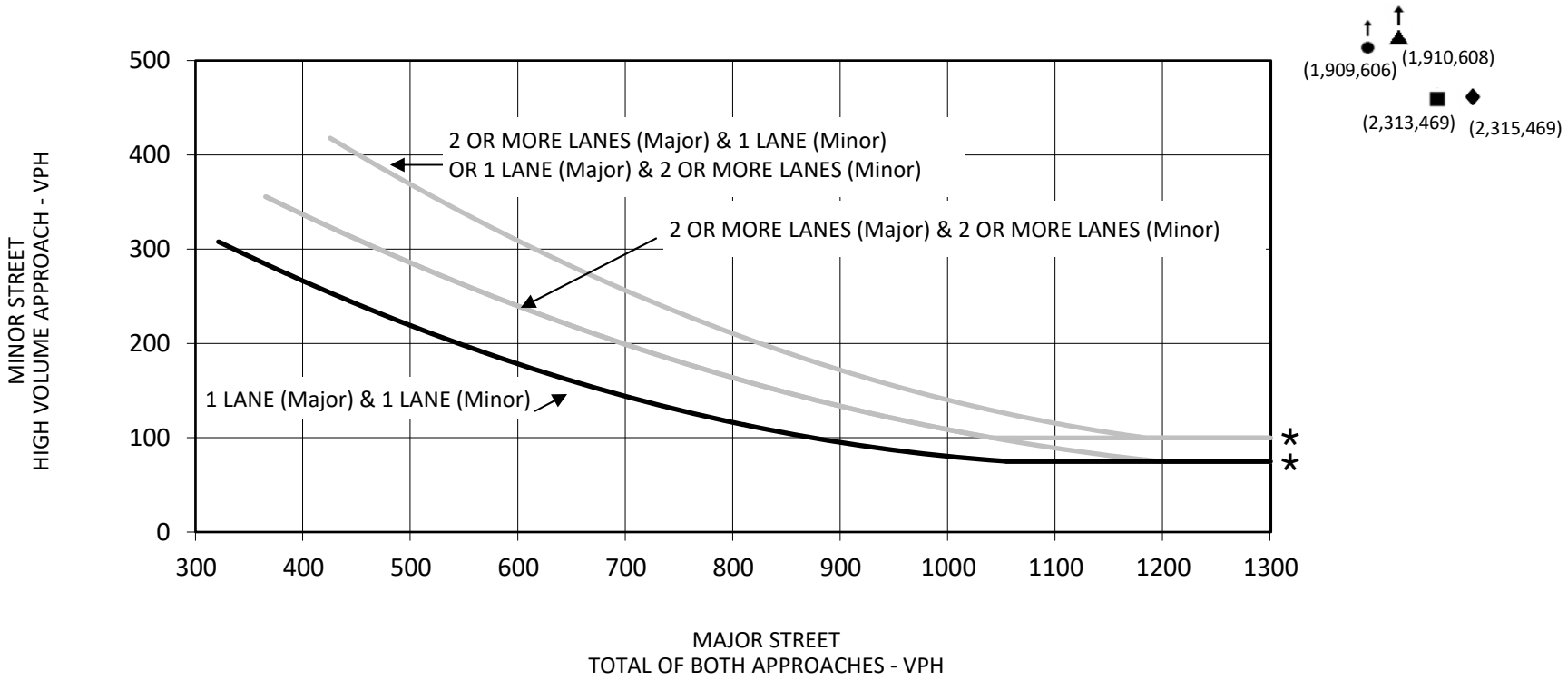
■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

Tract Map 6360 Project
Traffic Impact Study
Warrant 3: Peak Hour - Fowler Avenue/McKinley Avenue - Near Term Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-2

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

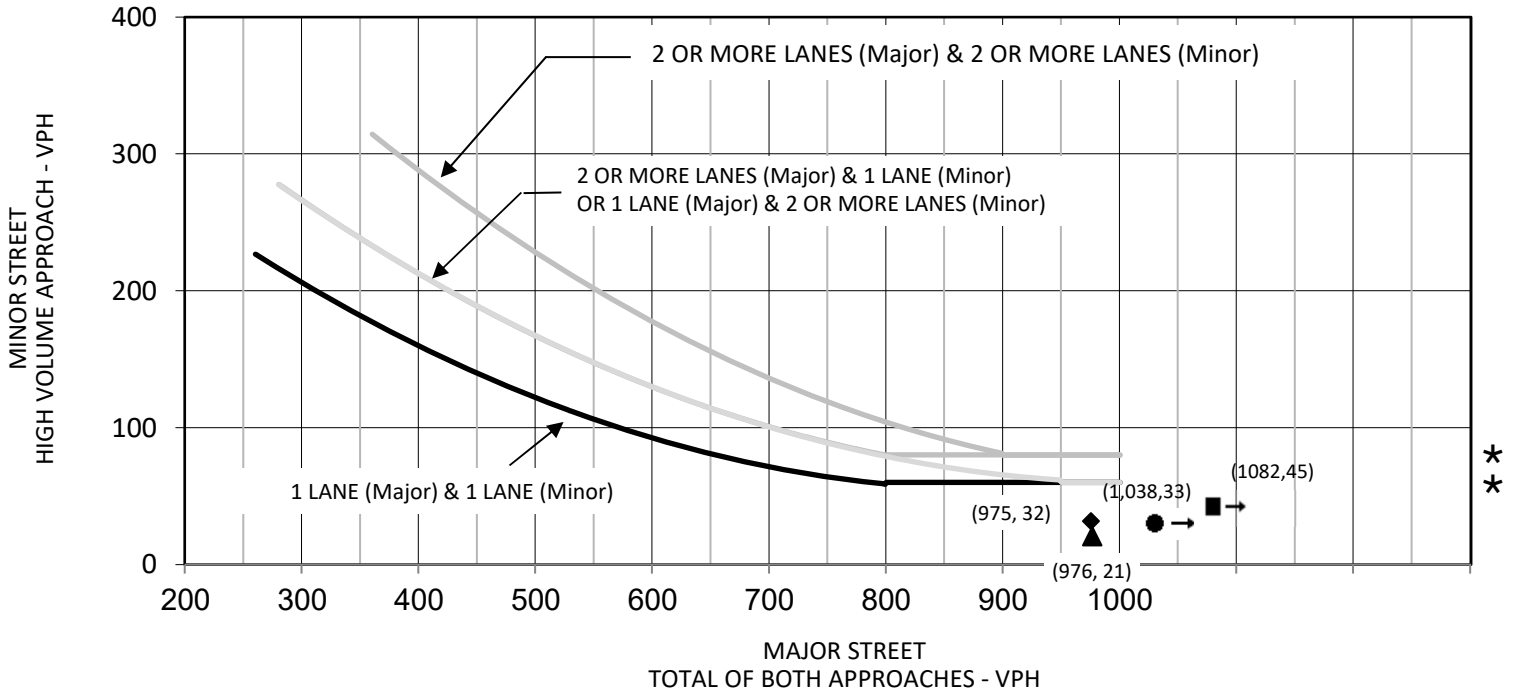
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Fowler Avenue/McKinley Avenue - Cumulative Year (2046) Conditions

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME (70% fACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 80 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 60 VPH applies as the lower threshold volume for a minor street approaching with one lane.

FIGURE 8-3

LSA

● Highest Hour Volumes (17:00-18:00)

■ Second Highest Hourly Volumes (18:00-19:00)

▲ Third Highest Hourly Volumes (16:00-17:00)

◆ Fourth Highest Hourly Volumes (15:00-16:00)

Tract Map 6360 Project

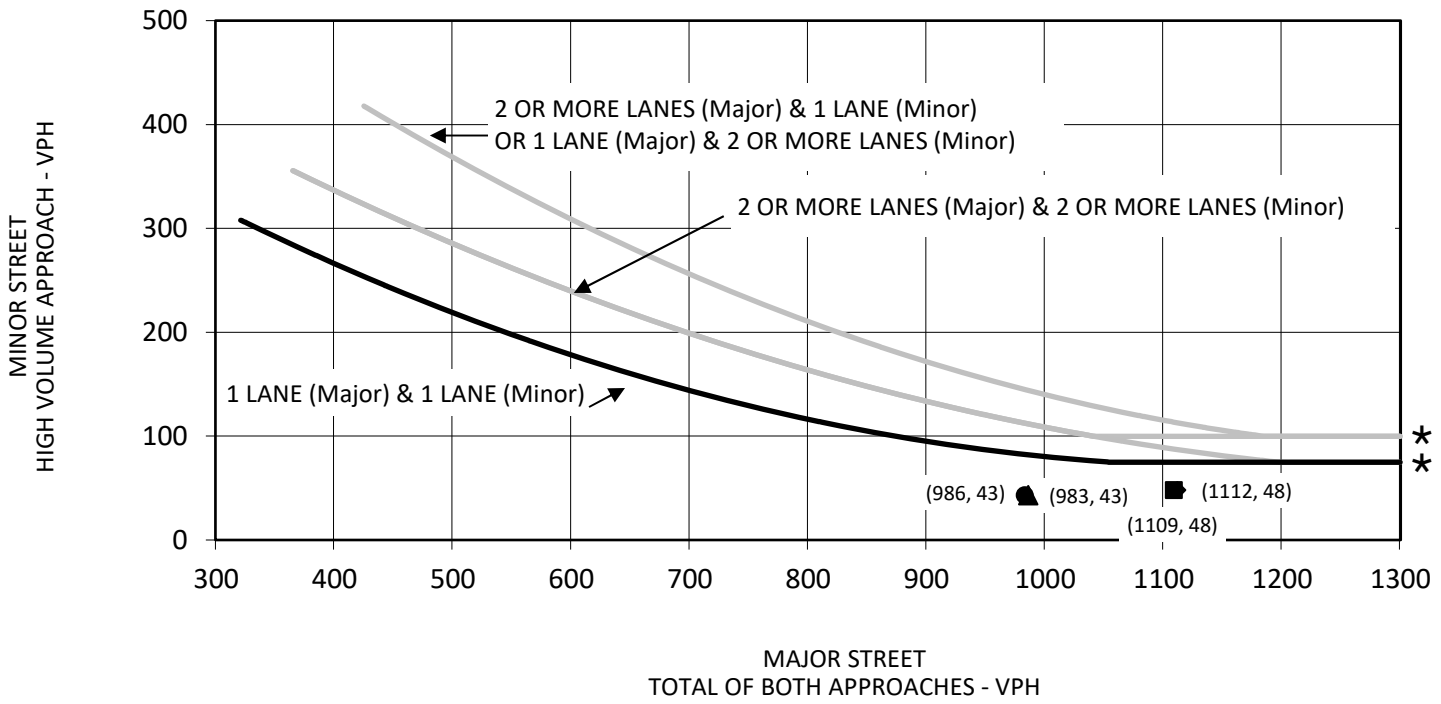
Traffic Impact Study

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-2

Warrant 2: 4 Hour - Fowler Avenue/Floradora Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-4

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

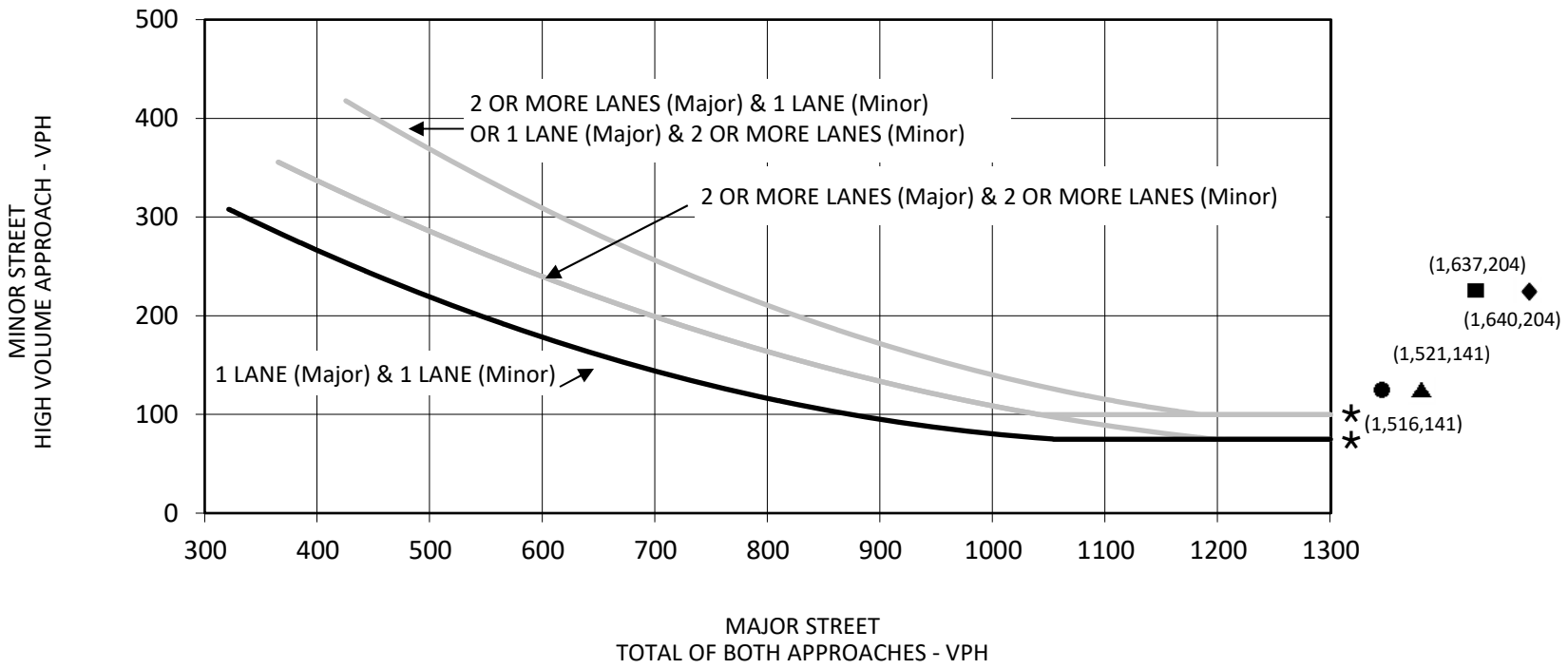
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Fowler Avenue/Floradora Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-5

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

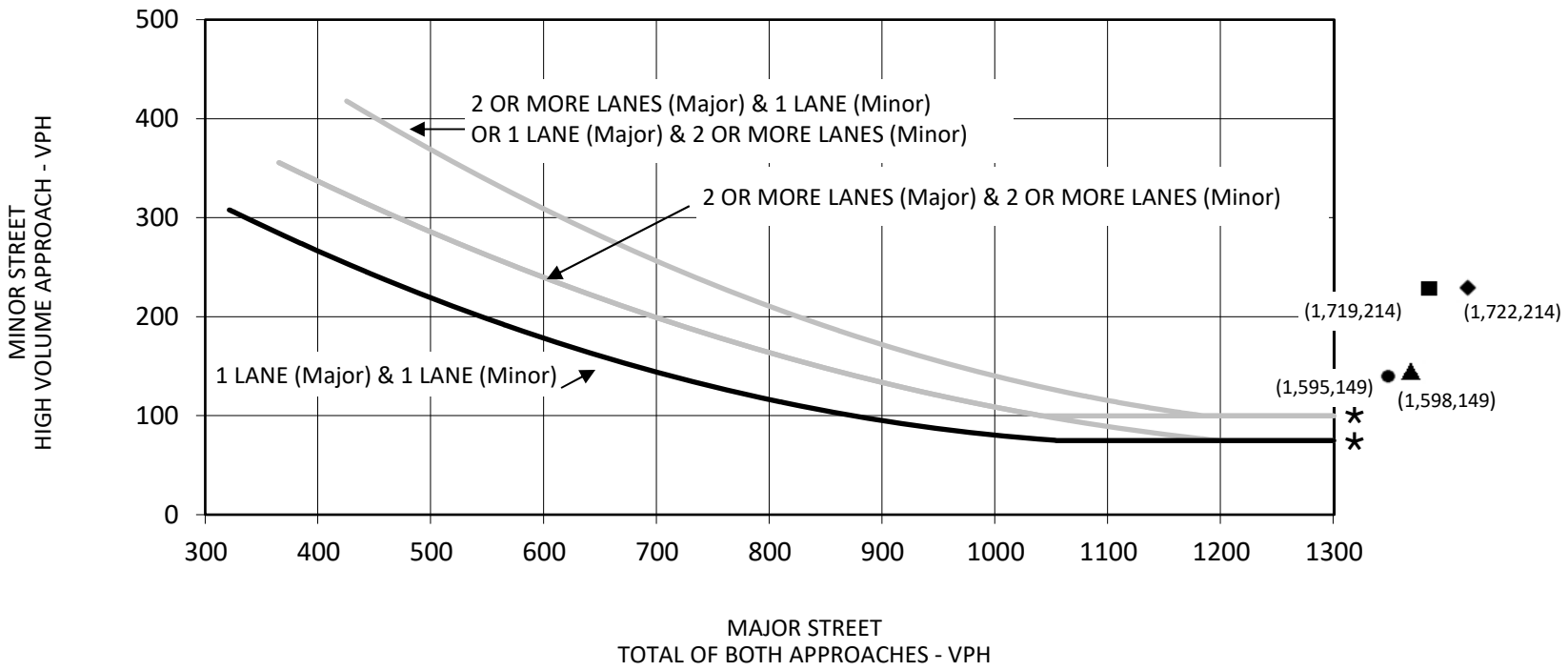
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Fowler Avenue/Floradora Avenue - Near Term Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-6

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

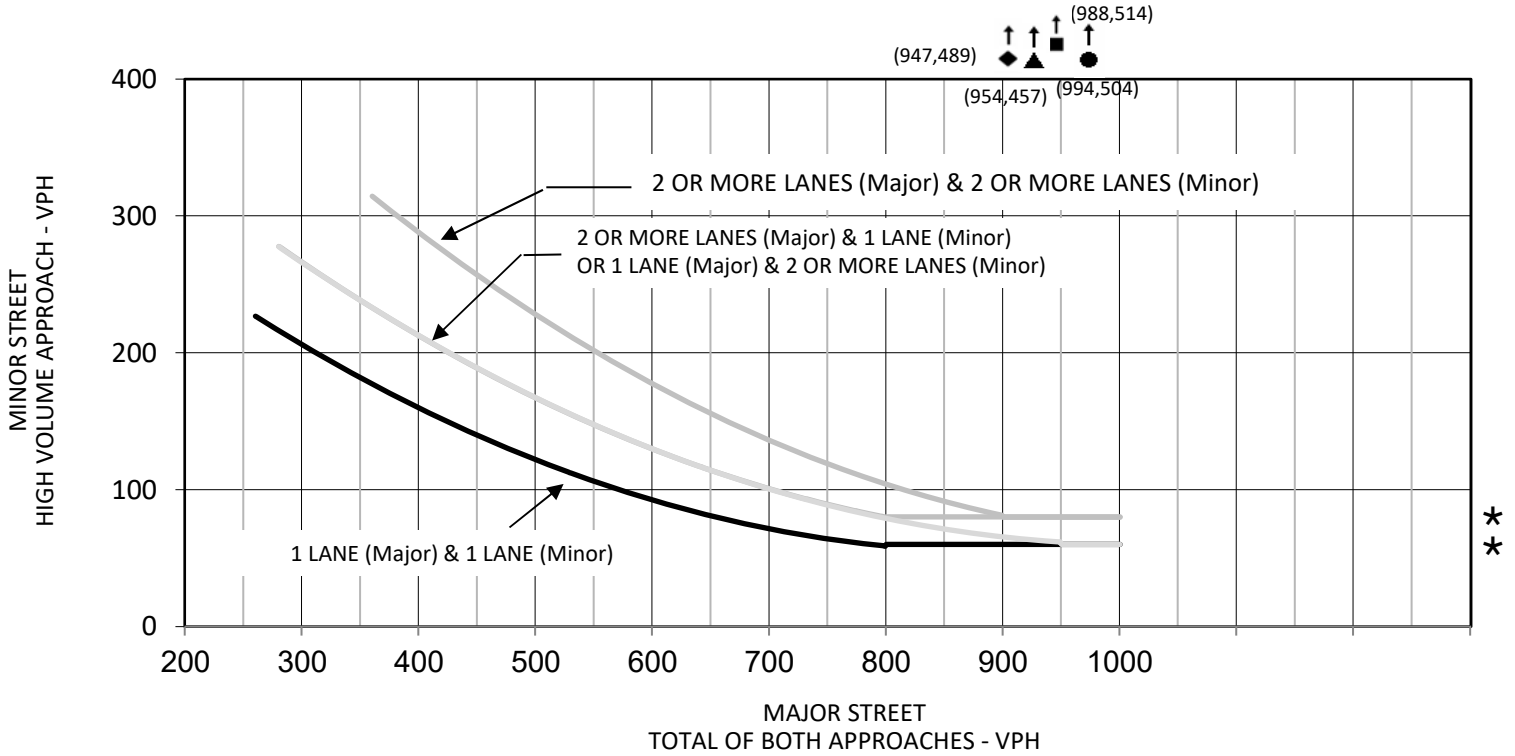
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Fowler Avenue/Floradora Avenue - Cumulative Year (2046) Conditions

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME (70% fACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 80 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 60 VPH applies as the lower threshold volume for a minor street approaching with one lane.

FIGURE 8-7

LSA

● Highest Hour Volumes (15:00-16:00)

▲ Third Highest Hourly Volumes (13:00-14:00)

■ Second Highest Hourly Volumes (14:00-15:00)

◆ Fourth Highest Hourly Volumes (18:00-19:00)

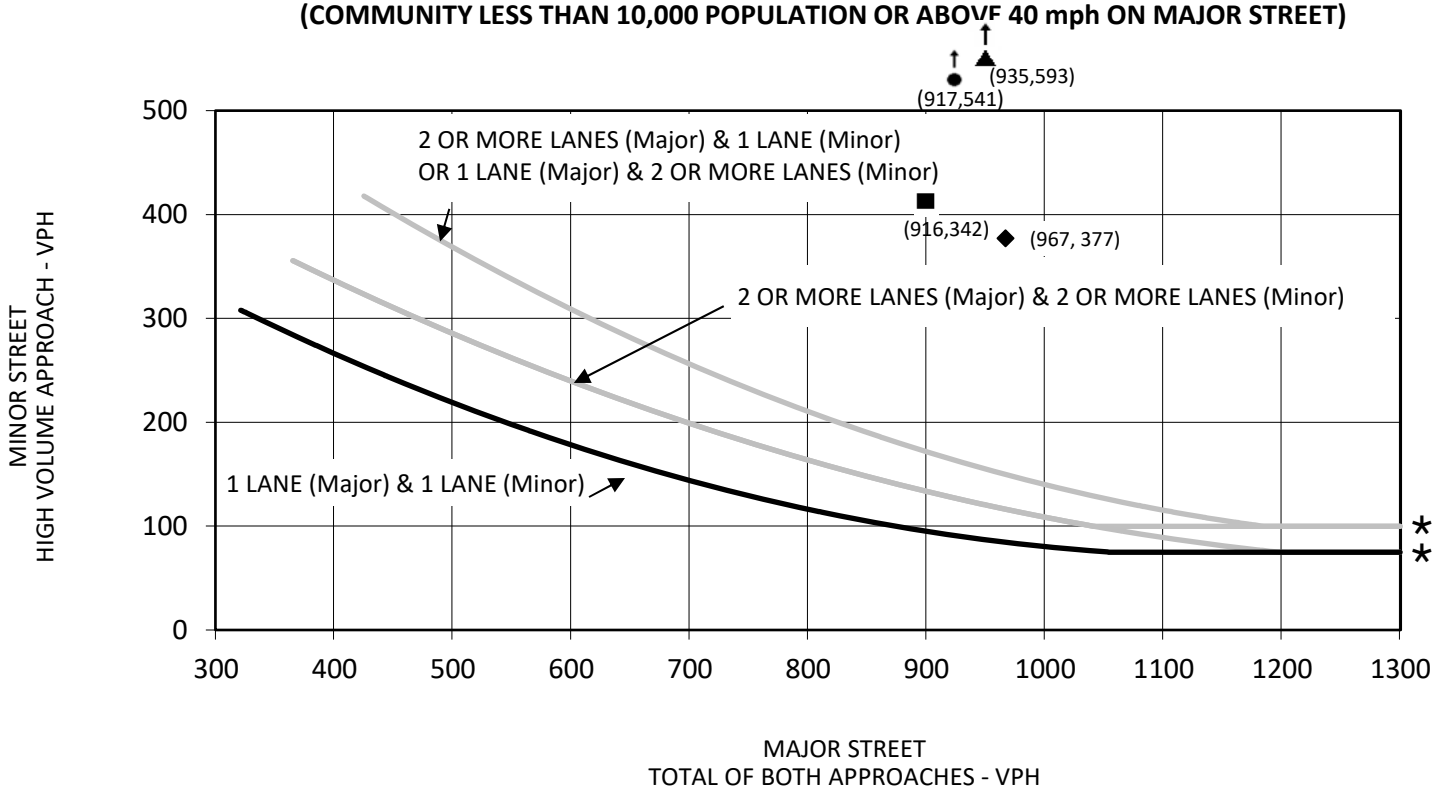
Tract Map 6360 Project
Traffic Impact Study

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-2

Warrant 2: 4 Hour - Fowler Avenue/Olive Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-8

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

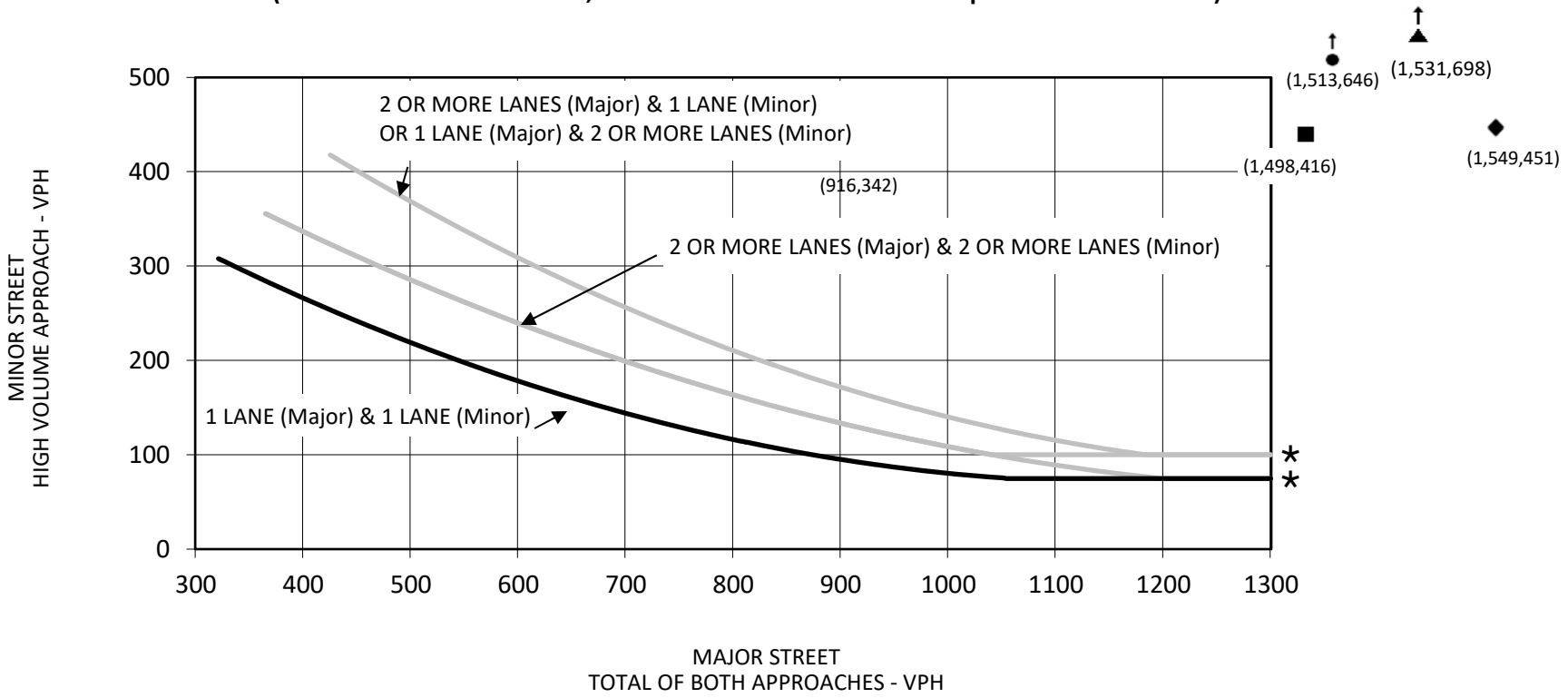
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Fowler Avenue/Olive Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-9

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

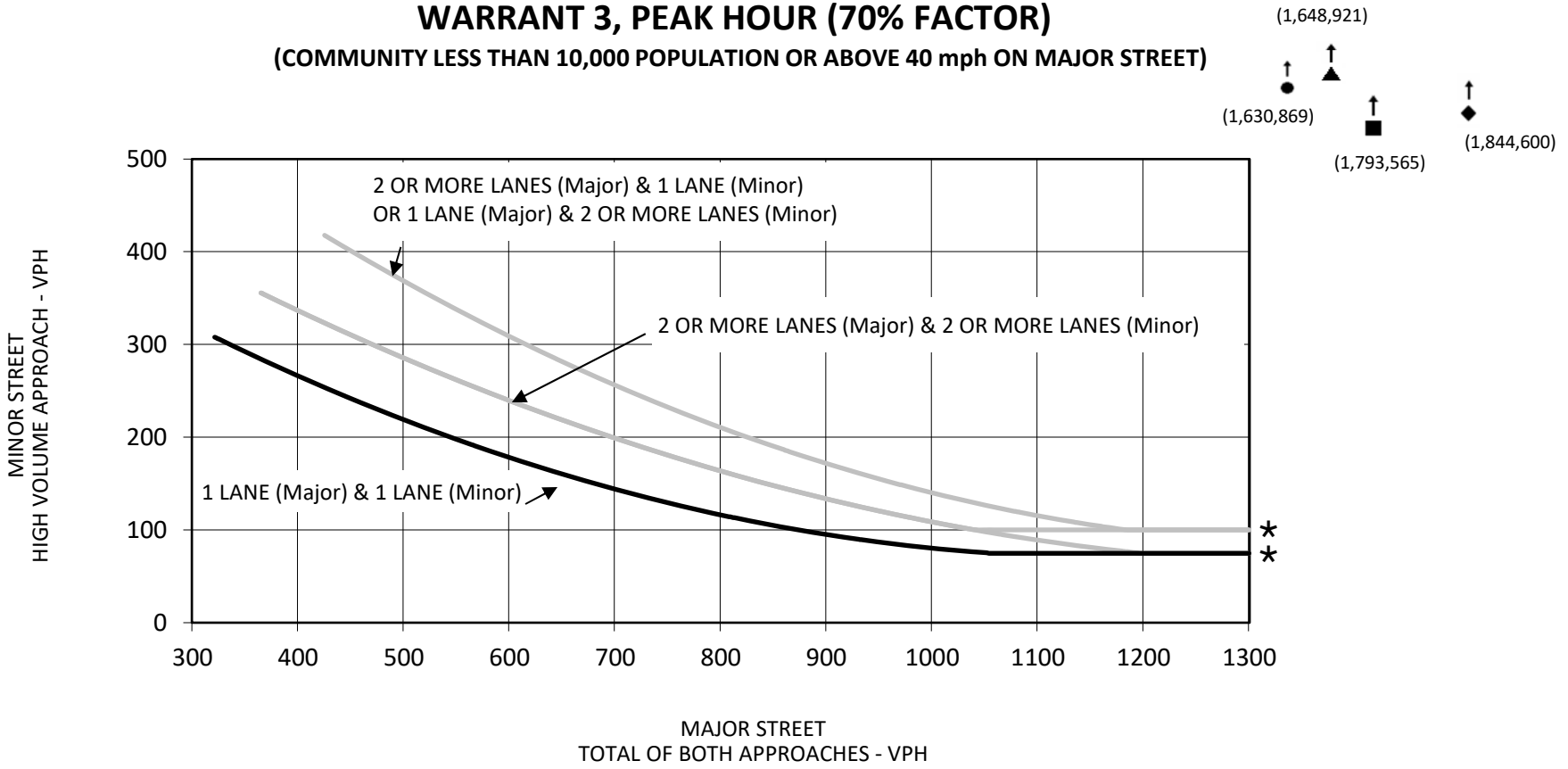
■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

Tract Map 6360 Project
Traffic Impact Study
Warrant 3: Peak Hour - Fowler Avenue/Olive Avenue - Near Term Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-10

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

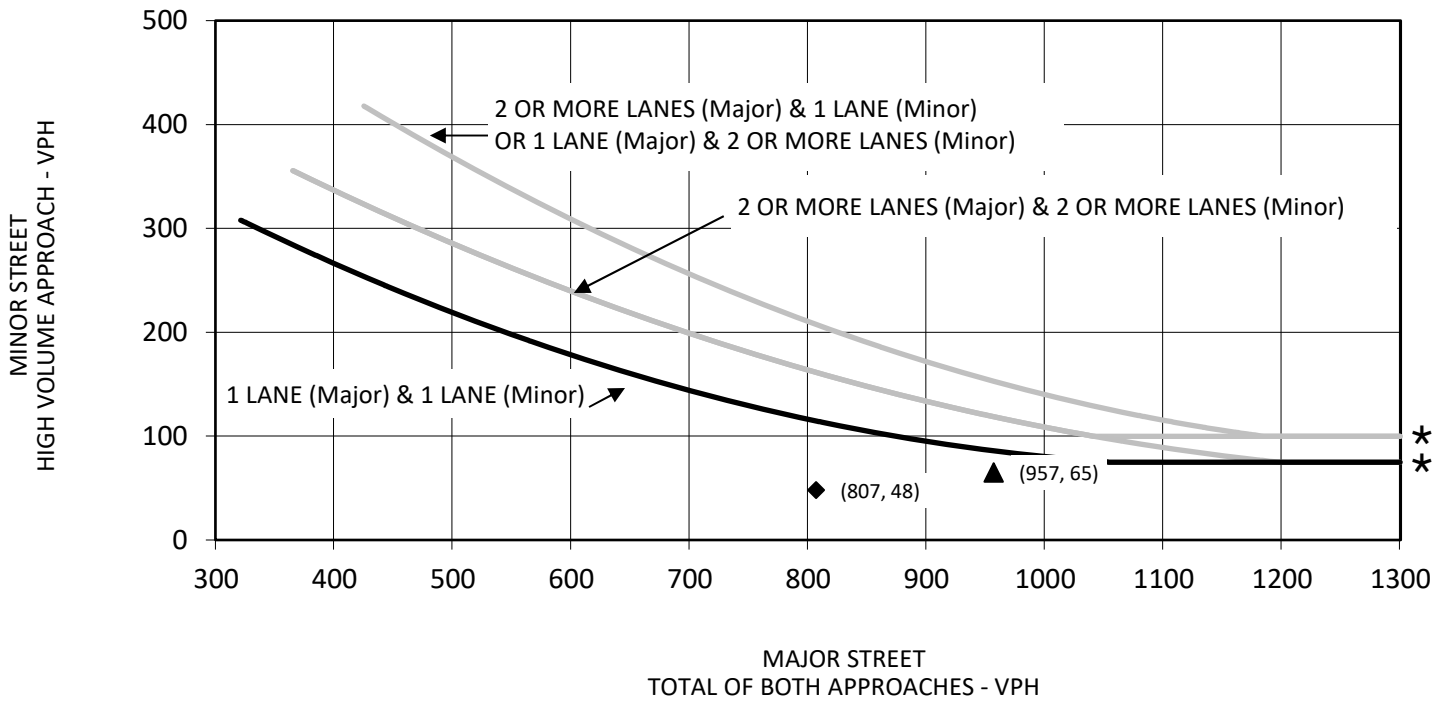
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Fowler Avenue/Olive Avenue - Cumulative Year (2046) Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-11

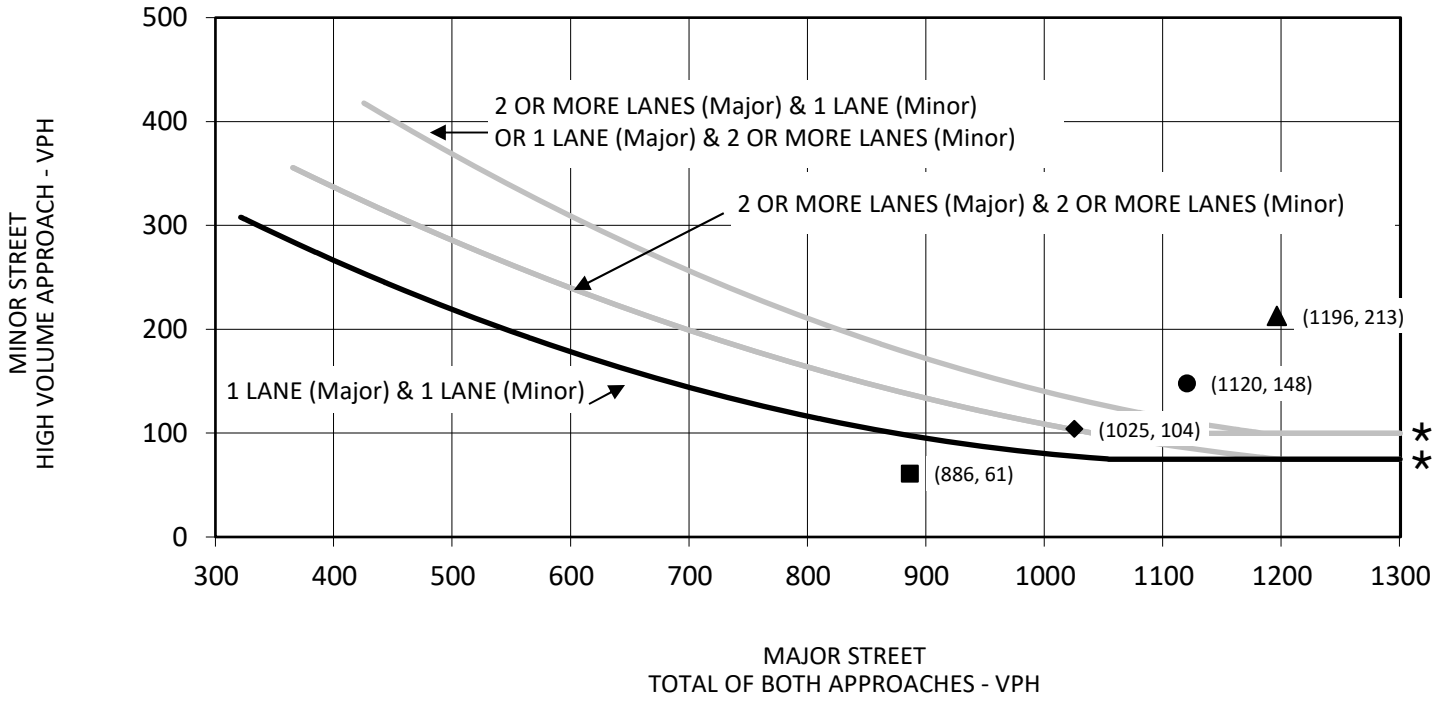
▲ Plus Project AM Peak Hour

◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-12

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

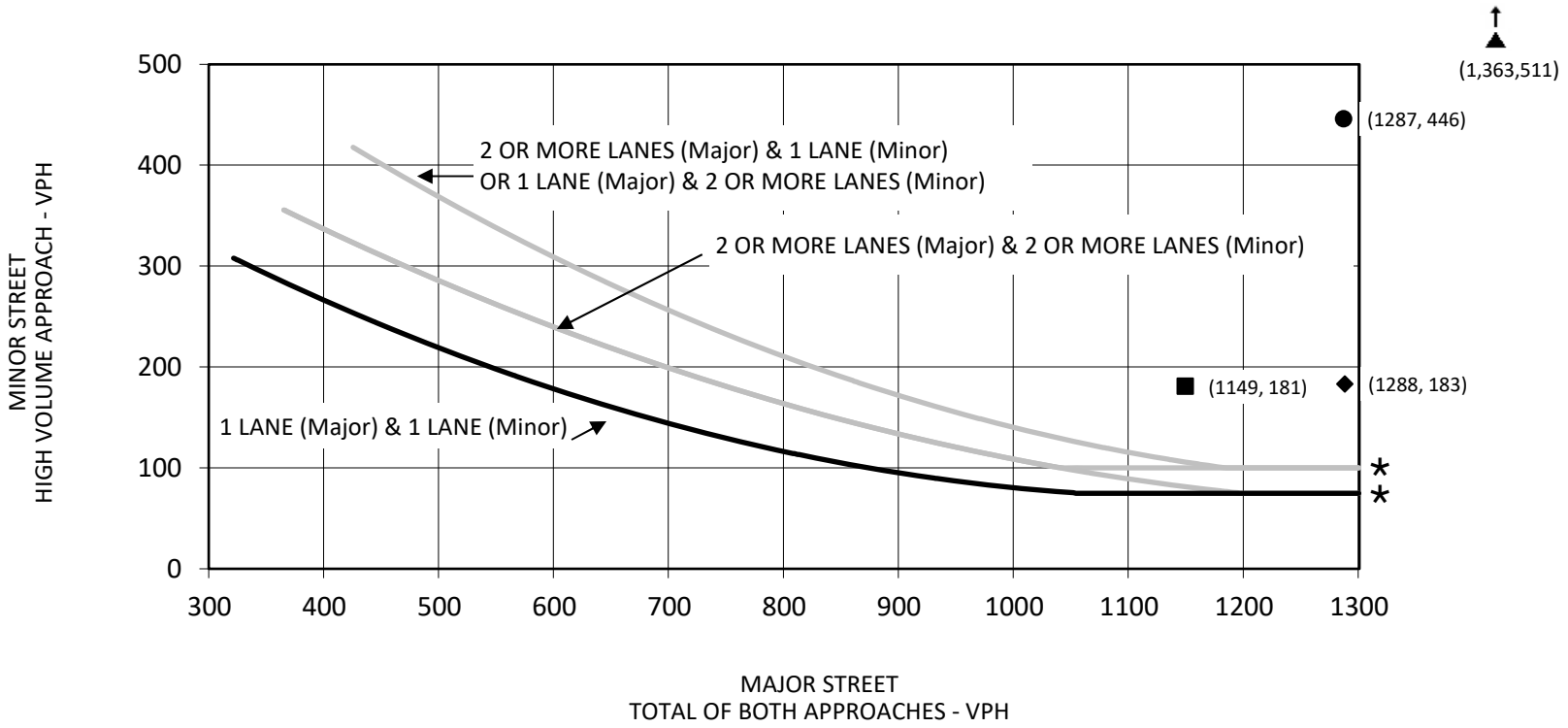
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Armstrong Avenue/McKinley Avenue - Near Term Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-13

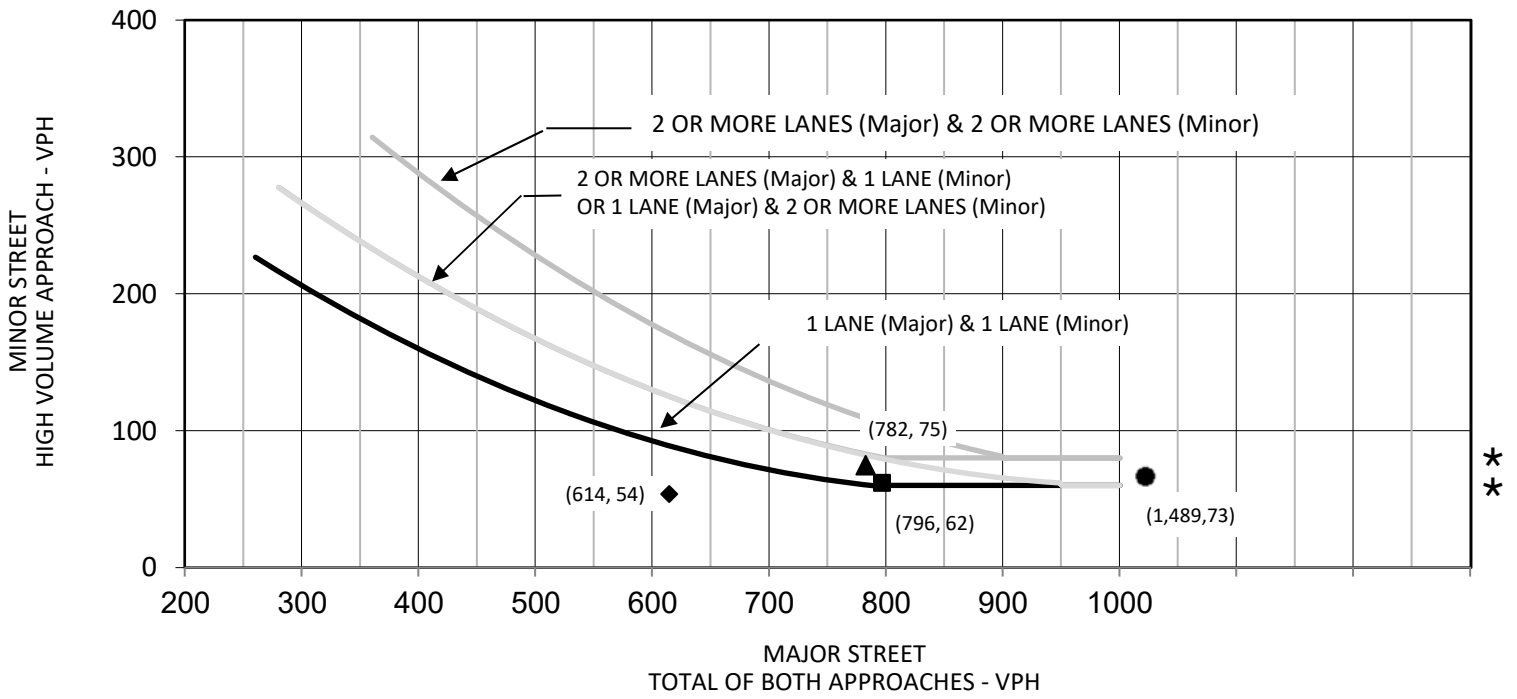
● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME (70% fACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 80 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 60 VPH applies as the lower threshold volume for a minor street approaching with one lane.

FIGURE 8-14

LSA

- ● Highest Hour Volumes (9:00-10:00)
- ▲ Third Highest Hourly Volumes (17:00-18:00)
- ■ Second Highest Hourly Volumes (18:00-19:00)
- ◆ Fourth Highest Hourly Volumes (19:00-20:00)

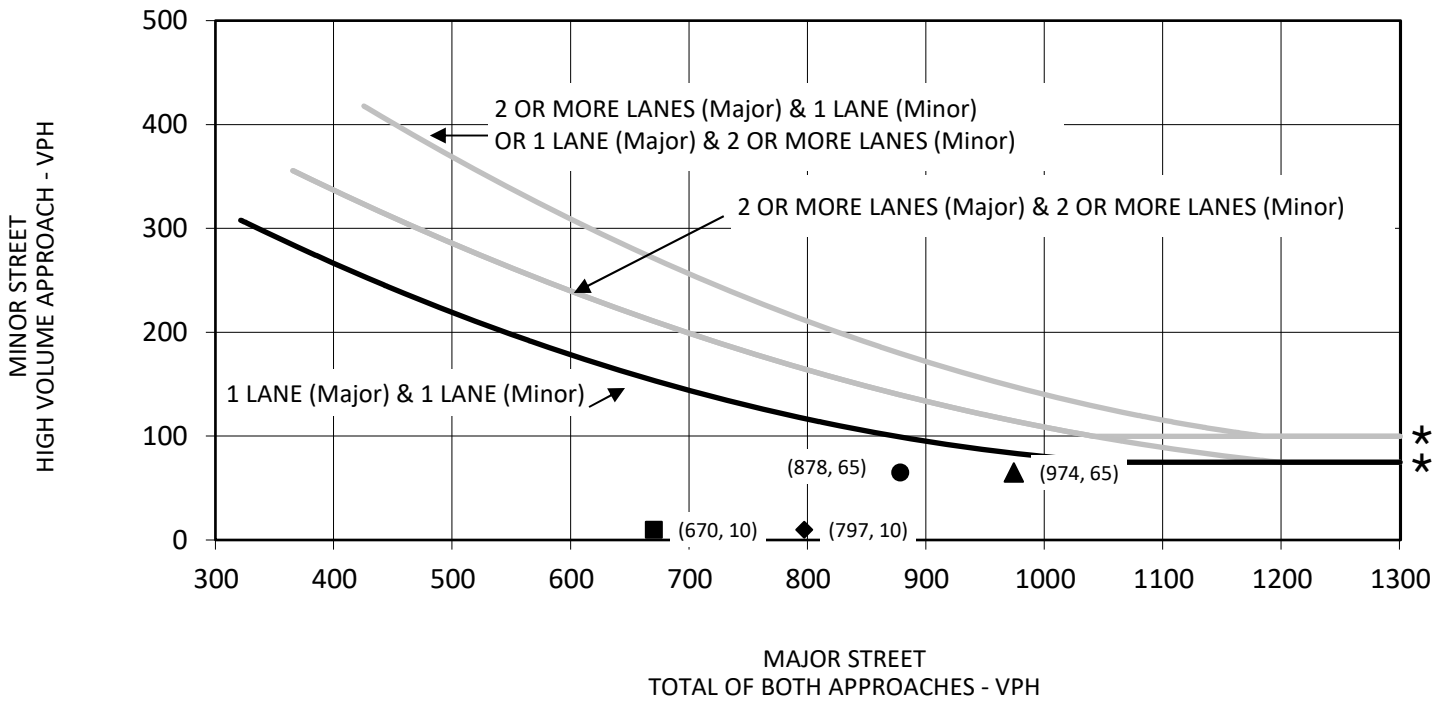
Tract Map 6360 Project
Traffic Impact Study

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-2

Warrant 2: 4 Hour - Armstrong Avenue/Floradora Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-15

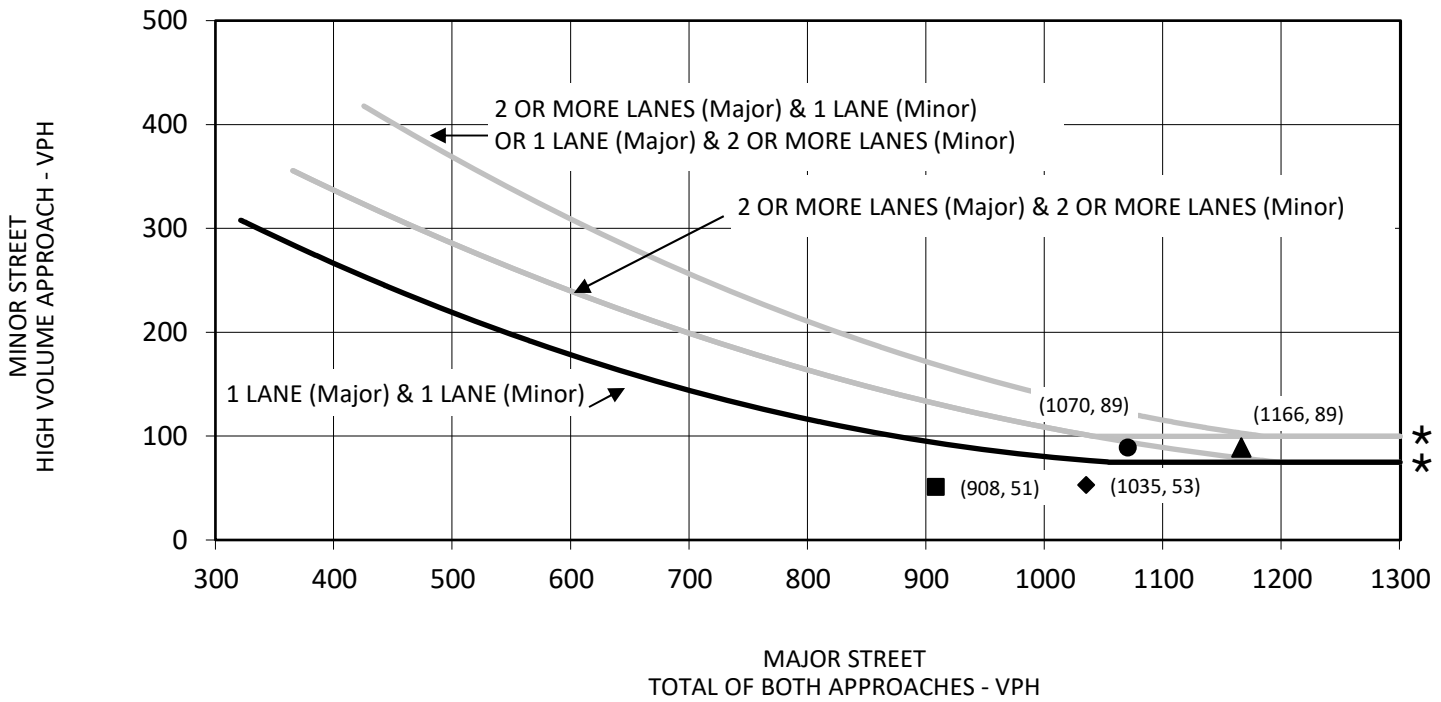
● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-16

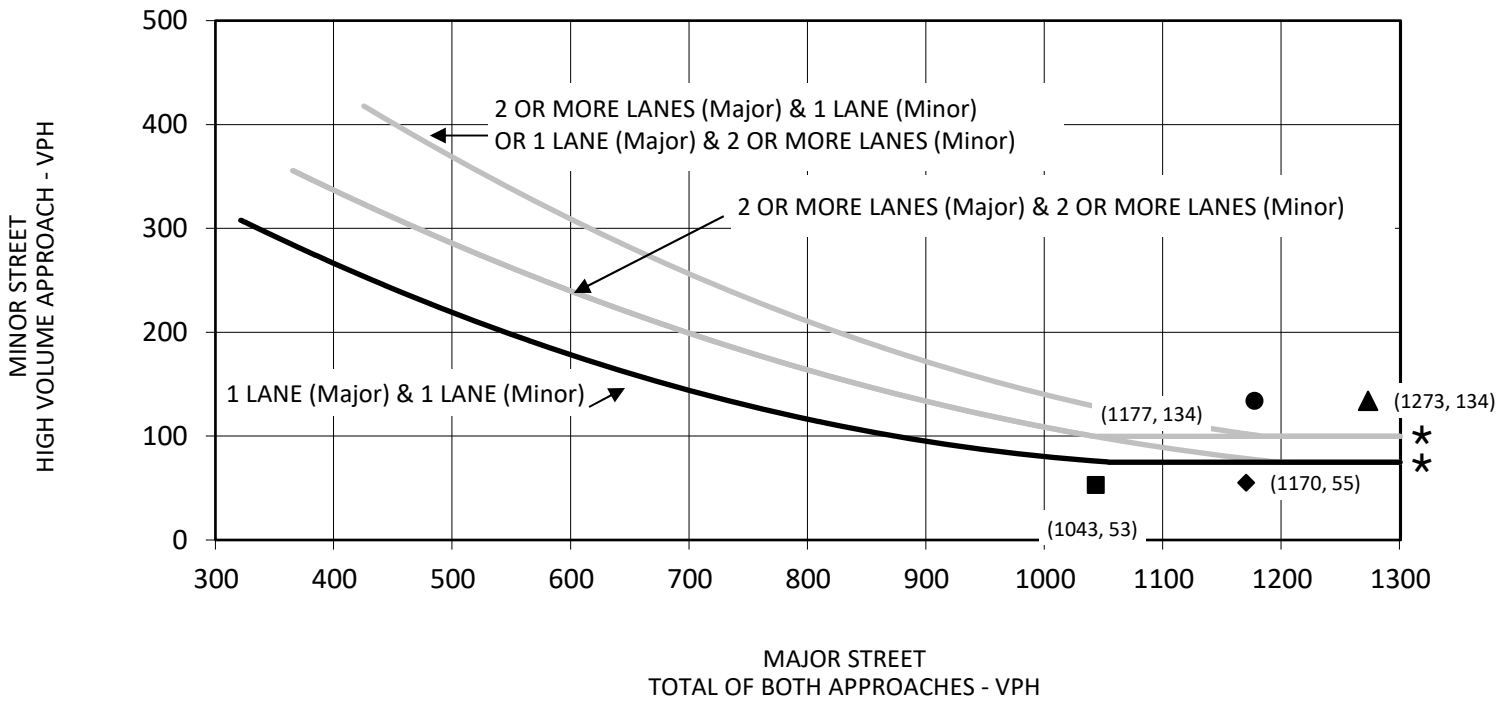
● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-17

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

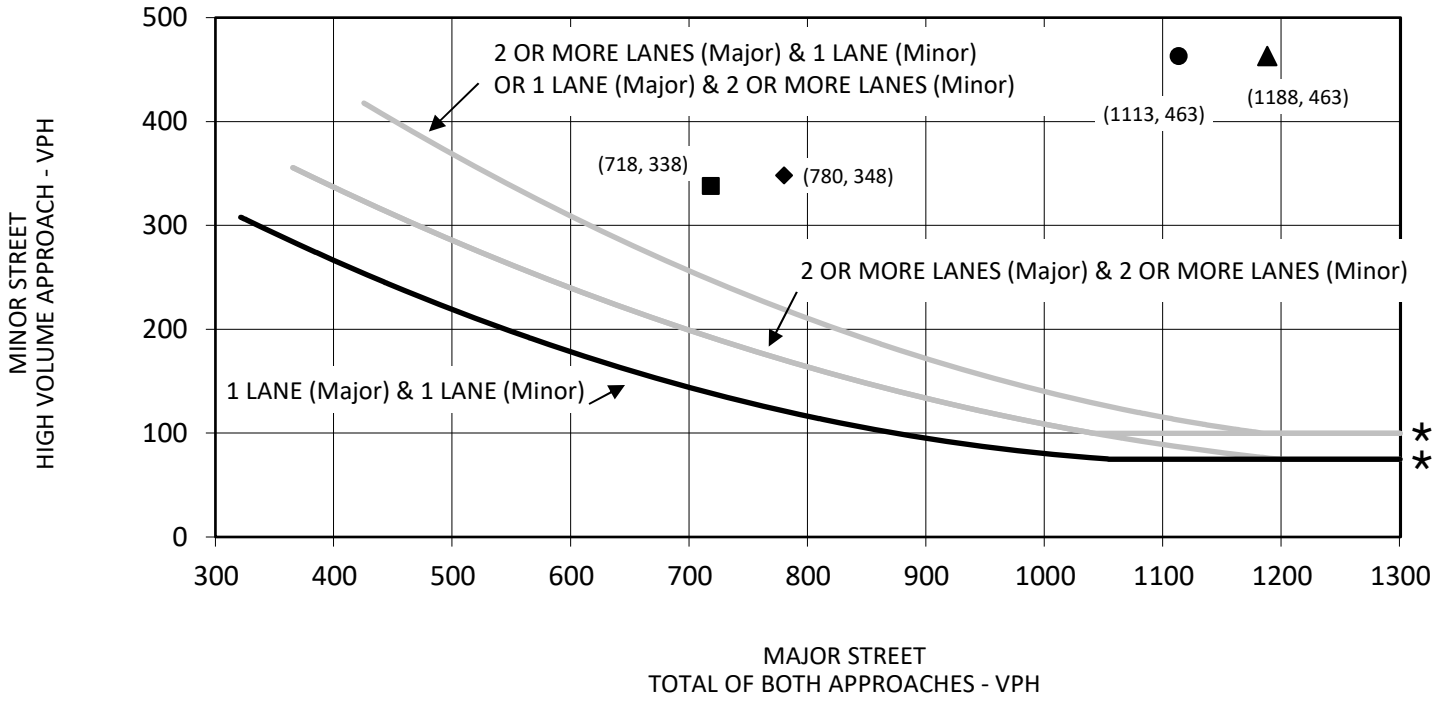
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Armstrong Avenue/Floradora Avenue - Cumulative Year (2046) Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-18

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

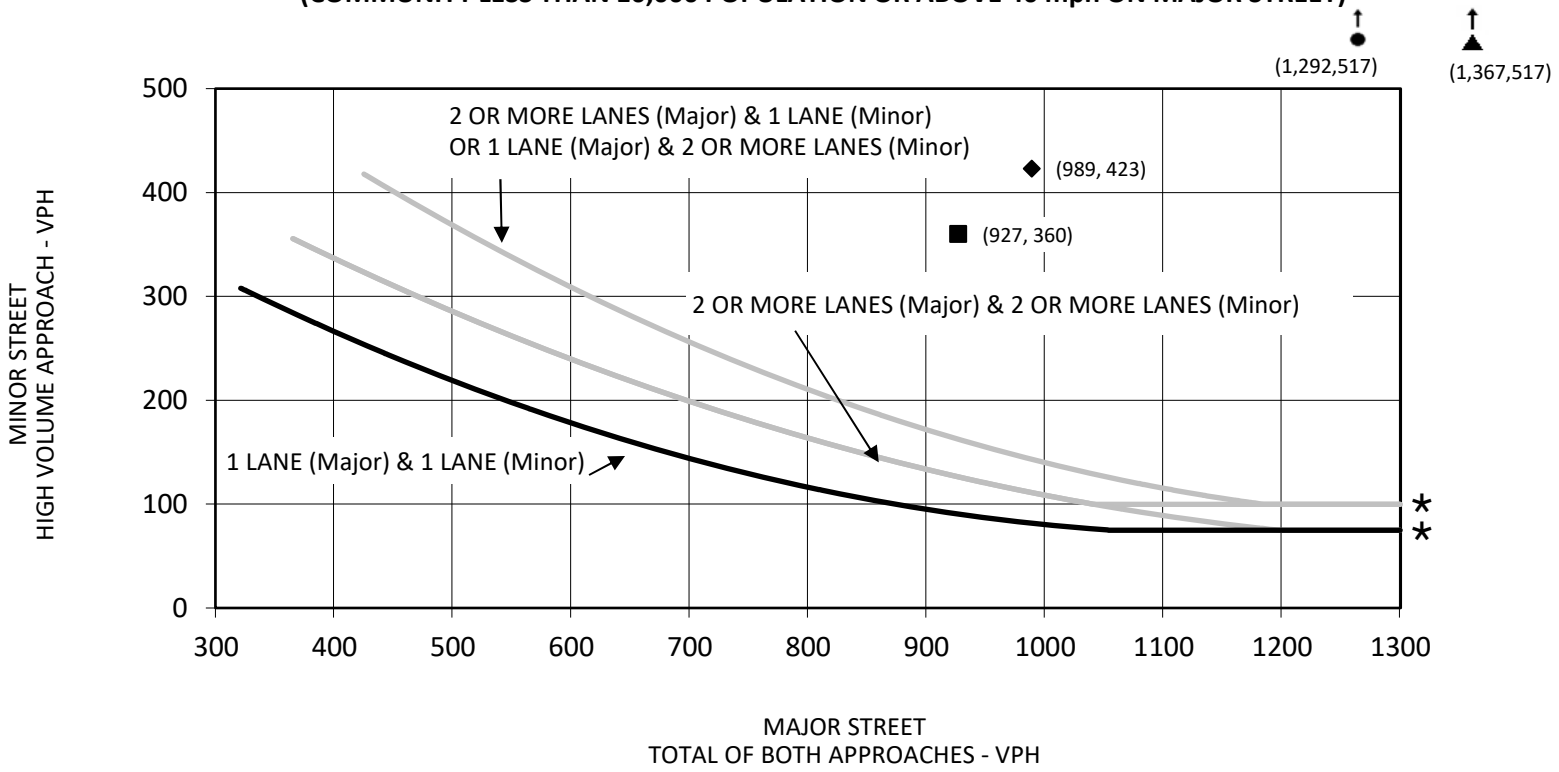
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Armstrong Avenue/Olive Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-19

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

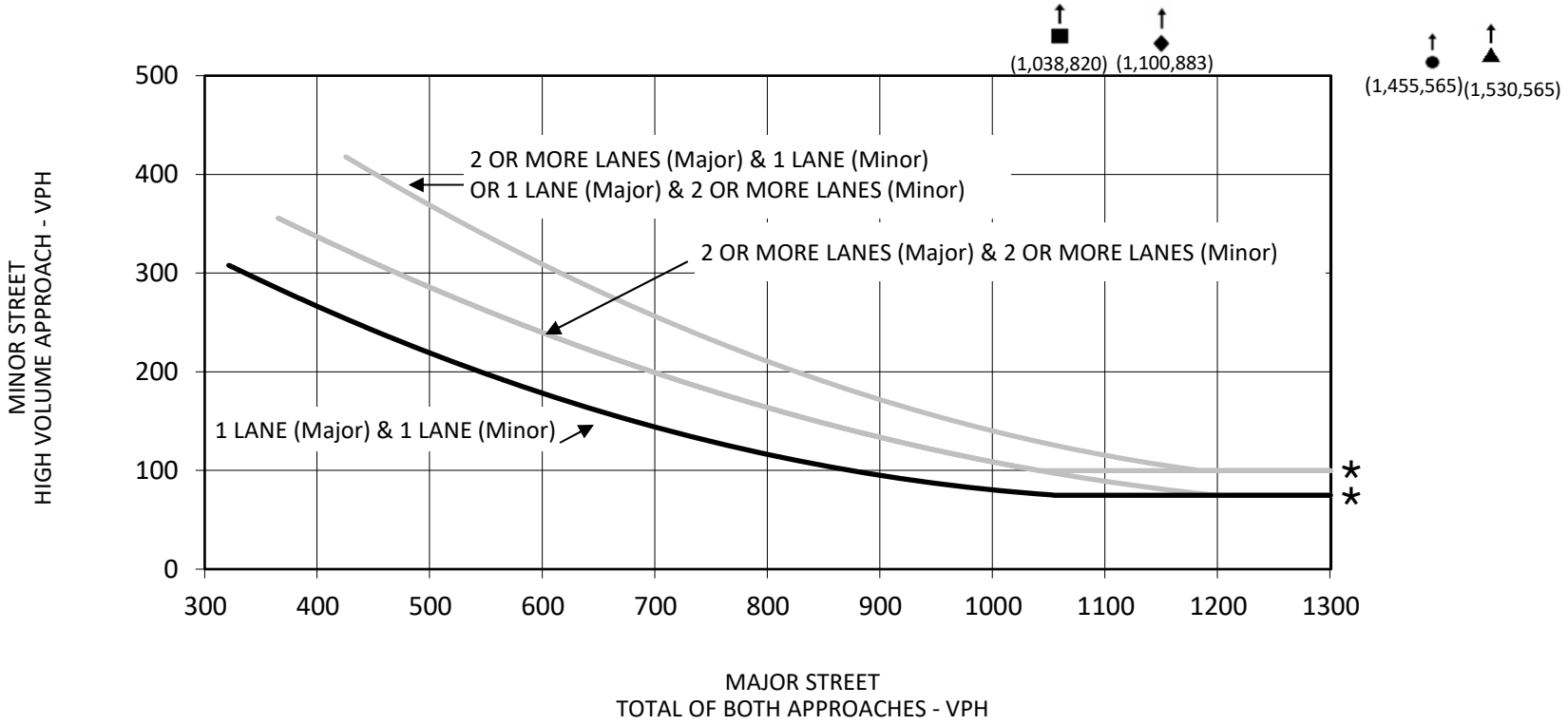
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Armstrong Avenue/Olive Avenue - Near Term Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-20

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

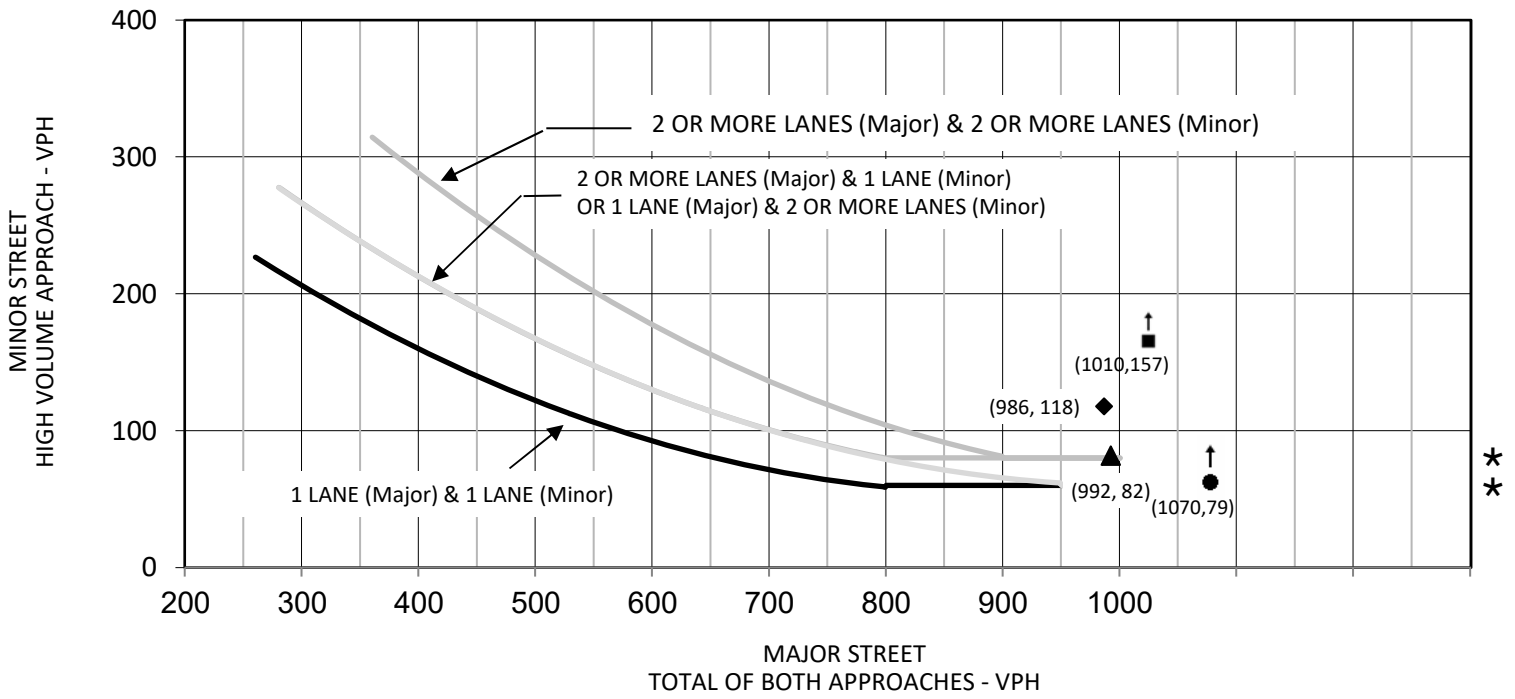
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Armstrong Avenue/Olive Avenue - Cumulative Year (2046) Conditions

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME (70% fACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 80 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 60 VPH applies as the lower threshold volume for a minor street approaching with one lane.

FIGURE 8-21

LSA

- ● Highest Hour Volumes (18:00-19:00)
- ■ Second Highest Hourly Volumes (9:00-10:00)
- ▲ Third Highest Hourly Volumes (19:00-20:00)
- ◆ Fourth Highest Hourly Volumes (17:00-18:00)

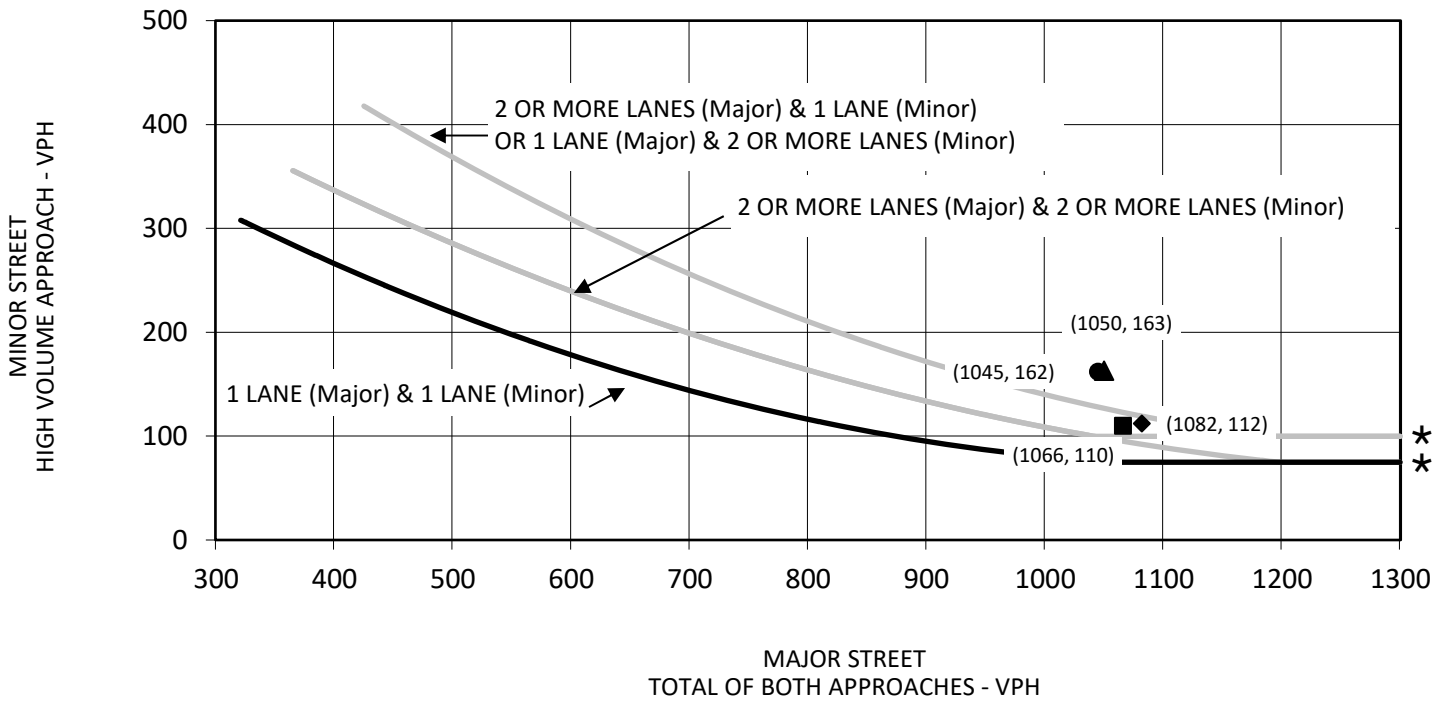
Tract Map 6360 Project
Traffic Impact Study

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-2

Warrant 2: 4 Hour -Temperance Avenue/McKinley Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-22

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

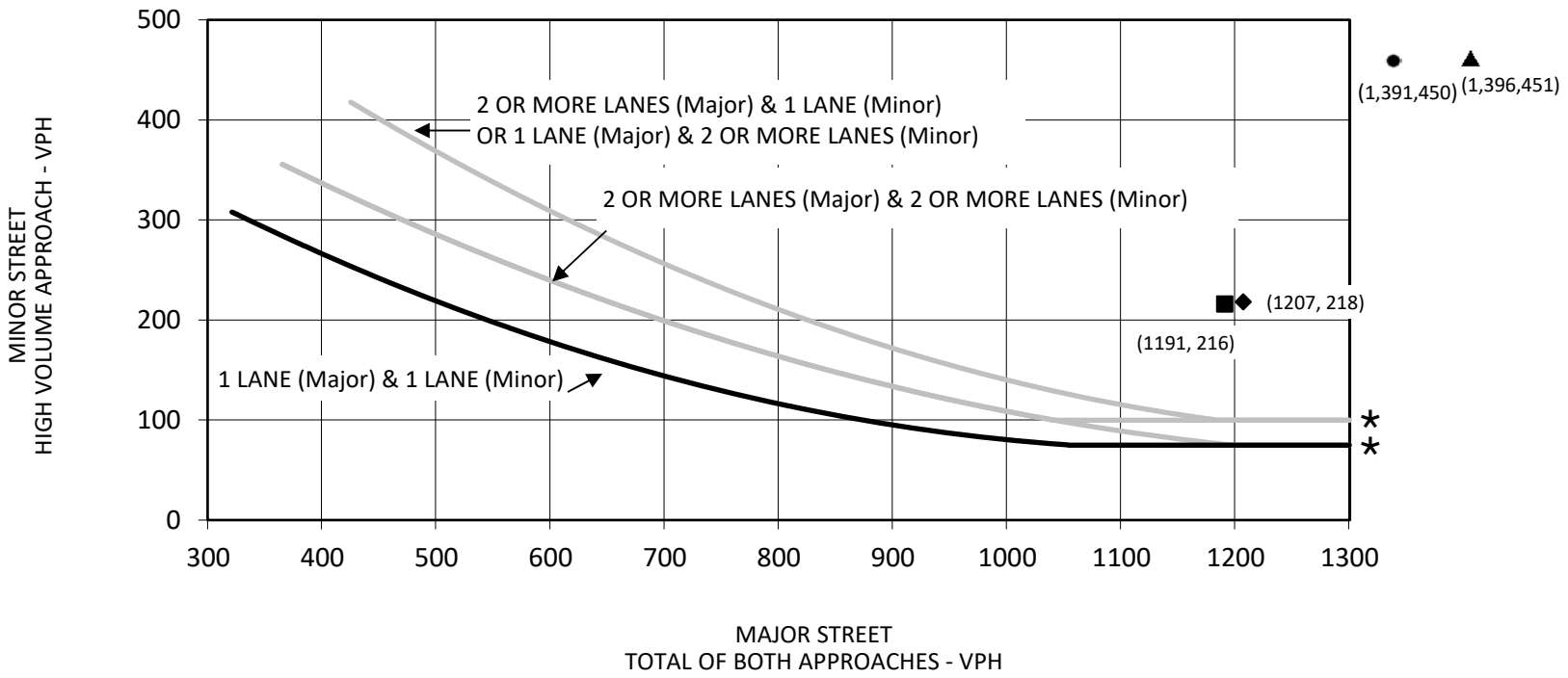
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Temperance Avenue/McKinley Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-23

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

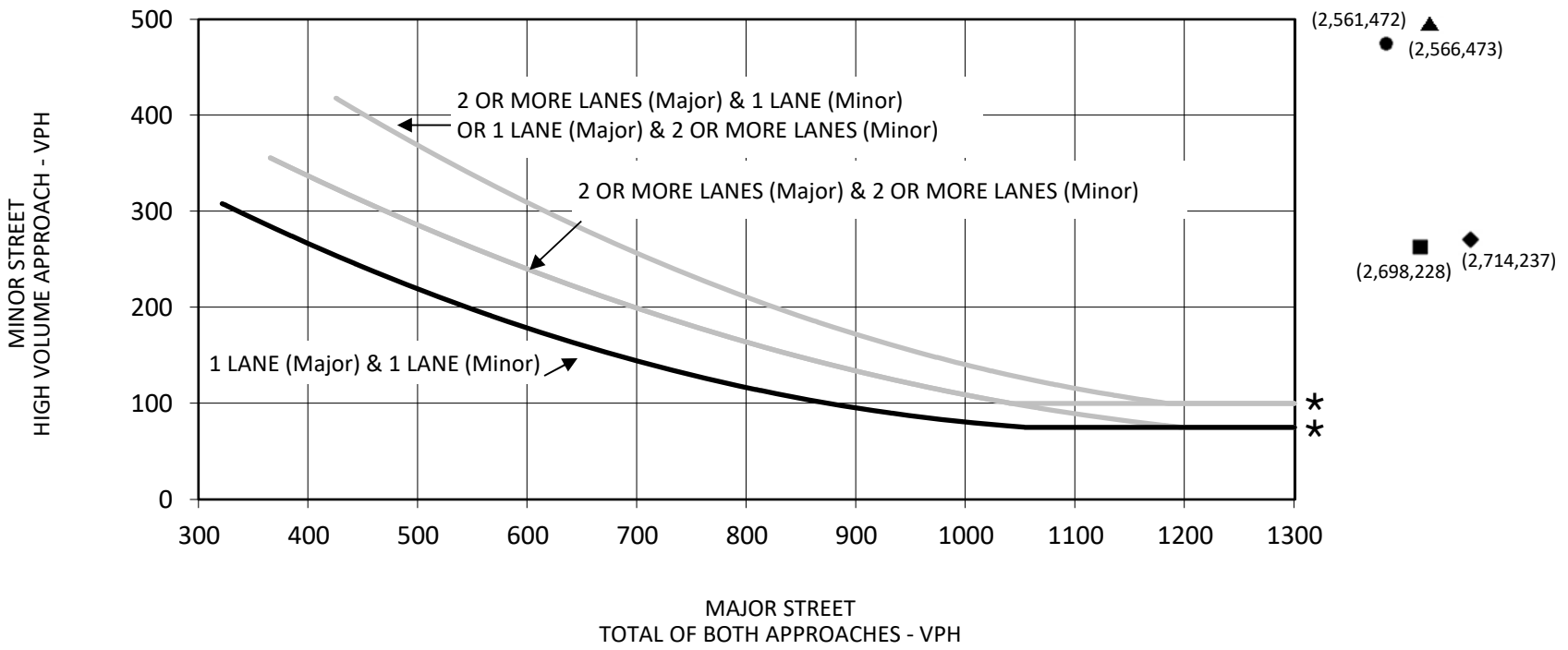
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Temperance Avenue/McKinley Avenue - Near Term Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-24

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

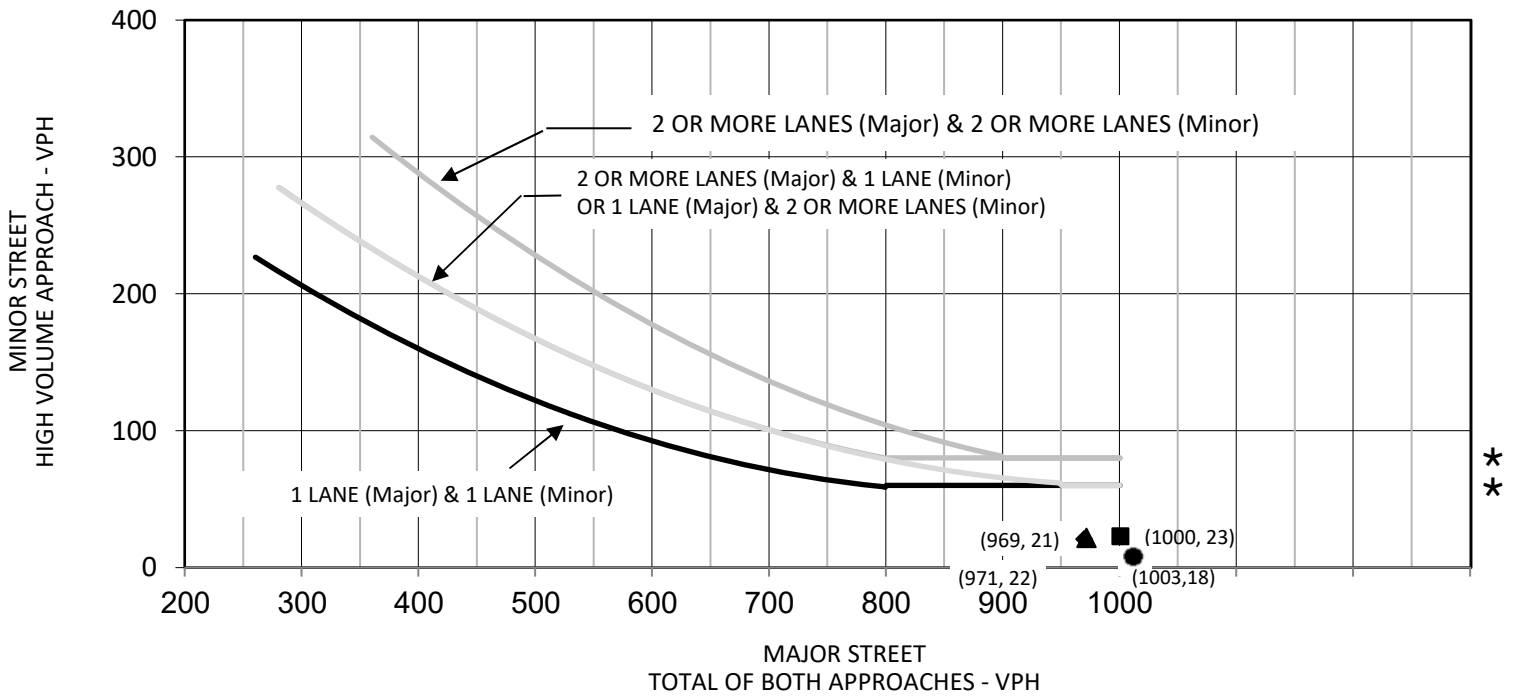
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Temperance Avenue/McKinley Avenue - Cumulative Year (2046) Conditions

WARRANT 2, FOUR-HOUR VEHICULAR VOLUME (70% fACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 80 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 60 VPH applies as the lower threshold volume for a minor street approaching with one lane.

FIGURE 8-25

LSA

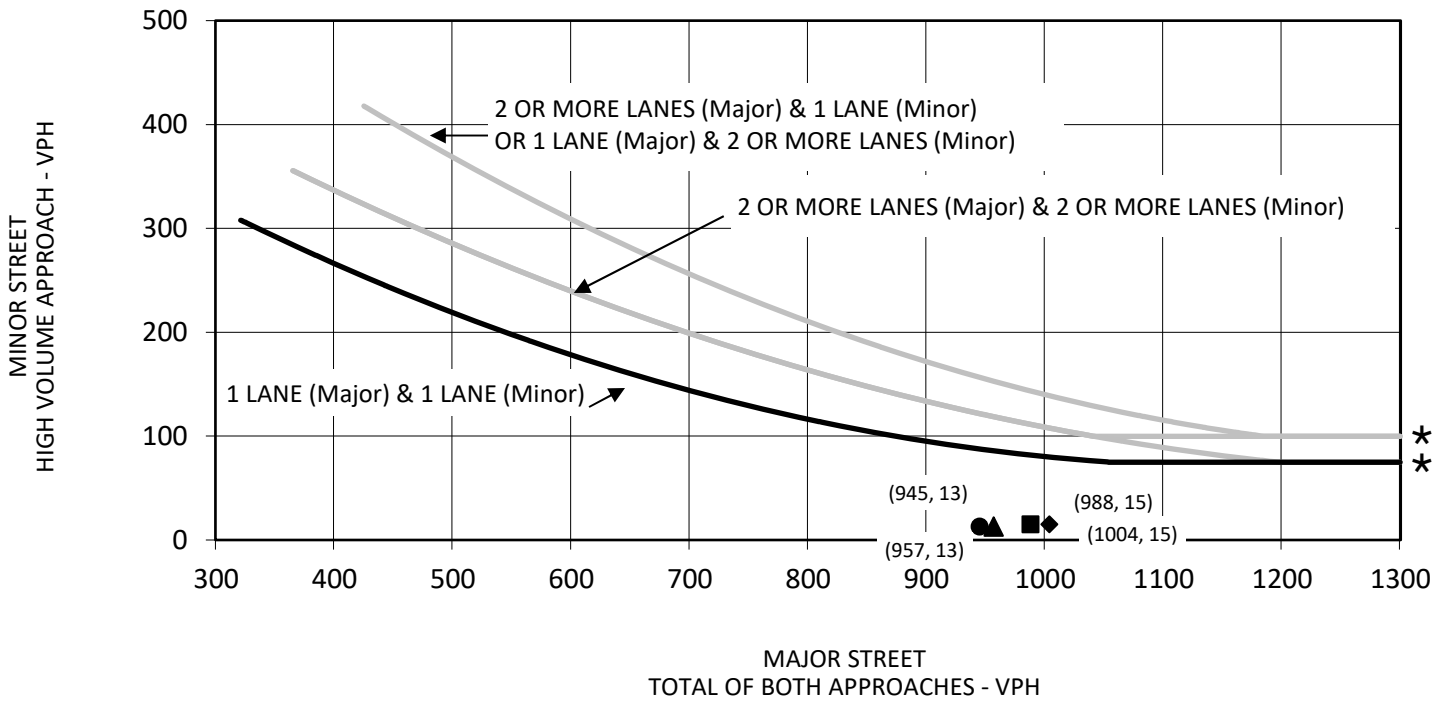
- ● Highest Hour Volumes (9:00-10:00)
- ■ Second Highest Hourly Volumes (18:00-19:00)
- ▲ Third Highest Hourly Volumes (17:00-18:00)
- ◆ Fourth Highest Hourly Volumes (19:00-20:00)

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-2

Warrant 2: 4 Hour - Temperance Avenue/Floradora Avenue - Existing Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-26

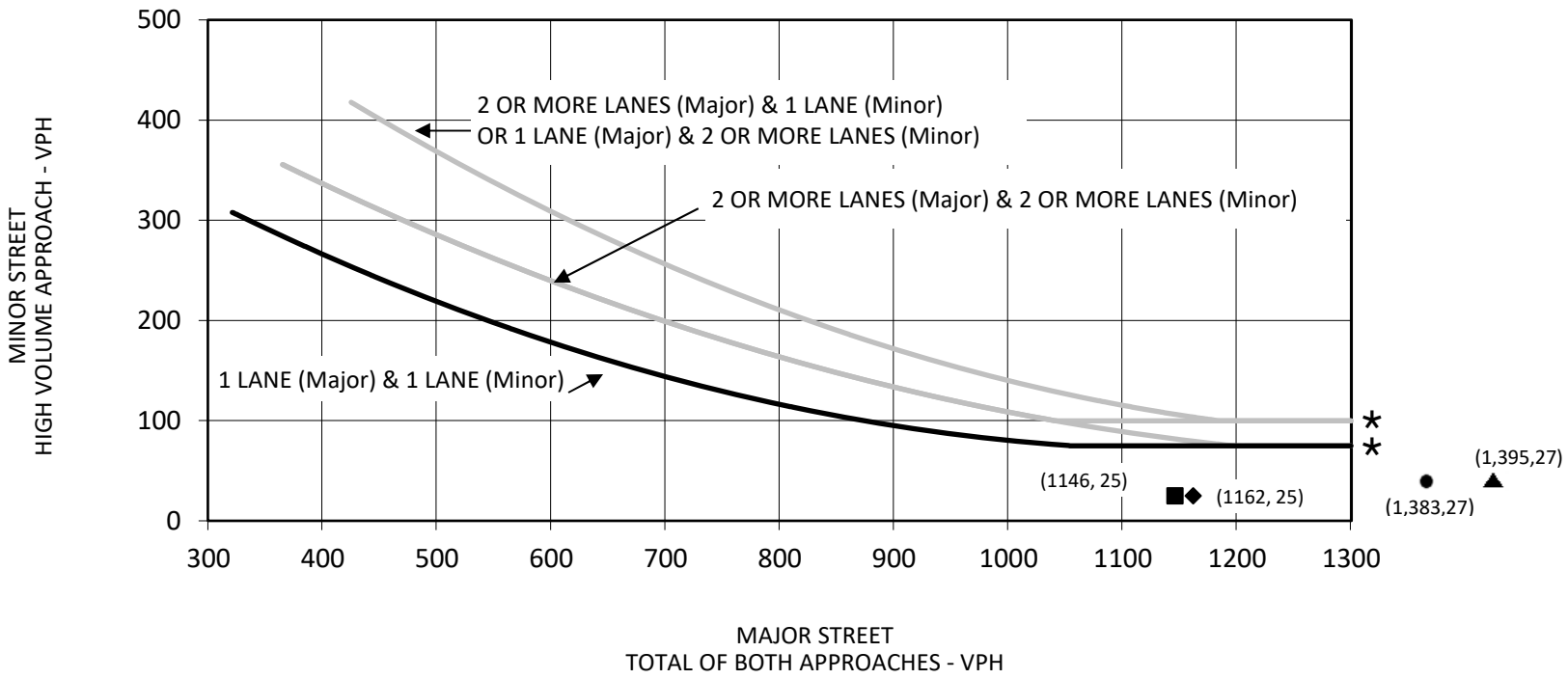
● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-27

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

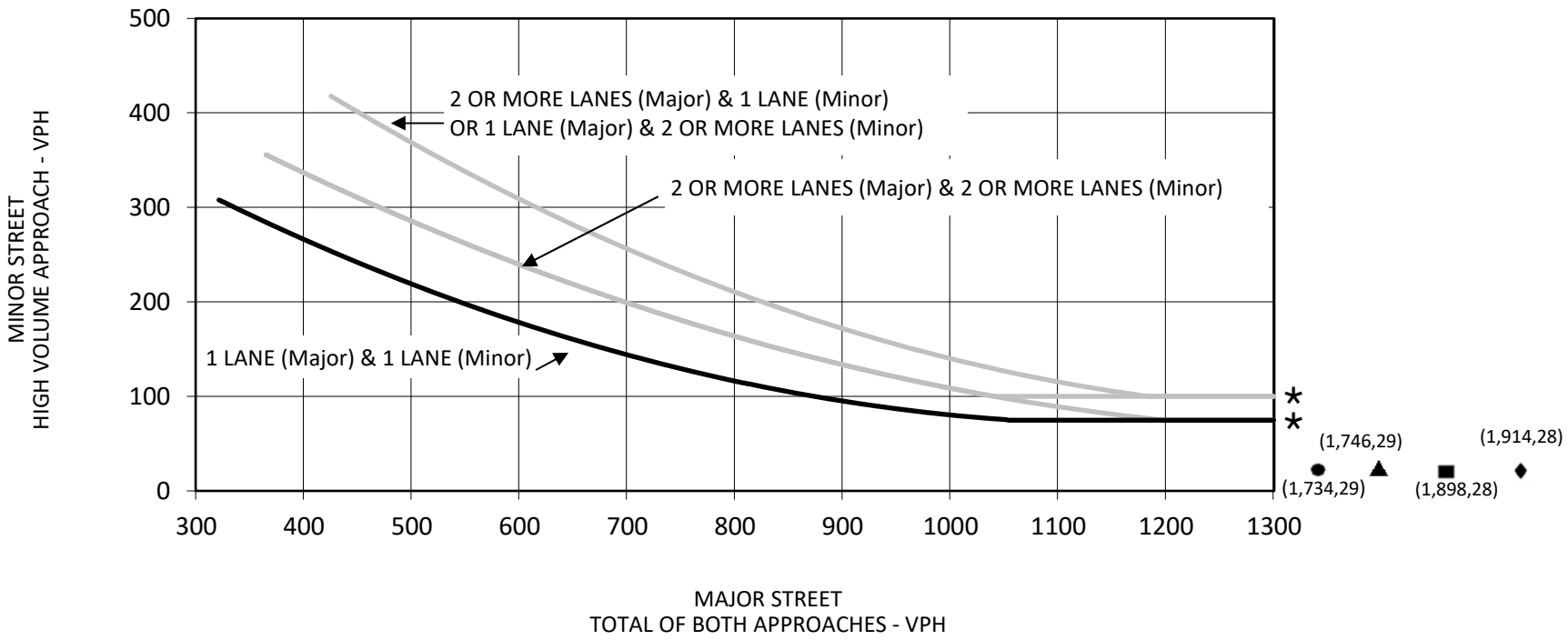
Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Temperance Avenue/Floradora Avenue - Near Term Conditions

WARRANT 3, PEAK HOUR (70% FACTOR)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 mph ON MAJOR STREET)



* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 8-28

● Without Project AM Peak Hour ▲ Plus Project AM Peak Hour

■ Without Project PM Peak Hour ◆ Plus Project PM Peak Hour

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-4

Tract Map 6360 Project

Traffic Impact Study

Warrant 3: Peak Hour - Temperance Avenue/Floradora Avenue - Cumulative Year (2046) Conditions

LSA

Table 8-A - Eight-Hour Warrant Analysis - Condition A (70%)

Fowler Avenue/Floradora Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 350 Veh/hr)	Higher Minor Approaches (≥ 105 Veh/hr)	Warrant Met
2 Fowler Avenue/Floradora Avenue		**Minor Approach**	**Major Approach**				
0:00 - 1:00		1	73	66	139	1	No
1:00 - 2:00		1	48	33	81	1	No
2:00 - 3:00		3	31	38	69	3	No
3:00 - 4:00		2	28	26	54	2	No
4:00 - 5:00		1	37	41	78	1	No
5:00 - 6:00		3	75	133	208	3	No
6:00 - 7:00		5	186	253	439	5	No
7:00 - 8:00		13	331	493	824	13	No
8:00 - 9:00		41	407	552	959	41	No
9:00 - 10:00		37	424	491	915	37	No
10:00 - 11:00		19	380	418	798	19	No
11:00 - 12:00		9	366	454	820	9	No
12:00 - 13:00		12	414	403	817	12	No
13:00 - 14:00		21	447	477	924	21	No
14:00 - 15:00		22	499	472	971	22	No
15:00 - 16:00		32	489	486	975	32	No
16:00 - 17:00		21	487	489	976	21	No
17:00 - 18:00		45	589	493	1,082	45	No
18:00 - 19:00		33	541	497	1,038	33	No
19:00 - 20:00		14	447	411	858	14	No
20:00 - 21:00		7	391	300	691	7	No
21:00 - 22:00		3	274	238	512	3	No
22:00 -23:00		3	198	175	373	3	No
23:00 - 24:00		2	124	103	227	2	No
Total		350	7,286	7,542			

Notes:

Meets Approach Volume Criteria

LSA

Table 8-B - Eight-Hour Warrant Analysis - Condition B (80%)

Fowler Avenue/Floradora Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 600 Veh/hr)	Higher Minor Approaches (≥ 60 Veh/hr)	Warrant Met
2 Fowler Avenue/Floradora Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	1	73	66	139	1	No	
1:00 - 2:00	1	48	33	81	1	No	
2:00 - 3:00	3	31	38	69	3	No	
3:00 - 4:00	2	28	26	54	2	No	
4:00 - 5:00	1	37	41	78	1	No	
5:00 - 6:00	3	75	133	208	3	No	
6:00 - 7:00	5	186	253	439	5	No	
7:00 - 8:00	13	331	493	824	13	No	
8:00 - 9:00	41	407	552	959	41	No	
9:00 - 10:00	37	424	491	915	37	No	
10:00 - 11:00	19	380	418	798	19	No	
11:00 - 12:00	9	366	454	820	9	No	
12:00 - 13:00	12	414	403	817	12	No	
13:00 - 14:00	21	447	477	924	21	No	
14:00 - 15:00	22	499	472	971	22	No	
15:00 - 16:00	32	489	486	975	32	No	
16:00 - 17:00	21	487	489	976	21	No	
17:00 - 18:00	45	589	493	1,082	45	No	
18:00 - 19:00	33	541	497	1,038	33	No	
19:00 - 20:00	14	447	411	858	14	No	
20:00 - 21:00	7	391	300	691	7	No	
21:00 - 22:00	3	274	238	512	3	No	
22:00 -23:00	3	198	175	373	3	No	
23:00 - 24:00	2	124	103	227	2	No	
Total	350	7,286	7,542				

Notes:

Meets Approach Volume Criteria

LSA

Table 8-C - Eight-Hour Warrant Analysis - Condition A (70%)

Fowler Avenue/Olive Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 350 Veh/hr)	Higher Minor Approaches (≥ 105 Veh/hr)	Warrant Met
3 Fowler Avenue/Olive Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	97	12	94	65	159	97	No
1:00 - 2:00	56	10	58	32	90	56	No
2:00 - 3:00	33	3	33	37	70	33	No
3:00 - 4:00	32	13	33	24	57	32	No
4:00 - 5:00	45	15	43	40	83	45	No
5:00 - 6:00	78	41	76	132	208	78	No
6:00 - 7:00	224	112	223	249	472	224	**Yes**
7:00 - 8:00	443	298	434	475	909	443	**Yes**
8:00 - 9:00	425	546	447	480	927	546	**Yes**
9:00 - 10:00	459	282	436	464	900	459	**Yes**
10:00 - 11:00	431	164	427	411	838	431	**Yes**
11:00 - 12:00	433	143	427	448	875	433	**Yes**
12:00 - 13:00	452	174	455	398	853	452	**Yes**
13:00 - 14:00	457	171	484	470	954	457	**Yes**
14:00 - 15:00	514	181	526	462	988	514	**Yes**
15:00 - 16:00	504	203	524	470	994	504	**Yes**
16:00 - 17:00	433	310	432	418	850	433	**Yes**
17:00 - 18:00	483	234	499	434	933	483	**Yes**
18:00 - 19:00	489	221	499	448	947	489	**Yes**
19:00 - 20:00	508	121	486	403	889	508	**Yes**
20:00 - 21:00	479	94	480	296	776	479	**Yes**
21:00 - 22:00	348	56	352	237	589	348	**Yes**
22:00 -23:00	217	50	217	171	388	217	**Yes**
23:00 - 24:00	146	27	142	102	244	146	No
Total	7,786	3,481	7,827	7,166			

Notes:

Meets Approach Volume Criteria

LSA

Table 8-D - Eight-Hour Warrant Analysis - Condition A (70%)

Armstrong Avenue/Floradora Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 350 Veh/hr)	Higher Minor Approaches (≥ 105 Veh/hr)	Warrant Met
8 Armstrong Avenue/Floradora Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	1	0	10	15	25	1	No
1:00 - 2:00	1	1	0	5	5	1	No
2:00 - 3:00	2	0	5	5	10	2	No
3:00 - 4:00	2	0	0	0	0	2	No
4:00 - 5:00	1	0	0	0	0	1	No
5:00 - 6:00	1	0	0	5	5	1	No
6:00 - 7:00	7	0	25	30	55	7	No
7:00 - 8:00	23	24	198	242	440	24	No
8:00 - 9:00	73	155	277	1212	1,489	155	**Yes**
9:00 - 10:00	28	33	198	247	445	33	No
10:00 - 11:00	14	4	99	84	183	14	No
11:00 - 12:00	15	4	89	74	163	15	No
12:00 - 13:00	10	8	114	94	208	10	No
13:00 - 14:00	13	18	104	99	203	18	No
14:00 - 15:00	14	17	109	119	228	17	No
15:00 - 16:00	23	16	183	183	366	23	No
16:00 - 17:00	75	39	218	564	782	75	No
17:00 - 18:00	62	27	341	455	796	62	No
18:00 - 19:00	54	10	277	337	614	54	No
19:00 - 20:00	10	6	119	59	178	10	No
20:00 - 21:00	5	1	79	49	128	5	No
21:00 - 22:00	1	1	54	25	79	1	No
22:00 -23:00	6	4	49	35	84	6	No
23:00 - 24:00	2	3	15	6	21	3	No
Total	443	371	2,563	3,944			

Notes:

Meets Approach Volume Criteria

LSA

Table 8-E - Eight-Hour Warrant Analysis - Condition B (80%)

Armstrong Avenue/Floradora Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 600 Veh/hr)	Higher Minor Approaches (≥ 60 Veh/hr)	Warrant Met
8 Armstrong Avenue/Floradora Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	1	0	10	15	25	1	No
1:00 - 2:00	1	1	0	5	5	1	No
2:00 - 3:00	2	0	5	5	10	2	No
3:00 - 4:00	2	0	0	0	0	2	No
4:00 - 5:00	1	0	0	0	0	1	No
5:00 - 6:00	1	0	0	5	5	1	No
6:00 - 7:00	7	0	25	30	55	7	No
7:00 - 8:00	23	24	198	242	440	24	No
8:00 - 9:00	73	155	277	1212	1,489	155	**Yes**
9:00 - 10:00	28	33	198	247	445	33	No
10:00 - 11:00	14	4	99	84	183	14	No
11:00 - 12:00	15	4	89	74	163	15	No
12:00 - 13:00	10	8	114	94	208	10	No
13:00 - 14:00	13	18	104	99	203	18	No
14:00 - 15:00	14	17	109	119	228	17	No
15:00 - 16:00	23	16	183	183	366	23	No
16:00 - 17:00	75	39	218	564	782	75	**Yes**
17:00 - 18:00	62	27	341	455	796	62	**Yes**
18:00 - 19:00	54	10	277	337	614	54	No
19:00 - 20:00	10	6	119	59	178	10	No
20:00 - 21:00	5	1	79	49	128	5	No
21:00 - 22:00	1	1	54	25	79	1	No
22:00 -23:00	6	4	49	35	84	6	No
23:00 - 24:00	2	3	15	6	21	3	No
Total	443	371	2,563	3,944			

Notes:

Meets Approach Volume Criteria

LSA

Table 8-F - Eight-Hour Warrant Analysis - Condition A (70%)

Temperance Avenue/McKinley Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 350 Veh/hr)	Higher Minor Approaches (≥ 105 Veh/hr)	Warrant Met
10 Temperance Avenue/McKinley Avenue		**Minor Approach**	**Major Approach**				
0:00 - 1:00		8	46	39	85	8	No
1:00 - 2:00		3	32	16	48	3	No
2:00 - 3:00		3	14	10	24	3	No
3:00 - 4:00		3	14	17	31	3	No
4:00 - 5:00		9	23	36	59	9	No
5:00 - 6:00		19	16	66	82	19	No
6:00 - 7:00		34	52	187	239	34	No
7:00 - 8:00		90	247	418	665	90	No
8:00 - 9:00		157	388	622	1,010	157	**Yes**
9:00 - 10:00		78	304	427	731	78	No
10:00 - 11:00		60	232	268	500	60	No
11:00 - 12:00		69	243	275	518	69	No
12:00 - 13:00		72	281	298	579	72	No
13:00 - 14:00		55	320	321	641	55	No
14:00 - 15:00		63	297	337	634	63	No
15:00 - 16:00		83	429	429	858	83	No
16:00 - 17:00		118	510	476	986	118	**Yes**
17:00 - 18:00		79	582	488	1,070	79	No
18:00 - 19:00		82	547	445	992	82	No
19:00 - 20:00		55	364	281	645	55	No
20:00 - 21:00		30	233	178	411	30	No
21:00 - 22:00		23	217	167	384	23	No
22:00 -23:00		16	146	115	261	16	No
23:00 - 24:00		15	87	67	154	15	No
Total	0	1,224	5,624	5,983			

Notes:

Meets Approach Volume Criteria

LSA

Table 8-G - Eight-Hour Warrant Analysis - Condition B (80%)

Temperance Avenue/McKinley Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 600 Veh/hr)	Higher Minor Approaches (≥ 60 Veh/hr)	Warrant Met
10 Temperance Avenue/McKinley Avenue							
	Minor Approach		**Major Approach**				
0:00 - 1:00		8	46	39	85	8	No
1:00 - 2:00		3	32	16	48	3	No
2:00 - 3:00		3	14	10	24	3	No
3:00 - 4:00		3	14	17	31	3	No
4:00 - 5:00		9	23	36	59	9	No
5:00 - 6:00		19	16	66	82	19	No
6:00 - 7:00		34	52	187	239	34	No
7:00 - 8:00		90	247	418	665	90	**Yes**
8:00 - 9:00		157	388	622	1,010	157	**Yes**
9:00 - 10:00		78	304	427	731	78	**Yes**
10:00 - 11:00		60	232	268	500	60	No
11:00 - 12:00		69	243	275	518	69	No
12:00 - 13:00		72	281	298	579	72	No
13:00 - 14:00		55	320	321	641	55	No
14:00 - 15:00		63	297	337	634	63	**Yes**
15:00 - 16:00		83	429	429	858	83	**Yes**
16:00 - 17:00		118	510	476	986	118	**Yes**
17:00 - 18:00		79	582	488	1,070	79	**Yes**
18:00 - 19:00		82	547	445	992	82	**Yes**
19:00 - 20:00		55	364	281	645	55	No
20:00 - 21:00		30	233	178	411	30	No
21:00 - 22:00		23	217	167	384	23	No
22:00 -23:00		16	146	115	261	16	No
23:00 - 24:00		15	87	67	154	15	No
Total	0	1,224	5,624	5,983			

Notes:

Meets Approach Volume Criteria

LSA

Table 8-H - Eight-Hour Warrant Analysis - Condition A (70%)

Temperance Avenue/Floradora Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 350 Veh/hr)	Higher Minor Approaches (≥ 105 Veh/hr)	Warrant Met
11 Temperance Avenue/Floradora Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	0	0	50	40	90	0	No
1:00 - 2:00	0	0	31	18	49	0	No
2:00 - 3:00	0	0	16	13	29	0	No
3:00 - 4:00	0	0	16	20	36	0	No
4:00 - 5:00	0	0	21	44	65	0	No
5:00 - 6:00	0	0	16	80	96	0	No
6:00 - 7:00	1	1	42	205	247	1	No
7:00 - 8:00	6	0	226	450	676	6	No
8:00 - 9:00	18	1	379	624	1,003	18	No
9:00 - 10:00	14	1	319	426	745	14	No
10:00 - 11:00	2	0	221	281	502	2	No
11:00 - 12:00	4	0	243	286	529	4	No
12:00 - 13:00	9	0	266	301	567	9	No
13:00 - 14:00	7	1	301	313	614	7	No
14:00 - 15:00	11	0	305	328	633	11	No
15:00 - 16:00	8	0	400	385	785	8	No
16:00 - 17:00	22	1	500	471	971	22	No
17:00 - 18:00	23	2	563	437	1,000	23	No
18:00 - 19:00	21	0	541	428	969	21	No
19:00 - 20:00	7	0	385	271	656	7	No
20:00 - 21:00	2	1	246	174	420	2	No
21:00 - 22:00	4	1	217	153	370	4	No
22:00 -23:00	4	0	147	113	260	4	No
23:00 - 24:00	0	0	90	58	148	0	No
Total	163	9	5,541	5,919			

Notes:

Meets Approach Volume Criteria

LSA

Table 8- I - Eight-Hour Warrant Analysis - Condition B (80%)

Temperance Avenue/Floradora Avenue

Time	24-Hour Counts (Veh/hr) EB	WB	NB	SB	Total Major Approaches (≥ 600 Veh/hr)	Higher Minor Approaches (≥ 60 Veh/hr)	Warrant Met
11 Temperance Avenue/Floradora Avenue	**Minor Approach**		**Major Approach**				
0:00 - 1:00	0	0	50	40	90	0	No
1:00 - 2:00	0	0	31	18	49	0	No
2:00 - 3:00	0	0	16	13	29	0	No
3:00 - 4:00	0	0	16	20	36	0	No
4:00 - 5:00	0	0	21	44	65	0	No
5:00 - 6:00	0	0	16	80	96	0	No
6:00 - 7:00	1	1	42	205	247	1	No
7:00 - 8:00	6	0	226	450	676	6	No
8:00 - 9:00	18	1	379	624	1,003	18	No
9:00 - 10:00	14	1	319	426	745	14	No
10:00 - 11:00	2	0	221	281	502	2	No
11:00 - 12:00	4	0	243	286	529	4	No
12:00 - 13:00	9	0	266	301	567	9	No
13:00 - 14:00	7	1	301	313	614	7	No
14:00 - 15:00	11	0	305	328	633	11	No
15:00 - 16:00	8	0	400	385	785	8	No
16:00 - 17:00	22	1	500	471	971	22	No
17:00 - 18:00	23	2	563	437	1,000	23	No
18:00 - 19:00	21	0	541	428	969	21	No
19:00 - 20:00	7	0	385	271	656	7	No
20:00 - 21:00	2	1	246	174	420	2	No
21:00 - 22:00	4	1	217	153	370	4	No
22:00 -23:00	4	0	147	113	260	4	No
23:00 - 24:00	0	0	90	58	148	0	No
Total	163	9	5,541	5,919			

Notes:

Meets Approach Volume Criteria

9.0 CIRCULATION IMPROVEMENTS AND FUNDING SOURCES

9.1 RECOMMENDED IMPROVEMENTS

Improvements have been recommended at study intersections and roadway segments where an operational deficiency has been identified based on the results of the LOS analysis. Table 9-A summarizes the recommended improvements for study intersections for all analysis scenarios. Tables 9-B, 9-C, and 9-D summarize the post-improvement intersection LOS under existing, near-term, and cumulative year conditions, respectively. Detailed LOS worksheets are included in Appendix E. Figures 9-1, 9-2, and 9-3 illustrate the with recommended improvements intersection geometrics and traffic control under existing, near-term, and cumulative year conditions plus project, respectively.

It should be noted in many of the unsignalized intersections, installing a signal have been proposed to eliminate the existing or forecasted operational deficiency. However, a signal was only recommended as an improvement if it meets any of the signal warrants conducted for unsignalized intersections as included in Chapter 8.0 of this report.

Table 9-E summarizes the recommended improvements for roadway segments for all analysis scenarios. Tables 9-F, 9-G, and 9-H summarize the post-improvement roadway segment LOS under existing, near-term and cumulative year plus project conditions, respectively.

9.2 FUNDING SOURCES AND MECHANISMS

Where there is a funding mechanism (fee program) for the recommended improvements, payment into the fee program would be considered sufficient project obligation to alleviate project-related operational deficiencies. At study locations where the addition of project traffic creates an operational deficiency (existing with project conditions) and there is no funding mechanism in place, the project will be responsible for the implementation of the improvement. At locations where the project adds to or creates a forecast deficiency and there is no funding mechanism in place, the project is responsible for its fair-share payment.

9.2.1 Citywide Traffic Signal Mitigation Impact (TSMI) Program

The City of Fresno Traffic Signal Mitigation Impact (TSMI) fees are charged to all new developments throughout the City to mitigate the traffic operational deficiencies through the funding of traffic signal improvements to serve new developments. Based on the City of Fresno *City-Wide Traffic Signal Mitigation Impact Fee nexus Analysis for Proposed Fee Update*, dated June 2022, several of the proposed signals are included in the Traffic Signal Capital Improvements, where the entire funding is expected to be generated from the TSMI fees. Therefore, since these improvements are covered under the TSMI Fee program, the project will be paying into the fee program for these improvements.

9.2.2 Fresno COG FTIP

The underlying purpose of the Fresno Council of Governments (Fresno COG) Federal Transportation Improvement Program (FTIP) is the “incremental implementation (four years) of the long-range

[Regional Transportation Plan] (RTP) (24 years)." As such, it is a compilation of projects under the State Transportation Improvement program (STIP) and other programs within the Fresno County region. Projects listed include "all transportation-related projects requiring federal funding or other approval by the federal transportation agencies" and "are consistent with the Fresno COG's RTP and are part of the area's overall strategy for providing mobility, congestion relief and reduction of transportation-related air pollution." It should be noted that the timing for implementation of these projects may vary depending on the availability of funding. As such, the project would be contributing to the FTIP for implementation of these improvements.

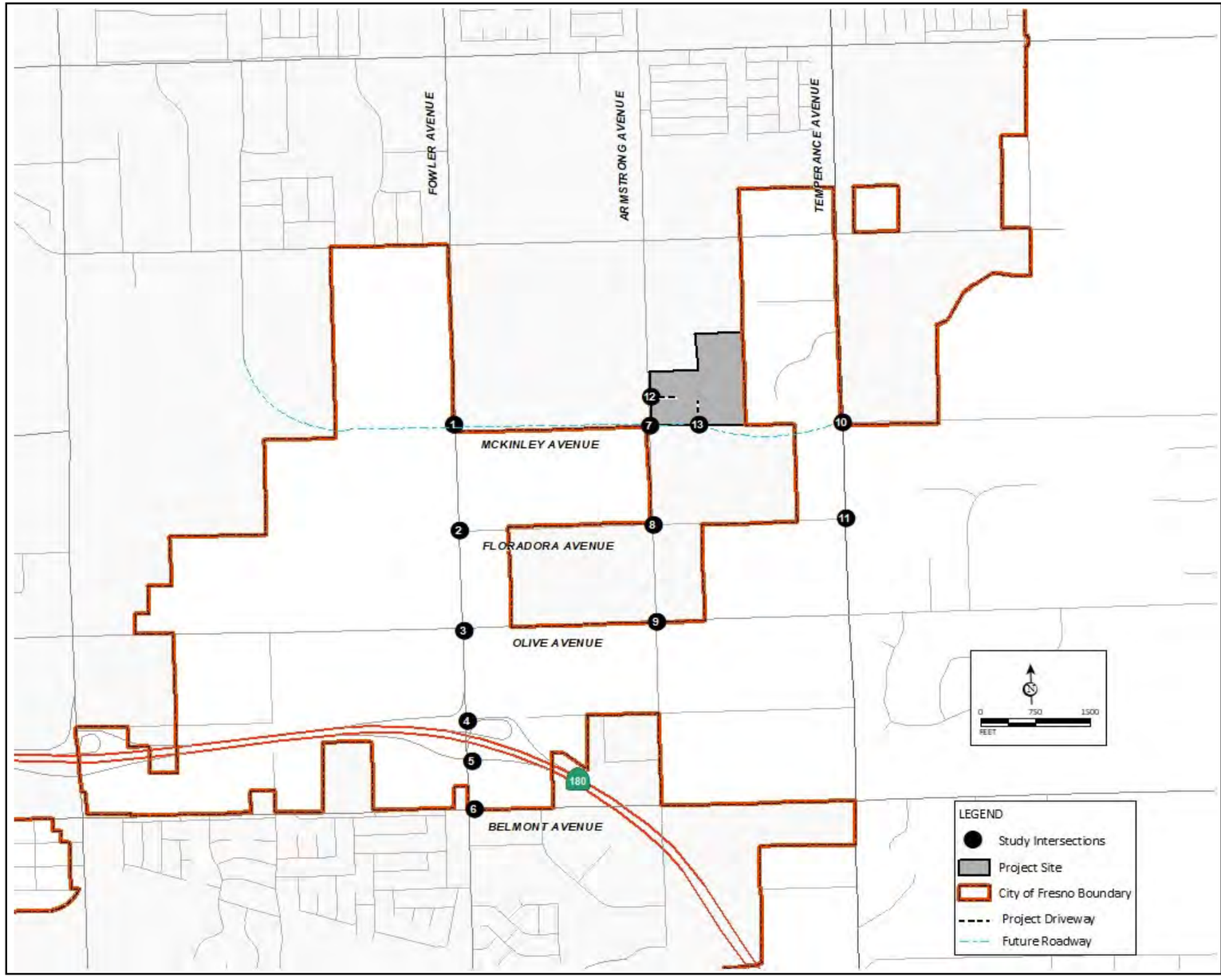
9.2.3 Project Fair Share

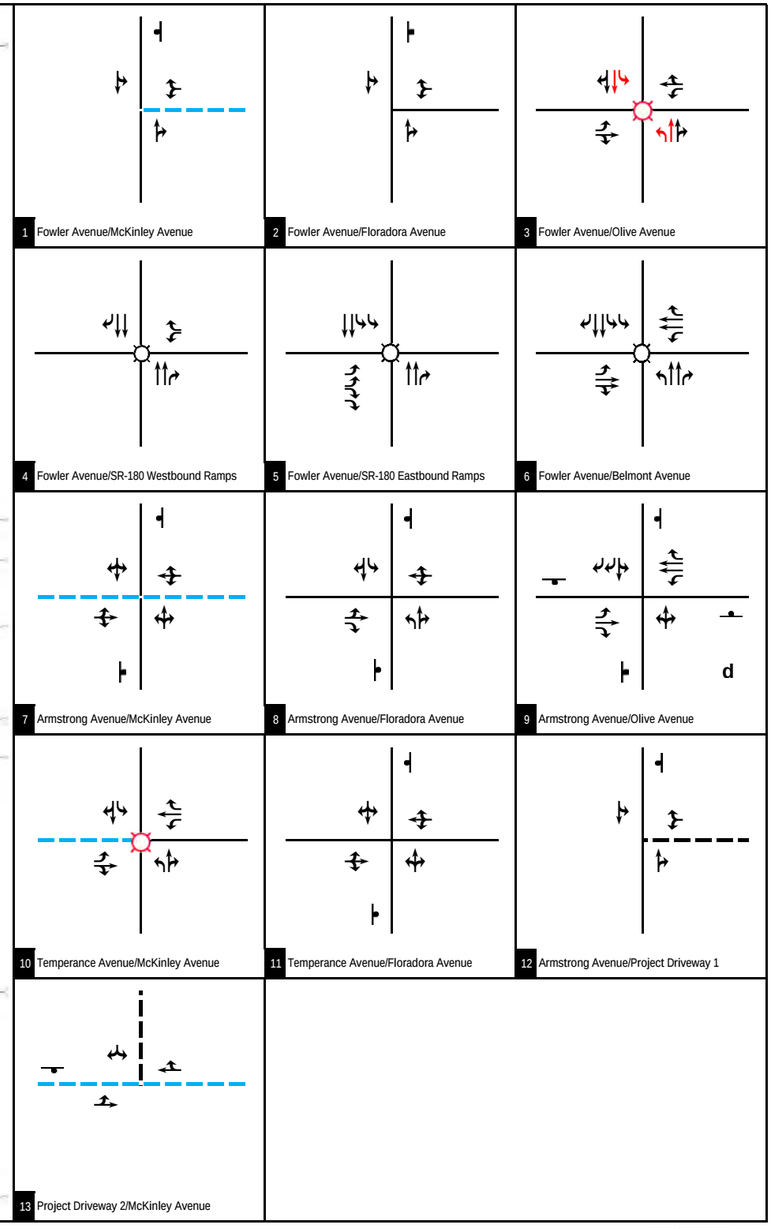
In the absence of a fee program where the project has an impact on the roadway network, the project will pay its respective fair share for the proposed improvements. The project's fair share has been calculated based on project traffic as a percentage of total growth of existing traffic plus project volumes.

Table 9-I summarizes the recommended improvement for the deficient intersections, funding mechanism, and its fair share percentage for the improvements to be covered under fair share. Table 9-J summarizes the corresponding improvements and funding mechanism for the roadway segments.

9.3 LIST OF CHAPTER 9.0 FIGURES AND TABLES

- Figure 9-1: Existing Plus Project with Improvements Study Intersection Geometrics and Traffic Control
- Figure 9-2: Near-Term Plus Project with Improvements Study Intersection Geometrics and Traffic Control
- Figure 9-3: Cumulative Year (2046) Plus Project with Improvements Study Intersection Geometrics and Traffic Control
- Table 9-A: Recommended Improvements for Intersections
- Table 9-B: Existing Plus Project with Recommended Improvements Intersection Levels of Service
- Table 9-C: Near-Term Plus Project with Recommended Improvements Intersection Levels of Service
- Table 9-D: Cumulative Year (2046) Plus Project with Recommended Improvements Intersection Levels of Service
- Table 9-E: Recommended Improvements for Roadway Segments
- Table 9-F: Existing Plus Project with Recommended Improvements Roadway Segments Levels of Service
- Table 9-G: Near-Term Plus Project with Recommended Improvements Roadway Segments Levels of Service
- Table 9-H: Cumulative Year (2046) Plus Project with Recommended Improvements Roadway Segments Levels of Service
- Table 9-I: Intersection Improvement Funding Mechanism and Fair Share
- Table 9-J: Roadway Segment Improvement Funding Mechanism and Fair Share





LSA

FIGURE 9-1

Legend

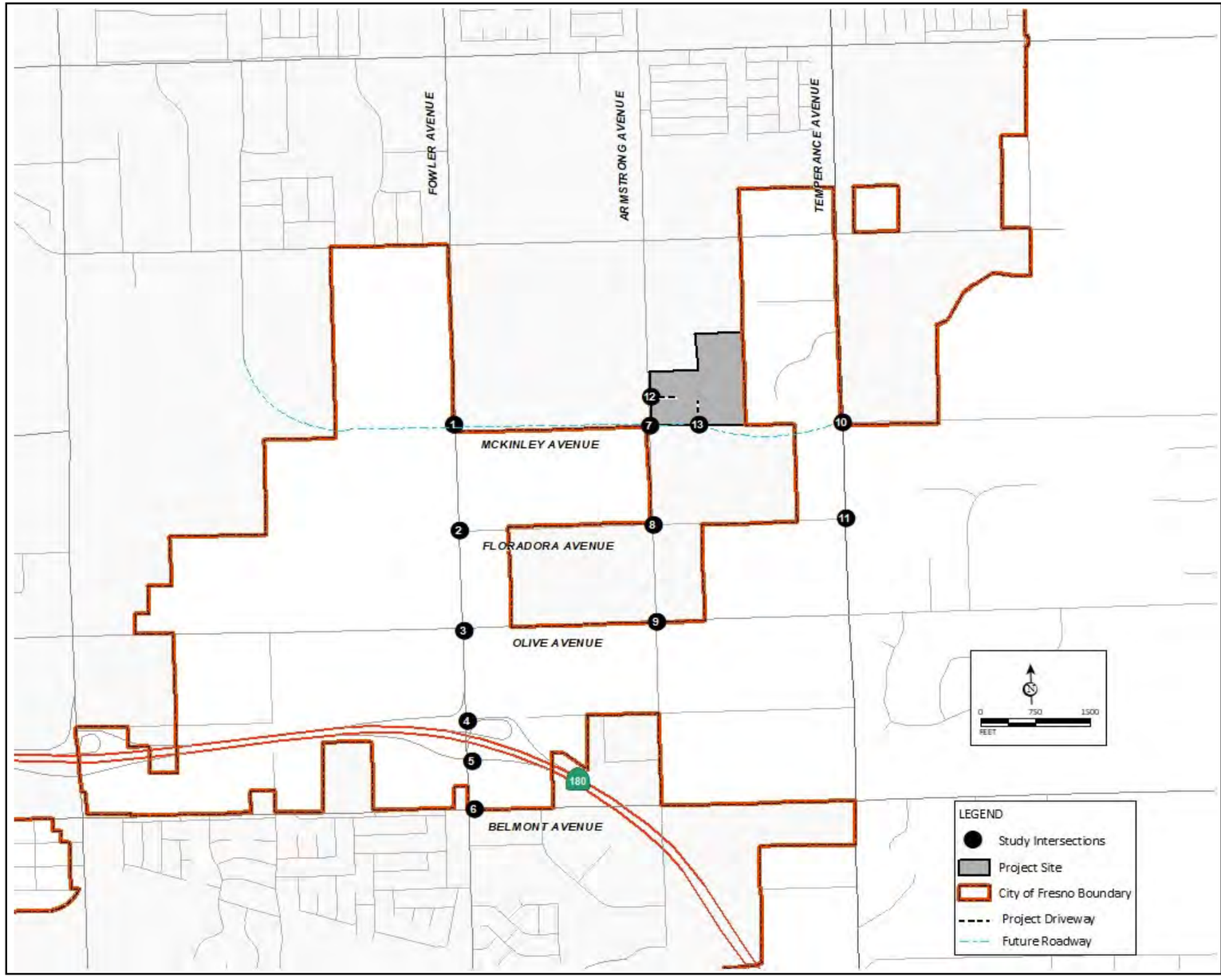
Signal — Project Driveway

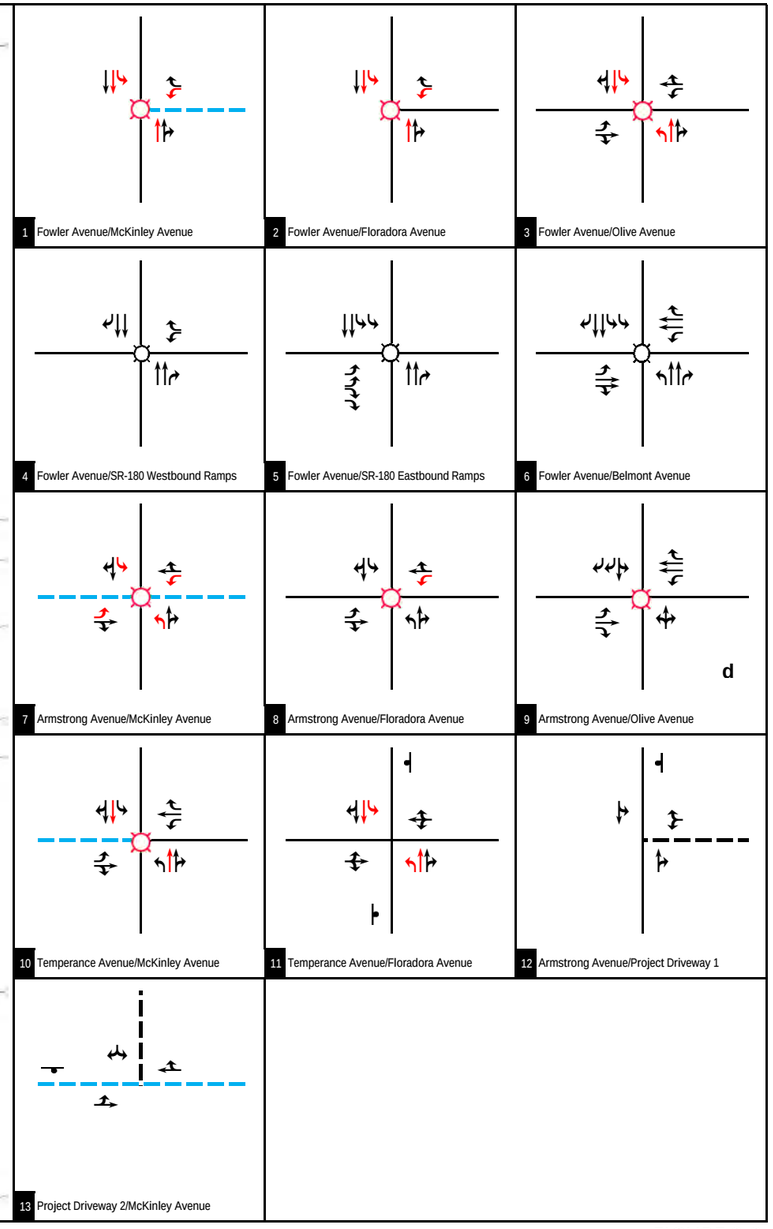
Stop Sign — Future Segment

d De-facto Right Turn — Recommended Improvements

Tract Map 6360 Project
Traffic Impact Study

Existing Plus Project with Improvements Study Intersection Geometrics and Traffic Control





LSA

FIGURE 9-2

Legend

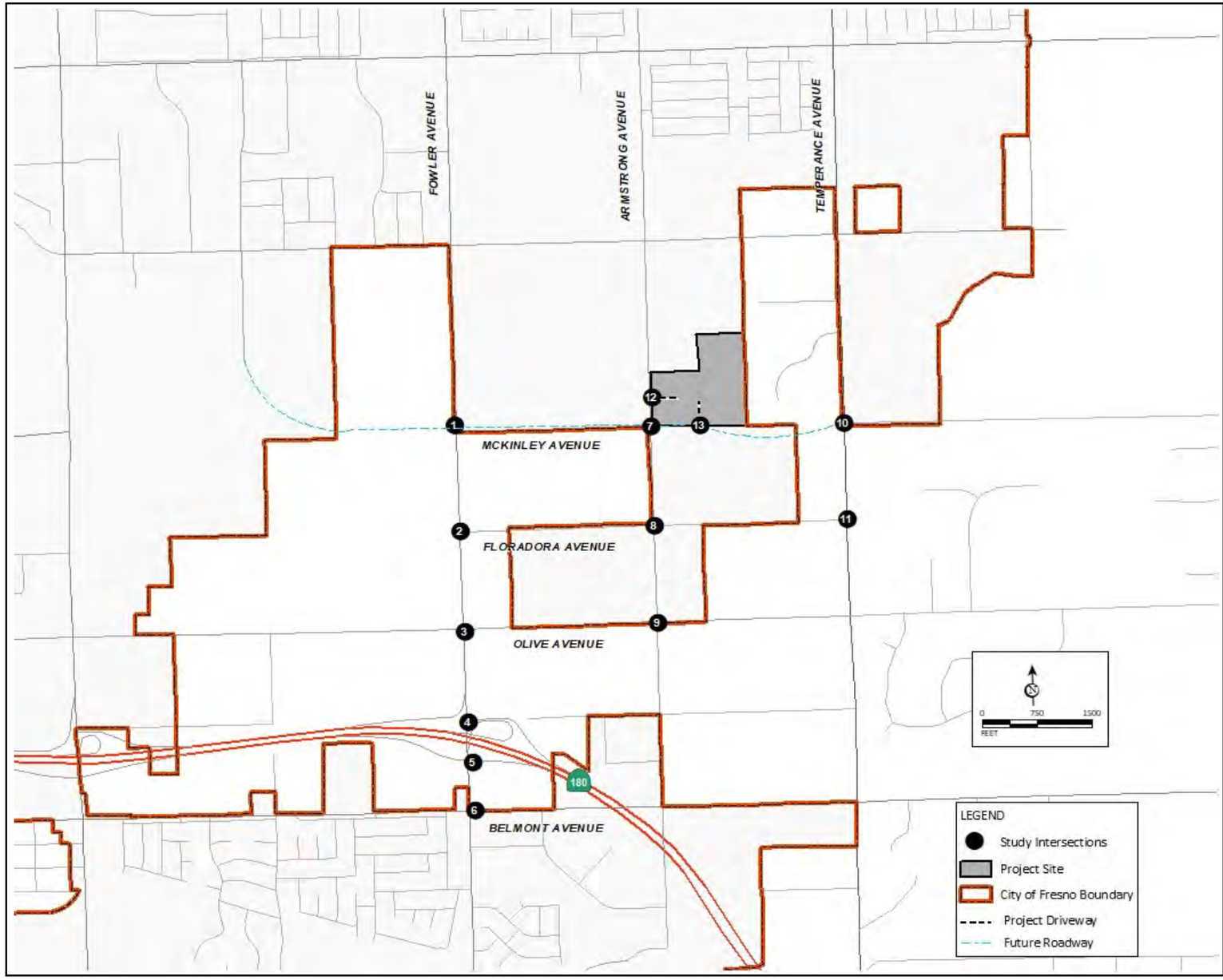
Signal — Project Driveway

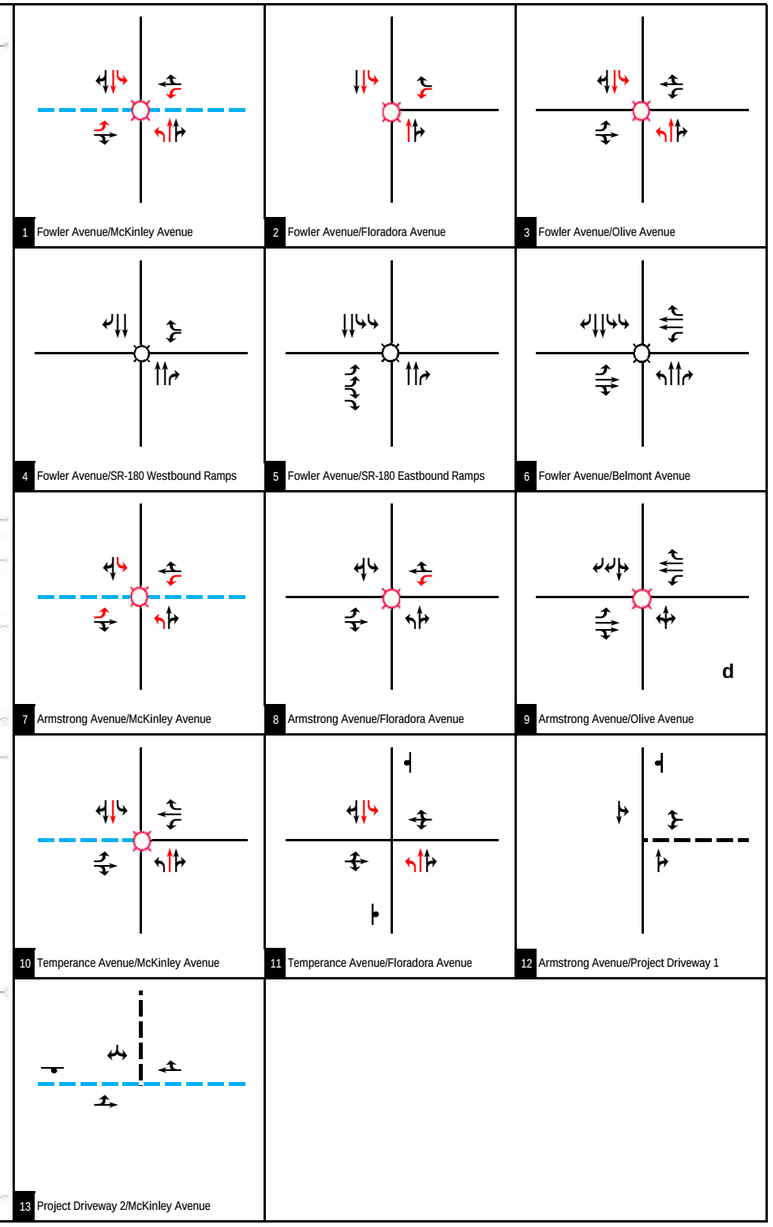
Stop Sign — Future Segment

d De-facto Right Turn — Recommended Improvements

Tract Map 6360 Project
Traffic Impact Study

Near-Term Plus Project with Improvements Study Intersection Geometrics and Traffic Control





LSA

FIGURE 9-3

Legend

Signal
Stop Sign
d De-facto Right Turn
Project Driveway
Future Segment
Recommended Improvements

Tract Map 6360 Project
Traffic Impact Study

Cumulative Year (2046) Plus Project with Improvements Study Intersection Geometrics and Traffic Control

LSA

Table 9-A - Recommended Improvements for Intersections

Intersection	Jurisdiction	Existing Plus Project Improvements[1]	Near-Term Plus Project Improvements	Cumulative Year (2046) Plus Project Improvements
1 . Fowler Avenue/McKinley Avenue	City of Fresno/Fresno County		Install traffic signal, add NBT lane, add SBL lane, add SBT lane, add WBL lane	Install traffic signal, add NBL lane, add NBT lane, add SBL lane, add SBT lane, add EBL lane, add WBL lane
2 . Fowler Avenue/Floradora Avenue	Fresno County		Install traffic signal, add NBT lane, add SBL lane, add SBT lane, add WBL lane	Install traffic signal, add NBT lane, add SBL lane, add SBT lane, add WBL lane
3 . Fowler Avenue/Olive Avenue	Fresno County	Install traffic signal, add NBL lane, add NBT lane, add SBL lane, add SBT lane	Install traffic signal, add NBL lane, add NBT lane, add SBL lane, add SBT lane	Install traffic signal, add NBL lane, add NBT lane, add SBL lane, add SBT lane
5 . Fowler Avenue/SR-180 Eastbound Ramps	Caltrans	Optimize signal timings	Optimize signal timings	Optimize signal timings
7 . Armstrong Avenue/McKinley Avenue	City of Fresno/Fresno County		Install traffic signal, add NBL lane, add SBL lane, add EBL lane, add WBL lane	Install traffic signal, add NBL lane, add SBL lane, add EBL lane, add WBL lane
8 . Armstrong Avenue/Floradora Avenue	City of Fresno/Fresno County		Install traffic signal, add WBL lane	Install traffic signal, add WBL lane
9 . Armstrong Avenue/Olive Avenue	City of Fresno/Fresno County		Install traffic signal	Install traffic signal, add EB receiving lane
10 . Temperance Avenue/McKinley Avenue	City of Fresno/Fresno County	Install traffic signal	Install traffic signal, add NBT lane, add SBT lane	Install traffic signal, add NBT lane, add SBT lane
11 . Temperance Avenue/Floradora Avenue	Fresno County		Add NBL lane, add NBT lane, add SBL lane, add SBT lane	Add NBL lane, add NBT lane, add SBL lane, add SBT lane

Notes:

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound

L = Left, T = Through, R = Right

[1] Recommended improvements for Existing Plus Project is for informational purposes only. As such, the project will be required to implement the recommended improvements starting with completion of the project.

LSA

Table 9-B - Existing Plus Project with Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Plus Project Without Improvements						Plus Project With Improvements				
				A.M. Peak Hour			P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour	
			Control	Delay (sec.)	LOS		Delay (sec.)	LOS	Control	Delay (sec.)	LOS	Delay (sec.)	LOS
3 . Fowler Avenue/Olive Avenue	Fresno County	D	AWSC	69.8	F	*	67.1	F *	Signal	30.1	C	25.9	C
5 . Fowler Avenue/SR-180 Eastbound Ramps	Caltrans	45 sec	Signal	20.4	C		69.5	E *	Signal	22.0	C	32.2	C
10 . Temperance Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	63.4	F	*	70.8	F *	TWSC	7.0	A	17.7	C

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

LSA

Table 9-C - Near-Term Plus Project with Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Plus Project Without Improvements						Plus Project With Improvements				
				A.M. Peak Hour			P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour	
			Control	Delay (sec.)	LOS		Delay (sec.)	LOS		Control	Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Fowler Avenue/McKinley Avenue	Fresno/Fresno County	D	OWSC	62.3	F	*	41.3	E	*	Signal	10.5	B	4.0	A
2 . Fowler Avenue/Floradora Avenue	Fresno County	D	OWSC	157.9	F	*	>200	F	*	Signal	10.0	A	8.1	A
3 . Fowler Avenue/Olive Avenue	Fresno County	D	AWSC	>200	F	*	>200	F	*	Signal	41.6	D	23.8	C
5 . Fowler Avenue/SR-180 Eastbound Ramps	Caltrans	45 sec	Signal	23.0	C		76.8	E	*	Signal	23.4	C	34.1	C
7 . Armstrong Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	194.9	F	*	44.9	E	*	Signal	22.8	C	11.9	B
8 . Armstrong Avenue/Floradora Avenue	Fresno	D	TWSC	58.4	F	*	33.1	D		Signal	7.9	A	4.7	A
9 . Armstrong Avenue/Olive Avenue[2]	Fresno	D	AWSC	76.1	F	*	188.9	F	*	Signal	46.2	D	46.5	D
10 . Temperance Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	-	F	*	>200	F	*	Signal	38.7	D	27.6	C
11 . Temperance Avenue/Floradora Avenue	Fresno County	D	TWSC	53.1	F	*	28.5	D		TWSC	17.0	C	13.9	B

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

[1] Based on Synchro results, intersections where the delay is represented with a dash (-) has through volumes that block the turn movements throughout the peak hour. As such, Synchro does not report a delay at these intersections for the blocked turn movements. Therefore, the worst-case movements at these intersections operate at LOS F.

[2] Due to the road configuration at this intersection, Synchro does not report an LOS using HCM metholodiges for this intersection. Therefore, the LOS was determined using SimTraffic simulation.

* Exceeds LOS Standard

LSA

Table 9-D - Cumulative Year (2046) Plus Project with Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Plus Project Without Improvements						Plus Project With Improvements				
				A.M. Peak Hour			P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour	
			Control	Delay (sec.)	LOS		Delay (sec.)	LOS	Control	Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Fowler Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	-	F	*	-	F *	Signal	53.7	D	39.9	D
2 . Fowler Avenue/Floradora Avenue	Fresno County	D	OWSC	>200	F	*	>200	F *	Signal	10.7	B	7.6	A
3 . Fowler Avenue/Olive Avenue	Fresno County	D	AWSC	>200	F	*	>200	F *	Signal	45.0	D	50.1	D
5 . Fowler Avenue/SR-180 Eastbound Ramps	Caltrans	45 sec	Signal	24.6	C		97.0	F *	Signal	24.9	C	37.5	D
7 . Armstrong Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	-	F	*	>200	F *	Signal	52.2	D	18.7	B
8 . Armstrong Avenue/Floradora Avenue	Fresno	D	TWSC	199.4	F	*	43.8	E *	Signal	9.4	A	4.6	A
9 . Armstrong Avenue/Olive Avenue[2]	Fresno	D	AWSC	108.6	F	*	>200	F *	Signal	51.3	D	54.8	D
10 . Temperance Avenue/McKinley Avenue	Fresno/Fresno County	D	TWSC	-	F	*	-	F *	Signal	47.9	D	32.6	C
11 . Temperance Avenue/Floradora Avenue	Fresno County	D	TWSC	101.8	F	*	92.9	F *	TWSC	20.2	C	31.3	D

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

[1] Based on Synchro results, intersections where the delay is represented with a dash (-) has through volumes that block the turn movements throughout the peak hour. As such, Synchro does not report a delay at these intersections for the blocked turn movements. Therefore, the worst-case movements at these intersections operate at LOS F.

[2] Due to the road configuration at this intersection, Synchro does not report an LOS using HCM metholodiges for this intersection. Therefore, the LOS was determined using SimTraffic simulation.

* Exceeds LOS Standard

LSA

Table 9-E - Recommended Improvements for Roadway Segments

Roadway Segment	Jurisdiction	Existing Plus Project Improvements	Near-Term Plus Project Improvements	Cumulative (2046) Plus Project Improvements
Segments on Fowler Avenue				
1 . between McKinley Avenue and Floradora Avenue	Fresno County		Convert to 4-Lane Divided Arterial	Convert to 4-Lane Divided Arterial
2 . between Floradora Avenue and Olive Avenue	Fresno County		Convert to 4-Lane Divided Arterial	Convert to 4-Lane Divided Arterial
3 . between Olive Avenue and SR-180 Westbound Ramps	Fresno County	Convert to 4-Lane Divided Arterial	Convert to 4-Lane Divided Arterial	Convert to 4-Lane Divided Arterial

LSA

Table 9-F - Existing Plus Project with Recommended Improvements Roadway Segments Levels of Service

Roadway Segment	Jurisdiction	Plus Project Without Improvements				Plus Project With Improvements			
		Functional Classification[1]	Roadway Capacity[2]	Daily Volume	LOS	Functional Classification[1]	Roadway Capacity[2]	Daily Volume	LOS
Segments on Fowler Avenue									
3 . between Olive Avenue and SR-180 Westbound Ramps	Fresno County	2-Lane Undivided Arterial	15,930	18,284	E *	4-Lane Divided Arterial[3]	35,820	18,284	C

Notes:

LOS = Level of Service.

[1] Classification obtained from the Figure MT-1 Major Street Circulation Diagram, City of Fresno 2014 General Plan.

[2] Roadway Capacity obtained from Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Since the facilities ate Non-State, a 10% reduction factor was applied for the roadway capacities.

[3] This classification is not listed in Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Roadway Capacity for this classification are interpolated from capacities of similar classifications.

* Exceeds LOS Standard

LSA

Table 9-G - Near-Term Plus Project with Recommended Improvements Roadway Segments Levels of Service

Roadway Segment	Jurisdiction	Plus Project Without Improvements				Plus Project With Improvements			
		Functional Classification[1]	Roadway Capacity[2]	Daily Volume	LOS	Functional Classification[1]	Roadway Capacity[2]	Daily Volume	LOS
Segments on Fowler Avenue									
1. between McKinley Avenue and Floradora Avenue	Fresno County	2-Lane Undivided Arterial	15,930	20,357	E *	4-Lane Divided Arterial[3]	35,820	20,357	C
2. between Floradora Avenue and Olive Avenue	Fresno County	2-Lane Undivided Arterial	15,930	20,626	E *	4-Lane Divided Arterial[3]	35,820	20,626	C
3. between Olive Avenue and SR-180 Westbound Ramps	Fresno County	2-Lane Undivided Arterial	15,930	24,705	E *	4-Lane Divided Arterial[3]	35,820	24,705	C

Notes:

LOS = Level of Service.

[1] Classification obtained from the Figure MT-1 Major Street Circulation Diagram, City of Fresno 2014 General Plan.

[2] Roadway Capacity obtained from Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Since the facilities ate Non-State, a 10% reduction factor was applied for the roadway capacities.

[3] This classification is not listed in Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Roadway Capacity for this classification are interpolated from capacities of similar classifications.

* Exceeds LOS Standard

LSA

Table 9-H - Cumulative Year (2046) Plus Project with Recommended Improvements Roadway Segments Levels of Service

Roadway Segment	Jurisdiction	Plus Project Without Improvements				Plus Project With Improvements			
		Functional Classification[1]	Roadway Capacity[2]	Daily Volume	LOS	Functional Classification[1]	Roadway Capacity[2]	Daily Volume	LOS
Segments on Fowler Avenue									
1. between McKinley Avenue and Floradora Avenue	Fresno County	2-Lane Undivided Arterial	15,930	21,373	E *	4-Lane Divided Arterial[3]	35,820	21,373	C
2. between Floradora Avenue and Olive Avenue	Fresno County	2-Lane Undivided Arterial	15,930	21,656	E *	4-Lane Divided Arterial[3]	35,820	21,656	C
3. between Olive Avenue and SR-180 Westbound Ramps	Fresno County	2-Lane Undivided Arterial	15,930	25,899	E *	4-Lane Divided Arterial[3]	35,820	25,899	C

Notes:

LOS = Level of Service.

[1] Classification obtained from the Figure MT-1 Major Street Circulation Diagram, City of Fresno 2014 General Plan.

[2] Roadway Capacity obtained from Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Since the facilities ate Non-State, a 10% reduction factor was applied for the roadway capacities.

[3] This classification is not listed in Table 1, Generalized Annual Average Daily Volumes for Florida's Urbanized Areas. Roadway Capacity for this classification are interpolated from capacities of similar classifications.

* Exceeds LOS Standard

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Table 9-I - Intersection Improvement Funding Mechanism and Fair Share

Intersection	Jurisdiction	Funding Mechanism	Improvements Covered by TSMI Fee Program[1]	Improvements Covered by FTIP[2]	Improvements Covered by Fair Share	Fair Share Percentage
1 . Fowler Avenue/McKinley Avenue	City of Fresno/Fresno County	TSMI/FTIP/Fair Share	Install traffic signal	Add NBT lane, add SBT lane	Add NBL lane, add SBL lane, add EBL lane, add WBL lane	0.17%
2 . Fowler Avenue/Floradora Avenue	Fresno County	FTIP/Fair Share		Add NBT lane, add SBT lane	Install traffic signal, add SBL lane, add WBL lane	0.42%
3 . Fowler Avenue/Olive Avenue	Fresno County	TSMI/FTIP/Fair Share	Install traffic signal	Add NBT lane, add SBT lane	Add NBL lane, add SBL lane	6.99%
5 . Fowler Avenue/SR-180 Eastbound Ramps	Caltrans	Fair Share			Optimize signal timings	6.26%
7 . Armstrong Avenue/McKinley Avenue	City of Fresno/Fresno County	TSMI/Fair Share	Install traffic signal		Add NBL lane, add SBL lane, add EBL lane, add WBL lane	24.45%
8 . Armstrong Avenue/Floradora Avenue	City of Fresno/Fresno County	Fair Share			Install traffic signal, add WBL lane	28.73%
9 . Armstrong Avenue/Olive Avenue	City of Fresno/Fresno County	TSMI/FTIP	Install traffic signal	Add EB receiving lane		
10 . Temperance Avenue/McKinley Avenue	City of Fresno/Fresno County	TSMI/FTIP	Install traffic signal	Add NBT lane, add SBT lane		
11 . Temperance Avenue/Floradora Avenue	Fresno County	FTIP/Fair Share		Add NBT lane, add SBT lane	Add NBL lane, add SBL lane	1.73%

Notes:

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound

L = Left, T = Through, R = Right

[1] Improvements in accordance with the City of Fresno *City-Wide Traffic Signal Mitigation Impact Fee* (dated June 2022)

[2] Improvements in accordance with the Fresno Council of Governments *2021 Federal Transportation Improvement Program (FTIP)*

[3] Project Fair Share Percentage is the highest fair share value of the AM and PM peak hour when both peak hours require improvements, or only in the peak hour that require improvements.

LSA

Table 9-J - Roadway Segment Improvement Funding Mechanism and Fair Share

Roadway Segment	Jurisdiction	Cumulative (2046) Plus Project Improvements	Funding Mechanism	Project Responsibility[1]	Improvements Covered by FTIP	Improvements Covered by Fair Share	Fair Share Percentage
Segments on Fowler Avenue							
1 . between McKinley Avenue and Floradora Avenue	Fresno County	Convert to 4-Lane Divided Arterial	FTIP		Convert to 4-Lane Divided Arterial		
2 . between Floradora Avenue and Olive Avenue	Fresno County	Convert to 4-Lane Divided Arterial	FTIP		Convert to 4-Lane Divided Arterial		
3 . between Olive Avenue and SR-180 Westbound Ramps	Fresno County	Convert to 4-Lane Divided Arterial	FTIP		Convert to 4-Lane Divided Arterial		

Notes:

LOS = Level of Service; FTIP = Fresno Council of Governments 2021 Federal Transportation Improvement Program

[1] Improvements listed under this section would be 100 percent project responsibility.

10.0 INTERSECTION QUEUING ANALYSIS

Tables 10-A, 10-B, and 10-C list the available turn-pocket storage lengths and summarize the 95th percentile back-of-queue lengths at the study intersections under existing, near-term, and cumulative year conditions. The queues for the signalized intersections have been reported from Synchro, while for unsignalized intersections, the SimTraffic queues have been reported since Synchro does not appropriately report queues at unsignalized intersections.

Detailed queuing analysis worksheets are included in Appendix F.

10.1 LIST OF CHAPTER 10.0 TABLES

- Table 10-A: Existing Queuing Analysis
- Table 10-B: Near-Term Queuing Analysis
- Table 10-C: Cumulative Year (2046) Queuing Analysis

LSA

Table 10-A - Existing Queuing Analysis

Intersection	Movement	Storage Length[1] (ft/ln)	Existing			
			No Project		Plus Project	
			AM	PM	AM	PM
3 . Fowler Avenue/Olive Avenue	**EBL**	190	50	110	50	65
AWSC	**WBL**	200	**280**	75	**245**	110
4 . Fowler Avenue/SR-180 Westbound Ramps	**NBR**	430	0	0	0	0
Signal	**WBL**	650	25	35	25	35
	WBR	650	30	15	30	15
5 . Fowler Avenue/SR-180 Eastbound Ramps	**NBR**	185	0	0	0	0
Signal	**SBL**	230	25	45	25	45
	EBL	405	90	125	95	130
	EBR	230	40	50	40	50
6 . Fowler Avenue/Belmont Avenue	**NBL**	250	170	120	170	120
Signal	**NBR**	165	55	30	55	30
	SBL	275	105	125	105	125
	SBR	130	0	5	0	5
	EBL	225	120	105	120	105
	WBL	250	150	135	150	135
	WBR	60	60	45	60	45
8 . Armstrong Avenue/Floradora Avenue	**NBL**	170	0	0	10	0
TWSC	**SBL**	100	0	0	0	15
	EBR	85	40	0	45	20
9 . Armstrong Avenue/Olive Avenue	**SBR**	130	105	50	120	60
AWSC	**EBL**	195	30	50	50	65
	EBR	105	10	10	15	10
	WBL	145	110	60	60	55
	WBR	150	30	20	30	35
10 . Temperance Avenue/McKinley Avenue	**NBL**	155	0	0	15	15
TWSC	**SBL**	155	50	55	45	65
	EBL	105	0	0	15	20
	WBL	105	70	60	50	60
	WBR	140	40	35	45	40

Notes:

AWSC = All-Way Stop Control; TWSC = Two-Way Stop Control

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; T = Through; R = Right

Bold = Queue exceeds available storage.

[1] Storage length for all movements are obtained from Google Earth measurements.

[2] All queues reported are 95th percentile queues. Queues for signalized intersections have been reported from Synchro, while queues for unsignalized intersections have been reported from SimTraffic.

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Table 10-B - Near-Term Queuing Analysis

Intersection	Movement	Storage Length[1] (ft/ln)	Near-Term Plus Project AM	Near-Term Plus Project PM
3 . Fowler Avenue/Olive Avenue	**EBL**	190	45	80
AWSC	**WBL**	200	**310**	125
4 . Fowler Avenue/SR-180 Westbound Ramps	**NBR**	430	0	0
Signal	**WBL**	650	75	80
	WBR	650	35	45
5 . Fowler Avenue/SR-180 Eastbound Ramps	**NBR**	185	40	35
Signal	**SBL**	230	55	65
	EBL	405	120	175
	EBR	230	40	225
6 . Fowler Avenue/Belmont Avenue	**NBL**	250	185	140
Signal	**NBR**	165	135	70
	SBL	275	210	215
	SBR	130	10	35
	EBL	225	175	155
	WBL	250	210	215
	WBR	60	**70**	**80**
8 . Armstrong Avenue/Floradora Avenue	**NBL**	170	10	15
TWSC	**SBL**	100	10	30
	EBR	85	55	15
9 . Armstrong Avenue/Olive Avenue	**SBR**	130	**385**	70
AWSC	**EBL**	195	45	100
	EBR	105	25	20
	WBL	145	**175**	70
	WBR	150	25	35
10 . Temperance Avenue/McKinley Avenue	**NBL**	155	20	30
TWSC	**SBL**	155	65	60
	EBL	105	**285**	30
	WBL	105	**320**	**110**
	WBR	140	70	55

Notes:

AWSC = All-Way Stop Control; TWSC = Two-Way Stop Control

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; T = Through; R = Right

Bold = Queue exceeds available storage.

[1] Storage length for all movements are obtained from Google Earth measurements.

[2] All queues reported are 95th percentile queues. Queues for signalized intersections have been reported from Synchro, while queues for unsignalized intersections have been reported from SimTraffic.

LSA

Table 10-C - Cumulative Year (2046) Queuing Analysis

Intersection	Movement	Storage Length[1] (ft/ln)	Cumulative Year (2046)			
			No Project		Plus Project	
			AM	PM	AM	PM
3 . Fowler Avenue/Olive Avenue	**EBL**	190	50	**370**	50	**470**
AWSC	**WBL**	200	**275**	**260**	**370**	**370**
4 . Fowler Avenue/SR-180 Westbound Ramps	**NBR**	430	0	0	0	0
Signal	**WBL**	650	80	85	80	85
	WBR	650	40	50	40	55
5 . Fowler Avenue/SR-180 Eastbound Ramps	**NBR**	185	45	35	45	35
Signal	**SBL**	230	60	65	60	65
	EBL	405	125	170	125	180
	EBR	230	45	**255**	45	**260**
6 . Fowler Avenue/Belmont Avenue	**NBL**	250	220	145	220	145
Signal	**NBR**	165	140	65	140	70
	SBL	275	220	220	220	220
	SBR	130	15	40	15	40
	EBL	225	185	**400**	185	**400**
	WBL	250	215	225	215	225
	WBR	60	**135**	**80**	**145**	**80**
8 . Armstrong Avenue/Floradora Avenue	**NBL**	170	0	10	0	0
TWSC	**SBL**	100	0	30	0	15
	EBR	85	75	15	75	25
9 . Armstrong Avenue/Olive Avenue	**SBR**	130	**180**	60	**225**	70
AWSC	**EBL**	195	**235**	180	150	**255**
	EBR	105	15	100	15	**145**
	WBL	145	65	105	105	115
	WBR	150	**155**	40	45	40
10 . Temperance Avenue/McKinley Avenue	**NBL**	155	**265**	25	**325**	55
TWSC	**SBL**	155	90	**250**	**300**	**260**
	EBL	105	**200**	**315**	0	**310**
	WBL	105	**390**	**310**	**300**	**180**
	WBR	140	0	0	0	0

Notes:

AWSC = All-Way Stop Control; TWSC = Two-Way Stop Control

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; T = Through; R = Right

Bold = Queue exceeds available storage.

[1] Storage length for all movements are obtained from Google Earth measurements.

[2] All queues reported are 95th percentile queues. Queues for signalized intersections have been reported from Synchro, while queues for unsignalized intersections have been reported from SimTraffic.

11.0 SITE ACCESS AND CIRCULATION ANALYSIS

As previously illustrated in Figure 1-2, access to the project would be provided via two full-access driveways, one on Armstrong Avenue and the other on McKinley Avenue.

11.1 SIGHT DISTANCE ANALYSIS

A sight distance analysis was conducted at the project driveways along Armstrong Avenue and McKinley Avenue to evaluate safe access in and out of the project. Sight distance is the length of the visible roadway a driver can see approaching vehicles before their line of sight is blocked by any object. For purposes of this analysis, both the stopping sight distance and corner sight distance have been evaluated. That is because there are the two sight distance lengths that would affect safe maneuver of ingress/egress traffic from the project driveways.

According to the *Caltrans Highway Design Manual (HDM)* (dated July 2020), the stopping sight distance is the minimum sight distance along a roadway required to allow a driver to decrease their speed from the design speed to a complete stop. The corner sight distance is the minimum sight distance in which a driver at a stop-controlled approach can see oncoming traffic on the major street to safely maneuver onto the roadway.

The stopping sight distance was evaluated on the major arterials abutting the project (i.e., Armstrong Avenue and McKinley Avenue). The posted speed limit on Armstrong Avenue is 45 mph. Though McKinley Avenue is yet to be constructed along the project frontage, the speed limit was estimated as 35 mph along the project frontage. For purposes of this analysis, the posted or estimated speed limits have been considered as the design speed. As stated in Table 201.1 of the HDM, the minimum stopping sight distance is 360 feet for a design speed of 45 mph and 250 feet for a design speed of 35 mph. Therefore, the minimum stopping sight distance has been considered as 360 feet and 250 feet for Project Driveway 1 (along Armstrong Avenue) and Project Driveway 2 (along McKinley Avenue), respectively.

As for corner sight distance, Section 405.1 of the HDM states that corner sight distance requirements are not applicable for urban driveways unless signalized. However, as a conservative approach, corner sight distances were also evaluated for the project driveways. The minimum corner sight distance was based on design speed, time gap, and type of vehicles from the minor roads (project driveways) to enter the major roads (Armstrong Avenue and McKinley Avenue). Based on the requirements established in the HDM, it was determined that a minimum corner sight distance of 500 feet and 390 feet would be required for left-turn maneuvers coming out of Project Driveway 1 and Project Driveway 2, respectively. Furthermore, a minimum corner sight distance of 430 feet and 335 feet would be required for right-turn maneuvers coming out of Project Driveway 1 and Project Driveway 2, respectively.

Since the corner sight distances required at the project driveways would be greater than the stopping sight distances (500 feet compared to 360 feet for Project Driveway 1 and 390 feet compared to 250 feet for Project Driveway 2), sight triangle figures were created using corner sight

distances. As a conservative measure, left-turn corner sight distances were used for both right- and left-turn sight triangles for both project driveways. As illustrated in Figure 11-1, Project Driveway 1 will provide adequate sight distance for left- and right-turn maneuvers onto Armstrong Avenue. As illustrated in Figure 11-2, Project Driveway 2 will provide adequate sight distance for left- and right-turn maneuvers onto McKinley Avenue.

11.2 DRIVEWAY SPACING

Previously referenced Figure 1-2 illustrates the project site plan. As illustrated in Figure 1-2, the driveway on Armstrong Avenue is located approximately 450 feet north from the intersection of Armstrong Avenue/McKinley Avenue. Similarly, the project driveway on McKinley Avenue is located approximately 650 feet east of this intersection. As such, none of the driveways are located too close to any existing and future intersections, and there would be sufficient spacing between all existing and future intersections including the project driveway intersections.

11.3 PROJECT DRIVEWAY QUEUING ANALYSIS

As shown in tables 10-A through 10-C, the project is not anticipated to create a back-up along Armstrong Avenue or McKinley Avenue due to project traffic. As such, the project traffic is not anticipated to create any adverse effect along the project driveways.

11.4 LIST OF CHAPTER 11.0 FIGURES

- Figure 11-1: Corner Sight Distance at Project Driveway 1
- Figure 11-2: Corner Sight Distance at Project Driveway 2

LSA

FIGURE 11-1

Tract Map 6360 Project
Traffic Impact Study

Corner Sight Distance at Project Driveway 1

SOURCE: Habrbour & Associates, November 2022

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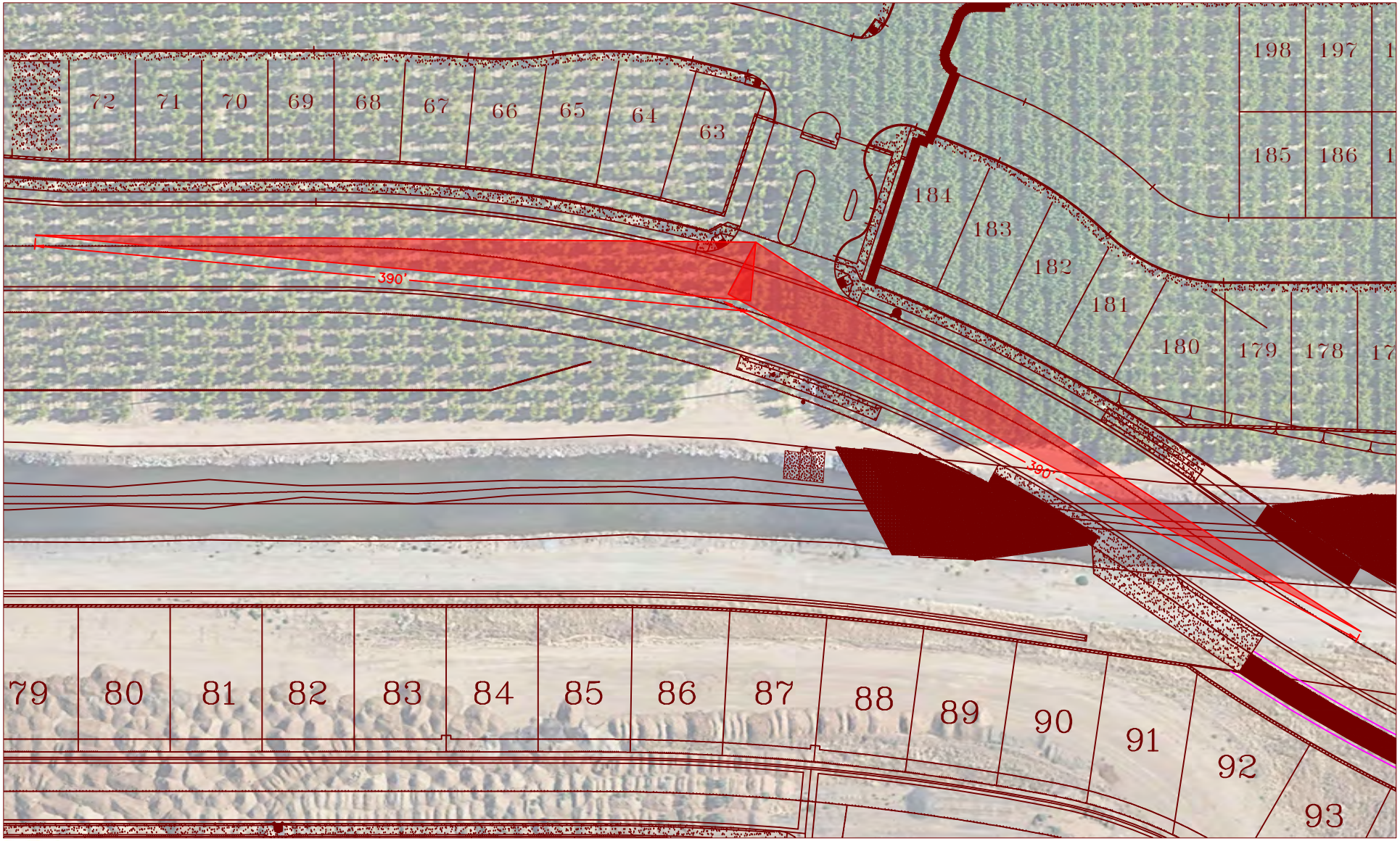

LSA

LEGEND

- Sight Distance Triangle

FIGURE 11-2

N

0 40 80

FEET

SOURCE: Habrbour & Associates, November 2022

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Tract Map 6360 Project
Traffic Impact Study

Corner Sight Distance at Project Driveway 2

12.0 SAFE ROUTES TO SCHOOL EVALUATION

The project will be under the jurisdiction of the Clovis Unified School District (CUSD). The CUSD provides transportation for students who live in excess of an established radius zone. The zones are a radius of 1.00 miles for grades Kindergarten through 6th and 2.50 miles for grades 7th through 12th.

The nearest elementary school to the project site is Temperance-Kutner Elementary School, which is located at the southeast corner of the intersection of Armstrong Avenue/Olive Avenue. The distance between the project corner and the school along Armstrong Avenue is approximately 0.55 miles. Therefore, it is estimated that children from the project will be accessing the elementary school by car, bike, or by walking. This school can be reached from the project site traveling directly south along Armstrong Avenue to the intersection of Armstrong Avenue/Olive Avenue.

Paved sidewalks are currently present along the southbound direction and intermittently present along the northbound direction of Armstrong Avenue between Floradora Avenue and Olive Avenue. The project will be adding sidewalks along the project frontage on Armstrong Avenue and McKinley Avenue. Additionally, paved sidewalks are expected to be constructed along both directions of Armstrong Avenue between McKinley Avenue and Olive Avenue prior to the completion of the project as part of TM 6209 project. The future intersection of Armstrong Avenue/McKinley Avenue is anticipated to be two-way stop controlled (TWSC) with the stop signage placed on both directions of McKinley Avenue and a marked crosswalk along the northbound direction of Armstrong Avenue. Students are anticipated to cross this intersection headed southbound on the westside of Armstrong Avenue towards the intersection of Armstrong Avenue/Floradora Avenue. The intersection of Armstrong Avenue/Floradora Avenue is TWSC with stop signage placed on both directions of Floradora Avenue and no marked crosswalks along any direction. Students are anticipated to cross this intersection and continue southbound on the westside of Armstrong Avenue to the intersection of Armstrong Avenue/Olive Avenue. The intersection of Armstrong Avenue/Olive Avenue is all-way stop controlled (AWSC) with marked crosswalks along the northbound direction of Armstrong Avenue and both directions along Olive Avenue. Students are anticipated to cross this intersection and arrive at the northwest corner of the elementary school. Due to the lack of marked crosswalks within the intersection of Armstrong Avenue/Floradora Avenue, it is recommended for CUSD and the City to prioritize installation of marked crosswalks at this intersection to provide a safe walking route for students walking from the project to school.

The nearest middle school to the project site is Reyburn Intermediate, which is located at the southeast corner of the intersection of De Wolf Avenue/Donner Avenue. The distance between the project site and the school is approximately 2.65 miles. Since the distance between the project site and the school exceeds the established radius zone of 2.50 miles, public transportation will be provided to students residing within the project.

The nearest high school to the project site is Clovis East High School, which is located at the southwest corner of the intersection of Leonard Avenue/Donner Avenue. The distance between the project site and the school is approximately 2.8 miles. Since the distance between the project site and the school exceeds the established radius zone of 2.50 miles, public transportation will be provided to the students residing within the project.

13.0 COLLISION ANALYSIS

13.1 LOCAL ROADWAYS AND INTERSECTIONS

A traffic collision analysis was conducted for the study area inclusive of all study intersections and roadway segments. Traffic collision data was obtained from the State of California *Statewide Integrated Traffic Records System* (SWITRS) through the University of California, Berkeley *Transportation Injury Mapping System* (TIMS). It should be noted that the SWITRS currently provides collision data dated from December 2021 and earlier. For purposes of this analysis, five years of traffic collision data, dated between December 2016 and December 2021, were examined for this analysis.

According to the data provided by SWITRS, there have been a total of 12 crashes involving at least one vehicle within the defined study area. These 12 crashes are divided into one fatal crash, seven crashes that resulted in injury, and four unmapped collisions. All 12 crashes involve at least one vehicle but none involve pedestrians or bicyclists. Of these 12 crashes, seven occurred on Fowler Avenue near the SR-180 ramps, three on the intersection of Armstrong Avenue/Belmont Avenue, and two near the intersection of Temperance Avenue/McKinley Avenue. The fatal collision occurred near the intersection of Temperance Avenue/McKinley Avenue and involved a vehicle colliding with an undocumented object.

Detailed collision data extracted from TIMS are included in Appendix G.

13.2 CALTRANS FACILITIES

Based on data obtained from the Caltrans *Traffic Accident Surveillance and Analysis System* (TASAS) for freeway facilities, 28 collisions occurred along the eastbound SR-180 in the vicinity of the Fowler Avenue interchange (between Clovis Avenue interchange and Temperance Avenue interchange) between August 2019 to July 2022. These collisions included 1 fatal, 10 injury, and 17 property damage only collisions. Based on the TASAS data, the fatal collision rate for this facility is higher than the statewide average. However, fatal + injury collision rate and the total collision rate for the SR-180 eastbound facility in the Fowler Avenue interchange is lower than the statewide average for such facilities.

For the westbound SR-180 in the vicinity of the Fowler Avenue interchange (between Clovis Avenue interchange and Temperance Avenue interchange), 53 collisions occurred within the same time. None of these collisions resulted in any fatalities. These collisions included 14 injury, and 39 property damage only collisions. As included in the summary, the rate of fatal + injury related collisions, as well as the rate of total rate of collisions along this facility, is lower than the corresponding statewide average rate for similar facilities.

The Caltrans TASAS data summary is included in Appendix G.

14.0 VEHICLE MILES TRAVELED ANALYSIS

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT).

The City adopted the City of Fresno CEQA Guidelines for Vehicle Miles Traveled Thresholds (VMT Guidelines) on June 25, 2020, which includes the screening criteria, VMT analysis methodology, VMT impact thresholds, and VMT mitigation measures. Therefore, the City's VMT Guidelines was used in the evaluation of the project's VMT analysis.

14.1 METHODOLOGY

14.1.1 Project Screening Evaluation

The VMT Guidelines provides multiple screening criteria for land use projects. The project was compared with the screening criteria established in the "Project Screening" section of the VMT Guidelines to check if the project can be screened out. Following is a brief description about the project in relation with the project screening criteria:

- **Project Located in a High-Quality Transit Area (HQTA):** The project is not located within an HQTA; therefore, this screening criteria does not apply to the project.

- **Local-Serving Retail:** The project consists of residential land use only; therefore, this screening criteria does not apply to the project.

- **Provision of Affordable Housing:** The project proposes to develop market-rate, single-family dwelling units. Therefore, this screening criteria does not apply to the project.

- **Small Project:** The guidelines state that projects generating less than 500 daily trips could be screened out of a detailed VMT analysis. As discussed in Section 5.0, Project Trip Generation, the project is estimated to generate 3,074 daily trips. Therefore, the project does not satisfy this screening criteria.

- **Project Located in Low VMT Area:** Given the project consists of only residential uses, the City's VMT per capita map can be used to check if the project is located in a low VMT area. Based on review of the City of Fresno VMT per capita screening map, the project is not located in a low VMT area; therefore, this criteria does not apply to the project.

As shown above, the project could not be screened out from detailed VMT analysis. As such, pursuant to the VMT Guidelines, a detailed VMT analysis was conducted to assess the project's VMT impact.

14.1.2 Thresholds of Significance

The project consists of residential land use. The guidelines established VMT per capita as the appropriate metric to evaluate residential land use projects while defining Fresno County as the "region" for determining VMT thresholds. The project would have a significant VMT impact if the baseline project VMT per capita is greater than 87 percent of the baseline Fresno County VMT per capita. Based on the guidelines, baseline Fresno County VMT per capita is 16.1 and the corresponding threshold is 14.0 (which is 87 percent of 16.1). Therefore, the project will have a significant VMT impact if the project VMT per capita is greater than 14.0.

As recommended in the guidelines, the Fresno COG ABM was used for the project VMT analysis. The model inputs were updated with the project land uses to calculate project VMT. The project VMT was calculated from a Fresno COG ABM model run as described in the following sections.

14.1.3 Project Traffic Analysis Zone Update

The first step in preparation of this analysis was to update the traffic analysis zones (TAZs) in the model that include the project area. The Fresno COG ABM includes the ability to add or split zones. In order to isolate the project VMT, a new zone was created in the model. The project households were included in the newly created zone for modeling purposes. No project-specific network modifications were required for the model run. A model run was conducted for the existing/base scenario with updated model inputs. The outputs from this updated model run were used to calculate the project VMT per capita.

14.1.4 Model Runs and Project Vehicle Miles Traveled Estimation

A model run was conducted for this updated model upon completion of the socioeconomic data update. The outputs from this updated model run were used to calculate the project VMT per capita.

14.2 PROJECT VEHICLE MILES TRAVELED ANALYSIS

Table 14-A summarizes the regional threshold and project VMT per capita. As shown in Table 14-A, the project VMT per capita is 9.1 percent higher than the City's VMT per capita threshold. Therefore, based on the guidelines, the project will have a significant VMT impact.

Detailed VMT calculation for the project is included in Appendix H.

14.3 VMT REDUCTION MEASURES – PROJECT DESIGN FEATURES AND MITIGATION MEASURES

When a lead agency identifies a significant CEQA impact, the agency must identify feasible mitigation measures in order to avoid or substantially reduce that impact. These measures can be incorporated as a part of plans, policies, regulations, or project designs. Project design features that encourage mode shift from automobiles to transit or non-motorized modes can therefore help reduce project VMT. Typically, VMT reduction and benefits from these project design features are not accounted in the project VMT calculations conducted using the regional travel demand model. Therefore, VMT reduction credit can be accounted for these design features, similar to VMT

mitigation measures to help reduce or eliminate the project's VMT impact. Enforcement of mitigation measures will be subject to the mitigation monitoring requirements under CEQA, as well as the regular police powers of the lead agency.

Evaluation of VMT reductions should be evaluated using state-of-the-practice methodologies recognizing that many of the VMT mitigation strategies/project design features are dependent on resident performance over time. Following is a detailed description of both and the corresponding potential reduction that could be achieved with implementation of these measures.

14.3.1 Project Design Features

As per information provided by the applicant, the project intends to implement project design features that will help reduce project VMT. The proposed project design features were evaluated using City's Urban Form VMT Calculator and California Air Pollution Control Officers Association's (CAPCOA) "*Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity – Designed for Local Governments, Communities, and Project Developers*" dated December 2021, (CAPCOA handbook) as described below.

Urban Form VMT Calculator: City of Fresno has developed a tool – "City of Fresno Urban Form VMT Calculator", to assist land use projects with estimation of VMT reduction that can obtained from project design features. The tool takes into account multiple project attributes (e.g., density, mix of uses), project location characteristics (accessibility to other land uses, major street connections), and project design features (inclusion of sidewalks, bike lanes, provision of trees) to estimate the VMT reduction that can be achieved from project location and design.

LSA used the project site plan in CAD (Computer-Aided Design) to estimate the inputs for City's Urban Form VMT Calculator. Based on the project inputs, no VMT reduction was estimated from the tool. However, it should be noted that Estimation of VMT reduction in the current tool was based on CAPCOA's "*Quantifying Greenhouse Gas Mitigation Measures - A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures*" dated August, 2010 and professional planning experience. However, CAPCOA has recently released an updated version of the handbook "*Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity – Designed for Local Governments, Communities, and Project Developers*" dated December 2021. As such, the City is in the process of updating the VMT tool using the recommendations and methodologies from the new Green Book. Therefore, VMT reduction from the Urban Form VMT Calculator was not utilized for this project.

LSA reviewed the project design features and VMT mitigation measures listed in the CAPCOA handbook that are applicable to City of Fresno. VMT reductions for applicable design features/mitigation measures were estimated using the most recent version of CAPCOA handbook.

Improve Street Connectivity: The project proposes to provide an internal circulation network. Projects with higher density of intersections would help increase street connectivity, reduce trip lengths and promote use of alternative transportation modes of travel. CAPCOA handbook, identifies measure **T-17: Improve Street Connectivity** to evaluate project street network. The measure is recommended as an appropriate design feature for plans within urban or suburban

areas. The current project is located in suburban/rural area type setting so this measure was explored as a potential VMT reduction design feature.

Measure T-17 estimates that an increased density of vehicular intersections improves street connectivity and helps in reduction in GHG emissions and corresponding VMT. As included in the CAPCOA handbook, this measure could be applied to a project for:

> *'Projects that increase intersection density would be building a new street network in a subdivision or retrofitting an existing street network to improve connectivity (e.g., converting cul-de-sacs or dead-end streets to grid streets)'.*

The measure establishes the following numerical formula of VMT reduction due to increased intersection density and improved street connectivity:

$$A = \frac{B - C}{C} * D$$

Where,

A = Percent Reduction in GHG/VMT emission from vehicle Travel

B = Intersection Density in project site with measure

C = Average Intersection Density for Typical developments (36)

D = Elasticity of VMT with respect to intersection density (-0.14)

The CAPCOA handbook establishes the variable C using an average density of intersections within a square mile in a typical development as included in the *Proposed Trip Generation, Distribution, and Transit Mode Split Forecasts for the Bayview Waterfront Project Transportation Study*, Fehr & Peers. 2009. This establishes the average suburban intersection density for the entire United States.

CAPCOA handbook adapts the variable D, Elasticity of VMT with respect to intersection density from the report '*Does Compact Development Make People Drive Less*?' published in the Journal of the American Planning Association, 2016, authored by Mark R. Stevens. The elasticity was determined from a meta-regression analysis from data of fifteen studies, having studied in different urban/suburban geographic regions within the Country.

The project is a gated community which has specified entry/exit ways that reduces accessibility to all project related traffic. While the increased intersection density helps facilitate greater number of short trips, the project consists of only single land use type (residential) and the amount of internal capture (trips that can be fulfilled within the project; with both origin and destinations within the project site) would be minimal. Also, CAPCOA suggests application of different VMT mitigation measures at different scales – project/site scale or community/plan scale. Based on CAPCOA handbook, this mitigation measure is applicable at a plan/community scale. However, this measure was explored as a VMT reduction design feature at a project scale with appropriate limitations as described below.

While the internal intersections can be considered to estimate the VMT reduction due to increased street connectivity, given the above limitations (project location area type, single land use type, gated entry/exit, and CAPCOA applicability scale), only the two project driveways were included to determine project intersection density. Figure 1-2 illustrates these driveway intersections of the project. The project site is approximately 31.27 acres. Therefore, the intersection density of the project would be approximately 40.35 intersections per square mile.

Since project intersection density is greater than the countrywide average intersection density of 36 intersections per square miles as identified in the CAPCOA handbook, it could be estimated that the project will help reduce project VMT due to a higher-than-average density of vehicular network intersections along with implementation of the project design features. The percentage of VMT reduction for the project could be determined as:

$$\%\, VMT\ reduction = \frac{40.35 - 36}{36} * (-0.14)$$

Or -1.69 percent

As such, due to these improved vehicular network connection and project design features, the project will achieve 1.69 percent reduction in VMT compared to the project VMT that was estimated from the regional travel demand model.

Pedestrian Infrastructure: The project proposes to provide pedestrian improvements/sidewalks both internal to the project site and along the project frontage. Providing sidewalk/pedestrian improvements encourage people to walk instead of drive and thus reduces VMT. CAPCOA transportation measure **T-18: Provide Pedestrian Network Improvement** was deemed applicable to estimate the VMT reduction due to project related pedestrian network improvements. According to this measure, providing pedestrian network improvements helps improve pedestrian access within the area. This encourages a mode shift on the roadway parallel to the sidewalks from vehicles to walking, displacing VMT and thus reducing GHG emissions. However, no additional VMT reduction due to provision of pedestrian infrastructure was estimated, since increasing intersection density (Improve Street Connectivity Measure) already accounts for the mode shift that will occur in the project area. As such, not estimating further VMT reduction due to this design feature when implemented along with improving street connectivity, provides a more conservative scenario in the estimation of VMT reduction.

Bicycle Infrastructure/Improvements: The project is planning to provide a 25-foot-wide easement for bicycle and pedestrian infrastructure. This easement provides the necessary right-of-way for the City of Fresno to construct a Class I Bike Path on East McKinley Avenue as planned in the City of Fresno *Active Transportation Plan, December 2016*. Similar to pedestrian facilities, these bicycle design features included in the project can encourage increase active transportation mode share in the area. CAPCOA transportation measure **T-19A: Construct or Improve Bike Facility** was deemed applicable to estimate the VMT reduction due to project bicycle features. According to the measure, providing bicycle infrastructure improve biking conditions within an area, which encourages a mode shift on the roadway parallel to the bicycle facility from vehicles to bicycles, displacing VMT and thus

reducing GHG emissions. Similar to project pedestrian infrastructure, no VMT reduction was estimated for this design feature to present a conservative scenario.

Implement a School Bus Program: As previously mentioned, the project is within the Clovis Unified School District (CUSD) jurisdiction. According to CUSD Board Policy 351, the school district is responsible for providing transportation between home and schools for students living outside the established radius zone. The established radius zone for students in grades K-6, is one mile from the school where the student is assigned and the established radius zone for students in grades 7-12 (intermediate and high school students), is 2.5 miles from the school where the student is assigned. Additionally, if a community is inside the established radius zone, a Community Funded Bus Run (CFBR) program can be established, per Clovis Unified Board Policy and Administrative Regulation #8301. If sufficient funds are raised by the CFBR program, the CUSD will provide transportation to the community. CAPCOA transportation measure **T-40: Implement School Bus Program** was deemed applicable to potentially reduce VMT and associated GHG emissions due to the reduction in number of private vehicles trips to drop-off or pick-up students.

14.3.2 Mitigation Measures

The project explored other potential mitigation measures from CAPCOA that might help further reduce project VMT that are shown below. Similar to project design features, VMT reduction that can be achieved by the mitigation measures has been estimated using the CAPCOA manual mentioned previously.

Provide Electric Vehicle (EV) Parking and EV Charging Infrastructure: Accessible EV parking and provision of charging for electric vehicles in the residential units will encourage the use of EVs. The latest California Green Building Standards (CALGreen), California Building Code, requires provision of infrastructure to accommodate electric vehicle chargers for new single family and attached dwelling units/town houses. For new construction projects such as apartments, condos, hotels, and motels, CALGreen code requires the project to provide EV charging stations as a percentage of the total project parking. While it is understood that provision of electric charging infrastructure/stations might not reduce VMT, it will reduce GHG which can be considered equivalent to reduction in VMT. According to CAPCOA, provision of additional electric charging stations, in addition to CALGreen requirements, can be considered as a GHG/VMT mitigation. Provision of EV charging infrastructure has a potential to achieve a maximum VMT reduction of up to 11.9 percent. However, the project is a single-family residential development and as such doesn't propose to provide electric charging stations. While this project design feature has the potential to reduce GHG emissions, no direct VMT reduction has been accounted for this project design feature.

In conclusion, project design features aim to promote overall mobility with the goal of reducing VMT and reducing greenhouse gas emissions. Implementation of the above project design features may possibly reduce the project's VMT by approximately up to 1.69 percent. The proposed measures and strategies should be monitored for their usage and effectiveness. The project design features can help offset some of the VMT impacts of the project but will not reduce the impact to a less than significant level. Therefore, the project will have a significant and unavoidable transportation impact under CEQA.

14.4 LIST OF CHAPTER 14.0 TABLES

Table 14-A: Regional and Project VMT per Capita

Region (Fresno County)[1]	Project	Difference	Percentage Difference
14.0	15.3	1.3	9.1%

Source: Fresno Council of Governments' Activity-Based Model

VMT = Vehicle Miles Traveled

[1]*The Fresno County VMT per capita was obtained from CEQA Guidelines for Vehicle Miles Traveled Thresholds, City of Fresno - June 25, 2020*

15.0 SUMMARY AND CONCLUSIONS

The proposed project would include 326 single-family residential units. The project site is zoned within the Residential Single-Family District (RS-3). The RS district is intended to provide for a variety of single-family residences built to urban or suburban standards to suit a spectrum of individual lifestyles and needs. This district is also meant to enhance the City's residential neighborhoods while providing new opportunities for the development of a range of housing types throughout the City. The project site is designated Low-Density Residential in the Fresno General Plan.

15.1 EXISTING CONDITIONS SUMMARY

All study intersections and roadway segments operate at a satisfactory LOS under existing and existing plus project conditions with the exception of three intersections and one roadway segment.

All three intersections meet signal warrant requirements under existing and existing plus project conditions.

15.2 NEAR-TERM PLUS PROJECT CONDITIONS SUMMARY

Four study intersections are forecast to operate at a satisfactory LOS under near-term plus project conditions. Nine study intersections are forecast to operate at a deficient LOS under near-term plus project conditions. All roadway segments are forecast to operate at a satisfactory LOS under near-term plus project conditions with the exception of three roadway segments.

Seven intersections meet signal warrant requirements under near-term plus project conditions.

15.3 CUMULATIVE YEAR (2046) CONDITIONS SUMMARY

Two study intersections are forecast to operate at a satisfactory LOS under cumulative year no project conditions while four study intersections are forecast to operate at a satisfactory LOS under cumulative year plus project conditions. Nine study intersections are forecast to operate at a deficient LOS under cumulative year no and plus project conditions. All roadway segments are forecast to operate at a satisfactory LOS under cumulative year no and plus project conditions with the exception of three roadway segments.

Seven intersections meet signal warrant requirements under cumulative year no and plus project conditions.

15.4 IMPROVEMENTS SUMMARY

Based on the improvements discussed in Section 9.1 "Recommended Improvements" of this report, the recommended improvements include adding additional lanes to roadway segments, installing traffic control signals where the requirements of a signal warrant were met, and restriping of existing lane markings. Most of the recommended circulation improvements are covered by the City's fee programs. However, the project will pay fair share percentages for intersections and roadway segments where improvements were not covered by a fee program.

15.5 SITE ACCESS AND CIRCULATION ANALYSIS SUMMARY

The project driveways have adequate corner sight distance and will be stop controlled. Based on the locations of the project driveways, the project is not anticipated to create deficiency in the neighborhood traffic flow pattern.

15.6 SAFE ROUTES TO SCHOOL EVALUATION SUMMARY

The nearest elementary school is within walking distance to the project site. However, there currently does not exist a safe route for students to access the elementary school by walking. The nearest middle school and high school are not within walking distance to the project site. However, public transportation will be provided to students at the project site.

15.7 COLLISION ANALYSIS SUMMARY

Accident ratio within the study area is lower than the corresponding countywide and statewide average and no improvement is necessary to enhance safety within the study area. Within one mile of the SR-180 and Fowler Avenue interchange, the accident rates are higher than the average for similar facilities. It is not estimated that project traffic will significantly change the traffic flow pattern within the study area or increase the current collision frequency.

15.8 VEHICLE MILES TRAVELED SUMMARY

The project could not be screened out and a detailed VMT analysis using Fresno COG ABM was conducted for the project. The project VMT is 9.1 percent higher than the City's threshold and therefore, will have a significant VMT impact. Though project design features and mitigation measures are estimated to reduce the project VMT by some percentages, the project VMT impact could not be fully mitigated.

APPENDIX A

SCOPING AGREEMENT

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

January 9, 2023

Ms. Harmanjit Dhaliwal, PE
Supervising Professional Engineer
Traffic Operations & Planning Division, Public Works Department
City of Fresno
2600 Fresno Street, Room 4064
Fresno, California 93721-3623

Subject: Tract Map 6360 Project TIS Scoping Agreement (LSA Project No. HAA2103)

Dear Harmanjit:

LSA will be preparing a Traffic Impact Study (TIS) for the proposed Tract Map 6360 Project (project) to be located at the northeast corner of the intersection between Armstrong Avenue and the future extension of McKinley Avenue in the City of Fresno (City). The project site is currently vacant. Figure 1 (all figures, tables, and appendices attached) illustrates the regional and project location.

The proposed project will include 326 single-family residential units. Access to the project will be provided via two full-access driveways, one located on Armstrong Avenue and the other located on the future extension of McKinley Avenue. It is to be noted that the section of McKinley Avenue along the project frontage from Armstrong Avenue and its extension up to Temperance Avenue will occur prior to the completion of the project. Figure 2 illustrates the conceptual site plan for the project.

The project site is zoned within the Residential Single-Family District (RS-3). The RS district is intended to provide for a variety of single-family residences built to urban or suburban standards to suit a spectrum of individual lifestyles and needs. This district is also meant to enhance the City's residential neighborhoods while providing new opportunities for the development of a range of housing types throughout the City. The project site is designated Low-Density Residential in the City's General Plan.

LSA anticipates that the following scope of work will be required to prepare the TIS for the proposed project.

SCOPE OF WORK: LEVEL OF SERVICE ANALYSIS

While Level of Service (LOS) analysis is no longer a determinant of California Environmental Quality Act (CEQA) impacts, consistency with the City's General Plan goals and policies is still required. The LOS analysis will be prepared to satisfy the requirements established by the City of Fresno *Traffic Impact Study Report Guidelines* (TIS Guidelines), updated February 2, 2009.

Study Intersections

LSA proposes to include the following intersections in the study:

1. Fowler Avenue/McKinley Avenue;

1500 Iowa Avenue, Suite 200, Riverside, California 92507 951.781.9310 www.lsa.net

2. Fowler Avenue/Floradora Avenue;
3. Fowler Avenue/Olive Avenue;
4. Fowler Avenue/State Route 180 (SR-180) Westbound Ramps;
5. Fowler Avenue/SR-180 Eastbound Ramps;
6. Fowler Avenue/Belmont Avenue;
7. Armstrong Avenue/McKinley Avenue;
8. Armstrong Avenue/Floradora Avenue;
9. Armstrong Avenue/Olive Avenue;
10. Temperance Avenue/McKinley Avenue;
11. Temperance Avenue/Floradora Avenue;
12. Armstrong Avenue/Project Driveway 1; and
13. Project Driveway 2/McKinley Avenue.

Figure 3 illustrates the study area intersections.

Roadway Segments

LSA proposes to include the following roadway segments in the study:

1. Fowler Avenue, between McKinley Avenue and Floradora Avenue;
2. Fowler Avenue, between Floradora Avenue and Olive Avenue;
3. Fowler Avenue, between Olive Avenue and SR-180 Westbound Ramps;
4. Fowler Avenue, between SR-180 Eastbound Ramps and Belmont Avenue;
5. Armstrong Avenue, between Project Driveway 1 and McKinley Avenue;
6. Armstrong Avenue, between McKinley Avenue and Floradora Avenue;
7. Armstrong Avenue, between Floradora Avenue and Olive Avenue;
8. Temperance Avenue, between McKinley Avenue and Floradora Avenue;
9. McKinley Avenue, between Fowler Avenue and Armstrong Avenue;
10. McKinley Avenue, between Armstrong Avenue and Project Driveway 2;
11. McKinley Avenue, between Project Driveway 2 and Temperance Avenue;
12. Floradora Avenue, between Fowler Avenue and Armstrong Avenue; and
13. Olive Avenue, between Fowler Avenue and Armstrong Avenue.

Analysis Scenarios

The LOS analysis will satisfy the requirements established by the City. As such, the following scenarios will be included in the TIS:

- Existing conditions;
- Existing plus project conditions;
- Near-term plus project conditions;
- Cumulative year (2046) no project conditions; and
- Cumulative year (2046) plus project conditions.

Trip Generation

The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition) for Land Use 210 - "Single-Family Detached Housing." Table A summarizes the project trip generation. As shown in Table A, the proposed project is anticipated to generate 3,074 daily trips, with 229 trips occurring during the a.m. peak hour and 306 trips occurring during the p.m. peak hour.

Project trip distribution patterns were developed using the select zone model run obtained from the Fresno Council of Governments' (COG's) Activity-Based Model (ABM). The select zone distribution plot is included in Appendix A. Figure 4 illustrates the project trip distribution. The project trip assignment at the study intersections is the product of the project trip generation and the corresponding trip distribution percentages. Figure 5 illustrates the project trip assignment.

Volume Development and Analysis Methodology

Traffic volumes for existing conditions will be developed using existing count data collected at study area intersections and roadway segments. Existing plus project volumes will be developed by adding project traffic to the existing traffic volumes.

Traffic volumes for near-term conditions will be developed by applying a per annum growth factor to existing traffic volumes and adding traffic from the project, as well as from approved and pending development projects in the vicinity of the project. LSA will be requesting City staff and adjacent jurisdictions for a list of such development projects.

Cumulative year without project traffic volumes will be developed using forecast volumes obtained from the Fresno COG ABM and by applying appropriate post-processing methodologies. Additionally, the transportation network to be evaluated in this scenario will be reviewed to include all Capital Improvement Projects (CIPs) already identified in impact fee programs such as the Fresno Major Street Impact (FMSI) or the Traffic Signal Mitigation Impact (TSMI) fee programs.

Cumulative year plus project traffic volumes will be developed by adding project traffic to cumulative without project traffic volumes.

All study intersections will be analyzed during the a.m. and p.m. peak hours. As per the City's TIS Guidelines, the a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. while the p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m. Intersection LOS will be calculated using the *Highway Capacity Manual 6* (HCM 6) analysis methodologies and by using the Synchro 11 software.

Roadway segments will be analyzed for daily traffic using Florida Tables as recommended in the City's TIS guidelines.

Queuing Analysis

A queuing analysis will be performed at all study intersections. Queues for signalized intersections will be reported from Synchro, while queues for unsignalized intersections will be reported from SimTraffic.

Site Access and Circulation

A description of the project driveway and an illustration of the site plan will be provided in the TIS. Traffic operations at the project driveway will be analyzed based on an LOS and queuing analysis. The TIS will also include a discussion on the distance of the driveway from nearby intersections, along with the anticipated queues and Minimum Required Throat Depth (MRTD) at the driveway. Additionally, as per the City's TIS guidelines, an evaluation of sight distance and other potential unsafe traffic conditions shall be included in the TIS and appropriate recommendations will be provided.

Analysis of Traffic Operations and Recommended Circulation Improvements

LOS without the project at study intersections and roadway segments will be compared to the LOS with the project for all analysis scenarios to determine operational deficiencies based on the LOS standards and operational deficiency criteria established in the City's TIS guidelines.

Based on the results of the LOS and queuing analysis, improvements will be recommended at locations where the project creates or contributes to an operational deficiency. Improvements may include addition of intersection turn lanes, roadway widening, traffic signal installation and modification, local street striping and channelization improvements, and signage. The LOS with improvements will be calculated and summarized along with a comparison of the LOS without improvements.

Signal Warrant Analysis

As requested by City staff, the following signal warrant analysis will be included in the TIS as per the criteria defined in the California supplement of the *Manual on Uniform Traffic Control Devices* (CA-MUTCD):

- Warrant 1 and 2 for the existing unsignalized study intersections under existing conditions; and
- Warrant 3 for all unsignalized study intersections under all analysis scenarios.

Collision Analysis

An analysis of the collision data, based on the California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS), over a five-year period will be included in the TIS.

Multimodal Analysis

The existing and planned transit routes, walkways, and bikeways will be documented and gaps in the existing sidewalk and bicycle network within the study area as well as current access to transit and current transit service will be identified in the analysis. The analysis will identify connectivity from the project site to the existing bicycle and pedestrian network, and distance to current transit stops. Improvements that will increase connectivity to sidewalks, trails, bicycle facilities, and transit facilities will be considered in the TIS.

Safe Routes to School Evaluation

As requested by City staff, the TIS will include a qualitative analysis of safe routes to school from the project site to the K-12 school(s) which would likely serve the project on its opening day.

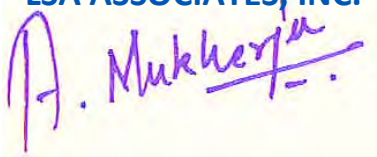
Fair Share

LSA will evaluate whether the improvements identified in the TIS are included in the City's FMSI or TMSI fee programs. If it is determined that an improvement is not covered through either of the fee programs, then the project's fair share contribution will be calculated based on the project traffic as a percentage of total growth from existing to cumulative year conditions.

Should you have any questions, please do not hesitate to contact me at (951) 781-9310 or email me at Ambarish.Mukherjee@lsa.net.

Sincerely,

LSA ASSOCIATES, INC.



Ambarish Mukherjee, AICP, PE
Principal

ATTACHMENTS

Table A: Project Trip Generation
Figure 1: Regional and Project Location
Figure 2: Conceptual Site Plan
Figure 3: Study Area Intersections
Figure 4: Project Trip Distribution
Figure 5: Project Trip Assignment
Appendix A: Fresno COG ABM Select Zone Distribution Plot

TABLES

LSA

Table A - Project Trip Generation

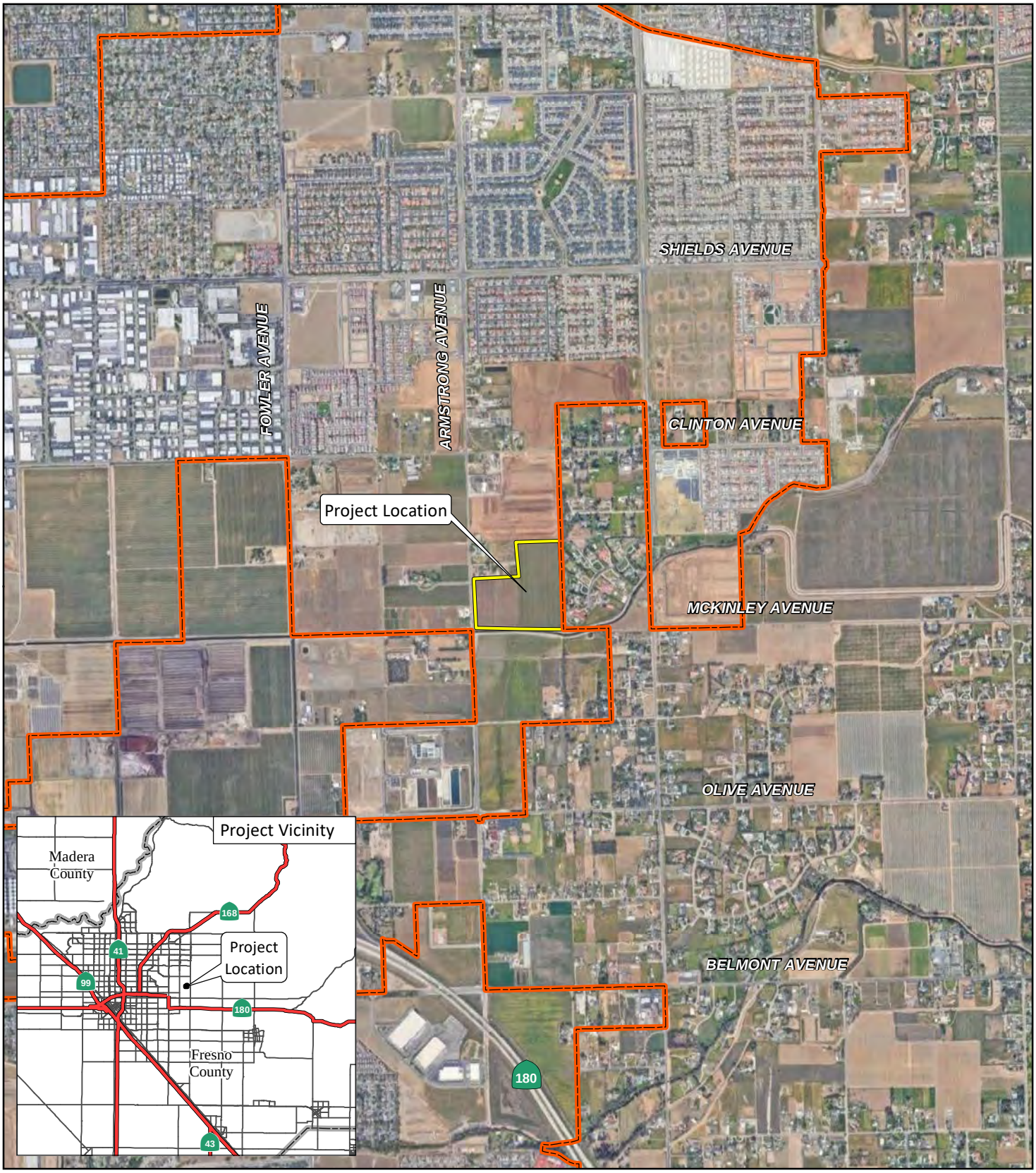
Land Use		Units	A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
Single-Family Detached Housing	326	DU							
Trips/Unit[1]			0.18	0.52	0.70	0.59	0.35	0.94	9.43
Trip Generation			59	170	229	192	114	306	3,074

Note:

DU = Dwelling Units

[1] Rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition), Land Use 210 - "Single-Family Detached Housing", Setting/Location - "General Urban/Suburban."

FIGURES



LSA

LEGEND

City of Fresno Boundary

Project Location

FIGURE 1

N

0 1000 2000

FEET

SOURCE: Google Earth, 2018; County of Fresno Streets Data, 2021.

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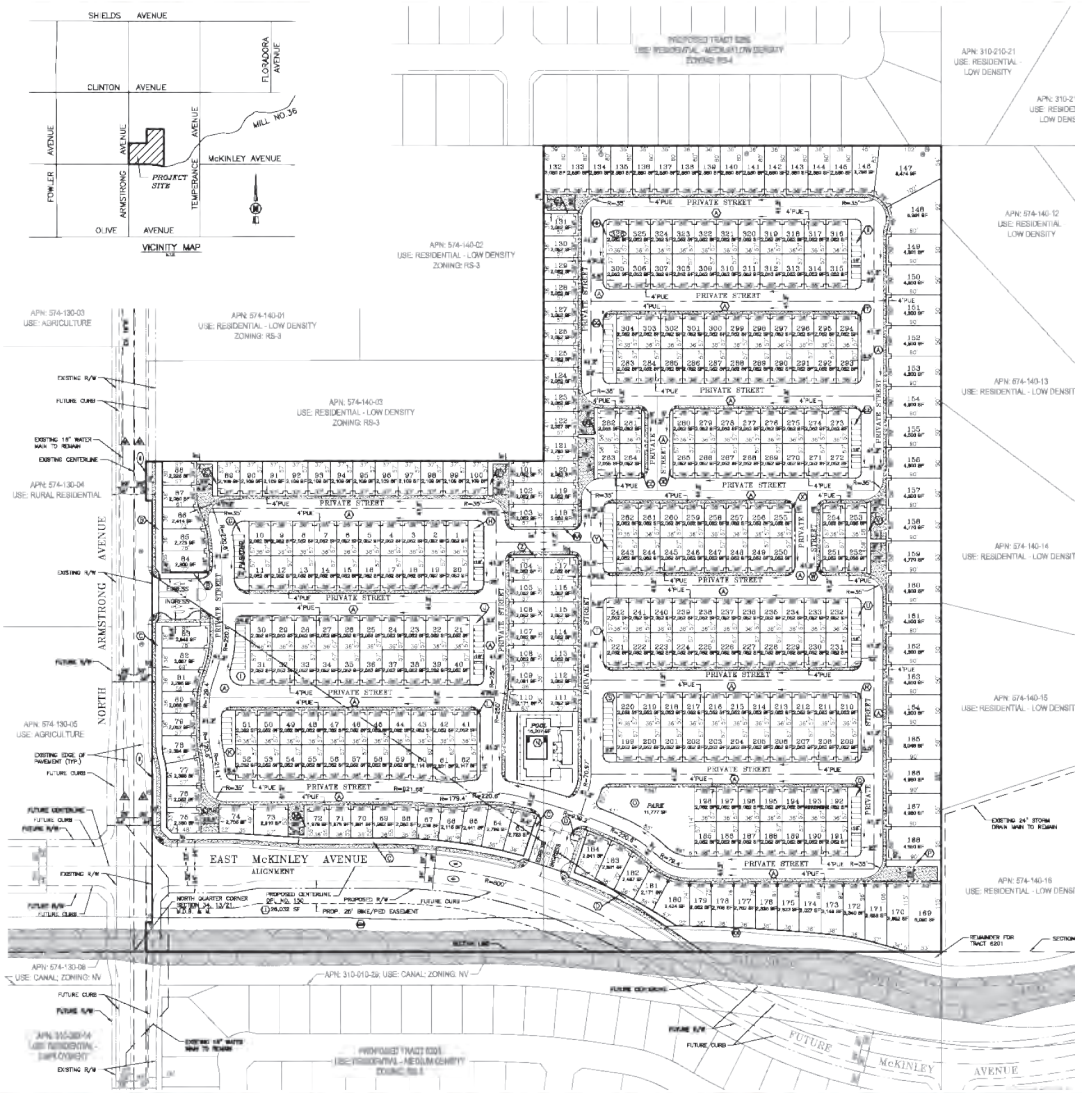
Tract 6360 Project
Traffic Impact Study

Regional and Project Location



LSA

FIGURE 2

0 170 340
FEET

Tract Map 6360 Project
Traffic Impact Study

Conceptual Site Plan

SOURCE: Harbour & Associates, November 2022

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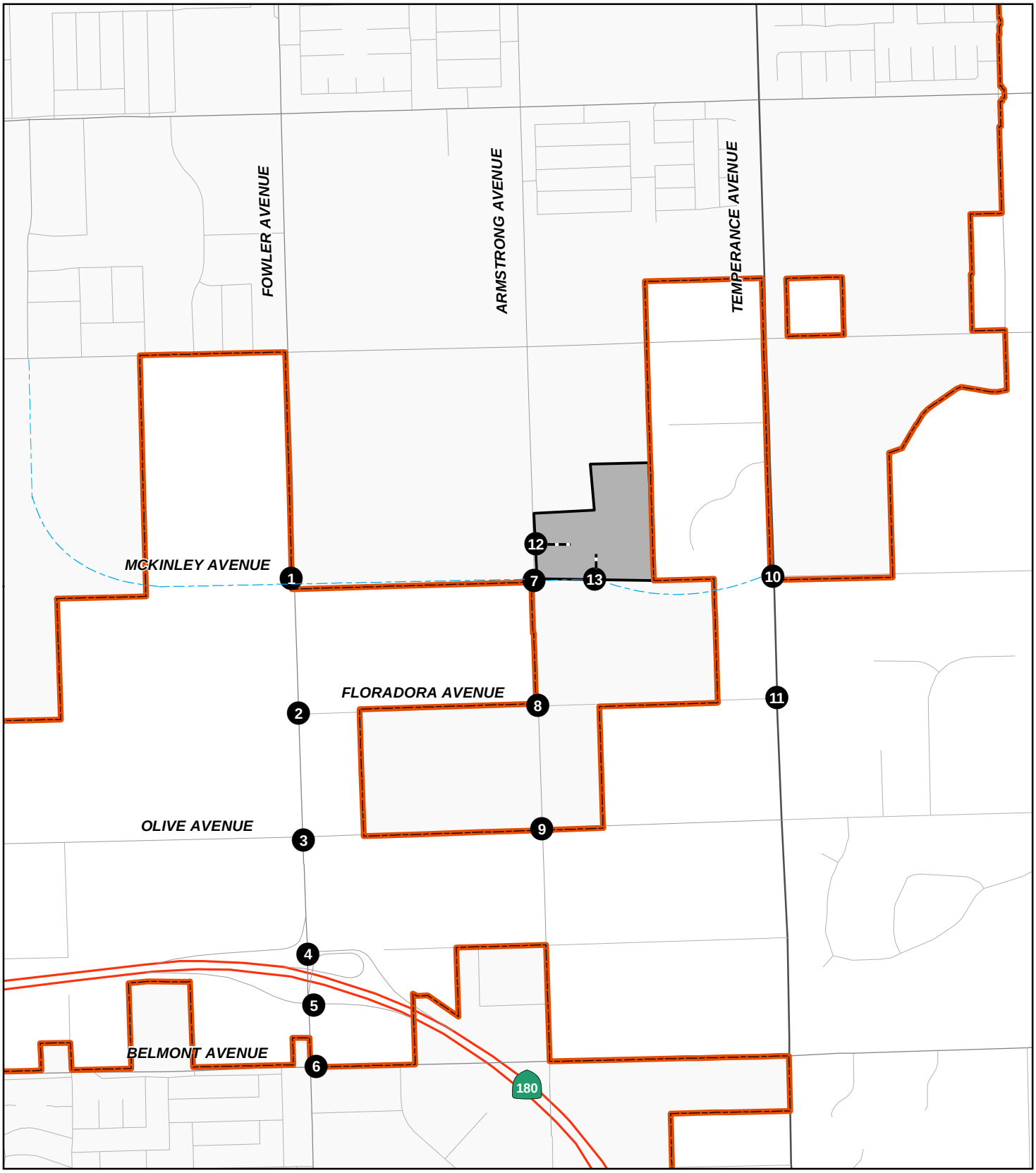

LSA

FIGURE 3

LEGEND

- Project Site
- City of Fresno Boundary
- Study Intersections
- Project Driveway
- Future Roadway

N

0 750 1500

FEET

SOURCE: County of Fresno Streets Data, 2021.

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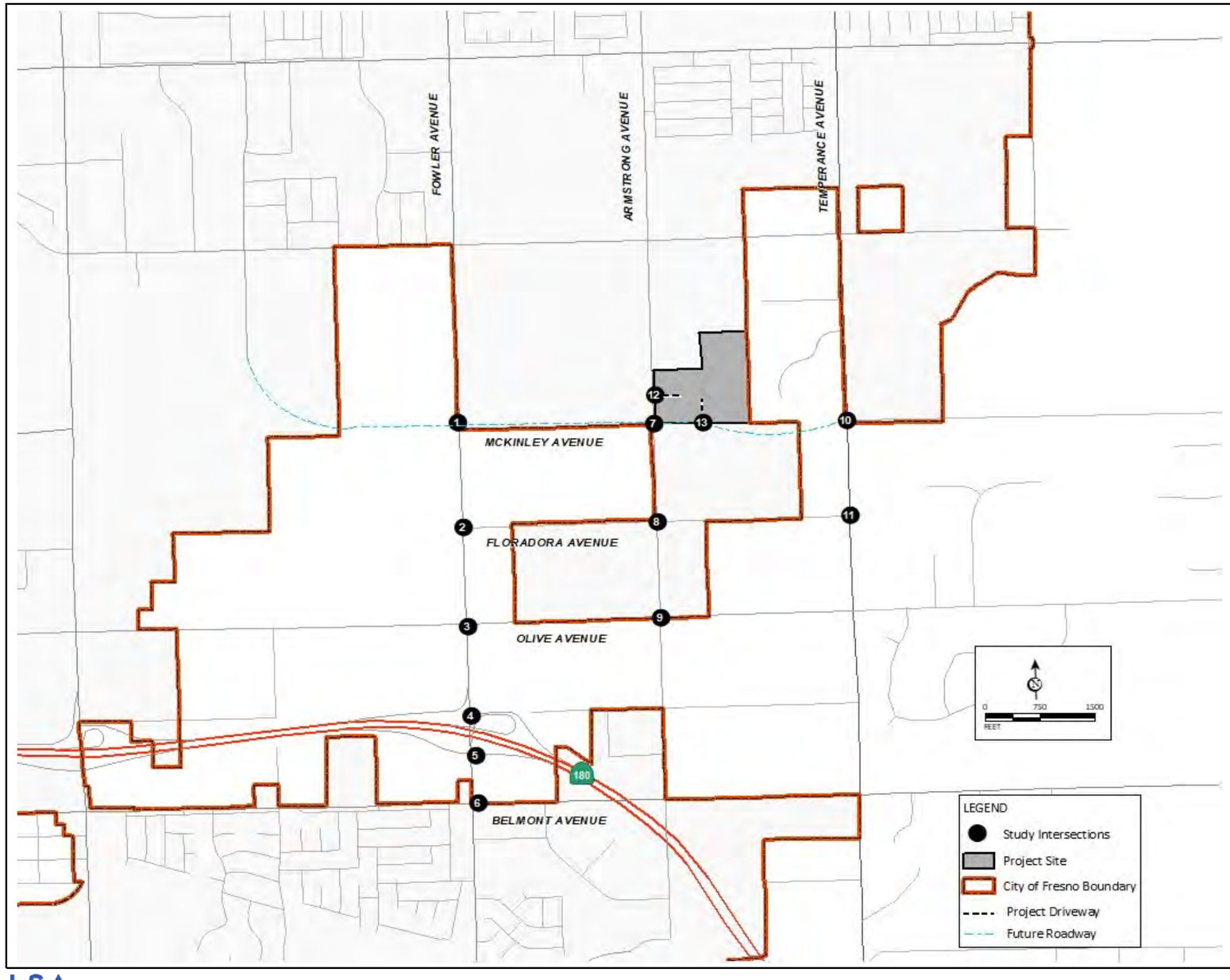
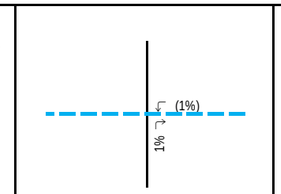
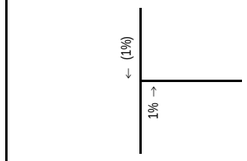
Tract 6360 Project
Traffic Impact Study

Study Area Intersections

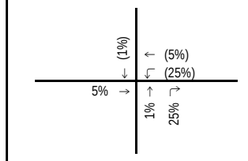




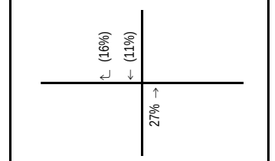
1 Fowler Avenue/McKinley Avenue



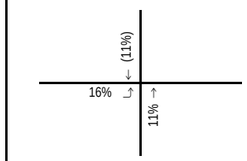
2 Fowler Avenue/Floradora Avenue



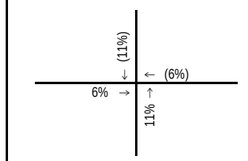
3 Fowler Avenue/Olive Avenue



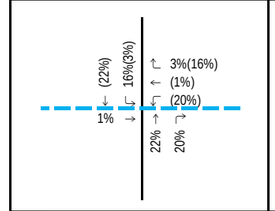
4 Fowler Avenue/State Route 180 (SR-180) Westbound Ramps



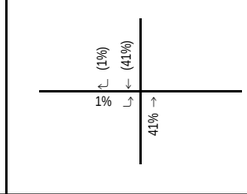
5 Fowler Avenue/SR-180 Eastbound Ramps



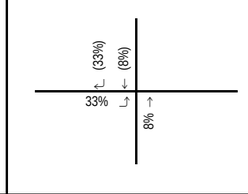
6 Fowler Avenue/Belmont Avenue



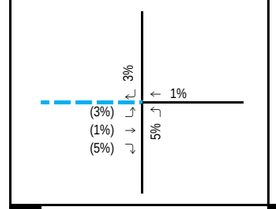
7 Armstrong Avenue/McKinley Avenue



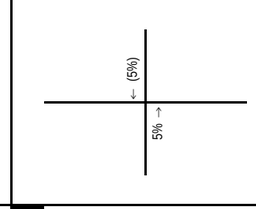
8 Armstrong Avenue/Floradora Avenue



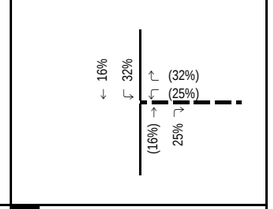
9 Armstrong Avenue/Olive Avenue



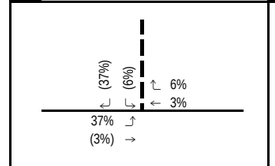
10 Temperance Avenue/McKinley Avenue



11 Temperance Avenue/Floradora Avenue



12 Armstrong Avenue/Project Driveway 1



13 Project Driveway 2/McKinley Avenue

LSA

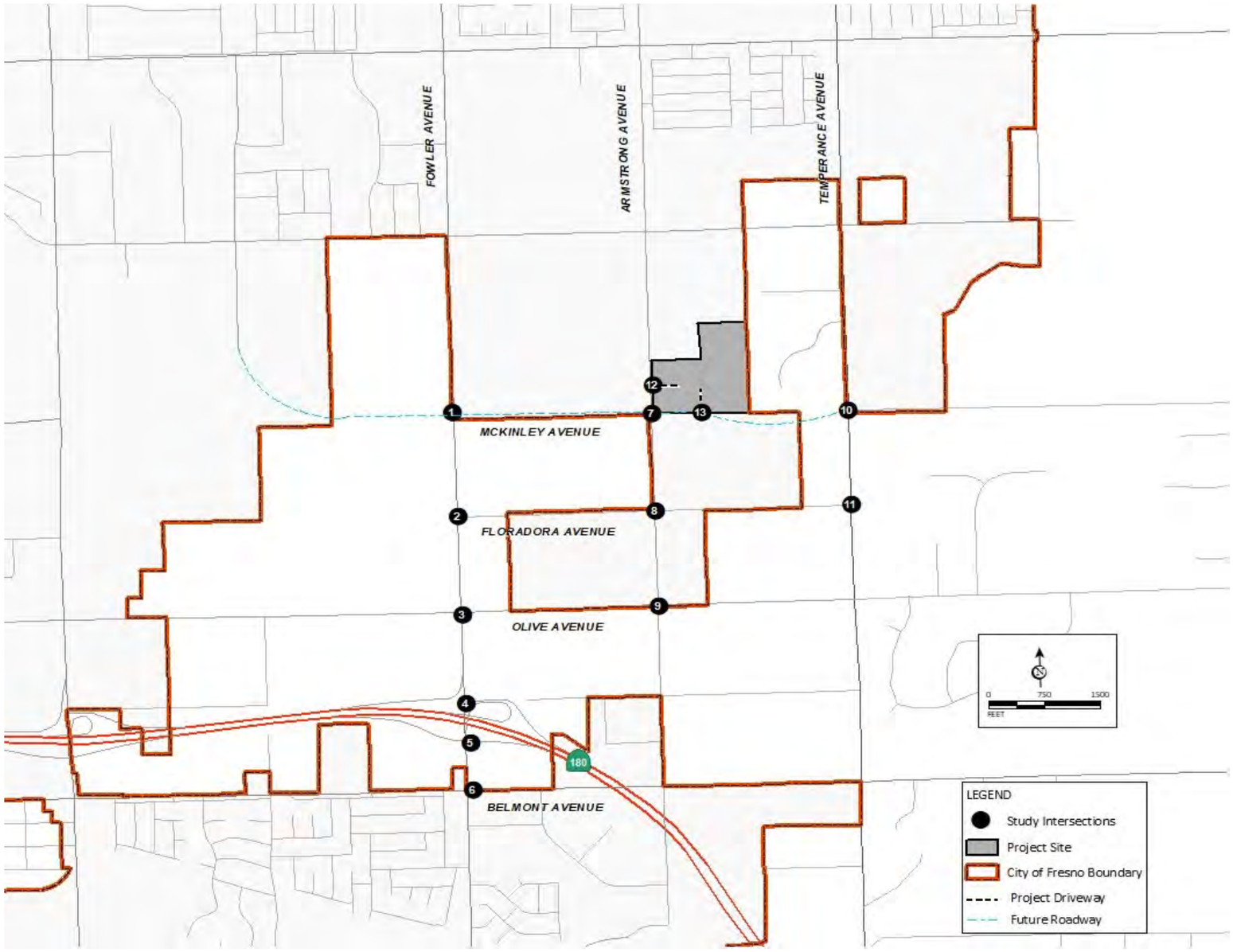
FIGURE 4

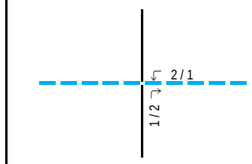
XX% (YY%)
Inbound (Outbound) Trip Distribution
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study

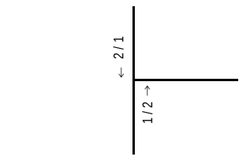
Project Trip Distribution

P:\HAA2103-TM 6360\PRODUCTS\Traffic\z45_Dist.xlsx 1/6/2023

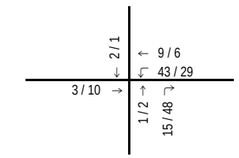




1 Fowler Avenue/McKinley Avenue

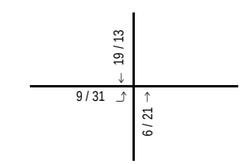


2 Fowler Avenue/Floradora Avenue

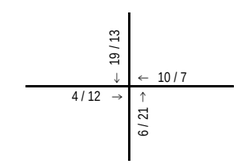


3 Fowler Avenue/Olive Avenue

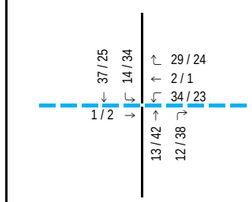
4 Fowler Avenue/Olive Avenue



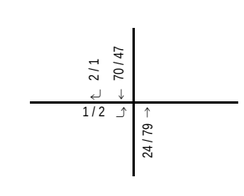
5 Fowler Avenue/State Route 180 (SR-180) Westbound Ramps



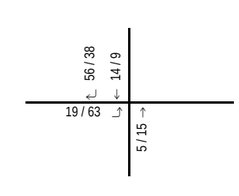
6 Fowler Avenue/SR-180 Eastbound Ramps



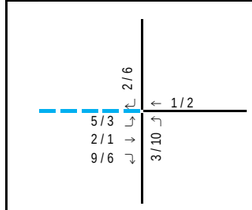
7 Fowler Avenue/Belmont Avenue



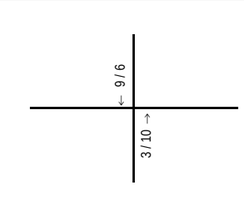
8 Armstrong Avenue/McKinley Avenue



9 Armstrong Avenue/Floradora Avenue

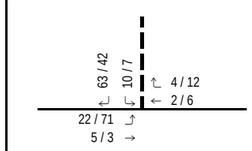


10 Armstrong Avenue/Olive Avenue



11 Temperance Avenue/McKinley Avenue

12 Temperance Avenue/Floradora Avenue



13 Armstrong Avenue/Project Driveway 1

LSA

FIGURE 5

XX / YY
AM / PM Peak Hour Traffic Volumes
Project Driveway
Future Segment

Tract Map 6360 Project
Traffic Impact Study

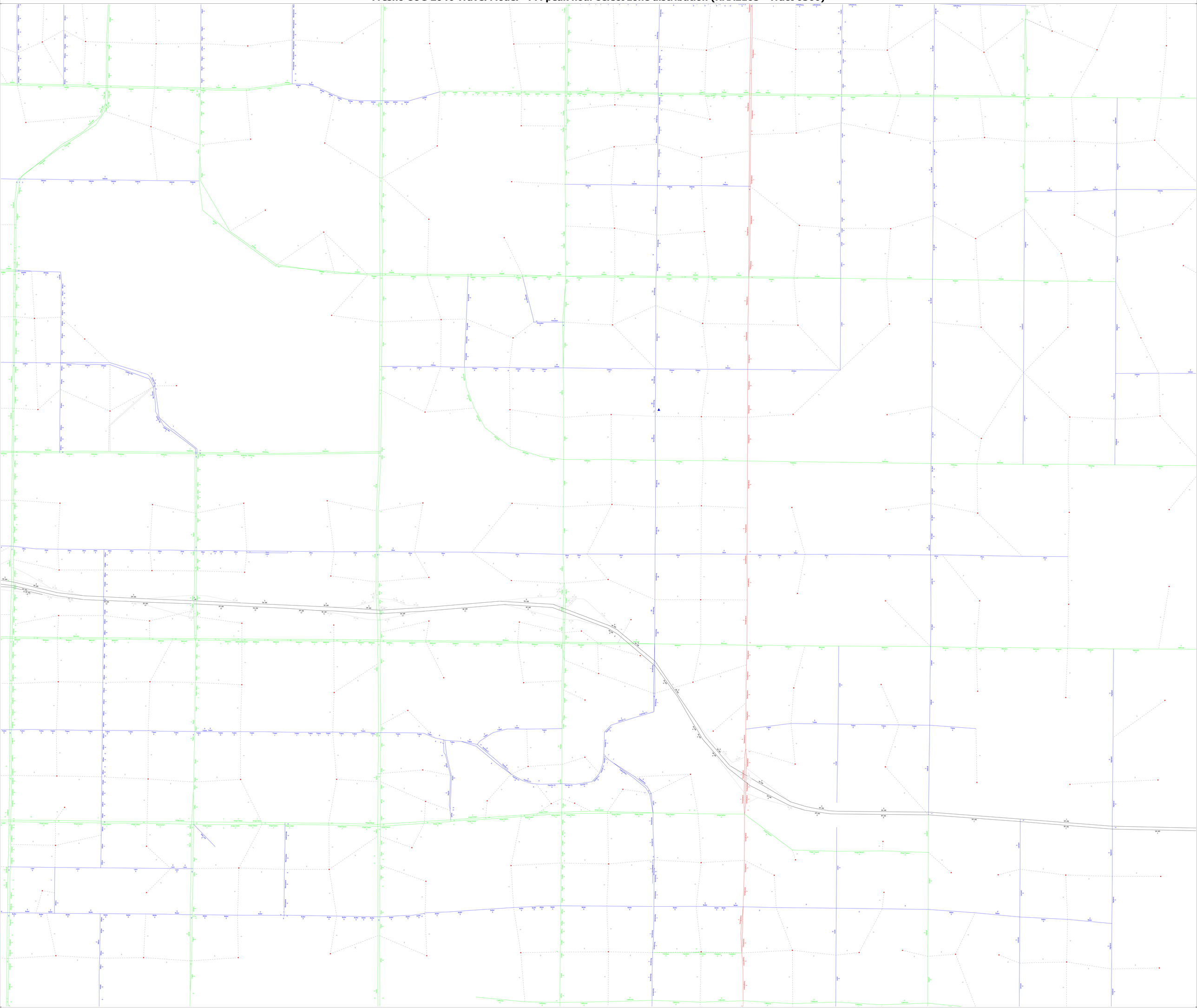
Project Trip Assignment

P:\HAA2103-TM 6360\PRODUCTS\Traffic\z45_Assign.xlsx 1/3/2023

APPENDIX A

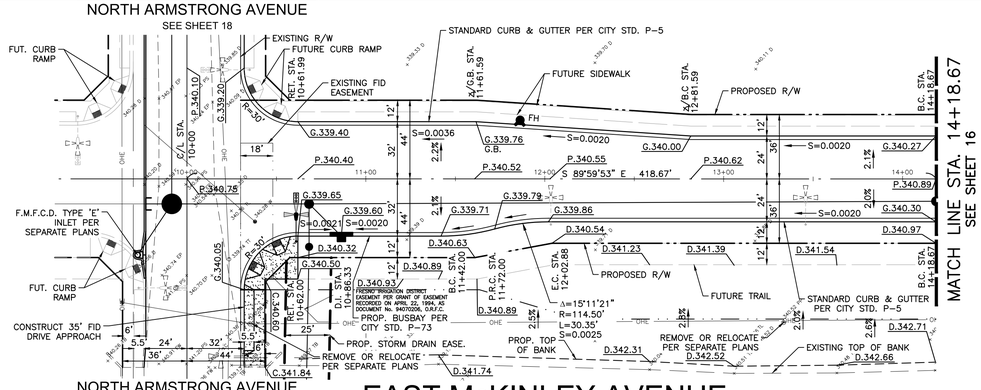
FRESNO COG ABM SELECT ZONE DISTRIBUTION PLOT

Fresno COG 2046 Travel Model - PM peak hour select zone distribution (HAA2103 - Tract 6360)



APPENDIX B

MCKINLEY AVENUE EXTENSION ALIGNMENT PLAN SHEETS



LEGEND

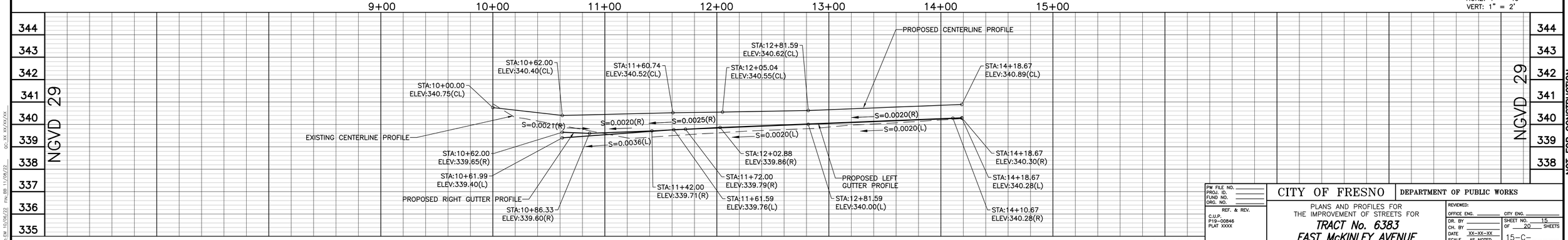
- INSTALL CURB RAMP PER CITY STANDARD P-28 & P-32
- INSTALL STREET LIGHT PER SEPARATE PLANS
- FH — FIRE HYDRANT, CURB AND SIDEWALK TRANSITION ADJACENT TO FIRE HYDRANT PER DETAIL ON SHEET 5
- P.349.19 — PAVEMENT ELEVATION
- G.349.19 — GUTTER ELEVATION
- FL.349.19 — FLOWLINE ELEVATION
- S=0.0000 — SLOPE
- CONSTRUCT SIDEWALK PER CITY STANDARD P-5
- G.B. — GRADE BREAK
- V.G. — CONSTRUCT VALLEY GUTTER PER CITY STD. P-10
- DW — PRIVATE LOT DRIVEWAY
- F.M.F.C.D. TYPE "D" INLET PER SEPARATE PLANS

NOTE:
ALL STATIONING IS ALONG AND PERPENDICULAR TO STREET CENTERLINE

REGISTERED PROFESSIONAL ENGINEER
RYAN NEELY
No. 85654
Exp. 9/24
CIVIL
STATE OF CALIFORNIA

GRAPHIC SCALE
0 20' 40' 80'

PLAN SCALE 1"= 40'
PROFILE SCALES
HORZ: 1" = 40'
VERT: 1" = 2'



Submittal: 01-09-23

PW FILE NO.	
PROJ. ID.	
FUND NO.	
ORG. NO.	
REF. & REV.	
C.U.P.	P19-00846
PLAT	XXXX

CITY OF FRESNO | DEPARTMENT OF PUBLIC WORKS

PLANS AND PROFILES FOR
THE IMPROVEMENT OF STREETS FOR
TRACT No. 6383
EAST McKINLEY AVENUE

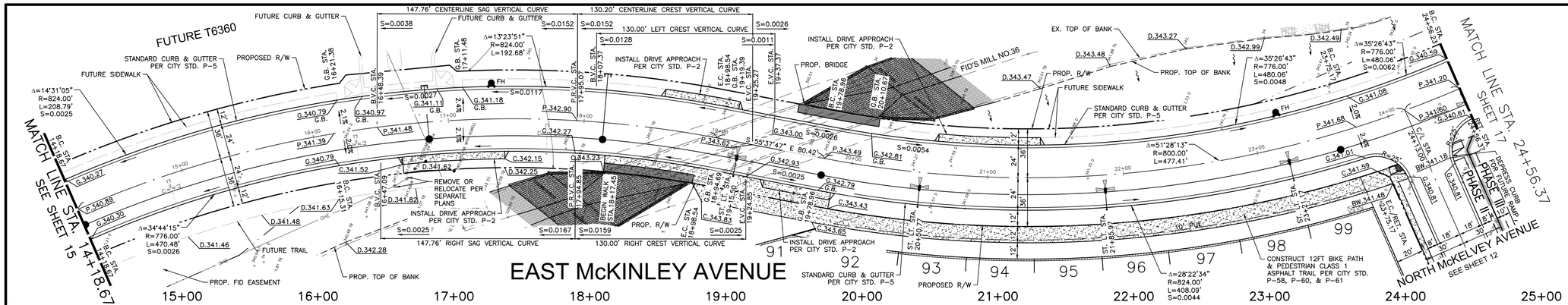
REVIEWED:	
OFFICE ENG.	CITY ENG.
DR. BY	SHEET NO. 15
CH. BY	OF 20 SHEETS
DATE	XX-XX-XX
SCALE	AS NOTED

15-C-_____

W.O. 21-054

X-203

INT=EM 10/06/22 FIN=BB 11/08/22 QC XX/XX/XX



LEGEND

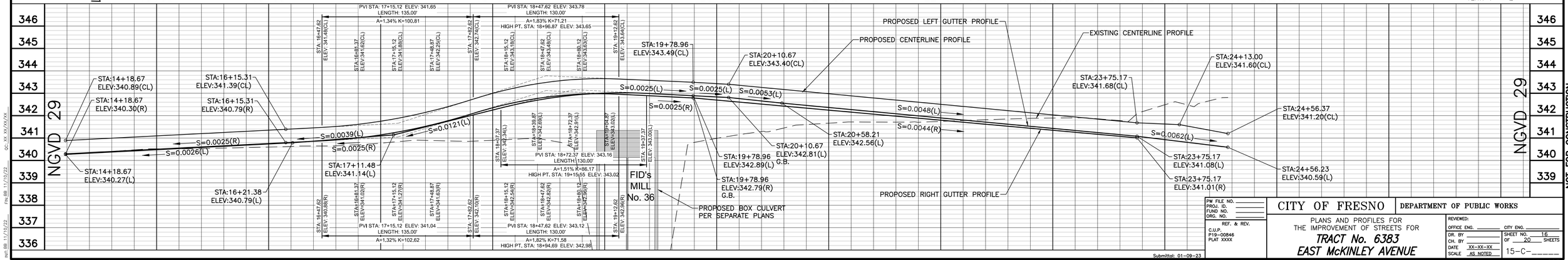
- INSTALL CURB RAMP PER CITY STANDARD P-28 & P-32
- INSTALL STREET LIGHT PER SEPARATE PLANS
- FUTURE STREET LIGHT
- FH — FIRE HYDRANT, CURB AND SIDEWALK TRANSITION ADJACENT TO FIRE HYDRANT PER DETAIL ON SHEET 5
- P.349.19 — PAVEMENT ELEVATION
- G.349.19 — GUTTER ELEVATION
- FL.349.19 — FLOWLINE ELEVATION
- S=0.0000 — SLOPE
- CONSTRUCT SIDEWALK PER CITY STANDARD P-5
- G.B. — GRADE BREAK
- V.G. — CONSTRUCT VALLEY GUTTER PER CITY STD. P-10
- DW — PRIVATE LOT DRIVEWAY
- PROPOSED TYPE "D" INLET PER F.M.F.C.D. STD. A-4
- PROPOSED MASONRY WALL PER DETAIL

NOTE:
ALL STATIONING IS ALONG AND PERPENDICULAR TO STREET CENTERLINE

REGISTERED PROFESSIONAL ENGINEER
RYAN NEELY
No. 85654
Exp. 9/24
CIVIL
STATE OF CALIFORNIA

GRAPHIC SCALE
0 20' 40' 80'

PLAN SCALE 1"= 40'
PROFILE SCALES
HORZ: 1" = 40'
VERT: 1" = 2'



NOT FOR CONSTRUCTION

QC: XX XX/XX/XX
FIN: BB 11/10/22
INIT: BB 11/10/22

Submittal: 01-09-23

PW FILE NO.
PROJ. ID.
FUND NO.
ORG. NO.
REF. & REV.
C.U.P. P19-00846
PLAT XXXX

CITY OF FRESNO
DEPARTMENT OF PUBLIC WORKS

PLANS AND PROFILES FOR
THE IMPROVEMENT OF STREETS FOR
TRACT No. 6383
EAST McKINLEY AVENUE

REVIEWED:
OFFICE ENG. _____ CITY ENG. _____
DR. BY _____
CH. BY _____
DATE XX-XX-XX
SCALE AS NOTED
SHEET NO. 16 OF 20 SHEETS
15-C-_____

W.O. 21-054

X-203

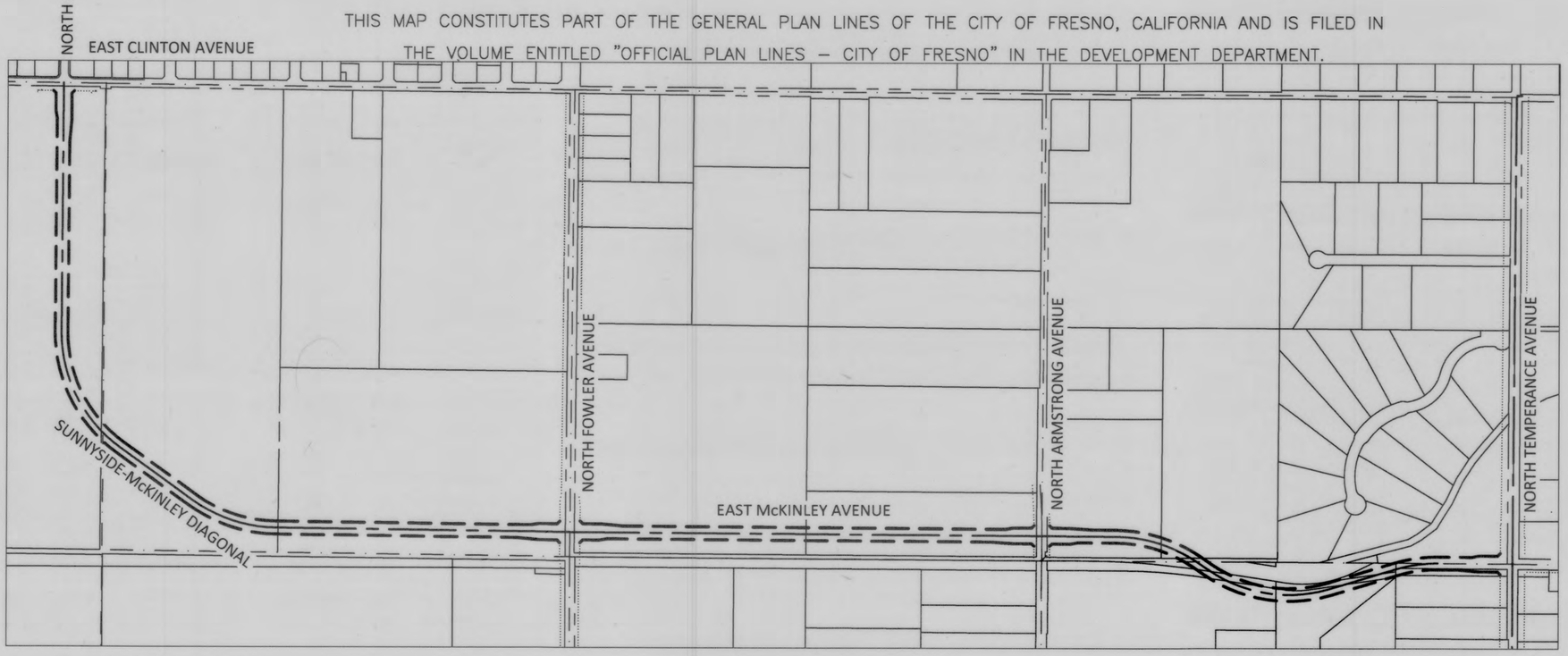
OFFICIAL PLAN LINES

EAST MCKINLEY AVENUE

BETWEEN

NORTH SUNNYSIDE AND NORTH TEMPERANCE AVENUES

THIS MAP CONSTITUTES PART OF THE GENERAL PLAN LINES OF THE CITY OF FRESNO, CALIFORNIA AND IS FILED IN THE VOLUME ENTITLED "OFFICIAL PLAN LINES – CITY OF FRESNO" IN THE DEVELOPMENT DEPARTMENT.



LOCATION MAP
SCALE: 1"=500'

WE HEREBY CERTIFY THAT THIS MAP CONSTITUTES A PART OF THE OFFICIAL PLAN LINE OF STREETS AND HIGHWAYS BEING A PART OF THE MASTER PLAN OF THE CITY OF FRESNO, CALIFORNIA, ADOPTED BY THE PLANNING COMMISSION OF SAID CITY BY RESOLUTION NO. 13428 AT A MEETING HELD ON THE 2ND DAY OF November, 20 16 AND CARRIED BY THE AFFIRMATIVE VOTE OF THE MAJORITY OF THE TOTAL MEMBERSHIP OF SAID COMMISSION.

SECRETARY

WE HEREBY CERTIFY THAT THIS MAP OF OFFICIAL PLAN LINES WAS ADOPTED BY THE CITY COUNCIL OF THE CITY OF FRESNO ON THE 8TH DAY OF December, 20 16 BY ORDINANCE NO. 2016-56 ADOPTED PURSUANT TO ARTICLE 7 OF CHAPTER 12 OF THE FRESNO MUNICIPAL CODE.

ATTEST:

YVONNE SPENCE, CMC
CITY CLERK OF THE CITY OF FRESNO

DEPUTY Mario Martinez 5/10/17

I, JASON A. CAMIT, CHIEF SURVEYOR OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF FRESNO, CALIFORNIA HEREBY CERTIFY THAT I HAVE EXAMINED THE OFFICIAL PLAN LINES DELINEATED ON THIS MAP AND I AM SATISFIED THAT THIS MAP IS TECHNICALLY CORRECT.

DATE 5-10-2017

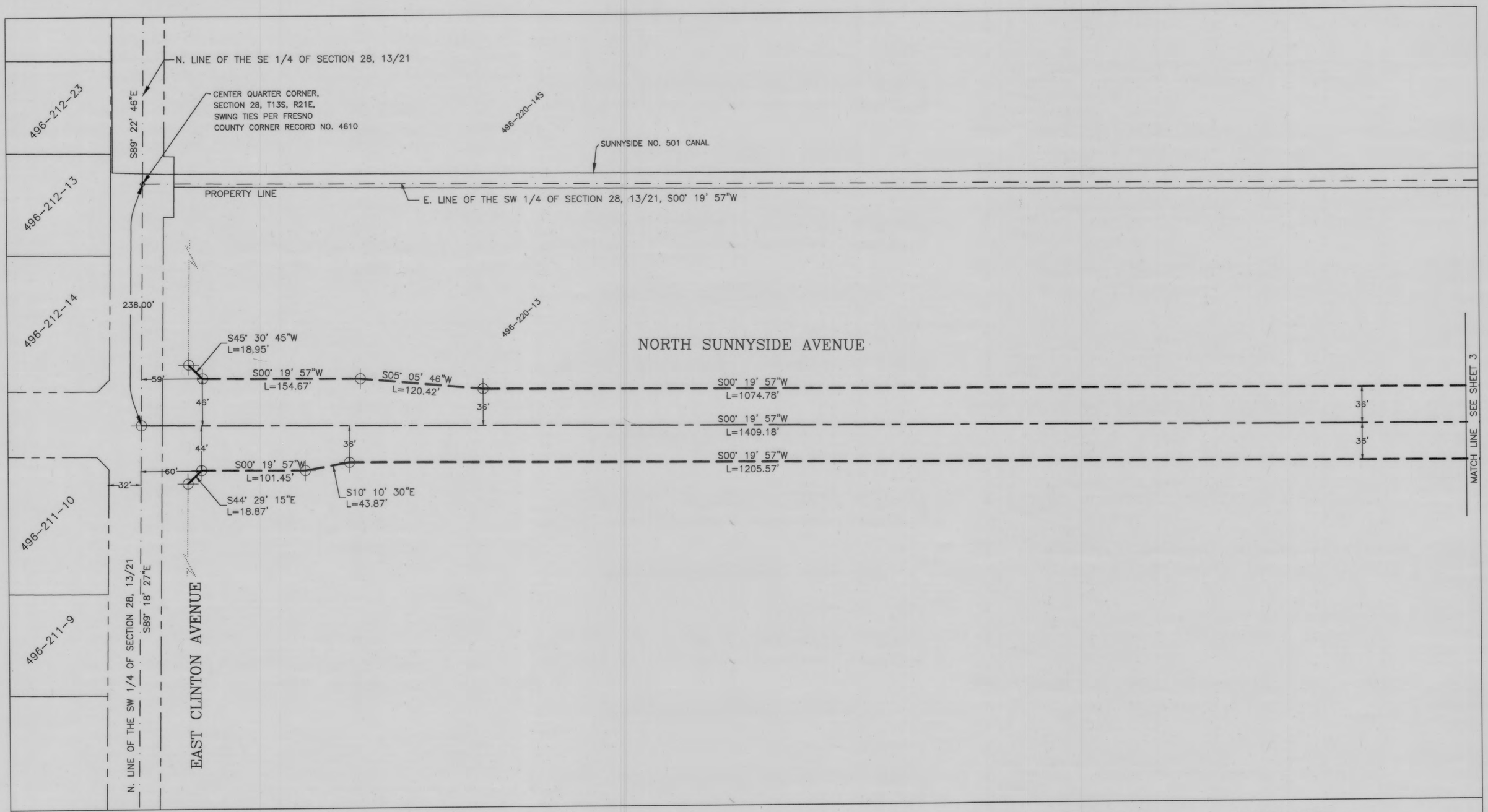
JASON A. CAMIT, PLS 8636
EXPIRES: 12-31-2017

INSTRUMENT NO. 2017-0057990 FILED AND RECORDED AT THE REQUEST OF THE CITY OF FRESNO THE 11TH DAY OF May, 20 17 AT 20 MINUTES PAST 10 A.M. AND RECORDED IN VOLUME 8 OF PRECISE PLANS AT PAGE 97-102 FRESNO COUNTY RECORDS.

PAUL DICTOS, C.P.A.
COUNTY RECORDER OF THE COUNTY OF FRESNO

BY: Angela Dillispie

Sheet No. 1 of 6 sheets



OFFICIAL PLAN LINES

EAST MCKINLEY AVENUE

BETWEEN

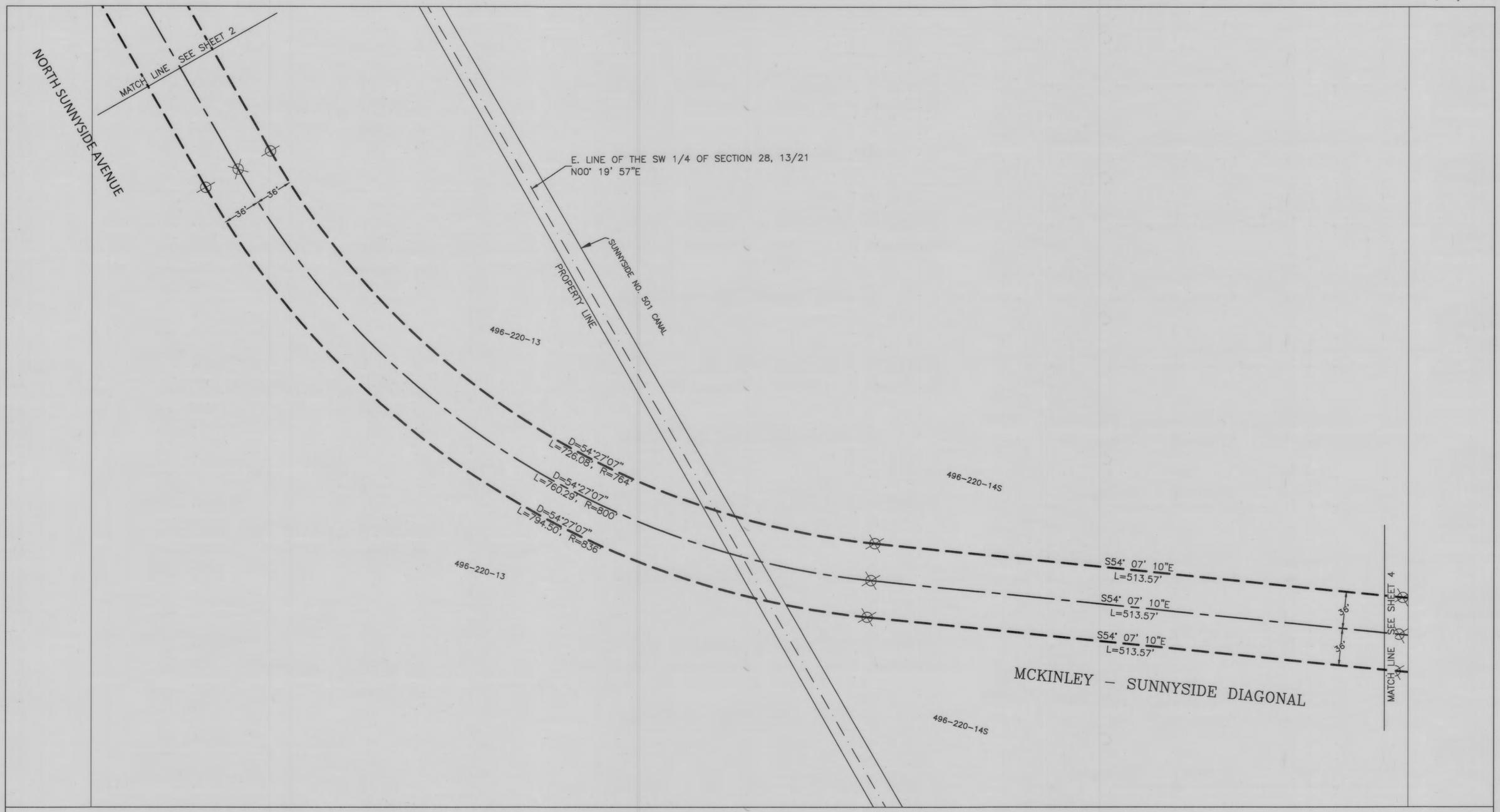
NORTH SUNNYSIDE AND NORTH TEMPERANCE AVENUES

SCALE: 1"=60'

NOTE:
ALL SETBACKS SHALL BE MEASURED FROM THE "OFFICIAL PLAN LINES".

LEGEND

- OFFICIAL PLAN LINES
- EXISTING RIGHT OF WAY LINES
- PROPERTY LINES
- CITY LIMITS
- SECTION LINE
- CENTER LINE



SCALE: 1" = 60'

NOTE:
ALL SETBACKS SHALL BE MEASURED FROM THE "OFFICIAL PLAN LINES".

OFFICIAL PLAN LINES

EAST MCKINLEY AVENUE

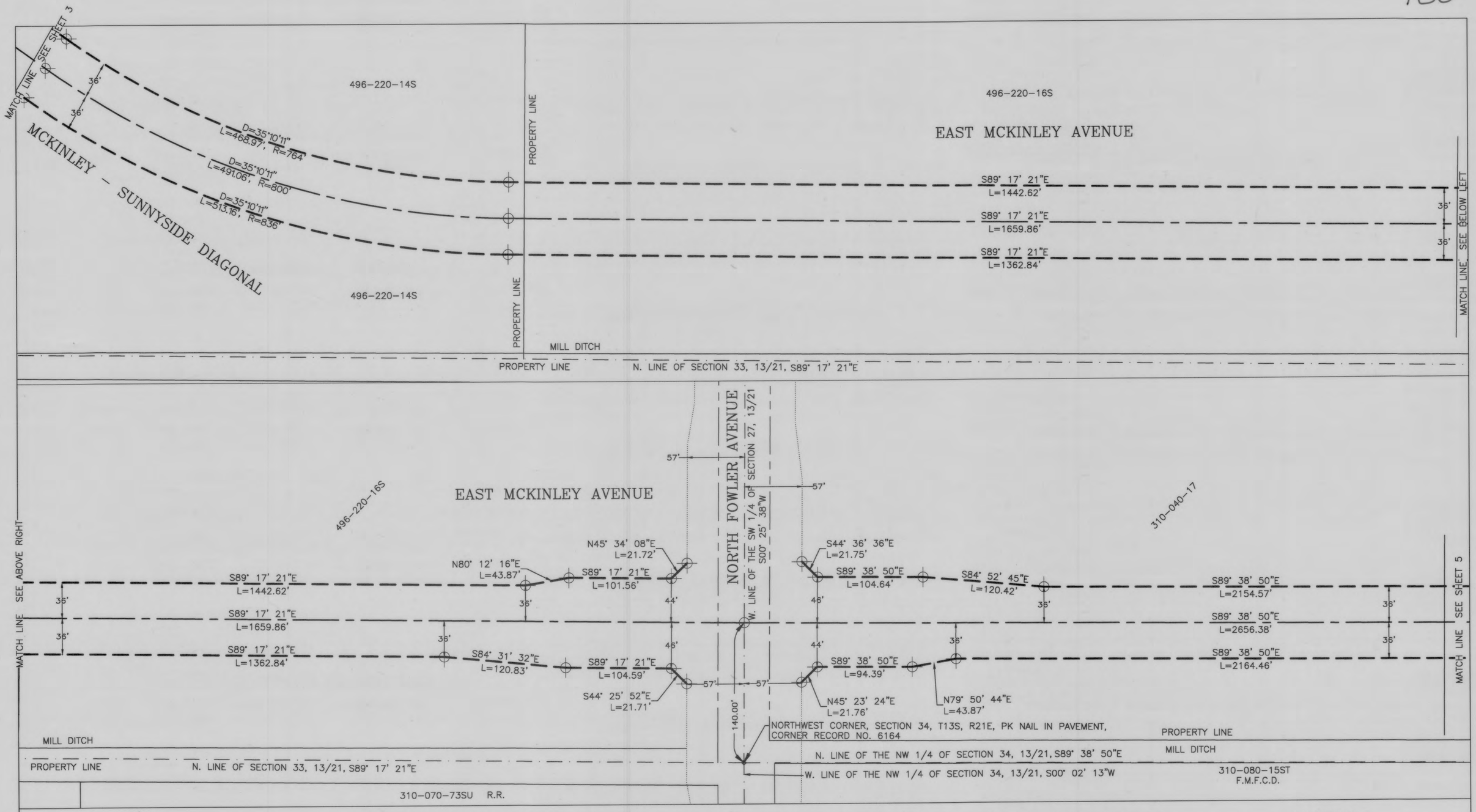
BETWEEN

NORTH SUNNYSIDE AND NORTH TEMPERANCE AVENUES

LEGEND

- OFFICIAL PLAN LINES
- EXISTING RIGHT OF WAY LINES
- EXISTING PROPERTY LINES
- CITY LIMITS
- SECTION LINE
- PROPOSED CENTER LINE
- FUTURE RIGHT OF WAY LINE
- FUTURE TRAIL EASEMENT

Sheet No. 3 of 6 Sheets



SCALE: 1" = 60'

NOTE:
ALL SETBACKS SHALL BE MEASURED FROM THE "OFFICIAL PLAN LINES".

OFFICIAL PLAN LINES

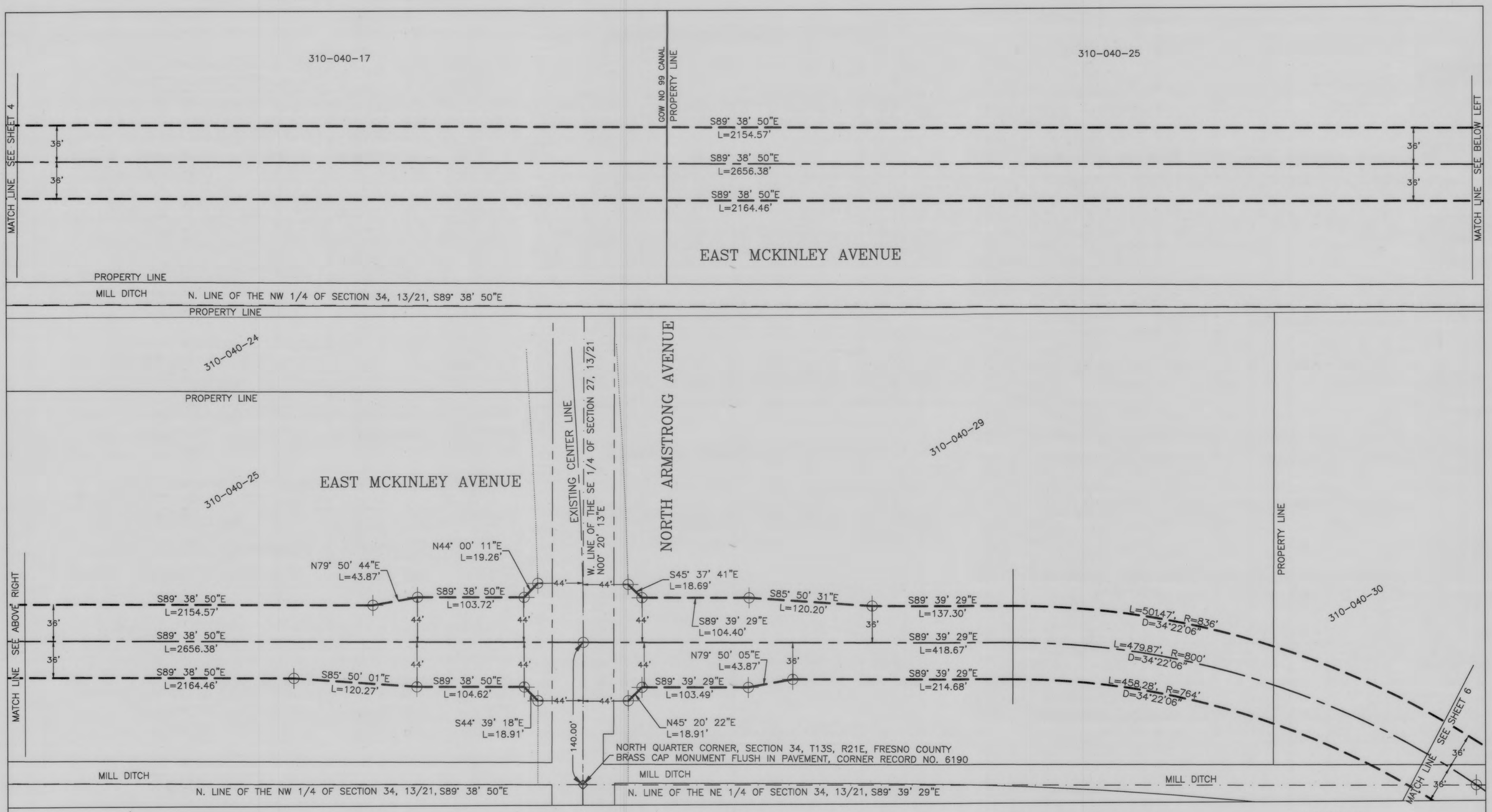
EAST MCKINLEY AVENUE

BETWEEN

NORTH SUNNYSIDE AND NORTH TEMPERANCE AVENUES

LEGEND

- OFFICIAL PLAN LINES
- EXISTING RIGHT OF WAY LINES
- EXISTING PROPERTY LINES
- CITY LIMITS
- SECTION LINE
- PROPOSED CENTER LINE
- FUTURE RIGHT OF WAY LINE
- FUTURE TRAIL EASEMENT



SCALE: 1" = 60'

NOTE:
ALL SETBACKS SHALL BE MEASURED FROM THE "OFFICIAL PLAN LINES".

OFFICIAL PLAN LINES

EAST MCKINLEY AVENUE

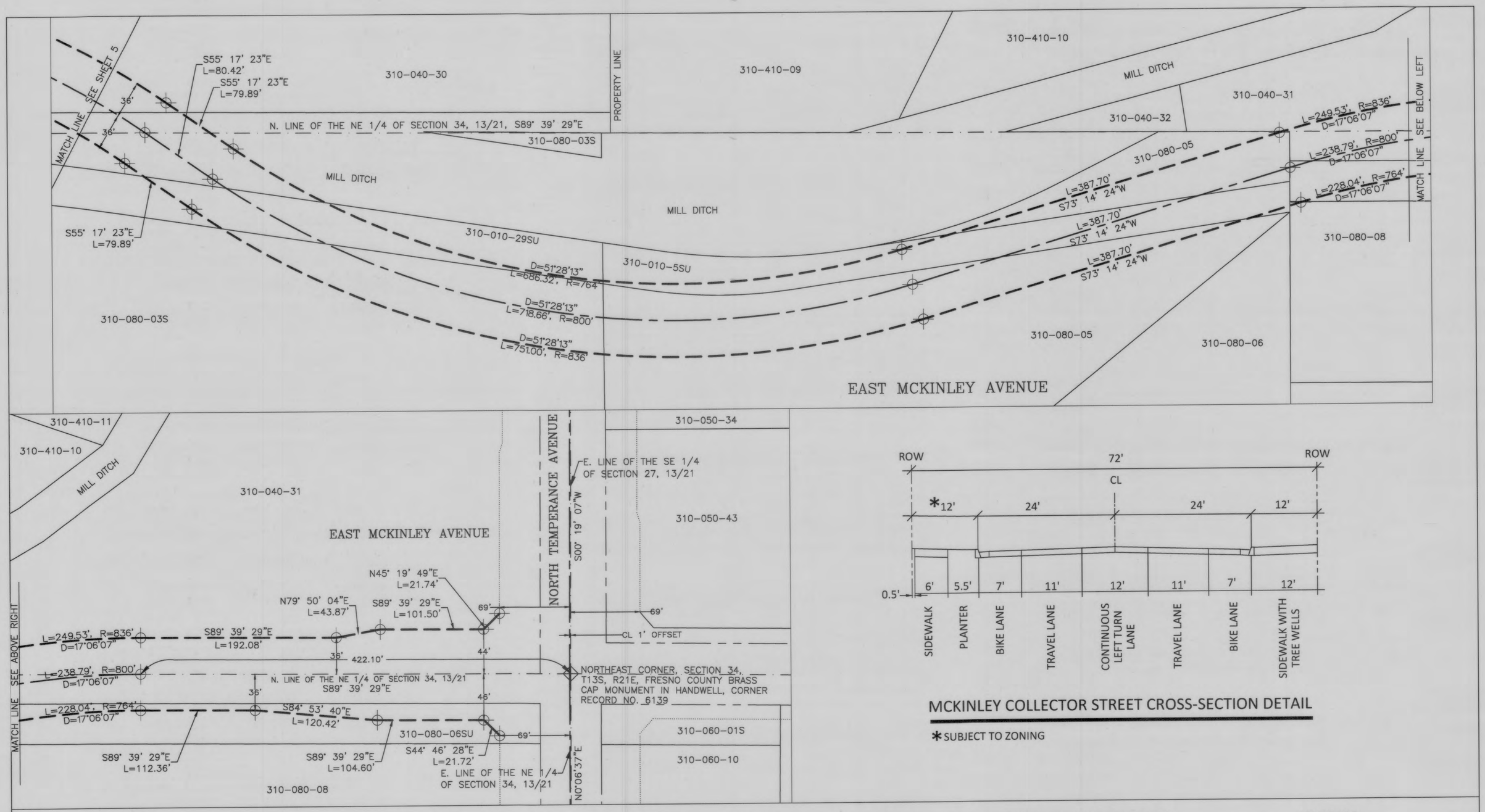
BETWEEN

NORTH SUNNYSIDE AND NORTH TEMPERANCE AVENUES

LEGEND

- OFFICIAL PLAN LINES
- EXISTING RIGHT OF WAY LINES
- EXISTING PROPERTY LINES
- CITY LIMITS
- SECTION LINE
- PROPOSED CENTER LINE
- FUTURE RIGHT OF WAY LINE
- FUTURE TRAIL EASEMENT

Sheet No. 5 of 6 Sheets



MCKINLEY COLLECTOR STREET CROSS-SECTION DETAIL

*SUBJECT TO ZONING

SCALE: 1" = 60'

NOTE:
ALL SETBACKS SHALL BE MEASURED FROM THE "OFFICIAL PLAN LINES".

OFFICIAL PLAN LINES

EAST MCKINLEY AVENUE

BETWEEN

NORTH SUNNYSIDE AND NORTH TEMPERANCE AVENUES

LEGEND

- OFFICIAL PLAN LINES
- EXISTING RIGHT OF WAY LINES
- EXISTING PROPERTY LINES
- CITY LIMITS
- SECTION LINE
- PROPOSED CENTER LINE
- FUTURE RIGHT OF WAY LINE
- FUTURE TRAIL EASEMENT

Sheet No. 6 of 6 Sheets

APPENDIX C

TRAFFIC COUNT AND SIGNAL TIMING SHEETS

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Fresno
N/S: Fowler Avenue
E/W: Floradora Avenue
Weather: Clear

File Name : 01_FSO_Fow_Flo AM
Site Code : 00322994
Start Date : 11/10/2022

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	105	0	108	0	0	1	1	0	72	1	73	0	0	0	0	182
07:15 AM	4	114	0	118	0	0	3	3	0	93	0	93	0	0	0	0	214
07:30 AM	4	142	0	146	0	0	5	5	0	98	3	101	0	0	0	0	252
07:45 AM	7	126	0	133	0	0	4	4	0	89	2	91	0	0	0	0	228
Total	18	487	0	505	0	0	13	13	0	352	6	358	0	0	0	0	876
08:00 AM	7	154	0	161	0	0	7	7	0	91	0	91	0	0	0	0	259
08:15 AM	25	118	0	143	2	0	14	16	0	106	0	106	0	0	0	0	265
08:30 AM	26	109	0	135	0	0	7	7	0	112	1	113	0	0	0	0	255
08:45 AM	15	105	0	120	0	0	13	13	0	114	0	114	0	0	0	0	247
Total	73	486	0	559	2	0	41	43	0	423	1	424	0	0	0	0	1026
Grand Total	91	973	0	1064	2	0	54	56	0	775	7	782	0	0	0	0	1902
Apprch %	8.6	91.4	0		3.6	0	96.4		0	99.1	0.9		0	0	0		
Total %	4.8	51.2	0	55.9	0.1	0	2.8	2.9	0	40.7	0.4	41.1	0	0	0	0	
Passenger Vehicles	90	955	0	1045	0	0	54	54	0	732	6	738	0	0	0	0	1837
% Passenger Vehicles	98.9	98.2	0	98.2	0	0	100	96.4	0	94.5	85.7	94.4	0	0	0	0	96.6
Large 2 Axle Vehicles	1	13	0	14	0	0	0	0	0	29	1	30	0	0	0	0	44
% Large 2 Axle Vehicles	1.1	1.3	0	1.3	0	0	0	0	0	3.7	14.3	3.8	0	0	0	0	2.3
3 Axle Vehicles	0	3	0	3	0	0	0	0	0	9	0	9	0	0	0	0	12
% 3 Axle Vehicles	0	0.3	0	0.3	0	0	0	0	0	1.2	0	1.2	0	0	0	0	0.6
4+ Axle Trucks	0	2	0	2	2	0	0	2	0	5	0	5	0	0	0	0	9
% 4+ Axle Trucks	0	0.2	0	0.2	100	0	0	3.6	0	0.6	0	0.6	0	0	0	0	0.5

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	7	**154**	0	**161**	0	0	7	7	0	91	0	91	0	0	0	0	259
08:15 AM	25	118	0	143	**2**	0	**14**	**16**	0	106	0	106	0	0	0	0	**265**
08:30 AM	**26**	109	0	135	0	0	7	7	0	112	**1**	113	0	0	0	0	255
08:45 AM	15	105	0	120	0	0	13	13	0	**114**	0	**114**	0	0	0	0	247
Total Volume	73	486	0	559	2	0	41	43	0	423	1	424	0	0	0	0	1026
% App. Total	13.1	86.9	0		4.7	0	95.3		0	99.8	0.2		0	0	0		
PHF	.702	.789	.000	.868	.250	.000	.732	.672	.000	.928	.250	.930	.000	.000	.000	.000	.968

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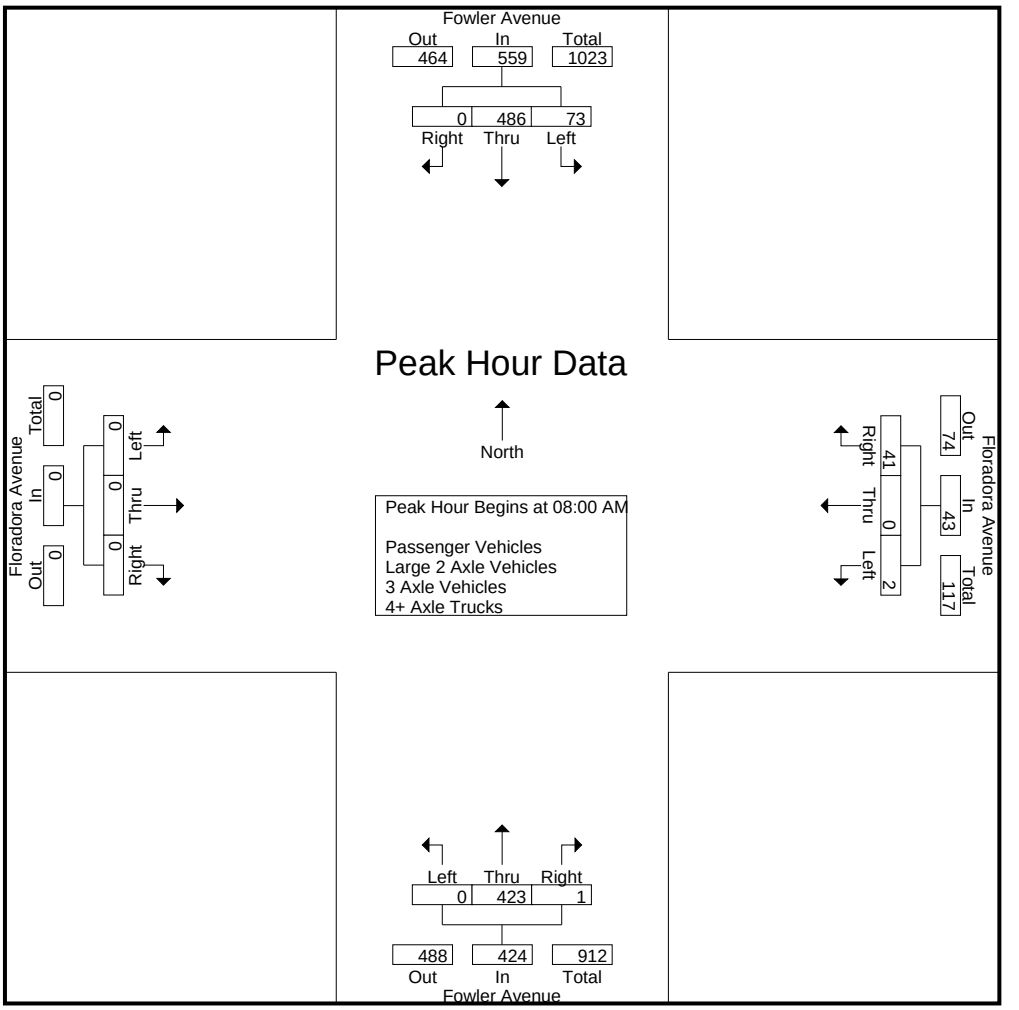
City of Fresno
N/S: Fowler Avenue
E/W: Floradora Avenue
Weather: Clear

File Name : 01_FSO_Fow_Flo AM
Site Code : 00322994
Start Date : 11/10/2022



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				08:00 AM				07:00 AM			
+0 mins.	4	142	0	146	0	0	7	7	0	91	0	91	0	0	0	0
+15 mins.	7	126	0	133	**2**	0	**14**	**16**	0	106	0	106	0	0	0	0
+30 mins.	7	**154**	0	**161**	0	0	7	7	0	112	**1**	113	0	0	0	0
+45 mins.	**25**	118	0	143	0	0	13	13	0	**114**	0	**114**	0	0	0	0
Total Volume	43	540	0	583	2	0	41	43	0	423	1	424	0	0	0	0
% App. Total	7.4	92.6	0		4.7	0	95.3		0	99.8	0.2		0	0	0	
PHF	.430	.877	.000	.905	.250	.000	.732	.672	.000	.928	.250	.930	.000	.000	.000	.000

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Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	103	0	106	0	0	1	1	0	65	1	66	0	0	0	0	173
07:15 AM	4	113	0	117	0	0	3	3	0	83	0	83	0	0	0	0	203
07:30 AM	4	139	0	143	0	0	5	5	0	94	3	97	0	0	0	0	245
07:45 AM	7	120	0	127	0	0	4	4	0	84	1	85	0	0	0	0	216
Total	18	475	0	493	0	0	13	13	0	326	5	331	0	0	0	0	837
08:00 AM	7	153	0	160	0	0	7	7	0	88	0	88	0	0	0	0	255
08:15 AM	24	116	0	140	0	0	14	14	0	104	0	104	0	0	0	0	258
08:30 AM	26	108	0	134	0	0	7	7	0	103	1	104	0	0	0	0	245
08:45 AM	15	103	0	118	0	0	13	13	0	111	0	111	0	0	0	0	242
Total	72	480	0	552	0	0	41	41	0	406	1	407	0	0	0	0	1000
Grand Total	90	955	0	1045	0	0	54	54	0	732	6	738	0	0	0	0	1837
Apprch %	8.6	91.4	0		0	0	100		0	99.2	0.8		0	0	0		
Total %	4.9	52	0	56.9	0	0	2.9	2.9	0	39.8	0.3	40.2	0	0	0	0	

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	7	**153**	0	**160**	0	0	7	7	0	88	0	88	0	0	0	0	255
08:15 AM	24	116	0	140	0	0	**14**	**14**	0	104	0	104	0	0	0	0	**258**
08:30 AM	**26**	108	0	134	0	0	7	7	0	103	**1**	104	0	0	0	0	245
08:45 AM	15	103	0	118	0	0	13	13	0	**111**	0	**111**	0	0	0	0	242
Total Volume	72	480	0	552	0	0	41	41	0	406	1	407	0	0	0	0	1000
% App. Total	13	87	0		0	0	100		0	99.8	0.2		0	0	0		
PHF	.692	.784	.000	.863	.000	.000	.732	.732	.000	.914	.250	.917	.000	.000	.000	.000	.969

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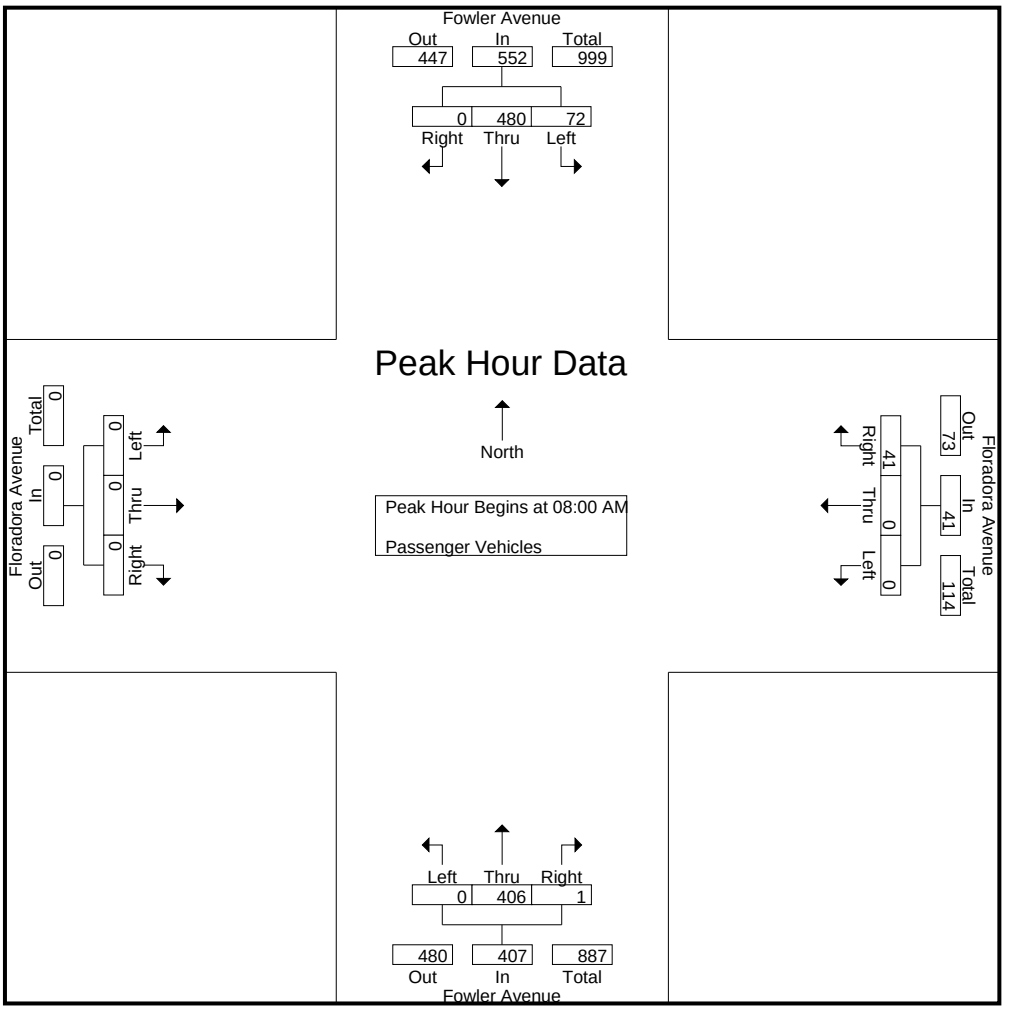

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	7	**153**	0	**160**	0	0	7	7	0	88	0	88	0	0	0	0
+15 mins.	24	116	0	140	0	0	**14**	**14**	0	104	0	104	0	0	0	0
+30 mins.	**26**	108	0	134	0	0	7	7	0	103	**1**	104	0	0	0	0
+45 mins.	15	103	0	118	0	0	13	13	0	**111**	0	**111**	0	0	0	0
Total Volume	72	480	0	552	0	0	41	41	0	406	1	407	0	0	0	0
% App. Total	13	87	0		0	0	100		0	99.8	0.2		0	0	0	
PHF	.692	.784	.000	.863	.000	.000	.732	.732	.000	.914	.250	.917	.000	.000	.000	.000

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Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	6
07:15 AM	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	6
07:30 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
07:45 AM	0	4	0	4	0	0	0	0	0	3	1	4	0	0	0	0	8
Total	0	8	0	8	0	0	0	0	0	16	1	17	0	0	0	0	25
08:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:15 AM	1	2	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
08:30 AM	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	0	8
08:45 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total	1	5	0	6	0	0	0	0	0	13	0	13	0	0	0	0	19
Grand Total	1	13	0	14	0	0	0	0	0	29	1	30	0	0	0	0	44
Apprch %	7.1	92.9	0		0	0	0		0	96.7	3.3		0	0	0		
Total %	2.3	29.5	0	31.8	0	0	0	0	0	65.9	2.3	68.2	0	0	0	0	

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:15 AM	**1**	**2**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0	4
08:30 AM	0	0	0	0	0	0	0	0	0	**8**	0	**8**	0	0	0	0	**8**
08:45 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total Volume	1	5	0	6	0	0	0	0	0	13	0	13	0	0	0	0	19
% App. Total	16.7	83.3	0		0	0	0		0	100	0		0	0	0		
PHF	.250	.625	.000	.500	.000	.000	.000	.000	.000	.406	.000	.406	.000	.000	.000	.000	.594

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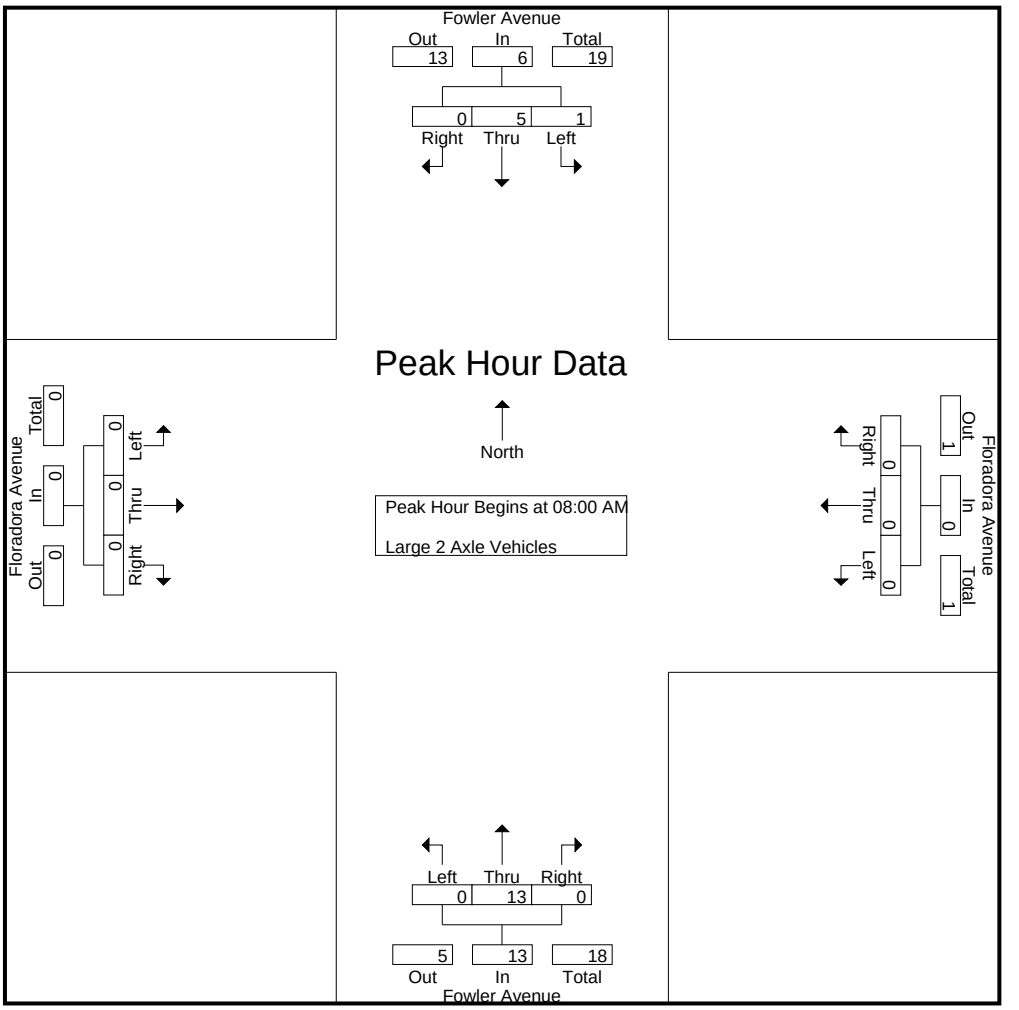

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	**1**	**2**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	**8**	0	**8**	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	1	5	0	6	0	0	0	0	0	13	0	13	0	0	0	0
% App. Total	16.7	83.3	0		0	0	0		0	100	0		0	0	0	
PHF	.250	.625	.000	.500	.000	.000	.000	.000	.000	.406	.000	.406	.000	.000	.000	.000

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Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
07:15 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	3	0	3	0	0	0	0	0	7	0	7	0	0	0	0	10
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Grand Total	0	3	0	3	0	0	0	0	0	9	0	9	0	0	0	0	12
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	25	0	25	0	0	0	0	0	75	0	75	0	0	0	0	

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.500

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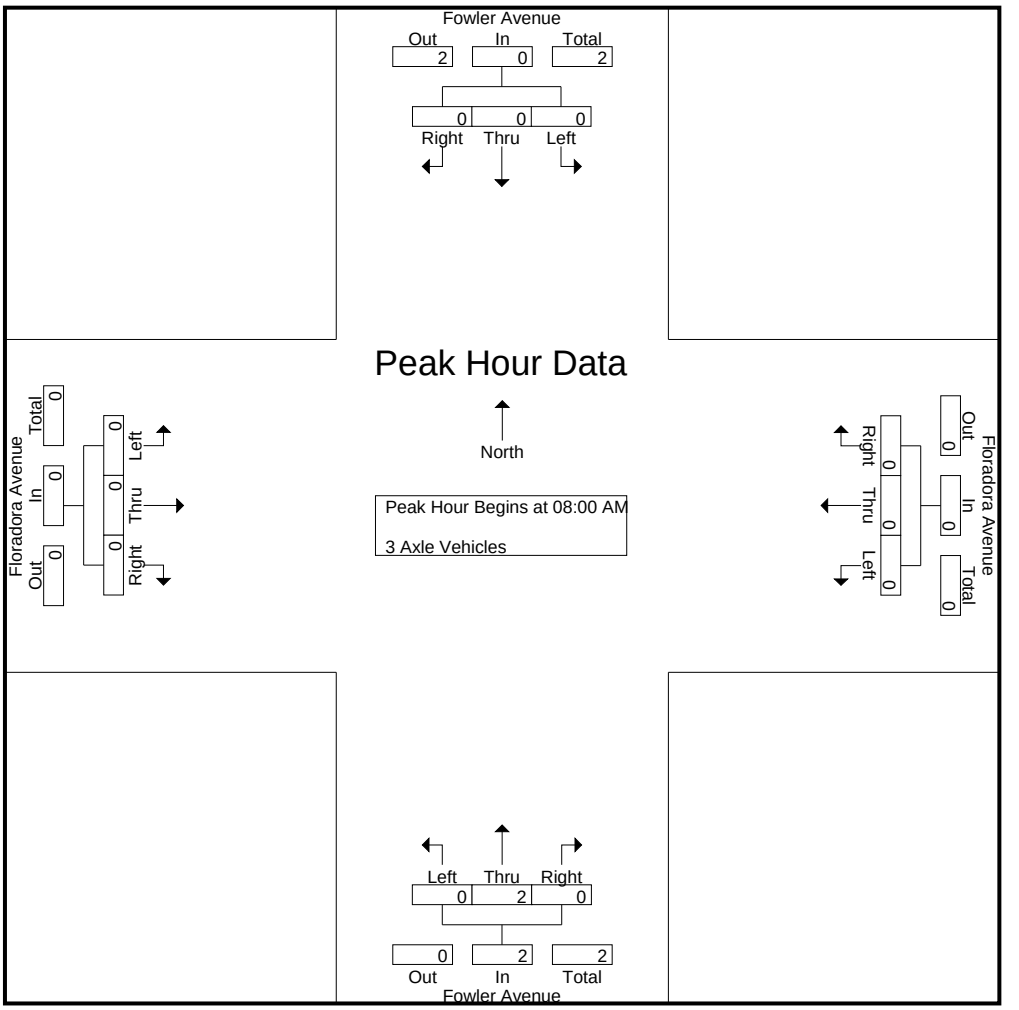

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
08:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	2	0	0	2	0	2	0	2	0	0	0	0	5
Grand Total	0	2	0	2	2	0	0	2	0	5	0	5	0	0	0	0	9
Apprch %	0	100	0		100	0	0		0	100	0		0	0	0		
Total %	0	22.2	0	22.2	22.2	0	0	22.2	0	55.6	0	55.6	0	0	0	0	

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	**2**	0	0	**2**	0	0	0	0	0	0	0	0	**2**
08:30 AM	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	1	0	1	2	0	0	2	0	2	0	2	0	0	0	0	5
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.625

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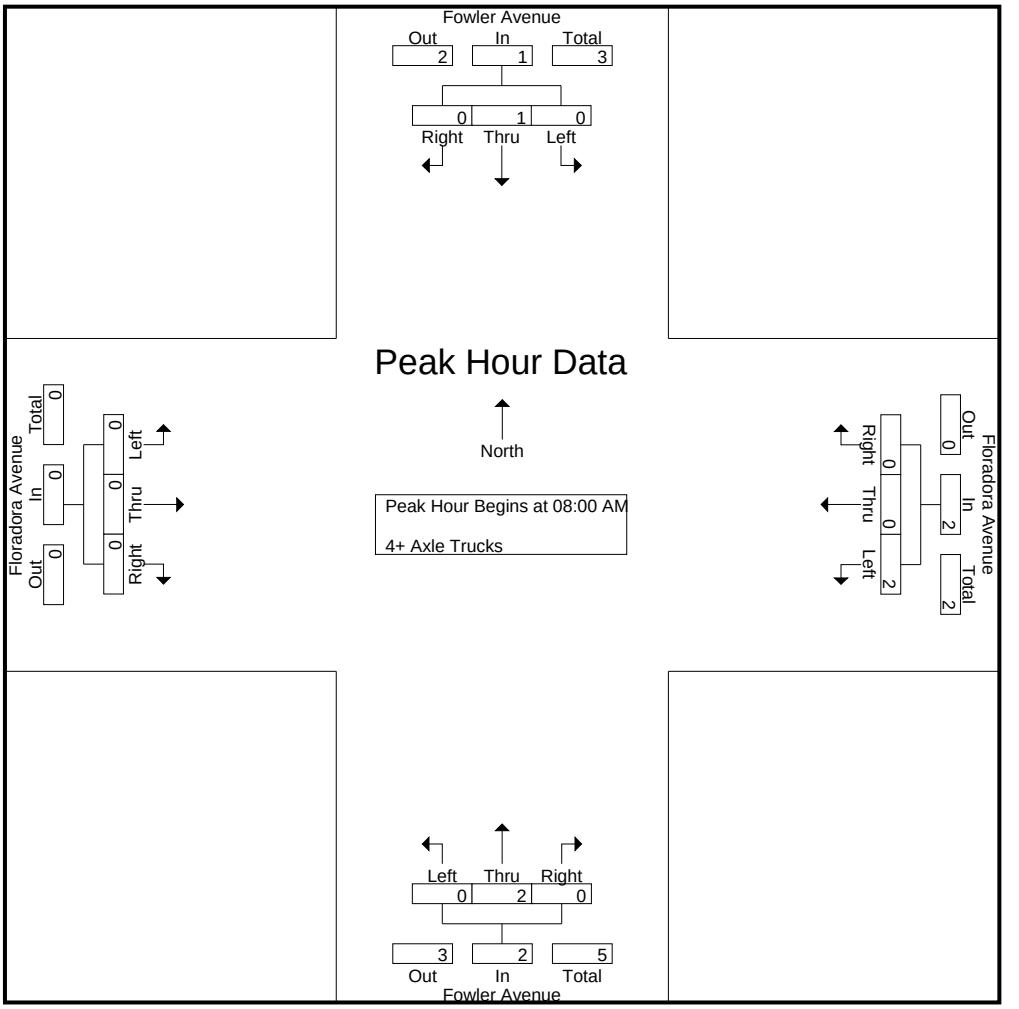

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	**2**	0	0	**2**	0	0	0	0	0	0	0	0
+30 mins.	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	1	0	1	2	0	0	2	0	2	0	2	0	0	0	0
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	116	0	120	0	0	5	5	0	121	2	123	0	0	0	0	248
04:15 PM	18	117	0	135	0	0	5	5	0	112	1	113	0	0	0	0	253
04:30 PM	21	106	0	127	0	0	8	8	0	133	1	134	0	0	0	0	269
04:45 PM	28	105	0	133	0	0	4	4	0	132	0	132	0	0	0	0	269
Total	71	444	0	515	0	0	22	22	0	498	4	502	0	0	0	0	1039
05:00 PM	29	112	0	141	0	0	10	10	0	144	0	144	0	0	0	0	295
05:15 PM	16	99	0	115	0	0	12	12	0	158	0	158	0	0	0	0	285
05:30 PM	11	124	0	135	1	0	12	13	0	143	1	144	0	0	0	0	292
05:45 PM	5	113	0	118	2	0	11	13	0	154	0	154	0	0	0	0	285
Total	61	448	0	509	3	0	45	48	0	599	1	600	0	0	0	0	1157
Grand Total	132	892	0	1024	3	0	67	70	0	1097	5	1102	0	0	0	0	2196
Apprch %	12.9	87.1	0		4.3	0	95.7		0	99.5	0.5		0	0	0		
Total %	6	40.6	0	46.6	0.1	0	3.1	3.2	0	50	0.2	50.2	0	0	0	0	
Passenger Vehicles	132	850	0	982	2	0	64	66	0	1071	5	1076	0	0	0	0	2124
% Passenger Vehicles	100	95.3	0	95.9	66.7	0	95.5	94.3	0	97.6	100	97.6	0	0	0	0	96.7
Large 2 Axle Vehicles	0	23	0	23	1	0	3	4	0	15	0	15	0	0	0	0	42
% Large 2 Axle Vehicles	0	2.6	0	2.2	33.3	0	4.5	5.7	0	1.4	0	1.4	0	0	0	0	1.9
3 Axle Vehicles	0	8	0	8	0	0	0	0	0	2	0	2	0	0	0	0	10
% 3 Axle Vehicles	0	0.9	0	0.8	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0.5
4+ Axle Trucks	0	11	0	11	0	0	0	0	0	9	0	9	0	0	0	0	20
% 4+ Axle Trucks	0	1.2	0	1.1	0	0	0	0	0	0.8	0	0.8	0	0	0	0	0.9

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**29**	112	0	**141**	0	0	10	10	0	144	0	144	0	0	0	0	**295**
05:15 PM	16	99	0	115	0	0	**12**	12	0	**158**	0	**158**	0	0	0	0	285
05:30 PM	11	**124**	0	135	1	0	12	**13**	0	143	**1**	144	0	0	0	0	292
05:45 PM	5	113	0	118	**2**	0	11	13	0	154	0	154	0	0	0	0	285
Total Volume	61	448	0	509	3	0	45	48	0	599	1	600	0	0	0	0	1157
% App. Total	12	88	0		6.2	0	93.8		0	99.8	0.2		0	0	0		
PHF	.526	.903	.000	.902	.375	.000	.938	.923	.000	.948	.250	.949	.000	.000	.000	.000	.981

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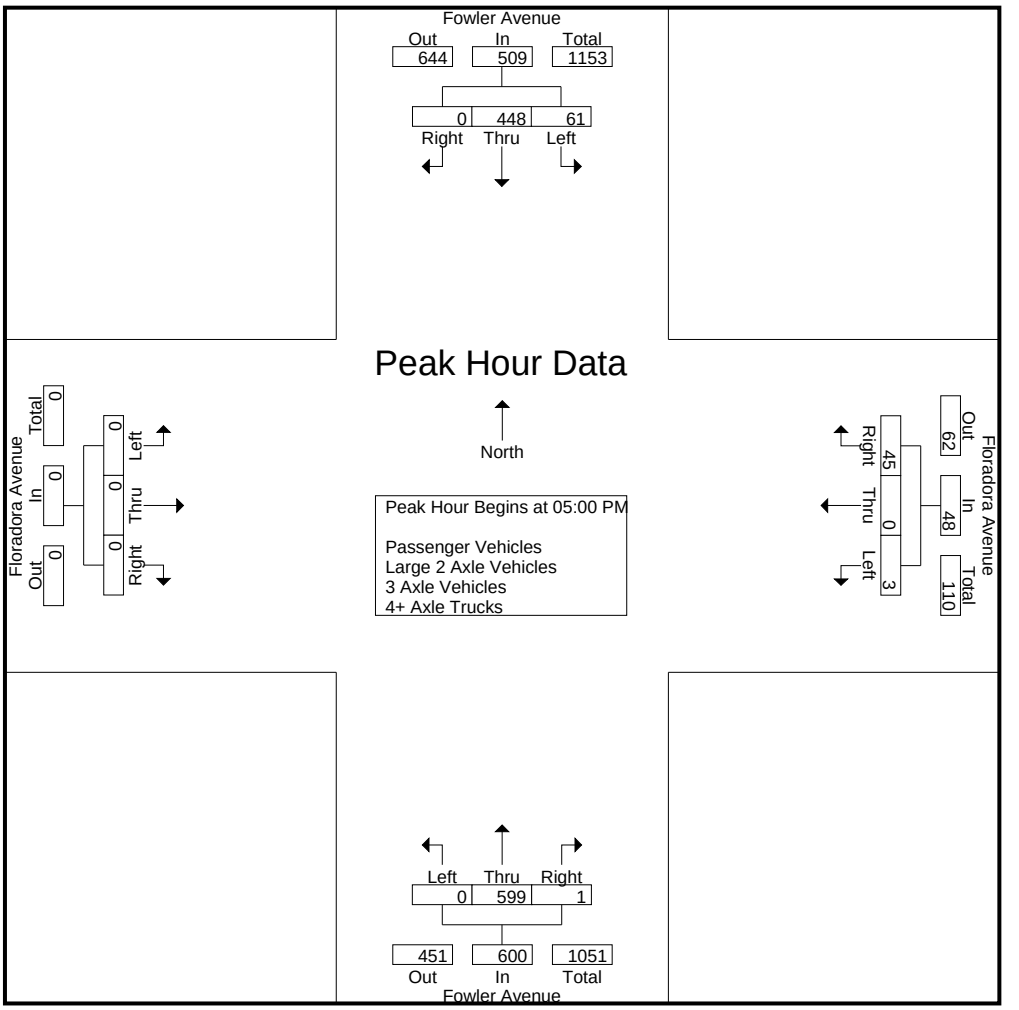

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				05:00 PM				04:00 PM			
+0 mins.	18	**117**	0	135	0	0	10	10	0	144	0	144	0	0	0	0
+15 mins.	21	106	0	127	0	0	**12**	12	0	**158**	0	**158**	0	0	0	0
+30 mins.	28	105	0	133	1	0	12	**13**	0	143	**1**	144	0	0	0	0
+45 mins.	**29**	112	0	**141**	**2**	0	11	13	0	154	0	154	0	0	0	0
Total Volume	96	440	0	536	3	0	45	48	0	599	1	600	0	0	0	0
% App. Total	17.9	82.1	0		6.2	0	93.8		0	99.8	0.2		0	0	0	
PHF	.828	.940	.000	.950	.375	.000	.938	.923	.000	.948	.250	.949	.000	.000	.000	.000

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Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	105	0	109	0	0	4	4	0	118	2	120	0	0	0	0	233
04:15 PM	18	113	0	131	0	0	5	5	0	107	1	108	0	0	0	0	244
04:30 PM	21	101	0	122	0	0	8	8	0	131	1	132	0	0	0	0	262
04:45 PM	28	99	0	127	0	0	4	4	0	127	0	127	0	0	0	0	258
Total	71	418	0	489	0	0	21	21	0	483	4	487	0	0	0	0	997
05:00 PM	29	107	0	136	0	0	9	9	0	141	0	141	0	0	0	0	286
05:15 PM	16	96	0	112	0	0	12	12	0	157	0	157	0	0	0	0	281
05:30 PM	11	120	0	131	1	0	11	12	0	137	1	138	0	0	0	0	281
05:45 PM	5	109	0	114	1	0	11	12	0	153	0	153	0	0	0	0	279
Total	61	432	0	493	2	0	43	45	0	588	1	589	0	0	0	0	1127
Grand Total	132	850	0	982	2	0	64	66	0	1071	5	1076	0	0	0	0	2124
Apprch %	13.4	86.6	0		3	0	97		0	99.5	0.5		0	0	0		
Total %	6.2	40	0	46.2	0.1	0	3	3.1	0	50.4	0.2	50.7	0	0	0	0	

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**29**	107	0	**136**	0	0	9	9	0	141	0	141	0	0	0	0	**286**
05:15 PM	16	96	0	112	0	0	**12**	**12**	0	**157**	0	**157**	0	0	0	0	281
05:30 PM	11	**120**	0	131	**1**	0	11	12	0	137	**1**	138	0	0	0	0	281
05:45 PM	5	109	0	114	1	0	11	12	0	153	0	153	0	0	0	0	279
Total Volume	61	432	0	493	2	0	43	45	0	588	1	589	0	0	0	0	1127
% App. Total	12.4	87.6	0		4.4	0	95.6		0	99.8	0.2		0	0	0		
PHF	.526	.900	.000	.906	.500	.000	.896	.938	.000	.936	.250	.938	.000	.000	.000	.000	.985

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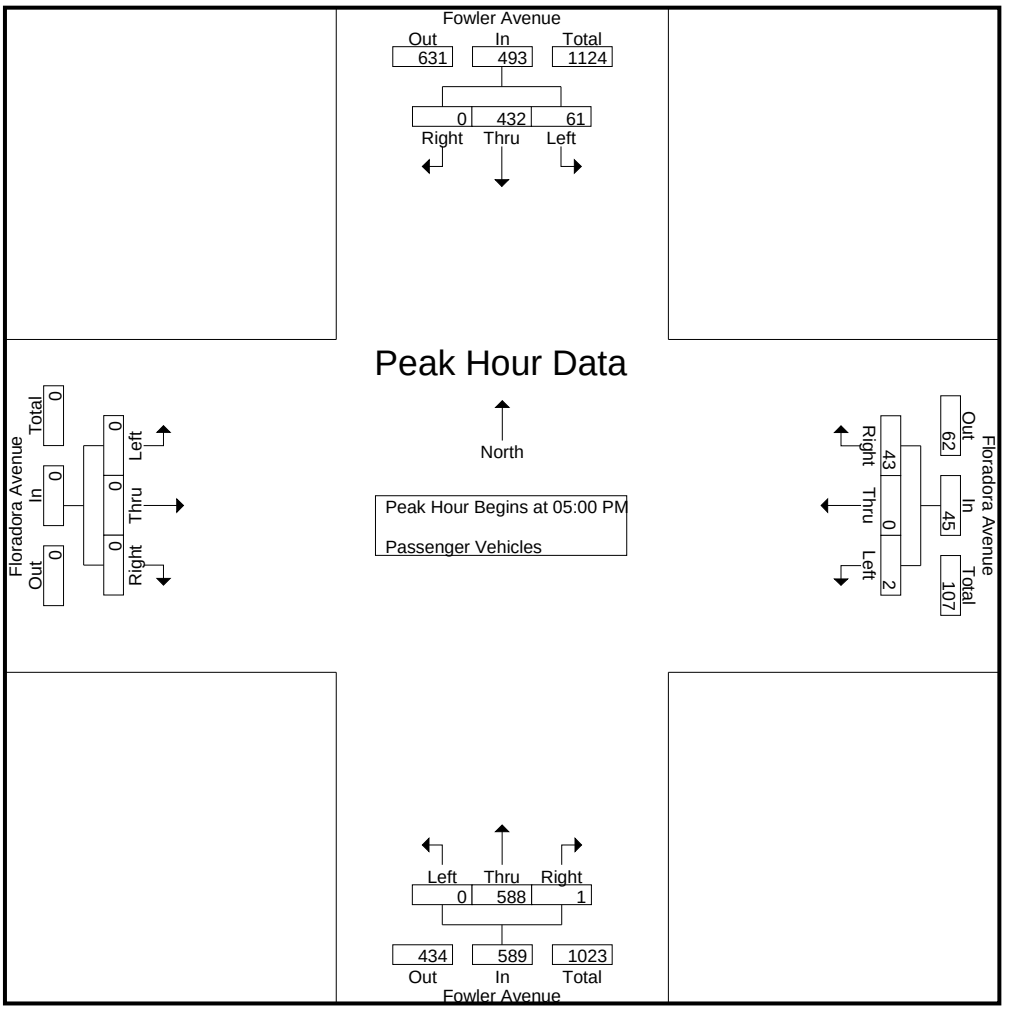

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	**29**	107	0	**136**	0	0	9	9	0	141	0	141	0	0	0	0
+15 mins.	16	96	0	112	0	0	**12**	**12**	0	**157**	0	**157**	0	0	0	0
+30 mins.	11	**120**	0	131	**1**	0	11	12	0	137	**1**	138	0	0	0	0
+45 mins.	5	109	0	114	1	0	11	12	0	153	0	153	0	0	0	0
Total Volume	61	432	0	493	2	0	43	45	0	588	1	589	0	0	0	0
% App. Total	12.4	87.6	0		4.4	0	95.6		0	99.8	0.2		0	0	0	
PHF	.526	.900	.000	.906	.500	.000	.896	.938	.000	.936	.250	.938	.000	.000	.000	.000

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Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	10	0	10	0	0	1	1	0	1	0	1	0	0	0	0	12
04:15 PM	0	2	0	2	0	0	0	0	0	5	0	5	0	0	0	0	7
04:30 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
04:45 PM	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
Total	0	19	0	19	0	0	1	1	0	10	0	10	0	0	0	0	30
05:00 PM	0	2	0	2	0	0	1	1	0	1	0	1	0	0	0	0	4
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	1	1	0	3	0	3	0	0	0	0	4
05:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	4	0	4	1	0	2	3	0	5	0	5	0	0	0	0	12
Grand Total	0	23	0	23	1	0	3	4	0	15	0	15	0	0	0	0	42
Apprch %	0	100	0		25	0	75		0	100	0		0	0	0		
Total %	0	54.8	0	54.8	2.4	0	7.1	9.5	0	35.7	0	35.7	0	0	0	0	

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**2**	0	**2**	0	0	**1**	**1**	0	1	0	1	0	0	0	0	**4**
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:30 PM	0	0	0	0	0	0	1	1	0	**3**	0	**3**	0	0	0	0	4
05:45 PM	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	4	0	4	1	0	2	3	0	5	0	5	0	0	0	0	12
% App. Total	0	100	0		33.3	0	66.7		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.250	.000	.500	.750	.000	.417	.000	.417	.000	.000	.000	.000	.750

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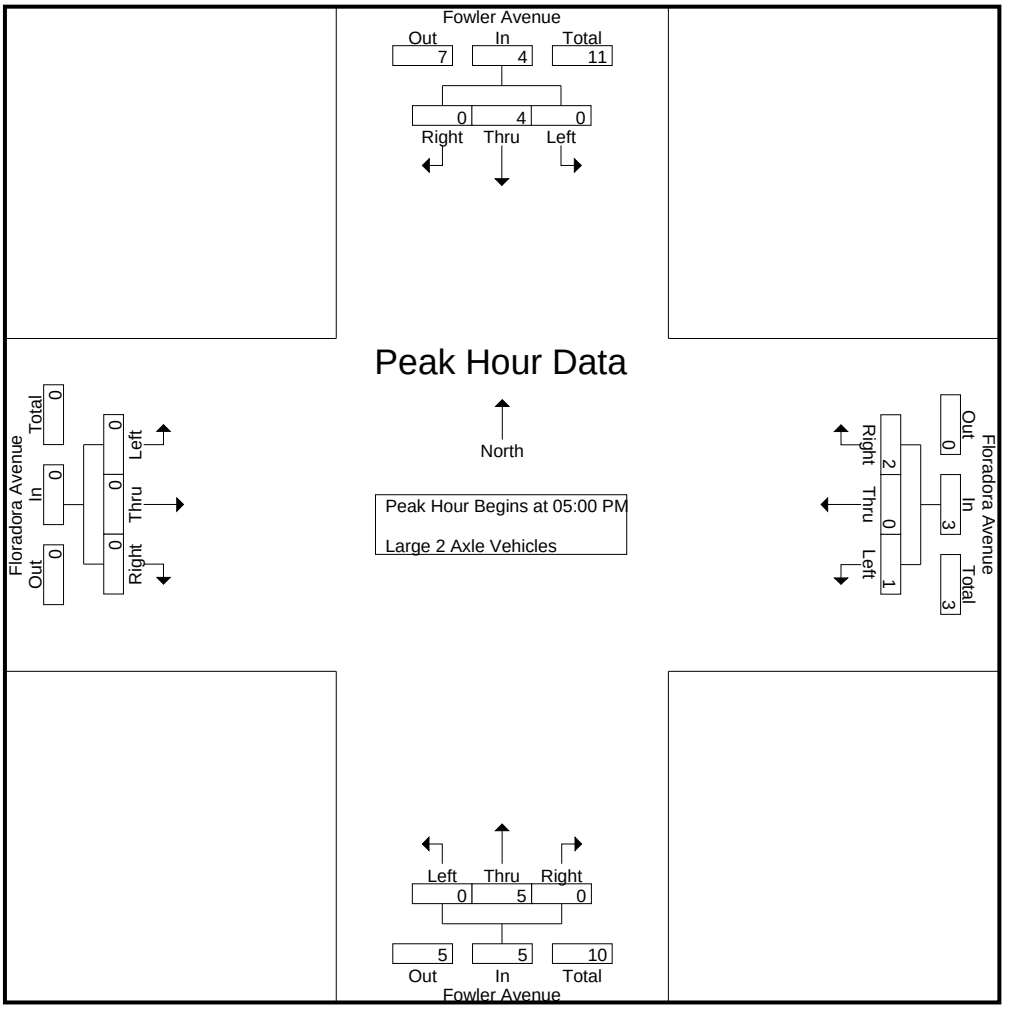

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**2**	0	**2**	0	0	**1**	**1**	0	1	0	1	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	1	1	0	**3**	0	**3**	0	0	0	0
+45 mins.	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0
Total Volume	0	4	0	4	1	0	2	3	0	5	0	5	0	0	0	0
% App. Total	0	100	0		33.3	0	66.7		0	100	0		0	0	0	
PHF	.000	.500	.000	.500	.250	.000	.500	.750	.000	.417	.000	.417	.000	.000	.000	.000

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Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:00 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	7	0	7	0	0	0	0	0	1	0	1	0	0	0	0	8
Grand Total	0	8	0	8	0	0	0	0	0	2	0	2	0	0	0	0	10
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	80	0	80	0	0	0	0	0	20	0	20	0	0	0	0	

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	2	0	2	0	0	0	0	0	**1**	0	**1**	0	0	0	0	3
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	**4**	0	**4**	0	0	0	0	0	0	0	0	0	0	0	0	**4**
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	7	0	7	0	0	0	0	0	1	0	1	0	0	0	0	8
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.438	.000	.438	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.500

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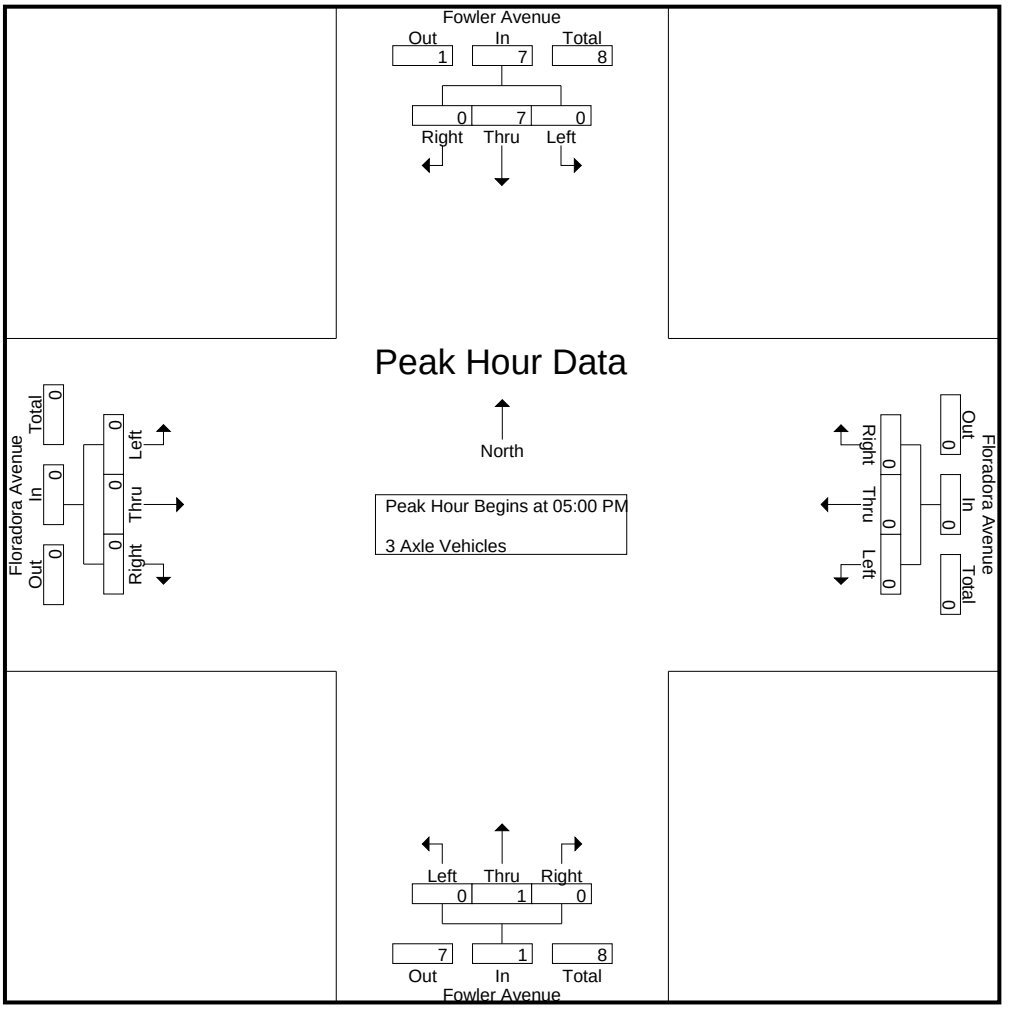

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	2	0	2	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	**4**	0	**4**	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	7	0	7	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.438	.000	.438	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
04:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:45 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	0	6	0	6	0	0	0	0	0	4	0	4	0	0	0	0	10
05:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
05:45 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
Total	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0	10
Grand Total	0	11	0	11	0	0	0	0	0	9	0	9	0	0	0	0	20
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	55	0	55	0	0	0	0	0	45	0	45	0	0	0	0	

	Fowler Avenue Southbound				Floradora Avenue Westbound				Fowler Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	0	0	3
05:45 PM	0	**4**	0	**4**	0	0	0	0	0	1	0	1	0	0	0	0	**5**
Total Volume	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0	10
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.313	.000	.313	.000	.000	.000	.000	.000	.417	.000	.417	.000	.000	.000	.000	.500

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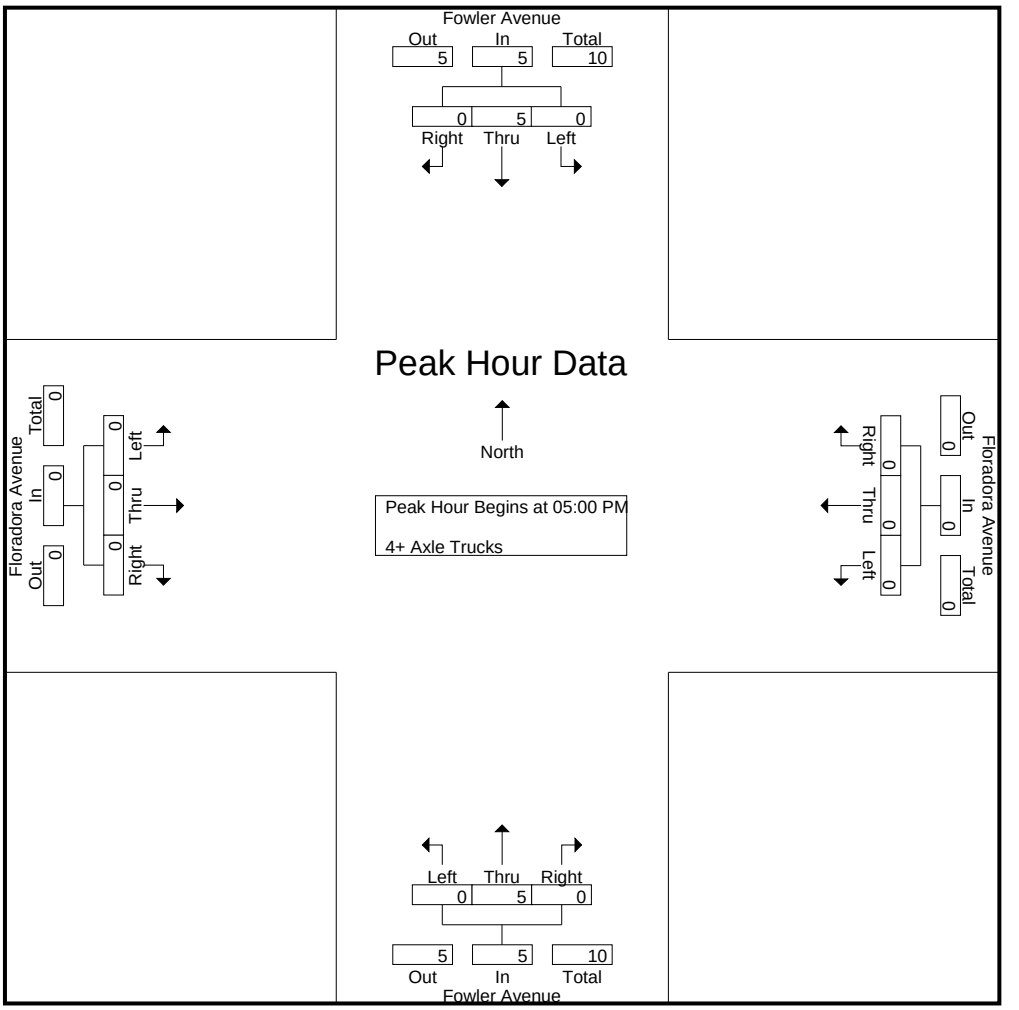

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	0	0
+45 mins.	0	**4**	0	**4**	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.313	.000	.313	.000	.000	.000	.000	.000	.417	.000	.417	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Fresno
N/S: Fowler Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 02_FSO_Fow_Oli AM
Site Code : 00322994
Start Date : 11/10/2022

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	101	1	103	38	3	2	43	9	69	16	94	2	5	1	8	248
07:15 AM	4	98	1	103	54	9	1	64	8	84	39	131	7	6	1	14	312
07:30 AM	1	133	3	137	73	16	6	95	6	94	32	132	6	3	6	15	379
07:45 AM	1	131	5	137	72	11	17	100	5	79	19	103	2	8	3	13	353
Total	7	463	10	480	237	39	26	302	28	326	106	460	17	22	11	50	1292
08:00 AM	0	127	3	130	84	11	10	105	6	78	18	102	2	11	3	16	353
08:15 AM	1	118	1	120	100	22	11	133	7	81	19	107	10	13	6	29	389
08:30 AM	0	108	3	111	107	50	11	168	7	91	15	113	11	19	11	41	433
08:45 AM	2	111	4	117	95	32	8	135	7	90	20	117	15	16	3	34	403
Total	3	464	11	478	386	115	40	541	27	340	72	439	38	59	23	120	1578
Grand Total	10	927	21	958	623	154	66	843	55	666	178	899	55	81	34	170	2870
Apprch %	1	96.8	2.2		73.9	18.3	7.8		6.1	74.1	19.8		32.4	47.6	20		
Total %	0.3	32.3	0.7	33.4	21.7	5.4	2.3	29.4	1.9	23.2	6.2	31.3	1.9	2.8	1.2	5.9	
Passenger Vehicles	10	906	21	937	616	152	64	832	52	642	174	868	51	79	33	163	2800
% Passenger Vehicles	100	97.7	100	97.8	98.9	98.7	97	98.7	94.5	96.4	97.8	96.6	92.7	97.5	97.1	95.9	97.6
Large 2 Axle Vehicles	0	13	0	13	2	2	1	5	2	14	3	19	3	1	1	5	42
% Large 2 Axle Vehicles	0	1.4	0	1.4	0.3	1.3	1.5	0.6	3.6	2.1	1.7	2.1	5.5	1.2	2.9	2.9	1.5
3 Axle Vehicles	0	4	0	4	4	0	1	5	0	6	0	6	1	0	0	1	16
% 3 Axle Vehicles	0	0.4	0	0.4	0.6	0	1.5	0.6	0	0.9	0	0.7	1.8	0	0	0.6	0.6
4+ Axle Trucks	0	4	0	4	1	0	0	1	1	4	1	6	0	1	0	1	12
% 4+ Axle Trucks	0	0.4	0	0.4	0.2	0	0	0.1	1.8	0.6	0.6	0.7	0	1.2	0	0.6	0.4

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	**127**	3	**130**	84	11	10	105	6	78	18	102	2	11	3	16	353
08:15 AM	1	118	1	120	100	22	**11**	133	**7**	81	19	107	10	13	6	29	389
08:30 AM	0	108	3	111	**107**	**50**	11	**168**	7	**91**	15	113	11	**19**	**11**	**41**	**433**
08:45 AM	**2**	111	**4**	117	95	32	8	135	7	90	**20**	**117**	**15**	16	3	34	403
Total Volume	3	464	11	478	386	115	40	541	27	340	72	439	38	59	23	120	1578
% App. Total	0.6	97.1	2.3		71.3	21.3	7.4		6.2	77.4	16.4		31.7	49.2	19.2		
PHF	.375	.913	.688	.919	.902	.575	.909	.805	.964	.934	.900	.938	.633	.776	.523	.732	.911

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City of Fresno
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Weather: Clear

File Name : 02_FSO_Fow_Oli AM
Site Code : 00322994
Start Date : 11/10/2022
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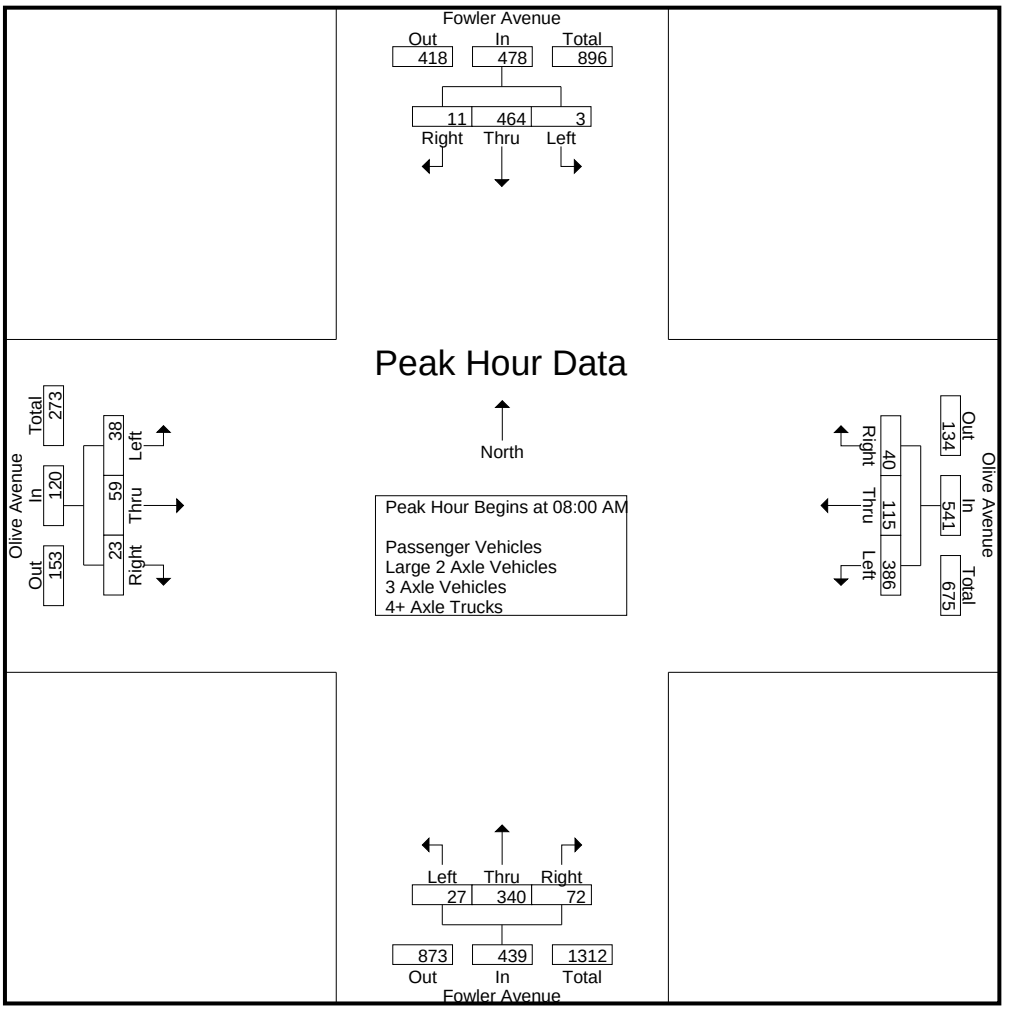

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:15 AM				08:00 AM			
+0 mins.	**1**	**133**	3	**137**	84	11	10	105	**8**	84	**39**	131	2	11	3	16
+15 mins.	1	131	**5**	137	100	22	**11**	133	6	**94**	32	**132**	10	13	6	29
+30 mins.	0	127	3	130	**107**	**50**	11	**168**	5	79	19	103	11	**19**	**11**	**41**
+45 mins.	1	118	1	120	95	32	8	135	6	78	18	102	**15**	16	3	34
Total Volume	3	509	12	524	386	115	40	541	25	335	108	468	38	59	23	120
% App. Total	0.6	97.1	2.3		71.3	21.3	7.4		5.3	71.6	23.1		31.7	49.2	19.2	
PHF	.750	.957	.600	.956	.902	.575	.909	.805	.781	.891	.692	.886	.633	.776	.523	.732

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File Name : 02_FSO_Fow_Oli AM
Site Code : 00322994
Start Date : 11/10/2022
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Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	99	1	101	36	3	2	41	9	65	16	90	1	4	1	6	238
07:15 AM	4	96	1	101	50	9	0	59	8	79	38	125	5	6	1	12	297
07:30 AM	1	130	3	134	73	16	6	95	6	92	31	129	5	3	6	14	372
07:45 AM	1	125	5	131	71	11	17	99	4	76	19	99	2	8	2	12	341
Total	7	450	10	467	230	39	25	294	27	312	104	443	13	21	10	44	1248
08:00 AM	0	126	3	129	84	10	9	103	5	75	17	97	2	11	3	16	345
08:15 AM	1	114	1	116	100	22	11	133	7	80	19	106	10	12	6	28	383
08:30 AM	0	107	3	110	107	49	11	167	6	88	15	109	11	19	11	41	427
08:45 AM	2	109	4	115	95	32	8	135	7	87	19	113	15	16	3	34	397
Total	3	456	11	470	386	113	39	538	25	330	70	425	38	58	23	119	1552
Grand Total	10	906	21	937	616	152	64	832	52	642	174	868	51	79	33	163	2800
Apprch %	1.1	96.7	2.2		74	18.3	7.7		6	74	20		31.3	48.5	20.2		
Total %	0.4	32.4	0.8	33.5	22	5.4	2.3	29.7	1.9	22.9	6.2	31	1.8	2.8	1.2	5.8	

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	**126**	3	**129**	84	10	9	103	5	75	17	97	2	11	3	16	345
08:15 AM	1	114	1	116	100	22	**11**	133	**7**	80	**19**	106	10	12	6	28	383
08:30 AM	0	107	3	110	**107**	**49**	11	**167**	6	**88**	15	109	11	**19**	**11**	**41**	**427**
08:45 AM	**2**	109	**4**	115	95	32	8	135	7	87	19	**113**	**15**	16	3	34	397
Total Volume	3	456	11	470	386	113	39	538	25	330	70	425	38	58	23	119	1552
% App. Total	0.6	97	2.3		71.7	21	7.2		5.9	77.6	16.5		31.9	48.7	19.3		
PHF	.375	.905	.688	.911	.902	.577	.886	.805	.893	.938	.921	.940	.633	.763	.523	.726	.909

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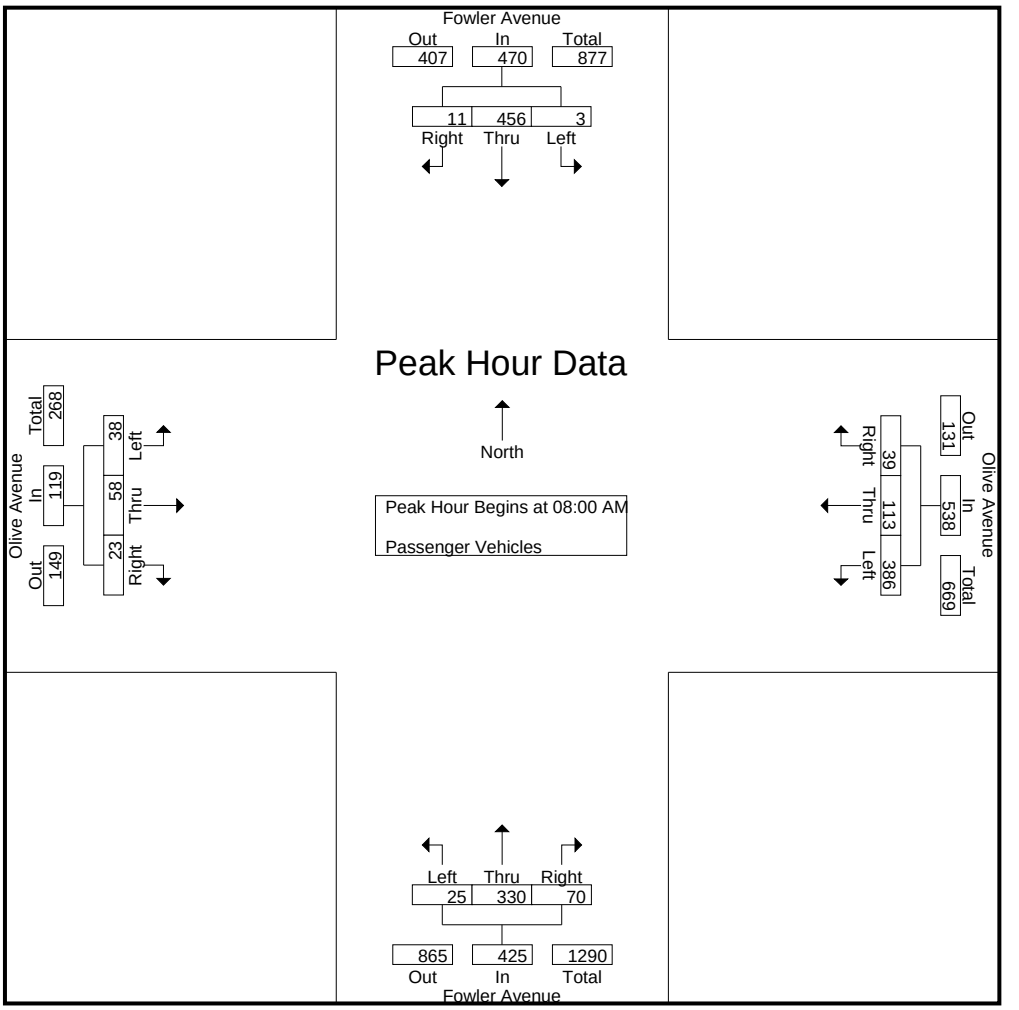
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	**126**	3	**129**	84	10	9	103	5	75	17	97	2	11	3	16
+15 mins.	1	114	1	116	100	22	**11**	133	**7**	80	**19**	106	10	12	6	28
+30 mins.	0	107	3	110	**107**	**49**	11	**167**	6	**88**	15	109	11	**19**	**11**	**41**
+45 mins.	**2**	109	**4**	115	95	32	8	135	7	87	19	**113**	**15**	16	3	34
Total Volume	3	456	11	470	386	113	39	538	25	330	70	425	38	58	23	119
% App. Total	0.6	97	2.3		71.7	21	7.2		5.9	77.6	16.5		31.9	48.7	19.3	
PHF	.375	.905	.688	.911	.902	.577	.886	.805	.893	.938	.921	.940	.633	.763	.523	.726

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City of Fresno
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Weather: Clear

File Name : 02_FSO_Fow_Oli AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	1	1	0	2	4
07:15 AM	0	1	0	1	2	0	0	2	0	2	1	3	2	0	0	2	8
07:30 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
07:45 AM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	1	1	7
Total	0	8	0	8	2	0	0	2	0	7	1	8	3	1	1	5	23
08:00 AM	0	1	0	1	0	1	1	2	1	2	1	4	0	0	0	0	7
08:15 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
08:30 AM	0	0	0	0	0	1	0	1	1	2	0	3	0	0	0	0	4
08:45 AM	0	2	0	2	0	0	0	0	0	2	1	3	0	0	0	0	5
Total	0	5	0	5	0	2	1	3	2	7	2	11	0	0	0	0	19
Grand Total	0	13	0	13	2	2	1	5	2	14	3	19	3	1	1	5	42
Apprch %	0	100	0		40	40	20		10.5	73.7	15.8		60	20	20		
Total %	0	31	0	31	4.8	4.8	2.4	11.9	4.8	33.3	7.1	45.2	7.1	2.4	2.4	11.9	

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	1	0	1	0	**1**	**1**	**2**	**1**	**2**	**1**	**4**	0	0	0	0	**7**
08:15 AM	0	**2**	0	**2**	0	0	0	0	0	1	0	1	0	0	0	0	3
08:30 AM	0	0	0	0	0	1	0	1	1	2	0	3	0	0	0	0	4
08:45 AM	0	2	0	2	0	0	0	0	0	2	1	3	0	0	0	0	5
Total Volume	0	5	0	5	0	2	1	3	2	7	2	11	0	0	0	0	19
% App. Total	0	100	0		0	66.7	33.3		18.2	63.6	18.2		0	0	0		
PHF	.000	.625	.000	.625	.000	.500	.250	.375	.500	.875	.500	.688	.000	.000	.000	.000	.679

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Site Code : 00322994
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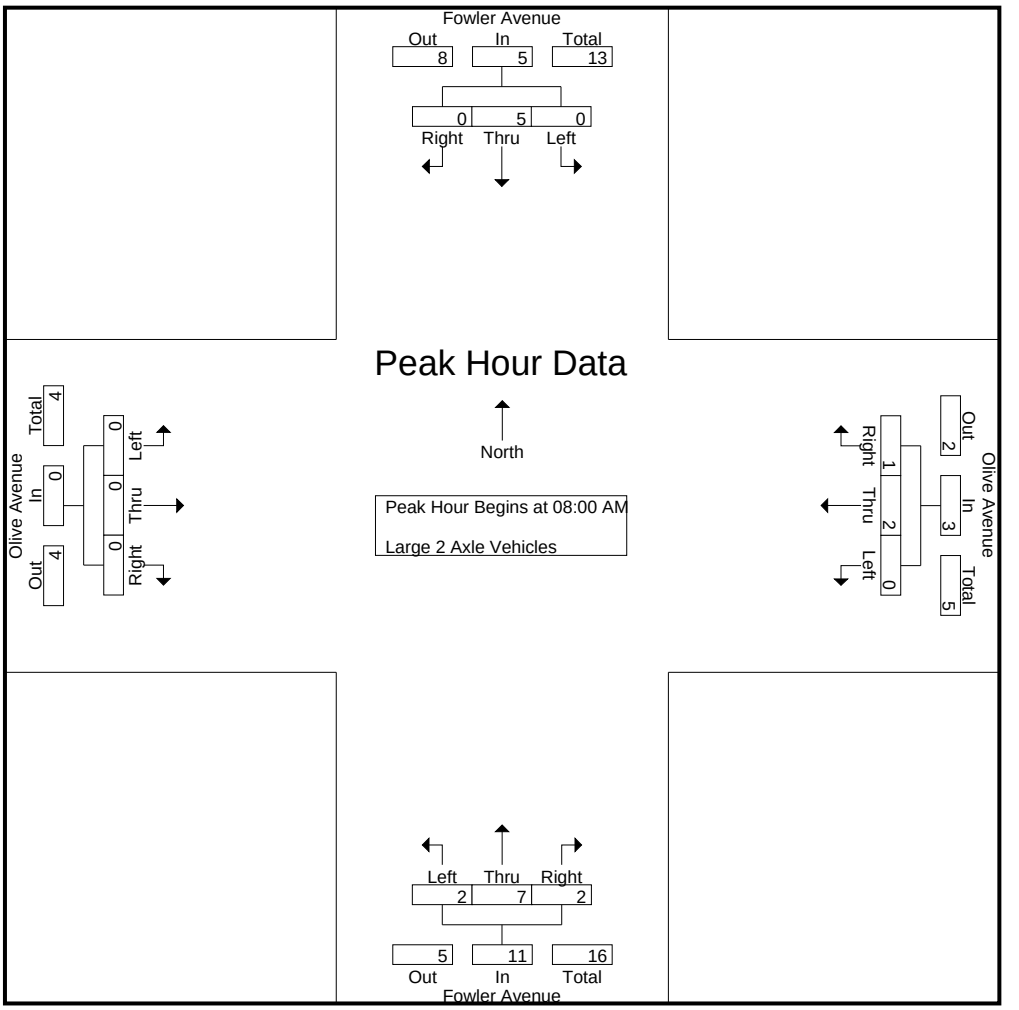

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	1	0	1	0	**1**	**1**	**2**	**1**	**2**	**1**	**4**	0	0	0	0
+15 mins.	0	**2**	0	**2**	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	1	2	0	3	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	2	1	3	0	0	0	0
Total Volume	0	5	0	5	0	2	1	3	2	7	2	11	0	0	0	0
% App. Total	0	100	0		0	66.7	33.3		18.2	63.6	18.2		0	0	0	
PHF	.000	.625	.000	.625	.000	.500	.250	.375	.500	.875	.500	.688	.000	.000	.000	.000

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File Name : 02_FSO_Fow_Oli AM
Site Code : 00322994
Start Date : 11/10/2022

Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	2	0	0	2	0	3	0	3	0	0	0	0	6
07:15 AM	0	1	0	1	2	0	1	3	0	1	0	1	0	0	0	0	5
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
07:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	4	0	4	4	0	1	5	0	5	0	5	1	0	0	1	15
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	4	0	4	4	0	1	5	0	6	0	6	1	0	0	1	16
Apprch %	0	100	0		80	0	20		0	100	0		100	0	0		
Total %	0	25	0	25	25	0	6.2	31.2	0	37.5	0	37.5	6.2	0	0	6.2	

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

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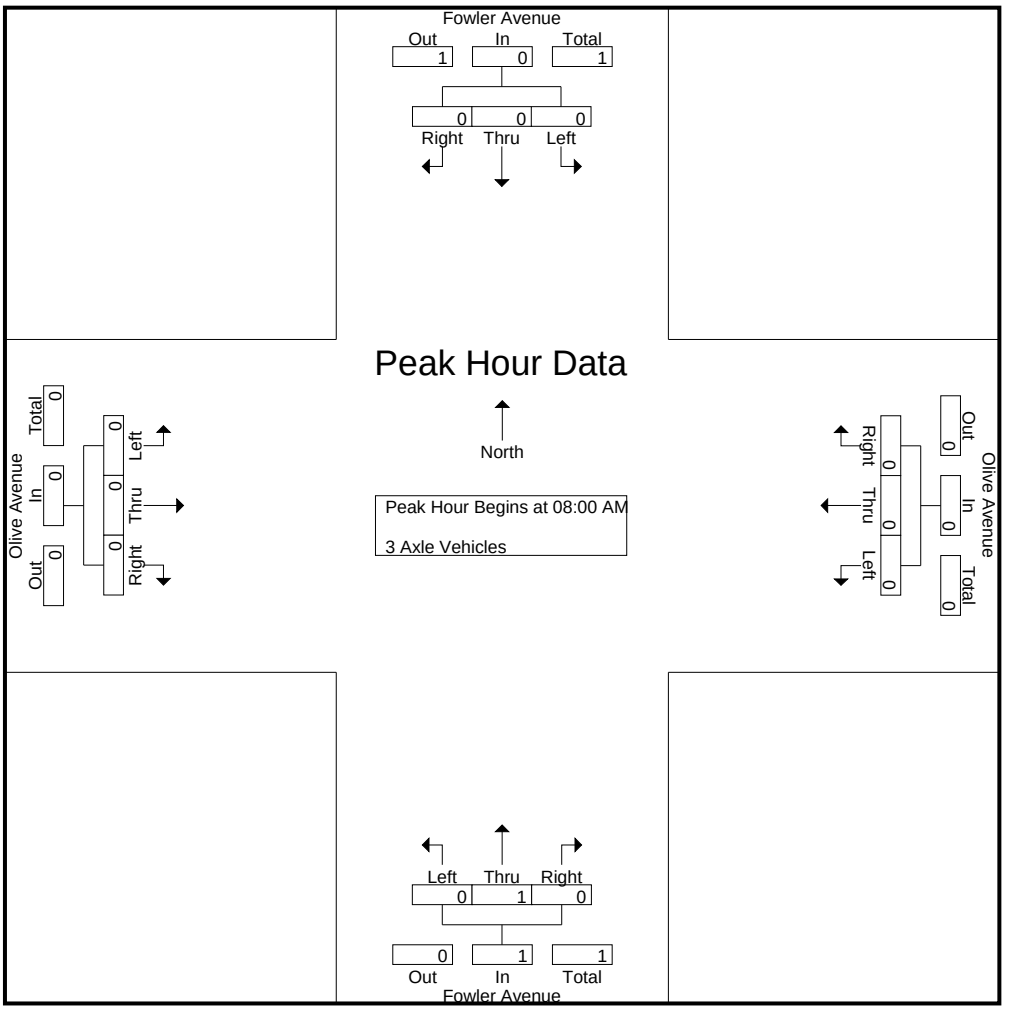

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:45 AM	0	1	0	1	1	0	0	1	1	0	0	1	0	0	0	0	3
Total	0	1	0	1	1	0	0	1	1	2	1	4	0	0	0	0	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	1	0	1	3
08:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	3	0	3	0	0	0	0	0	2	0	2	0	1	0	1	6
Grand Total	0	4	0	4	1	0	0	1	1	4	1	6	0	1	0	1	12
Apprch %	0	100	0		100	0	0		16.7	66.7	16.7		0	100	0		
Total %	0	33.3	0	33.3	8.3	0	0	8.3	8.3	33.3	8.3	50	0	8.3	0	8.3	

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	**1**	0	**1**	**3**
08:30 AM	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	3	0	3	0	0	0	0	0	2	0	2	0	1	0	1	6
% App. Total	0	100	0		0	0	0		0	100	0		0	100	0		
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.500	.000	.500	.000	.250	.000	.250	.500

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City of Fresno
N/S: Fowler Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 02_FSO_Fow_Oli AM
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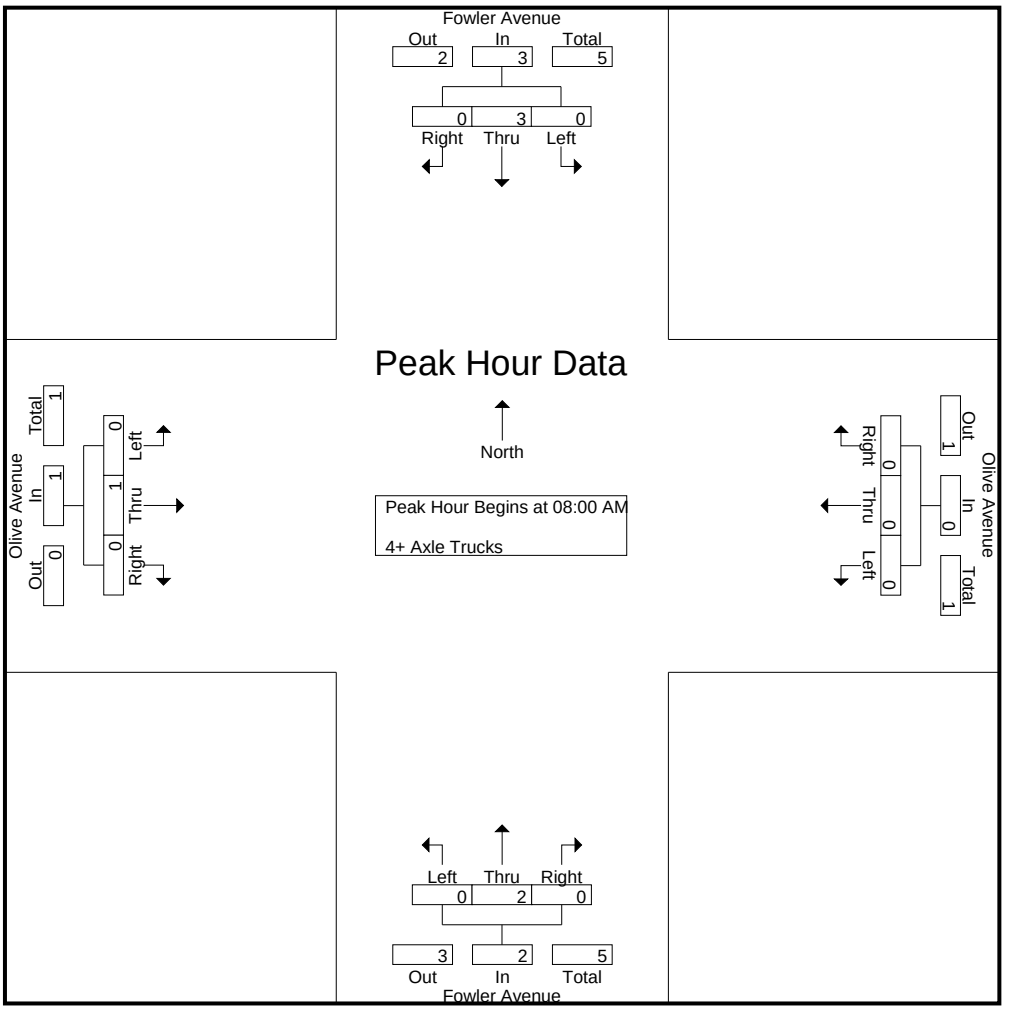

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+30 mins.	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	3	0	3	0	0	0	0	0	2	0	2	0	1	0	1
% App. Total	0	100	0		0	0	0		0	100	0		0	100	0	
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.500	.000	.500	.000	.250	.000	.250

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File Name : 02_FSO_Fow_Oli PM
Site Code : 00322994
Start Date : 11/10/2022

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	105	2	109	47	10	12	69	4	92	14	110	20	26	9	55	343
04:15 PM	2	113	4	119	44	16	12	72	2	82	21	105	20	23	10	53	349
04:30 PM	0	97	3	100	68	21	11	100	3	85	25	113	35	18	15	68	381
04:45 PM	2	105	3	110	52	23	16	91	3	87	33	123	30	22	10	62	386
Total	6	420	12	438	211	70	51	332	12	346	93	451	105	89	44	238	1459
05:00 PM	2	103	3	108	45	18	15	78	0	93	29	122	33	25	14	72	380
05:15 PM	7	104	6	117	47	9	17	73	0	102	21	123	41	24	4	69	382
05:30 PM	3	113	2	118	33	7	14	54	2	101	22	125	30	31	14	75	372
05:45 PM	6	108	3	117	34	8	13	55	3	98	26	127	42	35	14	91	390
Total	18	428	14	460	159	42	59	260	5	394	98	497	146	115	46	307	1524
Grand Total	24	848	26	898	370	112	110	592	17	740	191	948	251	204	90	545	2983
Apprch %	2.7	94.4	2.9		62.5	18.9	18.6		1.8	78.1	20.1		46.1	37.4	16.5		
Total %	0.8	28.4	0.9	30.1	12.4	3.8	3.7	19.8	0.6	24.8	6.4	31.8	8.4	6.8	3	18.3	
Passenger Vehicles	24	810	26	860	363	110	106	579	16	714	186	916	248	198	89	535	2890
% Passenger Vehicles	100	95.5	100	95.8	98.1	98.2	96.4	97.8	94.1	96.5	97.4	96.6	98.8	97.1	98.9	98.2	96.9
Large 2 Axle Vehicles	0	19	0	19	3	1	2	6	1	18	4	23	2	3	1	6	54
% Large 2 Axle Vehicles	0	2.2	0	2.1	0.8	0.9	1.8	1	5.9	2.4	2.1	2.4	0.8	1.5	1.1	1.1	1.8
3 Axle Vehicles	0	8	0	8	1	1	2	4	0	1	1	2	0	3	0	3	17
% 3 Axle Vehicles	0	0.9	0	0.9	0.3	0.9	1.8	0.7	0	0.1	0.5	0.2	0	1.5	0	0.6	0.6
4+ Axle Trucks	0	11	0	11	3	0	0	3	0	7	0	7	1	0	0	1	22
% 4+ Axle Trucks	0	1.3	0	1.2	0.8	0	0	0.5	0	0.9	0	0.7	0.4	0	0	0.2	0.7

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	97	3	100	**68**	21	11	**100**	**3**	85	25	113	35	18	**15**	68	381
04:45 PM	2	**105**	3	110	52	**23**	16	91	3	87	**33**	**123**	30	22	10	62	**386**
05:00 PM	2	103	3	108	45	18	15	78	0	93	29	122	33	**25**	14	**72**	380
05:15 PM	**7**	104	**6**	**117**	47	9	**17**	73	0	**102**	21	123	**41**	24	4	69	382
Total Volume	11	409	15	435	212	71	59	342	6	367	108	481	139	89	43	271	1529
% App. Total	2.5	94	3.4		62	20.8	17.3		1.2	76.3	22.5		51.3	32.8	15.9		
PHF	.393	.974	.625	.929	.779	.772	.868	.855	.500	.900	.818	.978	.848	.890	.717	.941	.990

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Weather: Clear

File Name : 02_FSO_Fow_Oli PM
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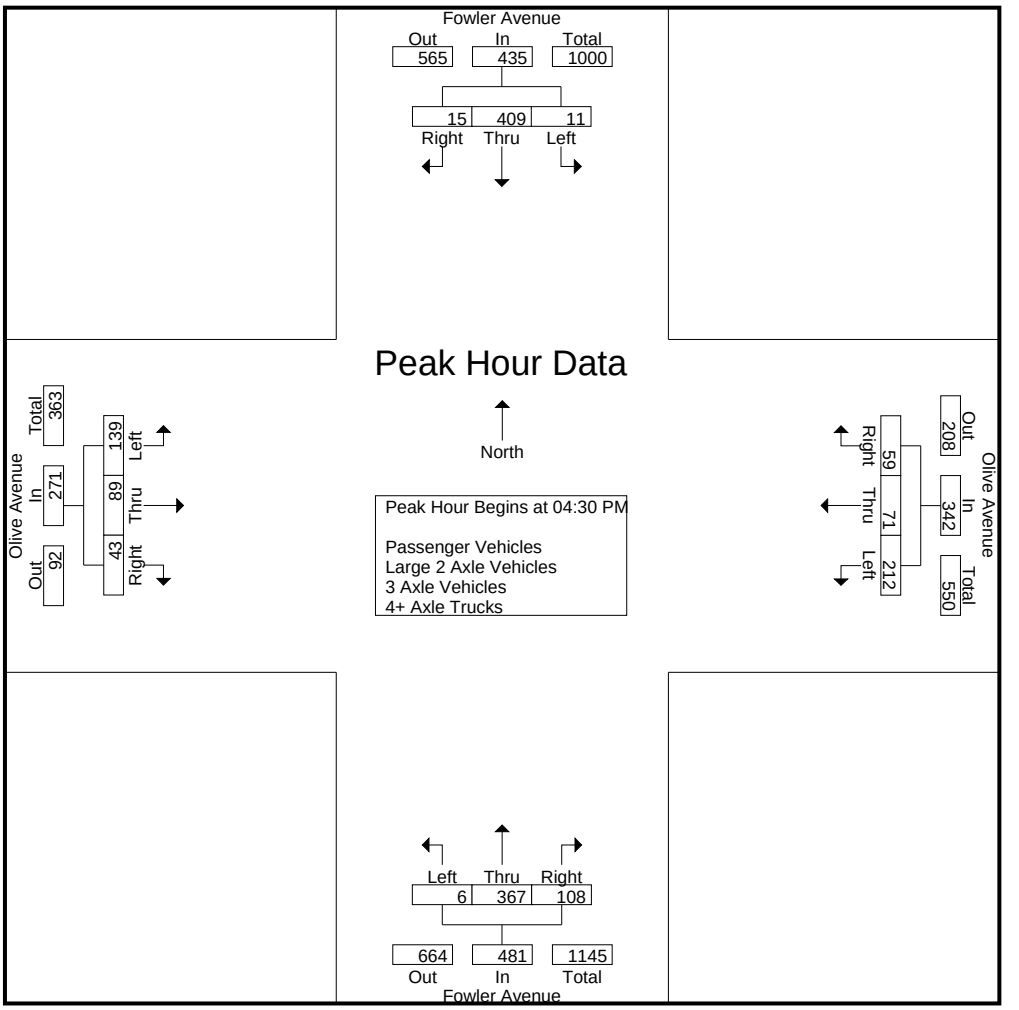

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				05:00 PM				05:00 PM			
+0 mins.	2	103	3	108	**68**	21	11	**100**	0	93	**29**	122	33	25	**14**	72
+15 mins.	**7**	104	**6**	117	52	**23**	16	91	0	**102**	21	123	41	24	4	69
+30 mins.	3	**113**	2	**118**	45	18	15	78	2	101	22	125	30	31	14	75
+45 mins.	6	108	3	117	47	9	**17**	73	**3**	98	26	**127**	**42**	**35**	14	**91**
Total Volume	18	428	14	460	212	71	59	342	5	394	98	497	146	115	46	307
% App. Total	3.9	93	3		62	20.8	17.3		1	79.3	19.7		47.6	37.5	15	
PHF	.643	.947	.583	.975	.779	.772	.868	.855	.417	.966	.845	.978	.869	.821	.821	.843

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Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	98	2	102	47	10	10	67	3	88	14	105	20	25	9	54	328
04:15 PM	2	111	4	117	43	16	11	70	2	78	20	100	18	22	10	50	337
04:30 PM	0	91	3	94	65	20	11	96	3	83	24	110	35	17	14	66	366
04:45 PM	2	99	3	104	52	23	16	91	3	83	32	118	29	22	10	61	374
Total	6	399	12	417	207	69	48	324	11	332	90	433	102	86	43	231	1405
05:00 PM	2	98	3	103	43	17	14	74	0	90	27	117	33	25	14	72	366
05:15 PM	7	102	6	115	47	9	17	73	0	100	21	121	41	23	4	68	377
05:30 PM	3	108	2	113	33	7	14	54	2	95	22	119	30	31	14	75	361
05:45 PM	6	103	3	112	33	8	13	54	3	97	26	126	42	33	14	89	381
Total	18	411	14	443	156	41	58	255	5	382	96	483	146	112	46	304	1485
Grand Total	24	810	26	860	363	110	106	579	16	714	186	916	248	198	89	535	2890
Apprch %	2.8	94.2	3		62.7	19	18.3		1.7	77.9	20.3		46.4	37	16.6		
Total %	0.8	28	0.9	29.8	12.6	3.8	3.7	20	0.6	24.7	6.4	31.7	8.6	6.9	3.1	18.5	

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	91	3	94	**65**	20	11	**96**	**3**	83	24	110	35	17	**14**	66	366
04:45 PM	2	99	3	104	52	**23**	16	91	3	83	**32**	118	29	22	10	61	374
05:00 PM	2	98	3	103	43	17	14	74	0	90	27	117	33	**25**	14	**72**	366
05:15 PM	**7**	**102**	**6**	**115**	47	9	**17**	73	0	**100**	21	**121**	**41**	23	4	68	**377**
Total Volume	11	390	15	416	207	69	58	334	6	356	104	466	138	87	42	267	1483
% App. Total	2.6	93.8	3.6		62	20.7	17.4		1.3	76.4	22.3		51.7	32.6	15.7		
PHF	.393	.956	.625	.904	.796	.750	.853	.870	.500	.890	.813	.963	.841	.870	.750	.927	.983

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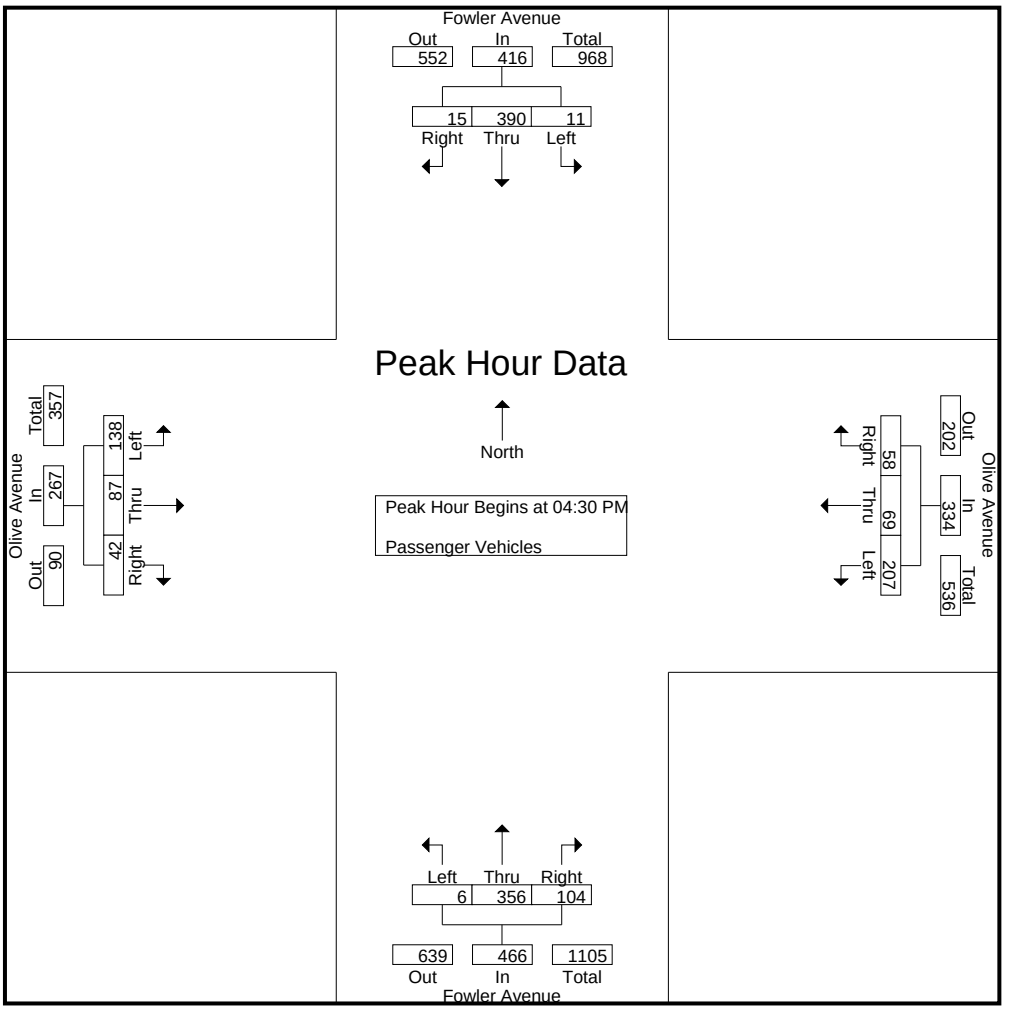

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	91	3	94	**65**	20	11	**96**	**3**	83	24	110	35	17	**14**	66
+15 mins.	2	99	3	104	52	**23**	16	91	3	83	**32**	118	29	22	10	61
+30 mins.	2	98	3	103	43	17	14	74	0	90	27	117	33	**25**	14	**72**
+45 mins.	**7**	**102**	**6**	**115**	47	9	**17**	73	0	**100**	21	**121**	**41**	23	4	68
Total Volume	11	390	15	416	207	69	58	334	6	356	104	466	138	87	42	267
% App. Total	2.6	93.8	3.6		62	20.7	17.4		1.3	76.4	22.3		51.7	32.6	15.7	
PHF	.393	.956	.625	.904	.796	.750	.853	.870	.500	.890	.813	.963	.841	.870	.750	.927

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Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	7	0	7	0	0	1	1	1	3	0	4	0	1	0	1	13
04:15 PM	0	0	0	0	1	0	1	2	0	4	1	5	2	0	0	2	9
04:30 PM	0	4	0	4	0	1	0	1	0	1	0	1	0	0	1	1	7
04:45 PM	0	4	0	4	0	0	0	0	0	3	1	4	0	0	0	0	8
Total	0	15	0	15	1	1	2	4	1	11	2	14	2	1	1	4	37
05:00 PM	0	1	0	1	2	0	0	2	0	2	2	4	0	0	0	0	7
05:15 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	1	0	1	5
05:30 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Total	0	4	0	4	2	0	0	2	0	7	2	9	0	2	0	2	17
Grand Total	0	19	0	19	3	1	2	6	1	18	4	23	2	3	1	6	54
Apprch %	0	100	0		50	16.7	33.3		4.3	78.3	17.4		33.3	50	16.7		
Total %	0	35.2	0	35.2	5.6	1.9	3.7	11.1	1.9	33.3	7.4	42.6	3.7	5.6	1.9	11.1	

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**4**	0	**4**	0	**1**	0	1	0	1	0	1	0	0	**1**	**1**	7
04:45 PM	0	4	0	4	0	0	0	0	0	**3**	1	**4**	0	0	0	0	**8**
05:00 PM	0	1	0	1	**2**	0	0	**2**	0	2	**2**	4	0	0	0	0	7
05:15 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	**1**	0	1	5
Total Volume	0	11	0	11	2	1	0	3	0	8	3	11	0	1	1	2	27
% App. Total	0	100	0		66.7	33.3	0		0	72.7	27.3		0	50	50		
PHF	.000	.688	.000	.688	.250	.250	.000	.375	.000	.667	.375	.688	.000	.250	.250	.500	.844

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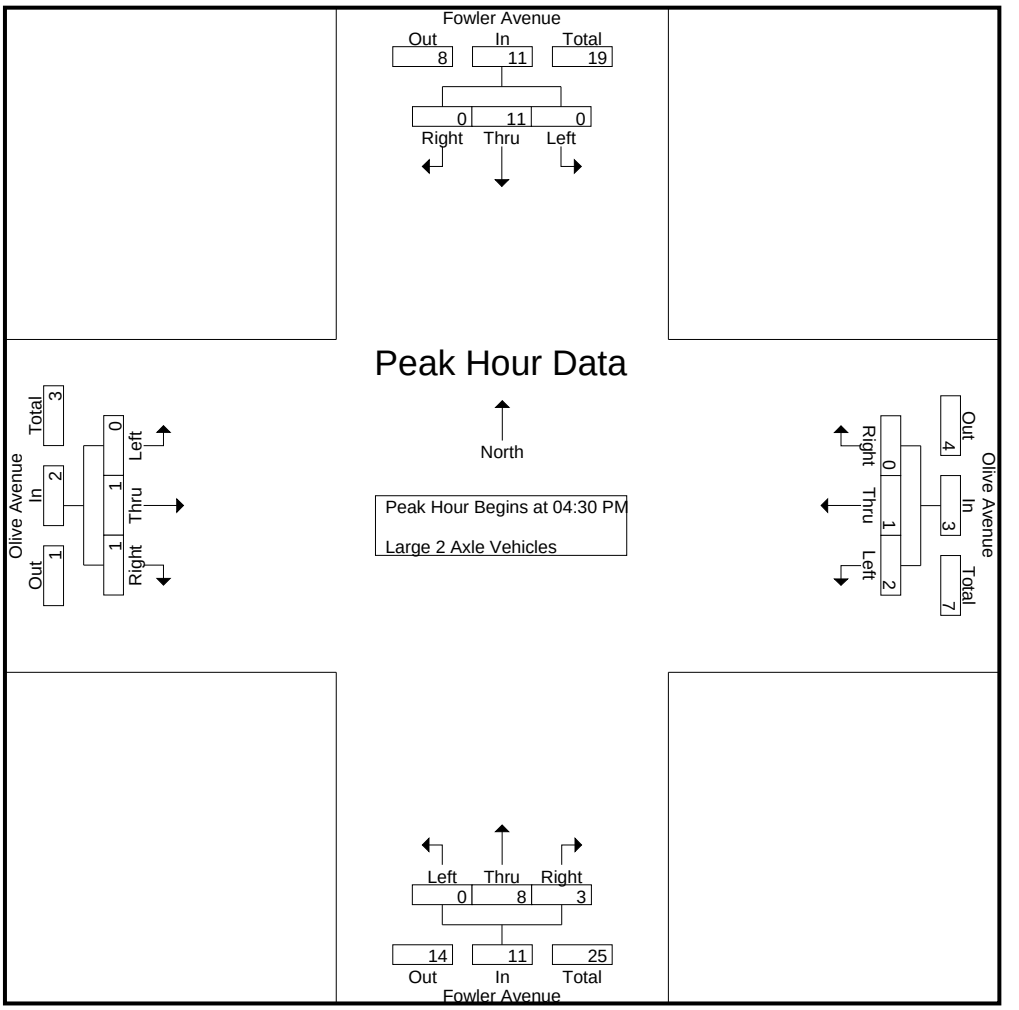

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	**4**	0	**4**	0	**1**	0	1	0	1	0	1	0	0	**1**	**1**
+15 mins.	0	4	0	4	0	0	0	0	0	**3**	1	**4**	0	0	0	0
+30 mins.	0	1	0	1	**2**	0	0	**2**	0	2	**2**	4	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	**1**	0	1
Total Volume	0	11	0	11	2	1	0	3	0	8	3	11	0	1	1	2
% App. Total	0	100	0		66.7	33.3	0		0	72.7	27.3		0	50	50	
PHF	.000	.688	.000	.688	.250	.250	.000	.375	.000	.667	.375	.688	.000	.250	.250	.500

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City of Fresno
N/S: Fowler Avenue
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Weather: Clear

File Name : 02_FSO_Fow_Oli PM
Site Code : 00322994
Start Date : 11/10/2022

Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	1	0	1	3
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	1	0	1	1	0	1	2	0	1	1	2	0	2	0	2	7
05:00 PM	0	1	0	1	0	1	1	2	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Total	0	7	0	7	0	1	1	2	0	0	0	0	0	1	0	1	10
Grand Total	0	8	0	8	1	1	2	4	0	1	1	2	0	3	0	3	17
Apprch %	0	100	0		25	25	50		0	50	50		0	100	0		
Total %	0	47.1	0	47.1	5.9	5.9	11.8	23.5	0	5.9	5.9	11.8	0	17.6	0	17.6	

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	**1**	0	0	1	0	0	**1**	**1**	0	**1**	0	**1**	**3**
04:45 PM	0	**1**	0	**1**	0	0	0	0	0	**1**	0	1	0	0	0	0	2
05:00 PM	0	1	0	1	0	**1**	**1**	**2**	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	1	1	1	3	0	1	1	2	0	1	0	1	8
% App. Total	0	100	0		33.3	33.3	33.3		0	50	50		0	100	0		
PHF	.000	.500	.000	.500	.250	.250	.250	.375	.000	.250	.250	.500	.000	.250	.000	.250	.667

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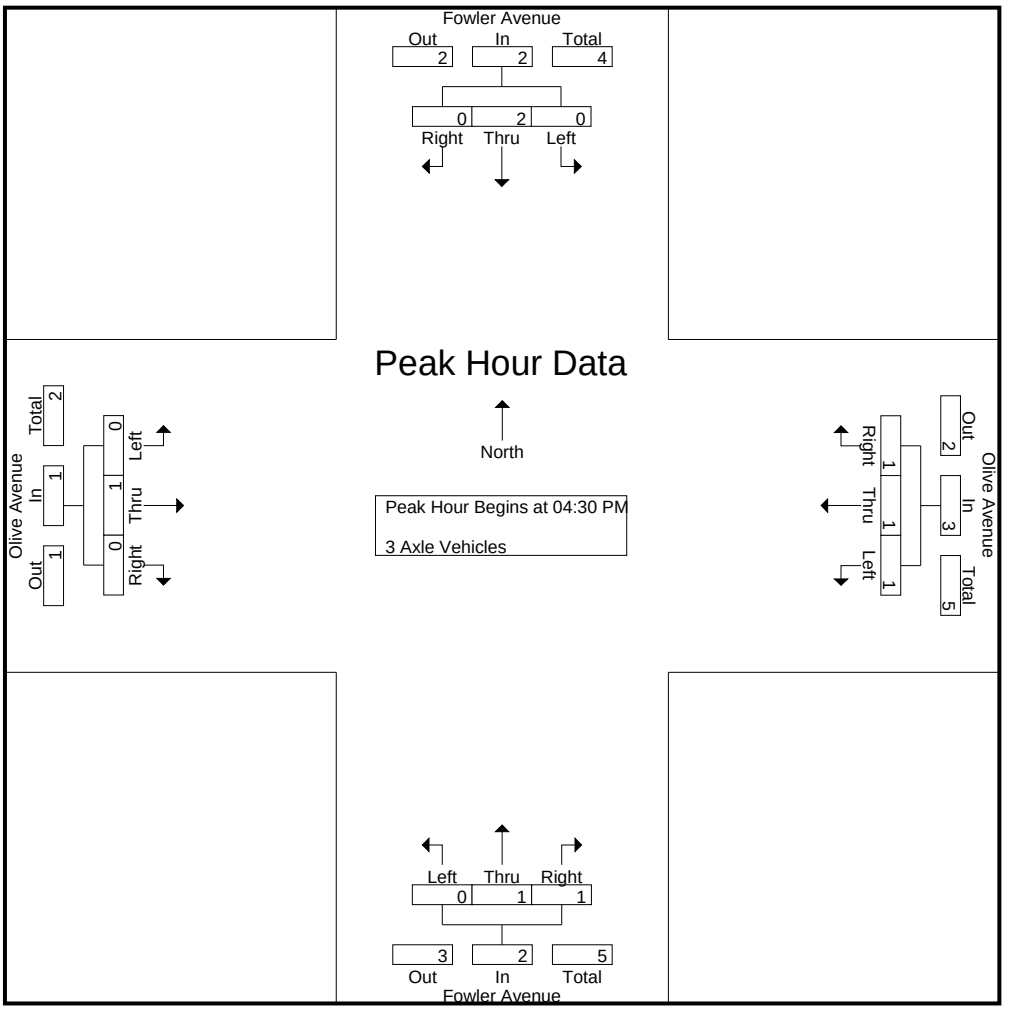
City of Fresno
N/S: Fowler Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 02_FSO_Fow_Oli PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	**1**	0	0	1	0	0	**1**	**1**	0	**1**	0	**1**
+15 mins.	0	**1**	0	**1**	0	0	0	0	0	**1**	0	1	0	0	0	0
+30 mins.	0	1	0	1	0	**1**	**1**	**2**	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	1	1	1	3	0	1	1	2	0	1	0	1
% App. Total	0	100	0		33.3	33.3	33.3		0	50	50		0	100	0	
PHF	.000	.500	.000	.500	.250	.250	.250	.375	.000	.250	.250	.500	.000	.250	.000	.250

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City of Fresno
N/S: Fowler Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 02_FSO_Fow_Oli PM
Site Code : 00322994
Start Date : 11/10/2022

Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	0	2	0	2	2	0	0	2	0	1	0	1	0	0	0	0	5
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	0	5	0	5	2	0	0	2	0	2	0	2	1	0	0	1	10
05:00 PM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
05:45 PM	0	3	0	3	1	0	0	1	0	1	0	1	0	0	0	0	5
Total	0	6	0	6	1	0	0	1	0	5	0	5	0	0	0	0	12
Grand Total	0	11	0	11	3	0	0	3	0	7	0	7	1	0	0	1	22
Apprch %	0	100	0		100	0	0		0	100	0		100	0	0		
Total %	0	50	0	50	13.6	0	0	13.6	0	31.8	0	31.8	4.5	0	0	4.5	

	Fowler Avenue Southbound				Olive Avenue Westbound				Fowler Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	2	0	2	**2**	0	0	**2**	0	**1**	0	**1**	0	0	0	0	**5**
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	**1**	0	0	**1**	2
05:00 PM	0	**3**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	6	0	6	2	0	0	2	0	2	0	2	1	0	0	1	11
% App. Total	0	100	0		100	0	0		0	100	0		100	0	0		
PHF	.000	.500	.000	.500	.250	.000	.000	.250	.000	.500	.000	.500	.250	.000	.000	.250	.550

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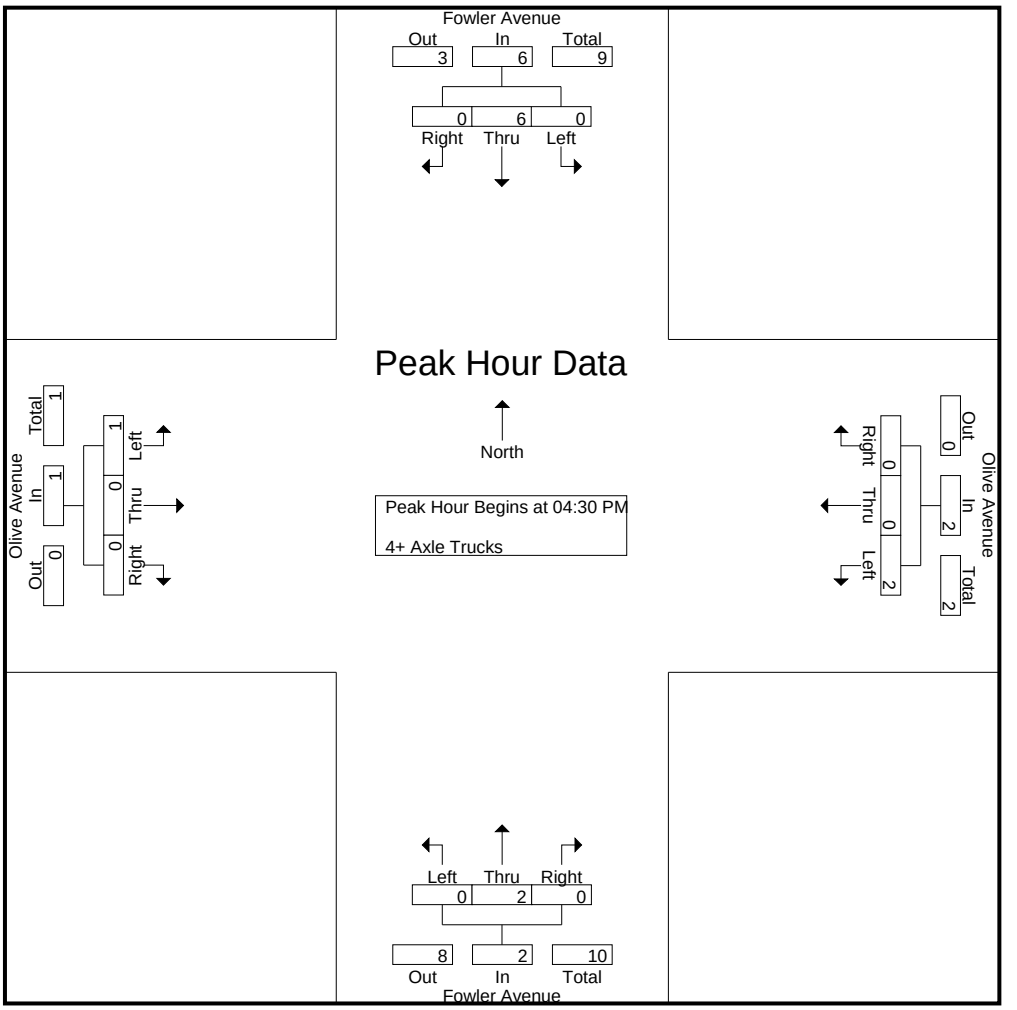
City of Fresno
N/S: Fowler Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 02_FSO_Fow_Oli PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	2	0	2	**2**	0	0	**2**	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	**1**	0	0	**1**
+30 mins.	0	**3**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	6	0	6	2	0	0	2	0	2	0	2	1	0	0	1
% App. Total	0	100	0		100	0	0		0	100	0		100	0	0	
PHF	.000	.500	.000	.500	.250	.000	.000	.250	.000	.500	.000	.500	.250	.000	.000	.250

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	31	112	143	3	0	20	23	0	79	57	136	0	0	0	0	302
07:15 AM	0	30	127	157	6	0	17	23	0	111	92	203	0	0	0	0	383
07:30 AM	0	39	165	204	3	0	21	24	0	105	105	210	0	0	0	0	438
07:45 AM	0	47	151	198	7	0	9	16	0	89	143	232	0	0	0	0	446
Total	0	147	555	702	19	0	67	86	0	384	397	781	0	0	0	0	1569
08:00 AM	0	41	167	208	5	0	11	16	0	98	154	252	0	0	0	0	476
08:15 AM	0	49	169	218	3	0	15	18	0	96	192	288	0	0	0	0	524
08:30 AM	0	37	187	224	5	0	18	23	0	114	210	324	0	0	0	0	571
08:45 AM	0	49	153	202	4	0	18	22	0	91	188	279	0	0	0	0	503
Total	0	176	676	852	17	0	62	79	0	399	744	1143	0	0	0	0	2074
Grand Total	0	323	1231	1554	36	0	129	165	0	783	1141	1924	0	0	0	0	3643
Apprch %	0	20.8	79.2		21.8	0	78.2		0	40.7	59.3		0	0	0		
Total %	0	8.9	33.8	42.7	1	0	3.5	4.5	0	21.5	31.3	52.8	0	0	0	0	
Passenger Vehicles	0	312	1213	1525	34	0	127	161	0	754	1123	1877	0	0	0	0	3563
% Passenger Vehicles	0	96.6	98.5	98.1	94.4	0	98.4	97.6	0	96.3	98.4	97.6	0	0	0	0	97.8
Large 2 Axle Vehicles	0	6	10	16	1	0	1	2	0	18	14	32	0	0	0	0	50
% Large 2 Axle Vehicles	0	1.9	0.8	1	2.8	0	0.8	1.2	0	2.3	1.2	1.7	0	0	0	0	1.4
3 Axle Vehicles	0	3	5	8	1	0	0	1	0	5	1	6	0	0	0	0	15
% 3 Axle Vehicles	0	0.9	0.4	0.5	2.8	0	0	0.6	0	0.6	0.1	0.3	0	0	0	0	0.4
4+ Axle Trucks	0	2	3	5	0	0	1	1	0	6	3	9	0	0	0	0	15
% 4+ Axle Trucks	0	0.6	0.2	0.3	0	0	0.8	0.6	0	0.8	0.3	0.5	0	0	0	0	0.4

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	41	167	208	**5**	0	11	16	0	98	154	252	0	0	0	0	476
08:15 AM	0	**49**	169	218	3	0	15	18	0	96	192	288	0	0	0	0	524
08:30 AM	0	37	**187**	**224**	5	0	**18**	**23**	0	**114**	**210**	**324**	0	0	0	0	**571**
08:45 AM	0	49	153	202	4	0	18	22	0	91	188	279	0	0	0	0	503
Total Volume	0	176	676	852	17	0	62	79	0	399	744	1143	0	0	0	0	2074
% App. Total	0	20.7	79.3		21.5	0	78.5		0	34.9	65.1		0	0	0		
PHF	.000	.898	.904	.951	.850	.000	.861	.859	.000	.875	.886	.882	.000	.000	.000	.000	.908

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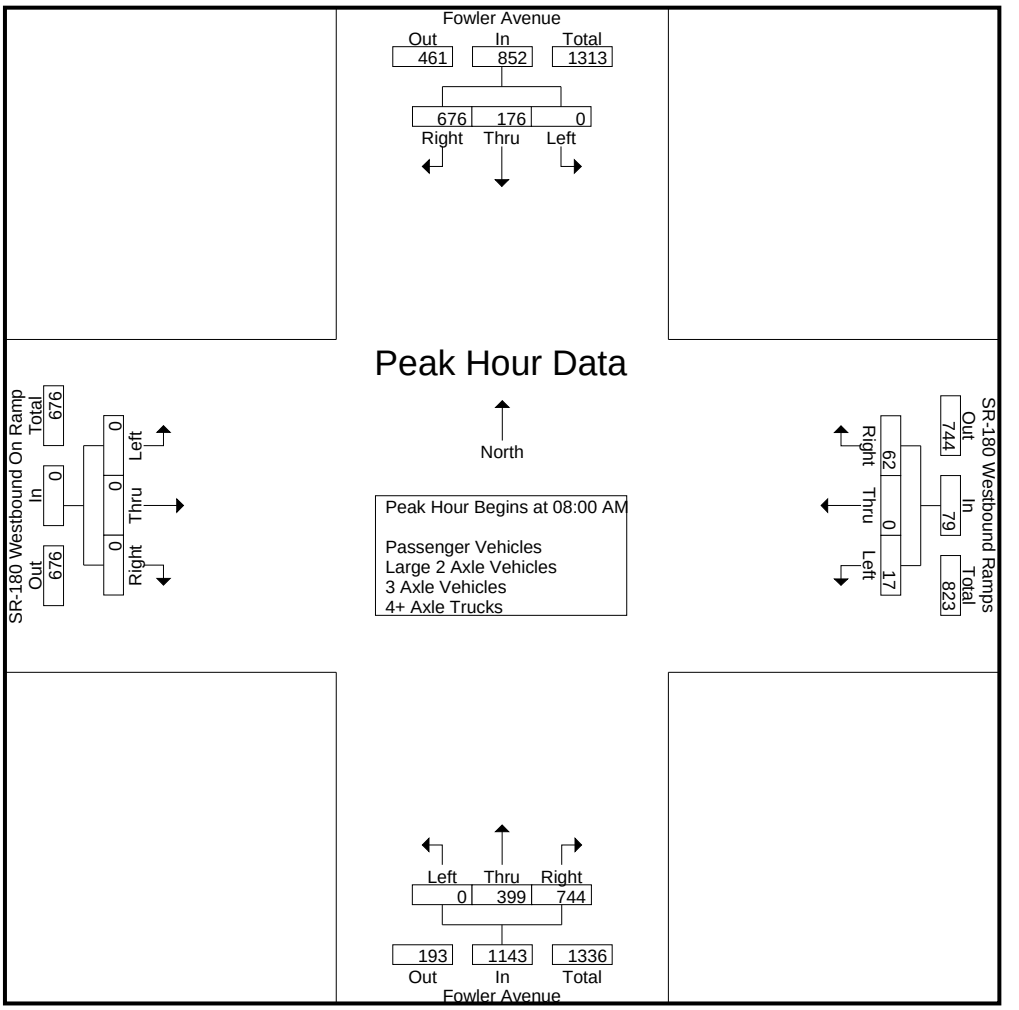
City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
Start Date : 11/10/2022



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:00 AM				08:00 AM				07:00 AM			
+0 mins.	0	41	167	208	3	0	20	23	0	98	154	252	0	0	0	0
+15 mins.	0	**49**	169	218	6	0	17	23	0	96	192	288	0	0	0	0
+30 mins.	0	37	**187**	**224**	3	0	**21**	**24**	0	**114**	**210**	**324**	0	0	0	0
+45 mins.	0	49	153	202	**7**	0	9	16	0	91	188	279	0	0	0	0
Total Volume	0	176	676	852	19	0	67	86	0	399	744	1143	0	0	0	0
% App. Total	0	20.7	79.3		22.1	0	77.9		0	34.9	65.1		0	0	0	
PHF	.000	.898	.904	.951	.679	.000	.798	.896	.000	.875	.886	.882	.000	.000	.000	.000

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	30	109	139	3	0	20	23	0	77	56	133	0	0	0	0	295
07:15 AM	0	29	123	152	4	0	16	20	0	104	92	196	0	0	0	0	368
07:30 AM	0	37	164	201	3	0	21	24	0	103	103	206	0	0	0	0	431
07:45 AM	0	44	146	190	7	0	9	16	0	84	142	226	0	0	0	0	432
Total	0	140	542	682	17	0	66	83	0	368	393	761	0	0	0	0	1526
08:00 AM	0	40	167	207	5	0	11	16	0	96	151	247	0	0	0	0	470
08:15 AM	0	48	165	213	3	0	15	18	0	92	187	279	0	0	0	0	510
08:30 AM	0	37	186	223	5	0	18	23	0	111	208	319	0	0	0	0	565
08:45 AM	0	47	153	200	4	0	17	21	0	87	184	271	0	0	0	0	492
Total	0	172	671	843	17	0	61	78	0	386	730	1116	0	0	0	0	2037
Grand Total	0	312	1213	1525	34	0	127	161	0	754	1123	1877	0	0	0	0	3563
Apprch %	0	20.5	79.5		21.1	0	78.9		0	40.2	59.8		0	0	0		
Total %	0	8.8	34	42.8	1	0	3.6	4.5	0	21.2	31.5	52.7	0	0	0	0	

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	40	167	207	**5**	0	11	16	0	96	151	247	0	0	0	0	470
08:15 AM	0	**48**	165	213	3	0	15	18	0	92	187	279	0	0	0	0	510
08:30 AM	0	37	**186**	**223**	5	0	**18**	**23**	0	**111**	**208**	**319**	0	0	0	0	**565**
08:45 AM	0	47	153	200	4	0	17	21	0	87	184	271	0	0	0	0	492
Total Volume	0	172	671	843	17	0	61	78	0	386	730	1116	0	0	0	0	2037
% App. Total	0	20.4	79.6		21.8	0	78.2		0	34.6	65.4		0	0	0		
PHF	.000	.896	.902	.945	.850	.000	.847	.848	.000	.869	.877	.875	.000	.000	.000	.000	.901

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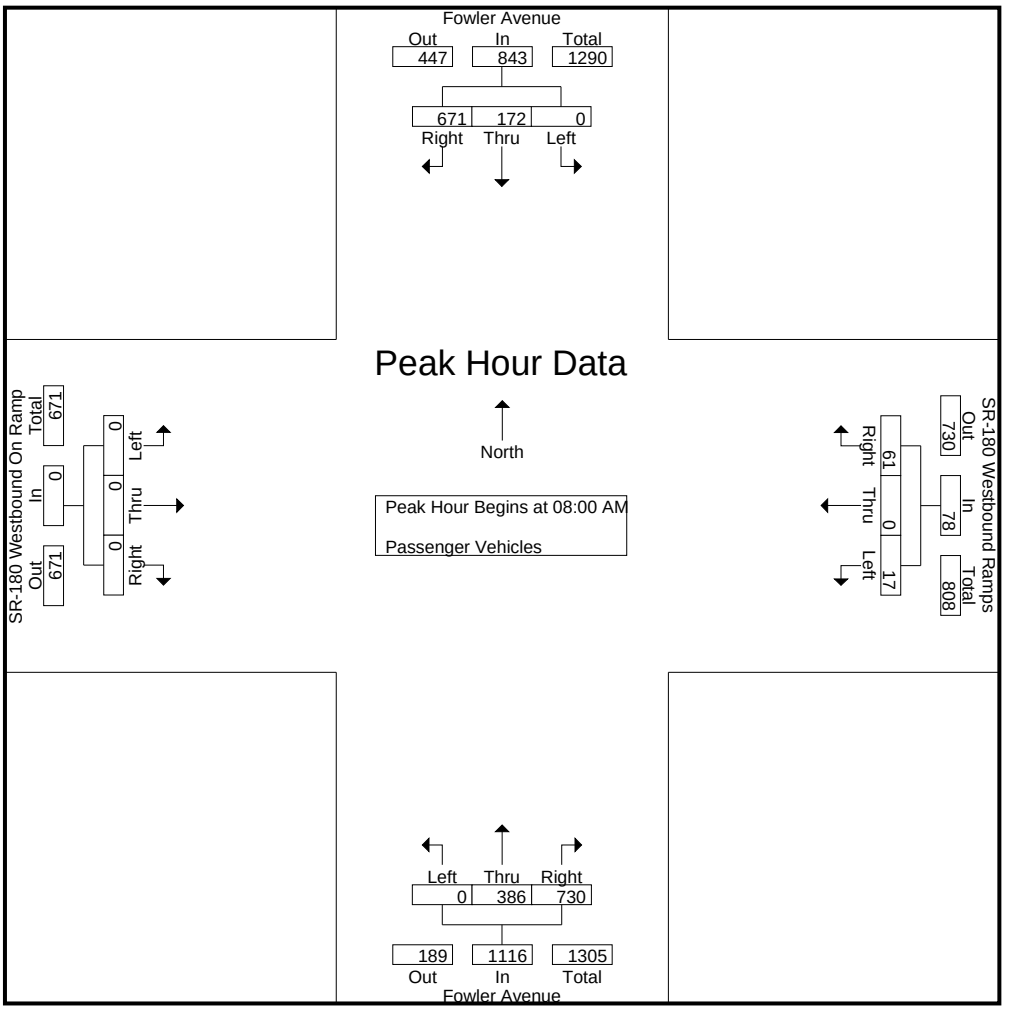
City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
Start Date : 11/10/2022



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	40	167	207	**5**	0	11	16	0	96	151	247	0	0	0	0
+15 mins.	0	**48**	165	213	3	0	15	18	0	92	187	279	0	0	0	0
+30 mins.	0	37	**186**	**223**	5	0	**18**	**23**	0	**111**	**208**	**319**	0	0	0	0
+45 mins.	0	47	153	200	4	0	17	21	0	87	184	271	0	0	0	0
Total Volume	0	172	671	843	17	0	61	78	0	386	730	1116	0	0	0	0
% App. Total	0	20.4	79.6		21.8	0	78.2		0	34.6	65.4		0	0	0	
PHF	.000	.896	.902	.945	.850	.000	.847	.848	.000	.869	.877	.875	.000	.000	.000	.000

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City of Fresno
N/S: Fowler Avenue
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Weather: Clear

File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:15 AM	0	0	3	3	1	0	1	2	0	3	0	3	0	0	0	0	8
07:30 AM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
07:45 AM	0	1	4	5	0	0	0	0	0	2	1	3	0	0	0	0	8
Total	0	2	8	10	1	0	1	2	0	6	2	8	0	0	0	0	20
08:00 AM	0	1	0	1	0	0	0	0	0	2	3	5	0	0	0	0	6
08:15 AM	0	1	2	3	0	0	0	0	0	4	5	9	0	0	0	0	12
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:45 AM	0	2	0	2	0	0	0	0	0	4	4	8	0	0	0	0	10
Total	0	4	2	6	0	0	0	0	0	12	12	24	0	0	0	0	30
Grand Total	0	6	10	16	1	0	1	2	0	18	14	32	0	0	0	0	50
Apprch %	0	37.5	62.5		50	0	50		0	56.2	43.8		0	0	0		
Total %	0	12	20	32	2	0	2	4	0	36	28	64	0	0	0	0	

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	1	0	1	0	0	0	0	0	2	3	5	0	0	0	0	6
08:15 AM	0	1	**2**	**3**	0	0	0	0	0	**4**	**5**	**9**	0	0	0	0	**12**
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:45 AM	0	**2**	0	2	0	0	0	0	0	4	4	8	0	0	0	0	10
Total Volume	0	4	2	6	0	0	0	0	0	12	12	24	0	0	0	0	30
% App. Total	0	66.7	33.3		0	0	0		0	50	50		0	0	0		
PHF	.000	.500	.250	.500	.000	.000	.000	.000	.000	.750	.600	.667	.000	.000	.000	.000	.625

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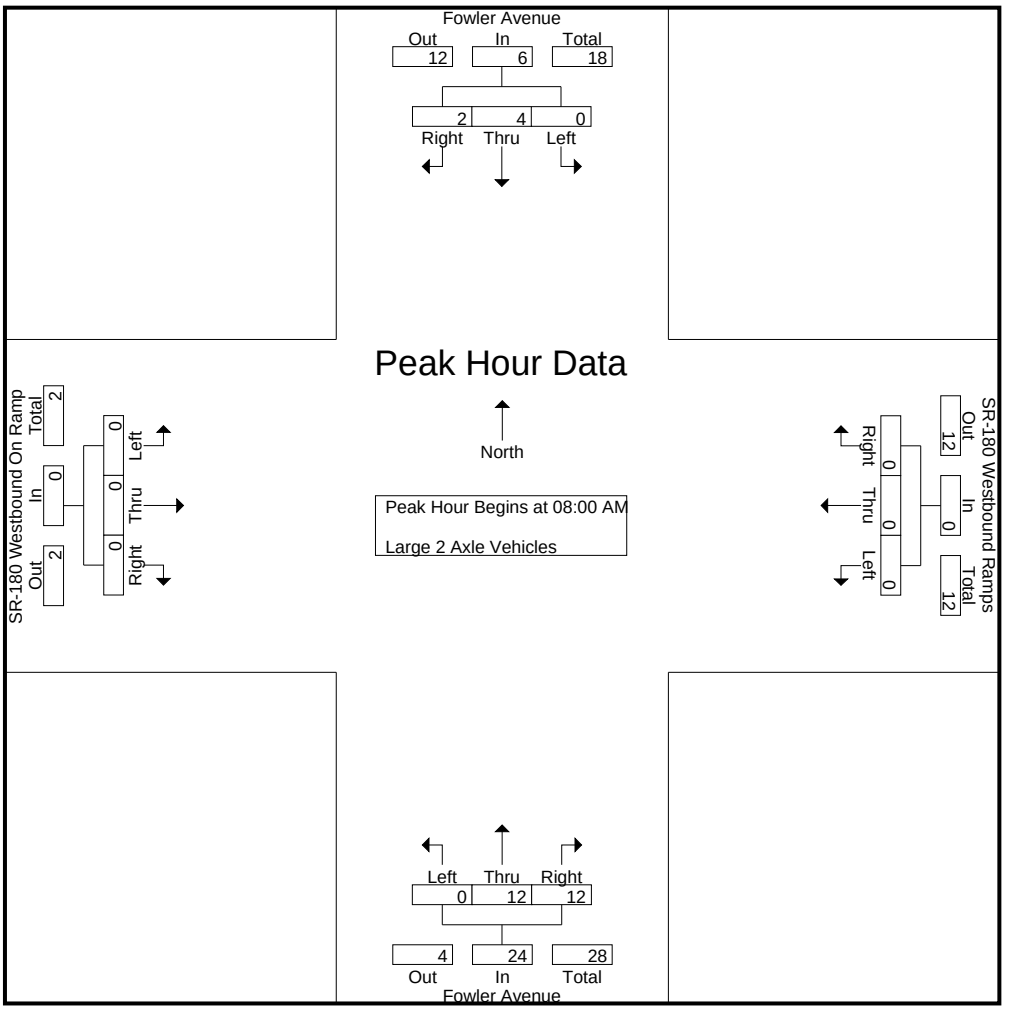
(951)268-6268

City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	2	3	5	0	0	0	0
+15 mins.	0	1	**2**	**3**	0	0	0	0	0	**4**	**5**	**9**	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	**2**	0	2	0	0	0	0	0	4	4	8	0	0	0	0
Total Volume	0	4	2	6	0	0	0	0	0	12	12	24	0	0	0	0
% App. Total	0	66.7	33.3		0	0	0		0	50	50		0	0	0	
PHF	.000	.500	.250	.500	.000	.000	.000	.000	.000	.750	.600	.667	.000	.000	.000	.000

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City of Fresno
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Weather: Clear

File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	3	3	0	0	0	0	0	2	0	2	0	0	0	0	5
07:15 AM	0	1	1	2	1	0	0	1	0	1	0	1	0	0	0	0	4
07:30 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
07:45 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total	0	3	4	7	1	0	0	1	0	5	1	6	0	0	0	0	14
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	3	5	8	1	0	0	1	0	5	1	6	0	0	0	0	15
Apprch %	0	37.5	62.5		100	0	0		0	83.3	16.7		0	0	0		
Total %	0	20	33.3	53.3	6.7	0	0	6.7	0	33.3	6.7	40	0	0	0	0	

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

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City of Fresno
N/S: Fowler Avenue
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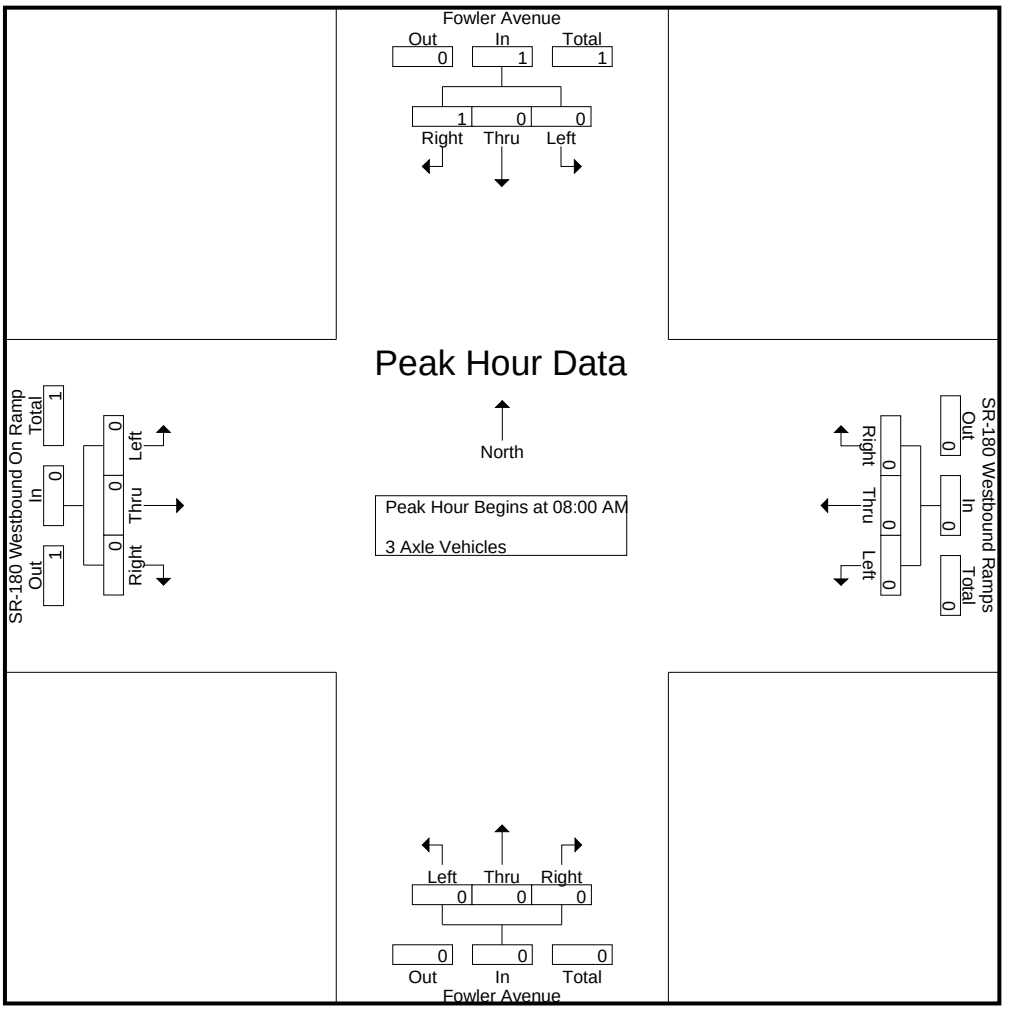
Weather: Clear

File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
Start Date : 11/10/2022



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Fresno
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File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
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Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
07:45 AM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	0	2	1	3	0	0	0	0	0	5	1	6	0	0	0	0	9
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	3
08:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	0	2	2	0	0	1	1	0	1	2	3	0	0	0	0	6
Grand Total	0	2	3	5	0	0	1	1	0	6	3	9	0	0	0	0	15
Apprch %	0	40	60		0	0	100		0	66.7	33.3		0	0	0		
Total %	0	13.3	20	33.3	0	0	6.7	6.7	0	40	20	60	0	0	0	0	

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	**2**	**2**	0	0	0	0	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	**1**	**2**	**3**	0	0	0	0	**3**
08:45 AM	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	0	2	2	0	0	1	1	0	1	2	3	0	0	0	0	6
% App. Total	0	0	100		0	0	100		0	33.3	66.7		0	0	0		
PHF	.000	.000	.250	.250	.000	.000	.250	.250	.000	.250	.250	.250	.000	.000	.000	.000	.500

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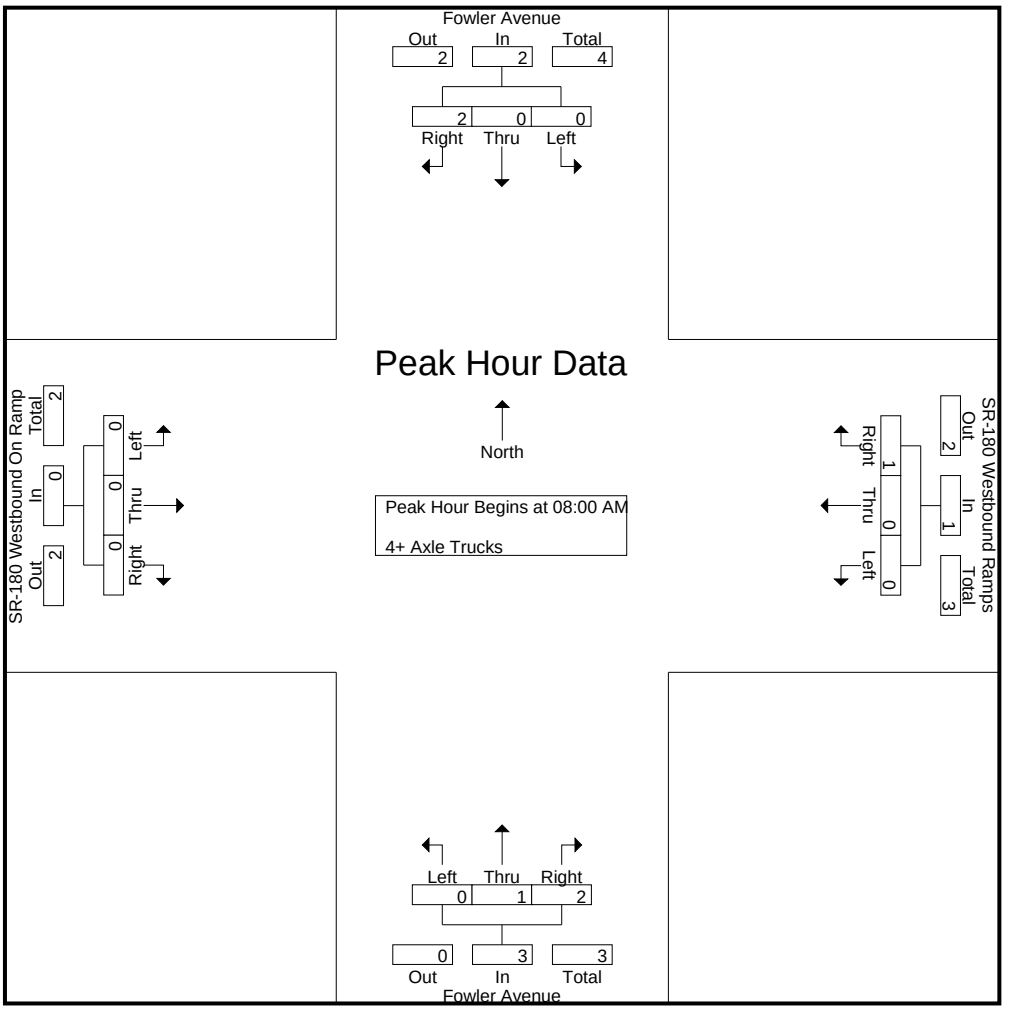
File Name : 03_FSO_Fow_180W AM
Site Code : 00322994
Start Date : 11/10/2022



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	**2**	**2**	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	**1**	**2**	**3**	0	0	0	0
+45 mins.	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	0	0	0
Total Volume	0	0	2	2	0	0	1	1	0	1	2	3	0	0	0	0
% App. Total	0	0	100		0	0	100		0	33.3	66.7		0	0	0	
PHF	.000	.000	.250	.250	.000	.000	.250	.250	.000	.250	.250	.250	.000	.000	.000	.000

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File Name : 03_FSO_Fow_180W PM
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Start Date : 11/10/2022
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	66	96	162	4	0	8	12	0	86	76	162	0	0	0	0	336
04:15 PM	0	77	88	165	4	0	7	11	0	96	59	155	0	0	0	0	331
04:30 PM	0	68	112	180	3	0	15	18	0	109	69	178	0	0	0	0	376
04:45 PM	0	72	85	157	9	0	12	21	0	112	65	177	0	0	0	0	355
Total	0	283	381	664	20	0	42	62	0	403	269	672	0	0	0	0	1398
05:00 PM	0	86	78	164	9	0	10	19	0	112	62	174	0	0	0	0	357
05:15 PM	0	71	81	152	9	0	6	15	0	126	75	201	0	0	0	0	368
05:30 PM	0	91	68	159	4	0	8	12	0	103	108	211	0	0	0	0	382
05:45 PM	0	84	75	159	11	0	12	23	0	130	100	230	0	0	0	0	412
Total	0	332	302	634	33	0	36	69	0	471	345	816	0	0	0	0	1519
Grand Total	0	615	683	1298	53	0	78	131	0	874	614	1488	0	0	0	0	2917
Apprch %	0	47.4	52.6		40.5	0	59.5		0	58.7	41.3		0	0	0		
Total %	0	21.1	23.4	44.5	1.8	0	2.7	4.5	0	30	21	51	0	0	0	0	
Passenger Vehicles	0	599	651	1250	50	0	75	125	0	856	599	1455	0	0	0	0	2830
% Passenger Vehicles	0	97.4	95.3	96.3	94.3	0	96.2	95.4	0	97.9	97.6	97.8	0	0	0	0	97
Large 2 Axle Vehicles	0	9	16	25	3	0	3	6	0	9	10	19	0	0	0	0	50
% Large 2 Axle Vehicles	0	1.5	2.3	1.9	5.7	0	3.8	4.6	0	1	1.6	1.3	0	0	0	0	1.7
3 Axle Vehicles	0	2	9	11	0	0	0	0	0	2	2	4	0	0	0	0	15
% 3 Axle Vehicles	0	0.3	1.3	0.8	0	0	0	0	0	0.2	0.3	0.3	0	0	0	0	0.5
4+ Axle Trucks	0	5	7	12	0	0	0	0	0	7	3	10	0	0	0	0	22
% 4+ Axle Trucks	0	0.8	1	0.9	0	0	0	0	0	0.8	0.5	0.7	0	0	0	0	0.8

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	86	78	**164**	9	0	10	19	0	112	62	174	0	0	0	0	357
05:15 PM	0	71	**81**	152	9	0	6	15	0	126	75	201	0	0	0	0	368
05:30 PM	0	**91**	68	159	4	0	8	12	0	103	**108**	211	0	0	0	0	382
05:45 PM	0	84	75	159	**11**	0	**12**	**23**	0	**130**	100	**230**	0	0	0	0	**412**
Total Volume	0	332	302	634	33	0	36	69	0	471	345	816	0	0	0	0	1519
% App. Total	0	52.4	47.6		47.8	0	52.2		0	57.7	42.3		0	0	0		
PHF	.000	.912	.932	.966	.750	.000	.750	.750	.000	.906	.799	.887	.000	.000	.000	.000	.922

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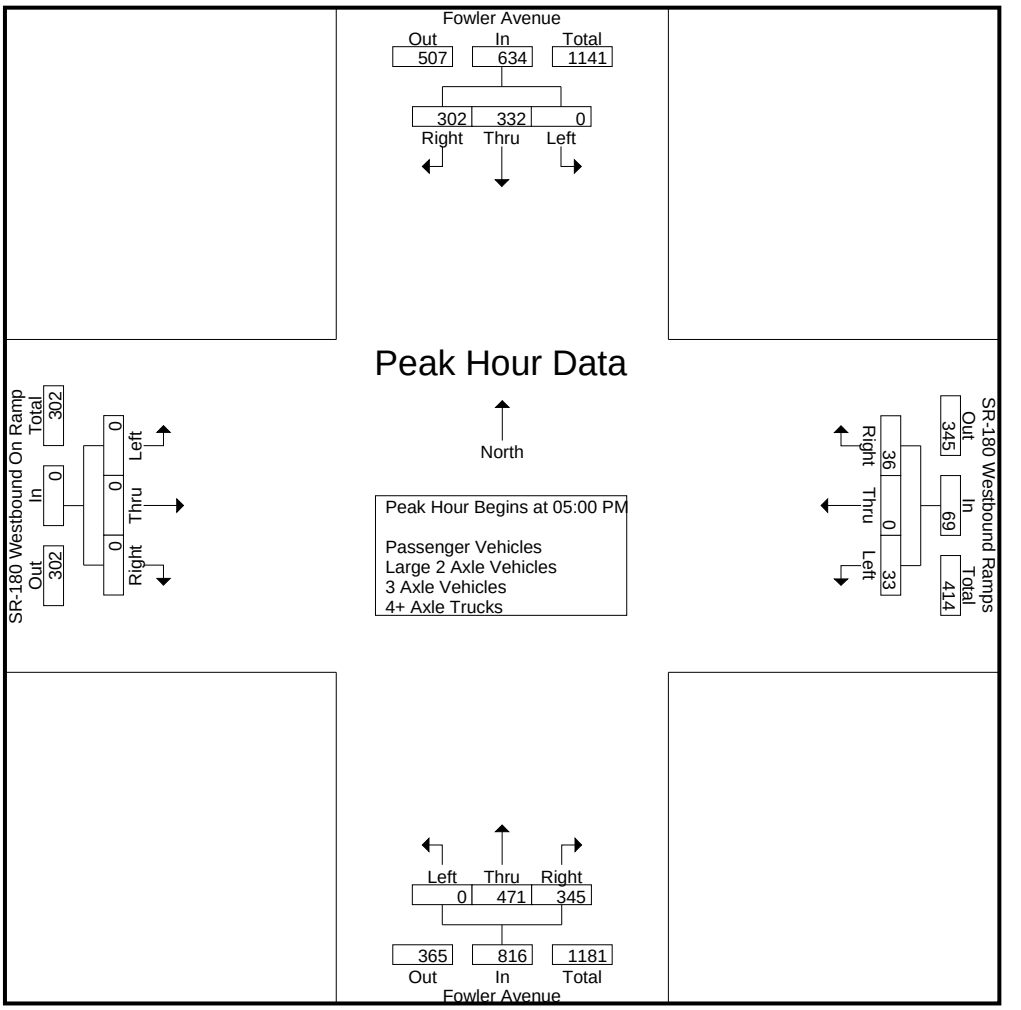

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				05:00 PM				04:00 PM			
+0 mins.	0	77	88	165	3	0	**15**	18	0	112	62	174	0	0	0	0
+15 mins.	0	68	**112**	**180**	**9**	0	12	**21**	0	126	75	201	0	0	0	0
+30 mins.	0	72	85	157	9	0	10	19	0	103	**108**	211	0	0	0	0
+45 mins.	0	**86**	78	164	9	0	6	15	0	**130**	100	**230**	0	0	0	0
Total Volume	0	303	363	666	30	0	43	73	0	471	345	816	0	0	0	0
% App. Total	0	45.5	54.5		41.1	0	58.9		0	57.7	42.3		0	0	0	
PHF	.000	.881	.810	.925	.833	.000	.717	.869	.000	.906	.799	.887	.000	.000	.000	.000

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Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	64	90	154	4	0	8	12	0	84	76	160	0	0	0	0	326
04:15 PM	0	76	86	162	3	0	7	10	0	93	57	150	0	0	0	0	322
04:30 PM	0	65	105	170	3	0	15	18	0	106	67	173	0	0	0	0	361
04:45 PM	0	68	82	150	9	0	10	19	0	109	62	171	0	0	0	0	340
Total	0	273	363	636	19	0	40	59	0	392	262	654	0	0	0	0	1349
05:00 PM	0	84	73	157	8	0	9	17	0	111	62	173	0	0	0	0	347
05:15 PM	0	71	78	149	8	0	6	14	0	125	72	197	0	0	0	0	360
05:30 PM	0	89	65	154	4	0	8	12	0	99	106	205	0	0	0	0	371
05:45 PM	0	82	72	154	11	0	12	23	0	129	97	226	0	0	0	0	403
Total	0	326	288	614	31	0	35	66	0	464	337	801	0	0	0	0	1481
Grand Total	0	599	651	1250	50	0	75	125	0	856	599	1455	0	0	0	0	2830
Apprch %	0	47.9	52.1		40	0	60		0	58.8	41.2		0	0	0		
Total %	0	21.2	23	44.2	1.8	0	2.7	4.4	0	30.2	21.2	51.4	0	0	0	0	

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	84	73	**157**	8	0	9	17	0	111	62	173	0	0	0	0	347
05:15 PM	0	71	**78**	149	8	0	6	14	0	125	72	197	0	0	0	0	360
05:30 PM	0	**89**	65	154	4	0	8	12	0	99	**106**	205	0	0	0	0	371
05:45 PM	0	82	72	154	**11**	0	**12**	**23**	0	**129**	97	**226**	0	0	0	0	**403**
Total Volume	0	326	288	614	31	0	35	66	0	464	337	801	0	0	0	0	1481
% App. Total	0	53.1	46.9		47	0	53		0	57.9	42.1		0	0	0		
PHF	.000	.916	.923	.978	.705	.000	.729	.717	.000	.899	.795	.886	.000	.000	.000	.000	.919

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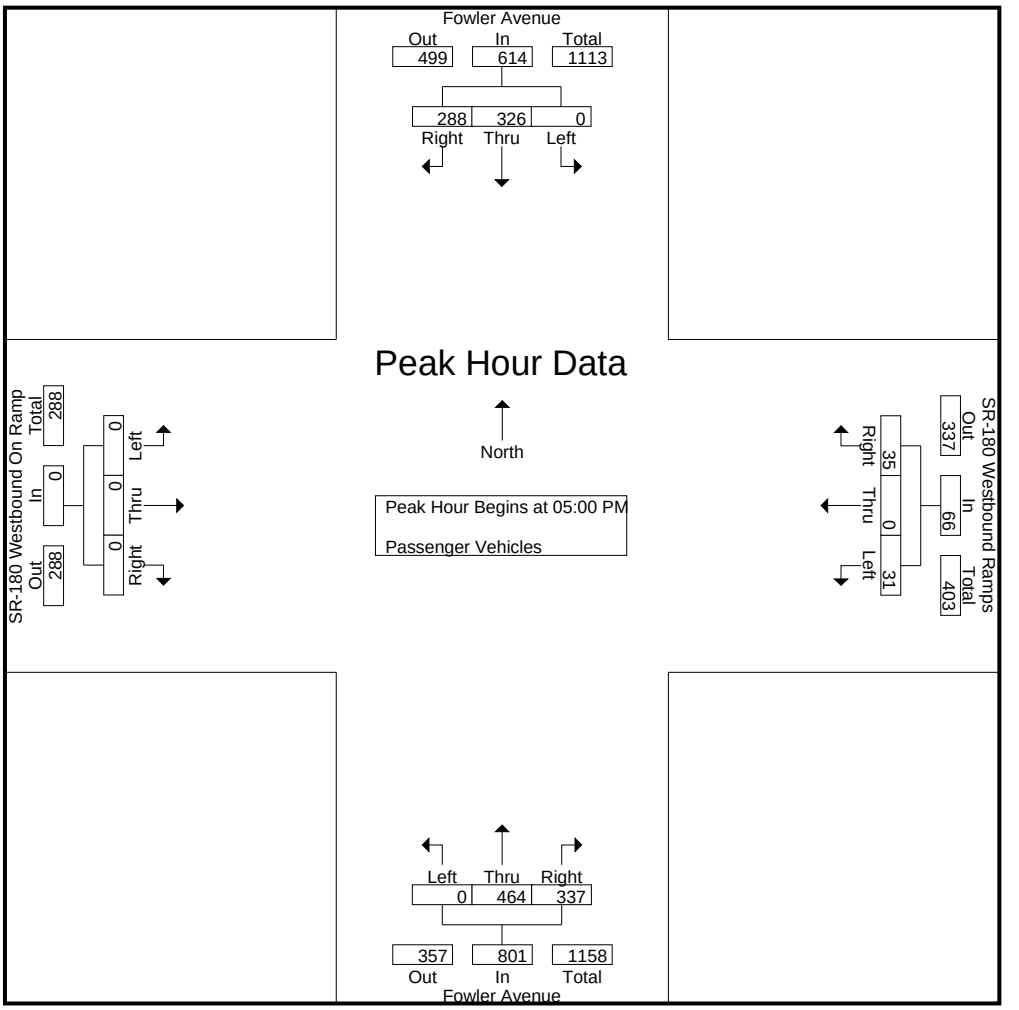

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	84	73	**157**	8	0	9	17	0	111	62	173	0	0	0	0
+15 mins.	0	71	**78**	149	8	0	6	14	0	125	72	197	0	0	0	0
+30 mins.	0	**89**	65	154	4	0	8	12	0	99	**106**	205	0	0	0	0
+45 mins.	0	82	72	154	**11**	0	**12**	**23**	0	**129**	97	**226**	0	0	0	0
Total Volume	0	326	288	614	31	0	35	66	0	464	337	801	0	0	0	0
% App. Total	0	53.1	46.9		47	0	53		0	57.9	42.1		0	0	0	
PHF	.000	.916	.923	.978	.705	.000	.729	.717	.000	.899	.795	.886	.000	.000	.000	.000

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Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	5	7	0	0	0	0	0	1	0	1	0	0	0	0	8
04:15 PM	0	0	1	1	1	0	0	1	0	3	2	5	0	0	0	0	7
04:30 PM	0	3	2	5	0	0	0	0	0	1	1	2	0	0	0	0	7
04:45 PM	0	3	2	5	0	0	2	2	0	1	3	4	0	0	0	0	11
Total	0	8	10	18	1	0	2	3	0	6	6	12	0	0	0	0	33
05:00 PM	0	1	2	3	1	0	1	2	0	1	0	1	0	0	0	0	6
05:15 PM	0	0	3	3	1	0	0	1	0	0	3	3	0	0	0	0	7
05:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:45 PM	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	2
Total	0	1	6	7	2	0	1	3	0	3	4	7	0	0	0	0	17
Grand Total	0	9	16	25	3	0	3	6	0	9	10	19	0	0	0	0	50
Apprch %	0	36	64		50	0	50		0	47.4	52.6		0	0	0		
Total %	0	18	32	50	6	0	6	12	0	18	20	38	0	0	0	0	

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**1**	2	**3**	**1**	0	**1**	**2**	0	1	0	1	0	0	0	0	6
05:15 PM	0	0	**3**	3	1	0	0	1	0	0	**3**	**3**	0	0	0	0	**7**
05:30 PM	0	0	0	0	0	0	0	0	0	**2**	0	2	0	0	0	0	2
05:45 PM	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	2
Total Volume	0	1	6	7	2	0	1	3	0	3	4	7	0	0	0	0	17
% App. Total	0	14.3	85.7		66.7	0	33.3		0	42.9	57.1		0	0	0		
PHF	.000	.250	.500	.583	.500	.000	.250	.375	.000	.375	.333	.583	.000	.000	.000	.000	.607

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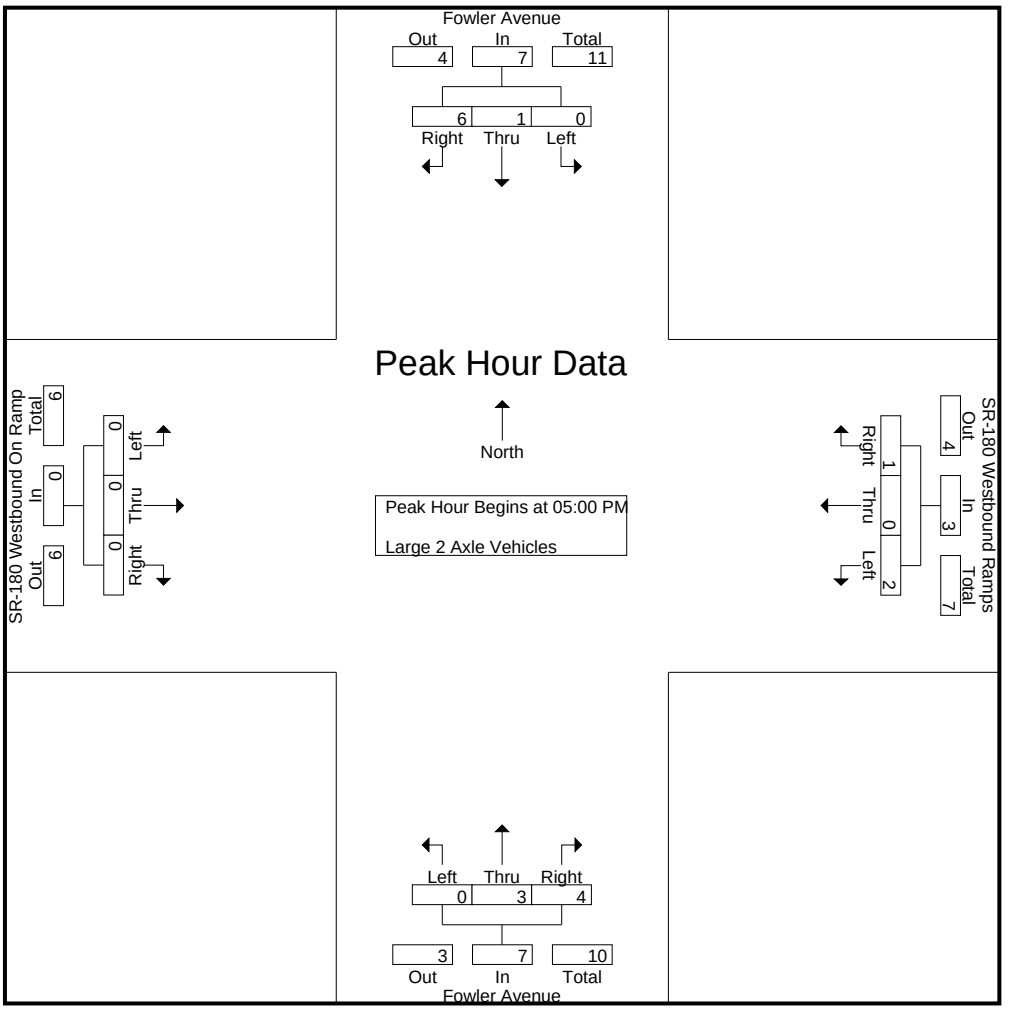
City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**1**	2	**3**	**1**	0	**1**	**2**	0	1	0	1	0	0	0	0
+15 mins.	0	0	**3**	3	1	0	0	1	0	0	**3**	**3**	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	**2**	0	2	0	0	0	0
+45 mins.	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	0	1	6	7	2	0	1	3	0	3	4	7	0	0	0	0
% App. Total	0	14.3	85.7		66.7	0	33.3		0	42.9	57.1		0	0	0	
PHF	.000	.250	.500	.583	.500	.000	.250	.375	.000	.375	.333	.583	.000	.000	.000	.000

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E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W PM
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Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	3	3	0	0	0	0	0	1	1	2	0	0	0	0	5
04:45 PM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	0	5	5	0	0	0	0	0	2	1	3	0	0	0	0	8
05:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	2	3	5	0	0	0	0	0	0	1	1	0	0	0	0	6
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	4	6	0	0	0	0	0	0	1	1	0	0	0	0	7
Grand Total	0	2	9	11	0	0	0	0	0	2	2	4	0	0	0	0	15
Apprch %	0	18.2	81.8		0	0	0		0	50	50		0	0	0		
Total %	0	13.3	60	73.3	0	0	0	0	0	13.3	13.3	26.7	0	0	0	0	

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	**2**	**3**	**5**	0	0	0	0	0	0	**1**	**1**	0	0	0	0	**6**
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	4	6	0	0	0	0	0	0	1	1	0	0	0	0	7
% App. Total	0	33.3	66.7		0	0	0		0	0	100		0	0	0		
PHF	.000	.250	.333	.300	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.292

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E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W PM
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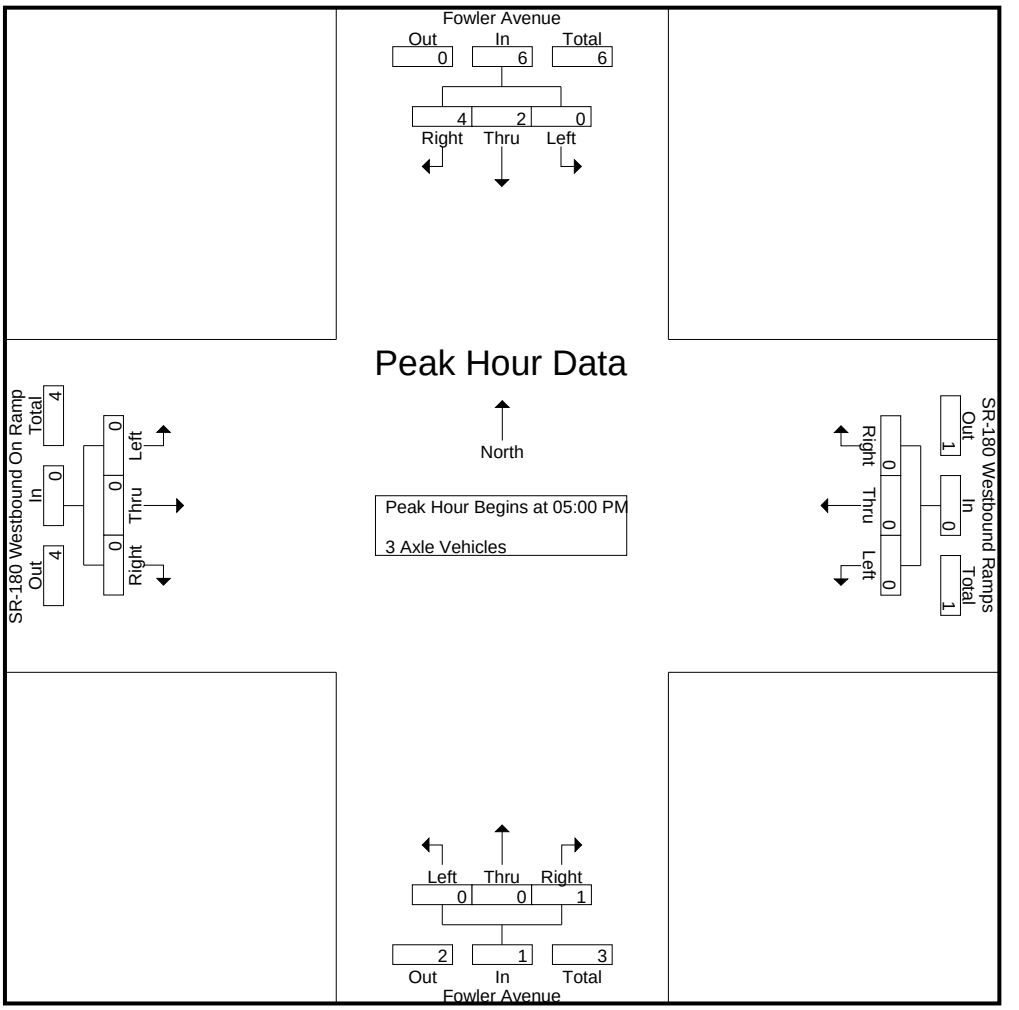

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	**2**	**3**	**5**	0	0	0	0	0	0	**1**	**1**	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	4	6	0	0	0	0	0	0	1	1	0	0	0	0
% App. Total	0	33.3	66.7		0	0	0		0	0	100		0	0	0	
PHF	.000	.250	.333	.300	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000

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E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W PM
Site Code : 00322994
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Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	2	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	2	3	5	0	0	0	0	0	3	0	3	0	0	0	0	8
05:00 PM	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	3
05:45 PM	0	2	2	4	0	0	0	0	0	1	2	3	0	0	0	0	7
Total	0	3	4	7	0	0	0	0	0	4	3	7	0	0	0	0	14
Grand Total	0	5	7	12	0	0	0	0	0	7	3	10	0	0	0	0	22
Apprch %	0	41.7	58.3		0	0	0		0	70	30		0	0	0		
Total %	0	22.7	31.8	54.5	0	0	0	0	0	31.8	13.6	45.5	0	0	0	0	

	Fowler Avenue Southbound				SR-180 Westbound Ramps Westbound				Fowler Avenue Northbound				SR-180 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	**2**	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	**2**	1	**3**	0	0	0	0	3
05:45 PM	0	**2**	2	**4**	0	0	0	0	0	1	**2**	3	0	0	0	0	**7**
Total Volume	0	3	4	7	0	0	0	0	0	4	3	7	0	0	0	0	14
% App. Total	0	42.9	57.1		0	0	0		0	57.1	42.9		0	0	0		
PHF	.000	.375	.500	.438	.000	.000	.000	.000	.000	.500	.375	.583	.000	.000	.000	.000	.500

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Westbound Ramps
Weather: Clear

File Name : 03_FSO_Fow_180W PM
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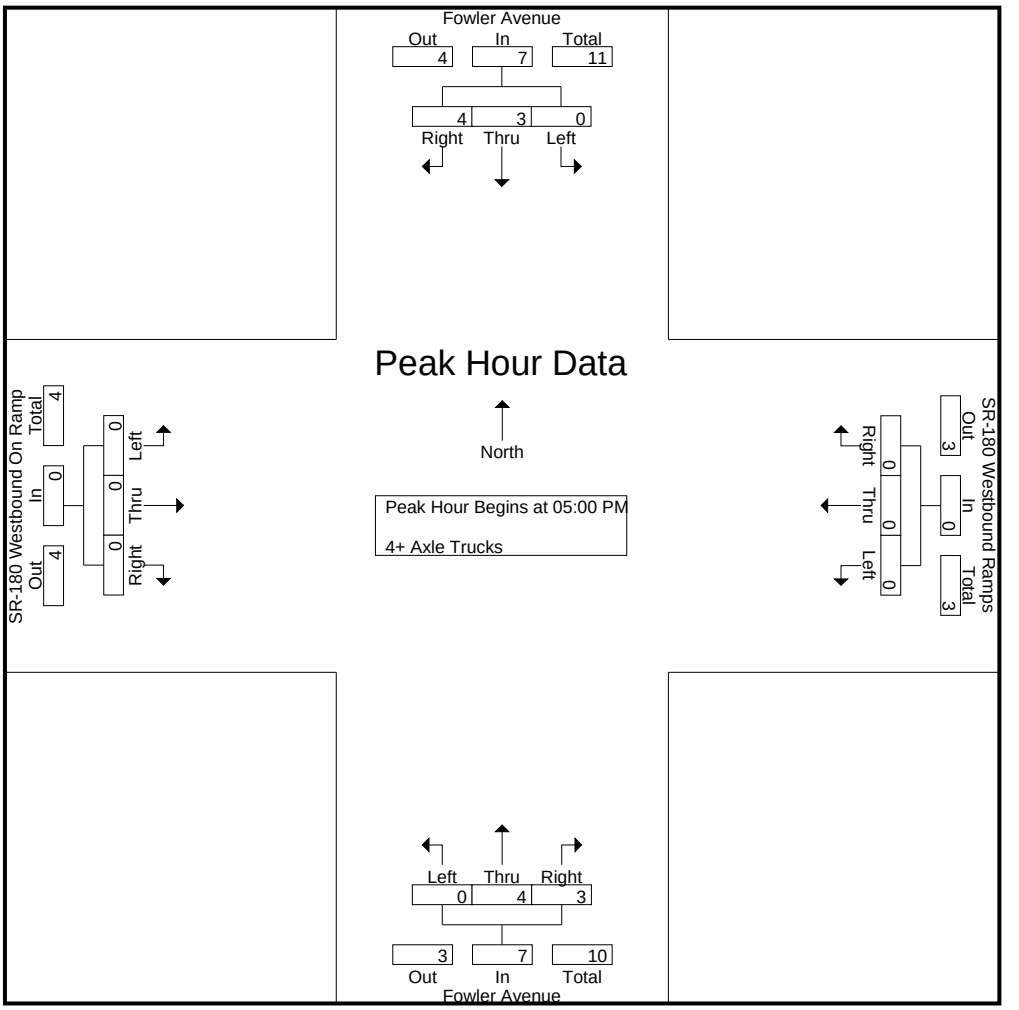

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	1	**2**	3	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	**2**	1	**3**	0	0	0	0
+45 mins.	0	**2**	2	**4**	0	0	0	0	0	1	**2**	3	0	0	0	0
Total Volume	0	3	4	7	0	0	0	0	0	4	3	7	0	0	0	0
% App. Total	0	42.9	57.1		0	0	0		0	57.1	42.9		0	0	0	
PHF	.000	.375	.500	.438	.000	.000	.000	.000	.000	.500	.375	.583	.000	.000	.000	.000

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E AM
Site Code : 00322994
Start Date : 11/10/2022
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	28	0	33	0	0	0	0	0	88	2	90	62	0	61	123	246
07:15 AM	10	27	0	37	0	0	0	0	0	125	2	127	73	0	39	112	276
07:30 AM	9	30	0	39	0	0	0	0	0	156	3	159	64	0	90	154	352
07:45 AM	7	47	0	54	0	0	0	0	0	185	3	188	46	0	97	143	385
Total	31	132	0	163	0	0	0	0	0	554	10	564	245	0	287	532	1259
08:00 AM	12	33	0	45	0	0	0	0	0	203	10	213	58	0	81	139	397
08:15 AM	6	42	0	48	0	0	0	0	0	255	7	262	47	0	79	126	436
08:30 AM	6	41	0	47	0	0	0	0	0	261	10	271	52	0	93	145	463
08:45 AM	5	55	0	60	0	0	0	0	0	220	7	227	57	0	86	143	430
Total	29	171	0	200	0	0	0	0	0	939	34	973	214	0	339	553	1726
Grand Total	60	303	0	363	0	0	0	0	0	1493	44	1537	459	0	626	1085	2985
Apprch %	16.5	83.5	0		0	0	0		0	97.1	2.9		42.3	0	57.7		
Total %	2	10.2	0	12.2	0	0	0	0	0	50	1.5	51.5	15.4	0	21	36.3	
Passenger Vehicles	59	291	0	350	0	0	0	0	0	1460	43	1503	435	0	598	1033	2886
% Passenger Vehicles	98.3	96	0	96.4	0	0	0	0	0	97.8	97.7	97.8	94.8	0	95.5	95.2	96.7
Large 2 Axle Vehicles	0	8	0	8	0	0	0	0	0	27	0	27	15	0	17	32	67
% Large 2 Axle Vehicles	0	2.6	0	2.2	0	0	0	0	0	1.8	0	1.8	3.3	0	2.7	2.9	2.2
3 Axle Vehicles	1	3	0	4	0	0	0	0	0	2	0	2	4	0	3	7	13
% 3 Axle Vehicles	1.7	1	0	1.1	0	0	0	0	0	0.1	0	0.1	0.9	0	0.5	0.6	0.4
4+ Axle Trucks	0	1	0	1	0	0	0	0	0	4	1	5	5	0	8	13	19
% 4+ Axle Trucks	0	0.3	0	0.3	0	0	0	0	0	0.3	2.3	0.3	1.1	0	1.3	1.2	0.6

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**12**	33	0	45	0	0	0	0	0	203	**10**	213	**58**	0	81	139	397
08:15 AM	6	42	0	48	0	0	0	0	0	255	7	262	47	0	79	126	436
08:30 AM	6	41	0	47	0	0	0	0	0	**261**	10	**271**	52	0	**93**	**145**	**463**
08:45 AM	5	**55**	0	**60**	0	0	0	0	0	220	7	227	57	0	86	143	430
Total Volume	29	171	0	200	0	0	0	0	0	939	34	973	214	0	339	553	1726
% App. Total	14.5	85.5	0		0	0	0		0	96.5	3.5		38.7	0	61.3		
PHF	.604	.777	.000	.833	.000	.000	.000	.000	.000	.899	.850	.898	.922	.000	.911	.953	.932

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E AM
Site Code : 00322994
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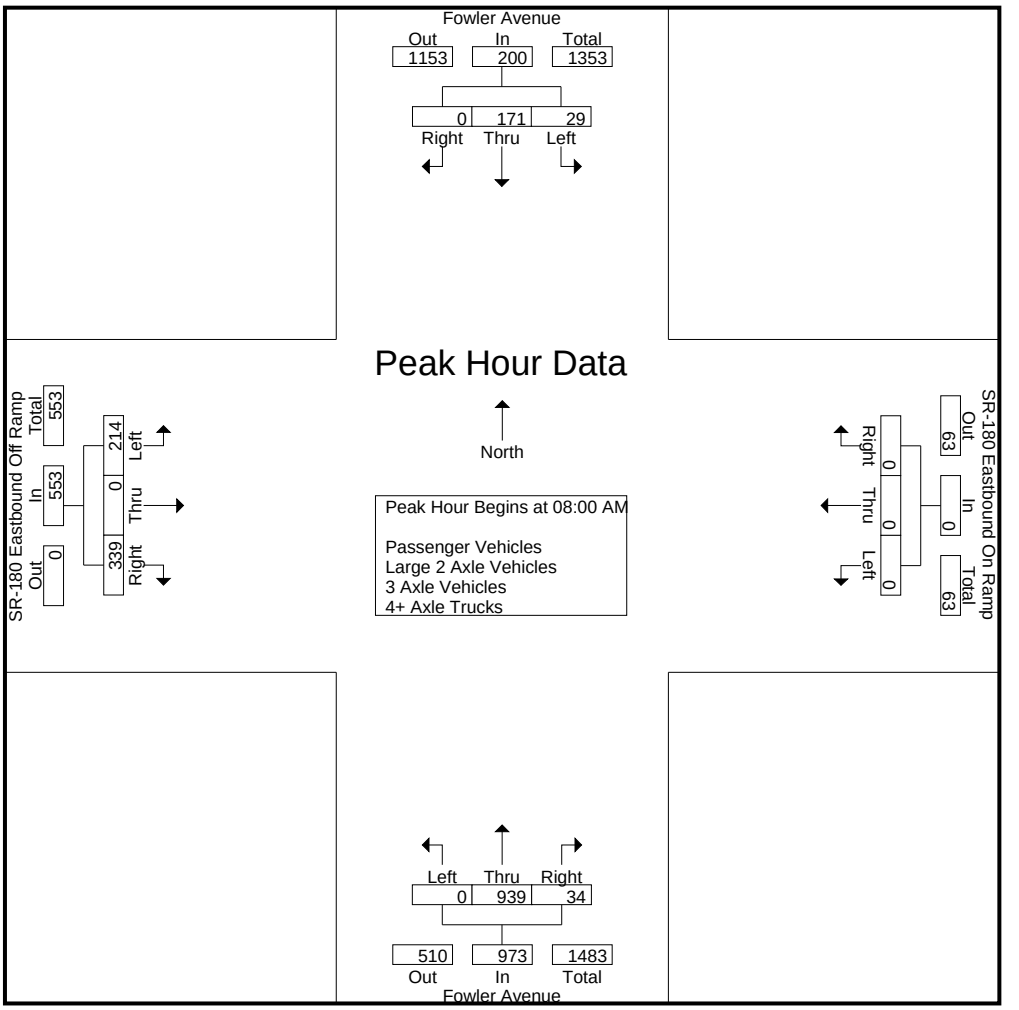

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:00 AM				08:00 AM				07:30 AM			
+0 mins.	**12**	33	0	45	0	0	0	0	0	203	**10**	213	**64**	0	90	**154**
+15 mins.	6	42	0	48	0	0	0	0	0	255	7	262	46	0	**97**	143
+30 mins.	6	41	0	47	0	0	0	0	0	**261**	10	**271**	58	0	81	139
+45 mins.	5	**55**	0	**60**	0	0	0	0	0	220	7	227	47	0	79	126
Total Volume	29	171	0	200	0	0	0	0	0	939	34	973	215	0	347	562
% App. Total	14.5	85.5	0		0	0	0		0	96.5	3.5		38.3	0	61.7	
PHF	.604	.777	.000	.833	.000	.000	.000	.000	.000	.899	.850	.898	.840	.000	.894	.912

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E AM
Site Code : 00322994
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Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	28	0	33	0	0	0	0	0	86	2	88	59	0	60	119	240
07:15 AM	10	23	0	33	0	0	0	0	0	124	2	126	65	0	38	103	262
07:30 AM	9	28	0	37	0	0	0	0	0	154	3	157	62	0	83	145	339
07:45 AM	6	45	0	51	0	0	0	0	0	181	3	184	43	0	92	135	370
Total	30	124	0	154	0	0	0	0	0	545	10	555	229	0	273	502	1211
08:00 AM	12	32	0	44	0	0	0	0	0	199	10	209	57	0	80	137	390
08:15 AM	6	41	0	47	0	0	0	0	0	247	7	254	45	0	76	121	422
08:30 AM	6	41	0	47	0	0	0	0	0	258	9	267	50	0	89	139	453
08:45 AM	5	53	0	58	0	0	0	0	0	211	7	218	54	0	80	134	410
Total	29	167	0	196	0	0	0	0	0	915	33	948	206	0	325	531	1675
Grand Total	59	291	0	350	0	0	0	0	0	1460	43	1503	435	0	598	1033	2886
Apprch %	16.9	83.1	0		0	0	0		0	97.1	2.9		42.1	0	57.9		
Total %	2	10.1	0	12.1	0	0	0	0	0	50.6	1.5	52.1	15.1	0	20.7	35.8	

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**12**	32	0	44	0	0	0	0	0	199	**10**	209	**57**	0	80	137	390
08:15 AM	6	41	0	47	0	0	0	0	0	247	7	254	45	0	76	121	422
08:30 AM	6	41	0	47	0	0	0	0	0	**258**	9	**267**	50	0	**89**	**139**	**453**
08:45 AM	5	**53**	0	**58**	0	0	0	0	0	211	7	218	54	0	80	134	410
Total Volume	29	167	0	196	0	0	0	0	0	915	33	948	206	0	325	531	1675
% App. Total	14.8	85.2	0		0	0	0		0	96.5	3.5		38.8	0	61.2		
PHF	.604	.788	.000	.845	.000	.000	.000	.000	.000	.887	.825	.888	.904	.000	.913	.955	.924

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E AM
Site Code : 00322994
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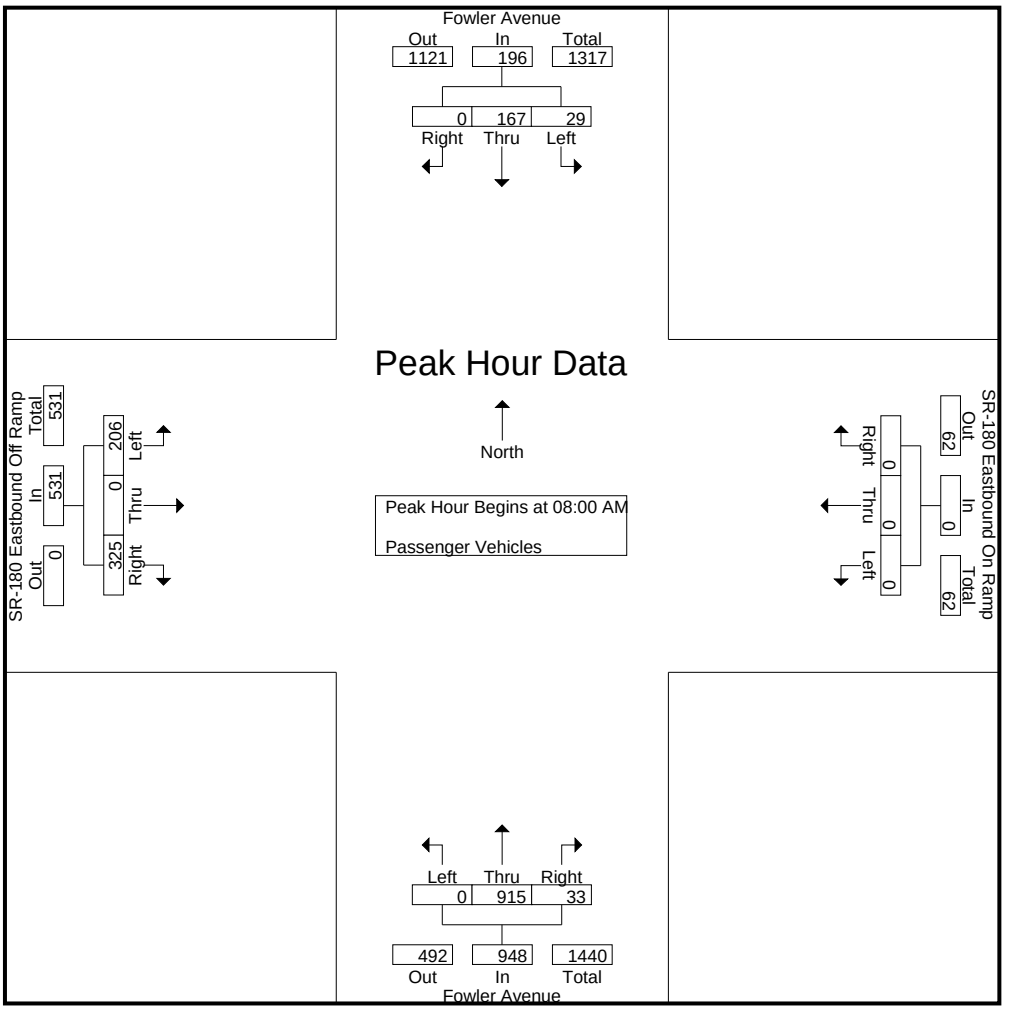

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	**12**	32	0	44	0	0	0	0	0	199	**10**	209	**57**	0	80	137
+15 mins.	6	41	0	47	0	0	0	0	0	247	7	254	45	0	76	121
+30 mins.	6	41	0	47	0	0	0	0	0	**258**	9	**267**	50	0	**89**	**139**
+45 mins.	5	**53**	0	**58**	0	0	0	0	0	211	7	218	54	0	80	134
Total Volume	29	167	0	196	0	0	0	0	0	915	33	948	206	0	325	531
% App. Total	14.8	85.2	0		0	0	0		0	96.5	3.5		38.8	0	61.2	
PHF	.604	.788	.000	.845	.000	.000	.000	.000	.000	.887	.825	.888	.904	.000	.913	.955

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E AM
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Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	1	3
07:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	4	0	1	5	7
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	5	6	7
07:45 AM	0	1	0	1	0	0	0	0	0	3	0	3	2	0	3	5	9
Total	0	4	0	4	0	0	0	0	0	5	0	5	8	0	9	17	26
08:00 AM	0	1	0	1	0	0	0	0	0	4	0	4	1	0	1	2	7
08:15 AM	0	1	0	1	0	0	0	0	0	7	0	7	2	0	2	4	12
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	1	0	3	4	6
08:45 AM	0	2	0	2	0	0	0	0	0	9	0	9	3	0	2	5	16
Total	0	4	0	4	0	0	0	0	0	22	0	22	7	0	8	15	41
Grand Total	0	8	0	8	0	0	0	0	0	27	0	27	15	0	17	32	67
Apprch %	0	100	0		0	0	0		0	100	0		46.9	0	53.1		
Total %	0	11.9	0	11.9	0	0	0	0	0	40.3	0	40.3	22.4	0	25.4	47.8	

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	1	0	1	0	0	0	0	0	4	0	4	1	0	1	2	7
08:15 AM	0	1	0	1	0	0	0	0	0	7	0	7	2	0	2	4	12
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	1	0	**3**	4	6
08:45 AM	0	**2**	0	**2**	0	0	0	0	0	**9**	0	**9**	**3**	0	2	**5**	**16**
Total Volume	0	4	0	4	0	0	0	0	0	22	0	22	7	0	8	15	41
% App. Total	0	100	0		0	0	0		0	100	0		46.7	0	53.3		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.611	.000	.611	.583	.000	.667	.750	.641

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File Name : 04_FSO_Fow_180E AM
Site Code : 00322994
Start Date : 11/10/2022
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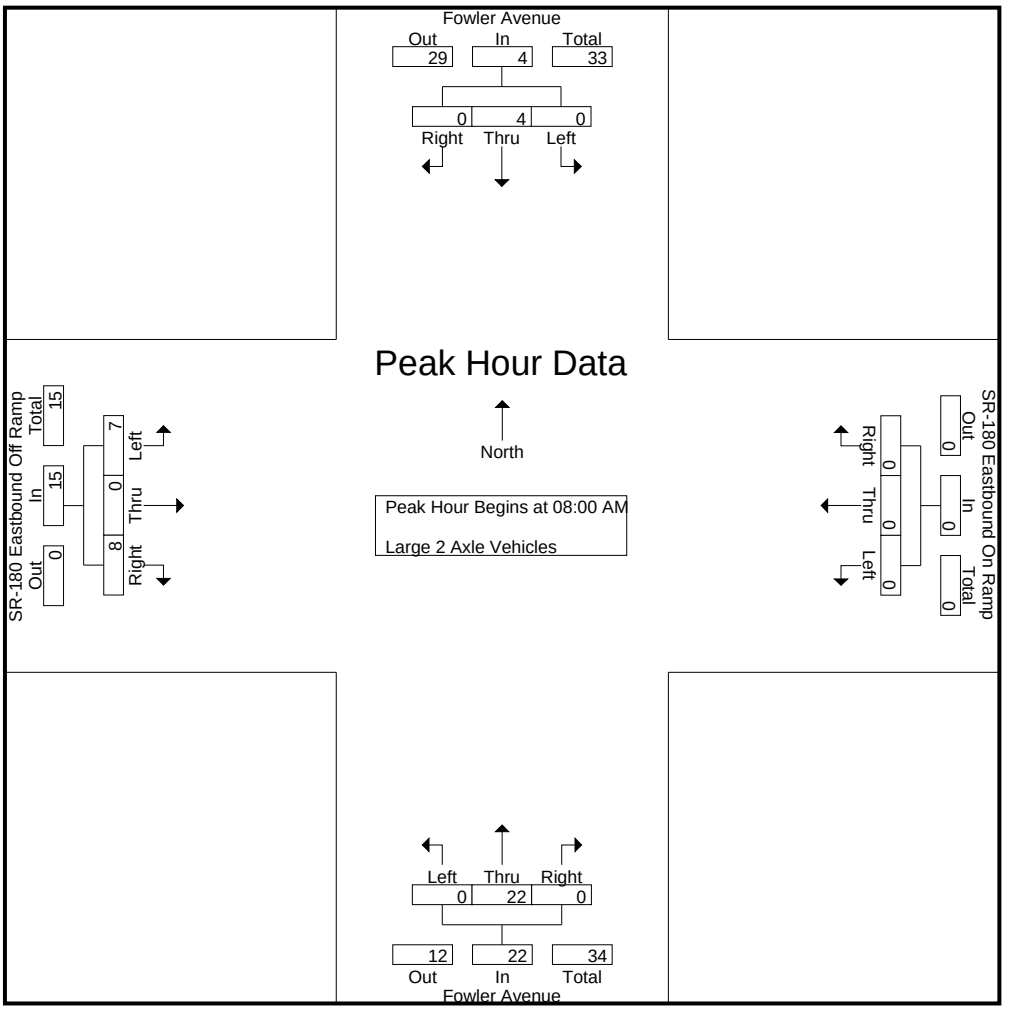

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	4	0	4	1	0	1	2
+15 mins.	0	1	0	1	0	0	0	0	0	7	0	7	2	0	2	4
+30 mins.	0	0	0	0	0	0	0	0	0	2	0	2	1	0	**3**	4
+45 mins.	0	**2**	0	**2**	0	0	0	0	0	**9**	0	**9**	**3**	0	2	**5**
Total Volume	0	4	0	4	0	0	0	0	0	22	0	22	7	0	8	15
% App. Total	0	100	0		0	0	0		0	100	0		46.7	0	53.3	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.611	.000	.611	.583	.000	.667	.750

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File Name : 04_FSO_Fow_180E AM
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Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
07:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	1	2	4
07:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	1	3	0	4	0	0	0	0	0	2	0	2	4	0	1	5	11
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Grand Total	1	3	0	4	0	0	0	0	0	2	0	2	4	0	3	7	13
Apprch %	25	75	0		0	0	0		0	100	0		57.1	0	42.9		
Total %	7.7	23.1	0	30.8	0	0	0	0	0	15.4	0	15.4	30.8	0	23.1	53.8	

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	**2**	**2**
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
% App. Total	0	0	0		0	0	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

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File Name : 04_FSO_Fow_180E AM
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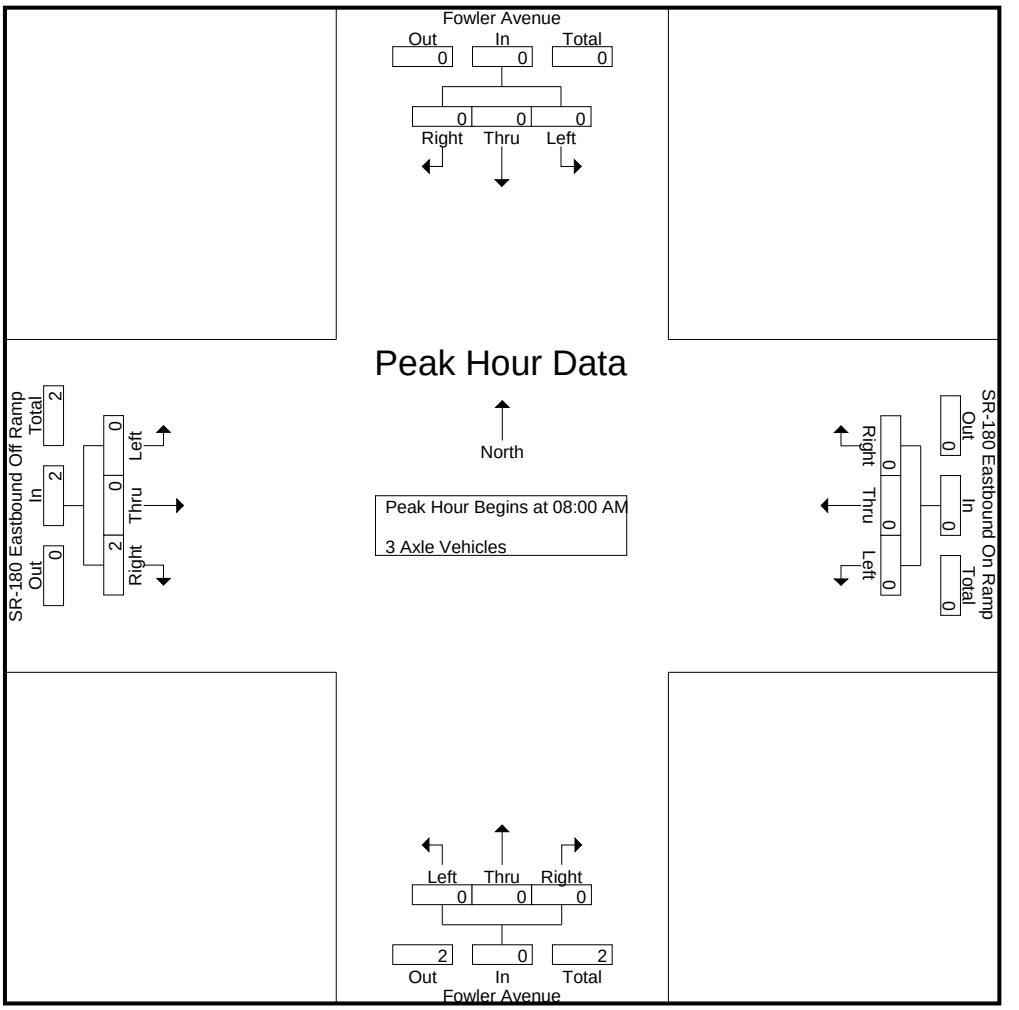

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	**2**
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
% App. Total	0	0	0		0	0	0		0	0	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	3	4
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	2	3	4
Total	0	1	0	1	0	0	0	0	0	2	0	2	4	0	4	8	11
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	1	1	2	1	0	1	2	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Total	0	0	0	0	0	0	0	0	0	2	1	3	1	0	4	5	8
Grand Total	0	1	0	1	0	0	0	0	0	4	1	5	5	0	8	13	19
Apprch %	0	100	0		0	0	0		0	80	20		38.5	0	61.5		
Total %	0	5.3	0	5.3	0	0	0	0	0	21.1	5.3	26.3	26.3	0	42.1	68.4	

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	1	**1**	**2**	**1**	0	1	**2**	**4**
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2	2
Total Volume	0	0	0	0	0	0	0	0	0	2	1	3	1	0	4	5	8
% App. Total	0	0	0		0	0	0		0	66.7	33.3		20	0	80		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.250	.375	.250	.000	.500	.625	.500

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City of Fresno
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E/W: SR-180 Eastbound Ramps
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File Name : 04_FSO_Fow_180E AM
Site Code : 00322994
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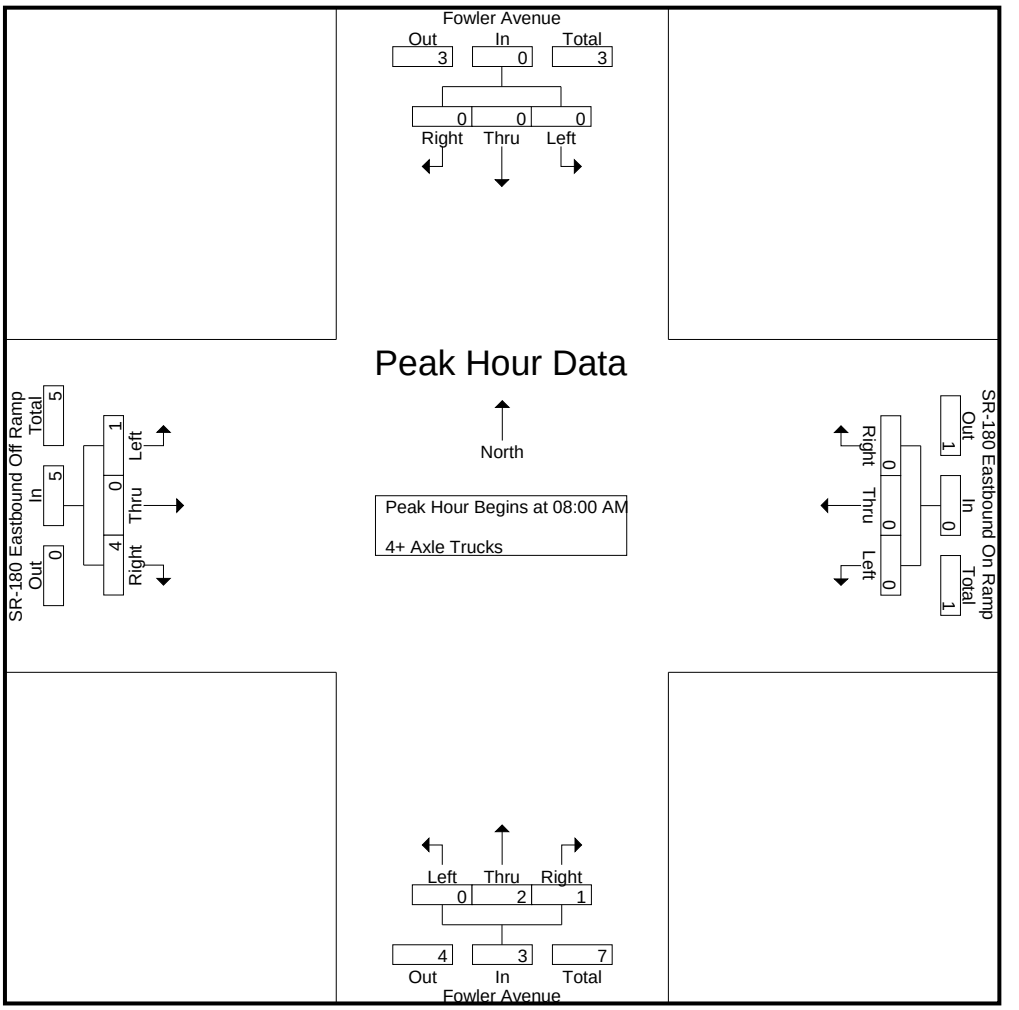

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0	1	**1**	**2**	**1**	0	1	**2**
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	2
Total Volume	0	0	0	0	0	0	0	0	0	2	1	3	1	0	4	5
% App. Total	0	0	0		0	0	0		0	66.7	33.3		20	0	80	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.250	.375	.250	.000	.500	.625

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City of Fresno
N/S: Fowler Avenue
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Weather: Clear

File Name : 04_FSO_Fow_180E PM
Site Code : 00322994
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	12	61	0	73	0	0	0	0	0	93	4	97	52	0	136	188	358
04:15 PM	15	59	0	74	0	0	0	0	0	87	6	93	84	0	169	253	420
04:30 PM	16	62	0	78	0	0	0	0	0	79	9	88	83	0	158	241	407
04:45 PM	14	77	0	91	0	0	0	0	0	90	5	95	91	0	133	224	410
Total	57	259	0	316	0	0	0	0	0	349	24	373	310	0	596	906	1595
05:00 PM	15	70	0	85	0	0	0	0	0	84	4	88	90	0	165	255	428
05:15 PM	17	72	0	89	0	0	0	0	0	127	5	132	76	1	176	253	474
05:30 PM	22	67	0	89	0	0	0	0	0	145	5	150	81	0	193	274	513
05:45 PM	21	76	0	97	0	0	0	0	0	157	8	165	82	0	192	274	536
Total	75	285	0	360	0	0	0	0	0	513	22	535	329	1	726	1056	1951
Grand Total	132	544	0	676	0	0	0	0	0	862	46	908	639	1	1322	1962	3546
Apprch %	19.5	80.5	0		0	0	0		0	94.9	5.1		32.6	0.1	67.4		
Total %	3.7	15.3	0	19.1	0	0	0	0	0	24.3	1.3	25.6	18	0	37.3	55.3	
Passenger Vehicles	132	525	0	657	0	0	0	0	0	838	46	884	630	1	1303	1934	3475
% Passenger Vehicles	100	96.5	0	97.2	0	0	0	0	0	97.2	100	97.4	98.6	100	98.6	98.6	98
Large 2 Axle Vehicles	0	11	0	11	0	0	0	0	0	16	0	16	2	0	9	11	38
% Large 2 Axle Vehicles	0	2	0	1.6	0	0	0	0	0	1.9	0	1.8	0.3	0	0.7	0.6	1.1
3 Axle Vehicles	0	4	0	4	0	0	0	0	0	3	0	3	1	0	5	6	13
% 3 Axle Vehicles	0	0.7	0	0.6	0	0	0	0	0	0.3	0	0.3	0.2	0	0.4	0.3	0.4
4+ Axle Trucks	0	4	0	4	0	0	0	0	0	5	0	5	6	0	5	11	20
% 4+ Axle Trucks	0	0.7	0	0.6	0	0	0	0	0	0.6	0	0.6	0.9	0	0.4	0.6	0.6

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	15	70	0	85	0	0	0	0	0	84	4	88	**90**	0	165	255	428
05:15 PM	17	72	0	89	0	0	0	0	0	127	5	132	76	**1**	176	253	474
05:30 PM	**22**	67	0	89	0	0	0	0	0	145	5	150	81	0	**193**	**274**	513
05:45 PM	21	**76**	0	**97**	0	0	0	0	0	**157**	**8**	**165**	82	0	192	274	**536**
Total Volume	75	285	0	360	0	0	0	0	0	513	22	535	329	1	726	1056	1951
% App. Total	20.8	79.2	0		0	0	0		0	95.9	4.1		31.2	0.1	68.8		
PHF	.852	.938	.000	.928	.000	.000	.000	.000	.000	.817	.688	.811	.914	.250	.940	.964	.910

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Weather: Clear

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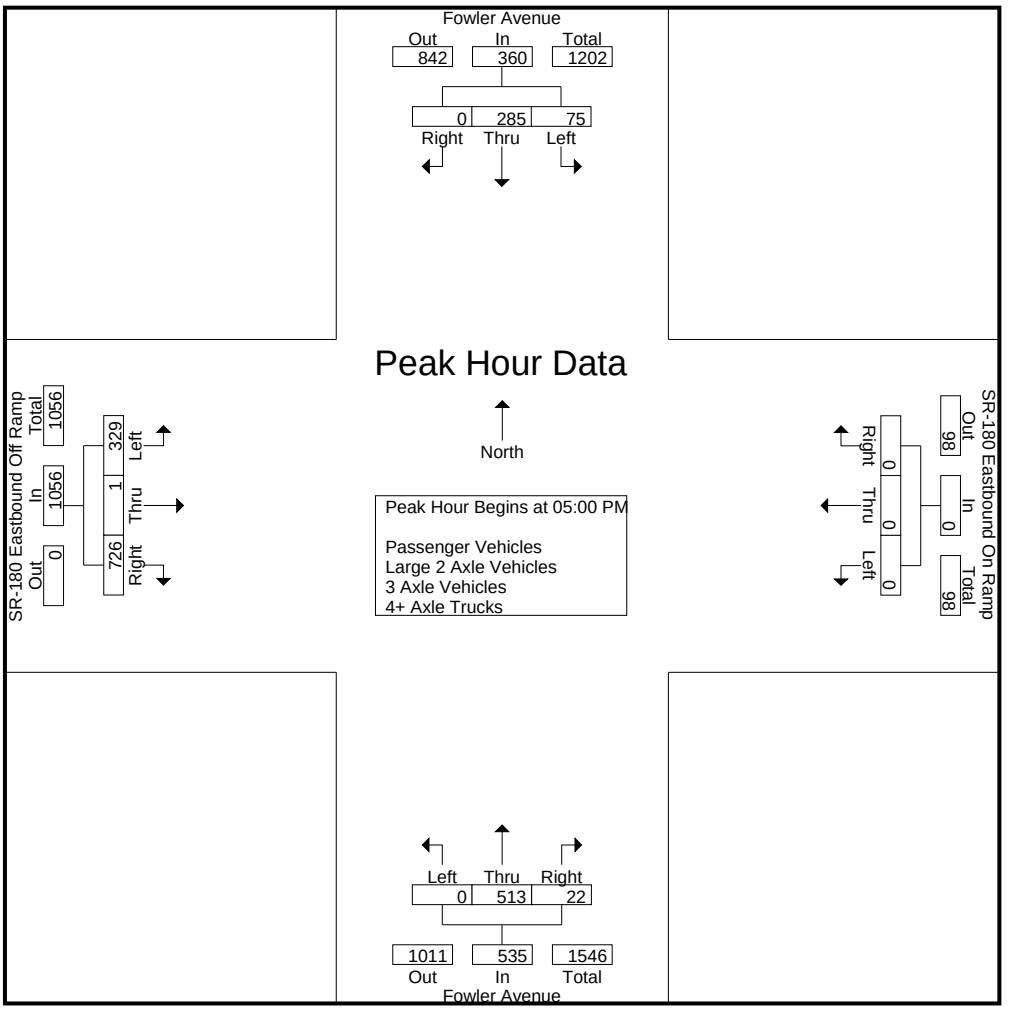

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				05:00 PM				05:00 PM			
+0 mins.	15	70	0	85	0	0	0	0	0	84	4	88	**90**	0	165	255
+15 mins.	17	72	0	89	0	0	0	0	0	127	5	132	76	**1**	176	253
+30 mins.	**22**	67	0	89	0	0	0	0	0	145	5	150	81	0	**193**	**274**
+45 mins.	21	**76**	0	**97**	0	0	0	0	0	**157**	**8**	**165**	82	0	192	274
Total Volume	75	285	0	360	0	0	0	0	0	513	22	535	329	1	726	1056
% App. Total	20.8	79.2	0		0	0	0		0	95.9	4.1		31.2	0.1	68.8	
PHF	.852	.938	.000	.928	.000	.000	.000	.000	.000	.817	.688	.811	.914	.250	.940	.964

Counts Unlimited, Inc.
PO Box 1178
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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	12	59	0	71	0	0	0	0	0	92	4	96	51	0	135	186	353
04:15 PM	15	57	0	72	0	0	0	0	0	84	6	90	81	0	162	243	405
04:30 PM	16	59	0	75	0	0	0	0	0	75	9	84	83	0	155	238	397
04:45 PM	14	71	0	85	0	0	0	0	0	87	5	92	89	0	131	220	397
Total	57	246	0	303	0	0	0	0	0	338	24	362	304	0	583	887	1552
05:00 PM	15	68	0	83	0	0	0	0	0	83	4	87	90	0	163	253	423
05:15 PM	17	71	0	88	0	0	0	0	0	122	5	127	74	1	174	249	464
05:30 PM	22	66	0	88	0	0	0	0	0	141	5	146	80	0	191	271	505
05:45 PM	21	74	0	95	0	0	0	0	0	154	8	162	82	0	192	274	531
Total	75	279	0	354	0	0	0	0	0	500	22	522	326	1	720	1047	1923
Grand Total	132	525	0	657	0	0	0	0	0	838	46	884	630	1	1303	1934	3475
Apprch %	20.1	79.9	0		0	0	0		0	94.8	5.2		32.6	0.1	67.4		
Total %	3.8	15.1	0	18.9	0	0	0	0	0	24.1	1.3	25.4	18.1	0	37.5	55.7	

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	15	68	0	83	0	0	0	0	0	83	4	87	**90**	0	163	253	423
05:15 PM	17	71	0	88	0	0	0	0	0	122	5	127	74	**1**	174	249	464
05:30 PM	**22**	66	0	88	0	0	0	0	0	141	5	146	80	0	191	271	505
05:45 PM	21	**74**	0	**95**	0	0	0	0	0	**154**	**8**	**162**	82	0	**192**	**274**	**531**
Total Volume	75	279	0	354	0	0	0	0	0	500	22	522	326	1	720	1047	1923
% App. Total	21.2	78.8	0		0	0	0		0	95.8	4.2		31.1	0.1	68.8		
PHF	.852	.943	.000	.932	.000	.000	.000	.000	.000	.812	.688	.806	.906	.250	.938	.955	.905

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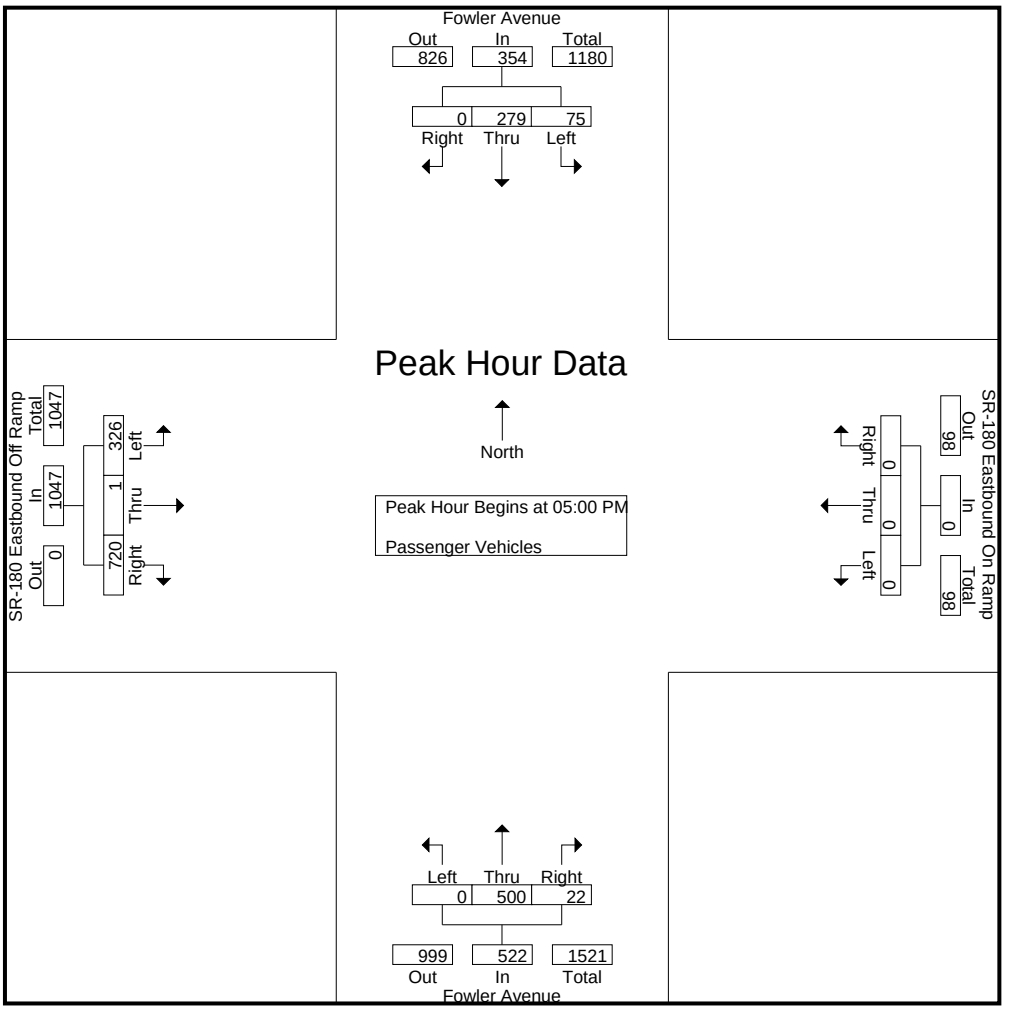
City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	15	68	0	83	0	0	0	0	0	83	4	87	**90**	0	163	253
+15 mins.	17	71	0	88	0	0	0	0	0	122	5	127	74	**1**	174	249
+30 mins.	**22**	66	0	88	0	0	0	0	0	141	5	146	80	0	191	271
+45 mins.	21	**74**	0	**95**	0	0	0	0	0	**154**	**8**	**162**	82	0	**192**	**274**
Total Volume	75	279	0	354	0	0	0	0	0	500	22	522	326	1	720	1047
% App. Total	21.2	78.8	0		0	0	0		0	95.8	4.2		31.1	0.1	68.8	
PHF	.852	.943	.000	.932	.000	.000	.000	.000	.000	.812	.688	.806	.906	.250	.938	.955

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:15 PM	0	1	0	1	0	0	0	0	0	2	0	2	2	0	3	5	8
04:30 PM	0	3	0	3	0	0	0	0	0	3	0	3	0	0	2	2	8
04:45 PM	0	5	0	5	0	0	0	0	0	3	0	3	0	0	1	1	9
Total	0	11	0	11	0	0	0	0	0	9	0	9	2	0	6	8	28
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	1	1	4
05:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	7	0	7	0	0	3	3	10
Grand Total	0	11	0	11	0	0	0	0	0	16	0	16	2	0	9	11	38
Apprch %	0	100	0		0	0	0		0	100	0		18.2	0	81.8		
Total %	0	28.9	0	28.9	0	0	0	0	0	42.1	0	42.1	5.3	0	23.7	28.9	

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	**1**	**1**	2
05:15 PM	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	1	1	**4**
05:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	7	0	7	0	0	3	3	10
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.750	.750	.625

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E PM
Site Code : 00322994
Start Date : 11/10/2022
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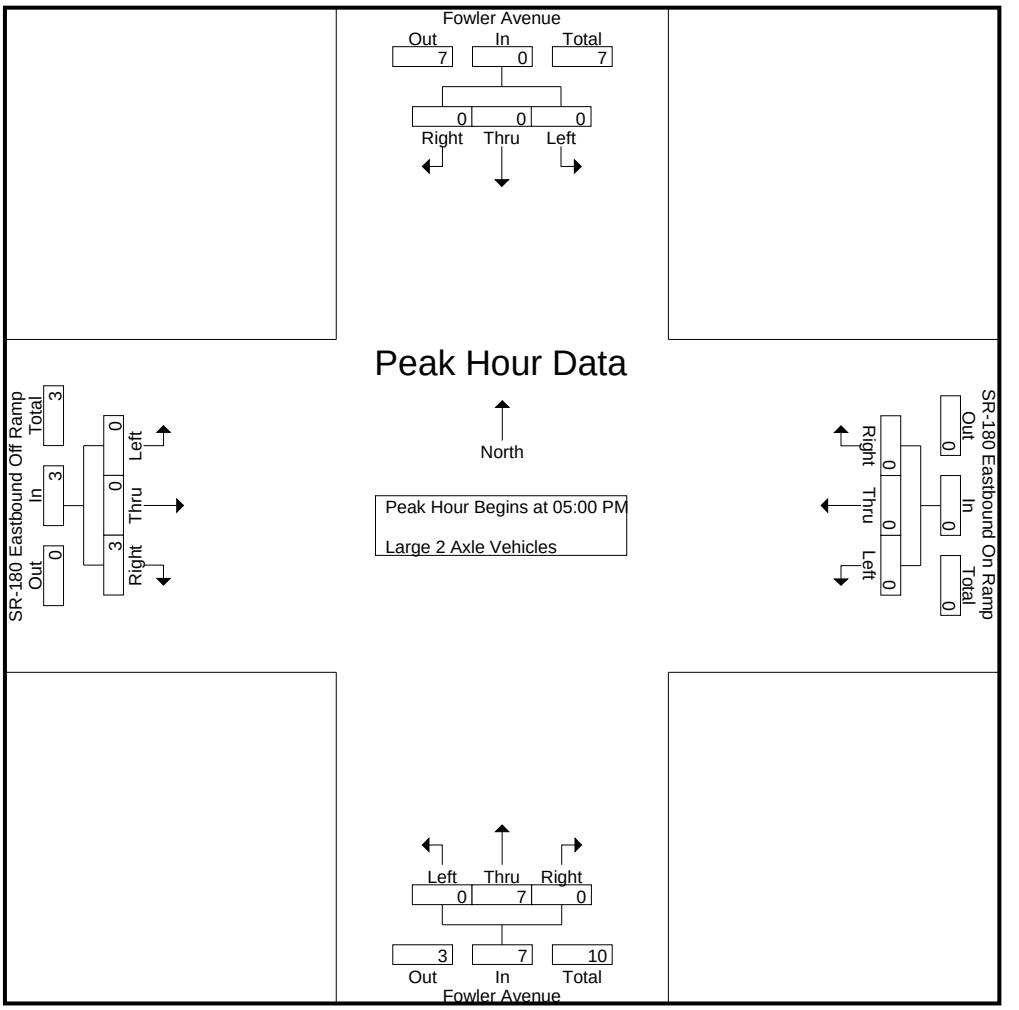

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	**1**	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	7	0	7	0	0	3	3
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.750	.750

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2	3
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	2	0	2	1	0	4	5	7
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	0	4	0	0	0	0	0	1	0	1	0	0	1	1	6
Grand Total	0	4	0	4	0	0	0	0	0	3	0	3	1	0	5	6	13
Apprch %	0	100	0		0	0	0		0	100	0		16.7	0	83.3		
Total %	0	30.8	0	30.8	0	0	0	0	0	23.1	0	23.1	7.7	0	38.5	46.2	

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**
05:15 PM	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0	2
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	4	0	4	0	0	0	0	0	1	0	1	0	0	1	1	6
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	1.00	.000	1.00	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.250	.250	.750

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E PM
Site Code : 00322994
Start Date : 11/10/2022
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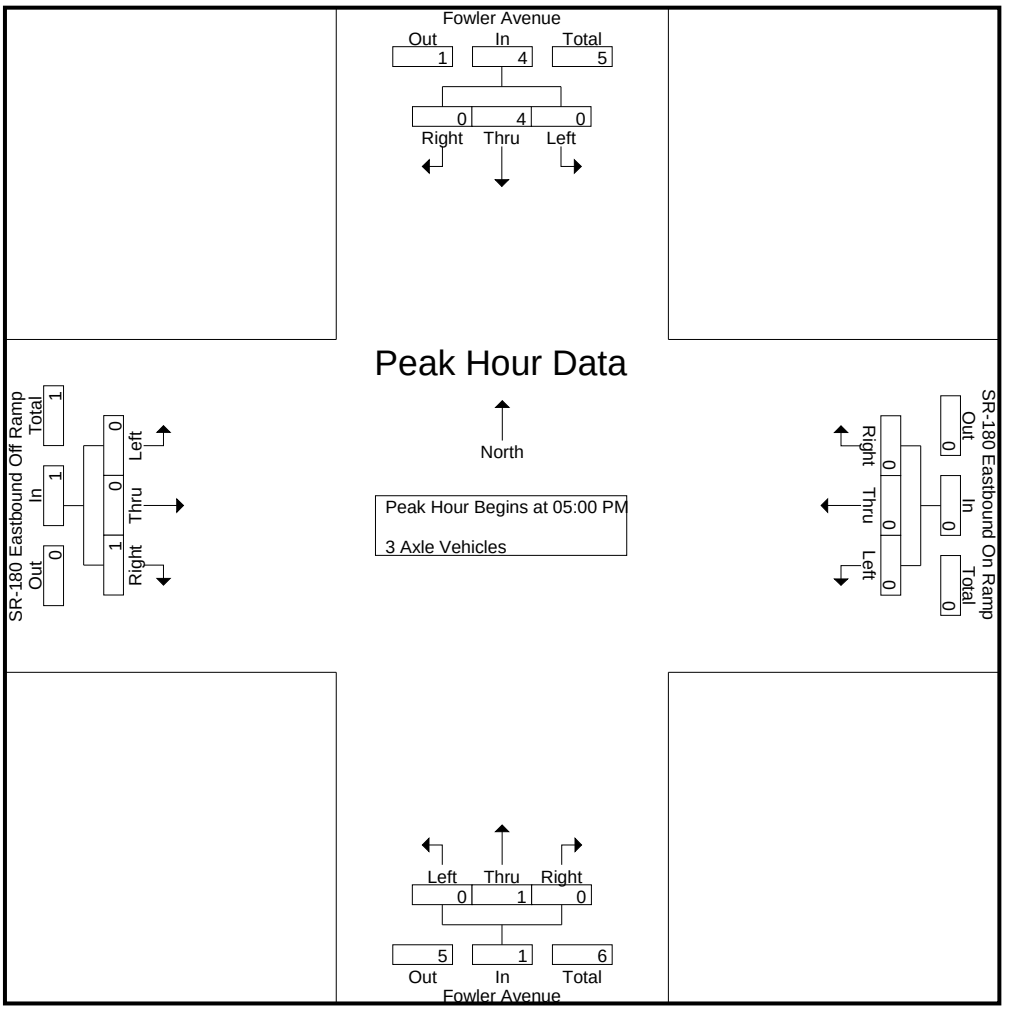

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	**1**	**1**
+15 mins.	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	4	0	4	0	0	0	0	0	1	0	1	0	0	1	1
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100	
PHF	.000	1.000	.000	1.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.250	.250

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City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	2	3	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	1	2	3
Total	0	2	0	2	0	0	0	0	0	0	0	0	3	0	3	6	8
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	2	0	1	3	4
05:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	1	0	1	2	4
05:45 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total	0	2	0	2	0	0	0	0	0	5	0	5	3	0	2	5	12
Grand Total	0	4	0	4	0	0	0	0	0	5	0	5	6	0	5	11	20
Apprch %	0	100	0		0	0	0		0	100	0		54.5	0	45.5		
Total %	0	20	0	20	0	0	0	0	0	25	0	25	30	0	25	55	

	Fowler Avenue Southbound				SR-180 Eastbound On Ramp Westbound				Fowler Avenue Northbound				SR-180 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	**2**	0	**1**	**3**	**4**
05:30 PM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	1	0	1	2	4
05:45 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total Volume	0	2	0	2	0	0	0	0	0	5	0	5	3	0	2	5	12
% App. Total	0	100	0		0	0	0		0	100	0		60	0	40		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.625	.000	.625	.375	.000	.500	.417	.750

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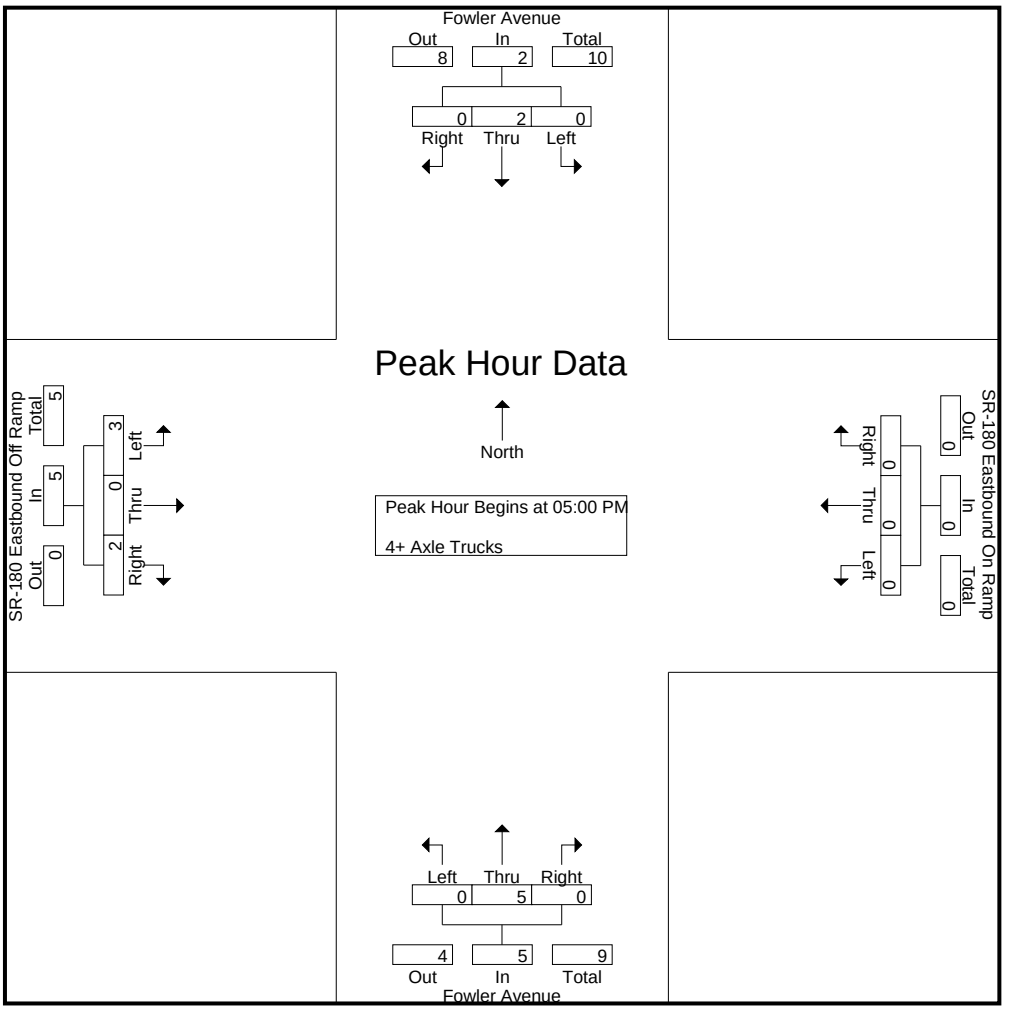
City of Fresno
N/S: Fowler Avenue
E/W: SR-180 Eastbound Ramps
Weather: Clear

File Name : 04_FSO_Fow_180E PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	**2**	0	**1**	**3**
+30 mins.	0	0	0	0	0	0	0	0	0	**2**	0	**2**	1	0	1	2
+45 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	5	0	5	3	0	2	5
% App. Total	0	100	0		0	0	0		0	100	0		60	0	40	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.625	.000	.625	.375	.000	.500	.417

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City of Fresno
N/S: Fowler Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 05_FSO_Fow_Bel AM
Site Code : 00322994
Start Date : 11/10/2022

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	18	63	1	82	7	7	6	20	6	69	5	80	4	17	1	22	204
07:15 AM	19	60	2	81	3	6	9	18	10	103	10	123	6	20	2	28	250
07:30 AM	22	78	3	103	9	10	13	32	7	130	10	147	8	24	3	35	317
07:45 AM	48	89	4	141	12	9	22	43	5	127	18	150	14	30	10	54	388
Total	107	290	10	407	31	32	50	113	28	429	43	500	32	91	16	139	1159
08:00 AM	31	82	4	117	9	13	21	43	13	177	14	204	14	28	3	45	409
08:15 AM	22	98	6	126	25	34	27	86	21	203	33	257	10	37	7	54	523
08:30 AM	43	87	2	132	30	37	36	103	38	215	39	292	24	44	21	89	616
08:45 AM	37	94	10	141	27	30	29	86	36	199	34	269	18	31	16	65	561
Total	133	361	22	516	91	114	113	318	108	794	120	1022	66	140	47	253	2109
Grand Total	240	651	32	923	122	146	163	431	136	1223	163	1522	98	231	63	392	3268
Apprch %	26	70.5	3.5		28.3	33.9	37.8		8.9	80.4	10.7		25	58.9	16.1		
Total %	7.3	19.9	1	28.2	3.7	4.5	5	13.2	4.2	37.4	5	46.6	3	7.1	1.9	12	
Passenger Vehicles	226	632	32	890	115	138	150	403	133	1213	161	1507	94	217	60	371	3171
% Passenger Vehicles	94.2	97.1	100	96.4	94.3	94.5	92	93.5	97.8	99.2	98.8	99	95.9	93.9	95.2	94.6	97
Large 2 Axle Vehicles	8	10	0	18	7	6	9	22	2	8	2	12	4	11	3	18	70
% Large 2 Axle Vehicles	3.3	1.5	0	2	5.7	4.1	5.5	5.1	1.5	0.7	1.2	0.8	4.1	4.8	4.8	4.6	2.1
3 Axle Vehicles	1	6	0	7	0	1	1	2	1	0	0	1	0	2	0	2	12
% 3 Axle Vehicles	0.4	0.9	0	0.8	0	0.7	0.6	0.5	0.7	0	0	0.1	0	0.9	0	0.5	0.4
4+ Axle Trucks	5	3	0	8	0	1	3	4	0	2	0	2	0	1	0	1	15
% 4+ Axle Trucks	2.1	0.5	0	0.9	0	0.7	1.8	0.9	0	0.2	0	0.1	0	0.4	0	0.3	0.5

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	31	82	4	117	9	13	21	43	13	177	14	204	14	28	3	45	409
08:15 AM	22	**98**	6	126	25	34	27	86	21	203	33	257	10	37	7	54	523
08:30 AM	**43**	87	2	132	**30**	**37**	**36**	**103**	**38**	**215**	**39**	**292**	**24**	**44**	**21**	**89**	**616**
08:45 AM	37	94	**10**	**141**	27	30	29	86	36	199	34	269	18	31	16	65	561
Total Volume	133	361	22	516	91	114	113	318	108	794	120	1022	66	140	47	253	2109
% App. Total	25.8	70	4.3		28.6	35.8	35.5		10.6	77.7	11.7		26.1	55.3	18.6		
PHF	.773	.921	.550	.915	.758	.770	.785	.772	.711	.923	.769	.875	.688	.795	.560	.711	.856

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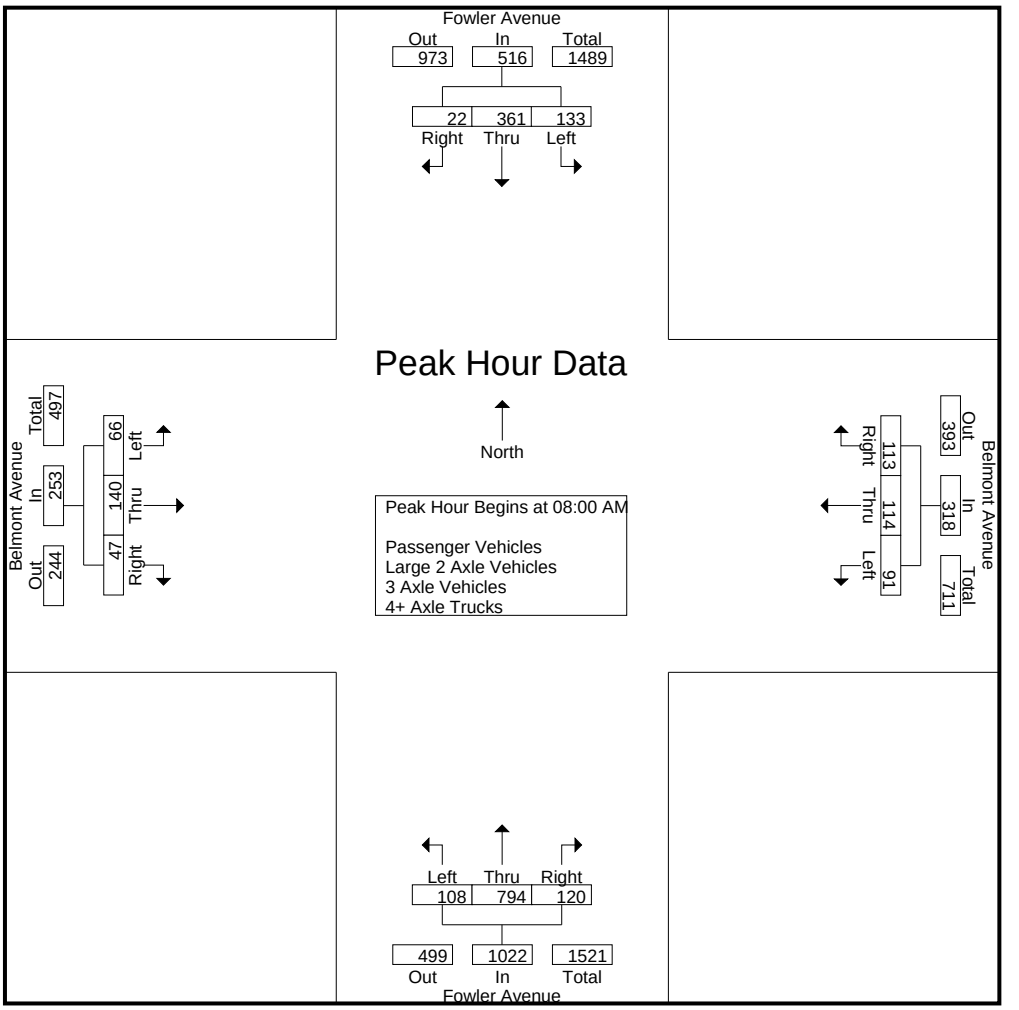
City of Fresno
N/S: Fowler Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 05_FSO_Fow_Bel AM
Site Code : 00322994
Start Date : 11/10/2022



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	**48**	89	4	**141**	9	13	21	43	13	177	14	204	14	28	3	45
+15 mins.	31	82	4	117	25	34	27	86	21	203	33	257	10	37	7	54
+30 mins.	22	**98**	**6**	126	**30**	**37**	**36**	**103**	**38**	**215**	**39**	**292**	**24**	**44**	**21**	**89**
+45 mins.	43	87	2	132	27	30	29	86	36	199	34	269	18	31	16	65
Total Volume	144	356	16	516	91	114	113	318	108	794	120	1022	66	140	47	253
% App. Total	27.9	69	3.1		28.6	35.8	35.5		10.6	77.7	11.7		26.1	55.3	18.6	
PHF	.750	.908	.667	.915	.758	.770	.785	.772	.711	.923	.769	.875	.688	.795	.560	.711

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City of Fresno
N/S: Fowler Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 05_FSO_Fow_Bel AM
Site Code : 00322994
Start Date : 11/10/2022
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Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	18	62	1	81	7	7	6	20	6	68	5	79	4	17	1	22	202
07:15 AM	18	57	2	77	3	6	9	18	10	103	10	123	6	20	2	28	246
07:30 AM	21	76	3	100	9	9	12	30	7	129	10	146	7	23	3	33	309
07:45 AM	43	86	4	133	9	8	20	37	5	127	18	150	12	30	9	51	371
Total	100	281	10	391	28	30	47	105	28	427	43	498	29	90	15	134	1128
08:00 AM	28	80	4	112	8	13	20	41	13	174	14	201	14	25	2	41	395
08:15 AM	22	95	6	123	24	32	25	81	21	201	32	254	9	34	7	50	508
08:30 AM	42	85	2	129	28	36	32	96	37	214	39	290	24	43	21	88	603
08:45 AM	34	91	10	135	27	27	26	80	34	197	33	264	18	25	15	58	537
Total	126	351	22	499	87	108	103	298	105	786	118	1009	65	127	45	237	2043
Grand Total	226	632	32	890	115	138	150	403	133	1213	161	1507	94	217	60	371	3171
Apprch %	25.4	71	3.6		28.5	34.2	37.2		8.8	80.5	10.7		25.3	58.5	16.2		
Total %	7.1	19.9	1	28.1	3.6	4.4	4.7	12.7	4.2	38.3	5.1	47.5	3	6.8	1.9	11.7	

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	28	80	4	112	8	13	20	41	13	174	14	201	14	25	2	41	395
08:15 AM	22	**95**	6	123	24	32	25	81	21	201	32	254	9	34	7	50	508
08:30 AM	**42**	85	2	129	**28**	**36**	**32**	**96**	**37**	**214**	**39**	**290**	**24**	**43**	**21**	**88**	**603**
08:45 AM	34	91	**10**	**135**	27	27	26	80	34	197	33	264	18	25	15	58	537
Total Volume	126	351	22	499	87	108	103	298	105	786	118	1009	65	127	45	237	2043
% App. Total	25.3	70.3	4.4		29.2	36.2	34.6		10.4	77.9	11.7		27.4	53.6	19		
PHF	.750	.924	.550	.924	.777	.750	.805	.776	.709	.918	.756	.870	.677	.738	.536	.673	.847

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City of Fresno
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Site Code : 00322994
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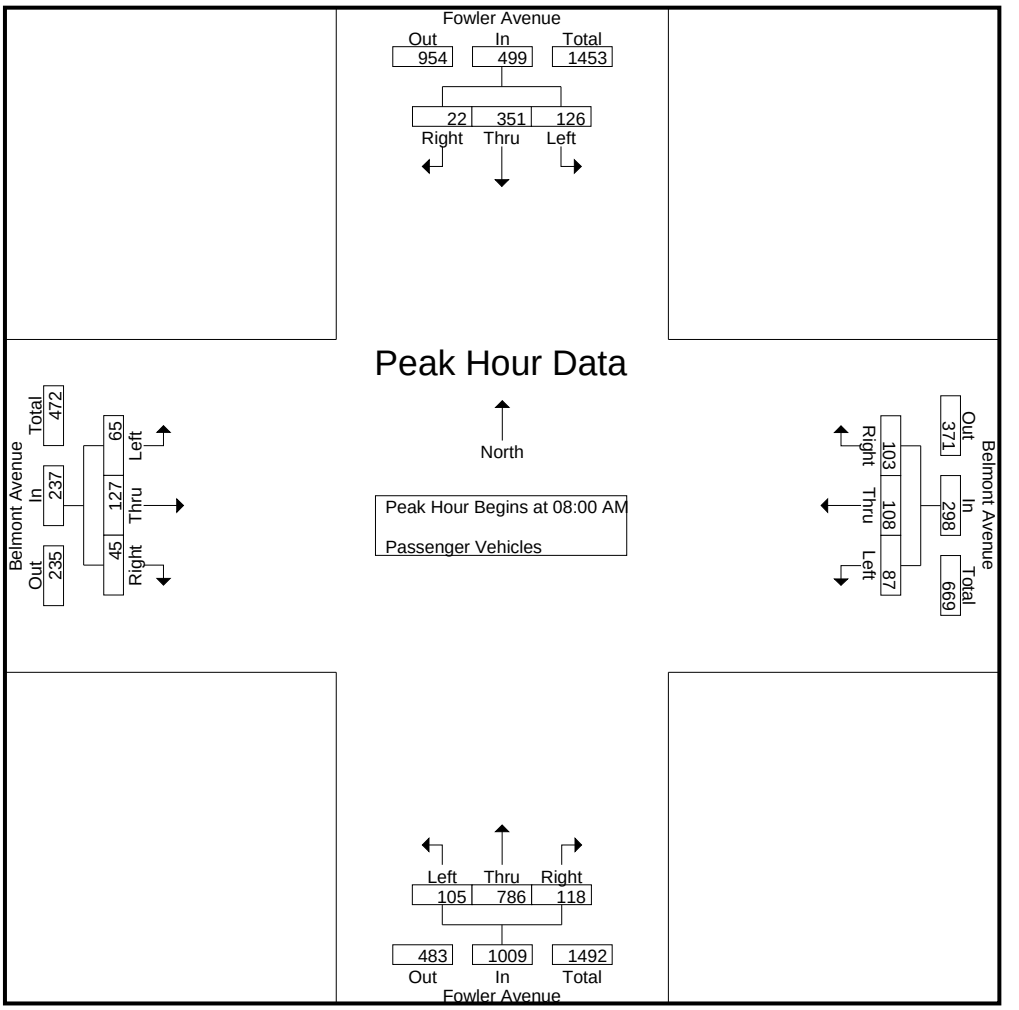

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	28	80	4	112	8	13	20	41	13	174	14	201	14	25	2	41
+15 mins.	22	**95**	6	123	24	32	25	81	21	201	32	254	9	34	7	50
+30 mins.	**42**	85	2	129	**28**	**36**	**32**	**96**	**37**	**214**	**39**	**290**	**24**	**43**	**21**	**88**
+45 mins.	34	91	**10**	**135**	27	27	26	80	34	197	33	264	18	25	15	58
Total Volume	126	351	22	499	87	108	103	298	105	786	118	1009	65	127	45	237
% App. Total	25.3	70.3	4.4		29.2	36.2	34.6		10.4	77.9	11.7		27.4	53.6	19	
PHF	.750	.924	.550	.924	.777	.750	.805	.776	.709	.918	.756	.870	.677	.738	.536	.673

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City of Fresno
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Site Code : 00322994
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Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	1	1	0	2	0	1	0	1	0	0	0	0	1	0	0	1	4
07:45 AM	2	2	0	4	3	0	1	4	0	0	0	0	2	0	1	3	11
Total	4	3	0	7	3	1	1	5	0	1	0	1	3	0	1	4	17
08:00 AM	2	2	0	4	1	0	1	2	0	3	0	3	0	2	1	3	12
08:15 AM	0	3	0	3	1	2	2	5	0	2	1	3	1	3	0	4	15
08:30 AM	0	1	0	1	2	0	2	4	1	0	0	1	0	1	0	1	7
08:45 AM	2	1	0	3	0	3	3	6	1	2	1	4	0	5	1	6	19
Total	4	7	0	11	4	5	8	17	2	7	2	11	1	11	2	14	53
Grand Total	8	10	0	18	7	6	9	22	2	8	2	12	4	11	3	18	70
Apprch %	44.4	55.6	0		31.8	27.3	40.9		16.7	66.7	16.7		22.2	61.1	16.7		
Total %	11.4	14.3	0	25.7	10	8.6	12.9	31.4	2.9	11.4	2.9	17.1	5.7	15.7	4.3	25.7	

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**2**	2	0	**4**	1	0	1	2	0	**3**	0	3	0	2	**1**	3	12
08:15 AM	0	**3**	0	3	1	2	2	5	0	2	**1**	3	**1**	3	0	4	15
08:30 AM	0	1	0	1	**2**	0	2	4	**1**	0	0	1	0	1	0	1	7
08:45 AM	2	1	0	3	0	**3**	**3**	**6**	1	2	1	**4**	0	**5**	1	**6**	**19**
Total Volume	4	7	0	11	4	5	8	17	2	7	2	11	1	11	2	14	53
% App. Total	36.4	63.6	0		23.5	29.4	47.1		18.2	63.6	18.2		7.1	78.6	14.3		
PHF	.500	.583	.000	.688	.500	.417	.667	.708	.500	.583	.500	.688	.250	.550	.500	.583	.697

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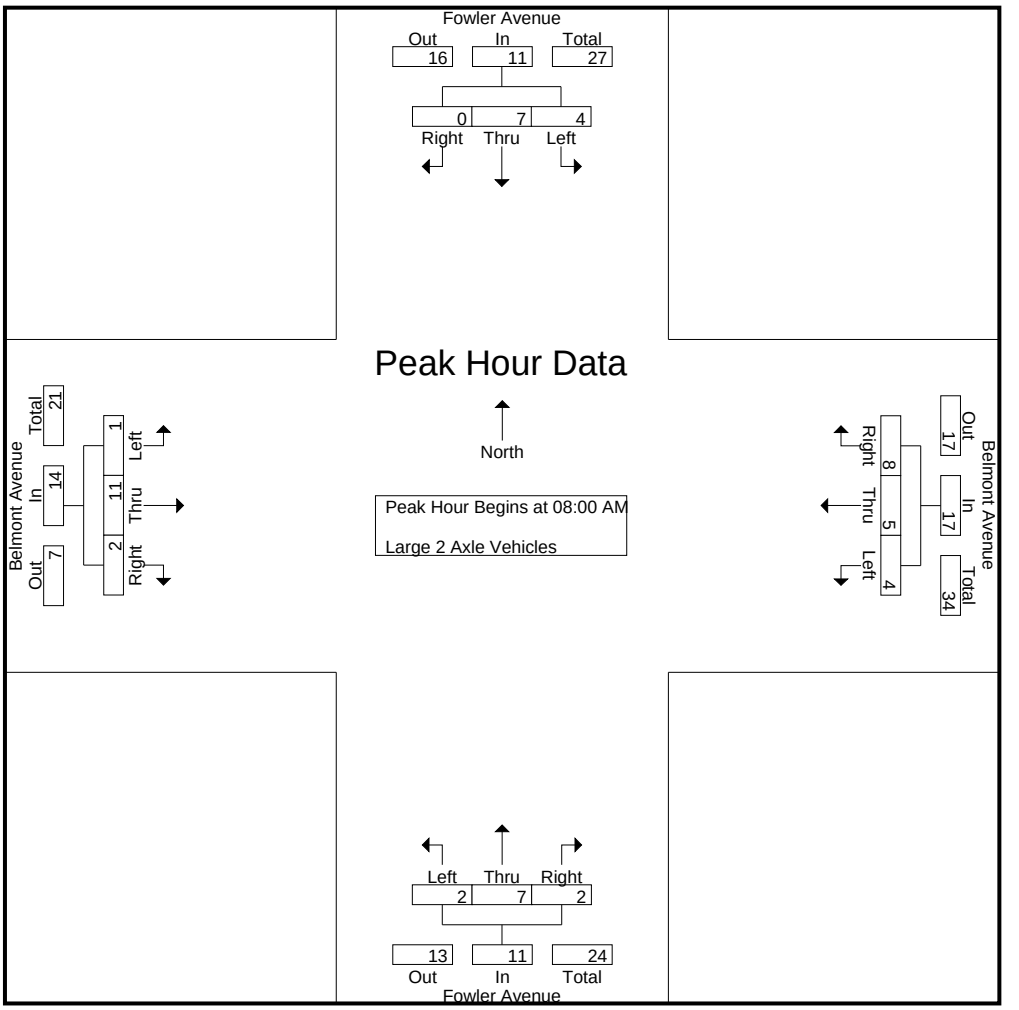

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	**2**	2	0	**4**	1	0	1	2	0	**3**	0	3	0	2	**1**	3
+15 mins.	0	**3**	0	3	1	2	2	5	0	2	**1**	3	**1**	3	0	4
+30 mins.	0	1	0	1	**2**	0	2	4	**1**	0	0	1	0	1	0	1
+45 mins.	2	1	0	3	0	**3**	**3**	**6**	1	2	1	**4**	0	**5**	1	**6**
Total Volume	4	7	0	11	4	5	8	17	2	7	2	11	1	11	2	14
% App. Total	36.4	63.6	0		23.5	29.4	47.1		18.2	63.6	18.2		7.1	78.6	14.3	
PHF	.500	.583	.000	.688	.500	.417	.667	.708	.500	.583	.500	.688	.250	.550	.500	.583

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File Name : 05_FSO_Fow_Bel AM
Site Code : 00322994
Start Date : 11/10/2022
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Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	1	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	3
Total	1	4	0	5	0	1	1	2	0	0	0	0	0	0	0	0	7
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	2	0	2	0	0	0	0	1	0	0	1	0	1	0	1	4
Total	0	2	0	2	0	0	0	0	1	0	0	1	0	2	0	2	5
Grand Total	1	6	0	7	0	1	1	2	1	0	0	1	0	2	0	2	12
Apprch %	14.3	85.7	0		0	50	50		100	0	0		0	100	0		
Total %	8.3	50	0	58.3	0	8.3	8.3	16.7	8.3	0	0	8.3	0	16.7	0	16.7	

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	**2**	0	**2**	0	0	0	0	**1**	0	0	**1**	0	1	0	1	**4**
Total Volume	0	2	0	2	0	0	0	0	1	0	0	1	0	2	0	2	5
% App. Total	0	100	0		0	0	0		100	0	0		0	100	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.000	.000	.250	.000	.500	.000	.500	.313

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City of Fresno
N/S: Fowler Avenue
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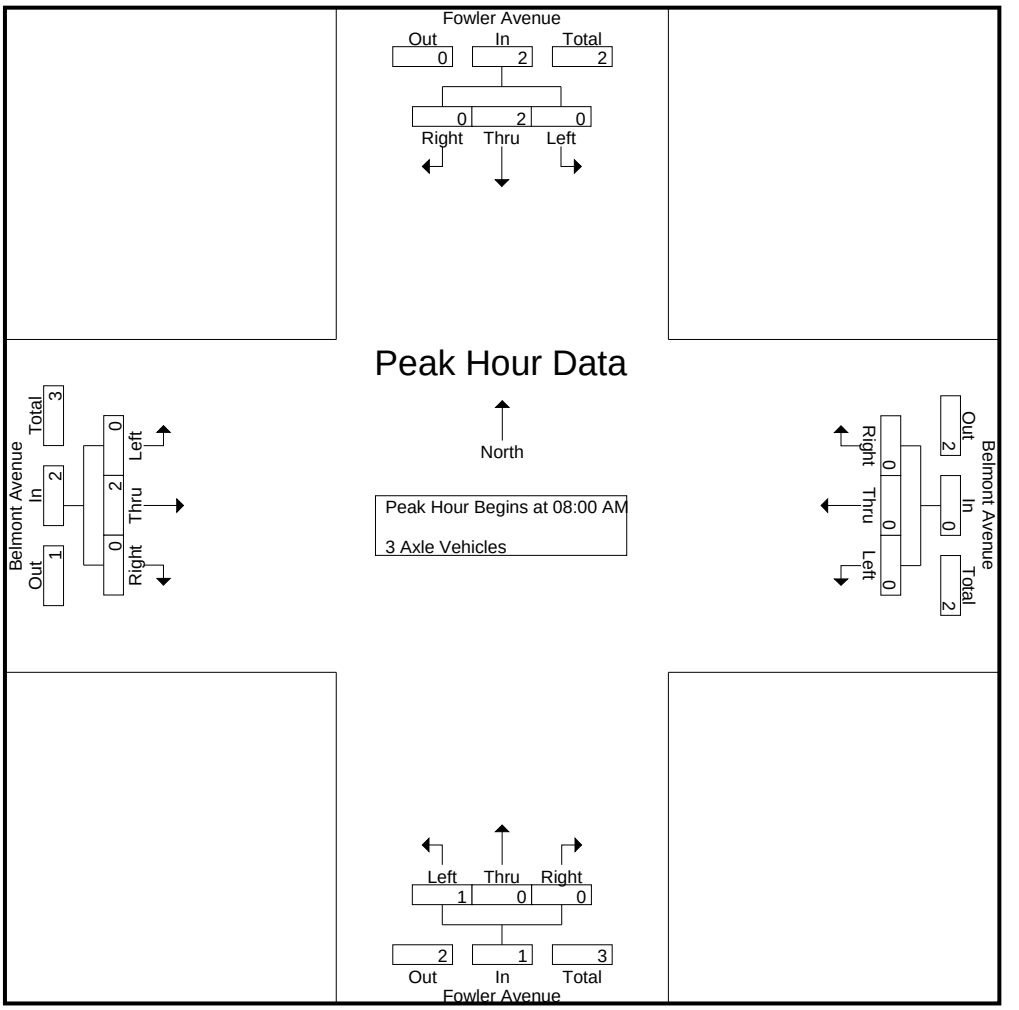

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	**2**	0	**2**	0	0	0	0	**1**	0	0	**1**	0	1	0	1
Total Volume	0	2	0	2	0	0	0	0	1	0	0	1	0	2	0	2
% App. Total	0	100	0		0	0	0		100	0	0		0	100	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.250	.000	.000	.250	.000	.500	.000	.500

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Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	1	0	1	3
07:45 AM	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	2	2	0	4	0	0	1	1	0	1	0	1	0	1	0	1	7
08:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	1	1	0	2	0	1	2	3	0	1	0	1	0	0	0	0	6
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	1	0	4	0	1	2	3	0	1	0	1	0	0	0	0	8
Grand Total	5	3	0	8	0	1	3	4	0	2	0	2	0	1	0	1	15
Apprch %	62.5	37.5	0		0	25	75		0	100	0		0	100	0		
Total %	33.3	20	0	53.3	0	6.7	20	26.7	0	13.3	0	13.3	0	6.7	0	6.7	

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	1	**1**	0	**2**	0	**1**	**2**	**3**	0	**1**	0	**1**	0	0	0	0	**6**
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	3	1	0	4	0	1	2	3	0	1	0	1	0	0	0	0	8
% App. Total	75	25	0		0	33.3	66.7		0	100	0		0	0	0		
PHF	.750	.250	.000	.500	.000	.250	.250	.250	.000	.250	.000	.250	.000	.000	.000	.000	.333

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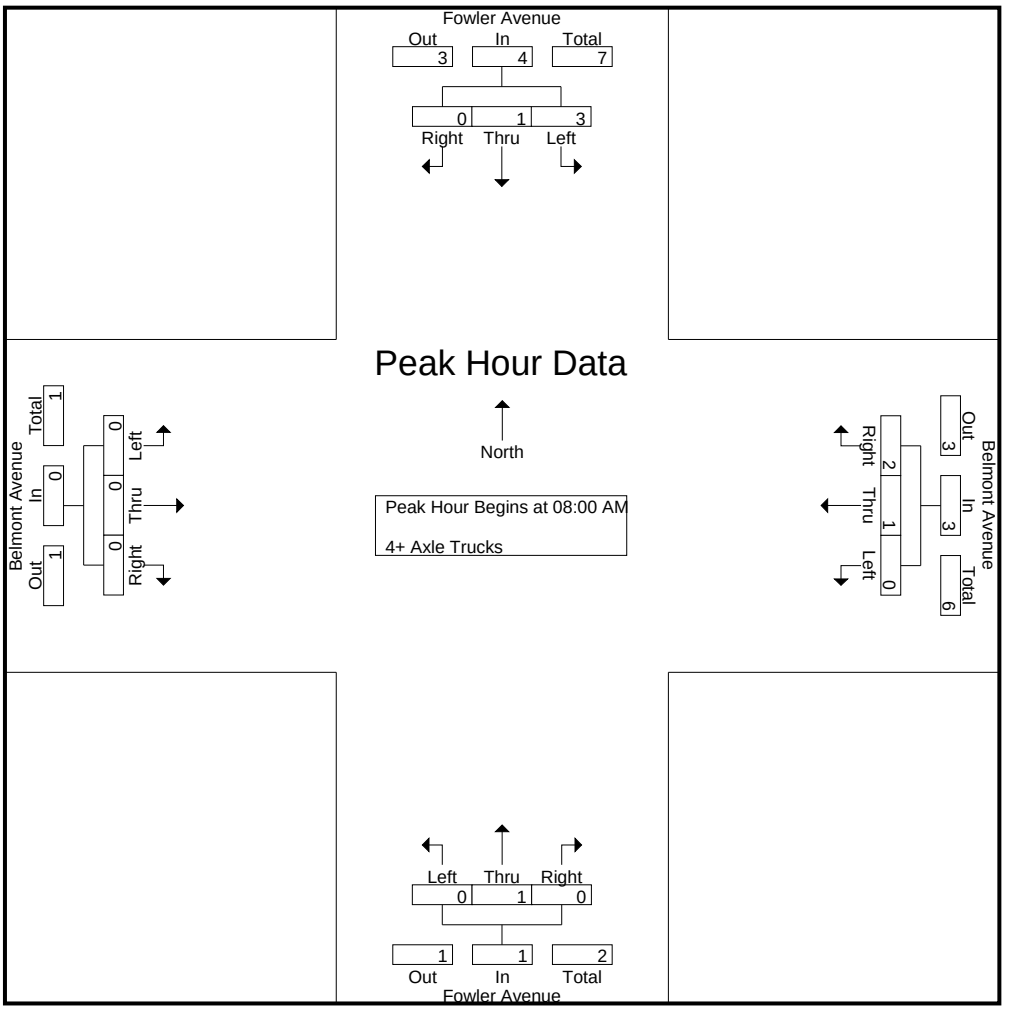
City of Fresno
N/S: Fowler Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 05_FSO_Fow_Bel AM
Site Code : 00322994
Start Date : 11/10/2022



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	1	**1**	0	**2**	0	**1**	**2**	**3**	0	**1**	0	**1**	0	0	0	0
+45 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	3	1	0	4	0	1	2	3	0	1	0	1	0	0	0	0
% App. Total	75	25	0		0	33.3	66.7		0	100	0		0	0	0	
PHF	.750	.250	.000	.500	.000	.250	.250	.250	.000	.250	.000	.250	.000	.000	.000	.000

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Site Code : 00322994
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	29	145	10	184	12	37	23	72	18	72	17	107	12	24	12	48	411
04:15 PM	30	159	5	194	18	27	27	72	12	50	6	68	12	24	13	49	383
04:30 PM	37	176	14	227	33	48	38	119	18	56	12	86	17	37	16	70	502
04:45 PM	26	139	12	177	28	32	22	82	11	49	9	69	18	28	24	70	398
Total	122	619	41	782	91	144	110	345	59	227	44	330	59	113	65	237	1694
05:00 PM	38	176	12	226	34	26	23	83	13	46	14	73	18	21	17	56	438
05:15 PM	39	166	12	217	21	22	14	57	15	84	18	117	14	29	16	59	450
05:30 PM	50	198	9	257	12	23	19	54	23	107	32	162	12	33	19	64	537
05:45 PM	44	183	16	243	10	22	14	46	16	140	22	178	8	33	19	60	527
Total	171	723	49	943	77	93	70	240	67	377	86	530	52	116	71	239	1952
Grand Total	293	1342	90	1725	168	237	180	585	126	604	130	860	111	229	136	476	3646
Apprch %	17	77.8	5.2		28.7	40.5	30.8		14.7	70.2	15.1		23.3	48.1	28.6		
Total %	8	36.8	2.5	47.3	4.6	6.5	4.9	16	3.5	16.6	3.6	23.6	3	6.3	3.7	13.1	
Passenger Vehicles	282	1318	87	1687	157	230	174	561	122	587	125	834	107	219	134	460	3542
% Passenger Vehicles	96.2	98.2	96.7	97.8	93.5	97	96.7	95.9	96.8	97.2	96.2	97	96.4	95.6	98.5	96.6	97.1
Large 2 Axle Vehicles	6	16	3	25	11	5	3	19	4	12	4	20	3	10	2	15	79
% Large 2 Axle Vehicles	2	1.2	3.3	1.4	6.5	2.1	1.7	3.2	3.2	2	3.1	2.3	2.7	4.4	1.5	3.2	2.2
3 Axle Vehicles	4	4	0	8	0	1	0	1	0	3	1	4	0	0	0	0	13
% 3 Axle Vehicles	1.4	0.3	0	0.5	0	0.4	0	0.2	0	0.5	0.8	0.5	0	0	0	0	0.4
4+ Axle Trucks	1	4	0	5	0	1	3	4	0	2	0	2	1	0	0	1	12
% 4+ Axle Trucks	0.3	0.3	0	0.3	0	0.4	1.7	0.7	0	0.3	0	0.2	0.9	0	0	0.2	0.3

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	38	176	12	226	**34**	**26**	**23**	**83**	13	46	14	73	**18**	21	17	56	438
05:15 PM	39	166	12	217	21	22	14	57	15	84	18	117	14	29	16	59	450
05:30 PM	**50**	**198**	9	**257**	12	23	19	54	**23**	107	**32**	162	12	**33**	**19**	**64**	**537**
05:45 PM	44	183	**16**	243	10	22	14	46	16	**140**	22	**178**	8	33	19	60	527
Total Volume	171	723	49	943	77	93	70	240	67	377	86	530	52	116	71	239	1952
% App. Total	18.1	76.7	5.2		32.1	38.8	29.2		12.6	71.1	16.2		21.8	48.5	29.7		
PHF	.855	.913	.766	.917	.566	.894	.761	.723	.728	.673	.672	.744	.722	.879	.934	.934	.909

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File Name : 05_FSO_Fow_Bel PM
Site Code : 00322994
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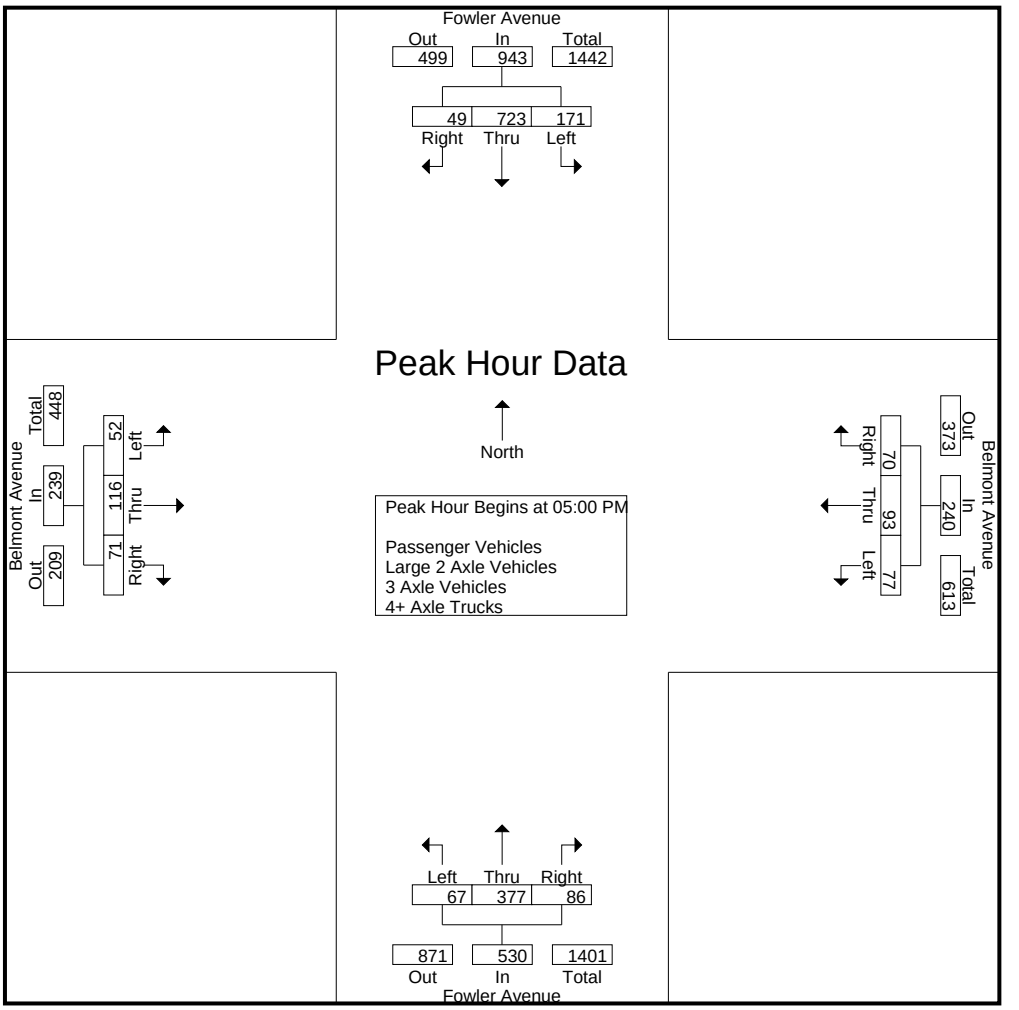

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				05:00 PM				04:30 PM			
+0 mins.	38	176	12	226	18	27	27	72	13	46	14	73	17	**37**	16	**70**
+15 mins.	39	166	12	217	33	**48**	**38**	**119**	15	84	18	117	**18**	28	**24**	70
+30 mins.	**50**	**198**	9	**257**	28	32	22	82	**23**	107	**32**	162	18	21	17	56
+45 mins.	44	183	**16**	243	**34**	26	23	83	16	**140**	22	**178**	14	29	16	59
Total Volume	171	723	49	943	113	133	110	356	67	377	86	530	67	115	73	255
% App. Total	18.1	76.7	5.2		31.7	37.4	30.9		12.6	71.1	16.2		26.3	45.1	28.6	
PHF	.855	.913	.766	.917	.831	.693	.724	.748	.728	.673	.672	.744	.931	.777	.760	.911

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Groups Printed- Passenger Vehicles

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	28	142	10	180	10	36	22	68	17	71	14	102	12	22	12	46	396
04:15 PM	28	154	5	187	17	26	26	69	12	47	6	65	12	23	13	48	369
04:30 PM	35	172	12	219	31	45	38	114	17	53	12	82	15	36	15	66	481
04:45 PM	25	134	12	171	24	31	20	75	10	48	8	66	17	26	23	66	378
Total	116	602	39	757	82	138	106	326	56	219	40	315	56	107	63	226	1624
05:00 PM	37	173	12	222	33	26	23	82	12	45	14	71	18	20	17	55	430
05:15 PM	38	166	11	215	20	21	14	55	15	81	18	114	14	27	16	57	441
05:30 PM	47	194	9	250	12	23	18	53	23	104	31	158	11	33	19	63	524
05:45 PM	44	183	16	243	10	22	13	45	16	138	22	176	8	32	19	59	523
Total	166	716	48	930	75	92	68	235	66	368	85	519	51	112	71	234	1918
Grand Total	282	1318	87	1687	157	230	174	561	122	587	125	834	107	219	134	460	3542
Apprch %	16.7	78.1	5.2		28	41	31		14.6	70.4	15		23.3	47.6	29.1		
Total %	8	37.2	2.5	47.6	4.4	6.5	4.9	15.8	3.4	16.6	3.5	23.5	3	6.2	3.8	13	

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	37	173	12	222	**33**	**26**	**23**	**82**	12	45	14	71	**18**	20	17	55	430
05:15 PM	38	166	11	215	20	21	14	55	15	81	18	114	14	27	16	57	441
05:30 PM	**47**	**194**	9	**250**	12	23	18	53	**23**	104	**31**	158	11	**33**	**19**	**63**	**524**
05:45 PM	44	183	**16**	243	10	22	13	45	16	**138**	22	**176**	8	32	19	59	523
Total Volume	166	716	48	930	75	92	68	235	66	368	85	519	51	112	71	234	1918
% App. Total	17.8	77	5.2		31.9	39.1	28.9		12.7	70.9	16.4		21.8	47.9	30.3		
PHF	.883	.923	.750	.930	.568	.885	.739	.716	.717	.667	.685	.737	.708	.848	.934	.929	.915

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Site Code : 00322994
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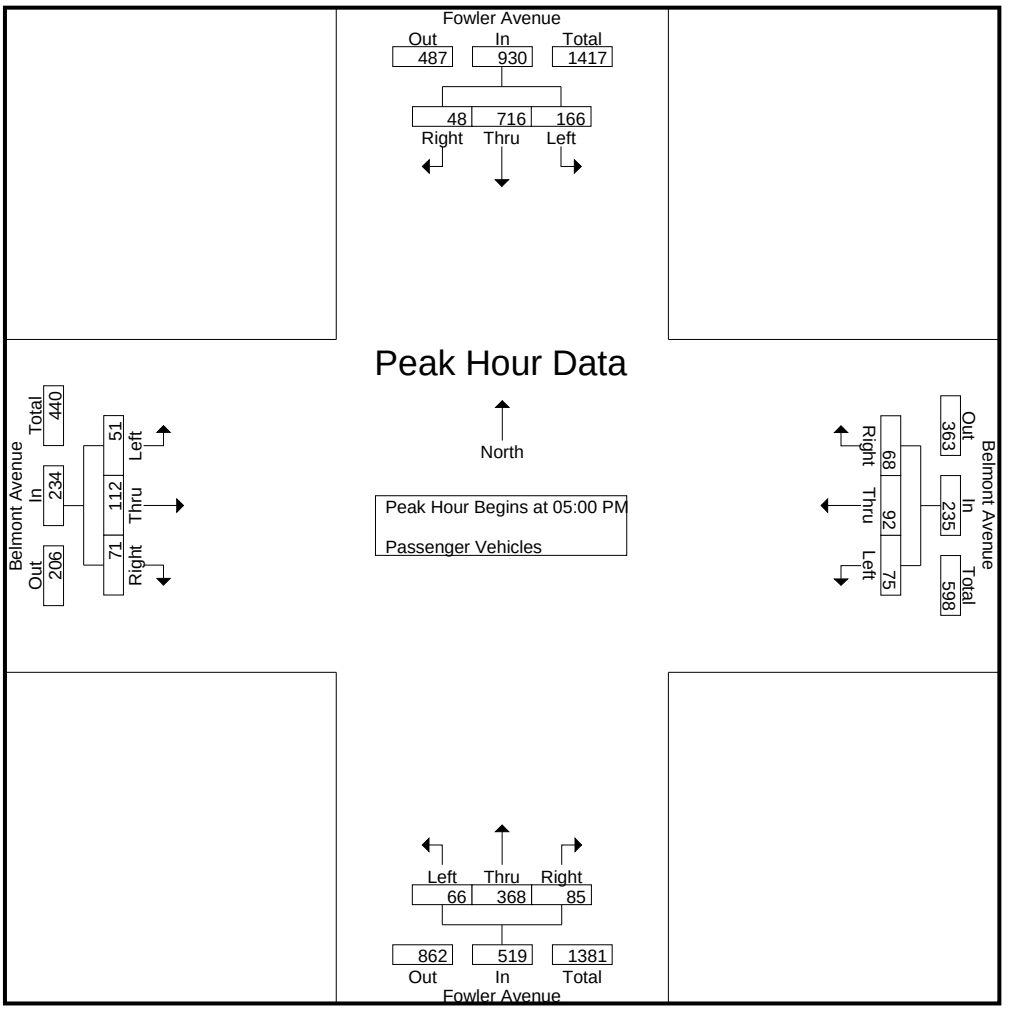

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	37	173	12	222	**33**	**26**	**23**	**82**	12	45	14	71	**18**	20	17	55
+15 mins.	38	166	11	215	20	21	14	55	15	81	18	114	14	27	16	57
+30 mins.	**47**	**194**	9	**250**	12	23	18	53	**23**	104	**31**	158	11	**33**	**19**	**63**
+45 mins.	44	183	**16**	243	10	22	13	45	16	**138**	22	**176**	8	32	19	59
Total Volume	166	716	48	930	75	92	68	235	66	368	85	519	51	112	71	234
% App. Total	17.8	77	5.2		31.9	39.1	28.9		12.7	70.9	16.4		21.8	47.9	30.3	
PHF	.883	.923	.750	.930	.568	.885	.739	.716	.717	.667	.685	.737	.708	.848	.934	.929

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Groups Printed- Large 2 Axle Vehicles

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	2	0	1	3	1	1	3	5	0	2	0	2	12
04:15 PM	1	2	0	3	1	0	0	1	0	3	0	3	0	1	0	1	8
04:30 PM	1	4	2	7	2	3	0	5	1	1	0	2	2	1	1	4	18
04:45 PM	0	4	0	4	4	1	1	6	1	1	1	3	1	2	1	4	17
Total	2	12	2	16	9	4	2	15	3	6	4	13	3	6	2	11	55
05:00 PM	1	3	0	4	1	0	0	1	1	1	0	2	0	1	0	1	8
05:15 PM	1	0	1	2	1	1	0	2	0	3	0	3	0	2	0	2	9
05:30 PM	2	1	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
05:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
Total	4	4	1	9	2	1	1	4	1	6	0	7	0	4	0	4	24
Grand Total	6	16	3	25	11	5	3	19	4	12	4	20	3	10	2	15	79
Apprch %	24	64	12		57.9	26.3	15.8		20	60	20		20	66.7	13.3		
Total %	7.6	20.3	3.8	31.6	13.9	6.3	3.8	24.1	5.1	15.2	5.1	25.3	3.8	12.7	2.5	19	

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	**3**	0	**4**	**1**	0	0	1	**1**	1	0	2	0	1	0	1	8
05:15 PM	1	0	**1**	2	1	**1**	0	**2**	0	**3**	0	**3**	0	**2**	0	**2**	**9**
05:30 PM	**2**	1	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
05:45 PM	0	0	0	0	0	0	**1**	1	0	0	0	0	0	1	0	1	2
Total Volume	4	4	1	9	2	1	1	4	1	6	0	7	0	4	0	4	24
% App. Total	44.4	44.4	11.1		50	25	25		14.3	85.7	0		0	100	0		
PHF	.500	.333	.250	.563	.500	.250	.250	.500	.250	.500	.000	.583	.000	.500	.000	.500	.667

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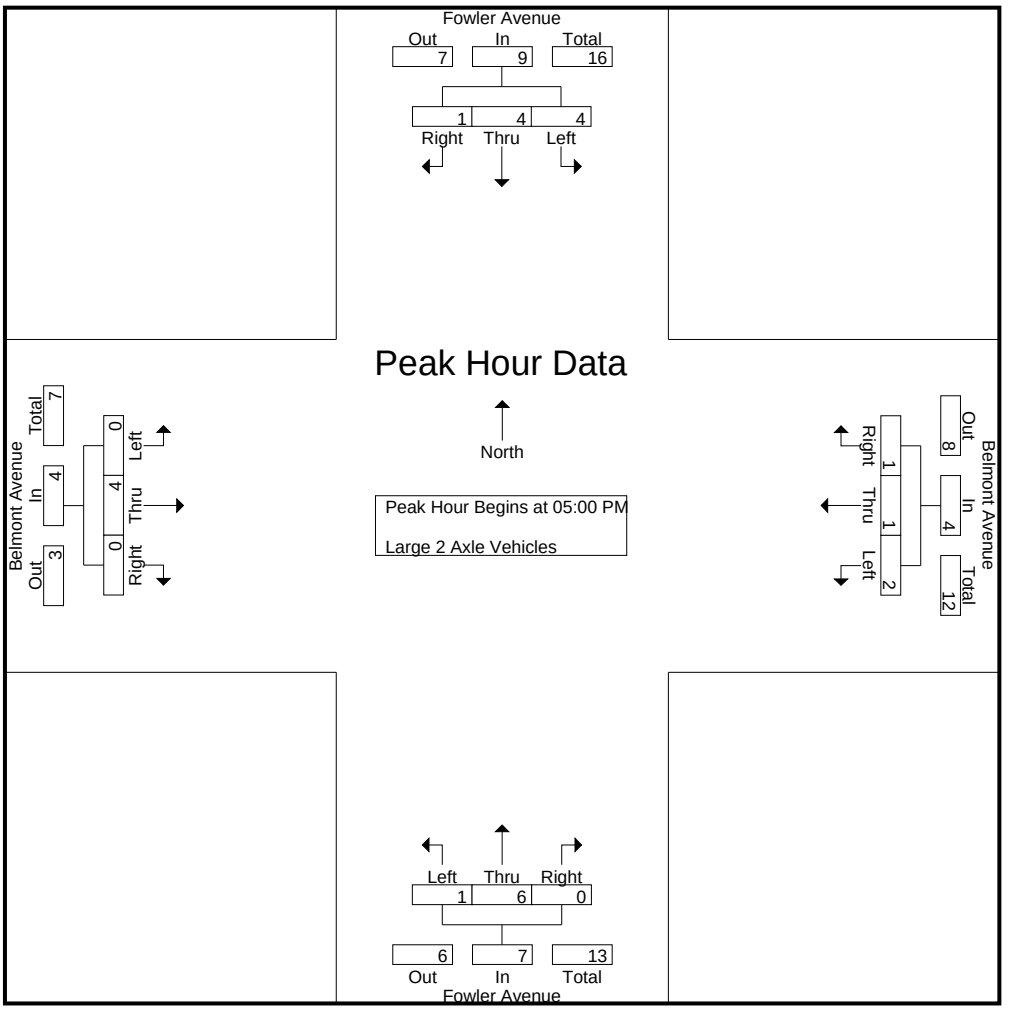

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	1	**3**	0	**4**	**1**	0	0	1	**1**	1	0	2	0	1	0	1
+15 mins.	1	0	**1**	2	1	**1**	0	**2**	0	**3**	0	**3**	0	**2**	0	**2**
+30 mins.	**2**	1	0	3	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	0	0	0	0	0	**1**	1	0	0	0	0	0	1	0	1
Total Volume	4	4	1	9	2	1	1	4	1	6	0	7	0	4	0	4
% App. Total	44.4	44.4	11.1		50	25	25		14.3	85.7	0		0	100	0	
PHF	.500	.333	.250	.563	.500	.250	.250	.500	.250	.500	.000	.583	.000	.500	.000	.500

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Groups Printed- 3 Axle Vehicles

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	1	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
04:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	2	0	5	0	1	0	1	0	2	0	2	0	0	0	0	8
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	2	0	3	0	0	0	0	0	1	1	2	0	0	0	0	5
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	2	0	3	0	0	0	0	0	1	1	2	0	0	0	0	5
Grand Total	4	4	0	8	0	1	0	1	0	3	1	4	0	0	0	0	13
Apprch %	50	50	0		0	100	0		0	75	25		0	0	0		
Total %	30.8	30.8	0	61.5	0	7.7	0	7.7	0	23.1	7.7	30.8	0	0	0	0	

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	**1**	**2**	0	**3**	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0	**5**
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	2	0	3	0	0	0	0	0	1	1	2	0	0	0	0	5
% App. Total	33.3	66.7	0		0	0	0		0	50	50		0	0	0		
PHF	.250	.250	.000	.250	.000	.000	.000	.000	.000	.250	.250	.250	.000	.000	.000	.000	.250

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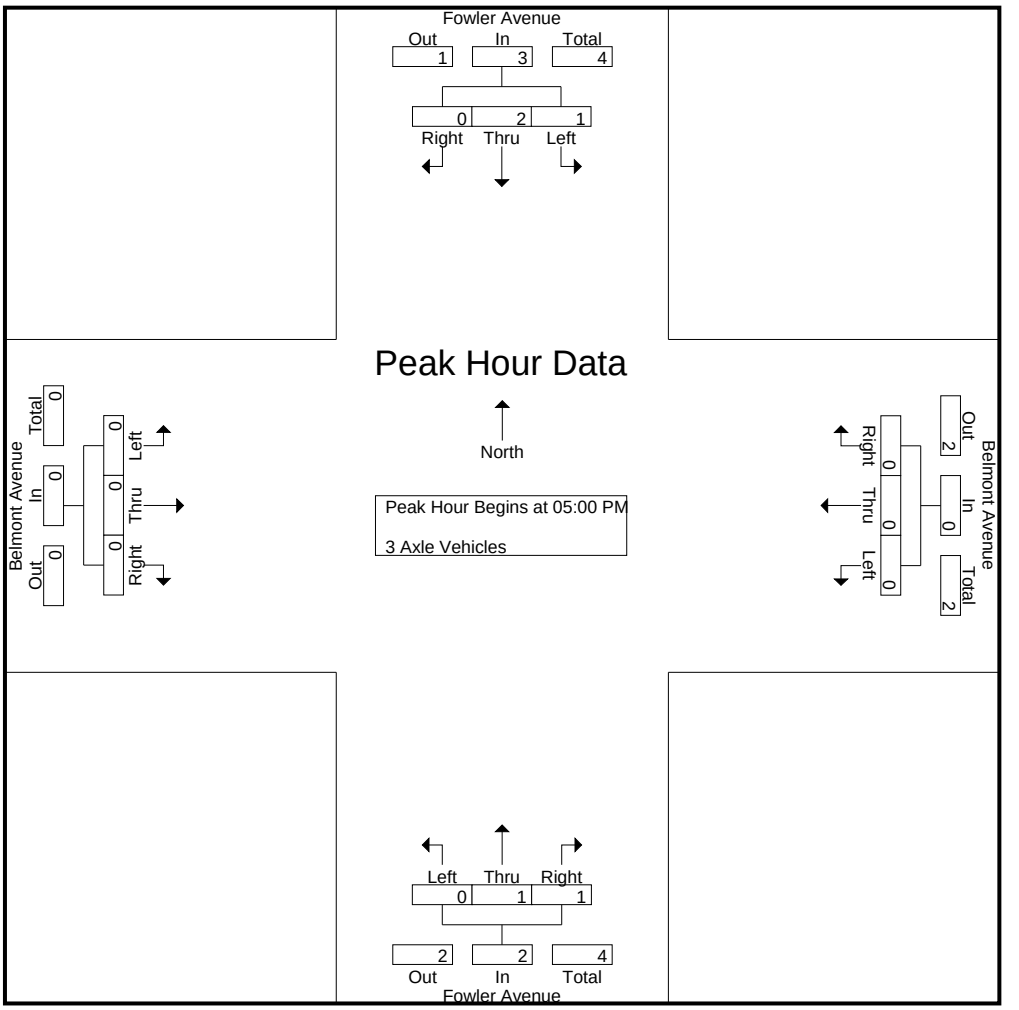

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	**1**	**2**	0	**3**	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	2	0	3	0	0	0	0	0	1	1	2	0	0	0	0
% App. Total	33.3	66.7	0		0	0	0		0	50	50		0	0	0	
PHF	.250	.250	.000	.250	.000	.000	.000	.000	.000	.250	.250	.250	.000	.000	.000	.000

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City of Fresno
N/S: Fowler Avenue
E/W: Belmont Avenue
Weather: Clear

File Name : 05_FSO_Fow_Bel PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	1	2	0	3	0	1	1	2	0	0	0	0	0	0	0	0	5
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
Total	1	3	0	4	0	1	2	3	0	0	0	0	0	0	0	0	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	1	0	0	1	1	0	0	0	0	1	0	0	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	1	0	1	0	0	1	1	0	2	0	2	1	0	0	1	5
Grand Total	1	4	0	5	0	1	3	4	0	2	0	2	1	0	0	1	12
Apprch %	20	80	0		0	25	75		0	100	0		100	0	0		
Total %	8.3	33.3	0	41.7	0	8.3	25	33.3	0	16.7	0	16.7	8.3	0	0	8.3	

	Fowler Avenue Southbound				Belmont Avenue Westbound				Fowler Avenue Northbound				Belmont Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	**1**	0	**1**	0	0	**1**	**1**	0	0	0	0	**1**	0	0	**1**	**3**
05:45 PM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	0	0	2
Total Volume	0	1	0	1	0	0	1	1	0	2	0	2	1	0	0	1	5
% App. Total	0	100	0		0	0	100		0	100	0		100	0	0		
PHF	.000	.250	.000	.250	.000	.000	.250	.250	.000	.250	.000	.250	.250	.000	.000	.250	.417

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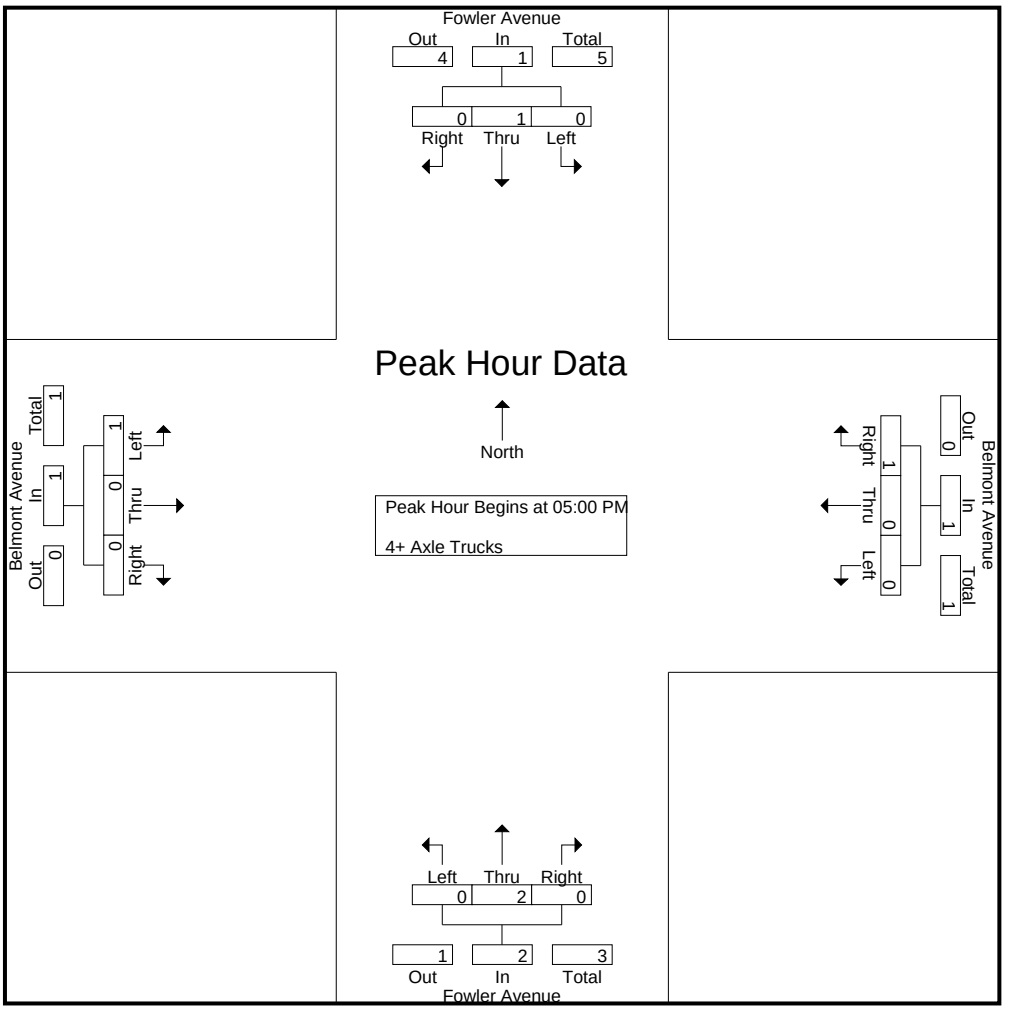
File Name : 05_FSO_Fow_Bel PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	**1**	0	**1**	0	0	**1**	**1**	0	0	0	0	**1**	0	0	**1**
+45 mins.	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	0	0
Total Volume	0	1	0	1	0	0	1	1	0	2	0	2	1	0	0	1
% App. Total	0	100	0		0	0	100		0	100	0		100	0	0	
PHF	.000	.250	.000	.250	.000	.000	.250	.250	.000	.250	.000	.250	.250	.000	.000	.250

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File Name : Armstrong Floradora 08292018
Site Code : 00082918
Start Date : 8/29/2018
Page No : 1

Groups Printed- Unshifted

	Armstrong Southbound					Floradora Westbound					Armstrong Northbound					Floradora Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	119	0	1	120	5	1	5	0	11	0	37	0	0	37	1	2	0	0	3	171
07:15 AM	0	168	0	0	168	2	2	2	0	6	1	41	4	0	46	1	0	3	0	4	224
07:30 AM	0	163	1	0	164	10	1	2	0	13	1	46	0	0	47	0	1	5	0	6	230
07:45 AM	0	114	1	0	115	25	2	0	0	27	1	63	2	0	66	1	2	4	0	7	215
Total	0	564	2	1	567	42	6	9	0	57	3	187	6	0	196	3	5	12	0	20	840
08:00 AM	3	105	1	0	109	1	0	1	1	3	2	41	1	0	44	0	1	1	0	2	158
08:15 AM	0	81	1	0	82	3	0	0	1	4	3	13	1	0	17	0	0	3	0	3	106
08:30 AM	1	49	0	0	50	0	1	1	0	2	1	11	0	0	12	1	2	0	0	3	67
08:45 AM	0	43	0	0	43	2	2	2	0	6	0	14	1	0	15	3	0	0	0	3	67
Total	4	278	2	0	284	6	3	4	2	15	6	79	3	0	88	4	3	4	0	11	398
******																					
04:00 PM	1	46	1	1	49	0	3	2	0	5	1	69	1	0	71	0	2	1	0	3	128
04:15 PM	0	31	1	0	32	0	1	1	0	2	0	69	2	0	71	0	1	1	0	2	107
04:30 PM	2	36	0	0	38	1	1	0	0	2	0	66	3	0	69	1	0	2	0	3	112
04:45 PM	0	44	0	0	44	2	1	2	0	5	0	82	3	0	85	0	1	1	0	2	136
Total	3	157	2	1	163	3	6	5	0	14	1	286	9	0	296	1	4	5	0	10	483
05:00 PM	0	63	1	0	64	0	0	1	0	1	0	92	2	0	94	1	0	0	0	1	160
05:15 PM	1	40	0	0	41	1	0	1	0	2	0	110	1	0	111	0	0	0	0	0	154
05:30 PM	2	50	0	0	52	0	1	0	0	1	1	88	2	0	91	2	2	0	0	4	148
05:45 PM	1	45	0	0	46	1	0	1	0	2	0	79	1	0	80	1	0	0	0	1	129
Total	4	198	1	0	203	2	1	3	0	6	1	369	6	0	376	4	2	0	0	6	591
Grand Total	11	1197	7	2	1217	53	16	21	2	92	11	921	24	0	956	12	14	21	0	47	2312
Apprch %	0.9	98.4	0.6	0.2		57.6	17.4	22.8	2.2		1.2	96.3	2.5	0		25.5	29.8	44.7	0		
Total %	0.5	51.8	0.3	0.1	52.6	2.3	0.7	0.9	0.1	4	0.5	39.8	1	0	41.3	0.5	0.6	0.9	0	2	

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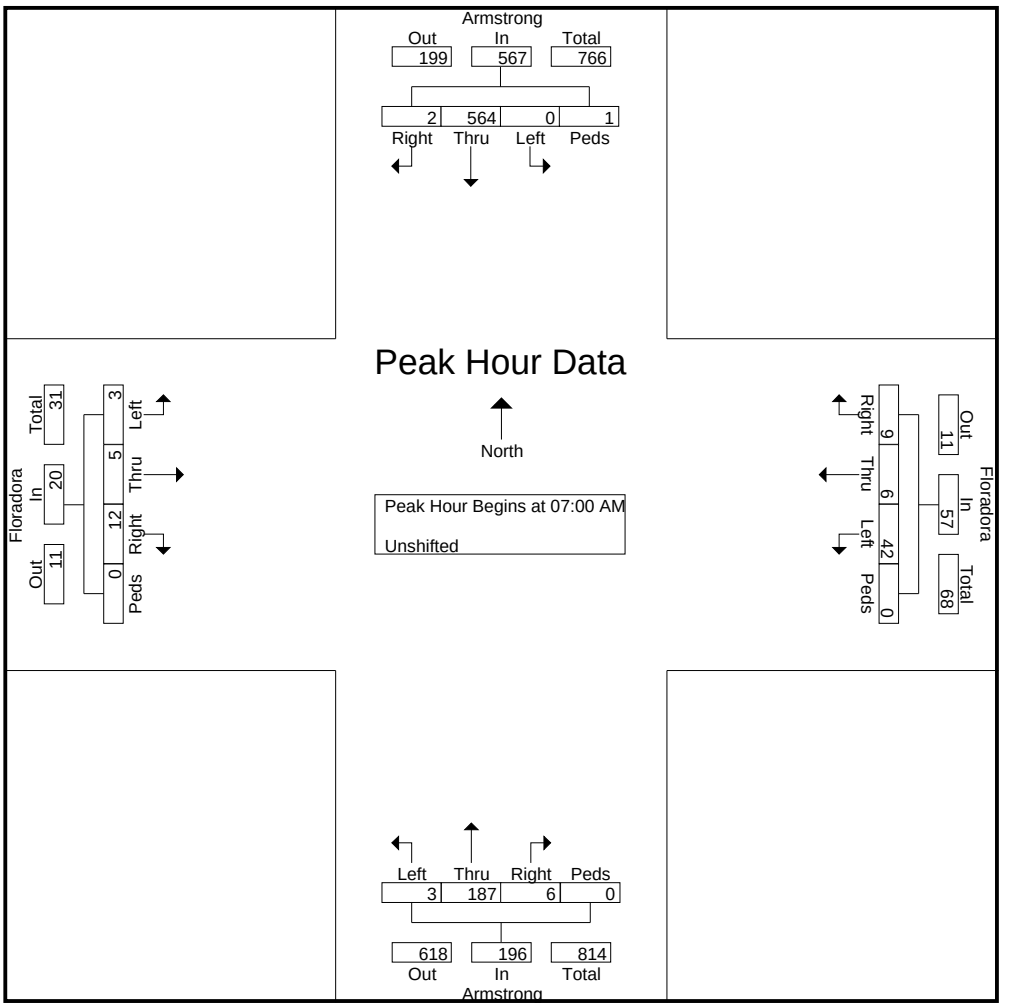
File Name : Armstrong Floradora 08292018
Site Code : 00082918
Start Date : 8/29/2018
Page No : 2

	Armstrong Southbound					Floradora Westbound					Armstrong Northbound					Floradora Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	119	0	**1**	120	5	1	**5**	0	11	0	37	0	0	37	**1**	**2**	0	0	3	171
07:15 AM	0	**168**	0	0	**168**	2	**2**	2	0	6	**1**	41	**4**	0	46	1	0	3	0	4	224
07:30 AM	0	163	**1**	0	164	10	1	2	0	13	1	46	0	0	47	0	1	**5**	0	6	**230**
07:45 AM	0	114	1	0	115	**25**	2	0	0	**27**	1	**63**	2	0	**66**	1	2	4	0	**7**	215
Total Volume	0	564	2	1	567	42	6	9	0	57	3	187	6	0	196	3	5	12	0	20	840
% App. Total	0	99.5	0.4	0.2		73.7	10.5	15.8	0		1.5	95.4	3.1	0		15	25	60	0		
PHF	.000	.839	.500	.250	.844	.420	.750	.450	.000	.528	.750	.742	.375	.000	.742	.750	.625	.600	.000	.714	.913



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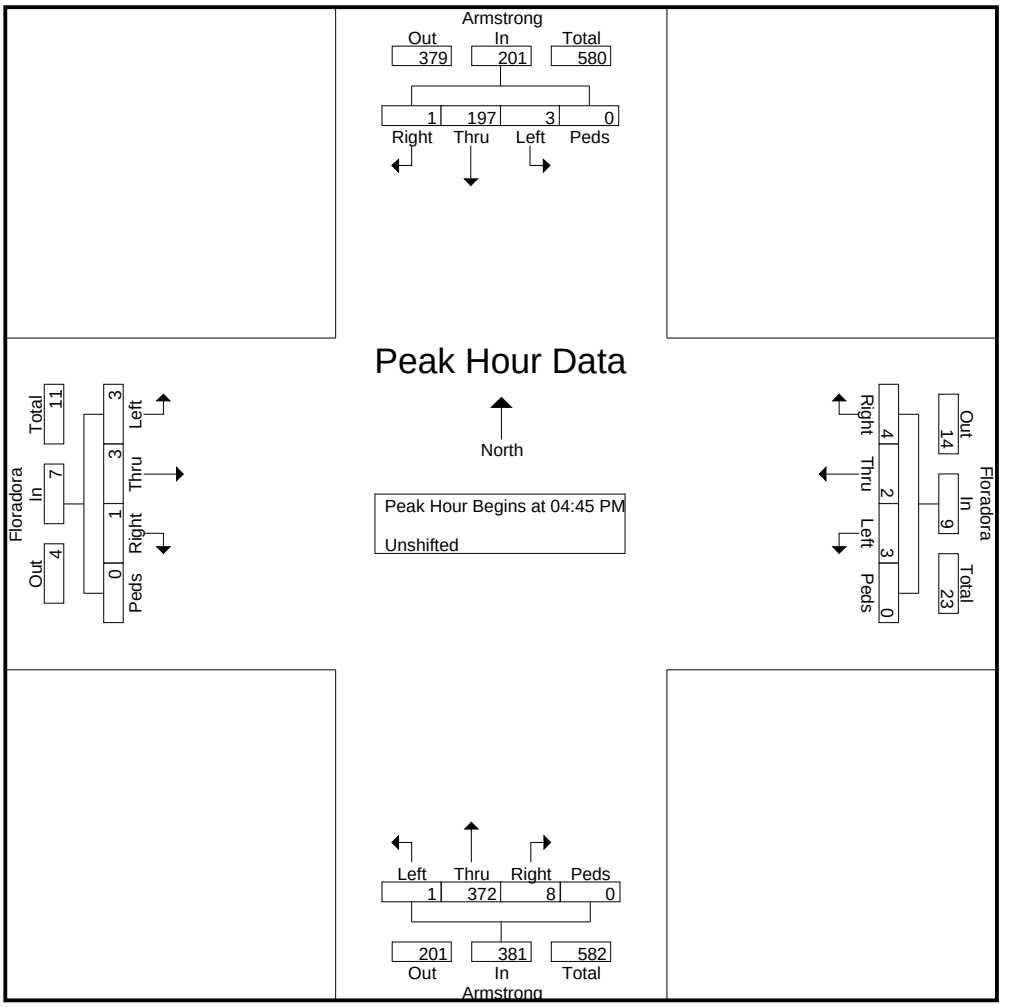
File Name : Armstrong Floradora 08292018
Site Code : 00082918
Start Date : 8/29/2018
Page No : 3

	Armstrong Southbound					Floradora Westbound					Armstrong Northbound					Floradora Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	44	0	0	44	**2**	**1**	**2**	0	**5**	0	82	**3**	0	85	0	1	**1**	0	2	136
05:00 PM	0	**63**	**1**	0	**64**	0	0	1	0	1	0	92	2	0	94	1	0	0	0	1	**160**
05:15 PM	1	40	0	0	41	1	0	1	0	2	0	**110**	1	0	**111**	0	0	0	0	0	154
05:30 PM	**2**	50	0	0	52	0	1	0	0	1	**1**	88	2	0	91	**2**	**2**	0	0	**4**	148
Total Volume	3	197	1	0	201	3	2	4	0	9	1	372	8	0	381	3	3	1	0	7	598
% App. Total	1.5	98	0.5	0		33.3	22.2	44.4	0		0.3	97.6	2.1	0		42.9	42.9	14.3	0		
PHF	.375	.782	.250	.000	.785	.375	.500	.500	.000	.450	.250	.845	.667	.000	.858	.375	.375	.250	.000	.438	.934



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City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	3	3	2	48	0	50	2	2	1	5	1	21	1	23	81
07:15 AM	0	4	4	8	3	53	0	56	2	0	4	6	3	37	6	46	116
07:30 AM	0	6	11	17	7	89	0	96	6	8	11	25	7	26	1	34	172
07:45 AM	2	7	13	22	4	65	0	69	7	8	15	30	13	16	1	30	151
Total	2	17	31	50	16	255	0	271	17	18	31	66	24	100	9	133	520
08:00 AM	3	10	29	42	23	79	0	102	10	6	34	50	3	24	3	30	224
08:15 AM	10	15	57	82	31	87	3	121	14	7	78	99	4	25	1	30	332
08:30 AM	3	32	43	78	40	89	2	131	19	12	56	87	2	29	5	36	332
08:45 AM	1	14	31	46	13	82	0	95	12	14	26	52	5	33	3	41	234
Total	17	71	160	248	107	337	5	449	55	39	194	288	14	111	12	137	1122
Grand Total	19	88	191	298	123	592	5	720	72	57	225	354	38	211	21	270	1642
Apprch %	6.4	29.5	64.1		17.1	82.2	0.7		20.3	16.1	63.6		14.1	78.1	7.8		
Total %	1.2	5.4	11.6	18.1	7.5	36.1	0.3	43.8	4.4	3.5	13.7	21.6	2.3	12.9	1.3	16.4	
Passenger Vehicles	19	85	190	294	122	584	5	711	70	56	221	347	35	209	21	265	1617
% Passenger Vehicles	100	96.6	99.5	98.7	99.2	98.6	100	98.8	97.2	98.2	98.2	98	92.1	99.1	100	98.1	98.5
Large 2 Axle Vehicles	0	3	0	3	1	6	0	7	1	1	3	5	1	2	0	3	18
% Large 2 Axle Vehicles	0	3.4	0	1	0.8	1	0	1	1.4	1.8	1.3	1.4	2.6	0.9	0	1.1	1.1
3 Axle Vehicles	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0.2	0	0.1	1.4	0	0	0.3	0	0	0	0	0.1
4+ Axle Trucks	0	0	1	1	0	1	0	1	0	0	1	1	2	0	0	2	5
% 4+ Axle Trucks	0	0	0.5	0.3	0	0.2	0	0.1	0	0	0.4	0.3	5.3	0	0	0.7	0.3

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	10	29	42	23	79	0	102	10	6	34	50	3	24	3	30	224
08:15 AM	**10**	15	**57**	**82**	31	87	**3**	121	14	7	**78**	**99**	4	25	1	30	**332**
08:30 AM	3	**32**	43	78	**40**	**89**	2	**131**	**19**	12	56	87	2	29	**5**	36	332
08:45 AM	1	14	31	46	13	82	0	95	12	**14**	26	52	**5**	**33**	3	**41**	234
Total Volume	17	71	160	248	107	337	5	449	55	39	194	288	14	111	12	137	1122
% App. Total	6.9	28.6	64.5		23.8	75.1	1.1		19.1	13.5	67.4		10.2	81	8.8		
PHF	.425	.555	.702	.756	.669	.947	.417	.857	.724	.696	.622	.727	.700	.841	.600	.835	.845

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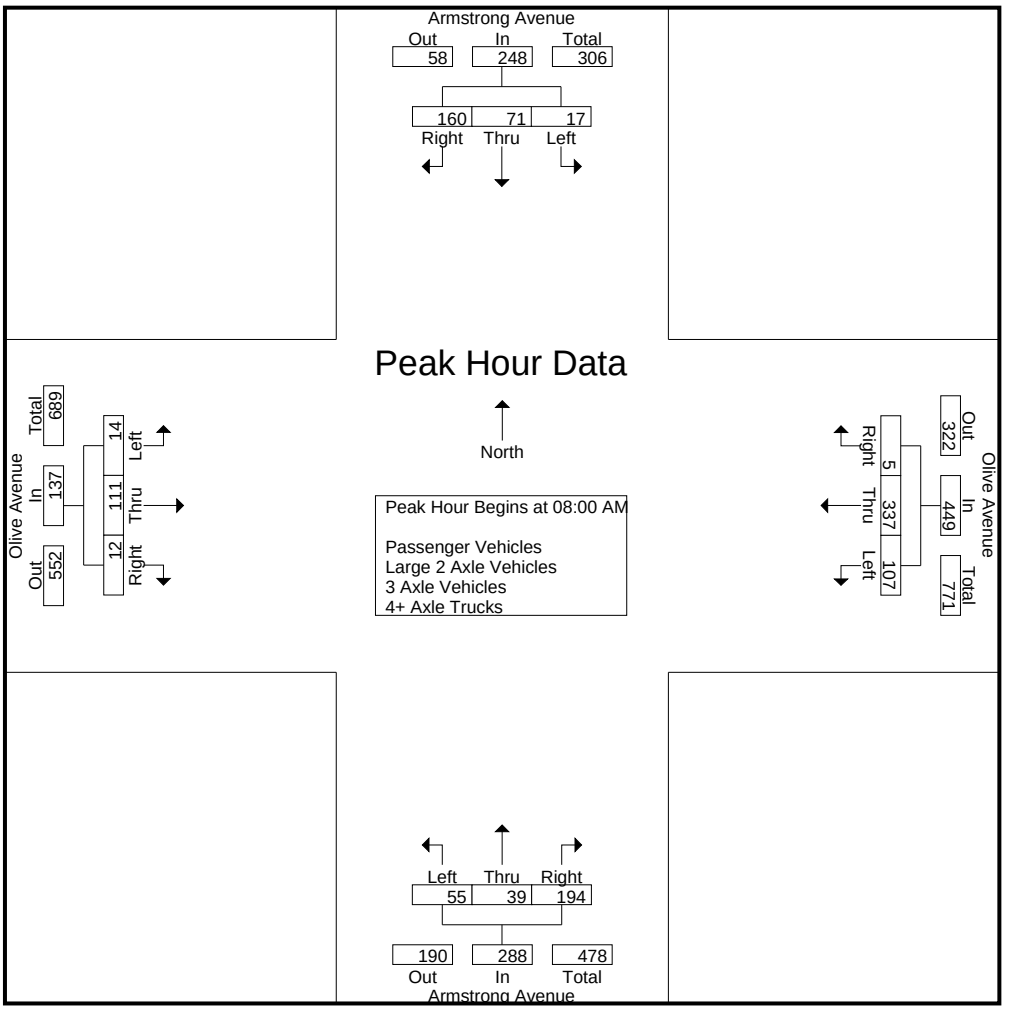
City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				07:15 AM			
+0 mins.	3	10	29	42	23	79	0	102	10	6	34	50	3	**37**	**6**	**46**
+15 mins.	**10**	15	**57**	**82**	31	87	**3**	121	14	7	**78**	**99**	7	26	1	34
+30 mins.	3	**32**	43	78	**40**	**89**	2	**131**	**19**	12	56	87	**13**	16	1	30
+45 mins.	1	14	31	46	13	82	0	95	12	**14**	26	52	3	24	3	30
Total Volume	17	71	160	248	107	337	5	449	55	39	194	288	26	103	11	140
% App. Total	6.9	28.6	64.5		23.8	75.1	1.1		19.1	13.5	67.4		18.6	73.6	7.9	
PHF	.425	.555	.702	.756	.669	.947	.417	.857	.724	.696	.622	.727	.500	.696	.458	.761

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City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	3	3	2	47	0	49	2	2	1	5	1	20	1	22	79
07:15 AM	0	4	4	8	3	51	0	54	2	0	4	6	3	37	6	46	114
07:30 AM	0	6	11	17	7	88	0	95	6	8	11	25	6	26	1	33	170
07:45 AM	2	7	12	21	4	65	0	69	7	7	14	28	13	16	1	30	148
Total	2	17	30	49	16	251	0	267	17	17	30	64	23	99	9	131	511
08:00 AM	3	10	29	42	23	78	0	101	8	6	34	48	3	23	3	29	220
08:15 AM	10	12	57	79	31	86	3	120	14	7	77	98	3	25	1	29	326
08:30 AM	3	32	43	78	39	88	2	129	19	12	56	87	2	29	5	36	330
08:45 AM	1	14	31	46	13	81	0	94	12	14	24	50	4	33	3	40	230
Total	17	68	160	245	106	333	5	444	53	39	191	283	12	110	12	134	1106
Grand Total	19	85	190	294	122	584	5	711	70	56	221	347	35	209	21	265	1617
Apprch %	6.5	28.9	64.6		17.2	82.1	0.7		20.2	16.1	63.7		13.2	78.9	7.9		
Total %	1.2	5.3	11.8	18.2	7.5	36.1	0.3	44	4.3	3.5	13.7	21.5	2.2	12.9	1.3	16.4	

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	10	29	42	23	78	0	101	8	6	34	48	3	23	3	29	220
08:15 AM	**10**	12	**57**	**79**	31	86	**3**	120	14	7	**77**	**98**	3	25	1	29	326
08:30 AM	3	**32**	43	78	**39**	**88**	2	**129**	**19**	12	56	87	2	29	**5**	36	**330**
08:45 AM	1	14	31	46	13	81	0	94	12	**14**	24	50	**4**	**33**	3	**40**	230
Total Volume	17	68	160	245	106	333	5	444	53	39	191	283	12	110	12	134	1106
% App. Total	6.9	27.8	65.3		23.9	75	1.1		18.7	13.8	67.5		9	82.1	9		
PHF	.425	.531	.702	.775	.679	.946	.417	.860	.697	.696	.620	.722	.750	.833	.600	.838	.838

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City of Fresno
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E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli AM
Site Code : 00322994
Start Date : 11/10/2022
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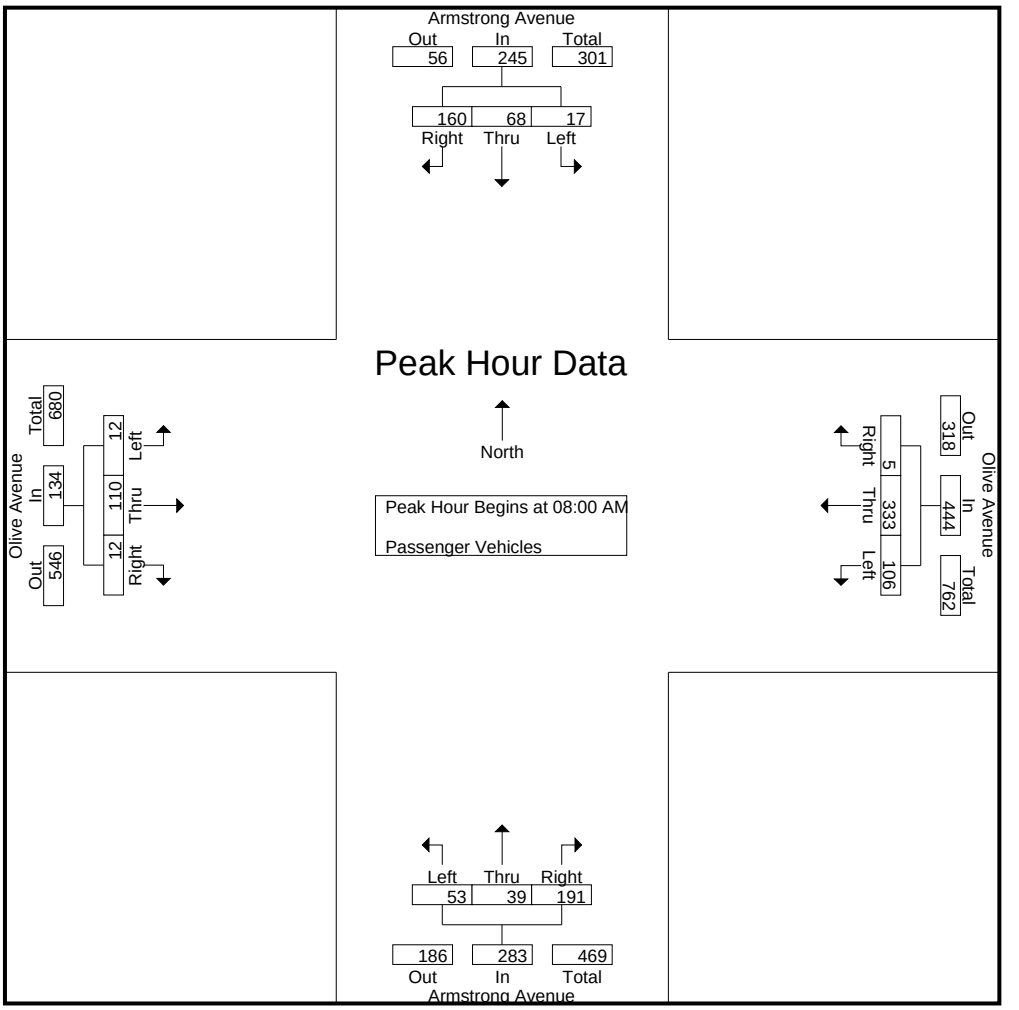

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	3	10	29	42	23	78	0	101	8	6	34	48	3	23	3	29
+15 mins.	**10**	12	**57**	**79**	31	86	**3**	120	14	7	**77**	**98**	3	25	1	29
+30 mins.	3	**32**	43	78	**39**	**88**	2	**129**	**19**	12	56	87	2	29	**5**	36
+45 mins.	1	14	31	46	13	81	0	94	12	**14**	24	50	**4**	**33**	3	**40**
Total Volume	17	68	160	245	106	333	5	444	53	39	191	283	12	110	12	134
% App. Total	6.9	27.8	65.3		23.9	75	1.1		18.7	13.8	67.5		9	82.1	9	
PHF	.425	.531	.702	.775	.679	.946	.417	.860	.697	.696	.620	.722	.750	.833	.600	.838

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Groups Printed- Large 2 Axle Vehicles

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	3	0	3	0	1	0	1	0	1	0	1	5
08:00 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	1	0	1	3
08:15 AM	0	3	0	3	0	1	0	1	0	0	1	1	0	0	0	0	5
08:30 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	1	3
Total	0	3	0	3	1	3	0	4	1	0	3	4	1	1	0	2	13
Grand Total	0	3	0	3	1	6	0	7	1	1	3	5	1	2	0	3	18
Apprch %	0	100	0		14.3	85.7	0		20	20	60		33.3	66.7	0		
Total %	0	16.7	0	16.7	5.6	33.3	0	38.9	5.6	5.6	16.7	27.8	5.6	11.1	0	16.7	

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	**1**	0	1	**1**	0	0	1	0	**1**	0	**1**	3
08:15 AM	0	**3**	0	**3**	0	1	0	1	0	0	1	1	0	0	0	0	**5**
08:30 AM	0	0	0	0	**1**	1	0	**2**	0	0	0	0	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	**2**	**2**	**1**	0	0	1	3
Total Volume	0	3	0	3	1	3	0	4	1	0	3	4	1	1	0	2	13
% App. Total	0	100	0		25	75	0		25	0	75		50	50	0		
PHF	.000	.250	.000	.250	.250	.750	.000	.500	.250	.000	.375	.500	.250	.250	.000	.500	.650

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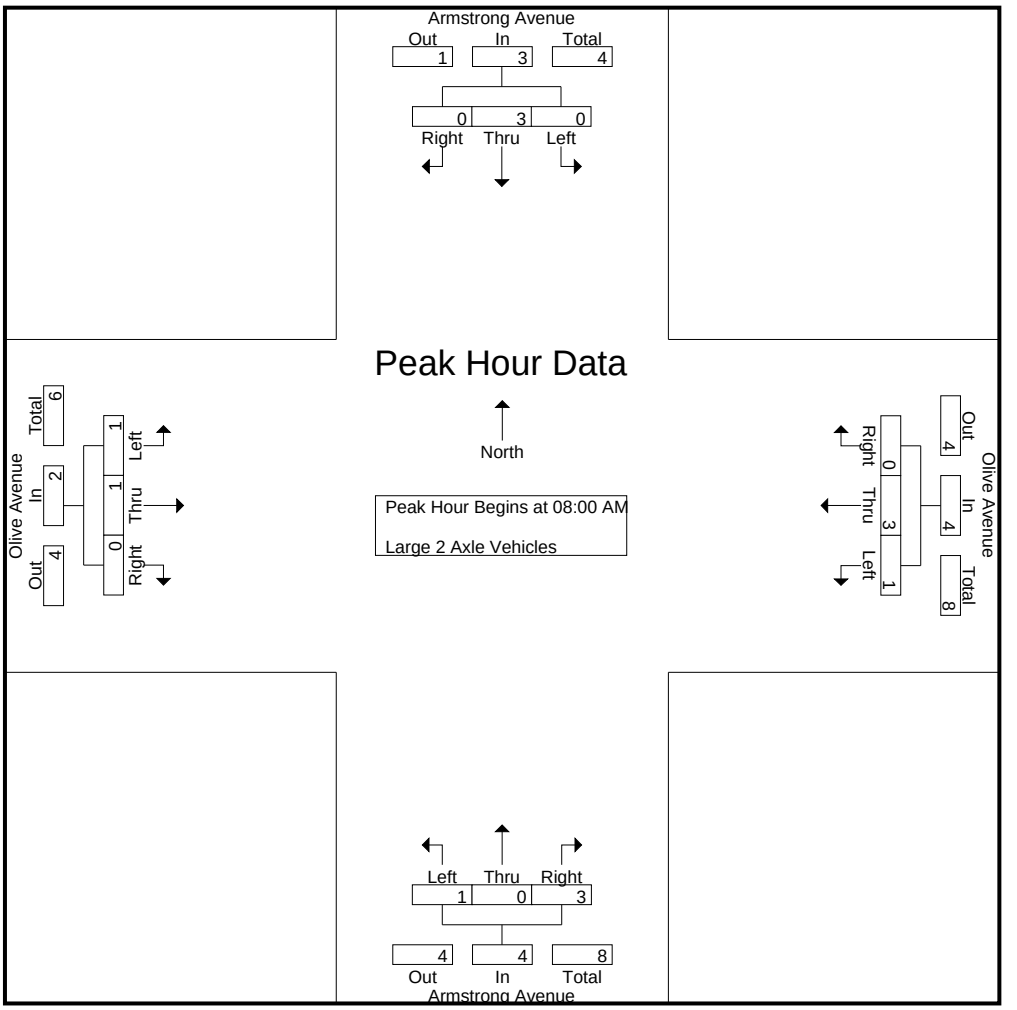

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	**1**	0	1	**1**	0	0	1	0	**1**	0	**1**
+15 mins.	0	**3**	0	**3**	0	1	0	1	0	0	1	1	0	0	0	0
+30 mins.	0	0	0	0	**1**	1	0	**2**	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	**2**	**2**	**1**	0	0	1
Total Volume	0	3	0	3	1	3	0	4	1	0	3	4	1	1	0	2
% App. Total	0	100	0		25	75	0		25	0	75		50	50	0	
PHF	.000	.250	.000	.250	.250	.750	.000	.500	.250	.000	.375	.500	.250	.250	.000	.500

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Groups Printed- 3 Axle Vehicles

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Grand Total	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
Apprch %	0	0	0		0	100	0		100	0	0		0	0	0		
Total %	0	0	0	0	0	50	0	50	50	0	0	50	0	0	0	0	

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	**1**
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.250

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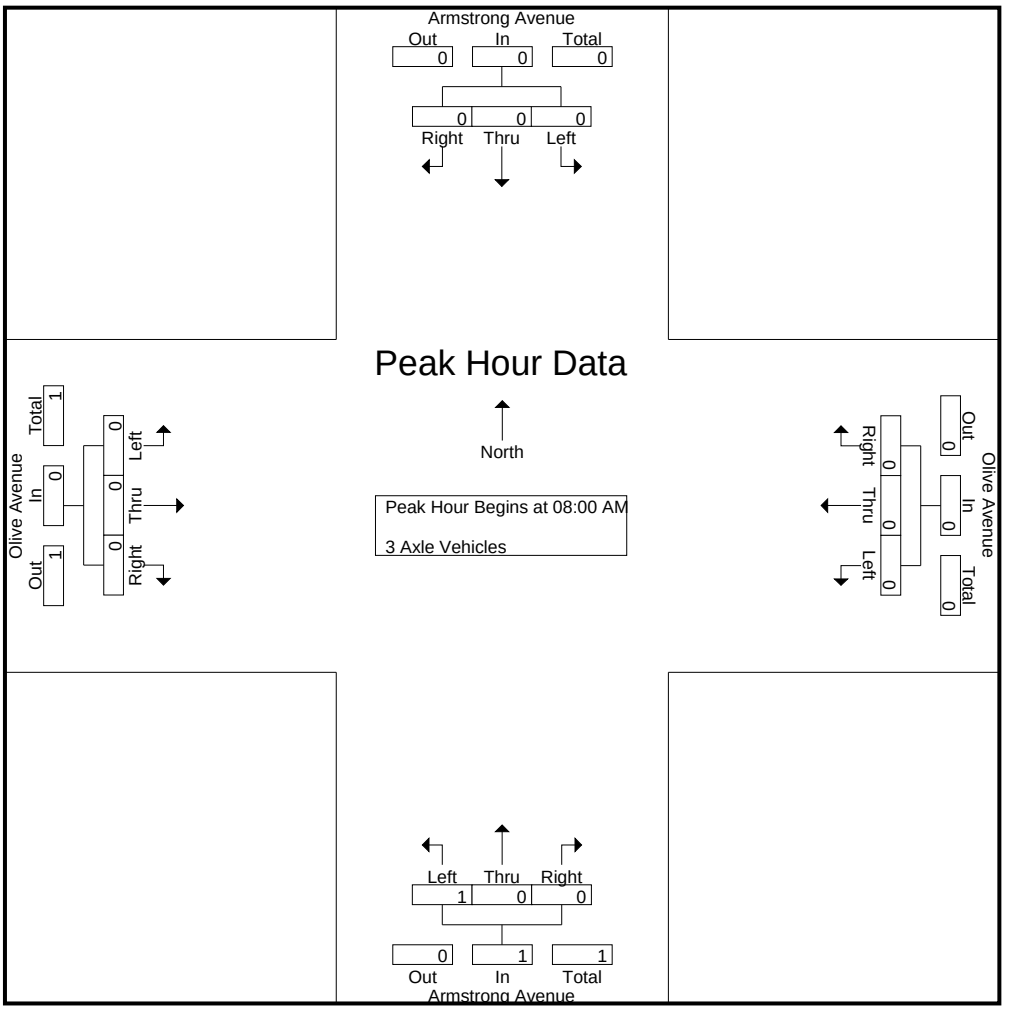

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
% App. Total	0	0	0		0	0	0		100	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:45 AM	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	2
Total	0	0	1	1	0	0	0	0	0	0	1	1	1	0	0	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
Grand Total	0	0	1	1	0	1	0	1	0	0	1	1	2	0	0	2	5
Apprch %	0	0	100		0	100	0		0	0	100		100	0	0		
Total %	0	0	20	20	0	20	0	20	0	0	20	20	40	0	0	40	

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**	**1**
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
% App. Total	0	0	0		0	100	0		0	0	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250	.000	.000	.250	.500

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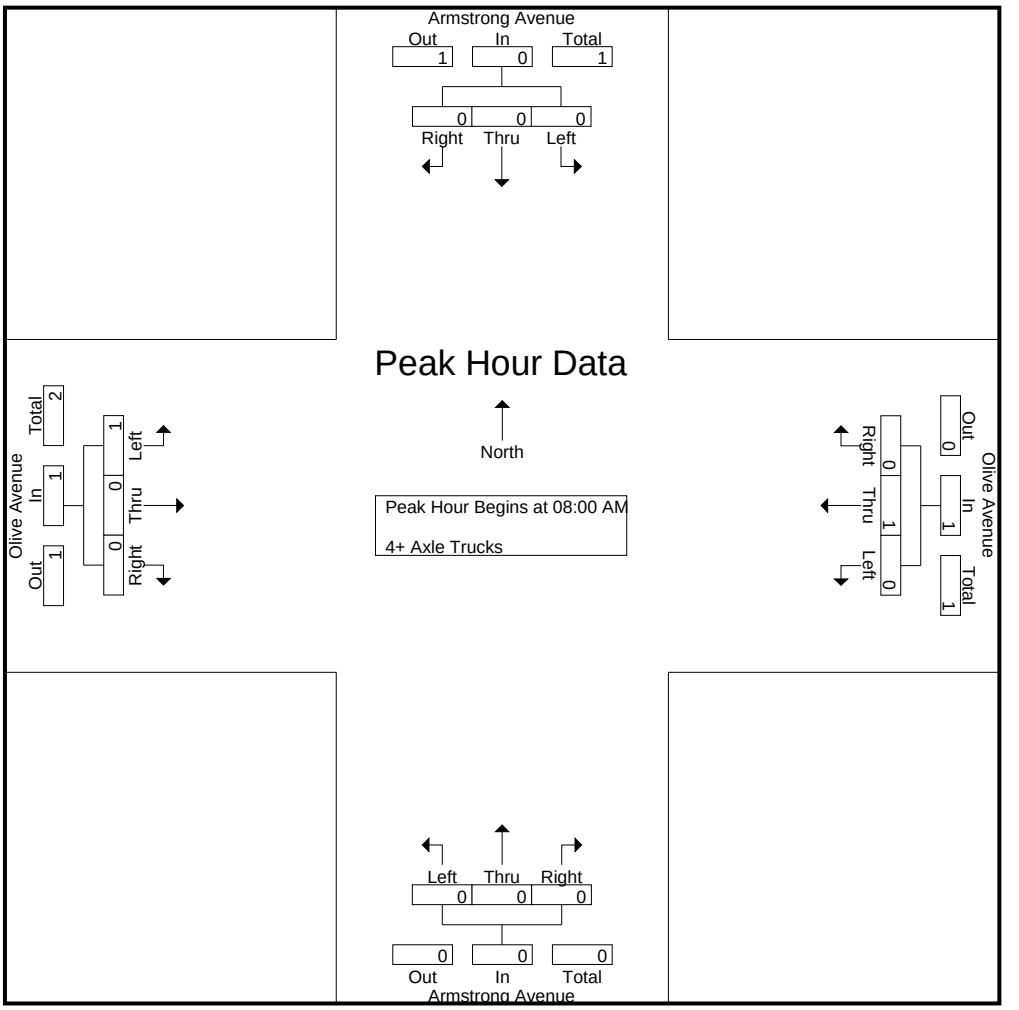

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1
% App. Total	0	0	0		0	100	0		0	0	0		100	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250	.000	.000	.250

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	6	8	14	1	40	0	41	13	3	20	36	3	36	2	41	132
04:15 PM	1	9	10	20	18	54	1	73	10	12	29	51	1	41	2	44	188
04:30 PM	4	20	17	41	24	72	0	96	9	6	33	48	2	34	3	39	224
04:45 PM	1	24	17	42	17	56	2	75	12	9	40	61	5	43	4	52	230
Total	6	59	52	117	60	222	3	285	44	30	122	196	11	154	11	176	774
05:00 PM	1	18	11	30	21	42	1	64	19	8	40	67	5	47	1	53	214
05:15 PM	0	15	12	27	10	39	1	50	12	12	32	56	9	33	1	43	176
05:30 PM	1	9	10	20	8	25	1	34	12	10	45	67	3	53	4	60	181
05:45 PM	1	8	7	16	7	35	1	43	14	14	41	69	6	47	3	56	184
Total	3	50	40	93	46	141	4	191	57	44	158	259	23	180	9	212	755
Grand Total	9	109	92	210	106	363	7	476	101	74	280	455	34	334	20	388	1529
Apprch %	4.3	51.9	43.8		22.3	76.3	1.5		22.2	16.3	61.5		8.8	86.1	5.2		
Total %	0.6	7.1	6	13.7	6.9	23.7	0.5	31.1	6.6	4.8	18.3	29.8	2.2	21.8	1.3	25.4	
Passenger Vehicles	9	106	91	206	106	354	7	467	99	72	278	449	34	331	19	384	1506
% Passenger Vehicles	100	97.2	98.9	98.1	100	97.5	100	98.1	98	97.3	99.3	98.7	100	99.1	95	99	98.5
Large 2 Axle Vehicles	0	3	1	4	0	3	0	3	1	2	2	5	0	3	1	4	16
% Large 2 Axle Vehicles	0	2.8	1.1	1.9	0	0.8	0	0.6	1	2.7	0.7	1.1	0	0.9	5	1	1
3 Axle Vehicles	0	0	0	0	0	2	0	2	1	0	0	1	0	0	0	0	3
% 3 Axle Vehicles	0	0	0	0	0	0.6	0	0.4	1	0	0	0.2	0	0	0	0	0.2
4+ Axle Trucks	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
% 4+ Axle Trucks	0	0	0	0	0	1.1	0	0.8	0	0	0	0	0	0	0	0	0.3

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	9	10	20	18	54	1	73	10	**12**	29	51	1	41	2	44	188
04:30 PM	**4**	20	**17**	41	**24**	**72**	0	**96**	9	6	33	48	2	34	3	39	224
04:45 PM	1	**24**	17	**42**	17	56	**2**	75	12	9	**40**	61	**5**	43	**4**	52	**230**
05:00 PM	1	18	11	30	21	42	1	64	**19**	8	40	**67**	5	**47**	1	**53**	214
Total Volume	7	71	55	133	80	224	4	308	50	35	142	227	13	165	10	188	856
% App. Total	5.3	53.4	41.4		26	72.7	1.3		22	15.4	62.6		6.9	87.8	5.3		
PHF	.438	.740	.809	.792	.833	.778	.500	.802	.658	.729	.888	.847	.650	.878	.625	.887	.930

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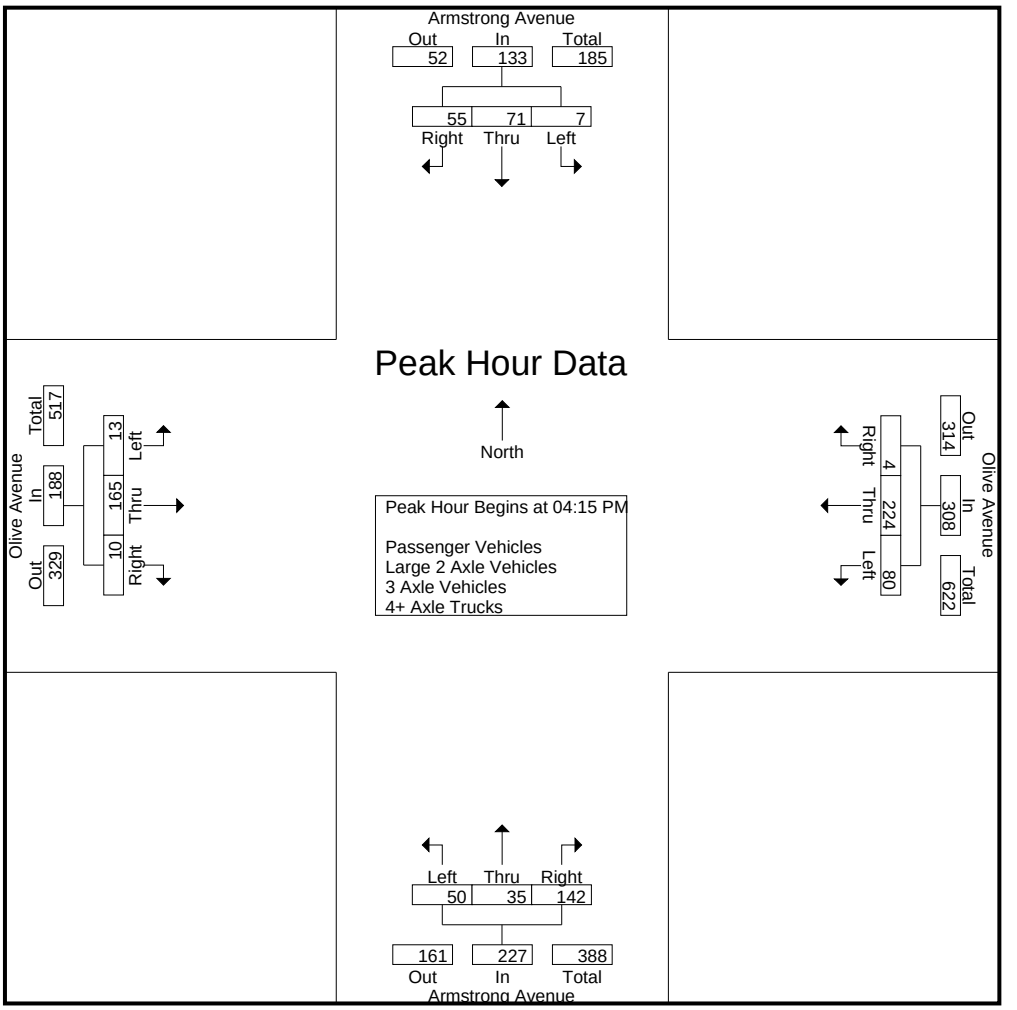

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				05:00 PM				05:00 PM			
+0 mins.	**4**	20	**17**	41	18	54	1	73	**19**	8	40	67	5	47	1	53
+15 mins.	1	**24**	17	**42**	**24**	**72**	0	**96**	12	12	32	56	**9**	33	1	43
+30 mins.	1	18	11	30	17	56	**2**	75	12	10	**45**	67	3	**53**	**4**	**60**
+45 mins.	0	15	12	27	21	42	1	64	14	**14**	41	**69**	6	47	3	56
Total Volume	6	77	57	140	80	224	4	308	57	44	158	259	23	180	9	212
% App. Total	4.3	55	40.7		26	72.7	1.3		22	17	61		10.8	84.9	4.2	
PHF	.375	.802	.838	.833	.833	.778	.500	.802	.750	.786	.878	.938	.639	.849	.563	.883

Counts Unlimited, Inc.
PO Box 1178
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City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	6	8	14	1	38	0	39	13	3	20	36	3	35	2	40	129
04:15 PM	1	8	10	19	18	54	1	73	9	12	27	48	1	40	2	43	183
04:30 PM	4	18	17	39	24	68	0	92	9	6	33	48	2	34	3	39	218
04:45 PM	1	24	17	42	17	55	2	74	12	9	40	61	5	43	4	52	229
Total	6	56	52	114	60	215	3	278	43	30	120	193	11	152	11	174	759
05:00 PM	1	18	10	29	21	41	1	63	18	7	40	65	5	47	1	53	210
05:15 PM	0	15	12	27	10	39	1	50	12	12	32	56	9	32	1	42	175
05:30 PM	1	9	10	20	8	24	1	33	12	9	45	66	3	53	3	59	178
05:45 PM	1	8	7	16	7	35	1	43	14	14	41	69	6	47	3	56	184
Total	3	50	39	92	46	139	4	189	56	42	158	256	23	179	8	210	747
Grand Total	9	106	91	206	106	354	7	467	99	72	278	449	34	331	19	384	1506
Apprch %	4.4	51.5	44.2		22.7	75.8	1.5		22	16	61.9		8.9	86.2	4.9		
Total %	0.6	7	6	13.7	7	23.5	0.5	31	6.6	4.8	18.5	29.8	2.3	22	1.3	25.5	

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	8	10	19	18	54	1	73	9	**12**	27	48	1	40	2	43	183
04:30 PM	**4**	18	**17**	39	**24**	**68**	0	**92**	9	6	33	48	2	34	3	39	218
04:45 PM	1	**24**	17	**42**	17	55	**2**	74	12	9	**40**	61	**5**	43	**4**	52	**229**
05:00 PM	1	18	10	29	21	41	1	63	**18**	7	40	**65**	5	**47**	1	**53**	210
Total Volume	7	68	54	129	80	218	4	302	48	34	140	222	13	164	10	187	840
% App. Total	5.4	52.7	41.9		26.5	72.2	1.3		21.6	15.3	63.1		7	87.7	5.3		
PHF	.438	.708	.794	.768	.833	.801	.500	.821	.667	.708	.875	.854	.650	.872	.625	.882	.917

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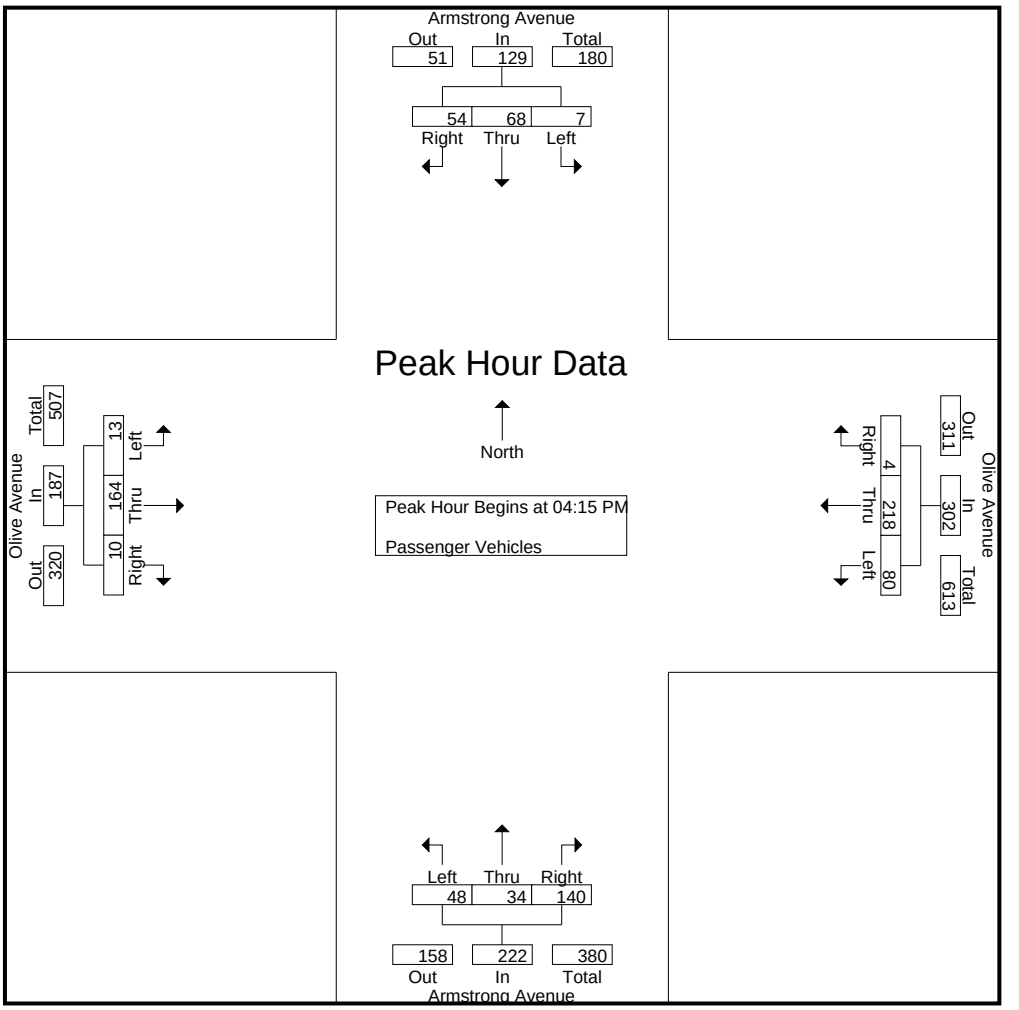
City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli PM
Site Code : 00322994
Start Date : 11/10/2022



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	1	8	10	19	18	54	1	73	9	**12**	27	48	1	40	2	43
+15 mins.	**4**	18	**17**	39	**24**	**68**	0	**92**	9	6	33	48	2	34	3	39
+30 mins.	1	**24**	17	**42**	17	55	**2**	74	12	9	**40**	61	**5**	43	**4**	52
+45 mins.	1	18	10	29	21	41	1	63	**18**	7	40	**65**	5	**47**	1	**53**
Total Volume	7	68	54	129	80	218	4	302	48	34	140	222	13	164	10	187
% App. Total	5.4	52.7	41.9		26.5	72.2	1.3		21.6	15.3	63.1		7	87.7	5.3	
PHF	.438	.708	.794	.768	.833	.801	.500	.821	.667	.708	.875	.854	.650	.872	.625	.882

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City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:15 PM	0	1	0	1	0	0	0	0	1	0	2	3	0	1	0	1	5
04:30 PM	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	3	0	2	0	2	1	0	2	3	0	2	0	2	10
05:00 PM	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	1	0	1	0	2	0	2	0	1	1	2	6
Grand Total	0	3	1	4	0	3	0	3	1	2	2	5	0	3	1	4	16
Apprch %	0	75	25		0	100	0		20	40	40		0	75	25		
Total %	0	18.8	6.2	25	0	18.8	0	18.8	6.2	12.5	12.5	31.2	0	18.8	6.2	25	

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	1	0	1	0	0	0	0	**1**	0	**2**	**3**	0	**1**	0	**1**	**5**
04:30 PM	0	**2**	0	**2**	0	**1**	0	**1**	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	**1**	1	0	1	0	1	0	**1**	0	1	0	0	0	0	3
Total Volume	0	3	1	4	0	2	0	2	1	1	2	4	0	1	0	1	11
% App. Total	0	75	25		0	100	0		25	25	50		0	100	0		
PHF	.000	.375	.250	.500	.000	.500	.000	.500	.250	.250	.250	.333	.000	.250	.000	.250	.550

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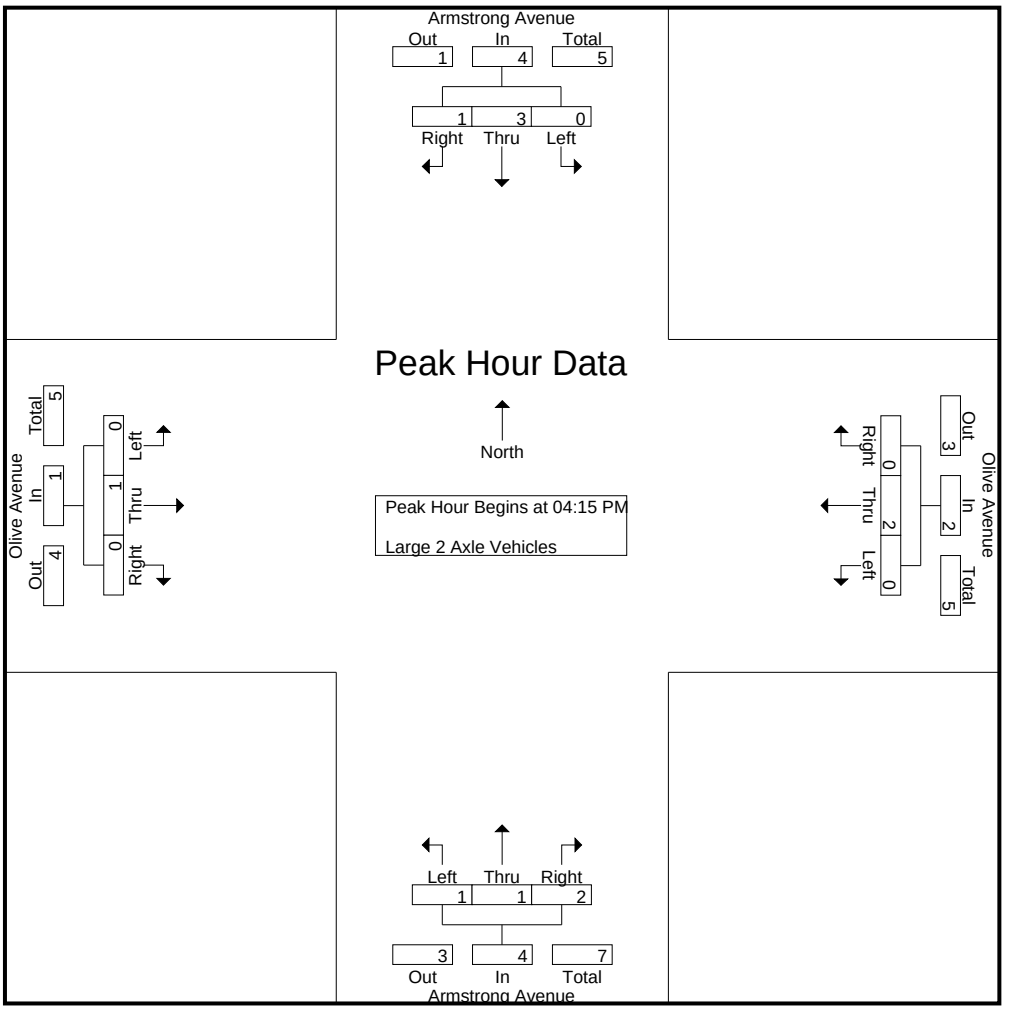
City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	1	0	1	0	0	0	0	**1**	0	**2**	**3**	0	**1**	0	**1**
+15 mins.	0	**2**	0	**2**	0	**1**	0	**1**	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	**1**	1	0	1	0	1	0	**1**	0	1	0	0	0	0
Total Volume	0	3	1	4	0	2	0	2	1	1	2	4	0	1	0	1
% App. Total	0	75	25		0	100	0		25	25	50		0	100	0	
PHF	.000	.375	.250	.500	.000	.500	.000	.500	.250	.250	.250	.333	.000	.250	.000	.250

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City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Grand Total	0	0	0	0	0	2	0	2	1	0	0	1	0	0	0	0	3
Apprch %	0	0	0		0	100	0		100	0	0		0	0	0		
Total %	0	0	0	0	0	66.7	0	66.7	33.3	0	0	33.3	0	0	0	0	

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	**1**
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	1
Total Volume	0	0	0	0	0	2	0	2	1	0	0	1	0	0	0	0	3
% App. Total	0	0	0		0	100	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.250	.000	.000	.250	.000	.000	.000	.000	.750

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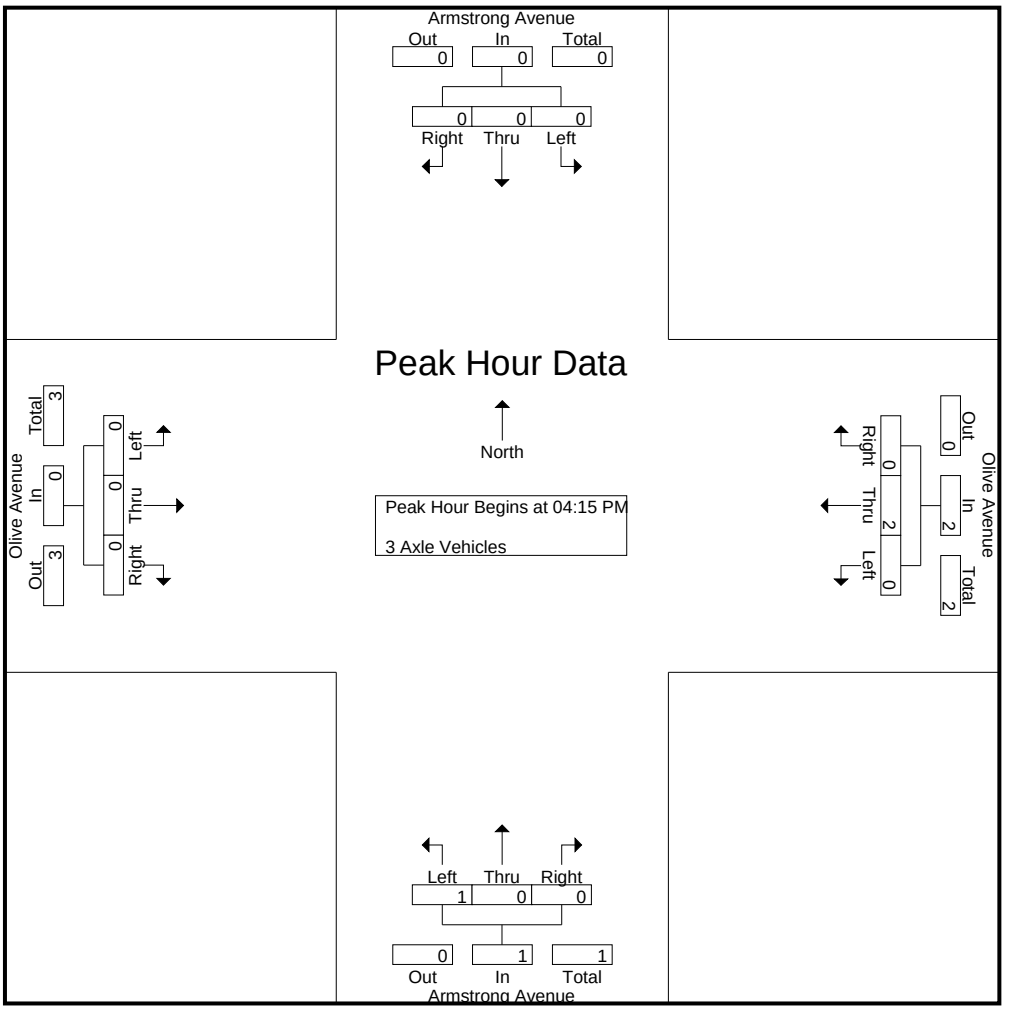
City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	1	0	0	1	0	0	0	0
% App. Total	0	0	0		0	100	0		100	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.250	.000	.000	.250	.000	.000	.000	.000

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City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	

	Armstrong Avenue Southbound				Olive Avenue Westbound				Armstrong Avenue Northbound				Olive Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	0	0	0	**2**
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
% App. Total	0	0	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

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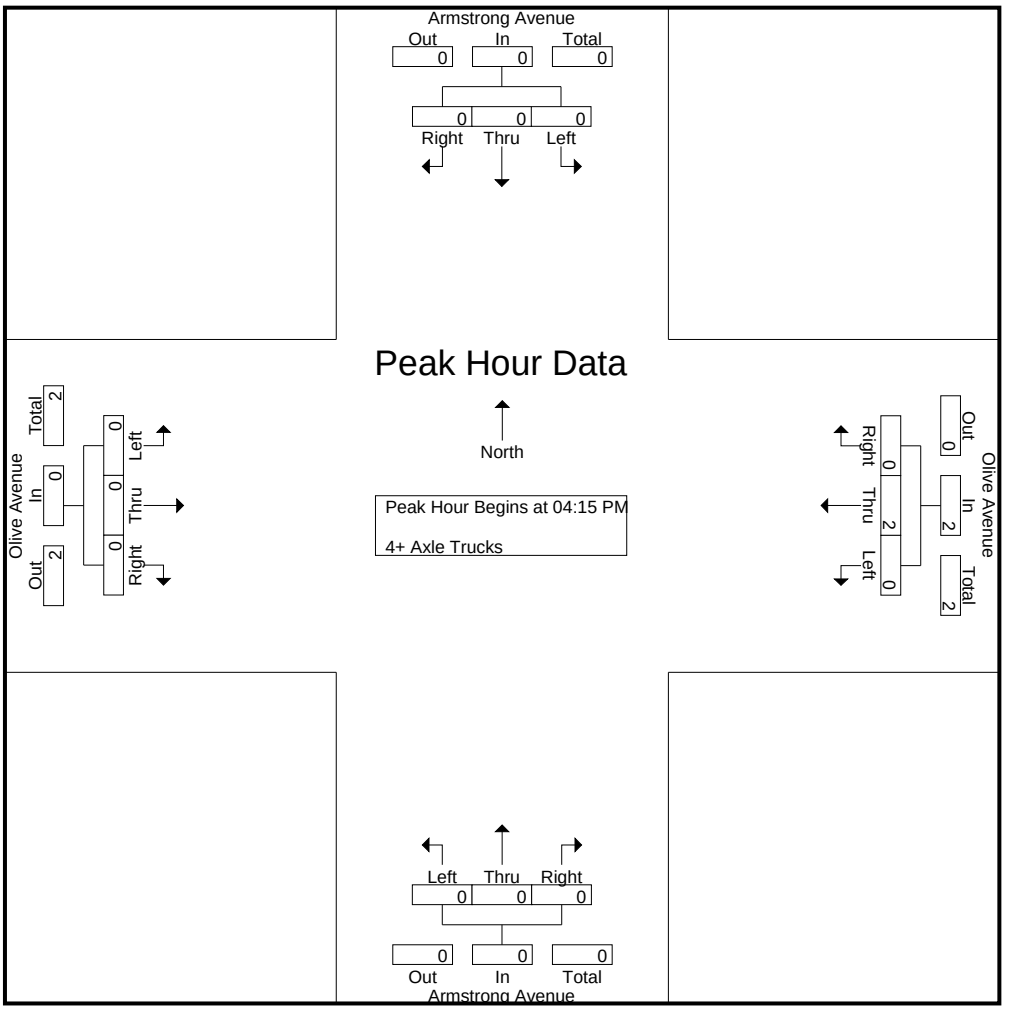
City of Fresno
N/S: Armstrong Avenue
E/W: Olive Avenue
Weather: Clear

File Name : 08_FSO_Arm_Oli PM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	100	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000

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City of Fresno
N/S: Temperance Avenue
E/W: McKinley Avenue
Weather: Clear

File Name : 10_FSO_Temp_McK AM
Site Code : 00322994
Start Date : 11/10/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	72	73	12	3	15	42	6	48	136
07:15 AM	1	94	95	9	10	19	44	6	50	164
07:30 AM	4	125	129	13	15	28	61	13	74	231
07:45 AM	11	117	128	16	16	32	87	11	98	258
Total	17	408	425	50	44	94	234	36	270	789
08:00 AM	13	123	136	15	14	29	66	8	74	239
08:15 AM	18	147	165	26	28	54	94	12	106	325
08:30 AM	20	163	183	15	28	43	108	15	123	349
08:45 AM	21	126	147	16	20	36	79	32	111	294
Total	72	559	631	72	90	162	347	67	414	1207
Grand Total	89	967	1056	122	134	256	581	103	684	1996
Apprch %	8.4	91.6		47.7	52.3		84.9	15.1		
Total %	4.5	48.4	52.9	6.1	6.7	12.8	29.1	5.2	34.3	
Passenger Vehicles	85	955	1040	119	128	247	541	94	635	1922
% Passenger Vehicles	95.5	98.8	98.5	97.5	95.5	96.5	93.1	91.3	92.8	96.3
Large 2 Axle Vehicles	4	8	12	3	6	9	32	6	38	59
% Large 2 Axle Vehicles	4.5	0.8	1.1	2.5	4.5	3.5	5.5	5.8	5.6	3
3 Axle Vehicles	0	1	1	0	0	0	6	3	9	10
% 3 Axle Vehicles	0	0.1	0.1	0	0	0	1	2.9	1.3	0.5
4+ Axle Trucks	0	3	3	0	0	0	2	0	2	5
% 4+ Axle Trucks	0	0.3	0.3	0	0	0	0.3	0	0.3	0.3

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	13	123	136	15	14	29	66	8	74	239
08:15 AM	18	147	165	**26**	**28**	**54**	94	12	106	325
08:30 AM	20	**163**	**183**	15	28	43	**108**	15	**123**	**349**
08:45 AM	**21**	126	147	16	20	36	79	**32**	111	294
Total Volume	72	559	631	72	90	162	347	67	414	1207
% App. Total	11.4	88.6		44.4	55.6		83.8	16.2		
PHF	.857	.857	.862	.692	.804	.750	.803	.523	.841	.865

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City of Fresno
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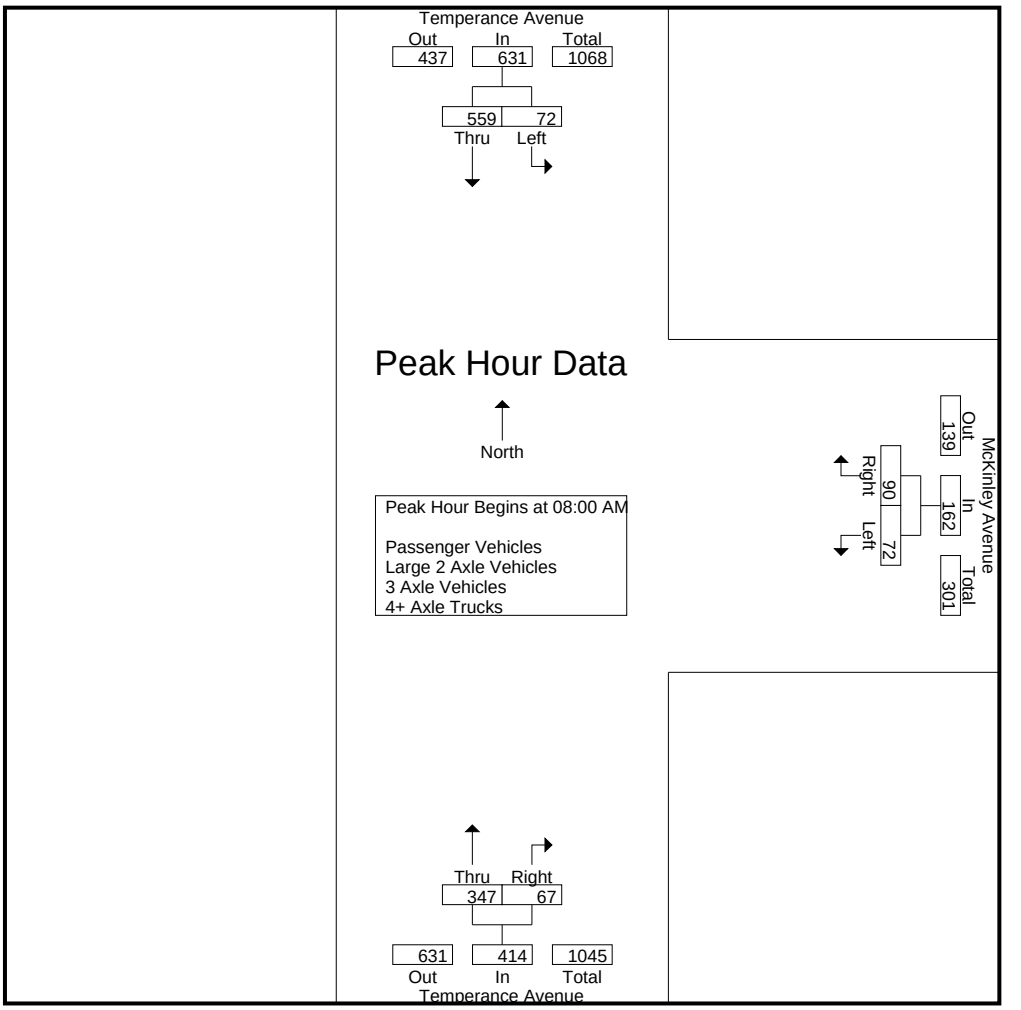
E/W: McKinley Avenue
Weather: Clear

File Name : 10_FSO_Temp_McK AM
Site Code : 00322994
Start Date : 11/10/2022



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	13	123	136	15	14	29	66	8	74
+15 mins.	18	147	165	**26**	**28**	**54**	94	12	106
+30 mins.	20	**163**	**183**	15	28	43	**108**	15	**123**
+45 mins.	**21**	126	147	16	20	36	79	**32**	111
Total Volume	72	559	631	72	90	162	347	67	414
% App. Total	11.4	88.6		44.4	55.6		83.8	16.2	
PHF	.857	.857	.862	.692	.804	.750	.803	.523	.841

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Groups Printed- Passenger Vehicles

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	71	72	11	3	14	36	6	42	128
07:15 AM	1	94	95	9	10	19	36	5	41	155
07:30 AM	4	121	125	13	15	28	60	10	70	223
07:45 AM	10	116	126	15	14	29	83	11	94	249
Total	16	402	418	48	42	90	215	32	247	755
08:00 AM	12	120	132	15	12	27	60	8	68	227
08:15 AM	16	145	161	26	27	53	89	10	99	313
08:30 AM	20	162	182	15	27	42	103	15	118	342
08:45 AM	21	126	147	15	20	35	74	29	103	285
Total	69	553	622	71	86	157	326	62	388	1167
Grand Total	85	955	1040	119	128	247	541	94	635	1922
Apprch %	8.2	91.8		48.2	51.8		85.2	14.8		
Total %	4.4	49.7	54.1	6.2	6.7	12.9	28.1	4.9	33	

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	12	120	132	15	12	27	60	8	68	227
08:15 AM	16	145	161	**26**	**27**	**53**	89	10	99	313
08:30 AM	20	**162**	**182**	15	27	42	**103**	15	**118**	**342**
08:45 AM	**21**	126	147	15	20	35	74	**29**	103	285
Total Volume	69	553	622	71	86	157	326	62	388	1167
% App. Total	11.1	88.9		45.2	54.8		84	16		
PHF	.821	.853	.854	.683	.796	.741	.791	.534	.822	.853

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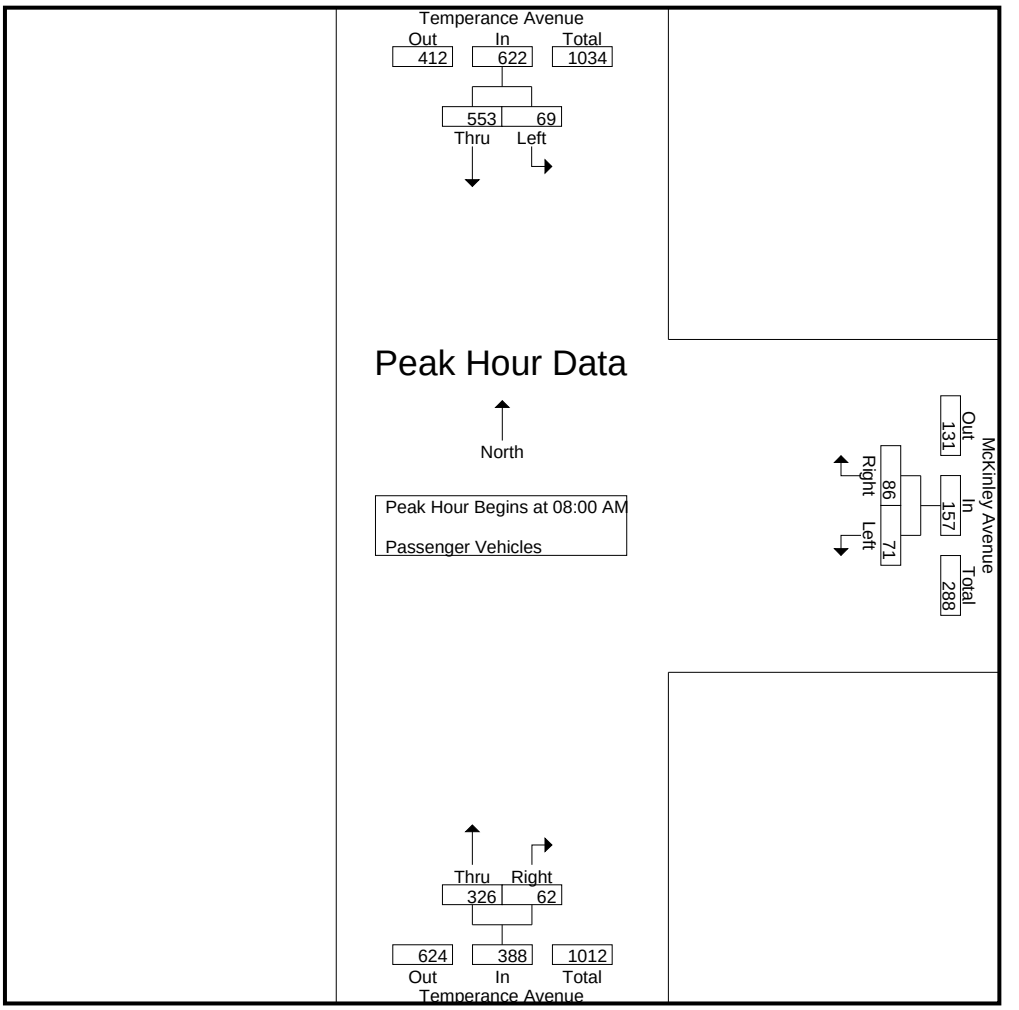

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	12	120	132	15	12	27	60	8	68
+15 mins.	16	145	161	**26**	**27**	**53**	89	10	99
+30 mins.	20	**162**	**182**	15	27	42	**103**	15	**118**
+45 mins.	**21**	126	147	15	20	35	74	**29**	103
Total Volume	69	553	622	71	86	157	326	62	388
% App. Total	11.1	88.9		45.2	54.8		84	16	
PHF	.821	.853	.854	.683	.796	.741	.791	.534	.822

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Groups Printed- Large 2 Axle Vehicles

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	1	1	0	1	3	0	3	5
07:15 AM	0	0	0	0	0	0	6	1	7	7
07:30 AM	0	2	2	0	0	0	1	0	1	3
07:45 AM	1	1	2	1	2	3	3	0	3	8
Total	1	4	5	2	2	4	13	1	14	23
08:00 AM	1	2	3	0	2	2	6	0	6	11
08:15 AM	2	2	4	0	1	1	4	2	6	11
08:30 AM	0	0	0	0	1	1	4	0	4	5
08:45 AM	0	0	0	1	0	1	5	3	8	9
Total	3	4	7	1	4	5	19	5	24	36
Grand Total	4	8	12	3	6	9	32	6	38	59
Apprch %	33.3	66.7		33.3	66.7		84.2	15.8		
Total %	6.8	13.6	20.3	5.1	10.2	15.3	54.2	10.2	64.4	

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	1	**2**	3	0	**2**	**2**	**6**	0	6	**11**
08:15 AM	**2**	2	**4**	0	1	1	4	2	6	11
08:30 AM	0	0	0	0	1	1	4	0	4	5
08:45 AM	0	0	0	**1**	0	1	5	**3**	**8**	9
Total Volume	3	4	7	1	4	5	19	5	24	36
% App. Total	42.9	57.1		20	80		79.2	20.8		
PHF	.375	.500	.438	.250	.500	.625	.792	.417	.750	.818

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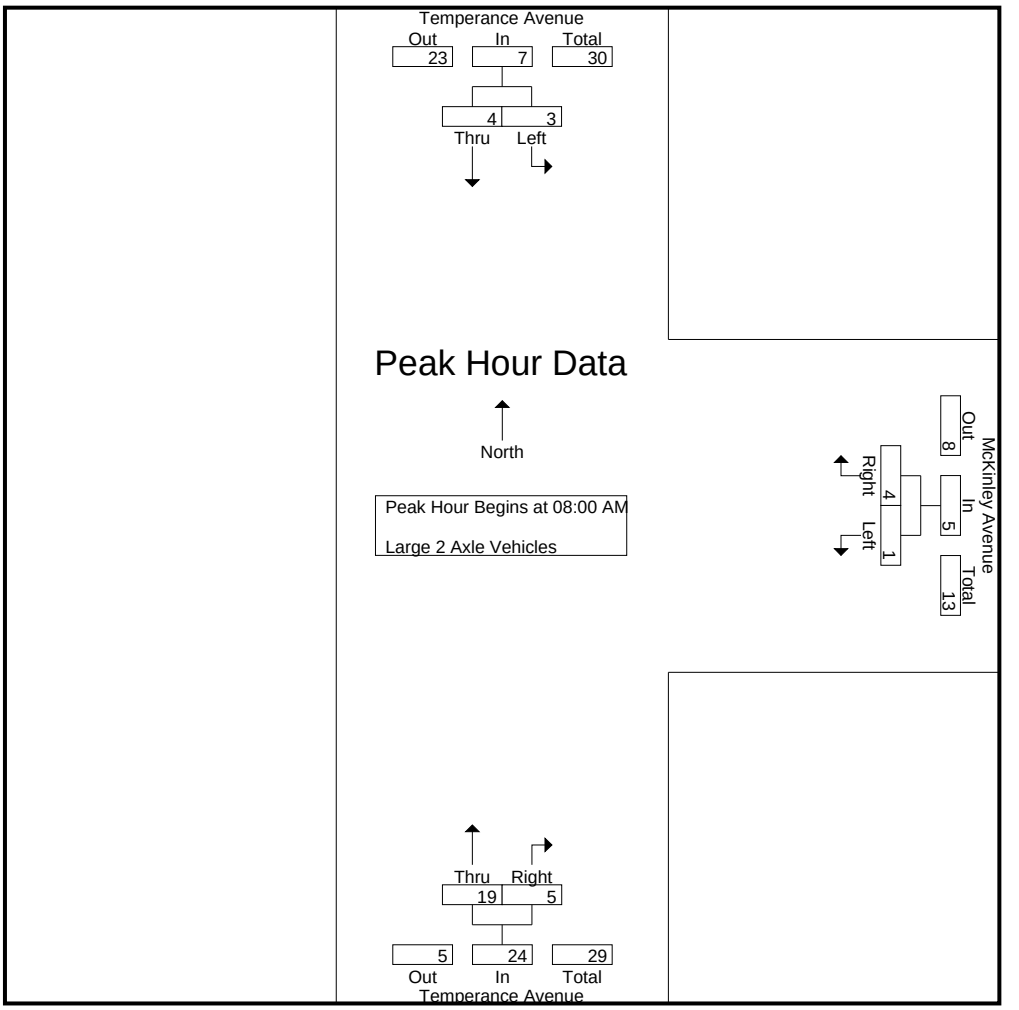

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	1	**2**	3	0	**2**	**2**	**6**	0	6
+15 mins.	**2**	2	**4**	0	1	1	4	2	6
+30 mins.	0	0	0	0	1	1	4	0	4
+45 mins.	0	0	0	**1**	0	1	5	**3**	**8**
Total Volume	3	4	7	1	4	5	19	5	24
% App. Total	42.9	57.1		20	80		79.2	20.8	
PHF	.375	.500	.438	.250	.500	.625	.792	.417	.750

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Groups Printed- 3 Axle Vehicles

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	3	0	3	3
07:15 AM	0	0	0	0	0	0	2	0	2	2
07:30 AM	0	0	0	0	0	0	0	3	3	3
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	6	3	9	9
08:00 AM	0	1	1	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
Grand Total	0	1	1	0	0	0	6	3	9	10
Apprch %	0	100		0	0		66.7	33.3		
Total %	0	10	10	0	0	0	60	30	90	

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	**1**	**1**	0	0	0	0	0	0	**1**
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	0	0	0	1
% App. Total	0	100		0	0		0	0		
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000	.250

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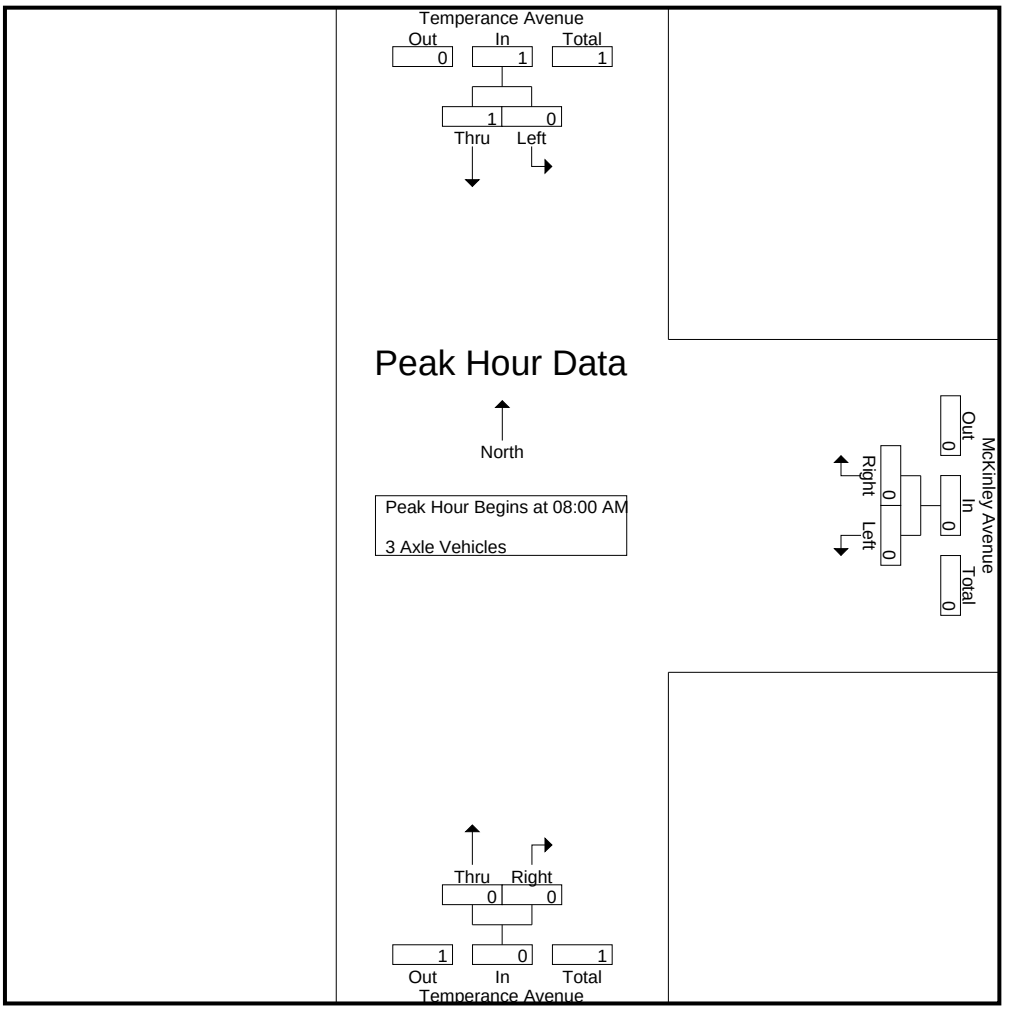

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	**1**	**1**	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	0	0	0
% App. Total	0	100		0	0		0	0	
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	2	2	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	2	2	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	1	1	0	0	0	1	0	1	2
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	2	0	2	3
Grand Total	0	3	3	0	0	0	2	0	2	5
Apprch %	0	100		0	0		100	0		
Total %	0	60	60	0	0	0	40	0	40	

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	**1**	0	**1**	1
08:30 AM	0	**1**	**1**	0	0	0	1	0	1	**2**
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	2	0	2	3
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500	.375

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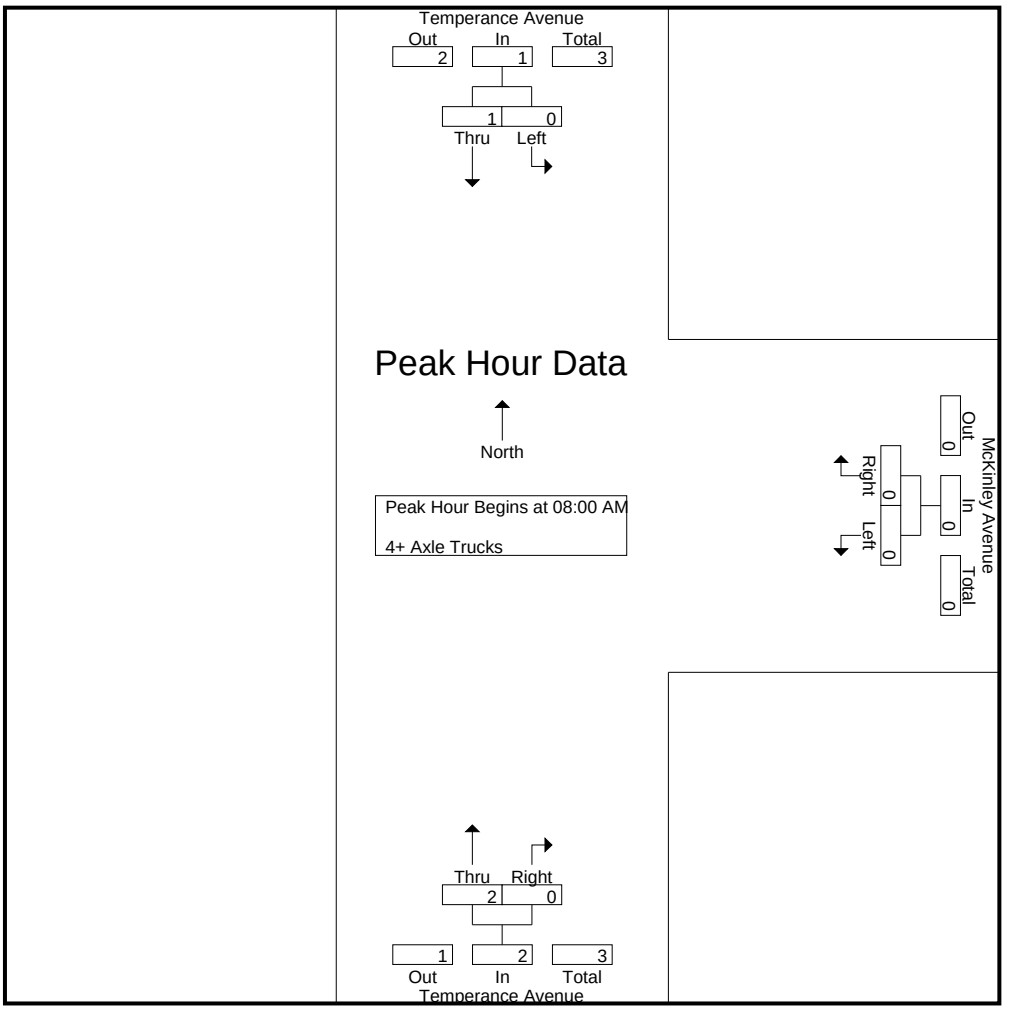

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	**1**	0	**1**
+30 mins.	0	**1**	**1**	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	19	86	105	8	9	17	124	17	141	263
04:15 PM	10	99	109	17	12	29	113	13	126	264
04:30 PM	33	131	164	29	17	46	108	15	123	333
04:45 PM	15	93	108	16	12	28	117	17	134	270
Total	77	409	486	70	50	120	462	62	524	1130
05:00 PM	30	104	134	10	10	20	127	13	140	294
05:15 PM	17	101	118	7	9	16	134	11	145	279
05:30 PM	25	100	125	10	7	17	145	13	158	300
05:45 PM	22	97	119	14	13	27	129	20	149	295
Total	94	402	496	41	39	80	535	57	592	1168
Grand Total	171	811	982	111	89	200	997	119	1116	2298
Apprch %	17.4	82.6		55.5	44.5		89.3	10.7		
Total %	7.4	35.3	42.7	4.8	3.9	8.7	43.4	5.2	48.6	
Passenger Vehicles	167	797	964	111	86	197	975	117	1092	2253
% Passenger Vehicles	97.7	98.3	98.2	100	96.6	98.5	97.8	98.3	97.8	98
Large 2 Axle Vehicles	4	7	11	0	2	2	17	2	19	32
% Large 2 Axle Vehicles	2.3	0.9	1.1	0	2.2	1	1.7	1.7	1.7	1.4
3 Axle Vehicles	0	6	6	0	0	0	2	0	2	8
% 3 Axle Vehicles	0	0.7	0.6	0	0	0	0.2	0	0.2	0.3
4+ Axle Trucks	0	1	1	0	1	1	3	0	3	5
% 4+ Axle Trucks	0	0.1	0.1	0	1.1	0.5	0.3	0	0.3	0.2

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**33**	**131**	**164**	**29**	**17**	**46**	108	15	123	**333**
04:45 PM	15	93	108	16	12	28	117	**17**	134	270
05:00 PM	30	104	134	10	10	20	127	13	140	294
05:15 PM	17	101	118	7	9	16	**134**	11	**145**	279
Total Volume	95	429	524	62	48	110	486	56	542	1176
% App. Total	18.1	81.9		56.4	43.6		89.7	10.3		
PHF	.720	.819	.799	.534	.706	.598	.907	.824	.934	.883

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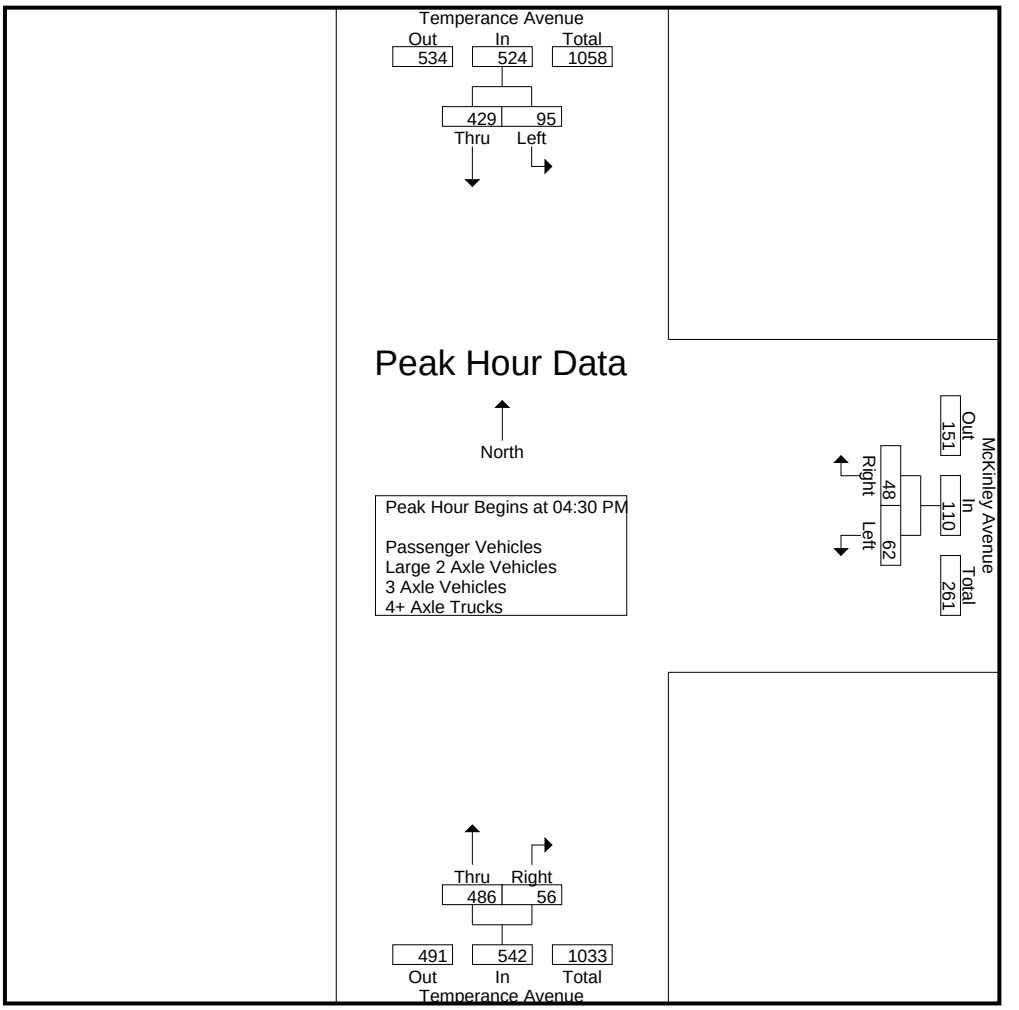

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:15 PM			05:00 PM		
+0 mins.	**33**	**131**	**164**	17	12	29	127	13	140
+15 mins.	15	93	108	**29**	**17**	**46**	134	11	145
+30 mins.	30	104	134	16	12	28	**145**	13	**158**
+45 mins.	17	101	118	10	10	20	129	**20**	149
Total Volume	95	429	524	72	51	123	535	57	592
% App. Total	18.1	81.9		58.5	41.5		90.4	9.6	
PHF	.720	.819	.799	.621	.750	.668	.922	.713	.937

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Groups Printed- Passenger Vehicles

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	19	86	105	8	8	16	120	17	137	258
04:15 PM	9	95	104	17	11	28	108	12	120	252
04:30 PM	32	129	161	29	17	46	107	14	121	328
04:45 PM	15	91	106	16	12	28	115	17	132	266
Total	75	401	476	70	48	118	450	60	510	1104
05:00 PM	30	103	133	10	9	19	125	13	138	290
05:15 PM	17	101	118	7	9	16	131	11	142	276
05:30 PM	24	98	122	10	7	17	142	13	155	294
05:45 PM	21	94	115	14	13	27	127	20	147	289
Total	92	396	488	41	38	79	525	57	582	1149
Grand Total	167	797	964	111	86	197	975	117	1092	2253
Apprch %	17.3	82.7		56.3	43.7		89.3	10.7		
Total %	7.4	35.4	42.8	4.9	3.8	8.7	43.3	5.2	48.5	

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**32**	**129**	**161**	**29**	**17**	**46**	107	14	121	**328**
04:45 PM	15	91	106	16	12	28	115	**17**	132	266
05:00 PM	30	103	133	10	9	19	125	13	138	290
05:15 PM	17	101	118	7	9	16	**131**	11	**142**	276
Total Volume	94	424	518	62	47	109	478	55	533	1160
% App. Total	18.1	81.9		56.9	43.1		89.7	10.3		
PHF	.734	.822	.804	.534	.691	.592	.912	.809	.938	.884

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Weather: Clear

File Name : 10_FSO_Temp_McK PM
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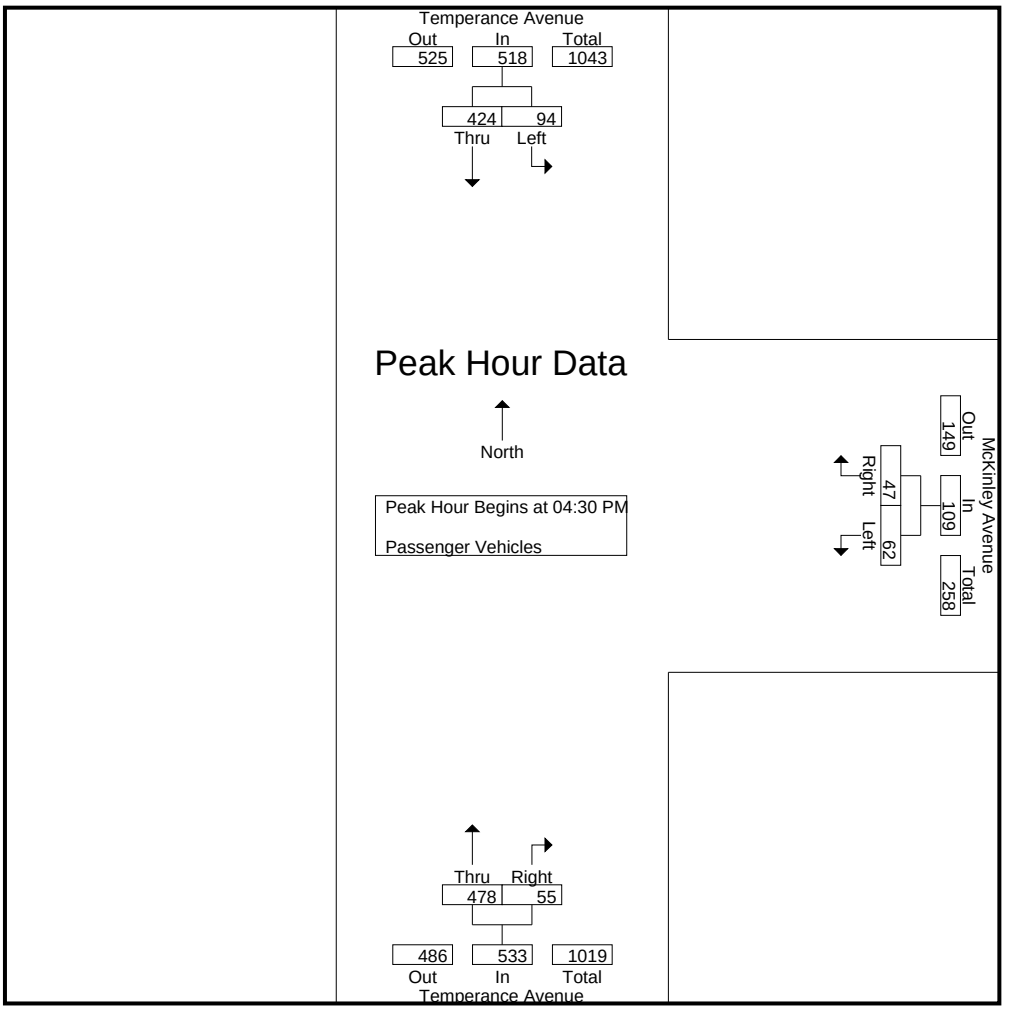

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	**32**	**129**	**161**	**29**	**17**	**46**	107	14	121
+15 mins.	15	91	106	16	12	28	115	**17**	132
+30 mins.	30	103	133	10	9	19	125	13	138
+45 mins.	17	101	118	7	9	16	**131**	11	**142**
Total Volume	94	424	518	62	47	109	478	55	533
% App. Total	18.1	81.9		56.9	43.1		89.7	10.3	
PHF	.734	.822	.804	.534	.691	.592	.912	.809	.938

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Groups Printed- Large 2 Axle Vehicles

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	1	3	4	0	1	1	5	1	6	11
04:30 PM	1	1	2	0	0	0	0	1	1	3
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total	2	4	6	0	1	1	7	2	9	16
05:00 PM	0	1	1	0	1	1	2	0	2	4
05:15 PM	0	0	0	0	0	0	3	0	3	3
05:30 PM	1	1	2	0	0	0	3	0	3	5
05:45 PM	1	1	2	0	0	0	2	0	2	4
Total	2	3	5	0	1	1	10	0	10	16
Grand Total	4	7	11	0	2	2	17	2	19	32
Apprch %	36.4	63.6		0	100		89.5	10.5		
Total %	12.5	21.9	34.4	0	6.2	6.2	53.1	6.2	59.4	

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**1**	**1**	**2**	0	0	0	0	**1**	1	3
04:45 PM	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	1	1	0	**1**	**1**	2	0	2	**4**
05:15 PM	0	0	0	0	0	0	**3**	0	**3**	3
Total Volume	1	2	3	0	1	1	6	1	7	11
% App. Total	33.3	66.7		0	100		85.7	14.3		
PHF	.250	.500	.375	.000	.250	.250	.500	.250	.583	.688

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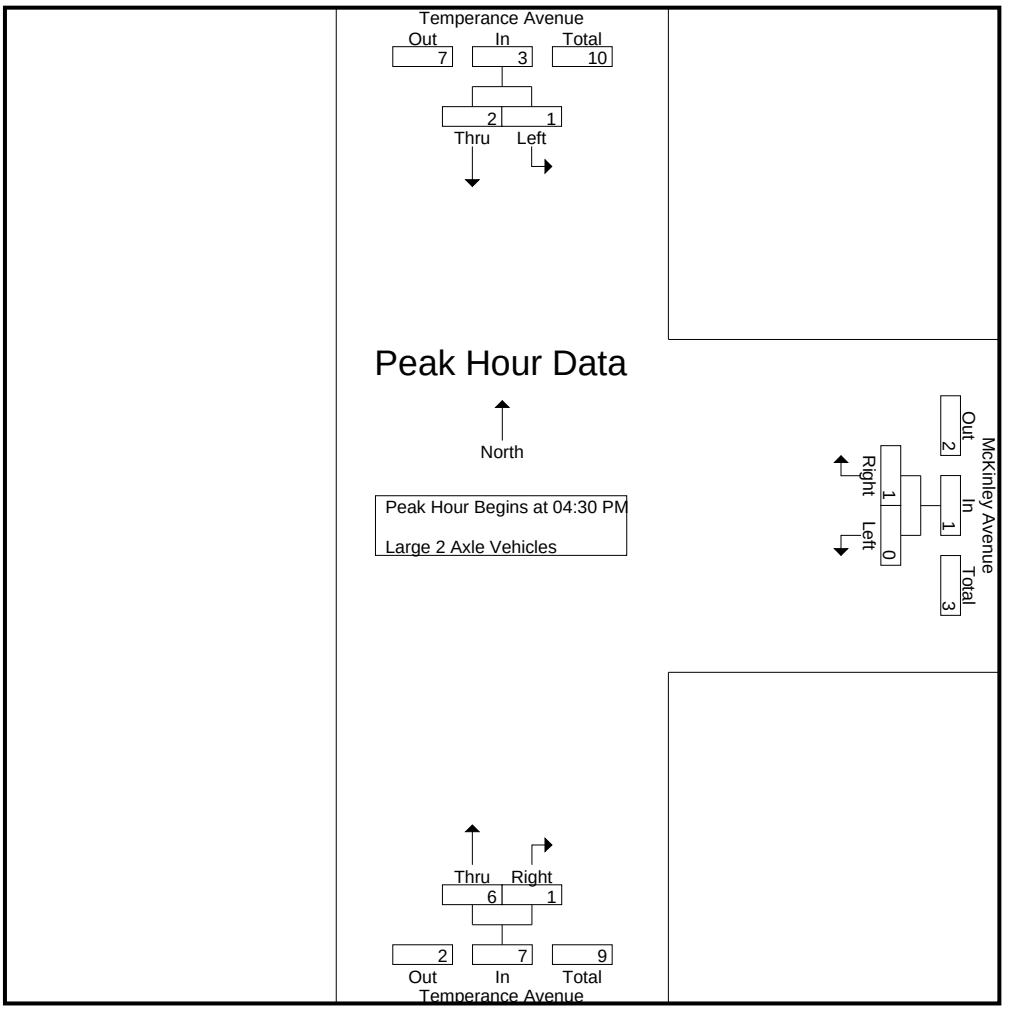

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	**1**	**1**	**2**	0	0	0	0	**1**	1
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	1	1	0	**1**	**1**	2	0	2
+45 mins.	0	0	0	0	0	0	**3**	0	**3**
Total Volume	1	2	3	0	1	1	6	1	7
% App. Total	33.3	66.7		0	100		85.7	14.3	
PHF	.250	.500	.375	.000	.250	.250	.500	.250	.583

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Groups Printed- 3 Axle Vehicles

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	1	1	0	0	0	0	0	0	1
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	1	1	0	0	0	0	0	0	1
Total	0	3	3	0	0	0	2	0	2	5
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	1	0	0	0	0	0	0	1
05:45 PM	0	2	2	0	0	0	0	0	0	2
Total	0	3	3	0	0	0	0	0	0	3
Grand Total	0	6	6	0	0	0	2	0	2	8
Apprch %	0	100		0	0		100	0		
Total %	0	75	75	0	0	0	25	0	25	

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	**1**	**1**	0	0	0	0	0	0	**1**
04:45 PM	0	1	1	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	0	0	0	2
% App. Total	0	100		0	0		0	0		
PHF	.000	.500	.500	.000	.000	.000	.000	.000	.000	.500

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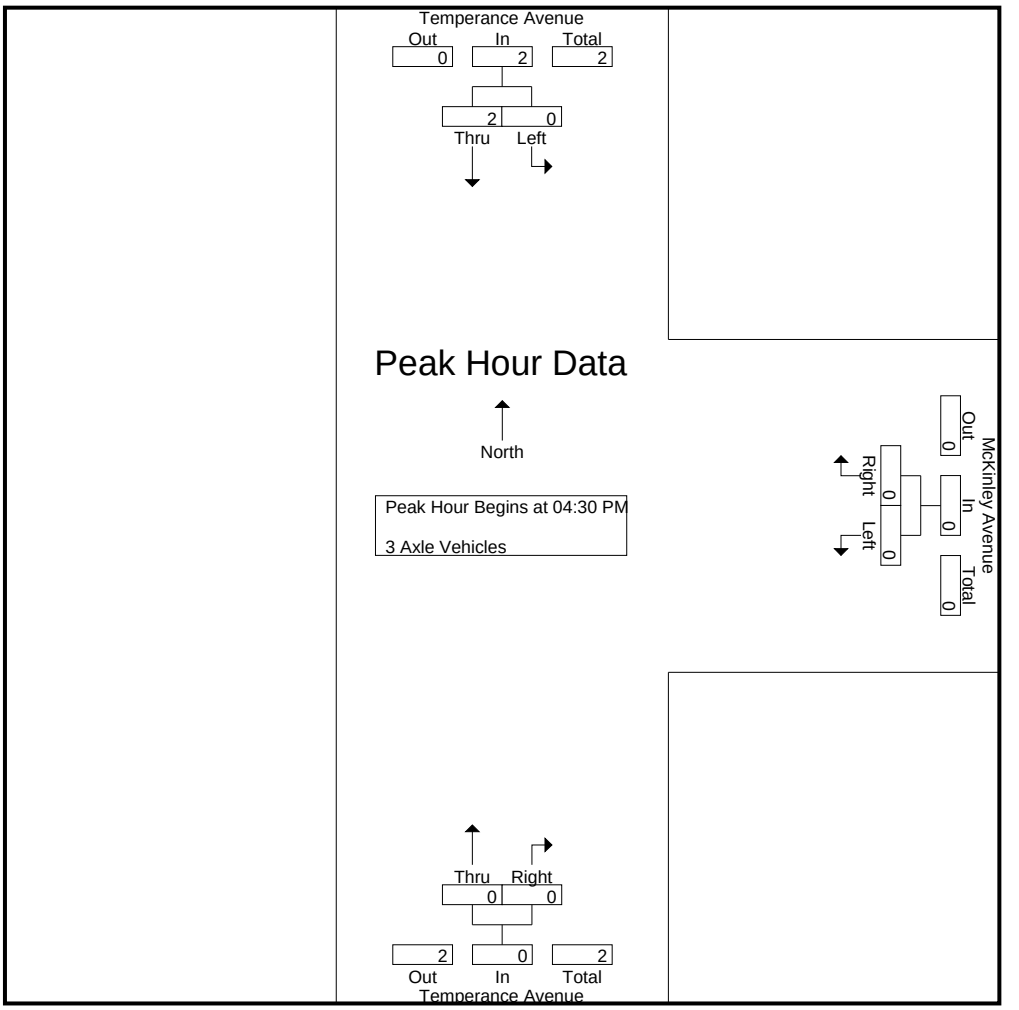

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	**1**	**1**	0	0	0	0	0	0
+15 mins.	0	1	1	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	0	0	0
% App. Total	0	100		0	0		0	0	
PHF	.000	.500	.500	.000	.000	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	1	1	1	0	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	1	1	0	0	0	1	0	1	2
Total	0	1	1	0	1	1	3	0	3	5
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	1	0	1	1	3	0	3	5
Apprch %	0	100		0	100		100	0		
Total %	0	20	20	0	20	20	60	0	60	

	Temperance Avenue Southbound			McKinley Avenue Westbound			Temperance Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	0	0	0	0	0	**1**	0	**1**	1
04:45 PM	0	**1**	**1**	0	0	0	1	0	1	**2**
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	2	0	2	3
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500	.375

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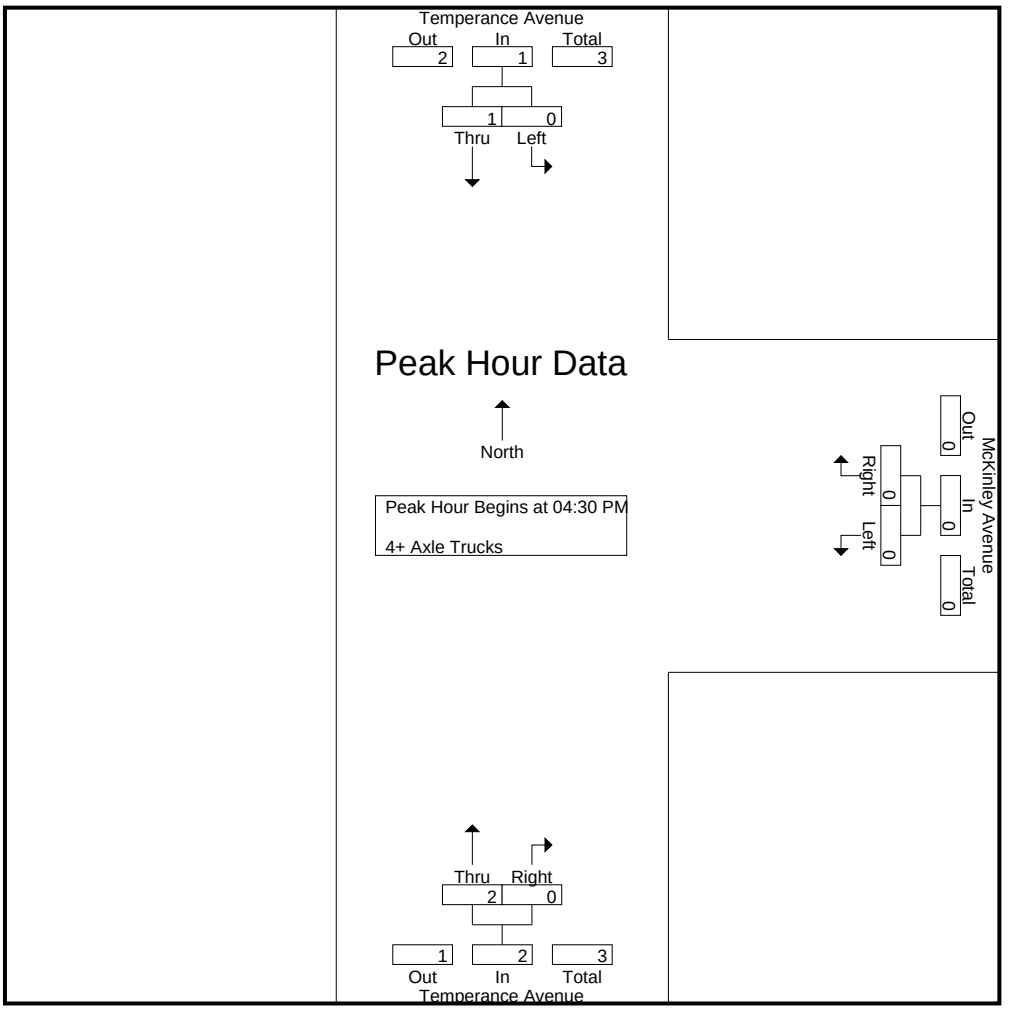

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	**1**	**1**	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	68	0	68	0	0	0	0	0	36	0	36	1	0	1	2	106
07:15 AM	0	97	3	100	0	0	0	0	0	47	0	47	0	0	0	0	147
07:30 AM	0	128	3	131	0	0	0	0	0	65	0	65	3	0	0	3	199
07:45 AM	0	104	20	124	0	0	0	0	1	92	0	93	2	0	0	2	219
Total	0	397	26	423	0	0	0	0	1	240	0	241	6	0	1	7	671
08:00 AM	0	124	21	145	1	0	0	1	1	75	0	76	3	0	0	3	225
08:15 AM	0	103	42	145	0	0	0	0	0	93	0	93	3	0	1	4	242
08:30 AM	0	127	48	175	0	0	0	0	3	107	0	110	2	0	0	2	287
08:45 AM	0	136	41	177	0	0	0	0	2	115	0	117	9	0	1	10	304
Total	0	490	152	642	1	0	0	1	6	390	0	396	17	0	2	19	1058
Grand Total	0	887	178	1065	1	0	0	1	7	630	0	637	23	0	3	26	1729
Apprch %	0	83.3	16.7		100	0	0		1.1	98.9	0		88.5	0	11.5		
Total %	0	51.3	10.3	61.6	0.1	0	0	0.1	0.4	36.4	0	36.8	1.3	0	0.2	1.5	
Passenger Vehicles	0	874	173	1047	1	0	0	1	6	599	0	605	21	0	3	24	1677
% Passenger Vehicles	0	98.5	97.2	98.3	100	0	0	100	85.7	95.1	0	95	91.3	0	100	92.3	97
Large 2 Axle Vehicles	0	10	3	13	0	0	0	0	1	23	0	24	1	0	0	1	38
% Large 2 Axle Vehicles	0	1.1	1.7	1.2	0	0	0	0	14.3	3.7	0	3.8	4.3	0	0	3.8	2.2
3 Axle Vehicles	0	2	0	2	0	0	0	0	0	6	0	6	1	0	0	1	9
% 3 Axle Vehicles	0	0.2	0	0.2	0	0	0	0	0	1	0	0.9	4.3	0	0	3.8	0.5
4+ Axle Trucks	0	1	2	3	0	0	0	0	0	2	0	2	0	0	0	0	5
% 4+ Axle Trucks	0	0.1	1.1	0.3	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0.3

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	124	21	145	**1**	0	0	**1**	1	75	0	76	3	0	0	3	225
08:15 AM	0	103	42	145	0	0	0	0	0	93	0	93	3	0	**1**	4	242
08:30 AM	0	127	**48**	175	0	0	0	0	**3**	107	0	110	2	0	0	2	287
08:45 AM	0	**136**	41	**177**	0	0	0	0	2	**115**	0	**117**	**9**	0	1	**10**	**304**
Total Volume	0	490	152	642	1	0	0	1	6	390	0	396	17	0	2	19	1058
% App. Total	0	76.3	23.7		100	0	0		1.5	98.5	0		89.5	0	10.5		
PHF	.000	.901	.792	.907	.250	.000	.000	.250	.500	.848	.000	.846	.472	.000	.500	.475	.870

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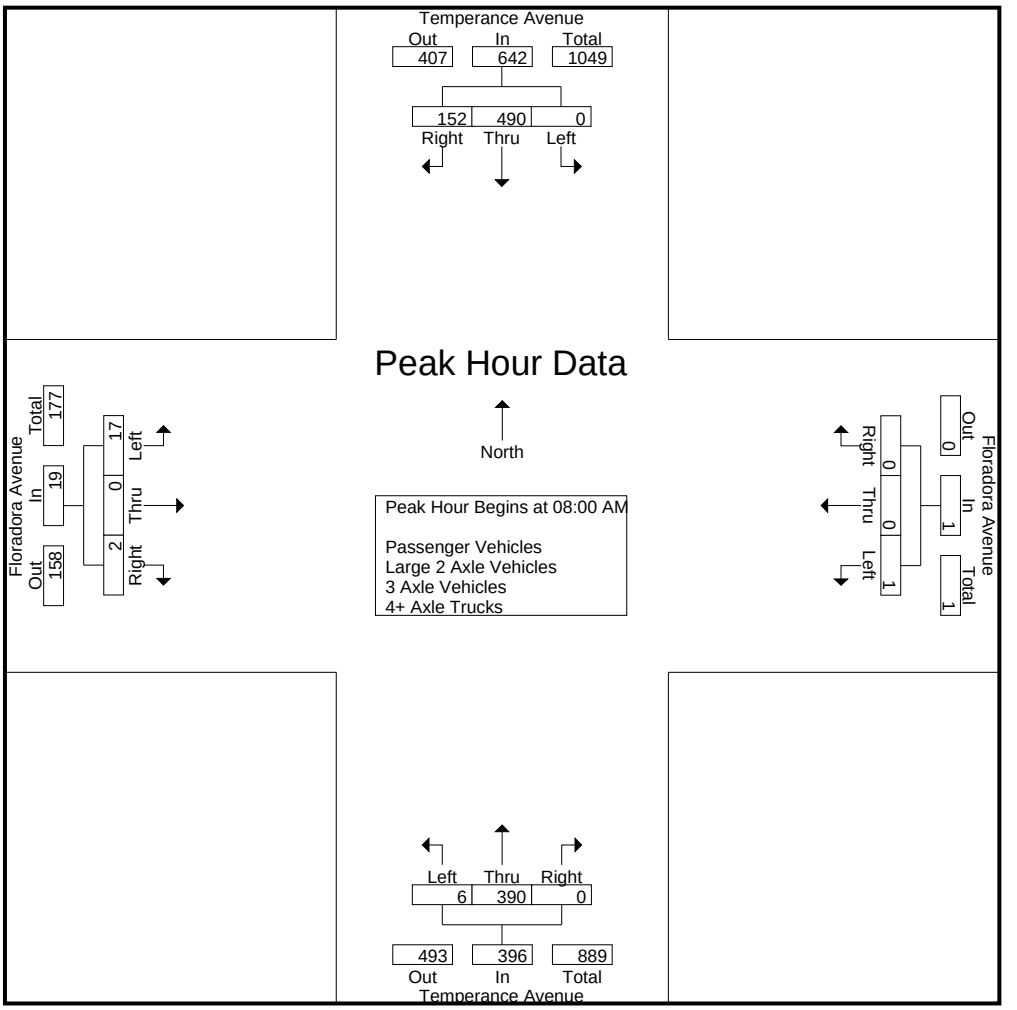

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:15 AM				08:00 AM				08:00 AM			
+0 mins.	0	124	21	145	0	0	0	0	1	75	0	76	3	0	0	3
+15 mins.	0	103	42	145	0	0	0	0	0	93	0	93	3	0	**1**	4
+30 mins.	0	127	**48**	175	0	0	0	0	**3**	107	0	110	2	0	0	2
+45 mins.	0	**136**	41	**177**	**1**	0	0	**1**	2	**115**	0	**117**	**9**	0	1	**10**
Total Volume	0	490	152	642	1	0	0	1	6	390	0	396	17	0	2	19
% App. Total	0	76.3	23.7		100	0	0		1.5	98.5	0		89.5	0	10.5	
PHF	.000	.901	.792	.907	.250	.000	.000	.250	.500	.848	.000	.846	.472	.000	.500	.475

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Groups Printed- Passenger Vehicles

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	66	0	66	0	0	0	0	0	35	0	35	0	0	1	1	102
07:15 AM	0	96	3	99	0	0	0	0	0	38	0	38	0	0	0	0	137
07:30 AM	0	128	3	131	0	0	0	0	0	64	0	64	3	0	0	3	198
07:45 AM	0	101	17	118	0	0	0	0	1	88	0	89	2	0	0	2	209
Total	0	391	23	414	0	0	0	0	1	225	0	226	5	0	1	6	646
08:00 AM	0	120	21	141	1	0	0	1	1	72	0	73	3	0	0	3	218
08:15 AM	0	101	42	143	0	0	0	0	0	89	0	89	2	0	1	3	235
08:30 AM	0	126	46	172	0	0	0	0	2	104	0	106	2	0	0	2	280
08:45 AM	0	136	41	177	0	0	0	0	2	109	0	111	9	0	1	10	298
Total	0	483	150	633	1	0	0	1	5	374	0	379	16	0	2	18	1031
Grand Total	0	874	173	1047	1	0	0	1	6	599	0	605	21	0	3	24	1677
Apprch %	0	83.5	16.5		100	0	0		1	99	0		87.5	0	12.5		
Total %	0	52.1	10.3	62.4	0.1	0	0	0.1	0.4	35.7	0	36.1	1.3	0	0.2	1.4	

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	120	21	141	**1**	0	0	**1**	1	72	0	73	3	0	0	3	218
08:15 AM	0	101	42	143	0	0	0	0	0	89	0	89	2	0	**1**	3	235
08:30 AM	0	126	**46**	172	0	0	0	0	**2**	104	0	106	2	0	0	2	280
08:45 AM	0	**136**	41	**177**	0	0	0	0	2	**109**	0	**111**	**9**	0	1	**10**	**298**
Total Volume	0	483	150	633	1	0	0	1	5	374	0	379	16	0	2	18	1031
% App. Total	0	76.3	23.7		100	0	0		1.3	98.7	0		88.9	0	11.1		
PHF	.000	.888	.815	.894	.250	.000	.000	.250	.625	.858	.000	.854	.444	.000	.500	.450	.865

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File Name : 09_FSO_Temp_Flo AM
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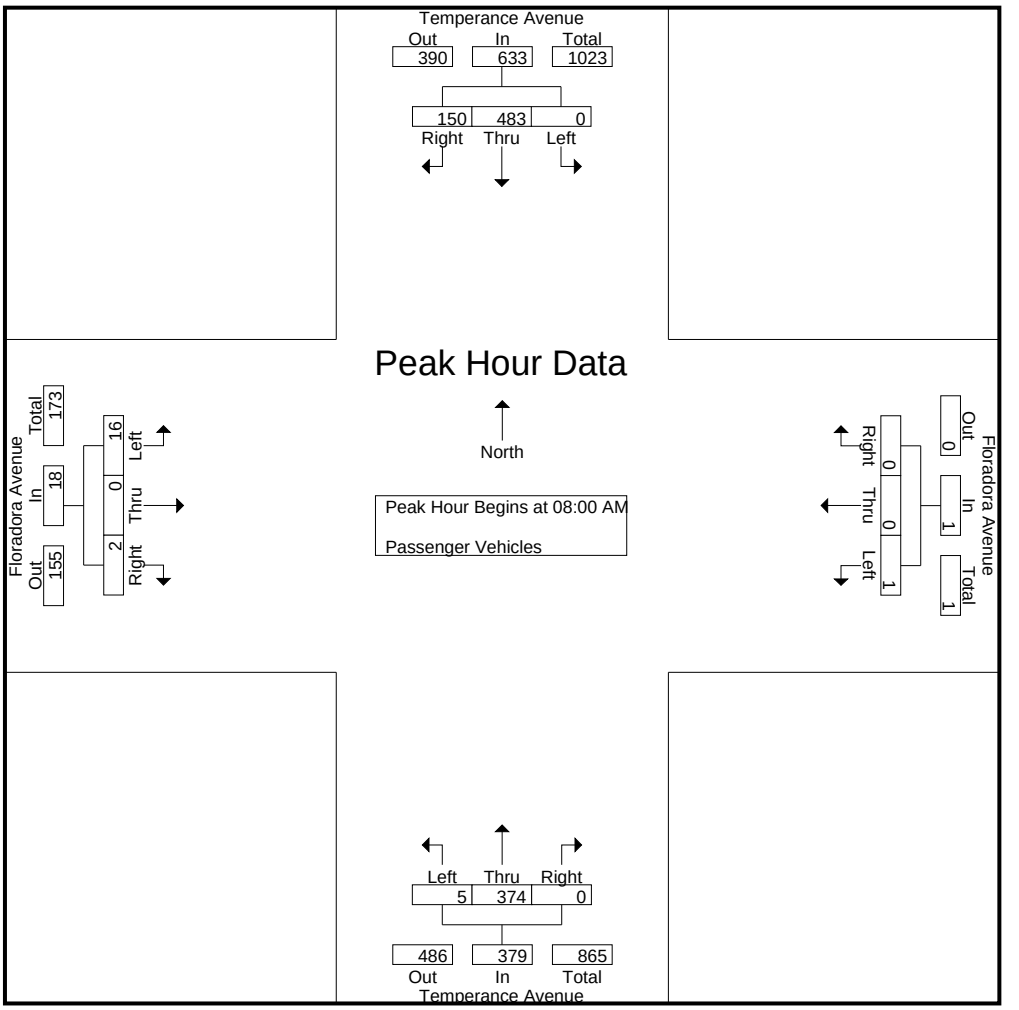

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	120	21	141	**1**	0	0	**1**	1	72	0	73	3	0	0	3
+15 mins.	0	101	42	143	0	0	0	0	0	89	0	89	2	0	**1**	3
+30 mins.	0	126	**46**	172	0	0	0	0	**2**	104	0	106	2	0	0	2
+45 mins.	0	**136**	41	**177**	0	0	0	0	2	**109**	0	**111**	**9**	0	1	**10**
Total Volume	0	483	150	633	1	0	0	1	5	374	0	379	16	0	2	18
% App. Total	0	76.3	23.7		100	0	0		1.3	98.7	0		88.9	0	11.1	
PHF	.000	.888	.815	.894	.250	.000	.000	.250	.625	.858	.000	.854	.444	.000	.500	.450

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Groups Printed- Large 2 Axle Vehicles

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:15 AM	0	1	0	1	0	0	0	0	0	6	0	6	0	0	0	0	7
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	3	1	4	0	0	0	0	0	2	0	2	0	0	0	0	6
Total	0	5	1	6	0	0	0	0	0	9	0	9	0	0	0	0	15
08:00 AM	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
08:15 AM	0	2	0	2	0	0	0	0	0	4	0	4	1	0	0	1	7
08:30 AM	0	0	2	2	0	0	0	0	1	2	0	3	0	0	0	0	5
08:45 AM	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	5
Total	0	5	2	7	0	0	0	0	1	14	0	15	1	0	0	1	23
Grand Total	0	10	3	13	0	0	0	0	1	23	0	24	1	0	0	1	38
Apprch %	0	76.9	23.1		0	0	0		4.2	95.8	0		100	0	0		
Total %	0	26.3	7.9	34.2	0	0	0	0	2.6	60.5	0	63.2	2.6	0	0	2.6	

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	**3**	0	**3**	0	0	0	0	0	3	0	3	0	0	0	0	6
08:15 AM	0	2	0	2	0	0	0	0	0	4	0	4	**1**	0	0	**1**	**7**
08:30 AM	0	0	**2**	2	0	0	0	0	**1**	2	0	3	0	0	0	0	5
08:45 AM	0	0	0	0	0	0	0	0	0	**5**	0	**5**	0	0	0	0	5
Total Volume	0	5	2	7	0	0	0	0	1	14	0	15	1	0	0	1	23
% App. Total	0	71.4	28.6		0	0	0		6.7	93.3	0		100	0	0		
PHF	.000	.417	.250	.583	.000	.000	.000	.000	.250	.700	.000	.750	.250	.000	.000	.250	.821

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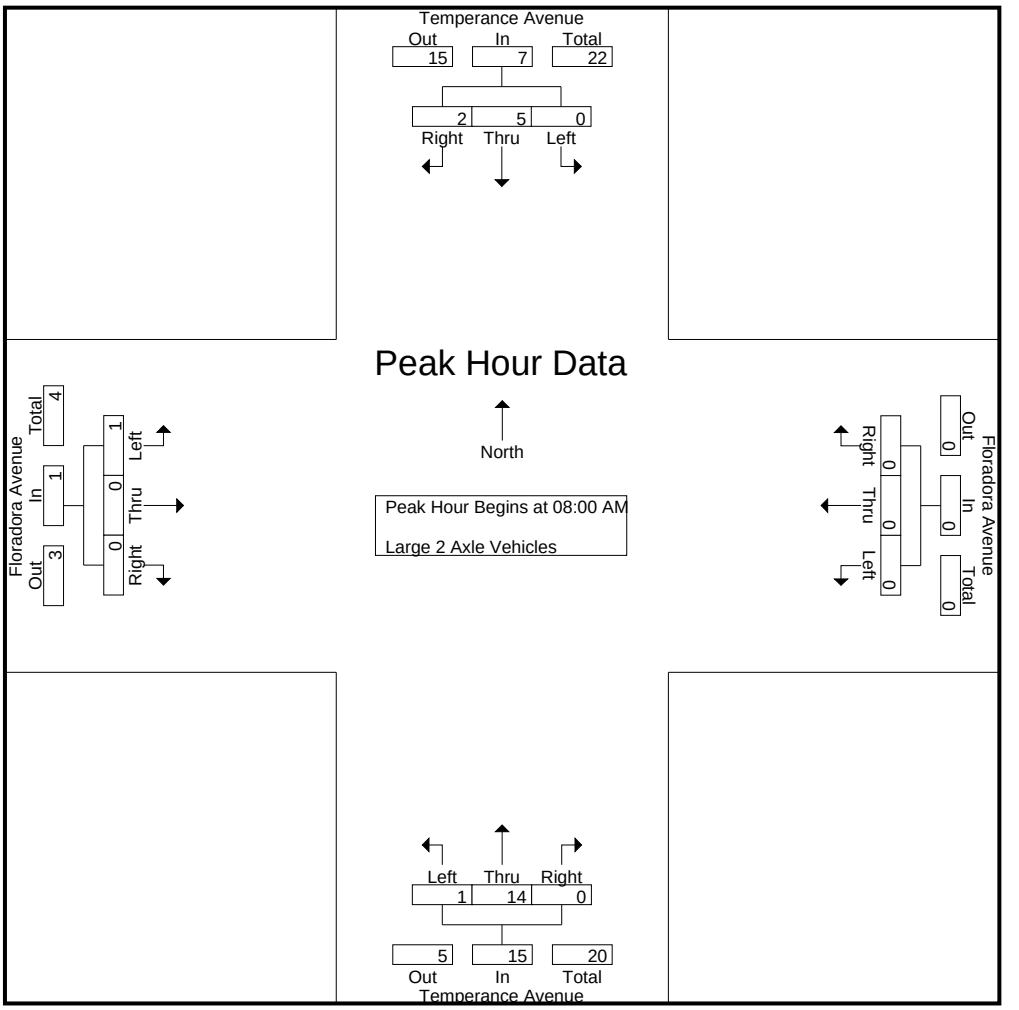

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	**3**	0	**3**	0	0	0	0	0	3	0	3	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	4	0	4	**1**	0	0	**1**
+30 mins.	0	0	**2**	2	0	0	0	0	**1**	2	0	3	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	**5**	0	**5**	0	0	0	0
Total Volume	0	5	2	7	0	0	0	0	1	14	0	15	1	0	0	1
% App. Total	0	71.4	28.6		0	0	0		6.7	93.3	0		100	0	0	
PHF	.000	.417	.250	.583	.000	.000	.000	.000	.250	.700	.000	.750	.250	.000	.000	.250

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Groups Printed- 3 Axle Vehicles

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
07:15 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	1	0	1	0	0	0	0	0	6	0	6	1	0	0	1	8
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	2	0	2	0	0	0	0	0	6	0	6	1	0	0	1	9
Apprch %	0	100	0		0	0	0		0	100	0		100	0	0		
Total %	0	22.2	0	22.2	0	0	0	0	0	66.7	0	66.7	11.1	0	0	11.1	

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

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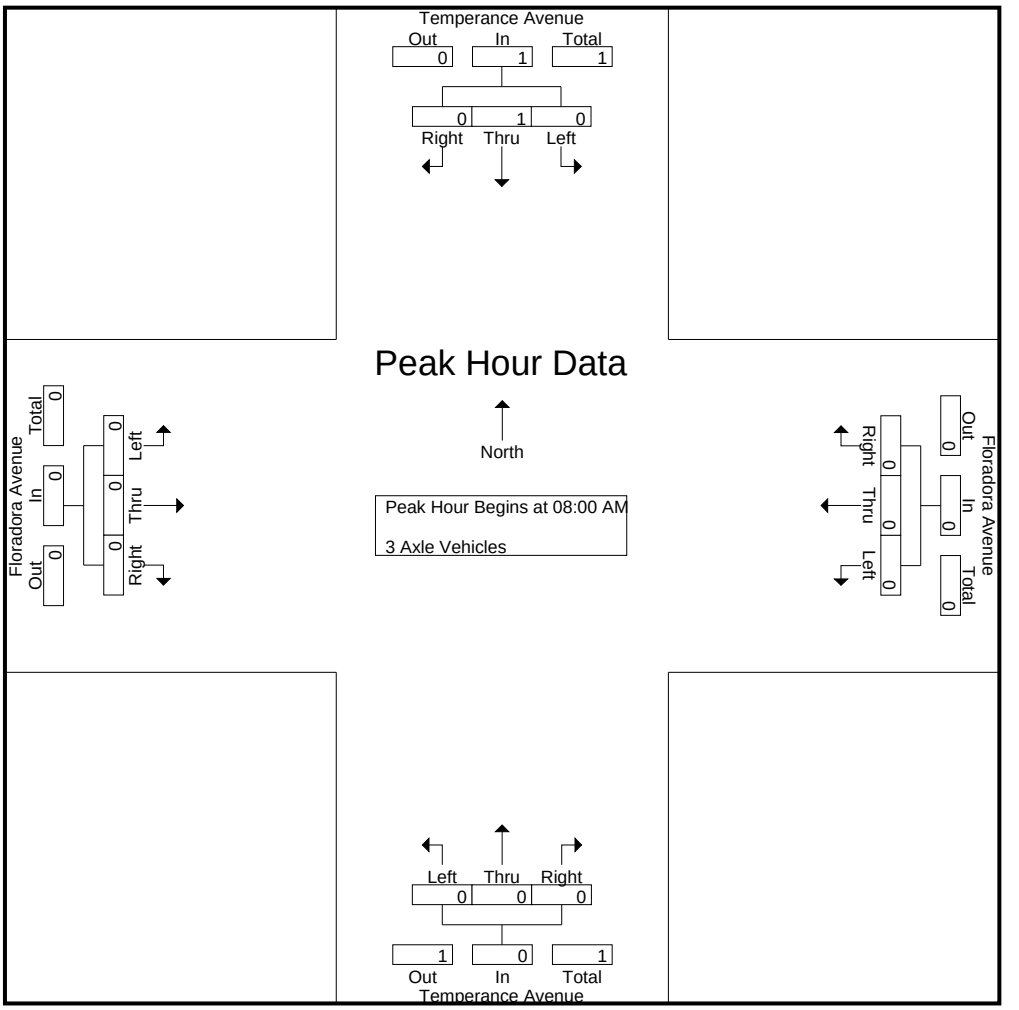

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Grand Total	0	1	2	3	0	0	0	0	0	2	0	2	0	0	0	0	5
Apprch %	0	33.3	66.7		0	0	0		0	100	0		0	0	0		
Total %	0	20	40	60	0	0	0	0	0	40	0	40	0	0	0	0	

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**2**
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.375

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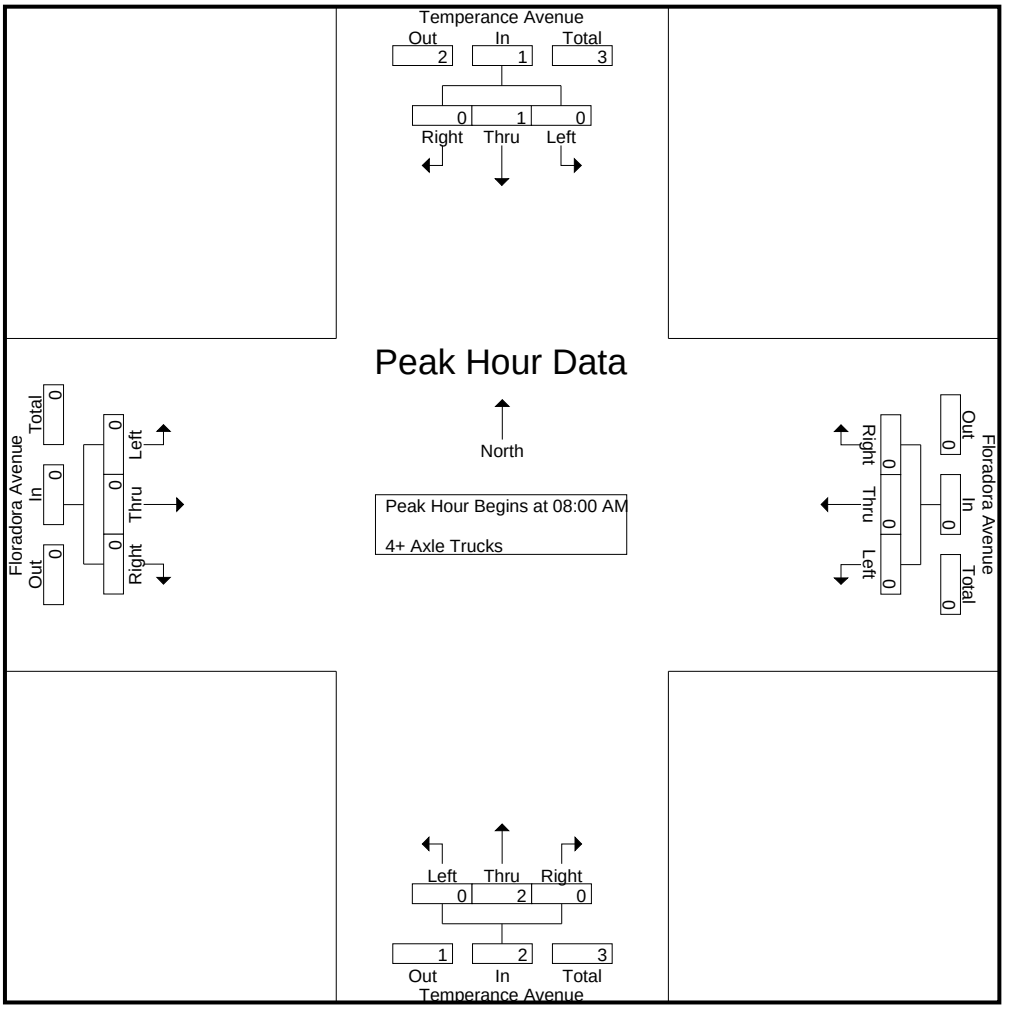

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	96	5	101	0	1	0	1	0	130	0	130	5	0	1	6	238
04:15 PM	0	105	6	111	0	0	0	0	0	130	2	132	2	0	3	5	248
04:30 PM	1	123	10	134	0	0	0	0	0	128	0	128	2	0	2	4	266
04:45 PM	0	102	19	121	0	0	0	0	1	123	0	124	2	0	5	7	252
Total	1	426	40	467	0	1	0	1	1	511	2	514	11	0	11	22	1004
05:00 PM	0	107	10	117	1	0	0	1	1	128	0	129	7	0	2	9	256
05:15 PM	0	119	7	126	0	0	0	0	0	147	0	147	3	0	2	5	278
05:30 PM	1	90	6	97	0	0	0	0	1	154	0	155	2	0	2	4	256
05:45 PM	0	102	3	105	0	0	1	1	0	142	0	142	4	0	1	5	253
Total	1	418	26	445	1	0	1	2	2	571	0	573	16	0	7	23	1043
Grand Total	2	844	66	912	1	1	1	3	3	1082	2	1087	27	0	18	45	2047
Apprch %	0.2	92.5	7.2		33.3	33.3	33.3		0.3	99.5	0.2		60	0	40		
Total %	0.1	41.2	3.2	44.6	0	0	0	0.1	0.1	52.9	0.1	53.1	1.3	0	0.9	2.2	
Passenger Vehicles	2	833	62	897	1	1	1	3	3	1058	2	1063	27	0	18	45	2008
% Passenger Vehicles	100	98.7	93.9	98.4	100	100	100	100	100	97.8	100	97.8	100	0	100	100	98.1
Large 2 Axle Vehicles	0	6	4	10	0	0	0	0	0	19	0	19	0	0	0	0	29
% Large 2 Axle Vehicles	0	0.7	6.1	1.1	0	0	0	0	0	1.8	0	1.7	0	0	0	0	1.4
3 Axle Vehicles	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
% 3 Axle Vehicles	0	0.5	0	0.4	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0.2
4+ Axle Trucks	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	5
% 4+ Axle Trucks	0	0.1	0	0.1	0	0	0	0	0	0.4	0	0.4	0	0	0	0	0.2

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	**123**	10	**134**	0	0	0	0	0	128	0	128	2	0	2	4	266
04:45 PM	0	102	**19**	121	0	0	0	0	**1**	123	0	124	2	0	**5**	7	252
05:00 PM	0	107	10	117	**1**	0	0	**1**	1	128	0	129	**7**	0	2	**9**	256
05:15 PM	0	119	7	126	0	0	0	0	0	**147**	0	**147**	3	0	2	5	**278**
Total Volume	1	451	46	498	1	0	0	1	2	526	0	528	14	0	11	25	1052
% App. Total	0.2	90.6	9.2		100	0	0		0.4	99.6	0		56	0	44		
PHF	.250	.917	.605	.929	.250	.000	.000	.250	.500	.895	.000	.898	.500	.000	.550	.694	.946

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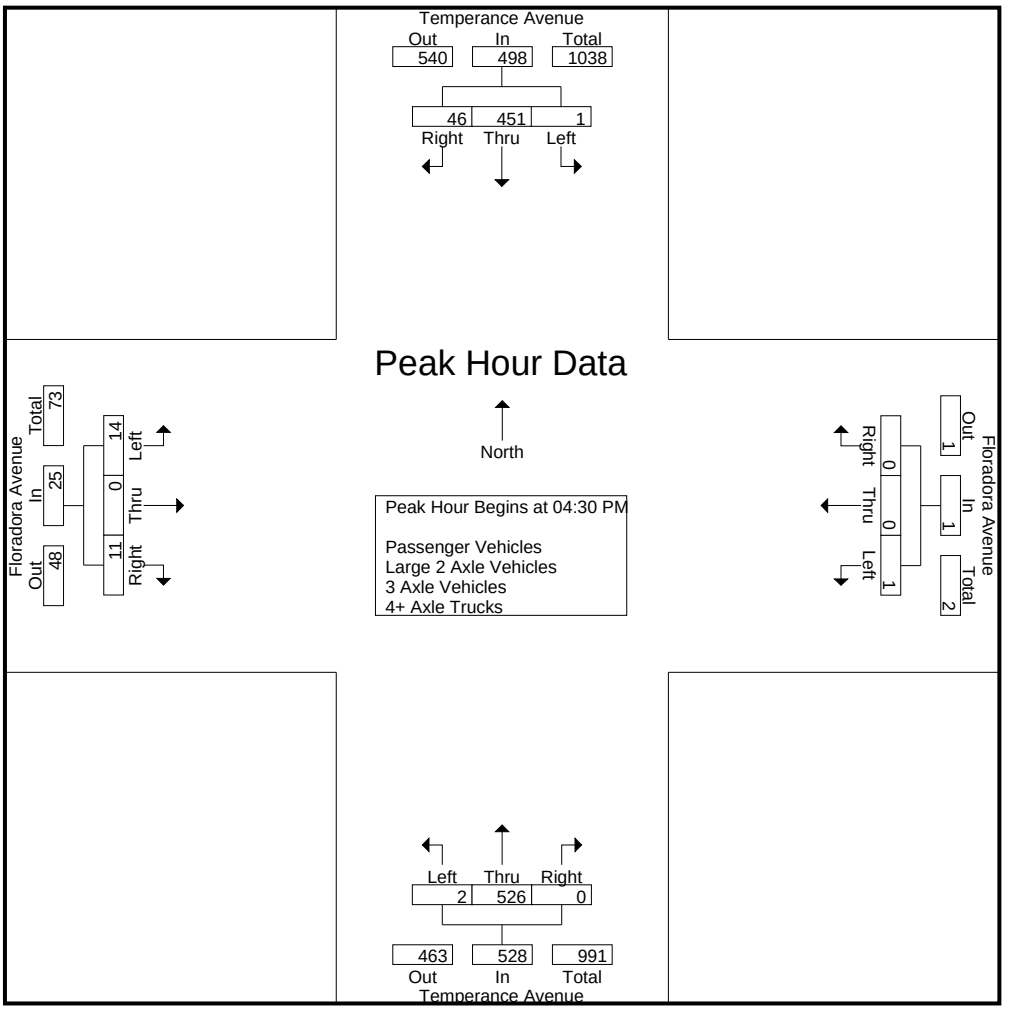

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				05:00 PM				04:15 PM			
+0 mins.	**1**	**123**	10	**134**	**1**	0	0	**1**	**1**	128	0	129	2	0	3	5
+15 mins.	0	102	**19**	121	0	0	0	0	0	147	0	147	2	0	2	4
+30 mins.	0	107	10	117	0	0	0	0	1	**154**	0	**155**	2	0	**5**	7
+45 mins.	0	119	7	126	0	0	**1**	1	0	142	0	142	**7**	0	2	**9**
Total Volume	1	451	46	498	1	0	1	2	2	571	0	573	13	0	12	25
% App. Total	0.2	90.6	9.2		50	0	50		0.3	99.7	0		52	0	48	
PHF	.250	.917	.605	.929	.250	.000	.250	.500	.500	.927	.000	.924	.464	.000	.600	.694

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Fresno
N/S: Temperance Avenue
E/W: Floradora Avenue
Weather: Clear

File Name : 09_FSO_Temp_Flo PM
Site Code : 00322994
Start Date : 11/10/2022
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Groups Printed- Passenger Vehicles

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	96	5	101	0	1	0	1	0	127	0	127	5	0	1	6	235
04:15 PM	0	101	5	106	0	0	0	0	0	124	2	126	2	0	3	5	237
04:30 PM	1	123	8	132	0	0	0	0	0	123	0	123	2	0	2	4	259
04:45 PM	0	100	19	119	0	0	0	0	1	123	0	124	2	0	5	7	250
Total	1	420	37	458	0	1	0	1	1	497	2	500	11	0	11	22	981
05:00 PM	0	106	9	115	1	0	0	1	1	125	0	126	7	0	2	9	251
05:15 PM	0	119	7	126	0	0	0	0	0	144	0	144	3	0	2	5	275
05:30 PM	1	89	6	96	0	0	0	0	1	154	0	155	2	0	2	4	255
05:45 PM	0	99	3	102	0	0	1	1	0	138	0	138	4	0	1	5	246
Total	1	413	25	439	1	0	1	2	2	561	0	563	16	0	7	23	1027
Grand Total	2	833	62	897	1	1	1	3	3	1058	2	1063	27	0	18	45	2008
Apprch %	0.2	92.9	6.9		33.3	33.3	33.3		0.3	99.5	0.2		60	0	40		
Total %	0.1	41.5	3.1	44.7	0	0	0	0.1	0.1	52.7	0.1	52.9	1.3	0	0.9	2.2	

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	**123**	8	**132**	0	0	0	0	0	123	0	123	2	0	2	4	259
04:45 PM	0	100	**19**	119	0	0	0	0	**1**	123	0	124	2	0	**5**	7	250
05:00 PM	0	106	9	115	**1**	0	0	**1**	1	125	0	126	**7**	0	2	**9**	251
05:15 PM	0	119	7	126	0	0	0	0	0	**144**	0	**144**	3	0	2	5	**275**
Total Volume	1	448	43	492	1	0	0	1	2	515	0	517	14	0	11	25	1035
% App. Total	0.2	91.1	8.7		100	0	0		0.4	99.6	0		56	0	44		
PHF	.250	.911	.566	.932	.250	.000	.000	.250	.500	.894	.000	.898	.500	.000	.550	.694	.941

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City of Fresno
N/S: Temperance Avenue
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File Name : 09_FSO_Temp_Flo PM
Site Code : 00322994
Start Date : 11/10/2022
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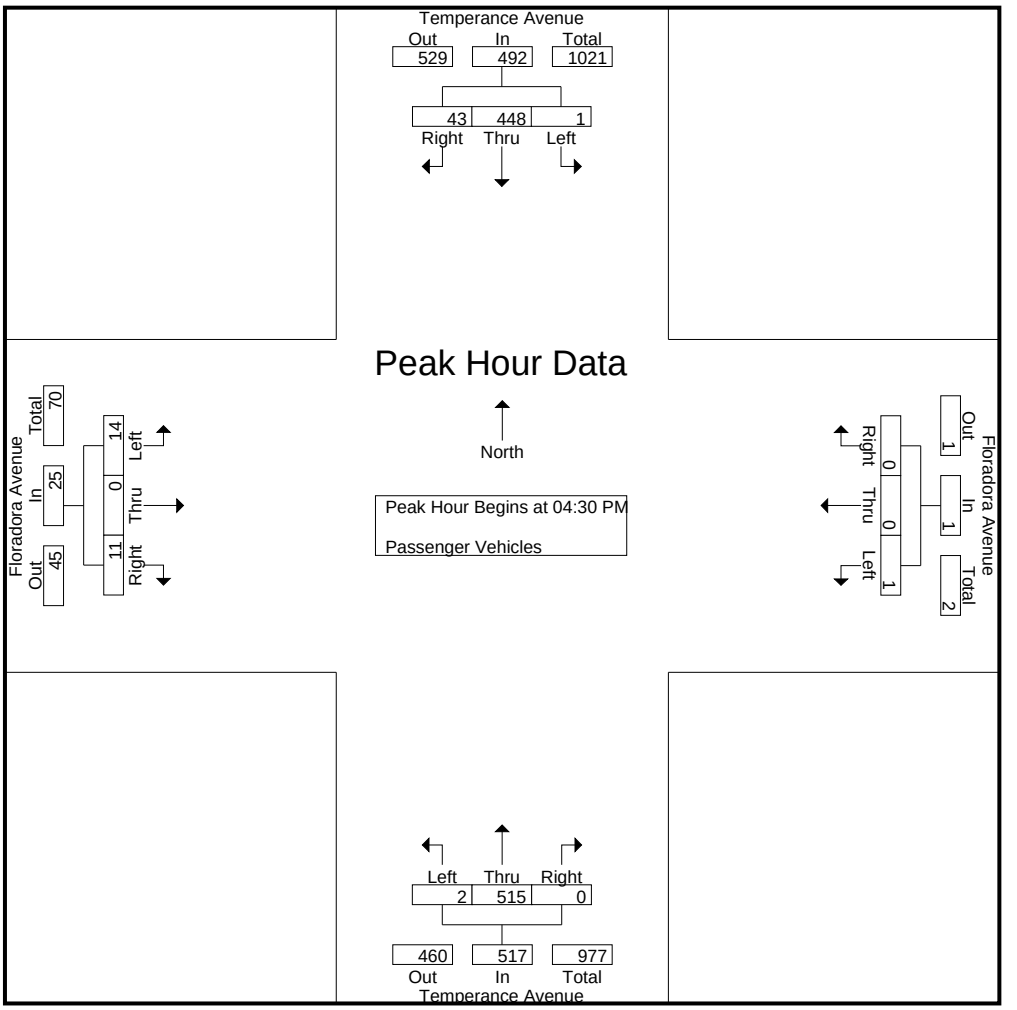

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	**1**	**123**	8	**132**	0	0	0	0	0	123	0	123	2	0	2	4
+15 mins.	0	100	**19**	119	0	0	0	0	**1**	123	0	124	2	0	**5**	7
+30 mins.	0	106	9	115	**1**	0	0	**1**	1	125	0	126	**7**	0	2	**9**
+45 mins.	0	119	7	126	0	0	0	0	0	**144**	0	**144**	3	0	2	5
Total Volume	1	448	43	492	1	0	0	1	2	515	0	517	14	0	11	25
% App. Total	0.2	91.1	8.7		100	0	0		0.4	99.6	0		56	0	44	
PHF	.250	.911	.566	.932	.250	.000	.000	.250	.500	.894	.000	.898	.500	.000	.550	.694

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City of Fresno
N/S: Temperance Avenue
E/W: Floradora Avenue
Weather: Clear

File Name : 09_FSO_Temp_Flo PM
Site Code : 00322994
Start Date : 11/10/2022
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Groups Printed- Large 2 Axle Vehicles

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:15 PM	0	3	1	4	0	0	0	0	0	4	0	4	0	0	0	0	8
04:30 PM	0	0	2	2	0	0	0	0	0	4	0	4	0	0	0	0	6
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	3	6	0	0	0	0	0	10	0	10	0	0	0	0	16
05:00 PM	0	0	1	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	6
Total	0	3	1	4	0	0	0	0	0	9	0	9	0	0	0	0	13
Grand Total	0	6	4	10	0	0	0	0	0	19	0	19	0	0	0	0	29
Apprch %	0	60	40		0	0	0		0	100	0		0	0	0		
Total %	0	20.7	13.8	34.5	0	0	0	0	0	65.5	0	65.5	0	0	0	0	

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	**2**	**2**	0	0	0	0	0	**4**	0	**4**	0	0	0	0	**6**
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	1	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
Total Volume	0	0	3	3	0	0	0	0	0	9	0	9	0	0	0	0	12
% App. Total	0	0	100		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.375	.375	.000	.000	.000	.000	.000	.563	.000	.563	.000	.000	.000	.000	.500

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City of Fresno
N/S: Temperance Avenue
E/W: Floradora Avenue
Weather: Clear

File Name : 09_FSO_Temp_Flo PM
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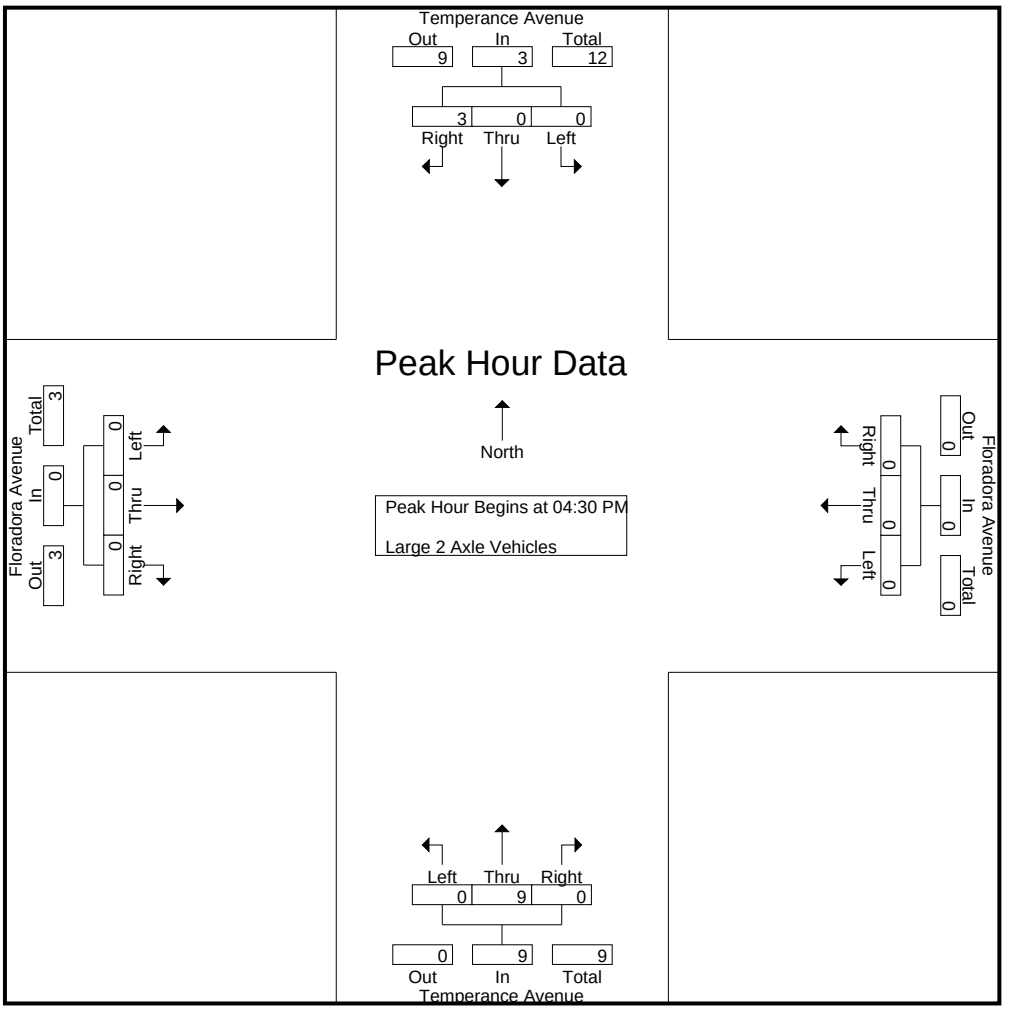

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	**2**	**2**	0	0	0	0	0	**4**	0	**4**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	1	1	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0
Total Volume	0	0	3	3	0	0	0	0	0	9	0	9	0	0	0	0
% App. Total	0	0	100		0	0	0		0	100	0		0	0	0	
PHF	.000	.000	.375	.375	.000	.000	.000	.000	.000	.563	.000	.563	.000	.000	.000	.000

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City of Fresno
N/S: Temperance Avenue
E/W: Floradora Avenue
Weather: Clear

File Name : 09_FSO_Temp_Flo PM
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Start Date : 11/10/2022
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Groups Printed- 3 Axle Vehicles

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	80	0	80	0	0	0	0	0	20	0	20	0	0	0	0	

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	**2**
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

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City of Fresno
N/S: Temperance Avenue
E/W: Floradora Avenue
Weather: Clear

File Name : 09_FSO_Temp_Flo PM
Site Code : 00322994
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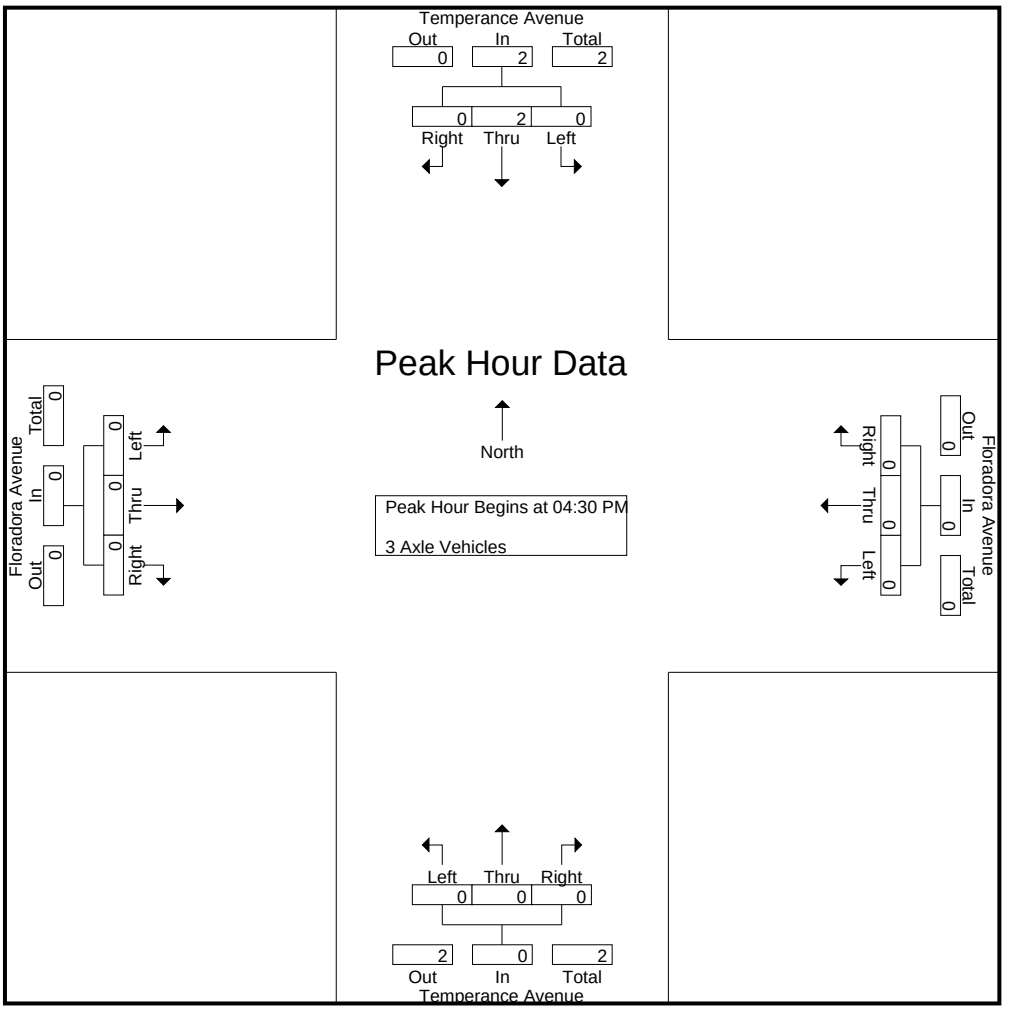

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Fresno
N/S: Temperance Avenue
E/W: Floradora Avenue
Weather: Clear

File Name : 09_FSO_Temp_Flo PM
Site Code : 00322994
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Groups Printed- 4+ Axle Trucks

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
05:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Grand Total	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	5
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	20	0	20	0	0	0	0	0	80	0	80	0	0	0	0	

	Temperance Avenue Southbound				Floradora Avenue Westbound				Temperance Avenue Northbound				Floradora Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	**1**	0	**1**	0	0	0	0	0	1	0	1	0	0	0	0	**2**
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.375

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City of Fresno
N/S: Temperance Avenue
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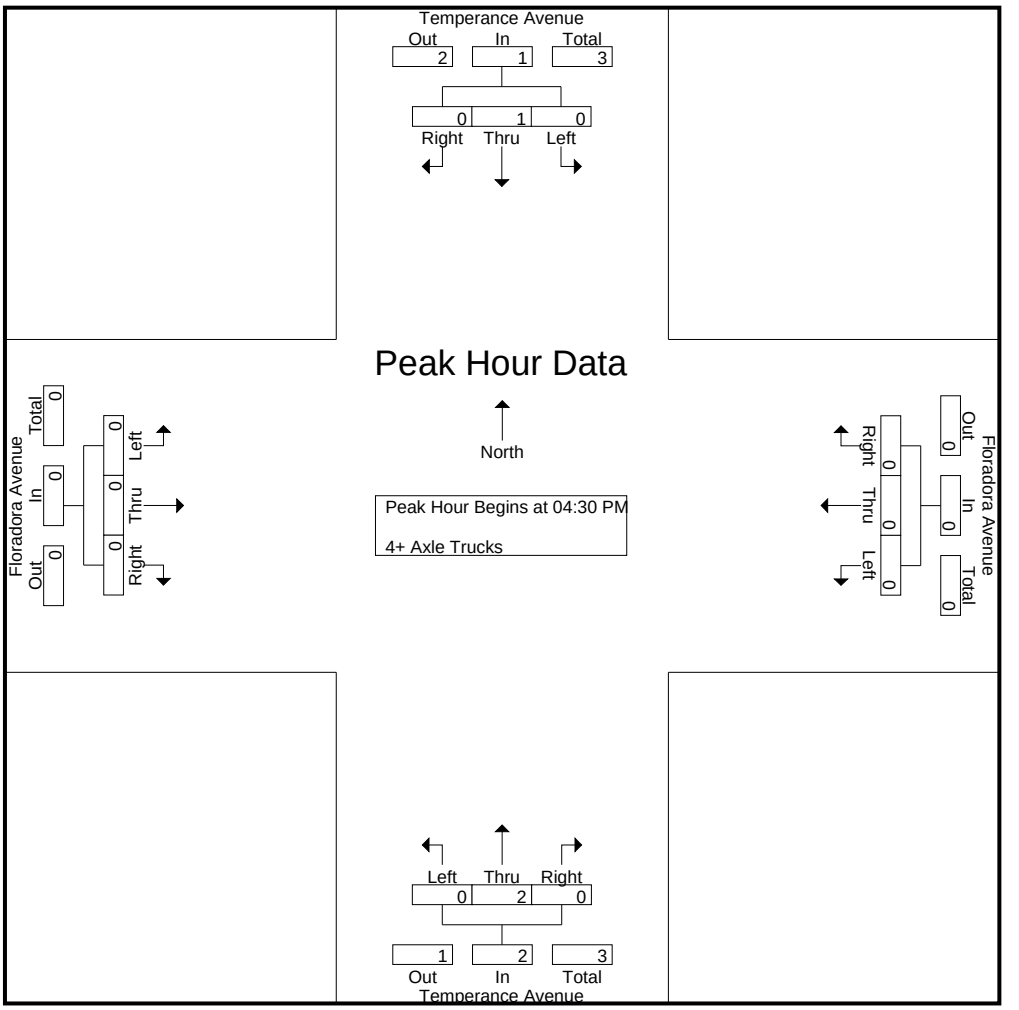

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	**1**	0	**1**	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

Counts Unlimited, Inc.

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email: counts@countsunlimited.com

City of Fresno
Fowler Avenue
N/ Floradora Avenue
24 Hour Directional Volume Count

FSO001
Site Code: 003-22994

Start Time	11/10/22 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		20	102			11	90				
12:15		17	108			16	111				
12:30		21	97			19	109				
12:45		16	114	74	421	20	93	66	403	140	824
01:00		18	113			11	107				
01:15		9	105			9	120				
01:30		16	115			8	136				
01:45		6	129	49	462	5	114	33	477	82	939
02:00		8	132			7	112				
02:15		8	134			10	127				
02:30		7	128			8	123				
02:45		10	123	33	517	13	110	38	472	71	989
03:00		11	121			6	118				
03:15		5	135			5	127				
03:30		7	125			7	124				
03:45		7	133	30	514	8	117	26	486	56	1000
04:00		9	122			3	109				
04:15		7	112			13	**131**				
04:30		7	139			18	**122**				
04:45		15	131	38	504	7	**127**	41	489	79	993
05:00		10	150			19	**136**				
05:15		14	**169**			26	112				
05:30		32	**148**			56	131				
05:45		22	**164**	78	631	32	114	133	493	211	1124
06:00		29	**151**			43	131				
06:15		35	144			50	125				
06:30		62	135			95	115				
06:45		62	139	188	569	65	126	253	497	441	1066
07:00		66	144			106	122				
07:15		86	135			117	111				
07:30		99	95			**143**	89				
07:45		88	85	339	459	**127**	89	493	411	832	870
08:00		95	113			**160**	85				
08:15		118	98			**140**	69				
08:30		**110**	93			134	74				
08:45		**124**	93	447	397	118	72	552	300	999	697
09:00		**121**	85			121	76				
09:15		**138**	69			122	59				
09:30		110	53			123	66				
09:45		91	70	460	277	125	37	491	238	951	515
10:00		92	64			91	50				
10:15		98	49			117	58				
10:30		92	51			113	46				
10:45		110	35	392	199	97	21	418	175	810	374
11:00		78	37			122	40				
11:15		99	36			103	22				
11:30		99	30			119	26				
11:45		90	22	366	125	110	15	454	103	820	228
Total		2494	5075	2494	5075	2998	4544	2998	4544	5492	9619
Combined Total		7569		7569		7542		7542		15111	
AM Peak	-	08:30	-	-	-	07:30	-	-	-	-	-
Vol.	-	493	-	-	-	570	-	-	-	-	-
P.H.F.		0.893				0.891					
PM Peak	-	-	05:15	-	-	-	04:15	-	-	-	-
Vol.	-	-	632	-	-	-	516	-	-	-	-
P.H.F.			0.935				0.949				
Percentage		33.0%	67.0%			39.8%	60.2%				
ADT/AADT		ADT 15,111		AADT 15,111							

Counts Unlimited, Inc.

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City of Fresno
Fowler Avenue
B/ Floradora Avenue - Olive Avenue
24 Hour Directional Volume Count

FSO002
Site Code: 003-22994

Start Time	11/10/22 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		19	101			11	89				
12:15		17	105			15	112				
12:30		21	97			19	106				
12:45		16	111	73	414	20	91	65	398	138	812
01:00		18	109			11	107				
01:15		8	101			9	119				
01:30		16	110			7	**133**				
01:45		6	127	48	447	5	**111**	32	470	80	917
02:00		7	126			7	**108**				
02:15		8	129			10	**123**				
02:30		7	122			8	122				
02:45		9	122	31	499	12	109	37	462	68	961
03:00		11	120			6	118				
03:15		5	127			5	124				
03:30		6	122			6	115				
03:45		6	120	28	489	7	113	24	470	52	959
04:00		9	120			3	105				
04:15		6	108			12	113				
04:30		7	132			18	101				
04:45		15	127	37	487	7	99	40	418	77	905
05:00		8	141			19	107				
05:15		14	**157**			25	96				
05:30		32	**138**			56	121				
05:45		21	**153**	75	589	32	110	132	434	207	1023
06:00		28	**144**			43	117				
06:15		35	140			49	104				
06:30		59	124			94	103				
06:45		64	133	186	541	63	124	249	448	435	989
07:00		66	134			103	117				
07:15		83	132			113	110				
07:30		97	95			**139**	88				
07:45		85	86	331	447	**120**	88	475	403	806	850
08:00		88	110			**153**	82				
08:15		104	97			**116**	68				
08:30		104	91			108	74				
08:45		**111**	93	407	391	103	72	480	296	887	687
09:00		**106**	83			107	76				
09:15		**129**	69			115	59				
09:30		**108**	53			121	65				
09:45		81	69	424	274	121	37	464	237	888	511
10:00		89	63			90	49				
10:15		94	48			114	56				
10:30		89	51			112	44				
10:45		108	36	380	198	95	22	411	171	791	369
11:00		78	36			119	40				
11:15		98	36			101	23				
11:30		98	30			119	24				
11:45		92	22	366	124	109	15	448	102	814	226
Total		2386	4900	2386	4900	2857	4309	2857	4309	5243	9209
Combined Total		7286		7286		7166		7166		14452	
AM Peak	-	08:45	-	-	-	07:30	-	-	-	-	-
Vol.	-	454	-	-	-	528	-	-	-	-	-
P.H.F.		0.880				0.863					
PM Peak	-	-	05:15	-	-	-	01:30	-	-	-	-
Vol.	-	-	592	-	-	-	475	-	-	-	-
P.H.F.			0.943				0.893				
Percentage		32.7%	67.3%			39.9%	60.1%				
ADT/AADT		ADT 14,452		AADT 14,452							

Counts Unlimited, Inc.

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City of Fresno
Fowler Avenue
B/ Olive Avenue - State Route 180 Westbound
24 Hour Directional Volume Count

FSO003
Site Code: 003-22994

Start Time	11/10/22 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		26	105			14	118				
12:15		28	117			18	131				
12:30		22	117			21	142				
12:45		18	116	94	455	21	115	74	506	168	961
01:00		23	122			14	142				
01:15		8	108			13	138				
01:30		18	128			14	158				
01:45		9	126	58	484	8	147	49	585	107	1069
02:00		8	148			8	143				
02:15		6	117			8	122				
02:30		8	128			10	156				
02:45		11	**133**	33	526	11	146	37	567	70	1093
03:00		15	**124**			10	145				
03:15		6	**131**			4	153				
03:30		6	**146**			14	146				
03:45		6	123	33	524	10	152	38	596	71	1120
04:00		11	92			6	154				
04:15		9	100			16	**162**				
04:30		10	121			20	**170**				
04:45		13	119	43	432	13	**150**	55	636	98	1068
05:00		8	120			18	**157**				
05:15		19	131			36	149				
05:30		31	107			66	154				
05:45		18	141	76	499	51	154	171	614	247	1113
06:00		30	127			51	147				
06:15		35	128			76	157				
06:30		77	117			136	149				
06:45		81	127	223	499	92	149	355	602	578	1101
07:00		97	131			139	151				
07:15		120	121			152	132				
07:30		124	109			201	118				
07:45		93	125	434	486	190	95	682	496	1116	982
08:00		107	126			**207**	96				
08:15		107	138			**183**	84				
08:30		**129**	106			**223**	92				
08:45		**104**	110	447	480	**200**	88	813	360	1260	840
09:00		**139**	104			187	98				
09:15		**121**	87			172	60				
09:30		84	80			181	72				
09:45		92	81	436	352	158	79	698	309	1134	661
10:00		102	64			124	58				
10:15		100	48			124	64				
10:30		109	57			158	55				
10:45		116	48	427	217	129	21	535	198	962	415
11:00		88	41			133	45				
11:15		122	41			127	33				
11:30		111	36			130	23				
11:45		106	24	427	142	140	20	530	121	957	263
Total		2731	5096	2731	5096	4037	5590	4037	5590	6768	10686
Combined Total		7827		7827		9627		9627		17454	
AM Peak	-	08:30	-	-	-	08:00	-	-	-	-	-
Vol.	-	493	-	-	-	813	-	-	-	-	-
P.H.F.		0.887				0.911					
PM Peak	-	-	02:45	-	-	-	04:15	-	-	-	-
Vol.	-	-	534	-	-	-	639	-	-	-	-
P.H.F.			0.914				0.940				
Percentage		34.9%	65.1%			41.9%	58.1%				
ADT/AADT		ADT 17,454		AADT 17,454							

Counts Unlimited, Inc.

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City of Fresno
Fowler Avenue
B/ State Route 180 Eastbound - Belmont Avenue
24 Hour Directional Volume Count

FSO005
Site Code: 003-22994

Start Time	11/10/22 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		22	120			22	114				
12:15		15	138			27	104				
12:30		12	97			32	97				
12:45		19	117	68	472	21	103	102	418	170	890
01:00		15	119			25	121				
01:15		6	113			20	128				
01:30		3	122			23	106				
01:45		4	95	28	449	9	129	77	484	105	933
02:00		5	137			10	146				
02:15		7	158			10	114				
02:30		8	133			11	122				
02:45		4	124	24	552	11	134	42	516	66	1068
03:00		8	127			8	148				
03:15		3	88			10	168				
03:30		5	109			9	163				
03:45		3	120	19	444	6	180	33	659	52	1103
04:00		5	105			10	180				
04:15		5	85			5	187				
04:30		10	106			5	219				
04:45		16	85	36	381	13	171	33	757	69	1138
05:00		18	86			21	222				
05:15		15	109			23	215				
05:30		30	133			18	**250**				
05:45		27	**159**	90	487	22	**243**	84	930	174	1417
06:00		38	**164**			28	**262**				
06:15		52	**176**			31	**253**				
06:30		77	**143**			46	225				
06:45		69	147	236	630	69	183	174	923	410	1553
07:00		78	136			81	191				
07:15		118	113			77	168				
07:30		148	103			100	145				
07:45		159	102	503	454	133	128	391	632	894	1086
08:00		208	110			112	105				
08:15		**235**	97			**123**	94				
08:30		**270**	76			**129**	127				
08:45		**241**	66	954	349	**135**	113	499	439	1453	788
09:00		**209**	83			**119**	106				
09:15		189	58			123	99				
09:30		138	67			110	80				
09:45		113	58	649	266	103	101	455	386	1104	652
10:00		98	52			96	94				
10:15		127	28			90	82				
10:30		154	40			101	73				
10:45		117	41	496	161	89	52	376	301	872	462
11:00		115	26			114	69				
11:15		133	28			98	46				
11:30		137	26			105	38				
11:45		101	19	486	99	127	19	444	172	930	271
Total		3589	4744	3589	4744	2710	6617	2710	6617	6299	11361
Combined Total		8333		8333		9327		9327		17660	
AM Peak	-	08:15	-	-	-	08:15	-	-	-	-	-
Vol.	-	955	-	-	-	506	-	-	-	-	-
P.H.F.		0.884				0.937					
PM Peak	-	-	05:45	-	-	-	05:30	-	-	-	-
Vol.	-	-	642	-	-	-	1008	-	-	-	-
P.H.F.			0.912				0.962				
Percentage		43.1%	56.9%			29.1%	70.9%				
ADT/AADT		ADT 17,660		AADT 17,660							

Prepared by NDS/ATD

VOLUME

N Armstrong Ave Bet. E Clinton Ave & E Floradora Ave

Day: Thursday
Date: 9/13/2018

City: Fresno
Project #: CA18_7292_002

DAILY TOTALS	NB	SB	EB	WB	Total
	2,408	3,041	0	0	5,449

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	2		1				3		12:00	32		27				59	
00:15	2		0				2		12:15	21		36				57	
00:30	3		2				5		12:30	31		29				60	
00:45	2	9	1	4			3	13	12:45	25	109	33	125			58	234
01:00	2		1				3		13:00	22		27				49	
01:15	1		1				2		13:15	22		36				58	
01:30	3		0				3		13:30	22		38				60	
01:45	1	7	1	3			2	10	13:45	33	99	31	132			64	231
02:00	2		2				4		14:00	32		35				67	
02:15	6		0				6		14:15	28		40				68	
02:30	2		6				8		14:30	45		38				83	
02:45	2	12	1	9			3	21	14:45	55	160	53	166			108	326
03:00	1		3				4		15:00	41		58				99	
03:15	2		1				3		15:15	55		76				131	
03:30	0		6				6		15:30	65		43				108	
03:45	0	3	5	15			5	18	15:45	56	217	36	213			92	430
04:00	2		7				9		16:00	52		40				92	
04:15	0		7				7		16:15	77		48				125	
04:30	0		14				14		16:30	88		47				135	
04:45	2	4	4	32			6	36	16:45	81	298	37	172			118	470
05:00	4		21				25		17:00	97		53				150	
05:15	5		12				17		17:15	93		57				150	
05:30	8		32				40		17:30	88		51				139	
05:45	18	35	43	108			61	143	17:45	70	348	34	195			104	543
06:00	11		45				56		18:00	48		26				74	
06:15	14		45				59		18:15	49		40				89	
06:30	12		92				104		18:30	37		39				76	
06:45	33	70	87	269			120	339	18:45	31	165	28	133			59	298
07:00	27		136				163		19:00	27		17				44	
07:15	35		162				197		19:15	36		28				64	
07:30	54		155				209		19:30	35		20				55	
07:45	66	182	140	593			206	775	19:45	39	137	18	83			57	220
08:00	50		116				166		20:00	22		15				37	
08:15	24		98				122		20:15	24		21				45	
08:30	14		54				68		20:30	21		20				41	
08:45	14	102	38	306			52	408	20:45	21	88	16	72			37	160
09:00	18		19				37		21:00	15		9				24	
09:15	21		33				54		21:15	16		7				23	
09:30	18		24				42		21:30	14		7				21	
09:45	15	72	26	102			41	174	21:45	17	62	13	36			30	98
10:00	19		25				44		22:00	13		7				20	
10:15	19		25				44		22:15	8		7				15	
10:30	17		34				51		22:30	9		8				17	
10:45	16	71	33	117			49	188	22:45	4	34	4	26			8	60
11:00	10		29				39		23:00	10		5				15	
11:15	28		30				58		23:15	6		6				12	
11:30	28		27				55		23:30	2		4				6	
11:45	37	103	27	113			64	216	23:45	3	21	2	17			5	38
TOTALS		670		1671				2341	TOTALS		1738		1370				3108
SPLIT %		28.6%		71.4%				43.0%	SPLIT %		55.9%		44.1%				57.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	2,408	3,041	0	0	5,449

AM Peak Hour	07:15	07:00					07:15		PM Peak Hour	16:30	14:45					16:45		
AM Pk Volume	205	593					778		PM Pk Volume	359	230					557		
Pk Hr Factor	0.777	0.915					0.931		Pk Hr Factor	0.925	0.757					0.928		
7 - 9 Volume	284	899	0	0			1183		4 - 6 Volume	646	367	0	0			1013		
7 - 9 Peak Hour	07:15	07:00					07:15		4 - 6 Peak Hour	16:30	16:45					16:45		
7 - 9 Pk Volume	205	593	0	0			778		4 - 6 Pk Volume	359	198	0	0			557		
Pk Hr Factor	0.777	0.915	0.000	0.000			0.931		Pk Hr Factor	0.925	0.868	0.000	0.000			0.928		

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City of Fresno
Armstrong Avenue
B/ Flroadora Avenue - Olive Avenue
24 Hour Directional Volume Count

FSO009
Site Code: 003-22994

Start Time	11/10/22 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	3			1	8				
12:15		0	7			0	3				
12:30		1	7			1	5				
12:45		0	6	2	23	1	3	3	19	5	42
01:00		0	5			1	6				
01:15		0	5			0	4				
01:30		0	4			0	4				
01:45		0	7	0	21	0	6	1	20	1	41
02:00		0	3			0	5				
02:15		0	10			1	7				
02:30		1	2			0	2				
02:45		0	7	1	22	0	10	1	24	2	46
03:00		0	1			0	5				
03:15		0	11			0	7				
03:30		0	9			0	11				
03:45		0	16	0	37	0	14	0	37	0	74
04:00		0	6			0	14				
04:15		0	14			0	19				
04:30		0	8			0	**39**				
04:45		0	16	0	44	0	**42**	0	114	0	158
05:00		0	13			0	**29**				
05:15		0	**22**			0	**27**				
05:30		0	**13**			1	20				
05:45		0	**21**	0	69	0	16	1	92	1	161
06:00		0	**15**			1	21				
06:15		2	8			1	26				
06:30		2	21			2	16				
06:45		1	12	5	56	2	5	6	68	11	124
07:00		3	15			3	8				
07:15		3	6			8	1				
07:30		14	3			17	1				
07:45		20	0	40	24	21	2	49	12	89	36
08:00		9	3			**42**	3				
08:15		**13**	2			**79**	1				
08:30		**16**	5			**78**	2				
08:45		**18**	6	56	16	**46**	4	245	10	301	26
09:00		**16**	3			27	4				
09:15		7	3			8	0				
09:30		6	2			9	0				
09:45		11	3	40	11	6	1	50	5	90	16
10:00		5	5			3	1				
10:15		3	4			6	2				
10:30		3	1			6	1				
10:45		9	0	20	10	2	3	17	7	37	17
11:00		10	1			4	0				
11:15		3	1			3	0				
11:30		2	1			4	1				
11:45		3	0	18	3	4	0	15	1	33	4
Total		182	336	182	336	388	409	388	409	570	745
Combined Total		518		518		797		797		1315	
AM Peak	-	08:15	-	-	-	08:00	-	-	-	-	-
Vol.	-	63	-	-	-	245	-	-	-	-	-
P.H.F.		0.875				0.775					
PM Peak	-	-	05:15	-	-	-	04:30	-	-	-	-
Vol.	-	-	71	-	-	-	137	-	-	-	-
P.H.F.			0.807				0.815				
Percentage		35.1%	64.9%			48.7%	51.3%				
ADT/AADT		ADT 1,315		AADT 1,315							

Counts Unlimited, Inc.

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City of Fresno
Temperance Avenue
B/ McKinley Avenue - Floradora Avenue
24 Hour Directional Volume Count

FSO012
Site Code: 003-22994

Start Time	11/10/22 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		14	71			8	82				
12:15		12	63			14	68				
12:30		11	70			11	72				
12:45		9	77	46	281	7	79	40	301	86	582
01:00		10	74			6	70				
01:15		8	75			6	81				
01:30		9	89			5	85				
01:45		5	82	32	320	1	77	18	313	50	633
02:00		3	76			2	84				
02:15		4	71			3	79				
02:30		2	70			7	75				
02:45		5	80	14	297	1	90	13	328	27	625
03:00		5	79			4	82				
03:15		5	98			4	86				
03:30		3	125			8	87				
03:45		1	127	14	429	4	**130**	20	385	34	814
04:00		7	137			7	**94**				
04:15		4	120			8	**112**				
04:30		8	121			11	**158**				
04:45		4	132	23	510	18	107	44	471	67	981
05:00		3	138			7	113				
05:15		4	**142**			16	108				
05:30		3	**155**			26	108				
05:45		6	**147**	16	582	31	108	80	437	96	1019
06:00		3	**145**			30	121				
06:15		9	136			53	111				
06:30		23	129			67	120				
06:45		17	137	52	547	55	76	205	428	257	975
07:00		42	120			82	92				
07:15		41	86			103	67				
07:30		70	88			134	67				
07:45		94	70	247	364	131	45	450	271	697	635
08:00		68	81			135	32				
08:15		**99**	58			**171**	47				
08:30		**118**	47			**177**	48				
08:45		**103**	47	388	233	**141**	47	624	174	1012	407
09:00		**83**	75			**136**	41				
09:15		95	51			100	28				
09:30		72	47			107	37				
09:45		54	44	304	217	83	47	426	153	730	370
10:00		52	34			67	29				
10:15		48	35			66	25				
10:30		68	36			77	35				
10:45		64	41	232	146	71	24	281	113	513	259
11:00		55	24			69	17				
11:15		73	23			80	11				
11:30		54	20			62	18				
11:45		61	20	243	87	75	12	286	58	529	145
Total		1611	4013	1611	4013	2487	3432	2487	3432	4098	7445
Combined Total		5624		5624		5919		5919		11543	
AM Peak	-	08:15	-	-	-	08:15	-	-	-	-	-
Vol.	-	403	-	-	-	625	-	-	-	-	-
P.H.F.		0.854				0.883					
PM Peak	-	-	05:15	-	-	-	03:45	-	-	-	-
Vol.	-	-	589	-	-	-	494	-	-	-	-
P.H.F.			0.950				0.782				
Percentage		28.6%	71.4%			42.0%	58.0%				
ADT/AADT		ADT 11,543		AADT 11,543							

Counts Unlimited, Inc.

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City of Fresno
Floradora Avenue
B/ Fowler Avenue - Armstrong Avenue
24 Hour Directional Volume Count

FSO014
Site Code: 003-22994

Start Time	11/10/22 Thu	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	2			1	2				
12:15		1	0			0	4				
12:30		0	5			0	2				
12:45		0	3	1	10	0	4	1	12	2	22
01:00		0	4			0	8				
01:15		0	3			1	6				
01:30		1	3			0	5				
01:45		0	3	1	13	0	2	1	21	2	34
02:00		0	5			1	7				
02:15		1	4			1	5				
02:30		0	2			0	7				
02:45		1	3	2	14	1	3	3	22	5	36
03:00		0	3			0	4				
03:15		0	5			0	10				
03:30		1	10			1	4				
03:45		1	5	2	23	1	14	2	32	4	55
04:00		0	6			0	4				
04:15		1	**19**			1	5				
04:30		0	**22**			0	8				
04:45		0	**28**	1	75	0	4	1	21	2	96
05:00		0	**29**			2	**9**				
05:15		1	16			0	**12**				
05:30		0	12			0	**12**				
05:45		0	5	1	62	1	**12**	3	45	4	107
06:00		0	15			1	8				
06:15		1	23			0	6				
06:30		1	13			3	12				
06:45		5	3	7	54	1	7	5	33	12	87
07:00		4	5			1	10				
07:15		4	1			3	3				
07:30		7	2			5	1				
07:45		8	2	23	10	4	0	13	14	36	24
08:00		7	4			7	4				
08:15		**24**	1			**14**	1				
08:30		**27**	0			**7**	2				
08:45		**15**	0	73	5	**13**	0	41	7	114	12
09:00		**14**	0			**15**	2				
09:15		7	0			9	0				
09:30		3	1			3	0				
09:45		4	0	28	1	10	1	37	3	65	4
10:00		2	1			4	1				
10:15		4	2			5	1				
10:30		3	2			5	0				
10:45		5	1	14	6	5	1	19	3	33	9
11:00		3	0			0	1				
11:15		5	0			4	1				
11:30		1	2			2	0				
11:45		6	0	15	2	3	0	9	2	24	4
Total		168	275	168	275	135	215	135	215	303	490
Combined Total		443		443		350		350		793	
AM Peak	-	08:15	-	-	-	08:15	-	-	-	-	-
Vol.	-	80	-	-	-	49	-	-	-	-	-
P.H.F.		0.741				0.817					
PM Peak	-	-	04:15	-	-	-	05:00	-	-	-	-
Vol.	-	-	98	-	-	-	45	-	-	-	-
P.H.F.			0.845				0.938				
Percentage		37.9%	62.1%			38.6%	61.4%				
ADT/AADT		ADT 793		AADT 793							

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City of Fresno
Olive Avenue
B/ Fowler Avenue - Armstrong Avenue
24 Hour Directional Volume Count

FSO018
Site Code: 003-22994

Start Time	11/10/22 Thu	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		7	28			2	49				
12:15		11	35			5	44				
12:30		3	36			3	41				
12:45		2	25	23	124	2	40	12	174	35	298
01:00		3	29			3	36				
01:15		2	29			3	44				
01:30		6	35			2	46				
01:45		2	33	13	126	2	45	10	171	23	297
02:00		1	32			0	47				
02:15		0	27			1	41				
02:30		1	22			1	42				
02:45		3	34	5	115	1	51	3	181	8	296
03:00		6	33			2	40				
03:15		2	41			1	51				
03:30		1	49			7	48				
03:45		2	35	11	158	3	64	13	203	24	361
04:00		2	40			3	59				
04:15		1	43			4	**73**				
04:30		2	39			3	**94**				
04:45		1	52	6	174	5	**84**	15	310	21	484
05:00		0	53			3	**69**				
05:15		3	42			7	63				
05:30		2	**59**			12	46				
05:45		2	**56**	7	210	19	56	41	234	48	444
06:00		5	**71**			12	60				
06:15		0	**53**			26	57				
06:30		19	52			42	59				
06:45		14	36	38	212	32	45	112	221	150	433
07:00		22	42			52	34				
07:15		**46**	32			57	34				
07:30		**33**	37			105	32				
07:45		**30**	45	131	156	84	21	298	121	429	277
08:00		**29**	34			**115**	32				
08:15		29	32			**157**	20				
08:30		36	29			**150**	23				
08:45		40	26	134	121	**124**	19	546	94	680	215
09:00		28	32			92	23				
09:15		24	25			66	7				
09:30		27	28			79	8				
09:45		22	21	101	106	45	18	282	56	383	162
10:00		24	17			32	15				
10:15		15	13			40	10				
10:30		24	13			54	17				
10:45		24	15	87	58	38	8	164	50	251	108
11:00		27	8			34	8				
11:15		25	10			36	4				
11:30		39	11			31	5				
11:45		33	5	124	34	42	10	143	27	267	61
Total		680	1594	680	1594	1639	1842	1639	1842	2319	3436
Combined Total		2274		2274		3481		3481		5755	
AM Peak	-	07:15	-	-	-	08:00	-	-	-	-	-
Vol.	-	138	-	-	-	546	-	-	-	-	-
P.H.F.		0.750				0.869					
PM Peak	-	-	05:30	-	-	-	04:15	-	-	-	-
Vol.	-	-	239	-	-	-	320	-	-	-	-
P.H.F.			0.842				0.851				
Percentage		29.9%	70.1%			47.1%	52.9%				
ADT/AADT		ADT 5,755		AADT 5,755							

State of California
DEPARTMENT OF TRANSPORTATION

2070 Controller Timing Chart

Caltrans TSCP Ver 2.21

Location:			**Designed By:**
System:	**District:**		**Intalled By:**
Master At:	**I/C:**		**Service Info:**

Timing Change:	**By:**	**Date Start:**	**Date End:**	**Designed:**	**Installed:**

		FLASH
PHASE	1)	[ ]
	2)	[ ]
	3)	[ ]
	4)	[ ]
	5)	[ ]
	6)	[ ]
	7)	[ ]
	8)	[ ]
OVERLAP	A)	[ ]
	B)	[ ]
	C)	[ ]
	D)	[ ]
	E)	[ ]
	F)	[ ]

Intersection Layout

Comments and Notes:

RAM Checksum

Page 2:	**C43D**	**Page 8:**	**85AF**
Page 3:	**DCAC**	**Page 9:**	**F6AB**
Page 4:	**F29E**	**Page 10:**	**64B2**
Page 5:	**191A**	**Page 11:**	**93EE**
Page 6:	**191A**	**Page 12:**	**EF20**
Page 7:	**EFC9**	**Page 13:**	**86F7**

CONFIGURATION PHASE FLAGS

Phases (2-1-1-1)	
Permitted	- 2 - - - 6 - 8
Restricted	- - - - - - - -

Phase Recalls (2-1-1-2)	
Vehicle Min	- 2 - - - 6 - -
vehicle Max	- - - - - - - -
Pedestrian	- - - - - - - -
Bicyle	- - - - - - - -

Phase Locks (2-1-1-3)	
Red	- - - - - - - -
Yellow	- - - - - - - -
Force/Max	- - - - - - - -

Phase Features (2-1-1-4)	
Double Entry	- - - - - - - -
Rest In Walk	- - - - - - - -
Rest In Red	- - - - - - - -
Walk2	- - - - - - - -
Max Green 2	- 2 - - - 6 - 8
Max Green 3	- - - - - - - -

Startup (2-1-1-5)	
First Green Phases	- 2 - - - 6 - -
Yellow Start Phases	- - - - - - - -
Vehicle Calls	- 2 - - - 6 - 8
Pedestrian Calls	- 2 - - - - - -
Yellow Start Overlaps	- - - - - -
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	- - - - - - - -	1	- - - - - - - -
2	- - - - - - - -	2	- - - - - - - -
3	- - - - - - - -	3	- - - - - - - -
4	- - - - - - - -	4	- - - - - - - -
5	- - - - - - - -	5	- - - - - - - -
6	- - - - - - - -	6	- - - - - - - -
7	- - - - - - - -	7	- - - - - - - -
8	- - - - - - - -	8	- - - - - - - -

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	- - - - - - - -
Yellow Flash Overlap	- - - - - - - -
Flash In Red Phases	- - - - - - - -
Flash In Red Overlap	- - - - - - - -

Special Operation (2-1-2-3)	
Single Exit Phase	- - - - - - - -
Driveway Signal Phases	- - - - - - - -
Driveway Signal Overlaps	- - - - - - - -
Leading Ped Phases	- - - - - - - -

Protected Permissive (2-1-2-4)	
Protected Permissive	- - - - - - - -

Pedestrian (2-1-3)	
P1	- - - - - - - -
P2	- 2 - - - - - -
P3	- - - - - - - -
P4	- - - - - - - -
P5	- - - - - - - -
P6	- - - - - - - -
P7	- - - - - - - -
P8	- - - - - - - -

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A [Arrow A]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
B [Arrow B]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
C [OL A]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
D [OL B]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
E [OL C]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
F [OL D]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

[-] 332 Cabinet Overlap Assignment - For Reference Only

 CHECKSUM: C43D

PHASE TIMING

PHASE (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	7	0	0	0	0	0	0
Flash Don't Walk	0	10	0	0	0	0	0	0
Minimum Green	0	10	0	0	0	10	0	8
Det Limit	0	20	0	0	0	20	0	20
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	0	25	0	0	0	25	0	20
Max Green 2	0	35	0	0	0	35	0	30
Max Green 3	0	0	0	0	0	0	0	0
Extension	0.0	5.2	0.0	0.0	0.0	5.2	0.0	5.2
Maximum Gap	0.0	7.2	0.0	0.0	0.0	7.2	0.0	7.2
Minimum Gap	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
Reduce Every	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.4
Yellow	3.0	4.4	3.0	3.0	3.0	4.4	3.0	4.4
All-Red	0.0	2.0	0.0	0.0	0.0	2.0	1.0	2.0
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A [Arrow A]	B [Arrow B]	C [OL A]	D [OL B]	E [OL C]	F [OL D]
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert (2-5)	
Time	5.0

Red To Se (2-6)	
Red To Sec	OFF

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

PAGE 3 CHECKSUM: DCAC

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

					[Offsets]			Green Factors or Press [F] to Select							
		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor		0.0	- - - - - - - -											
Plan 2	Green Factor		0.0	- - - - - - - -											
Plan 3	Green Factor		0.0	- - - - - - - -											
Plan 4	Green Factor		0.0	- - - - - - - -											
Plan 5	Green Factor		0.0	- - - - - - - -											
Plan 6	Green Factor		0.0	- - - - - - - -											
Plan 7	Green Factor		0.0	- - - - - - - -											
Plan 8	Green Factor		0.0	- - - - - - - -											
Plan 9	Green Factor		0.0	- - - - - - - -											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	- - - - - - - - -
11-19	- - - - - - - - -
21-29	- - - - - - - - -

Master Sub Master	
Input	0.0
Output	0

(7-E) Free	
Lag	Omit
- 2 - 4 - 6 - 8	- - - - - - - -
Veh Min	Veh Max
- 2 - - - 6 - -	- - - - - - - -
Ped	Bike
- - - - - - - -	- - - - - - - -
Cond	Cond Grn
- - - - - - - -	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 2	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 3	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 4	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 5	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 6	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 7	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 8	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 9	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	Offset
0	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

PAGE 4 CHECKSUM: F29E

Local Plan 11...19 (7-2) TIMING DATA COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 11	Green Factor		0.0	- - - - - - - -											
Plan 12	Green Factor		0.0	- - - - - - - -											
Plan 13	Green Factor		0.0	- - - - - - - -											
Plan 14	Green Factor		0.0	- - - - - - - -											
Plan 15	Green Factor		0.0	- - - - - - - -											
Plan 16	Green Factor		0.0	- - - - - - - -											
Plan 17	Green Factor		0.0	- - - - - - - -											
Plan 18	Green Factor		0.0	- - - - - - - -											
Plan 19	Green Factor		0.0	- - - - - - - -											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 12	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 13	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 14	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan15	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 16	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 17	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 18	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 19	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

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Local Plan 21...29 (7-3) TIMING DATA COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 21	Green Factor		0.0	- - - - - - - -											
Plan 22	Green Factor		0.0	- - - - - - - -											
Plan 23	Green Factor		0.0	- - - - - - - -											
Plan 24	Green Factor		0.0	- - - - - - - -											
Plan 25	Green Factor		0.0	- - - - - - - -											
Plan 26	Green Factor		0.0	- - - - - - - -											
Plan 27	Green Factor		0.0	- - - - - - - -											
Plan 28	Green Factor		0.0	- - - - - - - -											
Plan 29	Green Factor		0.0	- - - - - - - -											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 22	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 23	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 24	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 25	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 26	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 27	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 28	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 29	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

DETECTORS

Detector Attributes (5-1)				Slot
Det	Type	Phases	Lock	
1	Count+Call+Extend	1 - - - - - - -	NO	I1U
2	Count+Call+Extend	1 - - - - - - -	NO	I1L
3	Count+Call+Extend	- 2 - - - - - -	NO	I2U
4	Count+Call+Extend	- 2 - - - - - -	NO	I2L
5	Count+Call+Extend	- 2 - - - - - -	NO	I3U
6	Call+Extend	- 2 - - - - - -	NO	I3L
7	Limited	- 2 - - - - - -	NO	I4U
8	Limited	- 2 - - - - - -	NO	I4L
9	Count+Call+Extend	- - 3 - - - - -	NO	I5U
10	Count+Call+Extend	- - 3 - - - - -	NO	I5L
11	Count+Call+Extend	- - - 4 - - - -	NO	I6U
12	Count+Call+Extend	- - - 4 - - - -	NO	I6L
13	Count+Call+Extend	- - - 4 - - - -	NO	I7U
14	Call+Extend	- - - 4 - - - -	NO	I7L
15	Limited	- - - 4 - - - -	NO	I8U
16	Limited	- - - 4 - - - -	NO	I8L
17	Count+Call+Extend	1 - - - - - - -	NO	I9U
18	Count+Call+Extend	- - 3 - - - - -	NO	I9L
19	None	- - - - - - - -	NO	I10U
20	None	- - - - - - - -	NO	I10L
21	Count+Call+Extend	- - - - 5 - - -	NO	J1U
22	Count+Call+Extend	- - - - 5 - - -	NO	J1L
23	Count+Call+Extend	- - - - - 6 - -	NO	J2U
24	Count+Call+Extend	- - - - - 6 - -	NO	J2L
25	Count+Call+Extend	- - - - - 6 - -	NO	J3U
26	Call+Extend	- - - - - 6 - -	NO	J3L
27	Limited	- - - - - 6 - -	NO	J4U
28	Limited	- - - - - 6 - -	NO	J4L
29	Count+Call+Extend	- - - - - - 7 -	NO	J5U
30	Count+Call+Extend	- - - - - - 7 -	NO	J5L
31	Count+Call+Extend	- - - - - - - 8	NO	J6U
32	Count+Call+Extend	- - - - - - - 8	NO	J6L
33	Count+Call+Extend	- - - - - - - 8	NO	J7U
34	Call+Extend	- - - - - - - 8	NO	J7L
35	Limited	- - - - - - - 8	NO	J8U
36	Limited	- - - - - - - 8	NO	J8L
37	Count+Call+Extend	- - - - 5 - - -	NO	J9U
38	Count+Call+Extend	- - - - - - 7 -	NO	J9L
39	None	- - - - - - - -	NO	J10U
40	None	- - - - - - - -	NO	J10L
41	Pedestrian	- 2 - - - - - -	NO	I12U
42	Pedestrian	- - - 4 - - - -	NO	I12L
43	Pedestrian	- - - - - 6 - -	NO	I13U
44	Pedestrian	- - - - - - - 8	NO	I13L

Detector Configuration (5-2)				
Det	Delay	Extend	Recall	Port
1	0	0.0	10	3.2
2	0	0.0	10	7.2
3	0	1.3	10	1.1
4	0	1.3	10	1.5
5	0	0.0	10	4.5
6	0	0.0	10	6.2
7	0	0.0	10	2.1
8	0	0.0	10	7.4
9	0	0.0	10	3.4
10	0	0.0	10	7.6
11	0	0.0	10	1.3
12	0	0.0	10	1.7
13	0	0.0	10	4.7
14	0	0.0	10	6.4
15	0	0.0	10	2.3
16	0	0.0	10	7.8
17	0	0.0	10	3.6
18	0	0.0	10	3.8
19	0	0.0	10	4.1
20	0	0.0	10	4.2
21	0	0.0	10	3.1
22	0	0.0	10	7.1
23	0	1.2	10	1.2
24	0	1.2	10	1.6
25	0	0.0	10	4.6
26	0	0.0	10	6.3
27	0	0.0	10	2.2
28	0	0.0	10	7.3
29	0	0.0	10	3.3
30	0	0.0	10	7.5
31	2	1.3	10	1.4
32	2	1.3	10	1.8
33	0	0.0	10	4.8
34	10	0.0	10	6.5
35	0	2.0	10	2.4
36	0	2.0	10	7.7
37	0	0.0	10	3.5
38	0	0.0	10	3.7
39	0	0.0	10	4.3
40	0	0.0	10	4.4
41	0	0.0	10	5.1
42	0	0.0	10	5.3
43	0	0.0	10	5.2
44	0	0.0	10	5.4

Failure Times (5-3)	Minutes
Maximum On Time	0
Fail Reset Time	0

Failure Override (5-4)	
Detectors 1-8	- - - - - - - -
Detectors 9-16	- - - - - - - -
Detectors 17-24	- - - - - - - -
Detectors 25-32	- - - - - - - -
Detectors 33-40	- - - - - - - -
Detectors 41-44	- - - - - - - -

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Det Num	0	0	0	0	0	0	0	0

CIC Operation (5-6-1)	
Enable in Plans	- - - - - - - -

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.0	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

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TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 2 (8-2-2)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 3 (8-2-3)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 4 (8-2-4)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 5 (8-2-5)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 6 (8-2-6)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

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HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1	0	0	- - - - - - - -	0
2	0	0	- - - - - - - -	0
3	0	0	- - - - - - - -	0
4	0	0	- - - - - - - -	0
5	0	0	- - - - - - - -	0
6	0	0	- - - - - - - -	0
7	0	0	- - - - - - - -	0
8	0	0	- - - - - - - -	0
9	0	0	- - - - - - - -	0
10	0	0	- - - - - - - -	0
11	0	0	- - - - - - - -	0
12	0	0	- - - - - - - -	0
13	0	0	- - - - - - - -	0
14	0	0	- - - - - - - -	0
15	0	0	- - - - - - - -	0
16	0	0	- - - - - - - -	0

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1	0	0	- - - - - - - -	0
2	0	0	- - - - - - - -	0
3	0	0	- - - - - - - -	0
4	0	0	- - - - - - - -	0
5	0	0	- - - - - - - -	0
6	0	0	- - - - - - - -	0
7	0	0	- - - - - - - -	0
8	0	0	- - - - - - - -	0
9	0	0	- - - - - - - -	0
10	0	0	- - - - - - - -	0
11	0	0	- - - - - - - -	0
12	0	0	- - - - - - - -	0
13	0	0	- - - - - - - -	0
14	0	0	- - - - - - - -	0
15	0	0	- - - - - - - -	0
16	0	0	- - - - - - - -	0

Solar Clock Data (8-4)

North Latidude	37
West Longitude	120
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	- - - - - - - -
Holiday	- - - - - - - -

Daylight Saving (8-6)

Daylight Saving	YES

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	0630	2030	1 2 3 4 5 6 7	17	- 2 - - - 6 - 8
2	0000	0000	- - - - - - -	0	- - - - - - - -
3	0000	0000	- - - - - - -	0	- - - - - - - -
4	0000	0000	- - - - - - -	0	- - - - - - - -
5	0000	0000	- - - - - - -	0	- - - - - - - -
6	0000	0000	- - - - - - -	0	- - - - - - - -
7	0000	0000	- - - - - - -	0	- - - - - - - -
8	0000	0000	- - - - - - -	0	- - - - - - - -
9	0000	0000	- - - - - - -	0	- - - - - - - -
10	0000	0000	- - - - - - -	0	- - - - - - - -
11	0000	0000	- - - - - - -	0	- - - - - - - -
12	0000	0000	- - - - - - -	0	- - - - - - - -
13	0000	0000	- - - - - - -	0	- - - - - - - -
14	0000	0000	- - - - - - -	0	- - - - - - - -
15	0000	0000	- - - - - - -	0	- - - - - - - -
16	0000	0000	- - - - - - -	0	- - - - - - - -

Action Codes:
0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11.Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed
200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

C20 (6-1-2)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

C21 (6-1-3)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1	00.0	00	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

NETWORK

Network (6-4)				
Address	1			
Protocol	AB3418			
Port	27000			
IP Mode	Static IP			
IP Address	10	53	52	199
Netmask	255	255	255	0
Broadcast	10	53	52	255
Gateway	10	53	52	254

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RAILROAD PREEMPTION

RR 1	(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
			Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Delay	0									
	Clear 1	10	- 2 - - 5 - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- 2 - 4 - 6 - 8	- - - - - - -	- - - - - - -	- - - - - - -
	Clear 2	0	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -
	Clear 3	0	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -
	Hold	0	- - - - - - - - -	- - - - - - - - -	1 2 3 4 5 6 7 8	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	A B C D E F
	Exit	5									
	Min Grn	0									
	Ped Clr	0									

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Vehicle Recall	Ped Call
- - - - - - - - -	- - - - - - -	1 2 3 4 5 6 7 8	- 2 - 4 - 6 - 8

Configuration (3-1-6)			
Port	Gate Port	Latching	Power-Up
2.5	0.0	Yes	Flashing

RR 2	(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
			Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Delay	0									
	Clear 1	10	- - - 4 - - 7 -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- 2 - 4 - 6 - 8	- - - - - - -	- - - - - - -	- - - - - - -
	Clear 2	0	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -
	Clear 3	0	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -
	Hold	0	1 2 3 - - 6 - -	- - - - - - - - -	- - - - - - - - -	- 2 - - - 6 - -	- - - - - - - - -	- - - 4 - - - 8	- - - - - - -	- - - - - - -	- - - - - - -
	Exit	0									
	Min Grn	0									
	Ped Clr	0									

Exit Parameters (3-2-5)			
Exit Ph Grn	Exit Ovl Grn	Exit Veh Recall	Exit Ped Call
- - - - - - - - -	- - - - - - -	- - - 4 - - 7 -	- - - - - - - - -

Configuration (3-2-6)			
Port	Gate Port	Latching	Power-Up
2.6	0.0	Yes	Flashing

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	- 2 - - 5 - - -	- - - - - - -

Port	Latching	Phase Termination
5.5	No	Advance

EVB (3-B)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	- - - 4 - - 7 -	- - - - - - -

Port	Latching	Phase	Phase Termination
5.6	No		Advance

EVC (3-C)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	1 - - - - 6 - -	- - - - - - -

Port	Latching	Phase Termination
5.7	No	Advance

EVD (3-D)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	- - 3 - - - - 8	- - - - - - -

Port	Latching	Phase	Phase Termination
5.8	No		Advance

INPUTS

		7 Wire I/C(2-1-5-1)			
		Input	Port	Input	Port
Enable	No	R1	3.8	Free	3.6
Max ON	0	R2	3.5	D2	2.8
Max OFF	0	R3	3.7	D3	6.1

Manual Control(2-1-5-2)	
Input	Port
Manual Adv	6.6
Adv Enable	6.6

Battery Backup (2-1-5-5)	
Port	Operation
2.7	Flashing

Cabinet Staus (2-1-5-3)	
Input	Port
Flash Bus	0.0
Door Ajar	0.0
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	0.0
2	0.0
3	0.0
4	0.0

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:
0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C
+ middle output of loadswitches 3 and 6

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	1	2	3	4	5	6	7	8	Coord	Lag	Min Recall	Restricted
Plan C	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -
Plan D	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -

TRANSIT PRIORITY

Local Plans (3-E) 1...9 1...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 2	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 3	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 4	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 11	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 12	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 13	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 14	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 15	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 16	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 17	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 18	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 19	Green Factor	0	0	0	0	0	0	0	0	0	0	0

Enable Priority in Plan (3-E-A)					
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	- - - - - - - -	0.0	OPT	0	0
Plan 11-19	- - - - - - - -	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
0	- - - - - - - -
0	- - - - - - - -

Free Plans (3-E-E)	
Max Green	Hold Phase
0	- - - - - - - -

Access Utilities (9-5)	
Password	***
Timeout	30

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
	0.0	0.0	0	0	- - - - - - - -	0.0	0.0	0.0	0	0.0	0

CONTROLLER ID

Manufacturer ID	Caltrans TSCP Ver 2.21
Model ID	Model 2070
Protocol Revision ID	AB3418

Intersection Name: 180EB @ Fowler
Controller 42180029.4 Channel: 4218 Drop: 1
System: TransCore TransSuite TCS
Controller Type: Caltrans TSCPE
Revision - Version -
TransCore Unified Controller Manager 21.4.0

Zero Tables

AllRedLabel
LocalPlan 1 9
ForceOffCalculation
LocalPlan 11 19
ForceOffCalculation
LocalPlan 21 29
ForceOffCalculation
DetectorFail
SystemDetectorAssignment
HolidayTables
SoftLogic
TransitPriority
TruckPriority

Non-Zero Tables

ConfigurationPhaseFlags
PhaseTiming
OverlapTiming
CoordPlanConfig
CoordinationPlans 1 9
CoordinationPlans 11 19
CoordinationPlans 21 29
Detectors
CICOperations
TODSchedule
WeekdayAssignment
ClockConfig
TODFunctions
Communications
CallbackNumbers
Network
RailroadPreemption
EmergencyVehiclePreemption
Inputs
Outputs
YellowYieldCoordination
TSPConfig
Checksum
CONTROLLER ID

Journal Entries

2021/08/10 08:21:51: [By s128221] 20210810_OPR_NC

State of California
DEPARTMENT OF TRANSPORTATION

2070 Controller Timing Chart

Caltrans TSCP Ver 2.21

Location:			Designed By:
System:	District:		Intalled By:
Master At:	I/C:		Service Info:

Timing Change:	By:	Date Start:	Date End:	Designed:	Installed:

		FLASH
PHASE	1)	[ ]
	2)	[ ]
	3)	[ ]
	4)	[ ]
	5)	[ ]
	6)	[ ]
	7)	[ ]
	8)	[ ]
OVERLAP	A)	[ ]
	B)	[ ]
	C)	[ ]
	D)	[ ]
	E)	[ ]
	F)	[ ]

Intersection Layout

Comments and Notes:

RAM Checksum

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Page 3:	13C0	Page 9:	ED92
Page 4:	F29E	Page 10:	A4F6
Page 5:	191A	Page 11:	93EE
Page 6:	191A	Page 12:	EF20
Page 7:	7C74	Page 13:	86F7

CONFIGURATION PHASE FLAGS

Phases (2-1-1-1)	
Permitted	1 2 - 4 - 6 - -
Restricted	- - - - - - - -

Phase Recalls (2-1-1-2)	
Vehicle Min	- 2 - - - 6 - -
vehicle Max	- - - - - - - -
Pedestrian	- - - - - - - -
Bicyle	- - - - - - - -

Phase Locks (2-1-1-3)	
Red	- - - - - - - -
Yellow	- - - - - - - -
Force/Max	- - - - - - - -

Phase Features (2-1-1-4)	
Double Entry	- - - - - - - -
Rest In Walk	- - - - - - - -
Rest In Red	- - - - - - - -
Walk2	- - - - - - - -
Max Green 2	1 2 - 4 - 6 - -
Max Green 3	- - - - - - - -

Startup (2-1-1-5)	
First Green Phases	- 2 - - - 6 - -
Yellow Start Phases	- - - - - - - -
Vehicle Calls	1 2 - 4 - 6 - -
Pedestrian Calls	- 2 - - - 6 - -
Yellow Start Overlaps	- - - - - -
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	- - - - - - - -	1	- - - - - - - -
2	- - - - - - - -	2	- - - - - - - -
3	- - - - - - - -	3	- - - - - - - -
4	- - - - - - - -	4	- - - - - - - -
5	- - - - - - - -	5	- - - - - - - -
6	- - - - - - - -	6	- - - - - - - -
7	- - - - - - - -	7	- - - - - - - -
8	- - - - - - - -	8	- - - - - - - -

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	- - - - - - - -
Yellow Flash Overlap	- - - - - - - -
Flash In Red Phases	- - - - - - - -
Flash In Red Overlap	- - - - - - - -

Special Operation (2-1-2-3)	
Single Exit Phase	- - - - - - - -
Driveway Signal Phases	- - - - - - - -
Driveway Signal Overlaps	- - - - - - - -
Leading Ped Phases	- - - - - - - -

Protected Permissive (2-1-2-4)	
Protected Permissive	- - - - - - - -

Pedestrian (2-1-3)	
P1	- - - - - - - -
P2	- 2 - - - - - -
P3	- - - - - - - -
P4	- - - - - - - -
P5	- - - - - - - -
P6	- - - - - 6 - -
P7	- - - - - - - -
P8	- - - - - - - -

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A [Arrow A]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
B [Arrow B]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
C [OL A]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
D [OL B]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
E [OL C]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
F [OL D]	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

[-] 332 Cabinet Overlap Assignment - For Reference Only

PAGE 2 CHECKSUM: 9E95

PHASE TIMING

PHASE (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	7	0	0	0	7	0	0
Flash Don't Walk	0	24	0	0	0	24	0	0
Minimum Green	6	11	0	8	0	11	0	0
Det Limit	0	30	0	20	0	30	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	15	30	0	20	0	30	0	0
Max Green 2	25	40	0	30	0	40	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	5.2	0.0	6.3	0.0	5.2	0.0	0.0
Maximum Gap	2.0	7.2	0.0	8.7	0.0	7.2	0.0	0.0
Minimum Gap	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Reduce Every	0.0	0.5	0.0	0.3	0.0	0.5	0.0	0.0
Yellow	3.7	4.4	3.0	4.1	3.0	4.4	3.0	3.0
All-Red	2.9	2.1	0.0	2.3	0.0	2.1	0.0	0.0
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A [Arrow A]	B [Arrow B]	C [OL A]	D [OL B]	E [OL C]	F [OL D]
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert (2-5)	
Time	5.0

Red To Se (2-6)	
Red To Sec	OFF

Max/Gap Out (2-7)	
Max Cnt	0
Gap Cnt	0

PAGE 3 CHECKSUM: 13C0

Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

					[Offsets]			Green Factors or Press [F] to Select							
		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor		0.0	- - - - - - - -											
Plan 2	Green Factor		0.0	- - - - - - - -											
Plan 3	Green Factor		0.0	- - - - - - - -											
Plan 4	Green Factor		0.0	- - - - - - - -											
Plan 5	Green Factor		0.0	- - - - - - - -											
Plan 6	Green Factor		0.0	- - - - - - - -											
Plan 7	Green Factor		0.0	- - - - - - - -											
Plan 8	Green Factor		0.0	- - - - - - - -											
Plan 9	Green Factor		0.0	- - - - - - - -											

Master Timer Sync (7-A)	
Enable in Plans	
1-9	- - - - - - - - -
11-19	- - - - - - - - -
21-29	- - - - - - - - -

Master Sub Master	
Input	0.0
Output	0

(7-E) Free	
Lag	Omit
- 2 - 4 - 6 - 8	- - - - - - - -
Veh Min	Veh Max
- 2 - - - 6 - -	- - - - - - - -
Ped	Bike
- - - - - - - -	- - - - - - - -
Cond	Cond Grn
- - - - - - - -	10

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 2	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 3	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 4	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 5	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 6	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 7	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 8	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 9	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

MANUAL COMMANDS

Manual Plan (4-1)	
Plan	Offset
0	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)			
#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

PAGE 4 CHECKSUM: F29E

Local Plan 11...19 (7-2) TIMING DATA COORDINATION

[Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 11	Green Factor		0.0	- - - - - - - -											
Plan 12	Green Factor		0.0	- - - - - - - -											
Plan 13	Green Factor		0.0	- - - - - - - -											
Plan 14	Green Factor		0.0	- - - - - - - -											
Plan 15	Green Factor		0.0	- - - - - - - -											
Plan 16	Green Factor		0.0	- - - - - - - -											
Plan 17	Green Factor		0.0	- - - - - - - -											
Plan 18	Green Factor		0.0	- - - - - - - -											
Plan 19	Green Factor		0.0	- - - - - - - -											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 12	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 13	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 14	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan15	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 16	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 17	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 18	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 19	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

Local Plan 21...29 (7-3) TIMING DATA COORDINATION

					[Offsets]			Green Factors or Press [F] to Select Force-Off							
		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 21	Green Factor		0.0	- - - - - - - -											
Plan 22	Green Factor		0.0	- - - - - - - -											
Plan 23	Green Factor		0.0	- - - - - - - -											
Plan 24	Green Factor		0.0	- - - - - - - -											
Plan 25	Green Factor		0.0	- - - - - - - -											
Plan 26	Green Factor		0.0	- - - - - - - -											
Plan 27	Green Factor		0.0	- - - - - - - -											
Plan 28	Green Factor		0.0	- - - - - - - -											
Plan 29	Green Factor		0.0	- - - - - - - -											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 22	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 23	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 24	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 25	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 26	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 27	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 28	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -
Plan 29	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - - -

DETECTORS

Detector Attributes (5-1)				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	Count+Call+Extend	1 - - - - - - -	NO	I1U	1	0	2.0	10	3.2
2	Count+Call+Extend	1 - - - - - - -	NO	I1L	2	0	2.0	10	7.2
3	Count+Call+Extend	- 2 - - - - - -	NO	I2U	3	0	1.2	10	1.1
4	Count+Call+Extend	- 2 - - - - - -	NO	I2L	4	0	1.2	10	1.5
5	Count+Call+Extend	- 2 - - - - - -	NO	I3U	5	0	0.0	10	4.5
6	Call+Extend	- 2 - - - - - -	NO	I3L	6	0	0.0	10	6.2
7	Limited	- 2 - - - - - -	NO	I4U	7	0	2.0	10	2.1
8	Limited	- 2 - - - - - -	NO	I4L	8	0	2.0	10	7.4
9	Count+Call+Extend	- - 3 - - - - -	NO	I5U	9	0	0.0	10	3.4
10	Count+Call+Extend	- - 3 - - - - -	NO	I5L	10	0	0.0	10	7.6
11	Count+Call+Extend	- - - 4 - - - -	NO	I6U	11	2	2.5	10	1.3
12	Count+Call+Extend	- - - 4 - - - -	NO	I6L	12	2	2.5	10	1.7
13	Count+Call+Extend	- - - 4 - - - -	NO	I7U	13	20	0.0	10	4.7
14	Call+Extend	- - - 4 - - - -	NO	I7L	14	20	0.0	10	6.4
15	Limited	- - - 4 - - - -	NO	I8U	15	0	2.0	10	2.3
16	Limited	- - - 4 - - - -	NO	I8L	16	0	2.0	10	7.8
17	Count+Call+Extend	1 - - - - - - -	NO	I9U	17	0	0.0	10	3.6
18	Count+Call+Extend	- - 3 - - - - -	NO	I9L	18	0	0.0	10	3.8
19	None	- - - - - - - -	NO	I10U	19	0	0.0	10	4.1
20	None	- - - - - - - -	NO	I10L	20	0	0.0	10	4.2
21	Count+Call+Extend	- - - - 5 - - -	NO	J1U	21	0	0.0	10	3.1
22	Count+Call+Extend	- - - - 5 - - -	NO	J1L	22	0	0.0	10	7.1
23	Count+Call+Extend	- - - - - 6 - -	NO	J2U	23	0	1.3	10	1.2
24	Count+Call+Extend	- - - - - 6 - -	NO	J2L	24	0	1.3	10	1.6
25	Count+Call+Extend	- - - - - 6 - -	NO	J3U	25	0	0.0	10	4.6
26	Call+Extend	- - - - - 6 - -	NO	J3L	26	0	0.0	10	6.3
27	Limited	- - - - - 6 - -	NO	J4U	27	0	2.0	10	2.2
28	Limited	- - - - - 6 - -	NO	J4L	28	0	2.0	10	7.3
29	Count+Call+Extend	- - - - - - 7 -	NO	J5U	29	0	0.0	10	3.3
30	Count+Call+Extend	- - - - - - 7 -	NO	J5L	30	0	0.0	10	7.5
31	Count+Call+Extend	- - - - - - - 8	NO	J6U	31	0	0.0	10	1.4
32	Count+Call+Extend	- - - - - - - 8	NO	J6L	32	0	0.0	10	1.8
33	Count+Call+Extend	- - - - - - - 8	NO	J7U	33	0	0.0	10	4.8
34	Call+Extend	- - - - - - - 8	NO	J7L	34	0	0.0	10	6.5
35	Limited	- - - - - - - 8	NO	J8U	35	0	0.0	10	2.4
36	Limited	- - - - - - - 8	NO	J8L	36	0	0.0	10	7.7
37	Count+Call+Extend	- - - - 5 - - -	NO	J9U	37	0	0.0	10	3.5
38	Count+Call+Extend	- - - - - - 7 -	NO	J9L	38	0	0.0	10	3.7
39	None	- - - - - - - -	NO	J10U	39	0	0.0	10	4.3
40	None	- - - - - - - -	NO	J10L	40	0	0.0	10	4.4
41	Pedestrian	- 2 - - - - - -	NO	I12U	41	0	0.0	10	5.1
42	Pedestrian	- - - 4 - - - -	NO	I12L	42	0	0.0	10	5.3
43	Pedestrian	- - - - - 6 - -	NO	I13U	43	0	0.0	10	5.2
44	Pedestrian	- - - - - - - 8	NO	I13L	44	0	0.0	10	5.4

Failure Times (5-3)	Minutes
Maximum On Time	0
Fail Reset Time	0

Failure Override (5-4)	
Detectors 1-8	- - - - - - - -
Detectors 9-16	- - - - - - - -
Detectors 17-24	- - - - - - - -
Detectors 25-32	- - - - - - - -
Detectors 33-40	- - - - - - - -
Detectors 41-44	- - - - - - - -

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Det Num	0	0	0	0	0	0	0	0

CIC Operation (5-6-1)	
Enable in Plans	- - - - - - - -

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.0	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

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TOD SCHEDULE

Table 1 (8-2-1)		
Time	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 2 (8-2-2)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 3 (8-2-3)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 4 (8-2-4)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 5 (8-2-5)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

Table 6 (8-2-6)		
Hour	Plan	OS
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A
0000	0	A

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

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HOLIDAY TABLES

Floating Holiday Table (8-2-8)

#	Mnth	Week	DOW	Table
1	0	0	- - - - - - - -	0
2	0	0	- - - - - - - -	0
3	0	0	- - - - - - - -	0
4	0	0	- - - - - - - -	0
5	0	0	- - - - - - - -	0
6	0	0	- - - - - - - -	0
7	0	0	- - - - - - - -	0
8	0	0	- - - - - - - -	0
9	0	0	- - - - - - - -	0
10	0	0	- - - - - - - -	0
11	0	0	- - - - - - - -	0
12	0	0	- - - - - - - -	0
13	0	0	- - - - - - - -	0
14	0	0	- - - - - - - -	0
15	0	0	- - - - - - - -	0
16	0	0	- - - - - - - -	0

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1	0	0	- - - - - - - -	0
2	0	0	- - - - - - - -	0
3	0	0	- - - - - - - -	0
4	0	0	- - - - - - - -	0
5	0	0	- - - - - - - -	0
6	0	0	- - - - - - - -	0
7	0	0	- - - - - - - -	0
8	0	0	- - - - - - - -	0
9	0	0	- - - - - - - -	0
10	0	0	- - - - - - - -	0
11	0	0	- - - - - - - -	0
12	0	0	- - - - - - - -	0
13	0	0	- - - - - - - -	0
14	0	0	- - - - - - - -	0
15	0	0	- - - - - - - -	0
16	0	0	- - - - - - - -	0

Solar Clock Data (8-4)

North Latidude	36
West Longitude	119
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	- - - - - - - -
Holiday	- - - - - - - -

Daylight Saving (8-6)

Daylight Saving	YES

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
1	0630	2030	1 2 3 4 5 6 7	17	1 2 - 4 - 6 - -
2	0000	0000	- - - - - - - -	0	- - - - - - - -
3	0000	0000	- - - - - - - -	0	- - - - - - - -
4	0000	0000	- - - - - - - -	0	- - - - - - - -
5	0000	0000	- - - - - - - -	0	- - - - - - - -
6	0000	0000	- - - - - - - -	0	- - - - - - - -
7	0000	0000	- - - - - - - -	0	- - - - - - - -
8	0000	0000	- - - - - - - -	0	- - - - - - - -
9	0000	0000	- - - - - - - -	0	- - - - - - - -
10	0000	0000	- - - - - - - -	0	- - - - - - - -
11	0000	0000	- - - - - - - -	0	- - - - - - - -
12	0000	0000	- - - - - - - -	0	- - - - - - - -
13	0000	0000	- - - - - - - -	0	- - - - - - - -
14	0000	0000	- - - - - - - -	0	- - - - - - - -
15	0000	0000	- - - - - - - -	0	- - - - - - - -
16	0000	0000	- - - - - - - -	0	- - - - - - - -

Action Codes:
0. None
1. Permitted
2. Restricted
4. Veh Min Recall
5. Veh Max Recall
6. Ped Recall
7. Bike Recall
8. Red Lock
9. Yellow Lock
10. Force/Max Lock
11.Double Entry
12. Y-Coord C
13. Y-Coord D
14. Free
15. Flashing
16. Walk 2
17. Max Green 2
18. Max Green 3
19. Rest in Walk
20. Rest in Red
21. Free Lag Phases
22. Special Functions
23. Truck Preempt
24. Conditional Service
25. Conditional Service
26. Leading Ped
41. Protected Permissive
42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed
200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

C20 (6-1-2)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

C21 (6-1-3)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1	00.0	00	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

NETWORK

Network (6-4)				
Address	1			
Protocol	AB3418			
Port	27000			
IP Mode	Static IP			
IP Address	10	53	52	203
Netmask	255	255	255	0
Broadcast	10	53	52	255
Gateway	10	53	52	254

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RAILROAD PREEMPTION

RR 1

(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Delay	0									
Clear 1	10	- 2 - - 5 - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- 2 - 4 - 6 - 8	- - - - - - -	- - - - - - -	- - - - - - -
Clear 2	0	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -
Clear 3	0	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -
Hold	0	- - - - - - - - -	- - - - - - - - -	1 2 3 4 5 6 7 8	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	A B C D E F
Exit	5									
Min Grn	0									
Ped Clr	0									

Exit Parameters (3-1-5)			
Phase Green	Overlap Green	Vehicle Recall	Ped Call
- - - - - - - - -	- - - - - - -	1 2 3 4 5 6 7 8	- 2 - 4 - 6 - 8

Configuration (3-1-6)			
Port	Gate Port	Latching	Power-Up
2.5	0.0	Yes	Flashing

RR 2

(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
Delay	0									
Clear 1	10	- - - 4 - - 7 -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- 2 - 4 - 6 - 8	- - - - - - -	- - - - - - -	- - - - - - -
Clear 2	0	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -
Clear 3	0	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -
Hold	0	1 2 3 - - 6 - -	- - - - - - - - -	- - - - - - - - -	- 2 - - - 6 - -	- - - - - - - - -	- - - 4 - - - 8	- - - - - - -	- - - - - - -	- - - - - - -
Exit	0									
Min Grn	0									
Ped Clr	0									

Exit Parameters (3-2-5)			
Exit Ph Grn	Exit Ovl Grn	Exit Veh Recall	Exit Ped Call
- - - - - - - - -	- - - - - - -	- - - 4 - - 7 -	- - - - - - - - -

Configuration (3-2-6)			
Port	Gate Port	Latching	Power-Up
2.6	0.0	Yes	Flashing

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	- 2 - - 5 - - -	- - - - - - -

Port	Latching	Phase Termination
5.5	No	Advance

EVB (3-B)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	- - - 4 - - 7 -	- - - - - - -

Port	Latching	Phase	Phase Termination
5.6	No		Advance

EVC (3-C)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	1 - - - - 6 - -	- - - - - - -

Port	Latching	Phase Termination
5.7	No	Advance

EVD (3-D)

Preempt Timers			Phase Green	Overlap Grn
Delay	Clear	Max		
0	30	30	- - 3 - - - - 8	- - - - - - -

Port	Latching	Phase	Phase Termination
5.8	No		Advance

INPUTS

		7 Wire I/C(2-1-5-1)			
		Input	Port	Input	Port
Enable	No	R1	3.8	Free	3.6
Max ON	0	R2	3.5	D2	2.8
Max OFF	0	R3	3.7	D3	6.1

Manual Control(2-1-5-2)	
Input	Port
Manual Adv	6.6
Adv Enable	6.6

Battery Backup (2-1-5-5)	
Port	Operation
2.7	Flashing

Cabinet Staus (2-1-5-3)	
Input	Port
Flash Bus	0.0
Door Ajar	0.0
Flash Sense	6.7
Stop Time	6.8

Special Function (2-1-5-4)	
Input	Port
1	0.0
2	0.0
3	0.0
4	0.0

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)							
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:
0 Unused (no output)
1-8 Vehicle 1-8
9-14 Overlap A-F
21-28 Ped 1-8
41-47 Special Functions
41 Protected Permissive Flashing Phase 1
43 Protected Permissive Flashing Phase 3
45 Protected Permissive Flashing Phase 5
47 Protected Permissive Flashing Phase 7
51-57 Special Functions
71-72 Seven Wire I/C
+ middle output of loadswitches 3 and 6

YELLOW YIELD COORDINATION

					Force-Offs											
Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	1	2	3	4	5	6	7	8	Coord	Lag	Min Recall	Restricted
Plan C	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -
Plan D	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -

TRANSIT PRIORITY

Local Plans (3-E) 1...9 1...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 2	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 3	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 4	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 11	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 12	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 13	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 14	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 15	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 16	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 17	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 18	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 19	Green Factor	0	0	0	0	0	0	0	0	0	0	0

Enable Priority in Plan (3-E-A)					
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	- - - - - - - -	0.0	OPT	0	0
Plan 11-19	- - - - - - - -	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
0	- - - - - - - -
0	- - - - - - - -

Free Plans (3-E-E)	
Max Green	Hold Phase
0	- - - - - - - -

Access Utilities (9-5)	
Password	***
Timeout	30

TRUCK PRIORITY

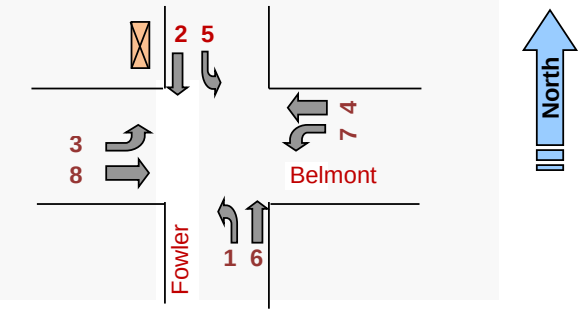
Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
	0.0	0.0	0	0	- - - - - - - -	0.0	0.0	0.0	0	0.0	0

CONTROLLER ID

Manufacturer ID	Caltrans TSCP Ver 2.21
Model ID	Model 2070
Protocol Revision ID	AB3418

Movement	NL	ST	EL	WT	SL	NT	WL	ET		
Times [1.1.1]	1	2	3	4	5	6	7	8	9	10
Min Green	8	8	8	8	8	8	8	8		0
Gap, Ext	2	6.5	2	5.5	2	6.5	2	5.6		0
Max 1	20	35	20	25	20	35	20	25		0
Max 2	12	25	12	15	12	25	12	15		0
Yel Clearance	3.6	3.9	3.9	4.3	3.6	3.9	3.9	4.3		0
Red Clearance	1	1	1	1	2	1	1	1		0
Walk	0	5	0	5		5		5		0
Ped Clearance	0	27	0	35		30		32		0
Red Revert	2	2	2	2	2	2	2	2		0
Add Initial	0		0			0		0		0
Max Initial	0		0			0		0		0
Time B4 Reduct	0	8	0	8		8		8		0
Cars B4 Reduct	0		0			0		0		0
Time To Reduce	0	18	0	11		18		11		0
Reduce By	0		0			0		0		0
Min Gap	2	2	2	2	2	2	2	2		0
DyMaxLim	0		0			0		0		0
Max Step	0		0			0		0		0

Options [1.1.2]	1	2	3	4	5	6	7	8	9	10
Enable	X	X	X	X	X	X	X	X		
Min Recall										
Max Recall										
Ped Recall										
Soft Recall		X				X				
Lock Calls										
Auto Flash Entry										
Auto Flash Exit										
Dual Entry		X		X		X		X		
Enable Simul Gap										
Gaurantee Passage										
Rest In Walk										
Conditonal Service										
Non-Actuated 1										
Non-Actuated 2										
Add Init Calc										



Phase Options+ [1.1.3]

Options+	1	2	3	4	5	6	7	8	9	10
Reservice										
PedClr Thru Yel										
SkipRed-NoCall										
Red Rest										
Max II										
*Max III										
Max Inhibit										
Ped Delay										
Red Rest on Gap										
Conflicting Phase	0	0	0	0	0	0	0	0	0	0
Grn/Ped Delay										
Omit Yel, Yel P	0	0	0	0	0	0	0	0	0	0
Ped Out/Olp Ped										
StartYel, Next P	0	0	0	0	0	0	0	0	0	0
*StartupVehCall	1	2	3	4	5	6	7	8		
*StartupPedCall										

Phase Concurrency [1.1.4]

Phase	Ring	StartUp	Concurrent Phases							
1	1	RED	5	6	0	0				
2	1	GREEN	5	6	0	0				
3	1	RED	7	8	0	0				
4	1	RED	7	8	0	0				
5	2	RED	1	2	0	0				
6	2	GREEN	1	2	0	0				
7	2	RED	3	4	0	0				
8	2	RED	3	4	0	0				
9	0	RED	0	0	0	0				
10	0	RED	0	0	0	0				
11	0	RED	0	0	0	0				
12	0	RED	0	0	0	0				

Comm Ports [6.6]

Channel	Port	Echo	Mode
Async 1	SP1	NONE	0
Async 2	SP2	NONE	0
Async 3	SP8	NONE	0
Async 4	OFF	NONE	0
Sync 1	SP5S		
Sync 2	OFF		
TS2CVM	NONE		
Opticom	NONE		
GPS	NONE		

Unit Params [1.2.1]

Screen Size	8	Metric	OFF
Startup Flash	0	Red Revert	2
MCE Timeout	0	Auto Ped Clear	OFF
Loc Flsh Start	RSt	Display Time	60
Yellow < 3"	OFF	Tone Disable	ON
Allow Skip Yel	OFF	AudioPedTime	0
Start Red Tm	6	Phase Mode	STD8
Startup Calls	UseProg	CNA FreeTime	0
TOD Dimming	OFF	Diamond Mode	4Ph
ST over Prmpt	OFF	Free Ring Seq	1
Feature Profile	1	IO Mode	USER
Mx Seek TrkTm	0	Max Cyc Timer	0
Mx Seek Dwell	0	CycFlt Actn	ALARM
Prmpt/Ext Coor	EXT	Clrnc Decide	OFF
Aux Switch	STOPTM	LPAlt Srs	3-6
*InhFYA Red St	OFF	Security Delay	0
RingA1go	0		

* - 76.12B or newer

Times+ [1.1.7]

	1	2	3	4	5	6	7	8
Walk2	0	0	0	0	0	0	0	0
BikeClr	0	0	0	0	0	0	0	0
GrnFlash	0	0	0	0	0	0	0	0
SfClrMn	0	0	0	0	0	0	0	0
SfClrNoFlsh	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
NoPed Reserv								

Comm [6.2]

Port	Baud Rate	FCM
1	38400	6
2	9600	6
3	9600	6
4	9600	6

Comm [6.5] — Host IPs

IP Address:	192	168	1	20	ATMS			
Mask:	255	255	255	0	10	50	10	22
Gateway:	192	168	1	1	SG			
Port #:	5001				0	0	0	0

City of FRESNO

Phase Seq. (2 ring) Chart [1.2.4]

Seq #	Ring	Phases					
1	1	1	2	3	4	0	0
	2	5	6	7	8	0	0
2	1	1	2	3	4	0	0
	2	6	5	7	8	0	0
3	1	2	1	3	4	0	0
	2	5	6	7	8	0	0
4	1	2	1	3	4	0	0
	2	6	5	7	8	0	0
5	1	1	2	3	4	0	0
	2	5	6	8	7	0	0
6	1	1	2	3	4	0	0
	2	6	5	8	7	0	0
7	1	2	1	3	4	0	0
	2	5	6	8	7	0	0
8	1	2	1	3	4	0	0
	2	6	5	8	7	0	0
9	1	1	2	4	3	0	0
	2	5	6	7	8	0	0
10	1	1	2	4	3	0	0
	2	6	5	7	8	0	0
11	1	2	1	4	3	0	0
	2	5	6	7	8	0	0
12	1	2	1	4	3	0	0
	2	6	5	7	8	0	0
13	1	1	2	4	3	0	0
	2	5	6	8	7	0	0
14	1	1	2	4	3	0	0
	2	6	5	8	7	0	0
15	1	2	1	4	3	0	0
	2	5	6	8	7	0	0
16	1	2	1	4	3	0	0
	2	6	5	8	7	0	0

Advance Warning [1.1.9]

	Ph	Tm
Aux Out #1	0	0
Aux Out #2	0	0

NAME: Belmont & Fowler **ID:** 166 **Configuration:** Standard File

V76.12/13
Updated 12/6/17

Prepared by:	PG	Date Installed / By:	2/24/2021
Checked by:	PG	Date Superseded:	

Date Printed: 2/24/21

[2.1] Coord Modes+

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX INH
Force Mode	FIXED
Flash Mode	CHANNEL

Coord Modes+ (Page 2)

FreeonSeqCh	ON
Closed Loop	OFF
External	OFF
Latch Sec Frc	OFF
Stop-in-Walk	OFF
Ped Recycle	P1256_INH
Expand Split	OFF
Easy Float	OFF
Auto Reset	ON
NTCIP Yield	+ 0

Leave Walk

Before	TIMED
After	TIMED

Intersection Name: Belmont & Fowler

ID: 166

City of FRESNO

Date Printed: 2/24/2021

[2.4] Patterns

Pat#	Cyc	Off	Split	Seq
1	0	0	1	1
2	0	0	2	1
3	0	0	3	1
4	0	0	4	1
5	0	0	5	1
6	0	0	6	1
7	0	0	7	1
8	0	0	8	1
9	0	0	9	1
10	0	0	10	1
11	0	0	0	1
12	0	0	0	1
13	0	0	0	1

[2.7.1-24] Splits

Split	[2.7]	1	2	3	4	5	6	7	8	9	10
1	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
2	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
3	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
4	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
5	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
6	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
7	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
8	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
9	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
10	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
11	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
12	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
13	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

[2.5] Transition

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	Ret Hold	Flt	Min Veh	Min Ped	MI
1	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
2	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
3	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
4	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
5	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
6	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
7	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
8	10	25	0	0	0	0	0	0	EndGRN	-	-	-	X	OFF
9	10	25	0	0	0	0	0	0	EndGRN	-	-	-	-	OFF
10	10	25	0	0	0	0	0	0	EndGRN	-	-	-	-	OFF
11		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
12	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
13		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF

[2.1] Coord Modes+

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX INH
Force Mode	FIXED
Flash Mode	CHANNEL

Coord Modes+ (Page 2)

FreeonSeqCh	ON
Closed Loop	OFF
External	OFF
Latch Sec Frc	OFF
Stop-in-Walk	OFF
Ped Recycle	P1256_INH
Expand Splt	OFF
Easy Float	OFF
Auto Reset	ON
NTCIP Yield	+ 0
Leave Walk	
Before	TIMED
After	TIMED

Intersection Name: Belmont & Fowler

ID: 166

Date Printed: 2/24/2021

[2.4] Patterns

Pat#	Cyc	Off	Split	Seq
20	0	0	0	1
21	0	0	0	1
22	0	0	0	1
23	0	0	0	1
24	0	0	0	1
25	0	0	0	1
26	0	0	0	1
27	0	0	0	1
28	0	0	0	1
29	0	0	0	1
30	0	0	0	1
31	0	0	0	1
32	0	0	0	1

[2.7.1-24] Splits

Split	[2.7]	1	2	3	4	5	6	7	8	9	10
20	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
21	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
22	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
23	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
24	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
25	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
26	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
27	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
28	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
29	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
30	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
31	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
32	Split	0	0	0	0	0	0	0	0	0	0
	Crd-P										
	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON

[2.5] Transition

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	Ret Hold	Flt	Min Veh	Min Ped	MI
20		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
21	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
22		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
23	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
24		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
25	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
26		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
27	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
28		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
29	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
30		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
31	0	17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF
32		17	0	0	0	0	0	0	BegGRN	-	-	-	-	OFF

[2.7.X.3] TSP Split Table

Pat#	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
1	0	0	1	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
2	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	2	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
3	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	3	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
4	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	4	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
5	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	5	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
6	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	6	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						
9 - FREE	Cyc	Off	Split	Seq	SPLITS	1	2	3	4	5	6	7	8	9	10
	0	0	9	1		0	0	0	0	0	0	0	0	0	0
					TSP - Max Reduction	0	0	0	0	0	0	0	0	0	0
					TSP - Max Extend	0	0	0	0	0	0	0	0	0	0
					Request	1	2	3	4						
					Strategy	0	0	0	0						
					TimSvcDes	0	0	0	0						
					TimEstDep	0	0	0	0						

[2.9.2.(1-8)] Strategy Tables

STRATEGY_1

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_2

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_3

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_4

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_5

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_6

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_7

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

STRATEGY_8

SvcPhases	0	0	0	0
Phs Omits	0	0	0	0
Ped Omits	0	0	0	0

Overlap 1-8 Program Parms & Parm+ [1.5.2.1] [1.5.2.8]

1	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
A	Conflict Olap									Red	1
	Conflict Ped										
2	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
B	Conflict Olap									Red	1
	Conflict Ped										
3	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
C	Conflict Olap									Red	1
	Conflict Ped										
4	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
D	Conflict Olap									Red	1
	Conflict Ped										
5	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
E	Conflict Olap									Red	1
	Conflict Ped										
6	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
F	Conflict Olap									Red	1
	Conflict Ped										
7	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
G	Conflict Olap									Red	1
	Conflict Ped										
8	Included Ø									NORMAL	
	Modifier Ø									Grn	
	Conflict Ø									Yel	3
H	Conflict Olap									Red	1
	Conflict Ped										

OLP GENERAL PARAMETERS [1.5.1]

Lock Inhibit	OFF
Conflict Lock Enable	OFF
Parent P Clearance	ON
Xtra Incl Phases	OFF
InhibitLockInterval	Always

Channel Parameters [1.8.3]

Pre Invert Rail Input	OFF

Preemption Options+ [3.Pre #.6]

Pre #	Enable	Type	Output	Pattern	Skip	Co+Pre	Flash	Max/Min
1	OFF	RAIL	TS2		OFF	OFF	OFF	MAX
2	OFF	RAIL	TS2	0	OFF	OFF	OFF	MAX
3	OFF	EMERG	TS2		OFF	OFF	OFF	MAX
4	OFF	EMERG	TS2	0	OFF	OFF	OFF	MAX
5	OFF	EMERG	TS2		OFF	OFF	OFF	MAX
6	OFF	EMERG	TS2	0	OFF	OFF	OFF	MAX

Preemption Times [3.#.1]

Pre #	Delay	MinDura	MaxPres	MinGrn	MinWlk	PedClr	Track Grn	Min Dwell
1								
2	0	0	0	0	0	0	0	0
3		10	60	6		10		10
4	0	10	60	6	0	10	0	10
5		10	60	6		10		10
6	0	10	60	6	0	10	0	10

Preemption, Options [3.#.3]

Pre #	Lock Input	Over-ride Auto Flash	Over-ride Higher Preempt	Flash Dwell	Link
1	OFF	OFF	OFF	ON	
2	OFF	OFF	OFF	OFF	0
3	OFF	OFF	OFF	OFF	
4	OFF	OFF	OFF	OFF	0
5	OFF	OFF	OFF	OFF	
6	OFF	OFF	OFF	OFF	0

Preemption, Times+ [3.#.4]

Pre No.	Extend Dwell	Return Max	Ped Clr	Yel	Red
1					
2	0	0	0	0	0
3		20	10	3.9	2
4	0	20	10	3.9	2
5		20	10	3.9	2
6	0	20	10	3.9	2

Pre 1 = RR1
Pre 2 = RR2
Pre 3 = EVA
Pre 4 = EVB
Pre 5 = EVC
Pre 6 = EVD

Prog Parms+ (MM>1>5>2>X>3)

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 1-A

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 2-B

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 3-C

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

OverlapB+: 4-D

Leading Green	OFF	FYA MCE Disable	OFF
Transit Input	0	FYA Skip Red	OFF
FYA Delay Time	0	FYA AfterPreempt	OFF
Ped Call Clear	OFF		
Ped ClearTime	0	FYA ImmedReturn	OFF
Green Ext Inh	0	0 0 0 0 0	

Phases [3.#.2] - set the Dwell Phases

Pre #	Column	1	2	3	4	5	6	7	8	9	10
1	Dwell Veh										
	Peds										
2	Dwell Veh										
	Peds										
3	Dwell Veh	2	5								
	Peds										
4	Dwell Veh	4	7								
	Peds										
5	Dwell Veh	6	1								
	Peds										
6	Dwell Veh	8	3								
	Peds										

Phases [3.#.2] - Trk Veh

Pre #	Phases			
1				
2				
3				
4				
5				
6				

Exit Phases [3.#.2]

No.	Exit Phase			
1				
2				
3	2	6		
4	4	8		
5	2	6		
6	4	8		

Overlaps+ [3.#.5]

Pre #		Preempt Overlaps +									
1	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
2	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
3	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
4	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
5	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										
6	Track	0	0	0	0	0	0	0	0	0	0
	Dwell										

City of FRESNO

ID: 166 **Name:** Belmont & Fowler

Date Printed: 2/24/2021

CHANNEL SETTINGS [1.8] plus UNIT PARAMETERS [1.2.1]

CHANNEL SETTINGS [1.8.1]

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Phase / Olap #	1	2	3	4	5	6	7	8	1	2	3	4	2	4	6	8
Channel Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED
Channel Flash	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK
Flash 1-2 Hertz		X		X		X		X								
	Page 1								Page 2							

Chan Settings [1.8.2]

17	18	19	20	21	22	23	24
VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK

CHANNEL PARMETERS [1.8.3]

CH 17-24 Mapping:	DEFAULT
D-Conn Mapping:	NONE
Invert Rail Inputs:	OFF
C1-C11-ABC IO Mode:	USER

IO PARAMETERS [1.8.6]

C1-C11-ABC IO Mode:	USER
D-Conn Mapping:	NONE
T & F BIU Mapping	DEFAULT
Invert Rail Inputs:	OFF
EVP Ped Confirm	OFF

CHANNELS+ [1.8.4]

Channel	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*
Flash Green	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Flash Red	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Flash Yellow	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Inh Red Fl in Preempt	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off
Olap Ovrd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Override Type	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ID: 166 **NAME:** Belmont & Fowler

I/O LOGIC [1.8.7]

Prt Date: 2/24/2021

Row#	Result			Operand_1					Operand_2					Operand_3					Timer	
	I/O	Fcn	=	Inv	Src	I/0	Fun	Logic Func	Inv	Src	I/0	Fun	Logic Func	Inv	Src	I/0	Fun	Logic Func	Dly	Sec
1	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
2	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
3	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
4	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
5	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
6	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
7	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
8	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
9	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0
10	I	0	=	-	0	I	OFF	----	-	0	I	OFF	----	-	0	I	OFF	----	DLY	0

Ped Parms (MM>5>4)

Det#	Call	No Act	Max Pres	Err Cnt
1	0	0	0	0
2	2	0	0	0
3	0	0	0	0
4	4	0	0	0
5	0	0	0	0
6	6	0	0	0
7	0	0	0	0
8	8	0	0	0

Veh Par 1-32 [5.1]											Vehicle Options 1-32 [5.2]									Parameters+ 1-32 [5.3]								Info Only	
Det #	Input Slot	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time	Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol	Det #	Occupancy G	Y	R	Delay 1	2	Type	Src	Dir	Det #
1	1I1U	1					0	0	0	255	1	X	X	-	-	-	-	X	X	1	X	X	-			NORM			1
2	2I2U	2	0	0	0	0	0	0	0	255	2	-	X	-	-	-	-	X	X	2	X	X	-	0	0	NORM	0	SBT1	2
3	2I2L	2	0	0	0	0	0	0	0	255	3	-	X	-	-	-	-	X	X	3	X	X	-	0	0	NORM	0	SBT2	3
4	2I3U	2	0	0	2	0	0	0	0	255	4	X	-	-	-	-	-	X	X	4	X	X	-	0	0	STOPB	0		4
5	2I3L	2	0	0	2	0	0	0	0	255	5	X	-	-	-	-	-	X	X	5	X	X	-	0	0	STOPB	0	SBR1	5
6	2I4U	2	0	0	2	0	0	0	0	255	6	X	-	-	-	-	-	X	X	6	X	X	-	0	0	STOPB	0		6
7	3I5U	3					0	0	0	255	7	X	X	-	-	-	-	X	X	7	X	X	-			NORM			7
8	4I6U	4	0	0	0	0	0	0	0	255	8	-	X	-	-	-	-	X	X	8	X	X	-	0	0	NORM	0	WBT1	8
9	4I6L	4	0	0	2	0	0	0	0	255	9	X	-	-	-	-	-	X	X	9	X	X	-	0	0	STOPB	0	WBT2	9
10	4I7U	4	0	0	0	0	0	0	0	255	10	-	X	-	-	-	-	X	X	10	X	X	-	0	0	NORM	0		10
11	4I7L	4		15	2		0	0	0	255	11	X	-	-	-	-	-	X	X	11	X	X	-			STOPB		WBR1	11
12	4I8U	4			2		0	0	0	255	12	X	-	-	-	-	-	X	X	12	X	X	-			STOPB			12
13	1I9U	1	0	0	0	0	0	0	0	255	13	X	X	-	-	-	-	X	X	13	X	X	-	0	0	NORM	0		13
14	3I9L	3	0	0	0	0	0	0	0	255	14	X	X	-	-	-	-	X	X	14	X	X	-	0	0	NORM	0	NBL1	14
15	5J1U	5	0	0	0	0	0	0	0	255	15	X	X	-	-	-	-	X	X	15	X	X	-	0	0	NORM	0		15
16	6J2U	6					0	0	0	255	16	-	X	-	-	-	-	X	X	16	X	X	-			NORM		NBT1	16
17	6J2L	6					0	0	0	255	17	-	X	-	-	-	-	X	X	17	X	X	-			NORM		NBT2	17
18	6J3U	6			2		0	0	0	255	18	X	-	-	-	-	-	X	X	18	X	X	-			STOPB			18
19	6J3L	6			2		0	0	0	255	19	X	-	-	-	-	-	X	X	19	X	X	-			STOPB		NBR1	19
20	6J4U	6			2		0	0	0	255	20	X	-	-	-	-	-	X	X	20	X	X	-			STOPB			20
21	7J5U	7					0	0	0	255	21	X	X	-	-	-	-	X	X	21	X	X	-			NORM			21
22	8J6U	8	0	0	0	0	0	0	0	255	22	-	X	-	-	-	-	X	X	22	X	X	-	0	0	NORM	0	EBT1	22
23	8J6L	8	0	0	0	0	0	0	0	255	23	-	X	-	-	-	-	X	X	23	X	X	-	0	0	NORM	0	EBT2	23
24	8J7U	8	0	0	2	0	0	0	0	255	24	X	-	-	-	-	-	X	X	24	X	X	-	0	0	STOPB	0		24
25	8J7L	8	0	15	2	0	0	0	0	255	25	X	-	-	-	-	-	X	X	25	X	X	-	0	0	STOPB	0		25
26	8J8U	8	0	0	2	0	0	0	0	255	26	X	-	-	-	-	-	X	X	26	X	X	-	0	0	STOPB	0		26
27	5J9U	5					0	0	0	255	27	X	X	-	-	-	-	X	X	27	X	X	-			NORM		SBL1	27
28	7J9L	7					0	0	0	255	28	X	X	-	-	-	-	X	X	28	X	X	-			NORM		WBL1	28
29	2I11U	2	0	15	2	0	0	0	0	255	29	X	-	-	-	-	-	X	X	29	X	X	-	0	0	STOPB	0		29
30	4I11L	4	0	15	2	0	0	0	0	255	30	X	-	-	-	-	-	X	X	30	X	X	-	0	0	STOPB	0		30
31	6J11U	5					0	0	0	255	31	X	X	-	-	-	-	X	X	31	X	X	-			NORM		SBL2	31
32	8J11L	8		15	2		0	0	0	255	32	X	-	-	-	-	-	X	X	32	X	X	-			STOPB			32
33	1I1L	1	0	0	0	0	0	0	0	255	33	X	X	-	-	-	-	X	X	33	X	X	-	0	0	NORM	0		33
34	2I4L	2			2		0	0	0	255	34	X	-	-	-	-	-	X	X	34	X	X	-			STOPB			34
35	3I5L	3	0	0	0	0	0	0	0	255	35	X	X	-	-	-	-	X	X	35	X	X	-	0	0	NORM	0		35
36	4I8L	4			2		0	0	0	255	36	X	-	-	-	-	-	X	X	36	X	X	-			STOPB			36
37	5J1L	5	0	0	0	0	0	0	0	255	37	X	X	-	-	-	-	X	X	37	X	X	-	0	0	NORM	0		37
38	6J4L	6			2		0	0	0	255	38	X	-	-	-	-	-	X	X	38	X	X	-			STOPB			38
39	7J5L	7	0	0	0	0	0	0	0	255	39	X	X	-	-	-	-	X	X	39	X	X	-	0	0	NORM	0		39
40	8J8L	8			2		0	0	0	255	40	X	-	-	-	-	-	X	X	40	X	X	-			STOPB			40
41	4I10U	4					0	0	0	255	41	-	X	-	-	-	-	X	X	41	X	X	-			NORM			41
42	4I10L	4					0	0	0	255	42	-	X	-	-	-	-	X	X	42	X	X	-			NORM			42
43	8J10U	8					0	0	0	255	43	-	X	-	-	-	-	X	X	43	X	X	-			NORM			43
44	8J10L	8					0	0	0	255	44	-	X	-	-	-	-	X	X	44	X	X	-			NORM			44

ID: 166 **Name:** Belmont & Fowler

Vol/Occ Period 0 Seconds / 5 Minutes

2/24/2021

Alt# 1 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.1.6.1]

Column#... ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Entry	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Guar Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 2 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Enrty	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 3 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Enrty	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alt# 4 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø		0		0		0		0
Lock Calls	-	-	-	-	-	-	-	-
Soft Recall	-	-	-	-	-	-	-	-
Dual Entry	-	-	-	-	-	-	-	-
Enabl SimGap	-	-	-	-	-	-	-	-
Gaur Passage	-	-	-	-	-	-	-	-
Rest In Walk	-	-	-	-	-	-	-	-
Cond Service	-	-	-	-	-	-	-	-
Reservice	-	-	-	-	-	-	-	-
Non-Act 1	-	-	-	-	-	-	-	-
Red Rest	-	-	-	-	-	-	-	-
Max2	-	-	-	-	-	-	-	-
Ped Delay	-	-	-	-	-	-	-	-
Conflicting Ø1		0		0		0		0

Alternate Tables [2.6]

Pat#	POpt	PTime	DetGrp	Call/Inh	Olp Off 1	2	3	4	5	6	7	8	ASC	CNA1	Max2	Dia
1	0	0	0	0									0	Off		DFT
2													0	Off		DFT
3	0	0	0	0									0	Off		DFT
4													0	Off		DFT
5	0	0	0	0									0	Off		DFT
6													0	Off		DFT
7	0	0	0	0									0	Off		DFT
8													0	Off		DFT
9	0	0	0	0									0	Off		DFT
10													0	Off		DFT
11	0	0	0	0									0	Off		DFT
12													0	Off		DFT
13	0	0	0	0									0	Off		DFT
14													0	Off		DFT
15	0	0	0	0									0	Off		DFT
16													0	Off		DFT
17	0	0	0	0									0	Off		DFT
18													0	Off		DFT
19	0	0	0	0									0	Off		DFT
20													0	Off		DFT
21	0	0	0	0									0	Off		DFT
22													0	Off		DFT
23	0	0	0	0									0	Off		DFT
24													0	Off		DFT

Time Base Parameters [4.6]

Daylight Savings Time	ENABLE	
Time Base Sync Ref	0	
GMT Offset	-	8
Daylight Savings	**Mon**	**Week**
Spring	3	2
Fall	11	1

NOTE: % and MI parameters are not used and are not shown above.

City of FRESNO

NAME: Belmont & Fowler

2/24/2021 **ID:** 166

Annual Schedule [4.3]	Month												Day of Week							Date																															Day Plan
	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
1	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1
2	X	X	X	X	X	X	X	X	X	X	X	X							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2
3	X	X	X	X	X	X	X	X	X	X	X	X	X							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3
4											X						X			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X	X	-	-	-	4
5																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
6																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
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8																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
9																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
10																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
11																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
12																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
13																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
14																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
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16																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
17																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
18																				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

NAME: Belmont & Fowler

ID No. 166

DAY PLANS [4.4]

Plan 1				Plan 2				Plan 3				Plan 4				Plan 5				Plan 6				Plan 7				Plan 8				Plan 9				Plan 10			
Evt	Hour	Min	Act	*Evt*	Hour	Min	Act	*Evt*	Hour	Min	Act	*Evt*	Hour	Min	Act	*Evt*	Hour	Min	Act	*Evt*	Hour	Min	Act	*Evt*	Hour	Min	Act	*Evt*	Hour	Min	Act	*Evt*	Hour	Min	Act	*Evt*	Hour	Min	Act
1		1	54	1		1	54	1		1	54	1	0	1	54	1				1				1				1				1				1			
2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
3				3				3				3	0			3				3				3				3				3				3			
4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0
5				5				5				5	0			5				5				5				5				5				5			
6	0	0	0	6	0	0	0	6	0	0	0	6	0	0	0	6	0	0	0	6	0	0	0	6	0	0	0	6	0	0	0	6	0	0	0	6	0	0	0
7				7				7				7	0			7				7				7				7				7				7			
8	0	0	0	8	0	0	0	8	0	0	0	8	0	0	0	8	0	0	0	8	0	0	0	8	0	0	0	8	0	0	0	8	0	0	0	8	0	0	0
9				9				9				9	0			9				9				9				9				9				9			
10	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0

#	Alarm	Ev	Alr
1	Power Up Alarm.	X	X
2	Stop Timing	X	X
3	Cabinet Door Activation	-	-
4	Coordination Failure	X	X
5	External Alarm # 1	-	-
6	External Alarm # 2	-	-
7	External Alarm # 3	-	-
8	External Alarm # 4	-	-
9	Closed Loop Disabled	-	-
10	External Alarm # 5	-	-
11	External Alarm # 6	-	-
12	Manual Control Enable	X	X
13	Coord Free Input	-	-
14	Local Flash Input	X	X
15	CMU/MMU Flash Input	-	-
16	MMU Fault	X	X
17	Cycle Fault	X	-
18	Cycle Failure	X	-
19	Coordination Fault	X	X
20	Controller Fault	X	X
25	EEPROM CRC Fault	X	X
30	Coord Diagnostic Fault	X	X
37	Download Request	X	X
38	Pattern Change	-	-
49	Preempt 1 Input	X	X
50	Preempt 2 Input	X	X
51	Preempt 3 Input	X	X
52	Preempt 4 Input	X	X
53	Preempt 5 Input	X	X
54	Preempt 6 Input	X	X
55	Preempt 7 Input	-	-
56	Preempt 8 Input	-	-
57	Preempt 9 Input	-	-
58	Preempt 10 Input	-	-
59	EEPROM Compare Fault	X	X
60	Coordination Failure	X	X
63	TSP Active Trigger	-	-
73	Controller Access	X	X
81	FIO Changed Status	X	X

#1 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

#2 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

#3 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

#4 Bus Preempt

		Times		Prior. Phases			
Enable	OFF	Min	0	0	0	0	0
Coor+Pre	OFF	Max	0	---TSP---			
Lock Mode	MAX	Lock	0	Headway	0		
No Skip	OFF	Alt Table	0	GrpLock	OFF		
Qjump	OFF	HoldDwell	#N/A	FreeMod	OFF		

I/O INPUT TABLE

	1	2	3	4	5	6	7	8
1	2	16	8	22	3	17	9	23
2	6	20	12	26	198	199	30	31
3	15	1	21	7	27	13	28	14
4	189	189	189	189	4	18	10	24
5	130	134	132	136	200	201	202	203
6	32	5	19	11	25	29	208	207
7	33	34	35	36	37	38	39	40
8	41	42	43	44	189	189	189	189

ACTION Table [4.5]

Act	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8	P1	P2
1	1	-	-	-	-	-	-	-	-	-	-	-	0	0
2	2	-	-	-	-	-	-	-	-	-	-	-	0	0
3	3	-	-	-	-	-	-	-	-	-	-	-	0	0
4	4	-	-	-	-	-	-	-	-	-	-	-	0	0
5	5	-	-	-	-	-	-	-	-	-	-	-	0	0
6	6	-	-	-	-	-	-	-	-	-	-	-	0	0
7	7	-	-	-	-	-	-	-	-	-	-	-	0	0
8	8	-	-	-	-	-	-	-	-	-	-	-	0	0
9	9	-	-	-	-	-	-	-	-	-	-	-	0	0
10	10	-	-	-	-	-	-	-	-	-	-	-	0	0
11	11	-	-	-	-	-	-	-	-	-	-	-	0	0
12	12	-	-	-	-	-	-	-	-	-	-	-	0	0
13	13	-	-	-	-	-	-	-	-	-	-	-	0	0
14	14	-	-	-	-	-	-	-	-	-	-	-	0	0
15	15	-	-	-	-	-	-	-	-	-	-	-	0	0
16	0	-	-	-	-	-	-	-	-	-	-	-	0	0
54	254	-	-	-	-	-	-	-	-	-	-	-	0	0
55	0	-	-	-	-	-	-	-	-	-	-	-	0	0

Alarm Parameters [1.6.7.1]

Pattern Events:	ON
Local Txmt Alarms:	OFF
Reassign User Alarm #1 In (5):	0
Reassign User Alarm #2 In (6):	0
Preempt Events:	ON

City of FRESNO

Date Printed
2/24/2021

ID: 166 **Name:** Belmont & Fowler

I/O Inputs - 1.8.9.1.5

C-1 PIN	I/O Source	Function	Input Name
39	I1-1	2	Veh Det 2
40	I1-2	16	Veh Det 16
41	I1-3	8	Veh Det 8
42	I1-4	22	Veh Det 22
43	I1-5	3	Veh Det 3
44	I1-6	17	Veh Det 17
45	I1-7	9	Veh Det 9
46	I1-8	23	Veh Det 23
47	I2-1	6	Veh Det 6
48	I2-2	20	Veh Det 20
49	I2-3	12	Veh Det 12
50	I2-4	26	Veh Det 26
51	I2-5	198	Pre 1 In
52	I2-6	199	Pre 2 In
53	I2-7	30	Veh Det 30
54	I2-8	31	Veh Det 31
55	I3-1	15	Veh Det 15
56	I3-2	1	Veh Det 1
57	I3-3	21	Veh Det 21
58	I3-4	7	Veh Det 7
59	I3-5	27	Veh Det 27
60	I3-6	13	Veh Det 13
61	I3-7	28	Veh Det 28
62	I3-8	14	Veh Det 14
63	I4-5	4	Veh Det 4
64	I4-6	18	Veh Det 18
65	I4-7	10	Veh Det 10
66	I4-8	24	Veh Det 24
67	I5-1	130	Ped Call 2
68	I5-2	134	Ped Call 6
69	I5-3	132	Ped Call 4
70	I5-4	136	Ped Call 8
71	I5-5	200	Pre 3 In
72	I5-6	201	Pre 4 In
73	I5-7	202	Pre 5 In
74	I5-8	203	Pre 6 In
75	I6-1	32	Veh Det 32
76	I6-2	5	Veh Det 5
77	I6-3	19	Veh Det 19
78	I6-4	11	Veh Det 11
79	I6-5	25	Veh Det 25
80	I6-6	29	Veh Det 29
81	I6-7	208	Local Flash
82	I6-8	207	Comp StopTm

I/O OUTPUTS - 1.8.9.2.5

C-1 PIN	I/O Source	Function	Output Name
1	Logic Grd		
2	O1-1	14	Red Ch 14
3	O1-2	62	Grn Chan 14
4	O1-3	4	Red Ch 4
5	O1-4	28	Yel Chan 4
6	O1-5	52	Grn Chan 4
7	O1-6	3	Red Ch 3
8	O1-7	27	Yel Chan 3
9	O1-8	51	Grn Chan 3
10	O2-1	13	Red Ch 13
11	O2-2	61	Grn Chan 13
12	O2-3	2	Red Ch 2
13	O2-4	26	Yel Chan 2
14	Logic Grd		
15	O2-5	50	Grn Chan 2
16	O2-6	1	Red Ch 1
17	O2-7	25	Yel Chan 1
18	O2-8	49	Grn Chan 1
19	O3-1	16	Red Ch 16
20	O3-2	64	Grn Chan 16
21	O3-3	8	Red Ch 8
22	O3-4	32	Yel Chan 8
23	O3-5	56	Grn Chan 8
24	O3-6	7	Red Ch 7
25	O3-7	31	Yel Chan 7
26	O3-8	55	Grn Chan 7
27	O4-1	15	Red Ch 15
28	O4-2	63	Grn Chan 15
29	O4-3	6	Red Ch 6
30	O4-4	30	Yel Chan 6
31	O4-5	54	Grn Chan 6
32	O4-6	5	Red Ch 5
33	O4-7	29	Yel Chan 5
34	O4-8	53	Grn Chan 5
35	O5-1	37	Yel Chan 13
36	O5-2	39	Yel Chan 15
37	O5-3	38	Yel Chan 14
38	O5-4	40	Yel Chan 16
100	O5-5	42	Yel Chan 18
101	O5-6	41	Yel Chan 17
102	O5-7	115	Not Used
103	O5-8	114	Watchdog

C-1 PIN	I/O Source	Function	Output Name
83	O6-1	18	Red Ch 18
84	O6-2	66	Grn Chan 18
85	O6-3	12	Red Ch 12
86	O6-4	36	Yel Chan 12
87	O6-5	60	Grn Chan 12
88	O6-6	11	Red Ch 11
89	O6-7	35	Yel Chan 11
90	O6-8	59	Grn Chan 11
91	O7-1	17	Red Ch 17
92	Logic Grd		
93	O7-2	65	Grn Chan 17
94	O7-3	10	Red Ch 10
95	O7-4	34	Yel Chan 10
96	O7-5	58	Grn Chan 10
97	O7-6	9	Red Ch 9
98	O7-7	33	Yel Chan 9
99	O7-8	57	Grn Chan 9

I/O Outputs - 1.8.9.2.5
C-11 OUTPUTS

1	O8-1	115	Not Used
2	O8-2	115	Not Used
3	O8-3	115	Not Used
4	O8-4	115	Not Used

I/O Inputs - 1.8.9.1.5
C-11 INPUTS

15	I7-1	33	Veh Det 33
16	I7-2	34	Veh Det 34
17	I7-3	35	Veh Det 35
18	I7-4	36	Veh Det 36
19	I7-5	37	Veh Det 37
20	I7-6	38	Veh Det 38
21	I7-7	39	Veh Det 39
22	I7-8	40	Veh Det 40
23	I8-1	41	Veh Det 41
24	I8-2	42	Veh Det 42
25	I8-3	43	Veh Det 43
26	I8-4	44	Veh Det 44
27	I8-5	189	Unused
28	I8-6	189	Unused
29	I8-7	189	Unused
30	I8-8	189	Unused

City of FRESNO

ID: 166

NAME: Belmont & Fowler

Date Printed: 2/24/2021

ID Number: B 0166 LOCATION BELMONT & FOWLER

City of Fresno
332 Cabinet
32 Detector Plus Setup

DETECTOR ASSIGNMENTS

ISOLATORS

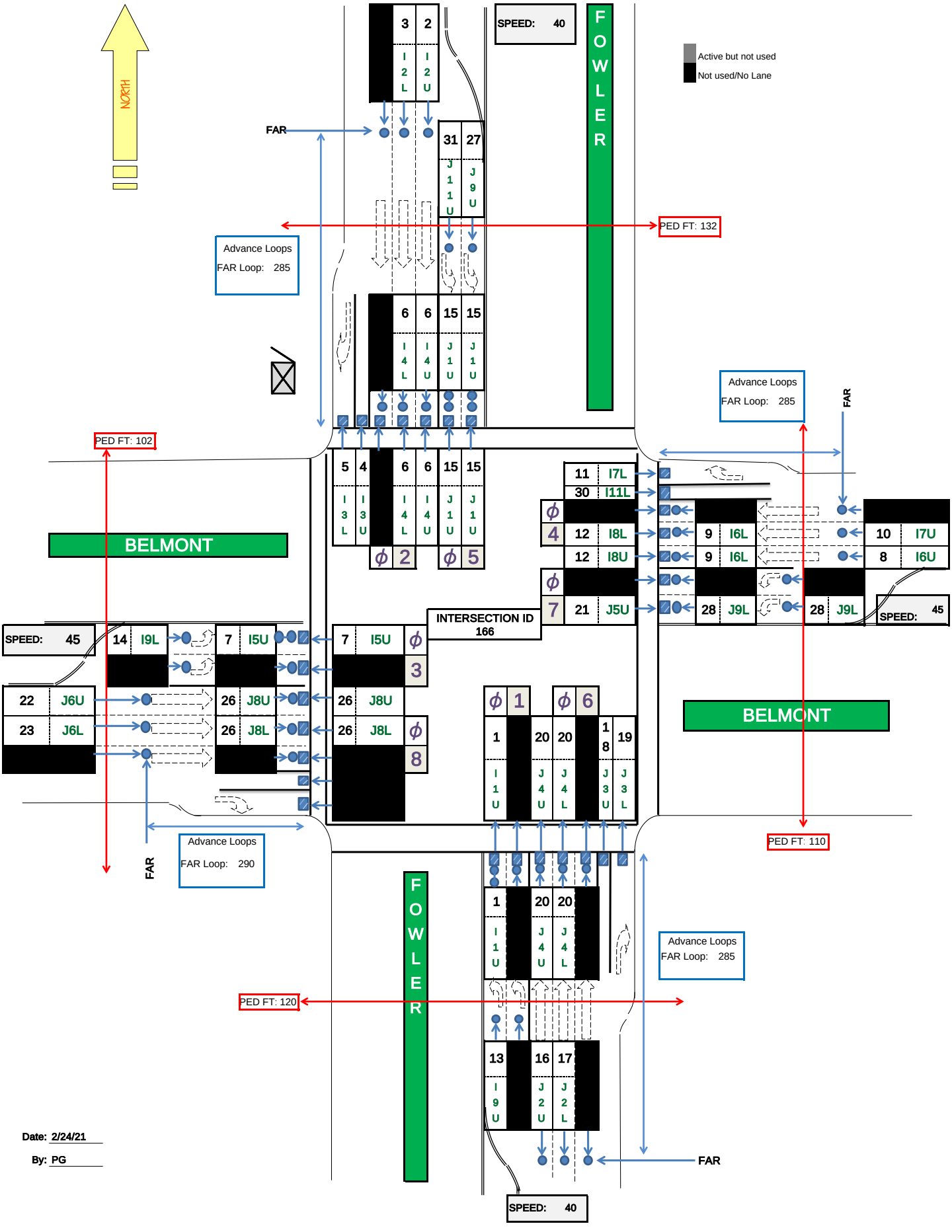
"I"	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14
UPPER	Ph 1 Cnt&Ext T2-1&2 C1-56 Det 1 NBL1	Ph 2 Cnt&Ext T2-5&6 C1-39 Det 2 SB Far	Ph 2 Cnt&Ext T2-9&10 C1-63 Det 4 SB Mid/T3	Ph 2 Call&TP3 T4-1&2 C1-47 Det 6 SBT1	Ph 3 Cnt&Ext T4-5&6 C1-58 Det 7 EBL1	Ph 4 Cnt&Ext T4-9&10 C1-41 Det 8 WB Far	Ph 4 Cnt&Ext T6-1&2 C1-65 Det 10 WB Mid/T3	Ph 4 Call&TP3 T6-5&6 C1-49 Det 12 WBT1	Ph 1 Cnt&Ext T6-9&10 C1-60 Det 13 NBLt Bk	Not Wired	Ph 1 Det 29 T8-1 C1-80 Det 29 BIKE	Ph 2 PPB T8-4 C1-67	Ph 6 PPB T8-7 C1-68	FLASH SENSE T8-10 C1-81
LOWER	Ph 1 Cnt&Ext T2-3&4 C1-56 Det 1 NBL2	Ph 2 Cnt&Ext T2-7&8 C1-43 Det 3 SB Bk	Ph 2 Ext T2-11&12 C1-76 Det 5 SBRt	Ph 2 Call&TP3 T4-3&4 C1-47 Det 6 SBT2	Ph 3 Cnt&Ext T4-7&8 C1-58 Det 7 EBL2	Ph 4 Cnt&Ext T4-11&12 C1-45 Det 9 WB Far	Ph 4 Ext T6-3&4 C1-78 Det 11 WBRt	Ph 4 Call&TP3 T6-7&8 C1-49 Det 12 WBT2	Ph 3 Cnt&Ext T6-11&12 C1-62 Det 14 EBLt Bk	Not Wired	Ph 3 Det 30 T8-2 C1-53 Det 30 BIKE	Ph 4 PPB T8-5 C1-69	Ph 8 PPB T8-8 C1-70	STOP TIMING T8-11 C1-82
"J"	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14
UPPER	Ph 5 Cnt&Ext T3-1&2 C1-55 Det 15 SBL1	Ph 6 Cnt&Ext T3-5&6 C1-40 Det 16 NB Far	Ph 6 Cnt&Ext T3-9&10 C1-64 Det 18 NB Mid/T3	Ph 6 Call&TP3 T5-1&2 C1-48 Det 20 NBT1	Ph 7 Cnt&Ext T5-5&6 C1-57 Det 21 WBL1	Ph 8 Cnt&Ext T5-9&10 C1-42 Det 22 EB Far	Ph 8 Cnt&Ext T7-1&2 C1-66 Det 24 EB Mid/T3	Ph 8 Call&TP3 T7-5&6 C1-50 Det 26 EBT1	Ph 5 Cnt&Ext T7-9&10 C1-59 Det 27 SBLt Bk	Not Wired	Ph 5 Det 31 T9-1 C1-54 Det 31 SBLt Bk	EMER A Ph 2 + 5 T9-4 C1-71	EMER B Ph 4 + 7 T9-5 C1-72	RR1 FLASH T9-10 C1-51
LOWER	Ph 5 Cnt&Ext T3-3&4 C1-55 Det 15 SBL2	Ph 6 Cnt&Ext T3-7&8 C1-44 Det 17 NB Bk	Ph 6 Ext T3-11&12 C1-77 Det 19 NBRt	Ph 6 Call&TP3 T5-3&4 C1-48 Det 20 NBT2	Ph 7 Cnt&Ext T5-7&8 C1-57 Det 21 WBL2	Ph 8 Cnt&Ext T5-11&12 C1-46 Det 23 EB Bk	Ph 8 Ext T7-3&4 C1-79 Det 25 EBRt	Ph 8 Call&TP3 T7-7&8 C1-50 Det 26 EBT2	Ph 7 Cnt&Ext T7-11&12 C1-61 Det 28 WBLt Bk	Not Wired	Ph 7 Det 32 T9-2 C1-75 Det 32 BIKE	EMER C Ph 1 + 6 T9-7 C1-73	EMER D Ph 3 + 8 T9-8 C1-74	RR2 LTD OP T9-11 C1-52

COMMENTS:

TIMING UPDATES AND MODIFICATIONS

ID: 166 **NAME:** Belmont & Fowler

DATE	CHANGES MADE	ATMS or CABINET	BY
2/24/2021	Updated Per Field Modifications and Belmont Widening Plans, 6 Second All Red Start, Turned on Vol/Occ on All Detectors	CABINET	PG



Detector Layout for the intersection of: 0166 BELMONT & FOWLER

APPENDIX D

VOLUME DEVELOPMENT WORKSHEETS

LSA

Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
1 Fowler Avenue/McKinley Avenue						
NBL	0	0	0	0	0	0
NBT	464	0	464	644	0	644
NBR	0	1	1	0	2	2
SBL	0	0	0	0	0	0
SBT	559	0	559	509	0	509
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	0	2	2	0	1	1
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	559	0	559	509	0	509
Departure	464	0	464	644	0	644
Total	1,023	0	1,023	1,153	0	1,153
South Leg						
Approach	464	1	465	644	2	646
Departure	559	2	561	509	1	510
Total	1,023	3	1,026	1,153	3	1,156
East Leg						
Approach	0	2	2	0	1	1
Departure	0	1	1	0	2	2
Total	0	3	3	0	3	3
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	1,023	3	1,026	1,153	3	1,156
Departure	1,023	3	1,026	1,153	3	1,156
Total	2,046	6	2,052	2,306	6	2,312

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
2 Fowler Avenue/Floradora Avenue						
NBL	0	0	0	0	0	0
NBT	423	1	424	599	2	601
NBR	1	0	1	1	0	1
SBL	73	0	73	61	0	61
SBT	486	2	488	448	1	449
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	2	0	2	3	0	3
WBT	0	0	0	0	0	0
WBR	41	0	41	45	0	45
North Leg						
Approach	559	2	561	509	1	510
Departure	464	1	465	644	2	646
Total	1,023	3	1,026	1,153	3	1,156
South Leg						
Approach	424	1	425	600	2	602
Departure	488	2	490	451	1	452
Total	912	3	915	1,051	3	1,054
East Leg						
Approach	43	0	43	48	0	48
Departure	74	0	74	62	0	62
Total	117	0	117	110	0	110
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	1,026	3	1,029	1,157	3	1,160
Departure	1,026	3	1,029	1,157	3	1,160
Total	2,052	6	2,058	2,314	6	2,320

LSA

Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
3 Fowler Avenue/Olive Avenue						
NBL	27	0	27	6	0	6
NBT	340	1	341	367	2	369
NBR	72	15	87	108	48	156
SBL	3	0	3	11	0	11
SBT	464	2	466	409	1	410
SBR	11	0	11	15	0	15
EBL	38	0	38	139	0	139
EBT	59	3	62	89	10	99
EBR	23	0	23	43	0	43
WBL	386	43	429	212	29	241
WBT	115	9	124	71	6	77
WBR	40	0	40	59	0	59
North Leg						
Approach	478	2	480	435	1	436
Departure	418	1	419	565	2	567
Total	896	3	899	1,000	3	1,003
South Leg						
Approach	439	16	455	481	50	531
Departure	873	45	918	664	30	694
Total	1,312	61	1,373	1,145	80	1,225
East Leg						
Approach	541	52	593	342	35	377
Departure	134	18	152	208	58	266
Total	675	70	745	550	93	643
West Leg						
Approach	120	3	123	271	10	281
Departure	153	9	162	92	6	98
Total	273	12	285	363	16	379
Total Approaches						
Approach	1,578	73	1,651	1,529	96	1,625
Departure	1,578	73	1,651	1,529	96	1,625
Total	3,156	146	3,302	3,058	192	3,250

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
4 Fowler Avenue/SR-180 Westbound Ramps						
NBL	0	0	0	0	0	0
NBT	402	16	418	486	52	538
NBR	751	0	751	356	0	356
SBL	0	0	0	0	0	0
SBT	182	19	201	327	13	340
SBR	676	27	703	302	18	320
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	18	0	18	33	0	33
WBT	0	0	0	0	0	0
WBR	62	0	62	36	0	36
North Leg						
Approach	858	46	904	629	31	660
Departure	464	16	480	522	52	574
Total	1,322	62	1,384	1,151	83	1,234
South Leg						
Approach	1,153	16	1,169	842	52	894
Departure	200	19	219	360	13	373
Total	1,353	35	1,388	1,202	65	1,267
East Leg						
Approach	80	0	80	69	0	69
Departure	751	0	751	356	0	356
Total	831	0	831	425	0	425
West Leg						
Approach	0	0	0	0	0	0
Departure	676	27	703	302	18	320
Total	676	27	703	302	18	320
Total Approaches						
Approach	2,091	62	2,153	1,540	83	1,623
Departure	2,091	62	2,153	1,540	83	1,623
Total	4,182	124	4,306	3,080	166	3,246

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
5 Fowler Avenue/SR-180 Eastbound Ramps						
NBL	0	0	0	0	0	0
NBT	939	6	945	513	21	534
NBR	34	0	34	22	0	22
SBL	29	0	29	75	0	75
SBT	171	19	190	285	13	298
SBR	0	0	0	0	0	0
EBL	214	9	223	329	31	360
EBT	0	0	0	0	0	0
EBR	339	0	339	727	0	727
WBL	0	0	0	0	0	0
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	200	19	219	360	13	373
Departure	1,153	15	1,168	842	52	894
Total	1,353	34	1,387	1,202	65	1,267
South Leg						
Approach	973	6	979	535	21	556
Departure	510	19	529	1,012	13	1,025
Total	1,483	25	1,508	1,547	34	1,581
East Leg						
Approach	0	0	0	0	0	0
Departure	63	0	63	97	0	97
Total	63	0	63	97	0	97
West Leg						
Approach	553	9	562	1,056	31	1,087
Departure	0	0	0	0	0	0
Total	553	9	562	1,056	31	1,087
Total Approaches						
Approach	1,726	34	1,760	1,951	65	2,016
Departure	1,726	34	1,760	1,951	65	2,016
Total	3,452	68	3,520	3,902	130	4,032

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
6 Fowler Avenue/Belmont Avenue						
NBL	108	0	108	67	0	67
NBT	794	6	800	404	21	425
NBR	120	0	120	86	0	86
SBL	133	0	133	171	0	171
SBT	361	19	380	723	13	736
SBR	22	0	22	49	0	49
EBL	66	0	66	56	0	56
EBT	140	4	144	116	12	128
EBR	47	0	47	71	0	71
WBL	91	0	91	77	0	77
WBT	114	10	124	93	7	100
WBR	113	0	113	75	0	75
North Leg						
Approach	516	19	535	943	13	956
Departure	973	6	979	535	21	556
Total	1,489	25	1,514	1,478	34	1,512
South Leg						
Approach	1,022	6	1,028	557	21	578
Departure	499	19	518	871	13	884
Total	1,521	25	1,546	1,428	34	1,462
East Leg						
Approach	318	10	328	245	7	252
Departure	393	4	397	373	12	385
Total	711	14	725	618	19	637
West Leg						
Approach	253	4	257	243	12	255
Departure	244	10	254	209	7	216
Total	497	14	511	452	19	471
Total Approaches						
Approach	2,109	39	2,148	1,988	53	2,041
Departure	2,109	39	2,148	1,988	53	2,041
Total	4,218	78	4,296	3,976	106	4,082

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
7 Armstrong Avenue/McKinley Avenue						
NBL	0	0	0	0	0	0
NBT	229	13	242	437	42	479
NBR	0	12	12	0	38	38
SBL	0	14	14	0	34	34
SBT	652	37	689	231	25	256
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	1	1	0	2	2
EBR	0	0	0	0	0	0
WBL	0	34	34	0	23	23
WBT	0	2	2	0	1	1
WBR	0	29	29	0	24	24
North Leg						
Approach	652	51	703	231	59	290
Departure	229	42	271	437	66	503
Total	881	93	974	668	125	793
South Leg						
Approach	229	25	254	437	80	517
Departure	652	71	723	231	48	279
Total	881	96	977	668	128	796
East Leg						
Approach	0	65	65	0	48	48
Departure	0	27	27	0	74	74
Total	0	92	92	0	122	122
West Leg						
Approach	0	1	1	0	2	2
Departure	0	2	2	0	1	1
Total	0	3	3	0	3	3
Total Approaches						
Approach	881	142	1,023	668	189	857
Departure	881	142	1,023	668	189	857
Total	1,762	284	2,046	1,336	378	1,714

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
8 Armstrong Avenue/Floradora Avenue						
NBL	3	0	3	1	0	1
NBT	216	24	240	429	79	508
NBR	7	0	7	9	0	9
SBL	0	0	0	3	0	3
SBT	650	70	720	227	47	274
SBR	2	2	4	1	1	2
EBL	3	1	4	3	2	5
EBT	6	0	6	3	0	3
EBR	14	0	14	1	0	1
WBL	48	0	48	3	0	3
WBT	7	0	7	2	0	2
WBR	10	0	10	5	0	5
North Leg						
Approach	652	72	724	231	48	279
Departure	229	25	254	437	81	518
Total	881	97	978	668	129	797
South Leg						
Approach	226	24	250	439	79	518
Departure	712	70	782	231	47	278
Total	938	94	1,032	670	126	796
East Leg						
Approach	65	0	65	10	0	10
Departure	13	0	13	15	0	15
Total	78	0	78	25	0	25
West Leg						
Approach	23	1	24	7	2	9
Departure	12	2	14	4	1	5
Total	35	3	38	11	3	14
Total Approaches						
Approach	966	97	1,063	687	129	816
Departure	966	97	1,063	687	129	816
Total	1,932	194	2,126	1,374	258	1,632

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
9 Armstrong Avenue/Olive Avenue						
NBL	55	0	55	50	0	50
NBT	152	5	157	295	15	310
NBR	194	0	194	142	0	142
SBL	49	0	49	12	0	12
SBT	204	14	218	123	9	132
SBR	459	56	515	96	38	134
EBL	55	19	74	110	63	173
EBT	111	0	111	165	0	165
EBR	12	0	12	10	0	10
WBL	107	0	107	80	0	80
WBT	337	0	337	224	0	224
WBR	19	0	19	34	0	34
North Leg						
Approach	712	70	782	231	47	278
Departure	226	24	250	439	78	517
Total	938	94	1,032	670	125	795
South Leg						
Approach	401	5	406	487	15	502
Departure	323	14	337	213	9	222
Total	724	19	743	700	24	724
East Leg						
Approach	463	0	463	338	0	338
Departure	354	0	354	319	0	319
Total	817	0	817	657	0	657
West Leg						
Approach	178	19	197	285	63	348
Departure	851	56	907	370	38	408
Total	1,029	75	1,104	655	101	756
Total Approaches						
Approach	1,754	94	1,848	1,341	125	1,466
Departure	1,754	94	1,848	1,341	125	1,466
Total	3,508	188	3,696	2,682	250	2,932

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
10 Temperance Avenue/McKinley Avenue						
NBL	0	3	3	0	10	10
NBT	347	0	347	486	0	486
NBR	67	0	67	56	0	56
SBL	72	0	72	95	0	95
SBT	559	0	559	429	0	429
SBR	0	2	2	0	6	6
EBL	0	5	5	0	3	3
EBT	0	2	2	0	1	1
EBR	0	9	9	0	6	6
WBL	72	0	72	62	0	62
WBT	0	1	1	0	2	2
WBR	90	0	90	48	0	48
North Leg						
Approach	631	2	633	524	6	530
Departure	437	5	442	534	3	537
Total	1,068	7	1,075	1,058	9	1,067
South Leg						
Approach	414	3	417	542	10	552
Departure	631	9	640	491	6	497
Total	1,045	12	1,057	1,033	16	1,049
East Leg						
Approach	162	1	163	110	2	112
Departure	139	2	141	151	1	152
Total	301	3	304	261	3	264
West Leg						
Approach	0	16	16	0	10	10
Departure	0	6	6	0	18	18
Total	0	22	22	0	28	28
Total Approaches						
Approach	1,207	22	1,229	1,176	28	1,204
Departure	1,207	22	1,229	1,176	28	1,204
Total	2,414	44	2,458	2,352	56	2,408

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
11 Temperance Avenue/Floradora Avenue						
NBL	2	0	2	0	0	0
NBT	390	3	393	526	10	536
NBR	0	0	0	0	0	0
SBL	0	0	0	1	0	1
SBT	490	9	499	451	6	457
SBR	63	0	63	10	0	10
EBL	12	0	12	8	0	8
EBT	0	0	0	0	0	0
EBR	1	0	1	7	0	7
WBL	1	0	1	1	0	1
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	553	9	562	462	6	468
Departure	402	3	405	534	10	544
Total	955	12	967	996	16	1,012
South Leg						
Approach	392	3	395	526	10	536
Departure	492	9	501	459	6	465
Total	884	12	896	985	16	1,001
East Leg						
Approach	1	0	1	1	0	1
Departure	0	0	0	1	0	1
Total	1	0	1	2	0	2
West Leg						
Approach	13	0	13	15	0	15
Departure	65	0	65	10	0	10
Total	78	0	78	25	0	25
Total Approaches						
Approach	959	12	971	1,004	16	1,020
Departure	959	12	971	1,004	16	1,020
Total	1,918	24	1,942	2,008	32	2,040

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
12 Armstrong Avenue/Project Driveway 1						
NBL	0	0	0	0	0	0
NBT	229	27	256	437	18	455
NBR	0	15	15	0	48	48
SBL	0	19	19	0	61	61
SBT	652	9	661	231	31	262
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	0	43	43	0	29	29
WBT	0	0	0	0	0	0
WBR	0	54	54	0	36	36
North Leg						
Approach	652	28	680	231	92	323
Departure	229	81	310	437	54	491
Total	881	109	990	668	146	814
South Leg						
Approach	229	42	271	437	66	503
Departure	652	52	704	231	60	291
Total	881	94	975	668	126	794
East Leg						
Approach	0	97	97	0	65	65
Departure	0	34	34	0	109	109
Total	0	131	131	0	174	174
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	881	167	1,048	668	223	891
Departure	881	167	1,048	668	223	891
Total	1,762	334	2,096		446	1,782

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Table D-1 - Existing Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project	Existing (2022) No Project	Project Trips	Existing (2022) Plus Project
13 Project Driveway 2/McKinley Avenue						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0
SBL	0	10	10	0	7	7
SBT	0	0	0	0	0	0
SBR	0	63	63	0	42	42
EBL	0	22	22	0	71	71
EBT	0	5	5	0	3	3
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	0	2	2	0	6	6
WBR	0	4	4	0	12	12
North Leg						
Approach	0	73	73	0	49	49
Departure	0	26	26	0	83	83
Total	0	99	99	0	132	132
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	0	6	6	0	18	18
Departure	0	15	15	0	10	10
Total	0	21	21	0	28	28
West Leg						
Approach	0	27	27	0	74	74
Departure	0	65	65	0	48	48
Total	0	92	92	0	122	122
Total Approaches						
Approach	0	106	106	0	141	141
Departure	0	106	106	0	141	141
Total	0	212	212	0	282	282

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
1 Fowler Avenue/McKinley Avenue								
NBL	0	0	0	0	0	0	0	0
NBT	464	139	0	603	644	280	0	924
NBR	0	39	1	40	0	8	2	10
SBL	0	99	0	99	0	53	0	53
SBT	559	255	0	814	509	199	0	708
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0
WBL	0	30	2	32	0	12	1	13
WBT	0	0	0	0	0	0	0	0
WBR	0	98	0	98	0	35	0	35
North Leg								
Approach	559	354	0	913	509	252	0	761
Departure	464	237	0	701	644	315	0	959
Total	1,023	591	0	1,614	1,153	567	0	1,720
South Leg								
Approach	464	178	1	643	644	288	2	934
Departure	559	285	2	846	509	211	1	721
Total	1,023	463	3	1,489	1,153	499	3	1,655
East Leg								
Approach	0	128	2	130	0	47	1	48
Departure	0	138	1	139	0	61	2	63
Total	0	266	3	269	0	108	3	111
West Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total Approaches								
Approach	1,023	660	3	1,686	1,153	587	3	1,743
Departure	1,023	660	3	1,686	1,153	587	3	1,743
Total	2,046	1,320	6	3,372	2,306	1,174	6	3,486

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
2 Fowler Avenue/Floradora Avenue								
NBL	0	0	0	0	0	0	0	0
NBT	423	148	1	572	599	233	2	834
NBR	1	102	0	103	1	84	0	85
SBL	73	58	0	131	61	41	0	102
SBT	486	227	2	715	448	170	1	619
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0
WBL	2	68	0	70	3	101	0	104
WBT	0	0	0	0	0	0	0	0
WBR	41	30	0	71	45	55	0	100
North Leg								
Approach	559	285	2	846	509	211	1	721
Departure	464	178	1	643	644	288	2	934
Total	1,023	463	3	1,489	1,153	499	3	1,655
South Leg								
Approach	424	250	1	675	600	317	2	919
Departure	488	295	2	785	451	271	1	723
Total	912	545	3	1,460	1,051	588	3	1,642
East Leg								
Approach	43	98	0	141	48	156	0	204
Departure	74	160	0	234	62	125	0	187
Total	117	258	0	375	110	281	0	391
West Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total Approaches								
Approach	1,026	633	3	1,662	1,157	684	3	1,844
Departure	1,026	633	3	1,662	1,157	684	3	1,844
Total	2,052	1,266	6	3,324	2,314	1,368	6	3,688

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
3 Fowler Avenue/Olive Avenue								
NBL	27	0	0	27	6	0	0	6
NBT	340	233	1	574	367	283	2	652
NBR	72	68	15	155	108	29	48	185
SBL	3	33	0	36	11	19	0	30
SBT	464	262	2	728	409	251	1	661
SBR	11	0	0	11	15	0	0	15
EBL	38	0	0	38	139	0	0	139
EBT	59	6	3	68	89	25	10	124
EBR	23	0	0	23	43	0	0	43
WBL	386	68	43	497	212	31	29	272
WBT	115	20	9	144	71	9	6	86
WBR	40	17	0	57	59	34	0	93
North Leg								
Approach	478	295	2	775	435	270	1	706
Departure	418	250	1	669	565	317	2	884
Total	896	545	3	1,444	1,000	587	3	1,590
South Leg								
Approach	439	301	16	756	481	312	50	843
Departure	873	330	45	1,248	664	282	30	976
Total	1,312	631	61	2,004	1,145	594	80	1,819
East Leg								
Approach	541	105	52	698	342	74	35	451
Departure	134	107	18	259	208	73	58	339
Total	675	212	70	957	550	147	93	790
West Leg								
Approach	120	6	3	129	271	25	10	306
Departure	153	20	9	182	92	9	6	107
Total	273	26	12	311	363	34	16	413
Total Approaches								
Approach	1,578	707	73	2,358	1,529	681	96	2,306
Departure	1,578	707	73	2,358	1,529	681	96	2,306
Total	3,156	1,414	146	4,716	3,058	1,362	192	4,612

Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
4 Fowler Avenue/SR-180 Westbound Ramps								
NBL	0	0	0	0	0	0	0	0
NBT	402	247	16	665	486	238	52	776
NBR	751	105	0	856	356	113	0	469
SBL	0	0	0	0	0	0	0	0
SBT	182	178	19	379	327	194	13	534
SBR	676	121	27	824	302	77	18	397
EBL	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0
WBL	18	91	0	109	33	93	0	126
WBT	0	0	0	0	0	0	0	0
WBR	62	53	0	115	36	72	0	108
North Leg								
Approach	858	299	46	1,203	629	271	31	931
Departure	464	300	16	780	522	310	52	884
Total	1,322	599	62	1,983	1,151	581	83	1,815
South Leg								
Approach	1,153	352	16	1,521	842	351	52	1,245
Departure	200	269	19	488	360	287	13	660
Total	1,353	621	35	2,009	1,202	638	65	1,905
East Leg								
Approach	80	144	0	224	69	165	0	234
Departure	751	105	0	856	356	113	0	469
Total	831	249	0	1,080	425	278	0	703
West Leg								
Approach	0	0	0	0	0	0	0	0
Departure	676	121	27	824	302	77	18	397
Total	676	121	27	824	302	77	18	397
Total Approaches								
Approach	2,091	795	62	2,948	1,540	787	83	2,410
Departure	2,091	795	62	2,948	1,540	787	83	2,410
Total	4,182	1,590	124	5,896	3,080	1,574	166	4,820

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
5 Fowler Avenue/SR-180 Eastbound Ramps								
NBL	0	0	0	0	0	0	0	0
NBT	939	226	6	1,171	513	232	21	766
NBR	34	99	0	133	22	107	0	129
SBL	29	76	0	105	75	53	0	128
SBT	171	221	19	411	285	241	13	539
SBR	0	0	0	0	0	0	0	0
EBL	214	92	9	315	329	93	31	453
EBT	0	0	0	0	0	0	0	0
EBR	339	99	0	438	727	99	0	826
WBL	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0
North Leg								
Approach	200	297	19	516	360	294	13	667
Departure	1,153	318	15	1,486	842	325	52	1,219
Total	1,353	615	34	2,002	1,202	619	65	1,886
South Leg								
Approach	973	325	6	1,304	535	339	21	895
Departure	510	320	19	849	1,012	340	13	1,365
Total	1,483	645	25	2,153	1,547	679	34	2,260
East Leg								
Approach	0	0	0	0	0	0	0	0
Departure	63	175	0	238	97	160	0	257
Total	63	175	0	238	97	160	0	257
West Leg								
Approach	553	191	9	753	1,056	192	31	1,279
Departure	0	0	0	0	0	0	0	0
Total	553	191	9	753	1,056	192	31	1,279
Total Approaches								
Approach	1,726	813	34	2,573	1,951	825	65	2,841
Departure	1,726	813	34	2,573	1,951	825	65	2,841
Total	3,452	1,626	68	5,146	3,902	1,650	130	5,682

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
6 Fowler Avenue/Belmont Avenue								
NBL	108	15	0	123	67	17	0	84
NBT	794	133	6	933	404	144	21	569
NBR	120	59	0	179	86	54	0	140
SBL	133	193	0	326	171	154	0	325
SBT	361	86	19	466	723	115	13	851
SBR	22	30	0	52	49	31	0	80
EBL	66	48	0	114	56	40	0	96
EBT	140	92	4	236	116	74	12	202
EBR	47	2	0	49	71	2	0	73
WBL	91	46	0	137	77	67	0	144
WBT	114	53	10	177	93	73	7	173
WBR	113	139	0	252	75	152	0	227
North Leg								
Approach	516	309	19	844	943	300	13	1,256
Departure	973	320	6	1,299	535	336	21	892
Total	1,489	629	25	2,143	1,478	636	34	2,148
South Leg								
Approach	1,022	207	6	1,235	557	215	21	793
Departure	499	134	19	652	871	184	13	1,068
Total	1,521	341	25	1,887	1,428	399	34	1,861
East Leg								
Approach	318	238	10	566	245	292	7	544
Departure	393	344	4	741	373	282	12	667
Total	711	582	14	1,307	618	574	19	1,211
West Leg								
Approach	253	142	4	399	243	116	12	371
Departure	244	98	10	352	209	121	7	337
Total	497	240	14	751	452	237	19	708
Total Approaches								
Approach	2,109	896	39	3,044	1,988	923	53	2,964
Departure	2,109	896	39	3,044	1,988	923	53	2,964
Total	4,218	1,792	78	6,088	3,976	1,846	106	5,928

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
7 Armstrong Avenue/McKinley Avenue								
NBL	0	28	0	28	0	13	0	13
NBT	229	74	13	316	437	100	42	579
NBR	0	19	12	31	0	5	38	43
SBL	0	39	14	53	0	18	34	52
SBT	652	79	37	768	231	82	25	338
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	0	129	1	130	0	31	2	33
EBR	0	9	0	9	0	30	0	30
WBL	0	15	34	49	0	6	23	29
WBT	0	100	2	102	0	34	1	35
WBR	0	33	29	62	0	16	24	40
North Leg								
Approach	652	118	51	821	231	100	59	390
Departure	229	107	42	378	437	116	66	619
Total	881	225	93	1,199	668	216	125	1,009
South Leg								
Approach	229	121	25	375	437	118	80	635
Departure	652	103	71	826	231	118	48	397
Total	881	224	96	1,201	668	236	128	1,032
East Leg								
Approach	0	148	65	213	0	56	48	104
Departure	0	187	27	214	0	54	74	128
Total	0	335	92	427	0	110	122	232
West Leg								
Approach	0	138	1	139	0	61	2	63
Departure	0	128	2	130	0	47	1	48
Total	0	266	3	269	0	108	3	111
Total Approaches								
Approach	881	525	142	1,548	668	335	189	1,192
Departure	881	525	142	1,548	668	335	189	1,192
Total	1,762	1,050	284	3,096	1,336	670	378	2,384

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
8 Armstrong Avenue/Floradora Avenue								
NBL	3	2	0	5	1	7	0	8
NBT	216	40	24	280	429	103	79	611
NBR	7	14	0	21	9	24	0	33
SBL	0	3	0	3	3	9	0	12
SBT	650	94	70	814	227	67	47	341
SBR	2	39	2	43	1	28	1	30
EBL	3	22	1	26	3	37	2	42
EBT	6	2	0	8	3	3	0	6
EBR	14	6	0	20	1	4	0	5
WBL	48	15	0	63	3	14	0	17
WBT	7	1	0	8	2	2	0	4
WBR	10	8	0	18	5	7	0	12
North Leg								
Approach	652	136	72	860	231	104	48	383
Departure	229	70	25	324	437	147	81	665
Total	881	206	97	1,184	668	251	129	1,048
South Leg								
Approach	226	56	24	306	439	134	79	652
Departure	712	115	70	897	231	85	47	363
Total	938	171	94	1,203	670	219	126	1,015
East Leg								
Approach	65	24	0	89	10	23	0	33
Departure	13	19	0	32	15	36	0	51
Total	78	43	0	121	25	59	0	84
West Leg								
Approach	23	30	1	54	7	44	2	53
Departure	12	42	2	56	4	37	1	42
Total	35	72	3	110	11	81	3	95
Total Approaches								
Approach	966	246	97	1,309	687	305	129	1,121
Departure	966	246	97	1,309	687	305	129	1,121
Total	1,932	492	194	2,618	1,374	610	258	2,242

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
9 Armstrong Avenue/Olive Avenue								
NBL	55	17	0	72	50	34	0	84
NBT	152	46	5	203	295	92	15	402
NBR	194	0	0	194	142	0	0	142
SBL	49	1	0	50	12	0	0	12
SBT	204	76	14	294	123	62	9	194
SBR	459	39	56	554	96	21	38	155
EBL	55	9	19	83	110	39	63	212
EBT	111	66	0	177	165	17	0	182
EBR	12	33	0	45	10	19	0	29
WBL	107	0	0	107	80	0	0	80
WBT	337	54	0	391	224	19	0	243
WBR	19	0	0	19	34	2	0	36
North Leg								
Approach	712	116	70	898	231	83	47	361
Departure	226	55	24	305	439	133	78	650
Total	938	171	94	1,203	670	216	125	1,011
South Leg								
Approach	401	63	5	469	487	126	15	628
Departure	323	109	14	446	213	81	9	303
Total	724	172	19	915	700	207	24	931
East Leg								
Approach	463	54	0	517	338	21	0	359
Departure	354	67	0	421	319	17	0	336
Total	817	121	0	938	657	38	0	695
West Leg								
Approach	178	108	19	305	285	75	63	423
Departure	851	110	56	1,017	370	74	38	482
Total	1,029	218	75	1,322	655	149	101	905
Total Approaches								
Approach	1,754	341	94	2,189	1,341	305	125	1,771
Departure	1,754	341	94	2,189	1,341	305	125	1,771
Total	3,508	682	188	4,378	2,682	610	250	3,542

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
10 Temperance Avenue/McKinley Avenue								
NBL	0	4	3	7	0	14	10	24
NBT	347	14	0	361	486	22	0	508
NBR	67	275	0	342	56	51	0	107
SBL	72	32	0	104	95	8	0	103
SBT	559	17	0	576	429	19	0	448
SBR	0	4	2	6	0	11	6	17
EBL	0	9	5	14	0	8	3	11
EBT	0	183	2	185	0	37	1	38
EBR	0	13	9	22	0	8	6	14
WBL	72	135	0	207	62	51	0	113
WBT	0	139	1	140	0	50	2	52
WBR	90	14	0	104	48	5	0	53
North Leg								
Approach	631	53	2	686	524	38	6	568
Departure	437	37	5	479	534	35	3	572
Total	1,068	90	7	1,165	1,058	73	9	1,140
South Leg								
Approach	414	293	3	710	542	87	10	639
Departure	631	165	9	805	491	78	6	575
Total	1,045	458	12	1,515	1,033	165	16	1,214
East Leg								
Approach	162	288	1	451	110	106	2	218
Departure	139	490	2	631	151	96	1	248
Total	301	778	3	1,082	261	202	3	466
West Leg								
Approach	0	205	16	221	0	53	10	63
Departure	0	147	6	153	0	75	18	93
Total	0	352	22	374	0	128	28	156
Total Approaches								
Approach	1,207	839	22	2,068	1,176	284	28	1,488
Departure	1,207	839	22	2,068	1,176	284	28	1,488
Total	2,414	1,678	44	4,136	2,352	568	56	2,976

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
11 Temperance Avenue/Floradora Avenue								
NBL	2	2	0	4	0	3	0	3
NBT	390	285	3	678	526	81	10	617
NBR	0	0	0	0	0	0	0	0
SBL	0	0	0	0	1	0	0	1
SBT	490	147	9	646	451	63	6	520
SBR	63	4	0	67	10	11	0	21
EBL	12	9	0	21	8	7	0	15
EBT	0	0	0	0	0	0	0	0
EBR	1	5	0	6	7	3	0	10
WBL	1	0	0	1	1	0	0	1
WBT	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0
North Leg								
Approach	553	151	9	713	462	74	6	542
Departure	402	294	3	699	534	88	10	632
Total	955	445	12	1,412	996	162	16	1,174
South Leg								
Approach	392	287	3	682	526	84	10	620
Departure	492	152	9	653	459	66	6	531
Total	884	439	12	1,335	985	150	16	1,151
East Leg								
Approach	1	0	0	1	1	0	0	1
Departure	0	0	0	0	1	0	0	1
Total	1	0	0	1	2	0	0	2
West Leg								
Approach	13	14	0	27	15	10	0	25
Departure	65	6	0	71	10	14	0	24
Total	78	20	0	98	25	24	0	49
Total Approaches								
Approach	959	452	12	1,423	1,004	168	16	1,188
Departure	959	452	12	1,423	1,004	168	16	1,188
Total	1,918	904	24	2,846	2,008	336	32	2,376

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
12 Armstrong Avenue/Project Driveway 1								
NBL	0	0	0	0	0	0	0	0
NBT	229	80	27	336	437	106	18	561
NBR	0	0	15	15	0	0	48	48
SBL	0	0	19	19	0	0	61	61
SBT	652	82	9	743	231	93	31	355
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0
WBL	0	0	43	43	0	0	29	29
WBT	0	0	0	0	0	0	0	0
WBR	0	0	54	54	0	0	36	36
North Leg								
Approach	652	82	28	762	231	93	92	416
Departure	229	80	81	390	437	106	54	597
Total	881	162	109	1,152	668	199	146	1,013
South Leg								
Approach	229	80	42	351	437	106	66	609
Departure	652	82	52	786	231	93	60	384
Total	881	162	94	1,137	668	199	126	993
East Leg								
Approach	0	0	97	97	0	0	65	65
Departure	0	0	34	34	0	0	109	109
Total	0	0	131	131	0	0	174	174
West Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total Approaches								
Approach	881	162	167	1,210	668	199	223	1,090
Departure	881	162	167	1,210	668	199	223	1,090
Total	1,762	324	334	2,420	1,336	398	446	2,180

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Table D-2 - Near-Term (2026) Peak Hour Volume Summary

	AM Peak Hour				PM Peak Hour			
	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project	Existing (2022) No Project	Cumulative Project Trips	Project Trips	Near-Term Plus Project
13 Project Driveway 2/McKinley Avenue								
NBL	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0
SBL	0	0	10	10	0	0	7	7
SBT	0	0	0	0	0	0	0	0
SBR	0	0	63	63	0	0	42	42
EBL	0	0	22	22	0	0	71	71
EBT	0	186	5	191	0	52	3	55
EBR	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0
WBT	0	148	2	150	0	56	6	62
WBR	0	0	4	4	0	0	12	12
North Leg								
Approach	0	0	73	73	0	0	49	49
Departure	0	0	26	26	0	0	83	83
Total	0	0	99	99	0	0	132	132
South Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
East Leg								
Approach	0	148	6	154	0	56	18	74
Departure	0	186	15	201	0	52	10	62
Total	0	334	21	355	0	108	28	136
West Leg								
Approach	0	186	27	213	0	52	74	126
Departure	0	148	65	213	0	56	48	104
Total	0	334	92	426	0	108	122	230
Total Approaches								
Approach	0	334	106	440	0	108	141	249
Departure	0	334	106	440	0	108	141	249
Total	0	668	212	880	0	216	282	498

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Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
1 Fowler Avenue/McKinley Avenue						
NBL	273	0	273	318	0	318
NBT	633	0	633	970	0	970
NBR	47	1	48	158	2	160
SBL	104	0	104	56	0	56
SBT	826	0	826	743	0	743
SBR	26	0	26	68	0	68
EBL	49	0	49	112	0	112
EBT	31	0	31	50	0	50
EBR	144	0	144	307	0	307
WBL	362	2	364	76	1	77
WBT	141	0	141	73	0	73
WBR	103	0	103	37	0	37
North Leg						
Approach	956	0	956	867	0	867
Departure	785	0	785	1,119	0	1,119
Total	1,741	0	1,741	1,986	0	1,986
South Leg						
Approach	953	1	954	1,446	2	1,448
Departure	1,332	2	1,334	1,126	1	1,127
Total	2,285	3	2,288	2,572	3	2,575
East Leg						
Approach	606	2	608	186	1	187
Departure	182	1	183	264	2	266
Total	788	3	791	450	3	453
West Leg						
Approach	224	0	224	469	0	469
Departure	440	0	440	459	0	459
Total	664	0	664	928	0	928
Total Approaches						
Approach	2,739	3	2,742	2,968	3	2,971
Departure	2,739	3	2,742	2,968	3	2,971
Total	5,478	6	5,484	5,936	6	5,942

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
2 Fowler Avenue/Floradora Avenue						
NBL	0	0	0	0	0	0
NBT	600	1	601	874	2	876
NBR	108	0	108	89	0	89
SBL	138	0	138	107	0	107
SBT	749	2	751	649	1	650
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	74	0	74	109	0	109
WBT	0	0	0	0	0	0
WBR	75	0	75	105	0	105
North Leg						
Approach	887	2	889	756	1	757
Departure	675	1	676	979	2	981
Total	1,562	3	1,565	1,735	3	1,738
South Leg						
Approach	708	1	709	963	2	965
Departure	823	2	825	758	1	759
Total	1,531	3	1,534	1,721	3	1,724
East Leg						
Approach	149	0	149	214	0	214
Departure	246	0	246	196	0	196
Total	395	0	395	410	0	410
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	1,744	3	1,747	1,933	3	1,936
Departure	1,744	3	1,747	1,933	3	1,936
Total	3,488	6	3,494	3,866	6	3,872

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
3 Fowler Avenue/Olive Avenue						
NBL	33	0	33	6	0	6
NBT	602	1	603	683	2	685
NBR	147	15	162	363	48	411
SBL	38	0	38	32	0	32
SBT	762	2	764	693	1	694
SBR	48	0	48	16	0	16
EBL	39	0	39	166	0	166
EBT	98	3	101	332	10	342
EBR	24	0	24	46	0	46
WBL	477	43	520	339	29	368
WBT	314	9	323	121	6	127
WBR	78	0	78	105	0	105
North Leg						
Approach	848	2	850	741	1	742
Departure	719	1	720	954	2	956
Total	1,567	3	1,570	1,695	3	1,698
South Leg						
Approach	782	16	798	1,052	50	1,102
Departure	1,263	45	1,308	1,078	30	1,108
Total	2,045	61	2,106	2,130	80	2,210
East Leg						
Approach	869	52	921	565	35	600
Departure	283	18	301	727	58	785
Total	1,152	70	1,222	1,292	93	1,385
West Leg						
Approach	161	3	164	544	10	554
Departure	395	9	404	143	6	149
Total	556	12	568	687	16	703
Total Approaches						
Approach	2,660	73	2,733	2,902	96	2,998
Departure	2,660	73	2,733	2,902	96	2,998
Total	5,320	146	5,466	5,804	192	5,996

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
4 Fowler Avenue/SR-180 Westbound Ramps						
NBL	0	0	0	0	0	0
NBT	665	16	681	815	52	867
NBR	879	0	879	486	0	486
SBL	0	0	0	0	0	0
SBT	401	19	420	553	13	566
SBR	837	27	864	447	18	465
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	121	0	121	133	0	133
WBT	0	0	0	0	0	0
WBR	121	0	121	113	0	113
North Leg						
Approach	1,238	46	1,284	1,000	31	1,031
Departure	786	16	802	928	52	980
Total	2,024	62	2,086	1,928	83	2,011
South Leg						
Approach	1,544	16	1,560	1,301	52	1,353
Departure	522	19	541	686	13	699
Total	2,066	35	2,101	1,987	65	2,052
East Leg						
Approach	242	0	242	246	0	246
Departure	879	0	879	486	0	486
Total	1,121	0	1,121	732	0	732
West Leg						
Approach	0	0	0	0	0	0
Departure	837	27	864	447	18	465
Total	837	27	864	447	18	465
Total Approaches						
Approach	3,024	62	3,086	2,547	83	2,630
Departure	3,024	62	3,086	2,547	83	2,630
Total	6,048	124	6,172	5,094	166	5,260

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
5 Fowler Avenue/SR-180 Eastbound Ramps						
NBL	0	0	0	0	0	0
NBT	1,223	6	1,229	858	21	879
NBR	140	0	140	135	0	135
SBL	110	0	110	134	0	134
SBT	412	19	431	552	13	565
SBR	0	0	0	0	0	0
EBL	321	9	330	443	31	474
EBT	0	0	0	0	0	0
EBR	487	0	487	867	0	867
WBL	0	0	0	0	0	0
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	522	19	541	686	13	699
Departure	1,544	15	1,559	1,301	52	1,353
Total	2,066	34	2,100	1,987	65	2,052
South Leg						
Approach	1,363	6	1,369	993	21	1,014
Departure	899	19	918	1,419	13	1,432
Total	2,262	25	2,287	2,412	34	2,446
East Leg						
Approach	0	0	0	0	0	0
Departure	250	0	250	269	0	269
Total	250	0	250	269	0	269
West Leg						
Approach	808	9	817	1,310	31	1,341
Departure	0	0	0	0	0	0
Total	808	9	817	1,310	31	1,341
Total Approaches						
Approach	2,693	34	2,727	2,989	65	3,054
Departure	2,693	34	2,727	2,989	65	3,054
Total	5,386	68	5,454	5,978	130	6,108

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
6 Fowler Avenue/Belmont Avenue						
NBL	155	0	155	88	0	88
NBT	977	6	983	540	21	561
NBR	188	0	188	147	0	147
SBL	342	0	342	341	0	341
SBT	469	19	488	880	13	893
SBR	55	0	55	88	0	88
EBL	120	0	120	230	0	230
EBT	244	4	248	200	12	212
EBR	53	0	53	106	0	106
WBL	144	0	144	151	0	151
WBT	258	10	268	174	7	181
WBR	266	0	266	223	0	223
North Leg						
Approach	866	19	885	1,309	13	1,322
Departure	1,363	6	1,369	993	21	1,014
Total	2,229	25	2,254	2,302	34	2,336
South Leg						
Approach	1,320	6	1,326	775	21	796
Departure	666	19	685	1,137	13	1,150
Total	1,986	25	2,011	1,912	34	1,946
East Leg						
Approach	668	10	678	548	7	555
Departure	774	4	778	688	12	700
Total	1,442	14	1,456	1,236	19	1,255
West Leg						
Approach	417	4	421	536	12	548
Departure	468	10	478	350	7	357
Total	885	14	899	886	19	905
Total Approaches						
Approach	3,271	39	3,310	3,168	53	3,221
Departure	3,271	39	3,310	3,168	53	3,221
Total	6,542	78	6,620	6,336	106	6,442

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
7 Armstrong Avenue/McKinley Avenue						
NBL	29	0	29	14	0	14
NBT	318	13	331	563	42	605
NBR	20	12	32	167	38	205
SBL	41	14	55	25	34	59
SBT	767	37	804	329	25	354
SBR	112	0	112	51	0	51
EBL	26	0	26	76	0	76
EBT	135	1	136	73	2	75
EBR	9	0	9	32	0	32
WBL	117	34	151	27	23	50
WBT	294	2	296	61	1	62
WBR	35	29	64	23	24	47
North Leg						
Approach	920	51	971	405	59	464
Departure	379	42	421	662	66	728
Total	1,299	93	1,392	1,067	125	1,192
South Leg						
Approach	367	25	392	744	80	824
Departure	893	71	964	388	48	436
Total	1,260	96	1,356	1,132	128	1,260
East Leg						
Approach	446	65	511	111	48	159
Departure	196	27	223	265	74	339
Total	642	92	734	376	122	498
West Leg						
Approach	170	1	171	181	2	183
Departure	435	2	437	126	1	127
Total	605	3	608	307	3	310
Total Approaches						
Approach	1,903	142	2,045	1,441	189	1,630
Departure	1,903	142	2,045	1,441	189	1,630
Total	3,806	284	4,090	2,882	378	3,260

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
8 Armstrong Avenue/Floradora Avenue						
NBL	5	0	5	8	0	8
NBT	269	24	293	561	79	640
NBR	22	0	22	74	0	74
SBL	3	0	3	13	0	13
SBT	835	70	905	357	47	404
SBR	43	2	45	30	1	31
EBL	26	1	27	42	2	44
EBT	8	0	8	6	0	6
EBR	21	0	21	5	0	5
WBL	107	0	107	23	0	23
WBT	8	0	8	4	0	4
WBR	19	0	19	13	0	13
North Leg						
Approach	881	72	953	400	48	448
Departure	314	25	339	616	81	697
Total	1,195	97	1,292	1,016	129	1,145
South Leg						
Approach	296	24	320	643	79	722
Departure	963	70	1,033	385	47	432
Total	1,259	94	1,353	1,028	126	1,154
East Leg						
Approach	134	0	134	40	0	40
Departure	33	0	33	93	0	93
Total	167	0	167	133	0	133
West Leg						
Approach	55	1	56	53	2	55
Departure	56	2	58	42	1	43
Total	111	3	114	95	3	98
Total Approaches						
Approach	1,366	97	1,463	1,136	129	1,265
Departure	1,366	97	1,463	1,136	129	1,265
Total	2,732	194	2,926	2,272	258	2,530

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
9 Armstrong Avenue/Olive Avenue						
NBL	76	0	76	88	0	88
NBT	208	5	213	406	15	421
NBR	244	0	244	167	0	167
SBL	67	0	67	20	0	20
SBT	284	14	298	194	9	203
SBR	576	56	632	163	38	201
EBL	67	19	86	289	63	352
EBT	186	0	186	501	0	501
EBR	47	0	47	30	0	30
WBL	131	0	131	106	0	106
WBT	411	0	411	355	0	355
WBR	23	0	23	46	0	46
North Leg						
Approach	927	70	997	377	47	424
Departure	298	24	322	741	78	819
Total	1,225	94	1,319	1,118	125	1,243
South Leg						
Approach	528	5	533	661	15	676
Departure	462	14	476	330	9	339
Total	990	19	1,009	991	24	1,015
East Leg						
Approach	565	0	565	507	0	507
Departure	497	0	497	688	0	688
Total	1,062	0	1,062	1,195	0	1,195
West Leg						
Approach	300	19	319	820	63	883
Departure	1,063	56	1,119	606	38	644
Total	1,363	75	1,438	1,426	101	1,527
Total Approaches						
Approach	2,320	94	2,414	2,365	125	2,490
Departure	2,320	94	2,414	2,365	125	2,490
Total	4,640	188	4,828	4,730	250	4,980

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
10 Temperance Avenue/McKinley Avenue						
NBL	102	3	105	49	10	59
NBT	472	0	472	1,505	0	1,505
NBR	359	0	359	112	0	112
SBL	109	0	109	108	0	108
SBT	1,350	0	1,350	889	0	889
SBR	169	2	171	35	6	41
EBL	40	5	45	120	3	123
EBT	192	2	194	39	1	40
EBR	14	9	23	68	6	74
WBL	217	0	217	119	0	119
WBT	146	1	147	53	2	55
WBR	109	0	109	56	0	56
North Leg						
Approach	1,628	2	1,630	1,032	6	1,038
Departure	621	5	626	1,681	3	1,684
Total	2,249	7	2,256	2,713	9	2,722
South Leg						
Approach	933	3	936	1,666	10	1,676
Departure	1,581	9	1,590	1,076	6	1,082
Total	2,514	12	2,526	2,742	16	2,758
East Leg						
Approach	472	1	473	228	2	230
Departure	660	2	662	259	1	260
Total	1,132	3	1,135	487	3	490
West Leg						
Approach	246	16	262	227	10	237
Departure	417	6	423	137	18	155
Total	663	22	685	364	28	392
Total Approaches						
Approach	3,279	22	3,301	3,153	28	3,181
Departure	3,279	22	3,301	3,153	28	3,181
Total	6,558	44	6,602	6,306	56	6,362

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
11 Temperance Avenue/Floradora Avenue						
NBL	4	0	4	3	0	3
NBT	709	3	712	1,091	10	1,101
NBR	0	0	0	0	0	0
SBL	0	0	0	1	0	1
SBT	951	9	960	779	6	785
SBR	70	0	70	24	0	24
EBL	23	0	23	16	0	16
EBT	0	0	0	0	0	0
EBR	6	0	6	12	0	12
WBL	1	0	1	1	0	1
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	1,021	9	1,030	804	6	810
Departure	732	3	735	1,107	10	1,117
Total	1,753	12	1,765	1,911	16	1,927
South Leg						
Approach	713	3	716	1,094	10	1,104
Departure	958	9	967	792	6	798
Total	1,671	12	1,683	1,886	16	1,902
East Leg						
Approach	1	0	1	1	0	1
Departure	0	0	0	1	0	1
Total	1	0	1	2	0	2
West Leg						
Approach	29	0	29	28	0	28
Departure	74	0	74	27	0	27
Total	103	0	103	55	0	55
Total Approaches						
Approach	1,764	12	1,776	1,927	16	1,943
Departure	1,764	12	1,776	1,927	16	1,943
Total	3,528	24	3,552	3,854	32	3,886

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
12 Armstrong Avenue/Project Driveway 1						
NBL	0	0	0	0	0	0
NBT	325	27	352	570	18	588
NBR	0	15	15	0	48	48
SBL	0	19	19	0	61	61
SBT	772	9	781	341	31	372
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	0	43	43	0	29	29
WBT	0	0	0	0	0	0
WBR	0	54	54	0	36	36
North Leg						
Approach	772	28	800	341	92	433
Departure	325	81	406	570	54	624
Total	1,097	109	1,206	911	146	1,057
South Leg						
Approach	325	42	367	570	66	636
Departure	772	52	824	341	60	401
Total	1,097	94	1,191	911	126	1,037
East Leg						
Approach	0	97	97	0	65	65
Departure	0	34	34	0	109	109
Total	0	131	131	0	174	174
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	1,097	167	1,264	911	223	1,134
Departure	1,097	167	1,264	911	223	1,134
Total	2,194	334	2,528	1,822	446	2,268

LSA

Table D-3 - Cumulative (2046) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project	Cumulative (2046) No Project	Project Trips	Cumulative (2046) Plus Project
13 Project Driveway 2/McKinley Avenue						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0
SBL	0	10	10	0	7	7
SBT	0	0	0	0	0	0
SBR	0	63	63	0	42	42
EBL	0	22	22	0	71	71
EBT	195	5	200	55	3	58
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	155	2	157	59	6	65
WBR	0	4	4	0	12	12
North Leg						
Approach	0	73	73	0	49	49
Departure	0	26	26	0	83	83
Total	0	99	99	0	132	132
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	155	6	161	59	18	77
Departure	195	15	210	55	10	65
Total	350	21	371	114	28	142
West Leg						
Approach	195	27	222	55	74	129
Departure	155	65	220	59	48	107
Total	350	92	442	114	122	236
Total Approaches						
Approach	350	106	456	114	141	255
Departure	350	106	456	114	141	255
Total	700	212	912	228	282	510

APPENDIX E

LEVEL OF SERVICE WORKSHEETS

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	41	423	1	73	486
Future Vol, veh/h	2	41	423	1	73	486
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	6	6	2	2	3	3
Mvmt Flow	2	42	432	1	74	496

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1077	433	0	0	433	0
Stage 1	433	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.13	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.227	-
Pot Cap-1 Maneuver	238	614	-	-	1121	-
Stage 1	646	-	-	-	-	-
Stage 2	515	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	216	614	-	-	1121	-
Mov Cap-2 Maneuver	216	-	-	-	-	-
Stage 1	646	-	-	-	-	-
Stage 2	468	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	566	1121	-
HCM Lane V/C Ratio	-	-	0.078	0.066	-
HCM Control Delay (s)	-	-	11.9	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2	-

Intersection	
Intersection Delay, s/veh	59.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	59	23	386	115	40	27	340	72	3	464	11
Future Vol, veh/h	38	59	23	386	115	40	27	340	72	3	464	11
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	4	4	4
Mvmt Flow	38	60	23	390	116	40	27	343	73	3	469	11
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	14.9	48.3	58.3	83.5
HCM LOS	B	E	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	100%	0%	100%	0%	1%
Vol Thru, %	77%	0%	72%	0%	74%	97%
Vol Right, %	16%	0%	28%	0%	26%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	439	38	82	386	155	478
LT Vol	27	38	0	386	0	3
Through Vol	340	0	59	0	115	464
RT Vol	72	0	23	0	40	11
Lane Flow Rate	443	38	83	390	157	483
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.948	0.107	0.217	0.941	0.352	1.049
Departure Headway (Hd)	7.875	10.437	9.702	8.982	8.273	7.821
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	466	345	372	405	437	468
Service Time	5.875	8.137	7.402	6.682	5.973	5.798
HCM Lane V/C Ratio	0.951	0.11	0.223	0.963	0.359	1.032
HCM Control Delay	58.3	14.4	15.1	61.5	15.4	83.5
HCM Lane LOS	F	B	C	F	C	F
HCM 95th-tile Q	11.3	0.4	0.8	10.5	1.6	15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	18	0	62	0	402	751	0	182	676
Future Volume (veh/h)	0	0	0	18	0	62	0	402	751	0	182	676
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	0	1841	0	1870	1870	0	1856	1856
Adj Flow Rate, veh/h				20	0	67	0	437	0	0	198	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	0	4	0	2	2	0	3	3
Cap, veh/h				179	0	159	0	2433		0	2414	
Arrive On Green				0.10	0.00	0.10	0.00	0.68	0.00	0.00	0.68	0.00
Sat Flow, veh/h				1753	0	1560	0	3647	1585	0	3618	1572
Grp Volume(v), veh/h				20	0	67	0	437	0	0	198	0
Grp Sat Flow(s),veh/h/ln				1753	0	1560	0	1777	1585	0	1763	1572
Q Serve(g_s), s				0.6	0.0	2.4	0.0	2.7	0.0	0.0	1.1	0.0
Cycle Q Clear(g_c), s				0.6	0.0	2.4	0.0	2.7	0.0	0.0	1.1	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				179	0	159	0	2433		0	2414	
V/C Ratio(X)				0.11	0.00	0.42	0.00	0.18		0.00	0.08	
Avail Cap(c_a), veh/h				602	0	536	0	2433		0	2414	
HCM Platoon Ratio				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	0.00	0.88	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				24.5	0.0	25.3	0.0	3.4	0.0	0.0	3.2	0.0
Incr Delay (d2), s/veh				0.6	0.0	4.1	0.0	0.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.3	0.0	1.0	0.0	0.5	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				25.1	0.0	29.4	0.0	3.5	0.0	0.0	3.2	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					87			437			198	
Approach Delay, s/veh					28.4			3.5			3.2	
Approach LOS					C			A			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	47.5		47.5		12.5			
Change Period (Y+Rc), s	6.4		6.4		6.4			
Max Green Setting (Gmax), s	26.6		26.6		20.6			
Max Q Clear Time (g_c+I1), s	4.7		3.1		4.4			
Green Ext Time (p_c), s	5.0		2.1		0.4			

Intersection Summary		
HCM 6th Ctrl Delay	6.5	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NBR, SBR] 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)	214	0	339	0	0	0	0	939	34	29	171	0
Future Volume (veh/h)	214	0	339	0	0	0	0	939	34	29	171	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	235	0	373				0	1032	37	32	188	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	653	0	527				0	1949	869	129	2354	0
Arrive On Green	0.19	0.00	0.19				0.00	0.55	0.55	0.04	0.66	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	235	0	373				0	1032	37	32	188	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	5.1	0.0	10.7				0.0	15.9	0.9	0.8	1.6	0.0
Cycle Q Clear(g_c), s	5.1	0.0	10.7				0.0	15.9	0.9	0.8	1.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	653	0	527				0	1949	869	129	2354	0
V/C Ratio(X)	0.36	0.00	0.71				0.00	0.53	0.04	0.25	0.08	0.00
Avail Cap(c_a), veh/h	810	0	654				0	1949	869	603	2354	0
HCM Platoon Ratio	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				0.00	0.91	0.91	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.4	0.0	32.7				0.0	12.4	9.0	40.2	5.2	0.0
Incr Delay (d2), s/veh	1.4	0.0	7.4				0.0	0.9	0.1	0.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	4.0				0.0	5.5	0.3	0.3	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	0.0	40.1				0.0	13.3	9.1	40.6	5.2	0.0
LnGrp LOS	C	A	D				A	B	A	D	A	A
Approach Vol, veh/h		608						1069			220	
Approach Delay, s/veh		36.9						13.2			10.4	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	9.8	53.7	22.5	63.5
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 15	31.0	* 20	52.6
Max Q Clear Time (g_c+I1), s	12.8	17.9	12.7	3.6
Green Ext Time (p_c), s	0.0	8.8	3.4	2.4

Intersection Summary	
HCM 6th Ctrl Delay	20.4
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)	66	140	47	91	114	113	108	794	120	133	361	22
Future Volume (veh/h)	66	140	47	91	114	113	108	794	120	133	361	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	73	154	52	100	125	124	119	873	132	146	397	24
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	1	1	1
Cap, veh/h	96	247	80	122	386	172	142	2248	1003	198	2209	985
Arrive On Green	0.05	0.09	0.09	0.07	0.11	0.11	0.08	0.63	0.63	0.06	0.62	0.62
Sat Flow, veh/h	1781	2634	859	1781	3554	1585	1781	3554	1585	3483	3582	1598
Grp Volume(v), veh/h	73	102	104	100	125	124	119	873	132	146	397	24
Grp Sat Flow(s),veh/h/ln	1781	1777	1716	1781	1777	1585	1781	1777	1585	1742	1791	1598
Q Serve(g_s), s	5.7	7.7	8.2	7.8	4.5	10.6	9.2	16.7	4.7	5.8	6.7	0.8
Cycle Q Clear(g_c), s	5.7	7.7	8.2	7.8	4.5	10.6	9.2	16.7	4.7	5.8	6.7	0.8
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	167	161	122	386	172	142	2248	1003	198	2209	985
V/C Ratio(X)	0.76	0.61	0.65	0.82	0.32	0.72	0.84	0.39	0.13	0.74	0.18	0.02
Avail Cap(c_a), veh/h	267	520	502	267	1041	464	267	2248	1003	522	2209	985
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	0.95	0.95	0.95
Uniform Delay (d), s/veh	65.3	61.0	61.2	64.3	57.6	60.3	63.5	12.5	10.3	65.0	11.6	10.4
Incr Delay (d2), s/veh	4.6	10.2	12.0	4.9	1.3	14.4	4.8	0.5	0.3	1.9	0.2	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	2.7	3.9	4.0	3.6	2.1	4.9	4.3	6.5	1.6	2.6	2.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	71.2	73.2	69.3	59.0	74.7	68.3	13.0	10.6	66.9	11.7	10.5
LnGrp LOS	E	E	E	E	E	E	E	B	B	E	B	B
Approach Vol, veh/h		279			349			1124			567	
Approach Delay, s/veh		71.6			67.5			18.6			25.9	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	91.2	12.4	20.5	13.6	93.5	14.5	18.4
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	21.0	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	11.2	8.7	7.7	12.6	7.8	18.7	9.8	10.2
Green Ext Time (p_c), s	0.1	6.9	0.1	2.6	0.2	12.1	0.1	2.5

Intersection Summary	
HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	6	14	48	7	10	3	216	7	0	650	2
Future Vol, veh/h	3	6	14	48	7	10	3	216	7	0	650	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	2	2	2	3	3	3
Mvmt Flow	3	6	15	52	8	11	3	232	8	0	699	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	952	946	700	953	943	236	701	0	0	240	0	0
Stage 1	700	700	-	242	242	-	-	-	-	-	-	-
Stage 2	252	246	-	711	701	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	240	263	441	239	263	803	896	-	-	1321	-	-
Stage 1	431	443	-	762	705	-	-	-	-	-	-	-
Stage 2	754	704	-	424	441	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	231	262	441	226	262	803	896	-	-	1321	-	-
Mov Cap-2 Maneuver	231	262	-	226	262	-	-	-	-	-	-	-
Stage 1	430	443	-	760	703	-	-	-	-	-	-	-
Stage 2	733	702	-	404	441	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16	24.1	0.1	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	896	-	-	251	441	258	1321	-	-
HCM Lane V/C Ratio	0.004	-	-	0.039	0.034	0.271	-	-	-
HCM Control Delay (s)	9	-	-	19.9	13.5	24.1	0	-	-
HCM Lane LOS	A	-	-	C	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	1.1	0	-	-

SimTraffic Performance Report

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.0	0.2	0.2	0.0	0.4
Denied Del/Veh (s)	0.4	1.4	2.1	0.0	0.9
Total Delay (hr)	0.6	2.4	1.4	2.5	6.8
Total Del/Veh (s)	11.5	17.5	12.5	12.9	13.9
Stop Delay (hr)	0.4	1.5	0.9	1.6	4.3
Stop Del/Veh (s)	7.2	11.3	8.0	8.1	8.9

Intersection	
Int Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	72	90	347	67	72	559
Future Vol, veh/h	72	90	347	67	72	559
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	140	-	-	-	155	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	2	2	1	1
Mvmt Flow	82	102	394	76	82	635

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1231	432	0	0	470	0
Stage 1	432	-	-	-	-	-
Stage 2	799	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	197	626	-	-	1097	-
Stage 1	657	-	-	-	-	-
Stage 2	444	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	182	626	-	-	1097	-
Mov Cap-2 Maneuver	182	-	-	-	-	-
Stage 1	657	-	-	-	-	-
Stage 2	411	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.4	0	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	182	626	1097	-
HCM Lane V/C Ratio	-	-	0.45	0.163	0.075	-
HCM Control Delay (s)	-	-	40	11.9	8.5	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	2.1	0.6	0.2	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	0	1	1	0	0	2	390	0	0	490	63
Future Vol, veh/h	12	0	1	1	0	0	2	390	0	0	490	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	13	0	1	1	0	0	2	411	0	0	516	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	964	964	549	965	997	411	582	0	0	411	0	0
Stage 1	549	549	-	415	415	-	-	-	-	-	-	-
Stage 2	415	415	-	550	582	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	237	257	539	236	246	645	992	-	-	1153	-	-
Stage 1	524	520	-	619	596	-	-	-	-	-	-	-
Stage 2	619	596	-	523	502	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	237	256	539	235	245	645	992	-	-	1153	-	-
Mov Cap-2 Maneuver	237	256	-	235	245	-	-	-	-	-	-	-
Stage 1	522	520	-	617	594	-	-	-	-	-	-	-
Stage 2	617	594	-	522	502	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.4	20.4	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	992	-	-	248	235	1153	-	-
HCM Lane V/C Ratio	0.002	-	-	0.055	0.004	-	-	-
HCM Control Delay (s)	8.6	0	-	20.4	20.4	0	-	-
HCM Lane LOS	A	A	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	45	599	1	61	448
Future Vol, veh/h	3	45	599	1	61	448
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	6	6	2	2	3	3
Mvmt Flow	3	46	611	1	62	457

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1193	612	0	0	612	0
Stage 1	612	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.13	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.227	-
Pot Cap-1 Maneuver	203	486	-	-	962	-
Stage 1	533	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	186	486	-	-	962	-
Mov Cap-2 Maneuver	186	-	-	-	-	-
Stage 1	533	-	-	-	-	-
Stage 2	504	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	441	962	-
HCM Lane V/C Ratio	-	-	0.111	0.065	-
HCM Control Delay (s)	-	-	14.2	9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.2	-

Intersection	
Intersection Delay, s/veh	49.5
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	89	43	212	71	59	6	367	108	11	409	15
Future Vol, veh/h	139	89	43	212	71	59	6	367	108	11	409	15
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	4	4	4
Mvmt Flow	140	90	43	214	72	60	6	371	109	11	413	15
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	17.2	20.3	80.1	58.7
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	1%	100%	0%	100%	0%	3%
Vol Thru, %	76%	0%	67%	0%	55%	94%
Vol Right, %	22%	0%	33%	0%	45%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	481	139	132	212	130	435
LT Vol	6	139	0	212	0	11
Through Vol	367	0	89	0	71	409
RT Vol	108	0	43	0	59	15
Lane Flow Rate	486	140	133	214	131	439
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1.039	0.372	0.325	0.554	0.308	0.947
Departure Headway (Hd)	7.695	9.821	9.057	9.568	8.712	7.999
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	476	369	400	379	415	457
Service Time	5.695	7.521	6.757	7.268	6.412	5.999
HCM Lane V/C Ratio	1.021	0.379	0.333	0.565	0.316	0.961
HCM Control Delay	80.1	18.2	16.1	23.5	15.2	58.7
HCM Lane LOS	F	C	C	C	C	F
HCM 95th-tile Q	14.7	1.7	1.4	3.2	1.3	11.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	33	0	36	0	486	356	0	327	302
Future Volume (veh/h)	0	0	0	33	0	36	0	486	356	0	327	302
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	0	1841	0	1870	1870	0	1856	1856
Adj Flow Rate, veh/h				36	0	39	0	528	0	0	355	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	0	4	0	2	2	0	3	3
Cap, veh/h				167	0	148	0	2457		0	2438	
Arrive On Green				0.10	0.00	0.10	0.00	0.69	0.00	0.00	0.69	0.00
Sat Flow, veh/h				1753	0	1560	0	3647	1585	0	3618	1572
Grp Volume(v), veh/h				36	0	39	0	528	0	0	355	0
Grp Sat Flow(s),veh/h/ln				1753	0	1560	0	1777	1585	0	1763	1572
Q Serve(g_s), s				1.1	0.0	1.4	0.0	3.2	0.0	0.0	2.1	0.0
Cycle Q Clear(g_c), s				1.1	0.0	1.4	0.0	3.2	0.0	0.0	2.1	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				167	0	148	0	2457		0	2438	
V/C Ratio(X)				0.22	0.00	0.26	0.00	0.21		0.00	0.15	
Avail Cap(c_a), veh/h				602	0	536	0	2457		0	2438	
HCM Platoon Ratio				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	0.00	0.93	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				25.1	0.0	25.2	0.0	3.4	0.0	0.0	3.2	0.0
Incr Delay (d2), s/veh				1.5	0.0	2.2	0.0	0.2	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.5	0.0	0.6	0.0	0.6	0.0	0.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				26.6	0.0	27.4	0.0	3.5	0.0	0.0	3.3	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					75			528			355	
Approach Delay, s/veh					27.0			3.5			3.3	
Approach LOS					C			A			A	

Timer - Assigned Phs	2		6		8	
Phs Duration (G+Y+Rc), s	47.9		47.9		12.1	
Change Period (Y+Rc), s	6.4		6.4		6.4	
Max Green Setting (Gmax), s	26.6		26.6		20.6	
Max Q Clear Time (g_c+I1), s	5.2		4.1		3.4	
Green Ext Time (p_c), s	6.0		4.0		0.4	

Intersection Summary		
HCM 6th Ctrl Delay	5.3	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NBR, SBR] 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)	329	0	727	0	0	0	0	513	22	75	285	0
Future Volume (veh/h)	329	0	727	0	0	0	0	513	22	75	285	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	362	0	799				0	564	24	82	313	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	810	0	654				0	1708	762	207	2194	0
Arrive On Green	0.23	0.00	0.23				0.00	0.48	0.48	0.06	0.62	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	362	0	799				0	564	24	82	313	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	7.7	0.0	20.0				0.0	8.4	0.7	2.0	3.2	0.0
Cycle Q Clear(g_c), s	7.7	0.0	20.0				0.0	8.4	0.7	2.0	3.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	810	0	654				0	1708	762	207	2194	0
V/C Ratio(X)	0.45	0.00	1.22				0.00	0.33	0.03	0.40	0.14	0.00
Avail Cap(c_a), veh/h	810	0	654				0	1708	762	603	2194	0
HCM Platoon Ratio	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				0.00	0.98	0.98	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.3	0.0	33.0				0.0	13.8	11.8	38.9	6.9	0.0
Incr Delay (d2), s/veh	1.7	0.0	113.2				0.0	0.5	0.1	0.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	16.8				0.0	3.1	0.2	0.8	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	0.0	146.2				0.0	14.3	11.8	39.4	7.0	0.0
LnGrp LOS	C	A	F				A	B	B	D	A	A
Approach Vol, veh/h		1161						588			395	
Approach Delay, s/veh		110.0						14.2			13.8	
Approach LOS		F						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	11.8	47.8		26.4		59.6
Change Period (Y+Rc), s	* 6.6	6.5		* 6.4		6.5
Max Green Setting (Gmax), s	* 15	31.0		* 20		52.6
Max Q Clear Time (g_c+I1), s	4.0	10.4		22.0		5.2
Green Ext Time (p_c), s	0.1	6.6		0.0		4.2

Intersection Summary	
HCM 6th Ctrl Delay	66.0
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)	56	116	71	77	93	75	67	404	86	171	723	49
Future Volume (veh/h)	56	116	71	77	93	75	67	404	86	171	723	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	62	127	78	85	102	82	74	444	95	188	795	54
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	1	1	1
Cap, veh/h	93	201	116	106	356	159	96	2242	1000	240	2340	1044
Arrive On Green	0.05	0.09	0.09	0.06	0.10	0.10	0.05	0.63	0.63	0.07	0.65	0.65
Sat Flow, veh/h	1781	2171	1251	1781	3554	1585	1781	3554	1585	3483	3582	1598
Grp Volume(v), veh/h	62	102	103	85	102	82	74	444	95	188	795	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1645	1781	1777	1585	1781	1777	1585	1742	1791	1598
Q Serve(g_s), s	4.8	7.8	8.4	6.6	3.7	6.9	5.7	7.4	3.3	7.4	13.8	1.7
Cycle Q Clear(g_c), s	4.8	7.8	8.4	6.6	3.7	6.9	5.7	7.4	3.3	7.4	13.8	1.7
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	93	164	152	106	356	159	96	2242	1000	240	2340	1044
V/C Ratio(X)	0.67	0.62	0.67	0.80	0.29	0.52	0.77	0.20	0.09	0.78	0.34	0.05
Avail Cap(c_a), veh/h	267	520	482	267	1041	464	267	2242	1000	522	2340	1044
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	0.85	0.85	0.85
Uniform Delay (d), s/veh	65.2	61.2	61.5	65.0	58.4	59.8	65.4	10.9	10.1	64.1	10.8	8.7
Incr Delay (d2), s/veh	3.1	10.7	14.0	5.2	1.2	7.0	4.8	0.2	0.2	1.8	0.3	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	2.2	3.9	4.1	3.1	1.7	3.0	2.7	2.8	1.1	3.3	5.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	71.9	75.5	70.2	59.6	66.8	70.2	11.1	10.3	65.9	11.2	8.8
LnGrp LOS	E	E	E	E	E	E	E	B	B	E	B	A
Approach Vol, veh/h		267			269			613			1037	
Approach Delay, s/veh		72.4			65.1			18.1			21.0	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	96.4	12.2	19.3	15.3	93.2	13.2	18.3
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	21.0	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	7.7	15.8	6.8	8.9	9.4	9.4	8.6	10.4
Green Ext Time (p_c), s	0.1	12.3	0.0	2.0	0.2	8.7	0.1	2.5

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	3	1	3	2	5	1	429	9	3	227	1
Future Vol, veh/h	3	3	1	3	2	5	1	429	9	3	227	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	2	2	2	3	3	3
Mvmt Flow	3	3	1	3	2	5	1	461	10	3	244	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	723	724	245	721	719	466	245	0	0	471	0	0
Stage 1	251	251	-	468	468	-	-	-	-	-	-	-
Stage 2	472	473	-	253	251	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	343	353	796	343	354	597	1321	-	-	1086	-	-
Stage 1	755	701	-	575	561	-	-	-	-	-	-	-
Stage 2	574	560	-	751	699	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	338	352	796	339	353	597	1321	-	-	1086	-	-
Mov Cap-2 Maneuver	338	352	-	339	353	-	-	-	-	-	-	-
Stage 1	754	699	-	574	560	-	-	-	-	-	-	-
Stage 2	566	559	-	744	697	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	13.4	0	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1321	-	-	345	796	437	1086	-	-
HCM Lane V/C Ratio	0.001	-	-	0.019	0.001	0.025	0.003	-	-
HCM Control Delay (s)	7.7	-	-	15.6	9.5	13.4	8.3	-	-
HCM Lane LOS	A	-	-	C	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.1	0	-	-

SimTraffic Performance Report

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.0	0.1	0.2	0.0	0.4
Denied Del/Veh (s)	0.5	1.3	1.4	0.0	1.0
Total Delay (hr)	1.2	1.4	5.3	0.6	8.5
Total Del/Veh (s)	13.6	14.6	35.6	9.9	21.5
Stop Delay (hr)	0.7	0.9	4.2	0.4	6.2
Stop Del/Veh (s)	8.6	8.6	28.7	6.2	15.8

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	62	48	486	56	95	429
Future Vol, veh/h	62	48	486	56	95	429
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	140	-	-	-	155	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	1	1	2	2	1	1
Mvmt Flow	70	55	552	64	108	488

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1288	584	0	0	616	0
Stage 1	584	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	182	513	-	-	969	-
Stage 1	559	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	162	513	-	-	969	-
Mov Cap-2 Maneuver	162	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	437	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30	0	1.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	162	513	969	-
HCM Lane V/C Ratio	-	-	0.435	0.106	0.111	-
HCM Control Delay (s)	-	-	43.3	12.9	9.2	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	2	0.4	0.4	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	0	7	1	0	0	0	526	0	1	451	10
Future Vol, veh/h	8	0	7	1	0	0	0	526	0	1	451	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	8	0	7	1	0	0	0	554	0	1	475	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1037	1037	481	1040	1042	554	486	0	0	554	0	0
Stage 1	483	483	-	554	554	-	-	-	-	-	-	-
Stage 2	554	554	-	486	488	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	211	233	589	210	232	536	1077	-	-	1021	-	-
Stage 1	569	556	-	520	517	-	-	-	-	-	-	-
Stage 2	520	517	-	566	553	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	211	233	589	207	232	536	1077	-	-	1021	-	-
Mov Cap-2 Maneuver	211	233	-	207	232	-	-	-	-	-	-	-
Stage 1	569	555	-	520	517	-	-	-	-	-	-	-
Stage 2	520	517	-	558	552	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.6	22.5	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1077	-	-	301	207	1021	-	-
HCM Lane V/C Ratio	-	-	-	0.052	0.005	0.001	-	-
HCM Control Delay (s)	0	-	-	17.6	22.5	8.5	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	0	464	1	0	559
Future Vol, veh/h	2	0	464	1	0	559
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	3	3
Mvmt Flow	2	0	504	1	0	608

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1113	505	0	0	505	0
Stage 1	505	-	-	-	-	-
Stage 2	608	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.13	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.227	-
Pot Cap-1 Maneuver	231	567	-	-	1055	-
Stage 1	606	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	231	567	-	-	1055	-
Mov Cap-2 Maneuver	231	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	543	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	231	1055	-
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	-	-	20.7	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	41	424	1	73	488
Future Vol, veh/h	2	41	424	1	73	488
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	6	6	2	2	3	3
Mvmt Flow	2	42	433	1	74	498

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1080	434	0	0	434	0
Stage 1	434	-	-	-	-	-
Stage 2	646	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.13	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.227	-
Pot Cap-1 Maneuver	237	614	-	-	1120	-
Stage 1	645	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	215	614	-	-	1120	-
Mov Cap-2 Maneuver	215	-	-	-	-	-
Stage 1	645	-	-	-	-	-
Stage 2	467	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	565	1120	-
HCM Lane V/C Ratio	-	-	0.078	0.067	-
HCM Control Delay (s)	-	-	11.9	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2	-

Intersection	
Intersection Delay, s/veh	69.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	62	23	429	124	40	27	341	87	3	466	11
Future Vol, veh/h	38	62	23	429	124	40	27	341	87	3	466	11
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	4	4	4
Mvmt Flow	38	63	23	433	125	40	27	344	88	3	471	11
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	15.3	69.9	68.1	85.1
HCM LOS	C	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	100%	0%	100%	0%	1%
Vol Thru, %	75%	0%	73%	0%	76%	97%
Vol Right, %	19%	0%	27%	0%	24%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	455	38	85	429	164	480
LT Vol	27	38	0	429	0	3
Through Vol	341	0	62	0	124	466
RT Vol	87	0	23	0	40	11
Lane Flow Rate	460	38	86	433	166	485
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.987	0.108	0.226	1.054	0.371	1.05
Departure Headway (Hd)	8.065	10.681	9.953	9.063	8.363	8.066
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	455	338	363	403	432	456
Service Time	6.065	8.381	7.653	6.763	6.063	6.066
HCM Lane V/C Ratio	1.011	0.112	0.237	1.074	0.384	1.064
HCM Control Delay	68.1	14.7	15.5	90.6	15.9	85.1
HCM Lane LOS	F	B	C	F	C	F
HCM 95th-tile Q	12.5	0.4	0.9	13.9	1.7	14.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	18	0	62	0	418	751	0	201	703
Future Volume (veh/h)	0	0	0	18	0	62	0	418	751	0	201	703
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	0	1841	0	1870	1870	0	1856	1856
Adj Flow Rate, veh/h				20	0	67	0	454	0	0	218	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	0	4	0	2	2	0	3	3
Cap, veh/h				234	0	208	0	2322		0	2303	
Arrive On Green				0.13	0.00	0.13	0.00	0.65	0.00	0.00	0.65	0.00
Sat Flow, veh/h				1753	0	1560	0	3647	1585	0	3618	1572
Grp Volume(v), veh/h				20	0	67	0	454	0	0	218	0
Grp Sat Flow(s),veh/h/ln				1753	0	1560	0	1777	1585	0	1763	1572
Q Serve(g_s), s				0.6	0.0	2.3	0.0	3.0	0.0	0.0	1.4	0.0
Cycle Q Clear(g_c), s				0.6	0.0	2.3	0.0	3.0	0.0	0.0	1.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				234	0	208	0	2322		0	2303	
V/C Ratio(X)				0.09	0.00	0.32	0.00	0.20		0.00	0.09	
Avail Cap(c_a), veh/h				602	0	536	0	2322		0	2303	
HCM Platoon Ratio				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	0.00	0.87	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				22.8	0.0	23.5	0.0	4.1	0.0	0.0	3.8	0.0
Incr Delay (d2), s/veh				0.4	0.0	2.1	0.0	0.2	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.3	0.0	0.9	0.0	0.6	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				23.2	0.0	25.6	0.0	4.3	0.0	0.0	3.9	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					87			454			218	
Approach Delay, s/veh					25.1			4.3			3.9	
Approach LOS					C			A			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	45.6		45.6		14.4			
Change Period (Y+Rc), s	6.4		6.4		6.4			
Max Green Setting (Gmax), s	26.6		26.6		20.6			
Max Q Clear Time (g_c+I1), s	5.0		3.4		4.3			
Green Ext Time (p_c), s	5.1		2.3		0.4			

Intersection Summary		
HCM 6th Ctrl Delay	6.6	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NBR, SBR] 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)	223	0	339	0	0	0	0	945	34	29	190	0
Future Volume (veh/h)	223	0	339	0	0	0	0	945	34	29	190	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	245	0	373				0	1038	37	32	209	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	655	0	529				0	1947	868	129	2352	0
Arrive On Green	0.19	0.00	0.19				0.00	0.55	0.55	0.04	0.66	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	245	0	373				0	1038	37	32	209	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	5.3	0.0	10.7				0.0	16.0	0.9	0.8	1.8	0.0
Cycle Q Clear(g_c), s	5.3	0.0	10.7				0.0	16.0	0.9	0.8	1.8	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	655	0	529				0	1947	868	129	2352	0
V/C Ratio(X)	0.37	0.00	0.71				0.00	0.53	0.04	0.25	0.09	0.00
Avail Cap(c_a), veh/h	810	0	654				0	1947	868	603	2352	0
HCM Platoon Ratio	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				0.00	0.90	0.90	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.5	0.0	32.7				0.0	12.4	9.0	40.2	5.2	0.0
Incr Delay (d2), s/veh	1.5	0.0	7.3				0.0	0.9	0.1	0.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	4.0				0.0	5.6	0.3	0.3	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	0.0	40.0				0.0	13.4	9.1	40.6	5.3	0.0
LnGrp LOS	C	A	D				A	B	A	D	A	A
Approach Vol, veh/h		618						1075			241	
Approach Delay, s/veh		36.8						13.2			10.0	
Approach LOS		D						B			A	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	9.8	53.6	22.6	63.4
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 15	31.0	* 20	52.6
Max Q Clear Time (g_c+I1), s	12.8	18.0	12.7	3.8
Green Ext Time (p_c), s	0.0	8.7	3.5	2.7

Intersection Summary	
HCM 6th Ctrl Delay	20.4
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)	66	144	47	91	124	113	108	800	120	133	380	22
Future Volume (veh/h)	66	144	47	91	124	113	108	800	120	133	380	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	73	158	52	100	136	124	119	879	132	146	418	24
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	1	1	1
Cap, veh/h	96	251	80	122	390	174	142	2245	1001	198	2206	984
Arrive On Green	0.05	0.09	0.09	0.07	0.11	0.11	0.08	0.63	0.63	0.06	0.62	0.62
Sat Flow, veh/h	1781	2652	844	1781	3554	1585	1781	3554	1585	3483	3582	1598
Grp Volume(v), veh/h	73	104	106	100	136	124	119	879	132	146	418	24
Grp Sat Flow(s),veh/h/ln	1781	1777	1719	1781	1777	1585	1781	1777	1585	1742	1791	1598
Q Serve(g_s), s	5.7	7.9	8.3	7.8	5.0	10.6	9.2	16.9	4.7	5.8	7.1	0.8
Cycle Q Clear(g_c), s	5.7	7.9	8.3	7.8	5.0	10.6	9.2	16.9	4.7	5.8	7.1	0.8
Prop In Lane	1.00		0.49	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	168	163	122	390	174	142	2245	1001	198	2206	984
V/C Ratio(X)	0.76	0.62	0.65	0.82	0.35	0.71	0.84	0.39	0.13	0.74	0.19	0.02
Avail Cap(c_a), veh/h	267	520	503	267	1041	464	267	2245	1001	522	2206	984
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	0.95	0.95	0.95
Uniform Delay (d), s/veh	65.3	60.9	61.1	64.3	57.7	60.2	63.5	12.6	10.4	65.0	11.7	10.5
Incr Delay (d2), s/veh	4.6	10.3	12.0	4.9	1.5	13.9	4.8	0.5	0.3	1.9	0.2	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	2.7	4.0	4.1	3.6	2.3	4.8	4.3	6.6	1.6	2.6	2.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	71.2	73.2	69.3	59.2	74.1	68.3	13.1	10.6	66.9	11.9	10.5
LnGrp LOS	E	E	E	E	E	E	E	B	B	E	B	B
Approach Vol, veh/h		283			360			1130			588	
Approach Delay, s/veh		71.6			67.1			18.7			25.5	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	91.1	12.4	20.7	13.6	93.3	14.5	18.6
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	11.3	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	11.2	9.1	7.7	12.6	7.8	18.9	9.8	10.3
Green Ext Time (p_c), s	0.1	7.3	0.1	2.8	0.2	12.1	0.1	2.6

Intersection Summary	
HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	0	34	2	29	0	242	12	14	689	0
Future Vol, veh/h	0	1	0	34	2	29	0	242	12	14	689	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3
Mvmt Flow	0	1	0	37	2	32	0	263	13	15	749	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1066	1055	749	1050	1049	270	749	0	0	276	0	0
Stage 1	779	779	-	270	270	-	-	-	-	-	-	-
Stage 2	287	276	-	780	779	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.13	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	200	226	412	205	227	769	860	-	-	1281	-	-
Stage 1	389	406	-	736	686	-	-	-	-	-	-	-
Stage 2	720	682	-	388	406	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	187	221	412	201	222	769	860	-	-	1281	-	-
Mov Cap-2 Maneuver	187	221	-	201	222	-	-	-	-	-	-	-
Stage 1	389	398	-	736	686	-	-	-	-	-	-	-
Stage 2	688	682	-	379	398	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.4	20.6	0	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	860	-	-	221	301	1281	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.235	0.012	-	-
HCM Control Delay (s)	0	-	-	21.4	20.6	7.8	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.9	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	6	14	48	7	10	3	240	7	0	720	4
Future Vol, veh/h	4	6	14	48	7	10	3	240	7	0	720	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	2	2	2	3	3	3
Mvmt Flow	4	6	15	52	8	11	3	258	8	0	774	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1054	1048	776	1055	1046	262	778	0	0	266	0	0
Stage 1	776	776	-	268	268	-	-	-	-	-	-	-
Stage 2	278	272	-	787	778	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	205	229	399	204	228	777	839	-	-	1292	-	-
Stage 1	392	409	-	738	687	-	-	-	-	-	-	-
Stage 2	731	686	-	385	407	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	197	228	399	192	227	777	839	-	-	1292	-	-
Mov Cap-2 Maneuver	197	228	-	192	227	-	-	-	-	-	-	-
Stage 1	390	409	-	735	684	-	-	-	-	-	-	-
Stage 2	710	683	-	365	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.9	28.6	0.1	0
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	839	-	-	214	399	221	1292	-	-
HCM Lane V/C Ratio	0.004	-	-	0.05	0.038	0.316	-	-	-
HCM Control Delay (s)	9.3	-	-	22.7	14.4	28.6	0	-	-
HCM Lane LOS	A	-	-	C	B	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	1.3	0	-	-

SimTraffic Performance Report

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.0	0.2	0.2	0.0	0.4
Denied Del/Veh (s)	0.5	1.2	2.1	0.0	0.8
Total Delay (hr)	0.8	2.9	1.5	3.7	8.8
Total Del/Veh (s)	13.1	20.5	13.6	18.0	17.1
Stop Delay (hr)	0.5	2.0	1.0	2.6	6.2
Stop Del/Veh (s)	8.9	14.2	9.0	12.9	12.0

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	2	9	72	1	90	3	347	67	72	559	2
Future Vol, veh/h	5	2	9	72	1	90	3	347	67	72	559	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	140	-	140	155	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	1	1	1
Mvmt Flow	6	2	10	82	1	102	3	394	76	82	635	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1290	1276	636	1244	1239	432	637	0	0	470	0	0
Stage 1	800	800	-	438	438	-	-	-	-	-	-	-
Stage 2	490	476	-	806	801	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	140	167	478	152	176	626	947	-	-	1097	-	-
Stage 1	379	397	-	599	580	-	-	-	-	-	-	-
Stage 2	560	557	-	377	398	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	110	154	478	138	162	626	947	-	-	1097	-	-
Mov Cap-2 Maneuver	110	154	-	138	162	-	-	-	-	-	-	-
Stage 1	378	367	-	597	578	-	-	-	-	-	-	-
Stage 2	466	555	-	339	368	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.2	34.7	0.1	1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	947	-	-	110	346	138	162	626	1097	-	-
HCM Lane V/C Ratio	0.004	-	-	0.052	0.036	0.593	0.007	0.163	0.075	-	-
HCM Control Delay (s)	8.8	-	-	39.5	15.8	63.4	27.4	11.9	8.5	-	-
HCM Lane LOS	A	-	-	E	C	F	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	3	0	0.6	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	0	1	1	0	0	2	393	0	0	499	63
Future Vol, veh/h	12	0	1	1	0	0	2	393	0	0	499	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	13	0	1	1	0	0	2	414	0	0	525	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	976	976	558	977	1009	414	591	0	0	414	0	0
Stage 1	558	558	-	418	418	-	-	-	-	-	-	-
Stage 2	418	418	-	559	591	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	232	253	533	232	242	643	985	-	-	1150	-	-
Stage 1	518	515	-	616	594	-	-	-	-	-	-	-
Stage 2	616	594	-	517	498	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	232	252	533	231	241	643	985	-	-	1150	-	-
Mov Cap-2 Maneuver	232	252	-	231	241	-	-	-	-	-	-	-
Stage 1	516	515	-	614	592	-	-	-	-	-	-	-
Stage 2	614	592	-	516	498	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.7	20.7	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	985	-	-	243	231	1150	-	-
HCM Lane V/C Ratio	0.002	-	-	0.056	0.005	-	-	-
HCM Control Delay (s)	8.7	0	-	20.7	20.7	0	-	-
HCM Lane LOS	A	A	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	54	256	15	19	661
Future Vol, veh/h	43	54	256	15	19	661
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	0	0	3
Mvmt Flow	47	59	278	16	21	718

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1046	286	0	0	294	0
Stage 1	286	-	-	-	-	-
Stage 2	760	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	255	758	-	-	1279	-
Stage 1	767	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	248	758	-	-	1279	-
Mov Cap-2 Maneuver	248	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	452	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.3	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	397	1279	-
HCM Lane V/C Ratio	-	-	0.266	0.016	-
HCM Control Delay (s)	-	-	17.3	7.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0	-

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	5	2	4	10	63
Future Vol, veh/h	22	5	2	4	10	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	2	0	0	0
Mvmt Flow	24	5	2	4	11	68

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	6	0	-	0	57	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1628	-	-	-	955	1085
Stage 1	-	-	-	-	1024	-
Stage 2	-	-	-	-	975	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1628	-	-	-	941	1085
Mov Cap-2 Maneuver	-	-	-	-	941	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	975	-

Approach	EB	WB	SB
HCM Control Delay, s	5.9	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1628	-	-	-	1063
HCM Lane V/C Ratio	0.015	-	-	-	0.075
HCM Control Delay (s)	7.2	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	644	2	0	509
Future Vol, veh/h	1	0	644	2	0	509
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	3	3
Mvmt Flow	1	0	700	2	0	553

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1254	701	0	0	702	0
Stage 1	701	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.13	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.227	-
Pot Cap-1 Maneuver	190	439	-	-	891	-
Stage 1	492	-	-	-	-	-
Stage 2	576	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	190	439	-	-	891	-
Mov Cap-2 Maneuver	190	-	-	-	-	-
Stage 1	492	-	-	-	-	-
Stage 2	576	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	190	891	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	-	-	24.1	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	45	601	1	61	449
Future Vol, veh/h	3	45	601	1	61	449
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	6	6	2	2	3	3
Mvmt Flow	3	46	613	1	62	458

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1196	614	0	0	614	0
Stage 1	614	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.13	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.227	-
Pot Cap-1 Maneuver	202	485	-	-	961	-
Stage 1	532	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	184	485	-	-	961	-
Mov Cap-2 Maneuver	184	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	503	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	440	961	-
HCM Lane V/C Ratio	-	-	0.111	0.065	-
HCM Control Delay (s)	-	-	14.2	9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.2	-

Intersection	
Intersection Delay, s/veh	67.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	99	43	241	77	59	6	369	156	11	410	15
Future Vol, veh/h	139	99	43	241	77	59	6	369	156	11	410	15
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	4	4	4
Mvmt Flow	140	100	43	243	78	60	6	373	158	11	414	15
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	18.1	23.6	124.1	66.7
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	1%	100%	0%	100%	0%	3%
Vol Thru, %	69%	0%	70%	0%	57%	94%
Vol Right, %	29%	0%	30%	0%	43%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	531	139	142	241	136	436
LT Vol	6	139	0	241	0	11
Through Vol	369	0	99	0	77	410
RT Vol	156	0	43	0	59	15
Lane Flow Rate	536	140	143	243	137	440
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1.17	0.373	0.356	0.626	0.325	0.974
Departure Headway (Hd)	7.853	10.25	9.5	9.899	9.055	8.444
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	467	354	382	368	400	432
Service Time	5.895	7.95	7.2	7.599	6.755	6.444
HCM Lane V/C Ratio	1.148	0.395	0.374	0.66	0.343	1.019
HCM Control Delay	124.1	18.9	17.4	27.8	16.1	66.7
HCM Lane LOS	F	C	C	D	C	F
HCM 95th-tile Q	19.8	1.7	1.6	4.1	1.4	11.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	33	0	36	0	538	356	0	340	320
Future Volume (veh/h)	0	0	0	33	0	36	0	538	356	0	340	320
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	0	1841	0	1870	1870	0	1856	1856
Adj Flow Rate, veh/h				36	0	39	0	585	0	0	370	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	0	4	0	2	2	0	3	3
Cap, veh/h				234	0	208	0	2322		0	2303	
Arrive On Green				0.13	0.00	0.13	0.00	0.65	0.00	0.00	0.65	0.00
Sat Flow, veh/h				1753	0	1560	0	3647	1585	0	3618	1572
Grp Volume(v), veh/h				36	0	39	0	585	0	0	370	0
Grp Sat Flow(s),veh/h/ln				1753	0	1560	0	1777	1585	0	1763	1572
Q Serve(g_s), s				1.1	0.0	1.3	0.0	4.1	0.0	0.0	2.4	0.0
Cycle Q Clear(g_c), s				1.1	0.0	1.3	0.0	4.1	0.0	0.0	2.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				234	0	208	0	2322		0	2303	
V/C Ratio(X)				0.15	0.00	0.19	0.00	0.25		0.00	0.16	
Avail Cap(c_a), veh/h				602	0	536	0	2322		0	2303	
HCM Platoon Ratio				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	0.00	0.92	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				23.0	0.0	23.1	0.0	4.3	0.0	0.0	4.0	0.0
Incr Delay (d2), s/veh				0.7	0.0	1.0	0.0	0.2	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.5	0.0	0.5	0.0	0.8	0.0	0.0	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				23.7	0.0	24.1	0.0	4.6	0.0	0.0	4.2	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					75			585			370	
Approach Delay, s/veh					23.9			4.6			4.2	
Approach LOS					C			A			A	

Timer - Assigned Phs	2		6		8	
Phs Duration (G+Y+Rc), s	45.6		45.6		14.4	
Change Period (Y+Rc), s	6.4		6.4		6.4	
Max Green Setting (Gmax), s	26.6		26.6		20.6	
Max Q Clear Time (g_c+I1), s	6.1		4.4		3.3	
Green Ext Time (p_c), s	6.6		4.1		0.4	

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

Notes

Unsignalized Delay for [NBR, SBR] 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)	360	0	727	0	0	0	0	534	22	75	298	0
Future Volume (veh/h)	360	0	727	0	0	0	0	534	22	75	298	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	396	0	799				0	587	24	82	327	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	790	0	638				0	1729	771	207	2215	0
Arrive On Green	0.23	0.00	0.23				0.00	0.49	0.49	0.06	0.62	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	396	0	799				0	587	24	82	327	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	8.5	0.0	19.5				0.0	8.7	0.7	2.0	3.3	0.0
Cycle Q Clear(g_c), s	8.5	0.0	19.5				0.0	8.7	0.7	2.0	3.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	790	0	638				0	1729	771	207	2215	0
V/C Ratio(X)	0.50	0.00	1.25				0.00	0.34	0.03	0.40	0.15	0.00
Avail Cap(c_a), veh/h	790	0	638				0	1729	771	603	2215	0
HCM Platoon Ratio	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				0.00	0.97	0.97	0.99	0.99	0.00
Uniform Delay (d), s/veh	29.0	0.0	33.3				0.0	13.6	11.5	38.9	6.7	0.0
Incr Delay (d2), s/veh	2.1	0.0	126.5				0.0	0.5	0.1	0.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	17.5				0.0	3.2	0.2	0.8	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	0.0	159.8				0.0	14.1	11.6	39.4	6.9	0.0
LnGrp LOS	C	A	F				A	B	B	D	A	A
Approach Vol, veh/h		1195						611			409	
Approach Delay, s/veh		117.1						14.0			13.4	
Approach LOS		F						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	11.8	48.3		25.9		60.1
Change Period (Y+Rc), s	* 6.6	6.5		* 6.4		6.5
Max Green Setting (Gmax), s	* 15	31.5		* 20		53.1
Max Q Clear Time (g_c+I1), s	14.0	10.7		21.5		5.3
Green Ext Time (p_c), s	0.1	6.9		0.0		4.4

Intersection Summary	
HCM 6th Ctrl Delay	69.5
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)	56	128	71	77	100	75	67	425	86	171	736	49
Future Volume (veh/h)	56	128	71	77	100	75	67	425	86	171	736	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	62	141	78	85	110	82	74	467	95	188	809	54
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	1	1	1
Cap, veh/h	93	219	115	106	373	166	96	2225	993	240	2323	1036
Arrive On Green	0.05	0.10	0.10	0.06	0.10	0.10	0.05	0.63	0.63	0.07	0.65	0.65
Sat Flow, veh/h	1781	2255	1180	1781	3554	1585	1781	3554	1585	3483	3582	1598
Grp Volume(v), veh/h	62	109	110	85	110	82	74	467	95	188	809	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1658	1781	1777	1585	1781	1777	1585	1742	1791	1598
Q Serve(g_s), s	4.8	8.3	8.9	6.6	4.0	6.8	5.7	7.9	3.3	7.4	14.4	1.7
Cycle Q Clear(g_c), s	4.8	8.3	8.9	6.6	4.0	6.8	5.7	7.9	3.3	7.4	14.4	1.7
Prop In Lane	1.00		0.71	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	93	173	161	106	373	166	96	2225	993	240	2323	1036
V/C Ratio(X)	0.67	0.63	0.68	0.80	0.30	0.49	0.77	0.21	0.10	0.78	0.35	0.05
Avail Cap(c_a), veh/h	267	520	486	267	1041	464	267	2225	993	522	2323	1036
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	0.86	0.86	0.86
Uniform Delay (d), s/veh	65.2	60.8	61.1	65.0	57.9	59.1	65.4	11.3	10.4	64.1	11.2	9.0
Incr Delay (d2), s/veh	3.1	10.6	13.6	5.2	1.2	6.1	4.8	0.2	0.2	1.8	0.4	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	2.2	4.2	4.3	3.1	1.8	3.0	2.7	3.1	1.2	3.3	5.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	71.4	74.6	70.2	59.1	65.3	70.2	11.5	10.6	66.0	11.5	9.0
LnGrp LOS	E	E	E	E	E	E	E	B	B	E	B	A
Approach Vol, veh/h		281			277			636			1051	
Approach Delay, s/veh		72.0			64.3			18.2			21.1	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	95.7	12.2	20.0	15.3	92.6	13.2	18.9
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	21.0	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	7.7	16.4	6.8	8.8	9.4	9.9	8.6	10.9
Green Ext Time (p_c), s	0.1	12.3	0.0	2.1	0.2	9.0	0.1	2.7

Intersection Summary	
HCM 6th Ctrl Delay	32.0
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	2	0	23	1	24	0	479	38	34	256	0
Future Vol, veh/h	0	2	0	23	1	24	0	479	38	34	256	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3
Mvmt Flow	0	2	0	25	1	26	0	521	41	37	278	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	907	914	278	895	894	542	278	0	0	562	0	0
Stage 1	352	352	-	542	542	-	-	-	-	-	-	-
Stage 2	555	562	-	353	352	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.13	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	257	273	761	261	280	540	1285	-	-	1004	-	-
Stage 1	665	632	-	525	520	-	-	-	-	-	-	-
Stage 2	516	510	-	664	632	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	236	261	761	251	268	540	1285	-	-	1004	-	-
Mov Cap-2 Maneuver	236	261	-	251	268	-	-	-	-	-	-	-
Stage 1	665	604	-	525	520	-	-	-	-	-	-	-
Stage 2	490	510	-	632	604	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.9	17.4	0	1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1285	-	-	261	343	1004	-	-
HCM Lane V/C Ratio	-	-	-	0.008	0.152	0.037	-	-
HCM Control Delay (s)	0	-	-	18.9	17.4	8.7	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.5	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	3	1	3	2	5	1	508	9	3	274	2
Future Vol, veh/h	5	3	1	3	2	5	1	508	9	3	274	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	2	2	2	3	3	3
Mvmt Flow	5	3	1	3	2	5	1	546	10	3	295	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	859	860	296	857	856	551	297	0	0	556	0	0
Stage 1	302	302	-	553	553	-	-	-	-	-	-	-
Stage 2	557	558	-	304	303	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	278	295	746	277	295	534	1264	-	-	1010	-	-
Stage 1	709	666	-	517	514	-	-	-	-	-	-	-
Stage 2	517	513	-	705	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	273	294	746	273	294	534	1264	-	-	1010	-	-
Mov Cap-2 Maneuver	273	294	-	273	294	-	-	-	-	-	-	-
Stage 1	708	664	-	516	513	-	-	-	-	-	-	-
Stage 2	509	512	-	698	662	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.3	15.1	0	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1264	-	-	281	746	368	1010	-	-
HCM Lane V/C Ratio	0.001	-	-	0.031	0.001	0.029	0.003	-	-
HCM Control Delay (s)	7.9	-	-	18.2	9.8	15.1	8.6	-	-
HCM Lane LOS	A	-	-	C	A	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.1	0	-	-

SimTraffic Performance Report

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.1	0.1	0.2	0.0	0.4
Denied Del/Veh (s)	0.7	1.3	1.4	0.0	0.9
Total Delay (hr)	1.2	1.3	2.6	0.7	5.8
Total Del/Veh (s)	12.2	13.6	20.3	9.4	14.6
Stop Delay (hr)	0.8	0.7	1.8	0.5	3.7
Stop Del/Veh (s)	7.6	7.9	14.1	5.8	9.4

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1	6	62	2	48	10	486	56	95	429	6
Future Vol, veh/h	3	1	6	62	2	48	10	486	56	95	429	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	140	-	140	155	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	1	1	1
Mvmt Flow	3	1	7	70	2	55	11	552	64	108	488	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1343	1346	492	1318	1317	584	495	0	0	616	0	0
Stage 1	708	708	-	606	606	-	-	-	-	-	-	-
Stage 2	635	638	-	712	711	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	129	151	577	135	158	513	1069	-	-	969	-	-
Stage 1	426	438	-	486	488	-	-	-	-	-	-	-
Stage 2	467	471	-	425	438	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	103	133	577	120	139	513	1069	-	-	969	-	-
Mov Cap-2 Maneuver	103	133	-	120	139	-	-	-	-	-	-	-
Stage 1	422	389	-	481	483	-	-	-	-	-	-	-
Stage 2	411	466	-	372	389	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.4	45.3	0.2	1.6
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1069	-	-	103	391	120	139	513	969	-	-
HCM Lane V/C Ratio	0.011	-	-	0.033	0.02	0.587	0.016	0.106	0.111	-	-
HCM Control Delay (s)	8.4	-	-	41.1	14.4	70.8	31.3	12.9	9.2	-	-
HCM Lane LOS	A	-	-	E	B	F	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	2.9	0.1	0.4	0.4	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	0	7	1	0	0	0	536	0	1	457	10
Future Vol, veh/h	8	0	7	1	0	0	0	536	0	1	457	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	8	0	7	1	0	0	0	564	0	1	481	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1053	1053	487	1056	1058	564	492	0	0	564	0	0
Stage 1	489	489	-	564	564	-	-	-	-	-	-	-
Stage 2	564	564	-	492	494	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	206	228	585	205	227	529	1071	-	-	1013	-	-
Stage 1	564	553	-	514	512	-	-	-	-	-	-	-
Stage 2	514	512	-	562	550	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	206	228	585	202	227	529	1071	-	-	1013	-	-
Mov Cap-2 Maneuver	206	228	-	202	227	-	-	-	-	-	-	-
Stage 1	564	552	-	514	512	-	-	-	-	-	-	-
Stage 2	514	512	-	554	549	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.9	22.9	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1071	-	-	295	202	1013	-	-
HCM Lane V/C Ratio	-	-	-	0.054	0.005	0.001	-	-
HCM Control Delay (s)	0	-	-	17.9	22.9	8.6	0	-
HCM Lane LOS	A	-	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	36	455	48	61	262
Future Vol, veh/h	29	36	455	48	61	262
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	0	0	3
Mvmt Flow	32	39	495	52	66	285

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	938	521	0	0	547	0
Stage 1	521	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	296	559	-	-	1033	-
Stage 1	600	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	274	559	-	-	1033	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	618	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.6	0	1.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	382	1033	-
HCM Lane V/C Ratio	-	-	0.185	0.064	-
HCM Control Delay (s)	-	-	16.6	8.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0.2	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	71	3	6	12	7	42
Future Vol, veh/h	71	3	6	12	7	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	2	0	0	0
Mvmt Flow	77	3	7	13	8	46

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	20	0	-	0	171	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1609	-	-	-	824	1072
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	876	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1609	-	-	-	784	1072
Mov Cap-2 Maneuver	-	-	-	-	784	-
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	876	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1609	-	-	-	1019
HCM Lane V/C Ratio	0.048	-	-	-	0.052
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection	
Int Delay, s/veh	5.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	98	603	40	99	814
Future Vol, veh/h	32	98	603	40	99	814
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	4	1	1
Mvmt Flow	35	107	655	43	108	885

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1778	677	0	0	698	0
Stage 1	677	-	-	-	-	-
Stage 2	1101	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	91	453	-	-	903	-
Stage 1	505	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	70	453	-	-	903	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	243	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	62.3	0	1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	193	903	-
HCM Lane V/C Ratio	-	-	0.732	0.119	-
HCM Control Delay (s)	-	-	62.3	9.5	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	4.7	0.4	-

Intersection	
Int Delay, s/veh	14.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	71	572	103	131	715
Future Vol, veh/h	70	71	572	103	131	715
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	5	4	4	1	1
Mvmt Flow	72	73	590	106	135	737

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1650	643	0	0	696	0
Stage 1	643	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.11	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.209	-
Pot Cap-1 Maneuver	107	468	-	-	905	-
Stage 1	518	-	-	-	-	-
Stage 2	349	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	80	468	-	-	905	-
Mov Cap-2 Maneuver	80	-	-	-	-	-
Stage 1	518	-	-	-	-	-
Stage 2	261	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	157.9	0	1.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	137	905	-
HCM Lane V/C Ratio	-	-	1.061	0.149	-
HCM Control Delay (s)	-	-	157.9	9.7	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	7.9	0.5	-

Intersection	
Intersection Delay, s/veh	314.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	68	23	497	144	57	27	574	155	36	728	11
Future Vol, veh/h	38	68	23	497	144	57	27	574	155	36	728	11
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
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	2	2	2
Mvmt Flow	42	75	25	546	158	63	30	631	170	40	800	12
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	20.9	152.3	398.5	428.7
HCM LOS	C	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	4%	100%	0%	100%	0%	5%
Vol Thru, %	76%	0%	75%	0%	72%	94%
Vol Right, %	21%	0%	25%	0%	28%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	756	38	91	497	201	775
LT Vol	27	38	0	497	0	36
Through Vol	574	0	68	0	144	728
RT Vol	155	0	23	0	57	11
Lane Flow Rate	831	42	100	546	221	852
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1.809	0.118	0.265	1.343	0.5	1.878
Departure Headway (Hd)	10.112	14.643	13.913	11.343	10.597	10.085
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	366	246	260	328	342	366
Service Time	8.112	12.343	11.613	9.043	8.297	8.085
HCM Lane V/C Ratio	2.27	0.171	0.385	1.665	0.646	2.328
HCM Control Delay	398.5	19.3	21.6	204.4	23.4	428.7
HCM Lane LOS	F	C	C	F	C	F
HCM 95th-tile Q	41.8	0.4	1	21.2	2.7	44.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	109	0	115	0	665	856	0	379	824
Future Volume (veh/h)	0	0	0	109	0	115	0	665	856	0	379	824
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1885	0	1870	0	1870	1870	0	1885	1885
Adj Flow Rate, veh/h				120	0	126	0	731	0	0	416	0
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				1	0	2	0	2	2	0	1	1
Cap, veh/h				235	0	208	0	2330		0	2348	
Arrive On Green				0.13	0.00	0.13	0.00	0.66	0.00	0.00	0.66	0.00
Sat Flow, veh/h				1795	0	1585	0	3647	1585	0	3676	1598
Grp Volume(v), veh/h				120	0	126	0	731	0	0	416	0
Grp Sat Flow(s),veh/h/ln				1795	0	1585	0	1777	1585	0	1791	1598
Q Serve(g_s), s				3.7	0.0	4.5	0.0	5.4	0.0	0.0	2.7	0.0
Cycle Q Clear(g_c), s				3.7	0.0	4.5	0.0	5.4	0.0	0.0	2.7	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				235	0	208	0	2330		0	2348	
V/C Ratio(X)				0.51	0.00	0.61	0.00	0.31		0.00	0.18	
Avail Cap(c_a), veh/h				616	0	544	0	2330		0	2348	
HCM Platoon Ratio				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	0.00	0.71	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				24.3	0.0	24.6	0.0	4.5	0.0	0.0	4.0	0.0
Incr Delay (d2), s/veh				4.0	0.0	6.6	0.0	0.3	0.0	0.0	0.2	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
%ile BackOfQ(50%),veh/ln				1.7	0.0	1.9	0.0	1.1	0.0	0.0	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				28.3	0.0	31.2	0.0	4.7	0.0	0.0	4.2	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					246			731			416	
Approach Delay, s/veh					29.7			4.7			4.2	
Approach LOS					C			A			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	45.7		45.7		14.3			
Change Period (Y+Rc), s	6.4		6.4		6.4			
Max Green Setting (Gmax), s	26.6		26.6		20.6			
Max Q Clear Time (g_c+I1), s	7.4		4.7		6.5			
Green Ext Time (p_c), s	8.1		4.7		1.4			

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

Notes

Unsignalized Delay for [NBR, SBR] 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)	315	0	438	0	0	0	0	1171	133	105	411	0
Future Volume (veh/h)	315	0	438	0	0	0	0	1171	133	105	411	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1841	0	1841				0	1856	1856	1870	1870	0
Adj Flow Rate, veh/h	339	0	471				0	1259	143	113	442	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	0	4				0	3	3	2	2	0
Cap, veh/h	735	0	593				0	1735	774	225	2253	0
Arrive On Green	0.22	0.00	0.22				0.00	0.49	0.49	0.07	0.63	0.00
Sat Flow, veh/h	3401	0	2745				0	3618	1572	3456	3647	0
Grp Volume(v), veh/h	339	0	471				0	1259	143	113	442	0
Grp Sat Flow(s),veh/h/ln	1700	0	1373				0	1763	1572	1728	1777	0
Q Serve(g_s), s	7.5	0.0	14.0				0.0	24.3	4.4	2.7	4.5	0.0
Cycle Q Clear(g_c), s	7.5	0.0	14.0				0.0	24.3	4.4	2.7	4.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	735	0	593				0	1735	774	225	2253	0
V/C Ratio(X)	0.46	0.00	0.79				0.00	0.73	0.18	0.50	0.20	0.00
Avail Cap(c_a), veh/h	791	0	638				0	1735	774	603	2253	0
HCM Platoon Ratio	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				0.00	0.68	0.68	0.99	0.99	0.00
Uniform Delay (d), s/veh	29.4	0.0	31.9				0.0	17.3	12.2	38.9	6.6	0.0
Incr Delay (d2), s/veh	1.9	0.0	10.2				0.0	1.8	0.4	0.6	0.2	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
%ile BackOfQ(50%),veh/ln	3.1	0.0	5.3				0.0	8.8	1.4	1.1	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.3	0.0	42.1				0.0	19.1	12.6	39.5	6.8	0.0
LnGrp LOS	C	A	D				A	B	B	D	A	A
Approach Vol, veh/h		810						1402			555	
Approach Delay, s/veh		37.6						18.4			13.4	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	12.2	48.8	25.0	61.0
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 15	31.0	* 20	52.6
Max Q Clear Time (g_c+I1), s	14.7	26.3	16.0	6.5
Green Ext Time (p_c), s	0.1	4.1	2.6	6.2

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)	114	236	49	137	177	252	123	933	179	326	466	52
Future Volume (veh/h)	114	236	49	137	177	252	123	933	179	326	466	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1885	1885	1885	1856	1856	1856
Adj Flow Rate, veh/h	133	274	57	159	206	293	143	1085	208	379	542	60
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, %	6	6	6	6	6	6	1	1	1	3	3	3
Cap, veh/h	156	598	123	182	776	346	167	1473	657	429	1587	708
Arrive On Green	0.09	0.21	0.21	0.11	0.23	0.23	0.09	0.41	0.41	0.13	0.45	0.45
Sat Flow, veh/h	1725	2844	583	1725	3441	1535	1795	3582	1598	3428	3526	1572
Grp Volume(v), veh/h	133	164	167	159	206	293	143	1085	208	379	542	60
Grp Sat Flow(s),veh/h/ln	1725	1721	1706	1725	1721	1535	1795	1791	1598	1714	1763	1572
Q Serve(g_s), s	10.6	11.7	12.0	12.7	6.9	25.6	11.0	35.8	12.3	15.2	14.0	3.1
Cycle Q Clear(g_c), s	10.6	11.7	12.0	12.7	6.9	25.6	11.0	35.8	12.3	15.2	14.0	3.1
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	362	359	182	776	346	167	1473	657	429	1587	708
V/C Ratio(X)	0.85	0.45	0.47	0.87	0.27	0.85	0.86	0.74	0.32	0.88	0.34	0.08
Avail Cap(c_a), veh/h	259	504	500	259	1008	449	269	1473	657	514	1587	708
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	0.94	0.94	0.94
Uniform Delay (d), s/veh	62.8	48.3	48.4	61.7	44.7	51.9	62.6	34.8	27.9	60.2	25.0	22.0
Incr Delay (d2), s/veh	6.5	2.6	2.7	15.5	0.5	16.6	7.8	3.3	1.3	12.5	0.6	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	4.9	5.2	5.3	6.3	3.0	11.2	5.3	15.9	4.9	7.2	5.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.2	50.8	51.1	77.2	45.2	68.5	70.3	38.2	29.2	72.7	25.6	22.2
LnGrp LOS	E	D	D	E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		464			658			1436			981	
Approach Delay, s/veh		56.2			63.3			40.1			43.6	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	67.9	17.6	36.9	23.1	62.5	19.7	34.7
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	13.0	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	13.0	16.0	12.6	27.6	17.2	37.8	14.7	14.0
Green Ext Time (p_c), s	0.1	8.7	0.1	4.0	0.3	0.0	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay	47.5
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	17.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	130	9	49	102	62	28	316	31	53	768	0
Future Vol, veh/h	0	130	9	49	102	62	28	316	31	53	768	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3	1	1	1
Mvmt Flow	0	141	10	53	111	67	30	343	34	58	835	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1460	1388	835	1447	1371	360	835	0	0	377	0	0
Stage 1	951	951	-	420	420	-	-	-	-	-	-	-
Stage 2	509	437	-	1027	951	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.11	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.209	-	-
Pot Cap-1 Maneuver	107	143	368	109	146	684	794	-	-	1187	-	-
Stage 1	312	338	-	611	589	-	-	-	-	-	-	-
Stage 2	547	579	-	283	338	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	22	~ 124	368	-	126	684	794	-	-	1187	-	-
Mov Cap-2 Maneuver	22	~ 124	-	-	126	-	-	-	-	-	-	-
Stage 1	297	307	-	582	561	-	-	-	-	-	-	-
Stage 2	377	551	-	135	307	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	194.9		0.7	0.5
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	794	-	-	130	-	1187	-	-
HCM Lane V/C Ratio	0.038	-	-	1.162	-	0.049	-	-
HCM Control Delay (s)	9.7	0	-	194.9	-	8.2	0	-
HCM Lane LOS	A	A	-	F	-	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	9	-	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	8	20	63	8	18	5	280	21	3	814	43
Future Vol, veh/h	26	8	20	63	8	18	5	280	21	3	814	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	1	1	1
Mvmt Flow	29	9	22	69	9	20	5	308	23	3	895	47

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1269	1266	919	1270	1278	320	942	0	0	331	0	0
Stage 1	925	925	-	330	330	-	-	-	-	-	-	-
Stage 2	344	341	-	940	948	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	145	169	329	146	167	723	728	-	-	1234	-	-
Stage 1	323	348	-	685	648	-	-	-	-	-	-	-
Stage 2	671	639	-	318	341	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	134	167	329	130	165	723	728	-	-	1234	-	-
Mov Cap-2 Maneuver	134	167	-	130	165	-	-	-	-	-	-	-
Stage 1	321	347	-	680	643	-	-	-	-	-	-	-
Stage 2	639	635	-	289	340	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31.1	58.4	0.2	0
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	728	-	-	141	329	159	1234	-	-
HCM Lane V/C Ratio	0.008	-	-	0.265	0.067	0.615	0.003	-	-
HCM Control Delay (s)	10	-	-	39.5	16.7	58.4	7.9	-	-
HCM Lane LOS	A	-	-	E	C	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1	0.2	3.3	0	-	-

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.0	0.2	0.3	0.0	0.4
Denied Del/Veh (s)	0.2	1.0	2.0	0.1	0.7
Total Delay (hr)	0.7	9.8	6.4	22.0	38.9
Total Del/Veh (s)	11.7	66.0	48.5	85.1	64.9
Stop Delay (hr)	0.5	8.8	5.5	19.7	34.5
Stop Del/Veh (s)	8.0	59.3	41.8	76.1	57.5

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	185	22	207	140	104	7	361	342	104	576	6
Future Vol, veh/h	14	185	22	207	140	104	7	361	342	104	576	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	140	-	140	155	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	3	3	3	6	6	6	1	1	1
Mvmt Flow	16	215	26	241	163	121	8	420	398	121	670	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1693	1750	674	1671	1554	619	677	0	0	818	0	0
Stage 1	916	916	-	635	635	-	-	-	-	-	-	-
Stage 2	777	834	-	1036	919	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.53	6.23	4.16	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.027	3.327	2.254	-	-	2.209	-	-
Pot Cap-1 Maneuver	74	~ 86	455	~ 76	~ 113	487	896	-	-	815	-	-
Stage 1	326	351	-	465	471	-	-	-	-	-	-	-
Stage 2	390	383	-	278	349	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 73	455	-	~ 95	487	896	-	-	815	-	-
Mov Cap-2 Maneuver	-	~ 73	-	-	~ 95	-	-	-	-	-	-	-
Stage 1	323	299	-	461	467	-	-	-	-	-	-	-
Stage 2	189	380	-	~ 63	297	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.1	1.5
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	896	-	-	-	80	-	95	487	815	-	-
HCM Lane V/C Ratio	0.009	-	-	-	3.009	-	1.714	0.248	0.148	-	-
HCM Control Delay (s)	9.1	-	-	-	$ 1016.9	-	$ 438	14.8	10.2	-	-
HCM Lane LOS	A	-	-	-	F	-	F	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	-	23.9	-	13.1	1	0.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	0	6	1	0	0	4	678	0	0	646	67
Future Vol, veh/h	21	0	6	1	0	0	4	678	0	0	646	67
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	5	5	5	0	0	0	4	4	4	1	1	1
Mvmt Flow	24	0	7	1	0	0	5	779	0	0	743	77

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1571	1571	782	1574	1609	779	820	0	0	779	0	0
Stage 1	782	782	-	789	789	-	-	-	-	-	-	-
Stage 2	789	789	-	785	820	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.1	6.5	6.2	4.14	-	-	4.11	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.5	4	3.3	2.236	-	-	2.209	-	-
Pot Cap-1 Maneuver	88	109	390	90	106	399	800	-	-	842	-	-
Stage 1	383	401	-	387	405	-	-	-	-	-	-	-
Stage 2	379	398	-	389	392	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	87	108	390	88	105	399	800	-	-	842	-	-
Mov Cap-2 Maneuver	87	108	-	88	105	-	-	-	-	-	-	-
Stage 1	379	401	-	383	401	-	-	-	-	-	-	-
Stage 2	375	394	-	382	392	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	53.1	46.5	0.1	0
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	800	-	-	105	88	842	-	-
HCM Lane V/C Ratio	0.006	-	-	0.296	0.013	-	-	-
HCM Control Delay (s)	9.5	0	-	53.1	46.5	0	-	-
HCM Lane LOS	A	A	-	F	E	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.1	0	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	54	336	15	19	743
Future Vol, veh/h	43	54	336	15	19	743
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	0	0	1
Mvmt Flow	47	59	365	16	21	808

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1223	373	0	0	381	0
Stage 1	373	-	-	-	-	-
Stage 2	850	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	200	678	-	-	1189	-
Stage 1	701	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	194	678	-	-	1189	-
Mov Cap-2 Maneuver	194	-	-	-	-	-
Stage 1	701	-	-	-	-	-
Stage 2	408	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.5	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	322	1189	-
HCM Lane V/C Ratio	-	-	0.327	0.017	-
HCM Control Delay (s)	-	-	21.5	8.1	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.4	0.1	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	191	150	4	10	63
Future Vol, veh/h	22	191	150	4	10	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	2	0	0	0
Mvmt Flow	24	208	163	4	11	68

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	167	0	-	0	421	165
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1423	-	-	-	593	885
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	791	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1423	-	-	-	582	885
Mov Cap-2 Maneuver	-	-	-	-	582	-
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	791	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1423	-	-	-	826
HCM Lane V/C Ratio	0.017	-	-	-	0.096
HCM Control Delay (s)	7.6	0	-	-	9.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	35	924	10	53	708
Future Vol, veh/h	13	35	924	10	53	708
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	3	3
Mvmt Flow	14	38	1004	11	58	770

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1896	1010	0	0	1015	0
Stage 1	1010	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.13	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.227	-
Pot Cap-1 Maneuver	76	291	-	-	679	-
Stage 1	352	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	65	291	-	-	679	-
Mov Cap-2 Maneuver	65	-	-	-	-	-
Stage 1	352	-	-	-	-	-
Stage 2	343	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	41.3	0	0.8
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	150	679	-
HCM Lane V/C Ratio	-	-	0.348	0.085	-
HCM Control Delay (s)	-	-	41.3	10.8	0
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	1.4	0.3	-

Intersection	
Int Delay, s/veh	49.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	104	100	834	85	102	619
Future Vol, veh/h	104	100	834	85	102	619
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	6	6	2	2	3	3
Mvmt Flow	106	102	851	87	104	632

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1735	895	0	0	938	0
Stage 1	895	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.13	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.227	-
Pot Cap-1 Maneuver	~ 94	334	-	-	726	-
Stage 1	393	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 73	334	-	-	726	-
Mov Cap-2 Maneuver	~ 73	-	-	-	-	-
Stage 1	393	-	-	-	-	-
Stage 2	325	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 439.3	0	1.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	118	726	-
HCM Lane V/C Ratio	-	-	1.764	0.143	-
HCM Control Delay (s)	-	-	$ 439.3	10.8	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	16.1	0.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	275.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	124	43	272	86	93	6	652	185	30	661	15
Future Vol, veh/h	139	124	43	272	86	93	6	652	185	30	661	15
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	4	4	4
Mvmt Flow	140	125	43	275	87	94	6	659	187	30	668	15
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	24	34.1	450.9	328.6
HCM LOS	C	D	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	1%	100%	0%	100%	0%	4%
Vol Thru, %	77%	0%	74%	0%	48%	94%
Vol Right, %	22%	0%	26%	0%	52%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	843	139	167	272	179	706
LT Vol	6	139	0	272	0	30
Through Vol	652	0	124	0	86	661
RT Vol	185	0	43	0	93	15
Lane Flow Rate	852	140	169	275	181	713
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1.931	0.385	0.431	0.723	0.432	1.646
Departure Headway (Hd)	9.692	13.131	12.4	12.388	11.463	10.424
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	383	277	294	294	316	357
Service Time	7.692	10.831	10.1	10.088	9.163	8.424
HCM Lane V/C Ratio	2.225	0.505	0.575	0.935	0.573	1.997
HCM Control Delay	450.9	23.8	24.2	41.7	22.6	328.6
HCM Lane LOS	F	C	C	E	C	F
HCM 95th-tile Q	48.7	1.7	2.1	5.2	2.1	34.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	126	0	108	0	776	469	0	534	397
Future Volume (veh/h)	0	0	0	126	0	108	0	776	469	0	534	397
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	0	1841	0	1870	1870	0	1856	1856
Adj Flow Rate, veh/h				137	0	117	0	843	0	0	580	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	0	4	0	2	2	0	3	3
Cap, veh/h				230	0	205	0	2329		0	2310	
Arrive On Green				0.13	0.00	0.13	0.00	0.66	0.00	0.00	0.66	0.00
Sat Flow, veh/h				1753	0	1560	0	3647	1585	0	3618	1572
Grp Volume(v), veh/h				137	0	117	0	843	0	0	580	0
Grp Sat Flow(s),veh/h/ln				1753	0	1560	0	1777	1585	0	1763	1572
Q Serve(g_s), s				4.4	0.0	4.2	0.0	6.4	0.0	0.0	4.1	0.0
Cycle Q Clear(g_c), s				4.4	0.0	4.2	0.0	6.4	0.0	0.0	4.1	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				230	0	205	0	2329		0	2310	
V/C Ratio(X)				0.59	0.00	0.57	0.00	0.36		0.00	0.25	
Avail Cap(c_a), veh/h				602	0	536	0	2329		0	2310	
HCM Platoon Ratio				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	0.00	0.80	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				24.6	0.0	24.5	0.0	4.7	0.0	0.0	4.3	0.0
Incr Delay (d2), s/veh				5.7	0.0	5.8	0.0	0.4	0.0	0.0	0.3	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
%ile BackOfQ(50%),veh/ln				2.1	0.0	1.8	0.0	1.3	0.0	0.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				30.2	0.0	30.3	0.0	5.0	0.0	0.0	4.5	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					254			843			580	
Approach Delay, s/veh					30.2			5.0			4.5	
Approach LOS					C			A			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	45.7		45.7		14.3			
Change Period (Y+Rc), s	6.4		6.4		6.4			
Max Green Setting (Gmax), s	26.6		26.6		20.6			
Max Q Clear Time (g_c+I1), s	8.4		6.1		6.4			
Green Ext Time (p_c), s	9.1		6.6		1.5			

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

Notes

Unsignalized Delay for [NBR, SBR] 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)	453	0	826	0	0	0	0	766	129	128	539	0
Future Volume (veh/h)	453	0	826	0	0	0	0	766	129	128	539	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	498	0	908				0	842	142	141	592	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	810	0	654				0	1682	750	233	2194	0
Arrive On Green	0.23	0.00	0.23				0.00	0.47	0.47	0.07	0.62	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	498	0	908				0	842	142	141	592	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	11.0	0.0	20.0				0.0	14.1	4.5	3.4	6.6	0.0
Cycle Q Clear(g_c), s	11.0	0.0	20.0				0.0	14.1	4.5	3.4	6.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	810	0	654				0	1682	750	233	2194	0
V/C Ratio(X)	0.61	0.00	1.39				0.00	0.50	0.19	0.61	0.27	0.00
Avail Cap(c_a), veh/h	810	0	654				0	1682	750	603	2194	0
HCM Platoon Ratio	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				0.00	0.89	0.89	0.97	0.97	0.00
Uniform Delay (d), s/veh	29.6	0.0	33.0				0.0	15.6	13.1	39.0	7.6	0.0
Incr Delay (d2), s/veh	3.3	0.0	184.2				0.0	1.0	0.5	0.9	0.3	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
%ile BackOfQ(50%),veh/ln	4.8	0.0	23.2				0.0	5.2	1.5	1.4	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	217.2				0.0	16.6	13.6	39.9	7.8	0.0
LnGrp LOS	C	A	F				A	B	B	D	A	A
Approach Vol, veh/h		1406						984			733	
Approach Delay, s/veh		151.9						16.2			14.0	
Approach LOS		F						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.4	47.2		26.4		59.6
Change Period (Y+Rc), s	* 6.6	6.5		* 6.4		6.5
Max Green Setting (Gmax), s	* 15	31.0		* 20		52.6
Max Q Clear Time (g_c+I1), s	15.4	16.1		22.0		8.6
Green Ext Time (p_c), s	0.1	8.7		0.0		8.8

Intersection Summary	
HCM 6th Ctrl Delay	76.8
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)	96	202	73	144	173	227	84	569	140	325	851	80
Future Volume (veh/h)	96	202	73	144	173	227	84	569	140	325	851	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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	105	222	80	158	190	249	92	625	154	357	935	88
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	1	1	1
Cap, veh/h	128	421	147	182	688	307	114	1668	744	409	1898	847
Arrive On Green	0.07	0.16	0.16	0.10	0.19	0.19	0.06	0.47	0.47	0.12	0.53	0.53
Sat Flow, veh/h	1781	2581	904	1781	3554	1585	1781	3554	1585	3483	3582	1598
Grp Volume(v), veh/h	105	151	151	158	190	249	92	625	154	357	935	88
Grp Sat Flow(s),veh/h/ln	1781	1777	1708	1781	1777	1585	1781	1777	1585	1742	1791	1598
Q Serve(g_s), s	8.1	10.9	11.4	12.2	6.4	21.0	7.1	15.9	8.0	14.1	23.2	3.8
Cycle Q Clear(g_c), s	8.1	10.9	11.4	12.2	6.4	21.0	7.1	15.9	8.0	14.1	23.2	3.8
Prop In Lane	1.00		0.53	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	290	279	182	688	307	114	1668	744	409	1898	847
V/C Ratio(X)	0.82	0.52	0.54	0.87	0.28	0.81	0.81	0.37	0.21	0.87	0.49	0.10
Avail Cap(c_a), veh/h	267	520	500	267	1041	464	267	1668	744	522	1898	847
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	0.75	0.75	0.75
Uniform Delay (d), s/veh	64.1	53.6	53.8	61.9	48.1	54.0	64.7	23.9	21.8	60.8	20.9	16.4
Incr Delay (d2), s/veh	4.9	4.2	4.7	13.2	0.6	13.6	5.0	0.6	0.6	8.3	0.7	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	3.8	5.1	5.2	6.1	2.8	9.4	3.4	6.7	3.0	6.6	9.5	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	57.7	58.5	75.1	48.7	67.6	69.7	24.6	22.5	69.0	21.6	16.5
LnGrp LOS	E	E	E	E	D	E	E	C	C	E	C	B
Approach Vol, veh/h		407			597			871			1380	
Approach Delay, s/veh		60.9			63.6			29.0			33.6	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	79.1	14.9	32.4	22.0	70.6	19.2	28.1
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	21.0	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	10.1	25.2	10.1	23.0	16.1	17.9	14.2	13.4
Green Ext Time (p_c), s	0.1	9.0	0.1	4.1	0.3	10.0	0.1	3.7

Intersection Summary	
HCM 6th Ctrl Delay	41.3
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	33	30	29	35	40	13	579	43	52	338	0
Future Vol, veh/h	0	33	30	29	35	40	13	579	43	52	338	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3
Mvmt Flow	0	36	33	32	38	43	14	629	47	57	367	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1202	1185	367	1197	1162	653	367	0	0	676	0	0
Stage 1	481	481	-	681	681	-	-	-	-	-	-	-
Stage 2	721	704	-	516	481	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.13	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	161	189	678	163	195	467	1192	-	-	911	-	-
Stage 1	566	554	-	440	450	-	-	-	-	-	-	-
Stage 2	419	440	-	542	554	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	113	171	678	121	176	467	1192	-	-	911	-	-
Mov Cap-2 Maneuver	113	171	-	121	176	-	-	-	-	-	-	-
Stage 1	555	510	-	432	441	-	-	-	-	-	-	-
Stage 2	341	432	-	442	510	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.2	44.9	0.2	1.2
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1192	-	-	266	198	911	-	-
HCM Lane V/C Ratio	0.012	-	-	0.257	0.571	0.062	-	-
HCM Control Delay (s)	8.1	0	-	23.2	44.9	9.2	0	-
HCM Lane LOS	A	A	-	C	E	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	3.1	0.2	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	6	5	17	4	12	8	611	33	12	341	30
Future Vol, veh/h	42	6	5	17	4	12	8	611	33	12	341	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	2	2	2	3	3	3
Mvmt Flow	45	6	5	18	4	13	9	657	35	13	367	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1110	1119	383	1108	1118	675	399	0	0	692	0	0
Stage 1	409	409	-	693	693	-	-	-	-	-	-	-
Stage 2	701	710	-	415	425	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	187	208	667	187	207	454	1160	-	-	898	-	-
Stage 1	621	598	-	434	445	-	-	-	-	-	-	-
Stage 2	431	438	-	615	586	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	176	203	667	178	202	454	1160	-	-	898	-	-
Mov Cap-2 Maneuver	176	203	-	178	202	-	-	-	-	-	-	-
Stage 1	616	590	-	431	441	-	-	-	-	-	-	-
Stage 2	411	434	-	595	578	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31	23.2	0.1	0.3
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1160	-	-	179	667	233	898	-	-
HCM Lane V/C Ratio	0.007	-	-	0.288	0.008	0.152	0.014	-	-
HCM Control Delay (s)	8.1	-	-	33.1	10.4	23.2	9.1	-	-
HCM Lane LOS	A	-	-	D	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.1	0	0.5	0	-	-

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.1	0.1	16.0	0.0	16.2
Denied Del/Veh (s)	0.7	1.6	94.1	0.0	35.5
Total Delay (hr)	1.5	1.6	30.5	1.4	35.0
Total Del/Veh (s)	15.9	17.6	185.3	13.8	77.1
Stop Delay (hr)	1.1	1.1	31.1	0.9	34.2
Stop Del/Veh (s)	11.7	12.1	188.9	9.3	75.4

Intersection	
Int Delay, s/veh	56.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	38	14	113	52	53	24	508	107	103	448	17
Future Vol, veh/h	11	38	14	113	52	53	24	508	107	103	448	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	140	-	140	155	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	1	1	1	2	2	2	1	1	1
Mvmt Flow	13	43	16	128	59	60	27	577	122	117	509	19

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1505	1506	519	1474	1454	638	528	0	0	699	0	0
Stage 1	753	753	-	692	692	-	-	-	-	-	-	-
Stage 2	752	753	-	782	762	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	100	121	557	~ 105	131	478	1039	-	-	902	-	-
Stage 1	402	417	-	436	447	-	-	-	-	-	-	-
Stage 2	402	417	-	389	415	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	45	102	557	~ 61	111	478	1039	-	-	902	-	-
Mov Cap-2 Maneuver	45	102	-	~ 61	111	-	-	-	-	-	-	-
Stage 1	392	363	-	425	435	-	-	-	-	-	-	-
Stage 2	296	406	-	290	361	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	63.8	$ 359.8	0.3	1.7
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	1039	-	-	45	131	61	111	478	902	-	-
HCM Lane V/C Ratio	0.026	-	-	0.278	0.451	2.105	0.532	0.126	0.13	-	-
HCM Control Delay (s)	8.6	-	-	113.3	53.3	$ 655.8	69.5	13.6	9.6	-	-
HCM Lane LOS	A	-	-	F	F	F	F	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	2	12.3	2.5	0.4	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	0	10	1	0	0	3	617	0	1	520	21
Future Vol, veh/h	15	0	10	1	0	0	3	617	0	1	520	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	16	0	11	1	0	0	3	649	0	1	547	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1215	1215	558	1221	1226	649	569	0	0	649	0	0
Stage 1	560	560	-	655	655	-	-	-	-	-	-	-
Stage 2	655	655	-	566	571	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	160	183	533	158	180	473	1003	-	-	942	-	-
Stage 1	516	514	-	458	466	-	-	-	-	-	-	-
Stage 2	458	466	-	513	508	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	159	182	533	154	179	473	1003	-	-	942	-	-
Mov Cap-2 Maneuver	159	182	-	154	179	-	-	-	-	-	-	-
Stage 1	513	513	-	456	464	-	-	-	-	-	-	-
Stage 2	456	464	-	502	507	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.5	28.5	0	0
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1003	-	-	221	154	942	-	-
HCM Lane V/C Ratio	0.003	-	-	0.119	0.007	0.001	-	-
HCM Control Delay (s)	8.6	0	-	23.5	28.5	8.8	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	36	561	48	61	355
Future Vol, veh/h	29	36	561	48	61	355
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	0	0	3
Mvmt Flow	32	39	610	52	66	386

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1154	636	0	0	662	0
Stage 1	636	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	220	481	-	-	936	-
Stage 1	531	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	200	481	-	-	936	-
Mov Cap-2 Maneuver	200	-	-	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	548	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.9	0	1.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	296	936	-
HCM Lane V/C Ratio	-	-	0.239	0.071	-
HCM Control Delay (s)	-	-	20.9	9.1	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.2	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	71	55	62	12	7	42
Future Vol, veh/h	71	55	62	12	7	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	2	0	0	0
Mvmt Flow	77	60	67	13	8	46

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	80	0	-	0	288	74
Stage 1	-	-	-	-	74	-
Stage 2	-	-	-	-	214	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1531	-	-	-	707	993
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	826	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1531	-	-	-	670	993
Mov Cap-2 Maneuver	-	-	-	-	670	-
Stage 1	-	-	-	-	904	-
Stage 2	-	-	-	-	826	-

Approach	EB	WB	SB
HCM Control Delay, s	4.2	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1531	-	-	-	929
HCM Lane V/C Ratio	0.05	-	-	-	0.057
HCM Control Delay (s)	7.5	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	49	31	144	362	141	103	273	633	47	104	826	26
Future Vol, veh/h	49	31	144	362	141	103	273	633	47	104	826	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	4	4	4	1	1	1
Mvmt Flow	53	34	157	393	153	112	297	688	51	113	898	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2578	2471	912	2542	2460	714	926	0	0	739	0	0
Stage 1	1138	1138	-	1308	1308	-	-	-	-	-	-	-
Stage 2	1440	1333	-	1234	1152	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.14	-	-	4.11	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.236	-	-	2.209	-	-
Pot Cap-1 Maneuver	~ 17	~ 30	332	~ 18	~ 31	431	730	-	-	872	-	-
Stage 1	245	276	-	~ 196	229	-	-	-	-	-	-	-
Stage 2	165	223	-	~ 216	272	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 7	332	-	~ 7	431	730	-	-	872	-	-
Mov Cap-2 Maneuver	-	~ 7	-	-	~ 7	-	-	-	-	-	-	-
Stage 1	74	202	-	~ 59	~ 69	-	-	-	-	-	-	-
Stage 2	-	68	-	~ 70	199	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			3.8	1.1
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	730	-	-	-	-	872	-	-
HCM Lane V/C Ratio	0.406	-	-	-	-	0.13	-	-
HCM Control Delay (s)	13.3	0	-	-	-	9.7	0	-
HCM Lane LOS	B	A	-	-	-	A	A	-
HCM 95th %tile Q(veh)	2	-	-	-	-	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	22

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	75	600	108	138	749
Future Vol, veh/h	74	75	600	108	138	749
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	5	4	4	1	1
Mvmt Flow	76	77	619	111	142	772

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1731	675	0	0	730	0
Stage 1	675	-	-	-	-	-
Stage 2	1056	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.11	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.209	-
Pot Cap-1 Maneuver	95	449	-	-	879	-
Stage 1	500	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 68	449	-	-	879	-
Mov Cap-2 Maneuver	~ 68	-	-	-	-	-
Stage 1	500	-	-	-	-	-
Stage 2	237	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	248.5	0	1.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	119	879	-
HCM Lane V/C Ratio	-	-	1.291	0.162	-
HCM Control Delay (s)	-	-	248.5	9.9	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	10.1	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	341.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	98	24	477	314	78	33	602	147	38	762	48
Future Vol, veh/h	39	98	24	477	314	78	33	602	147	38	762	48
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
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	2	2	2
Mvmt Flow	42	107	26	518	341	85	36	654	160	41	828	52
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	23.2	141.3	439.8	517.1
HCM LOS	C	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	4%	100%	0%	100%	0%	4%
Vol Thru, %	77%	0%	80%	0%	80%	90%
Vol Right, %	19%	0%	20%	0%	20%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	782	39	122	477	392	848
LT Vol	33	39	0	477	0	38
Through Vol	602	0	98	0	314	762
RT Vol	147	0	24	0	78	48
Lane Flow Rate	850	42	133	518	426	922
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1.902	0.12	0.353	1.299	0.991	2.079
Departure Headway (Hd)	10.278	14.833	14.145	11.982	11.296	10.007
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	365	243	256	306	324	378
Service Time	8.278	12.533	11.845	9.682	8.996	8.007
HCM Lane V/C Ratio	2.329	0.173	0.52	1.693	1.315	2.439
HCM Control Delay	439.8	19.5	24.4	189.3	83	517.1
HCM Lane LOS	F	C	C	F	F	F
HCM 95th-tile Q	45	0.4	1.5	19	10.7	53.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	121	0	121	0	665	879	0	401	837
Future Volume (veh/h)	0	0	0	121	0	121	0	665	879	0	401	837
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1885	0	1870	0	1870	1870	0	1885	1885
Adj Flow Rate, veh/h				132	0	132	0	723	0	0	436	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				1	0	2	0	2	2	0	1	1
Cap, veh/h				244	0	216	0	2312		0	2330	
Arrive On Green				0.14	0.00	0.14	0.00	0.65	0.00	0.00	0.65	0.00
Sat Flow, veh/h				1795	0	1585	0	3647	1585	0	3676	1598
Grp Volume(v), veh/h				132	0	132	0	723	0	0	436	0
Grp Sat Flow(s),veh/h/ln				1795	0	1585	0	1777	1585	0	1791	1598
Q Serve(g_s), s				4.1	0.0	4.7	0.0	5.4	0.0	0.0	2.9	0.0
Cycle Q Clear(g_c), s				4.1	0.0	4.7	0.0	5.4	0.0	0.0	2.9	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				244	0	216	0	2312		0	2330	
V/C Ratio(X)				0.54	0.00	0.61	0.00	0.31		0.00	0.19	
Avail Cap(c_a), veh/h				616	0	544	0	2312		0	2330	
HCM Platoon Ratio				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	0.00	0.67	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				24.2	0.0	24.4	0.0	4.6	0.0	0.0	4.2	0.0
Incr Delay (d2), s/veh				4.3	0.0	6.5	0.0	0.2	0.0	0.0	0.2	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
%ile BackOfQ(50%),veh/ln				1.9	0.0	2.0	0.0	1.1	0.0	0.0	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				28.5	0.0	30.9	0.0	4.8	0.0	0.0	4.3	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					264			723			436	
Approach Delay, s/veh					29.7			4.8			4.3	
Approach LOS					C			A			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	45.4		45.4		14.6			
Change Period (Y+Rc), s	6.4		6.4		6.4			
Max Green Setting (Gmax), s	26.6		26.6		20.6			
Max Q Clear Time (g_c+I1), s	7.4		4.9		6.7			
Green Ext Time (p_c), s	8.0		4.9		1.6			

Intersection Summary		
HCM 6th Ctrl Delay	9.3	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NBR, SBR] 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)	321	0	487	0	0	0	0	1223	140	110	412	0
Future Volume (veh/h)	321	0	487	0	0	0	0	1223	140	110	412	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1841	0	1841				0	1856	1856	1870	1870	0
Adj Flow Rate, veh/h	345	0	524				0	1315	151	118	443	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	0	4				0	3	3	2	2	0
Cap, veh/h	765	0	617				0	1702	759	227	2222	0
Arrive On Green	0.22	0.00	0.22				0.00	0.48	0.48	0.07	0.63	0.00
Sat Flow, veh/h	3401	0	2745				0	3618	1572	3456	3647	0
Grp Volume(v), veh/h	345	0	524				0	1315	151	118	443	0
Grp Sat Flow(s),veh/h/ln	1700	0	1373				0	1763	1572	1728	1777	0
Q Serve(g_s), s	7.5	0.0	15.7				0.0	26.5	4.7	2.8	4.6	0.0
Cycle Q Clear(g_c), s	7.5	0.0	15.7				0.0	26.5	4.7	2.8	4.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	765	0	617				0	1702	759	227	2222	0
V/C Ratio(X)	0.45	0.00	0.85				0.00	0.77	0.20	0.52	0.20	0.00
Avail Cap(c_a), veh/h	791	0	638				0	1702	759	603	2222	0
HCM Platoon Ratio	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				0.00	0.69	0.69	0.98	0.98	0.00
Uniform Delay (d), s/veh	28.8	0.0	31.9				0.0	18.3	12.7	38.9	6.9	0.0
Incr Delay (d2), s/veh	1.8	0.0	13.4				0.0	2.4	0.4	0.7	0.2	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
%ile BackOfQ(50%),veh/ln	3.1	0.0	6.1				0.0	9.8	1.6	1.2	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.0	45.3				0.0	20.8	13.1	39.5	7.1	0.0
LnGrp LOS	C	A	D				A	C	B	D	A	A
Approach Vol, veh/h		869						1466			561	
Approach Delay, s/veh		39.4						20.0			13.9	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	12.2	48.0	25.7	60.3
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 15	31.0	* 20	52.6
Max Q Clear Time (g_c+I1), s	14.8	28.5	17.7	6.6
Green Ext Time (p_c), s	0.1	2.3	1.6	6.2

Intersection Summary	
HCM 6th Ctrl Delay	24.6
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)	120	244	53	144	258	266	155	977	188	342	469	55
Future Volume (veh/h)	120	244	53	144	258	266	155	977	188	342	469	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1885	1885	1885	1856	1856	1856
Adj Flow Rate, veh/h	130	265	58	157	280	289	168	1062	204	372	510	60
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, %	6	6	6	6	6	6	1	1	1	3	3	3
Cap, veh/h	153	596	128	180	783	349	192	1479	660	422	1538	686
Arrive On Green	0.09	0.21	0.21	0.10	0.23	0.23	0.11	0.41	0.41	0.12	0.44	0.44
Sat Flow, veh/h	1725	2816	606	1725	3441	1535	1795	3582	1598	3428	3526	1572
Grp Volume(v), veh/h	130	160	163	157	280	289	168	1062	204	372	510	60
Grp Sat Flow(s),veh/h/ln	1725	1721	1702	1725	1721	1535	1795	1791	1598	1714	1763	1572
Q Serve(g_s), s	10.4	11.3	11.7	12.6	9.6	25.1	12.9	34.6	12.0	14.9	13.4	3.1
Cycle Q Clear(g_c), s	10.4	11.3	11.7	12.6	9.6	25.1	12.9	34.6	12.0	14.9	13.4	3.1
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	364	360	180	783	349	192	1479	660	422	1538	686
V/C Ratio(X)	0.85	0.44	0.45	0.87	0.36	0.83	0.87	0.72	0.31	0.88	0.33	0.09
Avail Cap(c_a), veh/h	259	504	498	259	1008	449	269	1479	660	514	1538	686
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	0.93	0.93	0.93
Uniform Delay (d), s/veh	62.9	48.0	48.1	61.8	45.5	51.5	61.6	34.3	27.7	60.4	26.0	23.1
Incr Delay (d2), s/veh	5.3	2.4	2.6	14.9	0.8	14.8	15.7	3.0	1.2	11.8	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	4.7	5.0	5.1	6.1	4.1	10.9	6.7	15.3	4.7	7.1	5.6	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.1	50.4	50.7	76.7	46.2	66.3	77.2	37.3	28.9	72.2	26.6	23.4
LnGrp LOS	E	D	D	E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		453			726			1434			942	
Approach Delay, s/veh		55.6			60.8			40.8			44.4	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	66.0	17.3	37.1	22.8	62.7	19.5	34.9
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	21.0	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	14.9	15.4	12.4	27.1	16.9	36.6	14.6	13.7
Green Ext Time (p_c), s	0.1	8.3	0.1	4.7	0.3	0.0	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	135	9	117	294	35	29	318	20	41	767	112
Future Vol, veh/h	26	135	9	117	294	35	29	318	20	41	767	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3	1	1	1
Mvmt Flow	28	147	10	127	320	38	32	346	22	45	834	122

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1585	1417	895	1485	1467	357	956	0	0	368	0	0
Stage 1	985	985	-	421	421	-	-	-	-	-	-	-
Stage 2	600	432	-	1064	1046	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.11	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.209	-	-
Pot Cap-1 Maneuver	88	~ 137	339	~ 103	~ 128	687	715	-	-	1196	-	-
Stage 1	299	326	-	610	589	-	-	-	-	-	-	-
Stage 2	488	582	-	270	~ 305	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 119	339	-	~ 111	687	715	-	-	1196	-	-
Mov Cap-2 Maneuver	-	~ 119	-	-	~ 111	-	-	-	-	-	-	-
Stage 1	282	299	-	576	556	-	-	-	-	-	-	-
Stage 2	185	549	-	~ 122	~ 280	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.8	0.4
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	715	-	-	-	-	1196	-	-
HCM Lane V/C Ratio	0.044	-	-	-	-	0.037	-	-
HCM Control Delay (s)	10.3	0	-	-	-	8.1	0	-
HCM Lane LOS	B	A	-	-	-	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	14

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	8	21	107	8	19	5	269	22	3	835	43
Future Vol, veh/h	26	8	21	107	8	19	5	269	22	3	835	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	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	1	1	1	2	2	2	1	1	1
Mvmt Flow	28	9	23	116	9	21	5	292	24	3	908	47

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1267	1264	932	1268	1275	304	955	0	0	316	0	0
Stage 1	938	938	-	314	314	-	-	-	-	-	-	-
Stage 2	329	326	-	954	961	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	146	169	323	146	168	738	720	-	-	1250	-	-
Stage 1	317	343	-	699	658	-	-	-	-	-	-	-
Stage 2	684	648	-	312	336	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	135	167	323	129	166	738	720	-	-	1250	-	-
Mov Cap-2 Maneuver	135	167	-	129	166	-	-	-	-	-	-	-
Stage 1	315	342	-	694	653	-	-	-	-	-	-	-
Stage 2	651	643	-	282	335	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.8	129.6	0.2	0
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	720	-	-	141	323	148	1250	-	-
HCM Lane V/C Ratio	0.008	-	-	0.262	0.071	0.984	0.003	-	-
HCM Control Delay (s)	10	-	-	39.4	17	129.6	7.9	-	-
HCM Lane LOS	B	-	-	E	C	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1	0.2	7.2	0	-	-

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.0	0.2	34.0	0.0	34.2
Denied Del/Veh (s)	0.1	1.2	230.3	0.0	78.9
Total Delay (hr)	4.6	6.0	21.8	1.8	34.2
Total Del/Veh (s)	72.6	34.8	222.4	29.9	86.9
Stop Delay (hr)	4.3	4.7	21.3	1.5	31.8
Stop Del/Veh (s)	67.7	27.6	217.2	24.4	80.8

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	192	14	217	146	109	102	472	359	109	1350	169
Future Vol, veh/h	40	192	14	217	146	109	102	472	359	109	1350	169
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	140	-	140	155	-	-	155	-	-
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	3	3	3	6	6	6	1	1	1
Mvmt Flow	43	209	15	236	159	118	111	513	390	118	1467	184

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2864	2920	1559	2837	2817	708	1651	0	0	903	0	0
Stage 1	1795	1795	-	930	930	-	-	-	-	-	-	-
Stage 2	1069	1125	-	1907	1887	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.53	6.23	4.16	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.027	3.327	2.254	-	-	2.209	-	-
Pot Cap-1 Maneuver	~ 11	~ 15	138	~ 11	~ 18	433	380	-	-	757	-	-
Stage 1	103	~ 132	-	319	345	-	-	-	-	-	-	-
Stage 2	268	280	-	~ 88	~ 118	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 9	138	-	~ 11	433	380	-	-	757	-	-
Mov Cap-2 Maneuver	-	~ 9	-	-	~ 11	-	-	-	-	-	-	-
Stage 1	73	~ 111	-	~ 226	244	-	-	-	-	-	-	-
Stage 2	48	~ 198	-	-	~ 100	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			2	0.7
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	380	-	-	-	10	-	11	433	757	-	-
HCM Lane V/C Ratio	0.292	-	-	-	22.391	-	14.427	0.274	0.157	-	-
HCM Control Delay (s)	18.3	-	-	-	$ 10354.2	-	$ 6707.6	16.4	10.6	-	-
HCM Lane LOS	C	-	-	-	F	-	F	C	B	-	-
HCM 95th %tile Q(veh)	1.2	-	-	-	29.6	-	21.3	1.1	0.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	23	0	6	1	0	0	4	709	0	0	951	70
Future Vol, veh/h	23	0	6	1	0	0	4	709	0	0	951	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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, %	5	5	5	0	0	0	4	4	4	1	1	1
Mvmt Flow	25	0	7	1	0	0	4	771	0	0	1034	76

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1851	1851	1072	1855	1889	771	1110	0	0	771	0	0
Stage 1	1072	1072	-	779	779	-	-	-	-	-	-	-
Stage 2	779	779	-	1076	1110	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.1	6.5	6.2	4.14	-	-	4.11	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.5	4	3.3	2.236	-	-	2.209	-	-
Pot Cap-1 Maneuver	56	73	264	57	71	403	622	-	-	848	-	-
Stage 1	263	293	-	392	409	-	-	-	-	-	-	-
Stage 2	384	402	-	268	287	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	56	72	264	55	70	403	622	-	-	848	-	-
Mov Cap-2 Maneuver	56	72	-	55	70	-	-	-	-	-	-	-
Stage 1	260	293	-	388	405	-	-	-	-	-	-	-
Stage 2	380	398	-	261	287	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	99.5	71.8	0.1	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	622	-	-	67	55	848	-	-
HCM Lane V/C Ratio	0.007	-	-	0.47	0.02	-	-	-
HCM Control Delay (s)	10.8	0	-	99.5	71.8	0	-	-
HCM Lane LOS	B	A	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.9	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	112	50	307	76	73	37	318	970	158	56	743	68
Future Vol, veh/h	112	50	307	76	73	37	318	970	158	56	743	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3
Mvmt Flow	122	54	334	83	79	40	346	1054	172	61	808	74

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2859	2885	845	2993	2836	1140	882	0	0	1226	0	0
Stage 1	967	967	-	1832	1832	-	-	-	-	-	-	-
Stage 2	1892	1918	-	1161	1004	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.13	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	~ 11	~ 16	363	~ 8	~ 17	245	767	-	-	565	-	-
Stage 1	306	333	-	98	127	-	-	-	-	-	-	-
Stage 2	~ 90	115	-	238	320	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	363	-	0	245	767	-	-	565	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	306	261	-	98	0	-	-	-	-	-	-	-
Stage 2	-	0	-	~ 12	251	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			3	0.8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	767	-	-	-	-	565	-	-
HCM Lane V/C Ratio	0.451	-	-	-	-	0.108	-	-
HCM Control Delay (s)	13.5	0	-	-	-	12.1	0	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th %tile Q(veh)	2.4	-	-	-	-	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	66.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	109	105	874	89	107	649
Future Vol, veh/h	109	105	874	89	107	649
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	6	6	2	2	3	3
Mvmt Flow	111	107	892	91	109	662

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1818	938	0	0	983	0
Stage 1	938	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.13	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.227	-
Pot Cap-1 Maneuver	~ 84	315	-	-	699	-
Stage 1	374	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 63	315	-	-	699	-
Mov Cap-2 Maneuver	~ 63	-	-	-	-	-
Stage 1	374	-	-	-	-	-
Stage 2	300	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 593.5	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	104	699	-
HCM Lane V/C Ratio	-	-	2.1	0.156	-
HCM Control Delay (s)	-	-	$ 593.5	11.1	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	18.7	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	457
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	166	332	46	339	121	105	6	683	363	32	693	16
Future Vol, veh/h	166	332	46	339	121	105	6	683	363	32	693	16
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	4	4	4
Mvmt Flow	168	335	46	342	122	106	6	690	367	32	700	16
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	83.8	73.4	830.2	493.5
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	1%	100%	0%	100%	0%	4%
Vol Thru, %	65%	0%	88%	0%	54%	94%
Vol Right, %	35%	0%	12%	0%	46%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1052	166	378	339	226	741
LT Vol	6	166	0	339	0	32
Through Vol	683	0	332	0	121	693
RT Vol	363	0	46	0	105	16
Lane Flow Rate	1063	168	382	342	228	748
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	2.769	0.474	1.018	0.973	0.596	1.996
Departure Headway (Hd)	12.32	16.077	15.444	16.095	15.202	14.638
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	308	226	241	229	240	254
Service Time	10.32	13.777	13.144	13.795	12.902	12.638
HCM Lane V/C Ratio	3.451	0.743	1.585	1.493	0.95	2.945
HCM Control Delay	830.2	32.5	106.4	96.9	38.1	493.5
HCM Lane LOS	F	D	F	F	E	F
HCM 95th-tile Q	69	2.3	9.7	8.7	3.4	35.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	133	0	113	0	815	486	0	553	447
Future Volume (veh/h)	0	0	0	133	0	113	0	815	486	0	553	447
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	0	1841	0	1870	1870	0	1856	1856
Adj Flow Rate, veh/h				145	0	123	0	886	0	0	601	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	0	4	0	2	2	0	3	3
Cap, veh/h				239	0	212	0	2312		0	2293	
Arrive On Green				0.14	0.00	0.14	0.00	0.65	0.00	0.00	0.65	0.00
Sat Flow, veh/h				1753	0	1560	0	3647	1585	0	3618	1572
Grp Volume(v), veh/h				145	0	123	0	886	0	0	601	0
Grp Sat Flow(s),veh/h/ln				1753	0	1560	0	1777	1585	0	1763	1572
Q Serve(g_s), s				4.7	0.0	4.4	0.0	7.0	0.0	0.0	4.3	0.0
Cycle Q Clear(g_c), s				4.7	0.0	4.4	0.0	7.0	0.0	0.0	4.3	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				239	0	212	0	2312		0	2293	
V/C Ratio(X)				0.61	0.00	0.58	0.00	0.38		0.00	0.26	
Avail Cap(c_a), veh/h				602	0	536	0	2312		0	2293	
HCM Platoon Ratio				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	0.00	0.77	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				24.4	0.0	24.3	0.0	4.9	0.0	0.0	4.4	0.0
Incr Delay (d2), s/veh				5.8	0.0	5.8	0.0	0.4	0.0	0.0	0.3	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
%ile BackOfQ(50%),veh/ln				2.2	0.0	1.8	0.0	1.5	0.0	0.0	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				30.2	0.0	30.1	0.0	5.3	0.0	0.0	4.7	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					268			886			601	
Approach Delay, s/veh					30.1			5.3			4.7	
Approach LOS					C			A			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	45.4		45.4		14.6			
Change Period (Y+Rc), s	6.4		6.4		6.4			
Max Green Setting (Gmax), s	26.6		26.6		20.6			
Max Q Clear Time (g_c+I1), s	9.0		6.3		6.7			
Green Ext Time (p_c), s	9.3		6.8		1.6			

Intersection Summary		
HCM 6th Ctrl Delay	8.9	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NBR, SBR] 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)	443	0	867	0	0	0	0	858	135	134	552	0
Future Volume (veh/h)	443	0	867	0	0	0	0	858	135	134	552	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	482	0	942				0	933	147	146	600	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	810	0	654				0	1681	750	234	2194	0
Arrive On Green	0.23	0.00	0.23				0.00	0.47	0.47	0.07	0.62	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	482	0	942				0	933	147	146	600	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	10.6	0.0	20.0				0.0	16.1	4.6	3.5	6.7	0.0
Cycle Q Clear(g_c), s	10.6	0.0	20.0				0.0	16.1	4.6	3.5	6.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	810	0	654				0	1681	750	234	2194	0
V/C Ratio(X)	0.60	0.00	1.44				0.00	0.55	0.20	0.62	0.27	0.00
Avail Cap(c_a), veh/h	810	0	654				0	1681	750	603	2194	0
HCM Platoon Ratio	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				0.00	0.81	0.81	0.97	0.97	0.00
Uniform Delay (d), s/veh	29.4	0.0	33.0				0.0	16.2	13.2	39.0	7.6	0.0
Incr Delay (d2), s/veh	3.0	0.0	206.9				0.0	1.1	0.5	1.0	0.3	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
%ile BackOfQ(50%),veh/ln	4.6	0.0	25.3				0.0	6.0	1.6	1.5	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	0.0	239.9				0.0	17.3	13.6	40.0	7.9	0.0
LnGrp LOS	C	A	F				A	B	B	D	A	A
Approach Vol, veh/h		1424						1080			746	
Approach Delay, s/veh		169.7						16.8			14.2	
Approach LOS		F						B			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	12.4	47.2	26.4	59.6
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 15	31.0	* 20	52.6
Max Q Clear Time (g_c+I1), s	15.5	18.1	22.0	8.7
Green Ext Time (p_c), s	0.1	8.4	0.0	8.9

Intersection Summary	
HCM 6th Ctrl Delay	83.2
HCM 6th LOS	F

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)	230	200	106	151	174	223	88	540	147	341	880	88
Future Volume (veh/h)	230	200	106	151	174	223	88	540	147	341	880	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	250	217	115	164	189	242	96	587	160	371	957	96
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	1	1	1
Cap, veh/h	267	532	271	188	673	300	118	1391	621	422	1625	725
Arrive On Green	0.15	0.23	0.23	0.11	0.19	0.19	0.07	0.39	0.39	0.12	0.45	0.45
Sat Flow, veh/h	1781	2277	1161	1781	3554	1585	1781	3554	1585	3483	3582	1598
Grp Volume(v), veh/h	250	167	165	164	189	242	96	587	160	371	957	96
Grp Sat Flow(s),veh/h/ln	1781	1777	1661	1781	1777	1585	1781	1777	1585	1742	1791	1598
Q Serve(g_s), s	19.4	11.2	11.8	12.7	6.4	20.5	7.4	16.9	9.6	14.7	27.9	4.9
Cycle Q Clear(g_c), s	19.4	11.2	11.8	12.7	6.4	20.5	7.4	16.9	9.6	14.7	27.9	4.9
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	415	388	188	673	300	118	1391	621	422	1625	725
V/C Ratio(X)	0.94	0.40	0.42	0.87	0.28	0.81	0.81	0.42	0.26	0.88	0.59	0.13
Avail Cap(c_a), veh/h	267	520	487	267	1041	464	267	1391	621	522	1625	725
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	0.72	0.72	0.72
Uniform Delay (d), s/veh	58.8	45.4	45.6	61.7	48.6	54.3	64.5	31.0	28.8	60.5	28.5	22.2
Incr Delay (d2), s/veh	37.6	1.8	2.1	15.0	0.6	13.3	5.0	0.9	1.0	8.9	1.1	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	11.4	5.1	5.0	6.4	2.8	9.1	3.5	7.3	3.8	6.9	11.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.4	47.2	47.7	76.7	49.2	67.6	69.5	32.0	29.8	69.4	29.7	22.5
LnGrp LOS	F	D	D	E	D	E	E	C	C	E	C	C
Approach Vol, veh/h		582			595			843			1424	
Approach Delay, s/veh		68.5			64.3			35.8			39.5	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	68.4	25.9	31.8	22.6	59.7	19.7	38.0
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	21.3	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	9.4	29.9	21.4	22.5	16.7	18.9	14.7	13.8
Green Ext Time (p_c), s	0.1	6.0	0.0	4.0	0.3	9.2	0.1	4.2

Intersection Summary	
HCM 6th Ctrl Delay	47.8
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	40.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	76	73	32	27	61	23	14	563	167	25	329	51
Future Vol, veh/h	76	73	32	27	61	23	14	563	167	25	329	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3
Mvmt Flow	83	79	35	29	66	25	15	612	182	27	358	55

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1219	1264	386	1230	1200	703	413	0	0	794	0	0
Stage 1	440	440	-	733	733	-	-	-	-	-	-	-
Stage 2	779	824	-	497	467	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.13	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	157	169	662	154	185	438	1146	-	-	823	-	-
Stage 1	596	578	-	412	426	-	-	-	-	-	-	-
Stage 2	389	387	-	555	562	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	99	158	662	84	173	438	1146	-	-	823	-	-
Mov Cap-2 Maneuver	99	158	-	84	173	-	-	-	-	-	-	-
Stage 1	582	553	-	402	416	-	-	-	-	-	-	-
Stage 2	301	378	-	431	538	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	269.8	84	0.2	0.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1146	-	-	142	153	823	-	-
HCM Lane V/C Ratio	0.013	-	-	1.385	0.789	0.033	-	-
HCM Control Delay (s)	8.2	0	-	269.8	84	9.5	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	12.7	5	0.1	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	6	5	23	4	13	8	561	74	13	357	30
Future Vol, veh/h	42	6	5	23	4	13	8	561	74	13	357	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	2	2	2	3	3	3
Mvmt Flow	45	6	5	25	4	14	9	603	80	14	384	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1098	1129	400	1095	1105	643	416	0	0	683	0	0
Stage 1	428	428	-	661	661	-	-	-	-	-	-	-
Stage 2	670	701	-	434	444	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	191	205	652	191	211	473	1143	-	-	905	-	-
Stage 1	607	586	-	452	460	-	-	-	-	-	-	-
Stage 2	448	442	-	600	575	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	179	200	652	181	206	473	1143	-	-	905	-	-
Mov Cap-2 Maneuver	179	200	-	181	206	-	-	-	-	-	-	-
Stage 1	602	577	-	448	456	-	-	-	-	-	-	-
Stage 2	427	438	-	579	566	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.5	24.2	0.1	0.3
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1143	-	-	181	652	230	905	-	-
HCM Lane V/C Ratio	0.008	-	-	0.285	0.008	0.187	0.015	-	-
HCM Control Delay (s)	8.2	-	-	32.6	10.6	24.2	9	-	-
HCM Lane LOS	A	-	-	D	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.1	0	0.7	0	-	-

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.1	0.2	75.7	0.0	76.0
Denied Del/Veh (s)	0.4	1.3	424.7	0.0	143.1
Total Delay (hr)	5.6	4.1	43.8	0.9	54.4
Total Del/Veh (s)	35.6	30.3	291.0	14.4	107.3
Stop Delay (hr)	4.7	3.2	45.9	0.6	54.5
Stop Del/Veh (s)	30.2	23.9	305.2	9.7	107.5

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	120	39	68	119	53	56	49	1505	112	108	889	35
Future Vol, veh/h	120	39	68	119	53	56	49	1505	112	108	889	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	140	-	140	155	-	-	155	-	-
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	1	1	1	2	2	2	1	1	1
Mvmt Flow	130	42	74	129	58	61	53	1636	122	117	966	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3082	3083	985	3080	3041	1697	1004	0	0	1758	0	0
Stage 1	1219	1219	-	1803	1803	-	-	-	-	-	-	-
Stage 2	1863	1864	-	1277	1238	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	~ 7	~ 12	301	~ 7	~ 13	115	690	-	-	358	-	-
Stage 1	220	253	-	~ 102	132	-	-	-	-	-	-	-
Stage 2	~ 94	122	-	205	249	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 7	301	-	~ 8	115	690	-	-	358	-	-
Mov Cap-2 Maneuver	-	~ 7	-	-	~ 8	-	-	-	-	-	-	-
Stage 1	203	170	-	~ 94	122	-	-	-	-	-	-	-
Stage 2	~ 22	113	-	~ 78	168	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.3	2.1
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	690	-	-	-	18	-	8	115	358	-	-
HCM Lane V/C Ratio	0.077	-	-	-	6.461	-	7.201	0.529	0.328	-	-
HCM Control Delay (s)	10.7	-	-	-	$ 2880	-	$ 3695.5	67	19.9	-	-
HCM Lane LOS	B	-	-	-	F	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-	15.2	-	8.7	2.5	1.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	0	12	1	0	0	3	1091	0	1	779	24
Future Vol, veh/h	16	0	12	1	0	0	3	1091	0	1	779	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	17	0	13	1	0	0	3	1148	0	1	820	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1989	1989	833	1995	2001	1148	845	0	0	1148	0	0
Stage 1	835	835	-	1154	1154	-	-	-	-	-	-	-
Stage 2	1154	1154	-	841	847	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	46	62	372	46	61	244	792	-	-	612	-	-
Stage 1	365	386	-	242	274	-	-	-	-	-	-	-
Stage 2	242	274	-	362	381	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	46	61	372	44	60	244	792	-	-	612	-	-
Mov Cap-2 Maneuver	46	61	-	44	60	-	-	-	-	-	-	-
Stage 1	361	385	-	240	271	-	-	-	-	-	-	-
Stage 2	240	271	-	349	380	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	82.7	88.8	0	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	792	-	-	74	44	612	-	-
HCM Lane V/C Ratio	0.004	-	-	0.398	0.024	0.002	-	-
HCM Control Delay (s)	9.6	0	-	82.7	88.8	10.9	0	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	1.6	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	49	31	144	364	141	103	273	633	48	104	826	26
Future Vol, veh/h	49	31	144	364	141	103	273	633	48	104	826	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	4	4	4	1	1	1
Mvmt Flow	53	34	157	396	153	112	297	688	52	113	898	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2579	2472	912	2542	2460	714	926	0	0	740	0	0
Stage 1	1138	1138	-	1308	1308	-	-	-	-	-	-	-
Stage 2	1441	1334	-	1234	1152	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.14	-	-	4.11	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.236	-	-	2.209	-	-
Pot Cap-1 Maneuver	~ 17	~ 30	332	~ 18	~ 31	431	730	-	-	871	-	-
Stage 1	245	276	-	~ 196	229	-	-	-	-	-	-	-
Stage 2	165	223	-	~ 216	272	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 7	332	-	~ 7	431	730	-	-	871	-	-
Mov Cap-2 Maneuver	-	~ 7	-	-	~ 7	-	-	-	-	-	-	-
Stage 1	74	202	-	~ 59	~ 69	-	-	-	-	-	-	-
Stage 2	-	67	-	~ 70	199	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			3.8	1.1
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	730	-	-	-	-	871	-	-
HCM Lane V/C Ratio	0.406	-	-	-	-	0.13	-	-
HCM Control Delay (s)	13.3	0	-	-	-	9.7	0	-
HCM Lane LOS	B	A	-	-	-	A	A	-
HCM 95th %tile Q(veh)	2	-	-	-	-	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	22

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	75	601	108	138	751
Future Vol, veh/h	74	75	601	108	138	751
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	5	5	4	4	1	1
Mvmt Flow	76	77	620	111	142	774

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1734	676	0	0	731	0
Stage 1	676	-	-	-	-	-
Stage 2	1058	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.11	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.209	-
Pot Cap-1 Maneuver	95	448	-	-	878	-
Stage 1	500	-	-	-	-	-
Stage 2	329	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 68	448	-	-	878	-
Mov Cap-2 Maneuver	~ 68	-	-	-	-	-
Stage 1	500	-	-	-	-	-
Stage 2	236	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	248.5	0	1.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	119	878	-
HCM Lane V/C Ratio	-	-	1.291	0.162	-
HCM Control Delay (s)	-	-	248.5	9.9	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	10.1	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	355.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	101	24	520	323	78	33	603	162	38	764	48
Future Vol, veh/h	39	101	24	520	323	78	33	603	162	38	764	48
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
Heavy Vehicles, %	1	1	1	1	1	1	3	3	3	2	2	2
Mvmt Flow	42	110	26	565	351	85	36	655	176	41	830	52
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	23.7	171.8	458.4	522.3
HCM LOS	C	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	4%	100%	0%	100%	0%	4%
Vol Thru, %	76%	0%	81%	0%	81%	90%
Vol Right, %	20%	0%	19%	0%	19%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	798	39	125	520	401	850
LT Vol	33	39	0	520	0	38
Through Vol	603	0	101	0	323	764
RT Vol	162	0	24	0	78	48
Lane Flow Rate	867	42	136	565	436	924
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	1.944	0.12	0.361	1.418	1.004	2.09
Departure Headway (Hd)	10.304	15.001	14.317	12.067	11.384	10.101
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	364	241	254	305	323	370
Service Time	8.304	12.701	12.017	9.767	9.084	8.101
HCM Lane V/C Ratio	2.382	0.174	0.535	1.852	1.35	2.497
HCM Control Delay	458.4	19.7	24.9	237.4	86.7	522.3
HCM Lane LOS	F	C	C	F	F	F
HCM 95th-tile Q	46.7	0.4	1.6	22.6	11	53.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	121	0	121	0	681	879	0	420	864
Future Volume (veh/h)	0	0	0	121	0	121	0	681	879	0	420	864
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1885	0	1870	0	1870	1870	0	1885	1885
Adj Flow Rate, veh/h				132	0	132	0	740	0	0	457	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				1	0	2	0	2	2	0	1	1
Cap, veh/h				616	0	544	0	1575		0	1588	
Arrive On Green				0.34	0.00	0.34	0.00	0.44	0.00	0.00	0.44	0.00
Sat Flow, veh/h				1795	0	1585	0	3647	1585	0	3676	1598
Grp Volume(v), veh/h				132	0	132	0	740	0	0	457	0
Grp Sat Flow(s),veh/h/ln				1795	0	1585	0	1777	1585	0	1791	1598
Q Serve(g_s), s				3.1	0.0	3.6	0.0	8.8	0.0	0.0	4.9	0.0
Cycle Q Clear(g_c), s				3.1	0.0	3.6	0.0	8.8	0.0	0.0	4.9	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				616	0	544	0	1575		0	1588	
V/C Ratio(X)				0.21	0.00	0.24	0.00	0.47		0.00	0.29	
Avail Cap(c_a), veh/h				616	0	544	0	1575		0	1588	
HCM Platoon Ratio				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	0.00	0.66	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				14.0	0.0	14.1	0.0	11.7	0.0	0.0	10.7	0.0
Incr Delay (d2), s/veh				0.8	0.0	1.1	0.0	0.7	0.0	0.0	0.5	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
%ile BackOfQ(50%),veh/ln				1.3	0.0	1.3	0.0	2.8	0.0	0.0	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				14.8	0.0	15.2	0.0	12.4	0.0	0.0	11.1	0.0
LnGrp LOS				B	A	B	A	B		A	B	
Approach Vol, veh/h					264			740			457	
Approach Delay, s/veh					15.0			12.4			11.1	
Approach LOS					B			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	33.0		33.0		27.0			
Change Period (Y+Rc), s	6.4		6.4		6.4			
Max Green Setting (Gmax), s	26.6		26.6		20.6			
Max Q Clear Time (g_c+I1), s	10.8		6.9		5.6			
Green Ext Time (p_c), s	7.3		5.0		1.6			

Intersection Summary		
HCM 6th Ctrl Delay	12.5	
HCM 6th LOS	B	

Notes

Unsignalized Delay for [NBR, SBR] 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)	330	0	487	0	0	0	0	1229	140	110	431	0
Future Volume (veh/h)	330	0	487	0	0	0	0	1229	140	110	431	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1841	0	1841				0	1856	1856	1870	1870	0
Adj Flow Rate, veh/h	355	0	524				0	1322	151	118	463	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	0	4				0	3	3	2	2	0
Cap, veh/h	765	0	618				0	1702	759	227	2221	0
Arrive On Green	0.22	0.00	0.22				0.00	0.48	0.48	0.07	0.63	0.00
Sat Flow, veh/h	3401	0	2745				0	3618	1572	3456	3647	0
Grp Volume(v), veh/h	355	0	524				0	1322	151	118	463	0
Grp Sat Flow(s),veh/h/ln	1700	0	1373				0	1763	1572	1728	1777	0
Q Serve(g_s), s	7.8	0.0	15.7				0.0	26.7	4.7	2.8	4.8	0.0
Cycle Q Clear(g_c), s	7.8	0.0	15.7				0.0	26.7	4.7	2.8	4.8	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	765	0	618				0	1702	759	227	2221	0
V/C Ratio(X)	0.46	0.00	0.85				0.00	0.78	0.20	0.52	0.21	0.00
Avail Cap(c_a), veh/h	791	0	638				0	1702	759	603	2221	0
HCM Platoon Ratio	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				0.00	0.68	0.68	0.95	0.95	0.00
Uniform Delay (d), s/veh	28.8	0.0	31.9				0.0	18.4	12.7	38.9	7.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	13.3				0.0	2.4	0.4	0.7	0.2	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
%ile BackOfQ(50%),veh/ln	3.3	0.0	6.1				0.0	9.9	1.6	1.2	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	0.0	45.2				0.0	20.9	13.1	39.5	7.2	0.0
LnGrp LOS	C	A	D				A	C	B	D	A	A
Approach Vol, veh/h		879						1473			581	
Approach Delay, s/veh		39.4						20.1			13.7	
Approach LOS		D						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.2	48.0		25.7		60.3
Change Period (Y+Rc), s	* 6.6	6.5		* 6.4		6.5
Max Green Setting (Gmax), s	* 15	31.0		* 20		52.6
Max Q Clear Time (g_c+I1), s	14.8	28.7		17.7		6.8
Green Ext Time (p_c), s	0.1	2.1		1.6		6.6

Intersection Summary	
HCM 6th Ctrl Delay	24.6
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)	120	248	53	144	268	266	155	983	188	342	488	55
Future Volume (veh/h)	120	248	53	144	268	266	155	983	188	342	488	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1885	1885	1885	1856	1856	1856
Adj Flow Rate, veh/h	130	270	58	157	291	289	168	1068	204	372	530	60
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, %	6	6	6	6	6	6	1	1	1	3	3	3
Cap, veh/h	153	600	127	180	785	350	192	1477	659	422	1535	685
Arrive On Green	0.09	0.21	0.21	0.10	0.23	0.23	0.11	0.41	0.41	0.12	0.44	0.44
Sat Flow, veh/h	1725	2827	598	1725	3441	1535	1795	3582	1598	3428	3526	1572
Grp Volume(v), veh/h	130	163	165	157	291	289	168	1068	204	372	530	60
Grp Sat Flow(s),veh/h/ln	1725	1721	1704	1725	1721	1535	1795	1791	1598	1714	1763	1572
Q Serve(g_s), s	10.4	11.5	11.9	12.6	10.0	25.1	12.9	35.0	12.0	14.9	14.0	3.1
Cycle Q Clear(g_c), s	10.4	11.5	11.9	12.6	10.0	25.1	12.9	35.0	12.0	14.9	14.0	3.1
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	365	362	180	785	350	192	1477	659	422	1535	685
V/C Ratio(X)	0.85	0.45	0.46	0.87	0.37	0.83	0.87	0.72	0.31	0.88	0.35	0.09
Avail Cap(c_a), veh/h	259	504	499	259	1008	449	269	1477	659	514	1535	685
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	0.93	0.93	0.93
Uniform Delay (d), s/veh	62.9	48.0	48.1	61.8	45.6	51.4	61.6	34.5	27.7	60.4	26.3	23.2
Incr Delay (d2), s/veh	5.3	2.5	2.6	14.9	0.8	14.6	15.7	3.1	1.2	11.8	0.6	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	4.7	5.1	5.2	6.1	4.3	10.8	6.7	15.5	4.7	7.1	5.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.1	50.4	50.7	76.7	46.4	66.0	77.2	37.6	28.9	72.2	26.8	23.4
LnGrp LOS	E	D	D	E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		458			737			1440			962	
Approach Delay, s/veh		55.6			60.5			41.0			44.1	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	65.9	17.3	37.2	22.8	62.6	19.5	35.0
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	21.0	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	14.9	16.0	12.4	27.1	16.9	37.0	14.6	13.9
Green Ext Time (p_c), s	0.1	8.5	0.1	4.9	0.3	0.0	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	26	136	9	151	296	64	29	331	32	55	804	112
Future Vol, veh/h	26	136	9	151	296	64	29	331	32	55	804	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3	1	1	1
Mvmt Flow	28	148	10	164	322	70	32	360	35	60	874	122

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1693	1514	935	1576	1558	378	996	0	0	395	0	0
Stage 1	1055	1055	-	442	442	-	-	-	-	-	-	-
Stage 2	638	459	-	1134	1116	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.11	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.209	-	-
Pot Cap-1 Maneuver	74	~ 120	322	~ 89	~ 112	669	691	-	-	1169	-	-
Stage 1	273	302	-	594	576	-	-	-	-	-	-	-
Stage 2	465	566	-	246	~ 283	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 99	322	-	~ 93	669	691	-	-	1169	-	-
Mov Cap-2 Maneuver	-	~ 99	-	-	~ 93	-	-	-	-	-	-	-
Stage 1	257	266	-	558	541	-	-	-	-	-	-	-
Stage 2	159	532	-	~ 93	~ 250	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.8	0.5
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	691	-	-	-	-	1169	-	-
HCM Lane V/C Ratio	0.046	-	-	-	-	0.051	-	-
HCM Control Delay (s)	10.5	0	-	-	-	8.2	0	-
HCM Lane LOS	B	A	-	-	-	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	19.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	8	21	107	8	19	5	293	22	3	905	45
Future Vol, veh/h	27	8	21	107	8	19	5	293	22	3	905	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	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	1	1	1	2	2	2	1	1	1
Mvmt Flow	29	9	23	116	9	21	5	318	24	3	984	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1370	1367	1009	1371	1379	330	1033	0	0	342	0	0
Stage 1	1015	1015	-	340	340	-	-	-	-	-	-	-
Stage 2	355	352	-	1031	1039	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	124	147	292	124	145	714	673	-	-	1223	-	-
Stage 1	287	316	-	677	641	-	-	-	-	-	-	-
Stage 2	662	632	-	283	309	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	114	146	292	~ 108	144	714	673	-	-	1223	-	-
Mov Cap-2 Maneuver	114	146	-	~ 108	144	-	-	-	-	-	-	-
Stage 1	285	315	-	672	637	-	-	-	-	-	-	-
Stage 2	629	628	-	253	308	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	37.1	199.4	0.2	0
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	673	-	-	120	292	125	1223	-	-
HCM Lane V/C Ratio	0.008	-	-	0.317	0.078	1.165	0.003	-	-
HCM Control Delay (s)	10.4	-	-	48.3	18.4	199.4	8	-	-
HCM Lane LOS	B	-	-	E	C	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.3	8.8	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.0	0.2	11.5	0.0	11.7
Denied Del/Veh (s)	0.1	1.2	75.3	0.0	26.0
Total Delay (hr)	2.2	3.4	14.2	5.1	24.9
Total Del/Veh (s)	34.5	22.0	114.9	58.9	58.2
Stop Delay (hr)	1.9	2.3	13.4	4.4	22.1
Stop Del/Veh (s)	29.9	15.2	108.6	50.9	51.6

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	194	23	217	147	109	105	472	359	109	1350	171
Future Vol, veh/h	45	194	23	217	147	109	105	472	359	109	1350	171
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	140	-	140	155	-	-	155	-	-
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	3	3	3	6	6	6	1	1	1
Mvmt Flow	49	211	25	236	160	118	114	513	390	118	1467	186

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2871	2927	1560	2850	2825	708	1653	0	0	903	0	0
Stage 1	1796	1796	-	936	936	-	-	-	-	-	-	-
Stage 2	1075	1131	-	1914	1889	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.53	6.23	4.16	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.027	3.327	2.254	-	-	2.209	-	-
Pot Cap-1 Maneuver	~ 10	~ 15	138	~ 11	~ 18	433	380	-	-	757	-	-
Stage 1	103	~ 132	-	317	342	-	-	-	-	-	-	-
Stage 2	266	278	-	~ 87	~ 118	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 9	138	-	~ 11	433	380	-	-	757	-	-
Mov Cap-2 Maneuver	-	~ 9	-	-	~ 11	-	-	-	-	-	-	-
Stage 1	72	~ 111	-	~ 222	239	-	-	-	-	-	-	-
Stage 2	~ 45	~ 195	-	-	~ 100	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			2.1	0.7
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	380	-	-	-	10	-	11	433	757	-	-
HCM Lane V/C Ratio	0.3	-	-	-	23.587	-	14.526	0.274	0.157	-	-
HCM Control Delay (s)	18.5	-	-	-	$ 10892.1	-	$ 6752.1	16.4	10.6	-	-
HCM Lane LOS	C	-	-	-	F	-	F	C	B	-	-
HCM 95th %tile Q(veh)	1.2	-	-	-	31.1	-	21.4	1.1	0.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	23	0	6	1	0	0	4	712	0	0	960	70
Future Vol, veh/h	23	0	6	1	0	0	4	712	0	0	960	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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, %	5	5	5	0	0	0	4	4	4	1	1	1
Mvmt Flow	25	0	7	1	0	0	4	774	0	0	1043	76

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1863	1863	1081	1867	1901	774	1119	0	0	774	0	0
Stage 1	1081	1081	-	782	782	-	-	-	-	-	-	-
Stage 2	782	782	-	1085	1119	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.1	6.5	6.2	4.14	-	-	4.11	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.5	4	3.3	2.236	-	-	2.209	-	-
Pot Cap-1 Maneuver	55	72	261	56	70	402	617	-	-	846	-	-
Stage 1	260	290	-	390	408	-	-	-	-	-	-	-
Stage 2	383	401	-	265	285	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	55	71	261	54	69	402	617	-	-	846	-	-
Mov Cap-2 Maneuver	55	71	-	54	69	-	-	-	-	-	-	-
Stage 1	257	290	-	386	404	-	-	-	-	-	-	-
Stage 2	379	397	-	258	285	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	101.8	73	0.1	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	617	-	-	66	54	846	-	-
HCM Lane V/C Ratio	0.007	-	-	0.478	0.02	-	-	-
HCM Control Delay (s)	10.9	0	-	101.8	73	0	-	-
HCM Lane LOS	B	A	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.9	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	54	352	15	19	781
Future Vol, veh/h	43	54	352	15	19	781
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	0	0	1
Mvmt Flow	47	59	383	16	21	849

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1282	391	0	0	399	0
Stage 1	391	-	-	-	-	-
Stage 2	891	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	184	662	-	-	1171	-
Stage 1	688	-	-	-	-	-
Stage 2	404	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	178	662	-	-	1171	-
Mov Cap-2 Maneuver	178	-	-	-	-	-
Stage 1	688	-	-	-	-	-
Stage 2	390	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.4	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	300	1171	-
HCM Lane V/C Ratio	-	-	0.351	0.018	-
HCM Control Delay (s)	-	-	23.4	8.1	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.5	0.1	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	200	157	4	10	63
Future Vol, veh/h	22	200	157	4	10	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	2	0	0	0
Mvmt Flow	24	217	171	4	11	68

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	175	0	-	0	438	173
Stage 1	-	-	-	-	173	-
Stage 2	-	-	-	-	265	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1414	-	-	-	580	876
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	784	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1414	-	-	-	569	876
Mov Cap-2 Maneuver	-	-	-	-	569	-
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	784	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1414	-	-	-	816
HCM Lane V/C Ratio	0.017	-	-	-	0.097
HCM Control Delay (s)	7.6	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	112	50	307	77	73	37	318	970	160	56	743	68
Future Vol, veh/h	112	50	307	77	73	37	318	970	160	56	743	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3
Mvmt Flow	122	54	334	84	79	40	346	1054	174	61	808	74

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2860	2887	845	2994	2837	1141	882	0	0	1228	0	0
Stage 1	967	967	-	1833	1833	-	-	-	-	-	-	-
Stage 2	1893	1920	-	1161	1004	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.13	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	~ 11	~ 16	363	~ 8	~ 17	244	767	-	-	564	-	-
Stage 1	306	333	-	98	127	-	-	-	-	-	-	-
Stage 2	~ 90	115	-	238	320	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	363	-	0	244	767	-	-	564	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	306	261	-	98	0	-	-	-	-	-	-	-
Stage 2	-	0	-	~ 12	251	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			3	0.8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	767	-	-	-	-	564	-	-
HCM Lane V/C Ratio	0.451	-	-	-	-	0.108	-	-
HCM Control Delay (s)	13.5	0	-	-	-	12.2	0	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th %tile Q(veh)	2.4	-	-	-	-	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	68.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	109	105	876	89	107	650
Future Vol, veh/h	109	105	876	89	107	650
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	6	6	2	2	3	3
Mvmt Flow	111	107	894	91	109	663

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1821	940	0	0	985	0
Stage 1	940	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.13	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.227	-
Pot Cap-1 Maneuver	~ 83	314	-	-	697	-
Stage 1	374	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 62	314	-	-	697	-
Mov Cap-2 Maneuver	~ 62	-	-	-	-	-
Stage 1	374	-	-	-	-	-
Stage 2	300	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 613	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	102	697	-
HCM Lane V/C Ratio	-	-	2.141	0.157	-
HCM Control Delay (s)	-	-	$ 613	11.1	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	18.9	0.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	487.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	166	342	46	368	127	105	6	685	411	32	694	16
Future Vol, veh/h	166	342	46	368	127	105	6	685	411	32	694	16
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles, %	2	2	2	2	2	2	3	3	3	4	4	4
Mvmt Flow	168	345	46	372	128	106	6	692	415	32	701	16
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	92.4	89.9	894.6	501
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	1%	100%	0%	100%	0%	4%
Vol Thru, %	62%	0%	88%	0%	55%	94%
Vol Right, %	37%	0%	12%	0%	45%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1102	166	388	368	232	742
LT Vol	6	166	0	368	0	32
Through Vol	685	0	342	0	127	694
RT Vol	411	0	46	0	105	16
Lane Flow Rate	1113	168	392	372	234	749
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	2.912	0.476	1.05	1.056	0.613	2.009
Departure Headway (Hd)	12.54	16.618	15.986	16.499	15.615	15.289
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	301	220	231	223	234	247
Service Time	10.54	14.318	13.686	14.199	13.315	13.289
HCM Lane V/C Ratio	3.698	0.764	1.697	1.668	1	3.032
HCM Control Delay	894.6	33.6	117.6	121.2	40.3	501
HCM Lane LOS	F	D	F	F	E	F
HCM 95th-tile Q	72.9	2.3	10.1	10.1	3.6	34.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	133	0	113	0	867	486	0	566	465
Future Volume (veh/h)	0	0	0	133	0	113	0	867	486	0	566	465
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1841	0	1841	0	1870	1870	0	1856	1856
Adj Flow Rate, veh/h				145	0	123	0	942	0	0	615	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				4	0	4	0	2	2	0	3	3
Cap, veh/h				251	0	224	0	2286		0	2268	
Arrive On Green				0.14	0.00	0.14	0.00	0.64	0.00	0.00	0.64	0.00
Sat Flow, veh/h				1753	0	1560	0	3647	1585	0	3618	1572
Grp Volume(v), veh/h				145	0	123	0	942	0	0	615	0
Grp Sat Flow(s),veh/h/ln				1753	0	1560	0	1777	1585	0	1763	1572
Q Serve(g_s), s				4.6	0.0	4.4	0.0	7.7	0.0	0.0	4.5	0.0
Cycle Q Clear(g_c), s				4.6	0.0	4.4	0.0	7.7	0.0	0.0	4.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				251	0	224	0	2286		0	2268	
V/C Ratio(X)				0.58	0.00	0.55	0.00	0.41		0.00	0.27	
Avail Cap(c_a), veh/h				251	0	224	0	2286		0	2268	
HCM Platoon Ratio				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	0.00	0.75	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				24.0	0.0	23.9	0.0	5.2	0.0	0.0	4.6	0.0
Incr Delay (d2), s/veh				9.3	0.0	9.4	0.0	0.4	0.0	0.0	0.3	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
%ile BackOfQ(50%),veh/ln				2.4	0.0	2.1	0.0	1.7	0.0	0.0	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				33.3	0.0	33.3	0.0	5.6	0.0	0.0	4.9	0.0
LnGrp LOS				C	A	C	A	A		A	A	
Approach Vol, veh/h					268			942			615	
Approach Delay, s/veh					33.3			5.6			4.9	
Approach LOS					C			A			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	45.0		45.0		15.0			
Change Period (Y+Rc), s	6.4		6.4		6.4			
Max Green Setting (Gmax), s	38.6		38.6		8.6			
Max Q Clear Time (g_c+I1), s	9.7		6.5		6.6			
Green Ext Time (p_c), s	13.3		8.5		0.3			

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

Notes

Unsignalized Delay for [NBR, SBR] 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)	474	0	867	0	0	0	0	879	135	134	565	0
Future Volume (veh/h)	474	0	867	0	0	0	0	879	135	134	565	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	515	0	942				0	955	147	146	614	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	749	0	605				0	1743	777	234	2256	0
Arrive On Green	0.22	0.00	0.22				0.00	0.49	0.49	0.07	0.63	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	515	0	942				0	955	147	146	614	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	11.7	0.0	18.5				0.0	16.1	4.5	3.5	6.6	0.0
Cycle Q Clear(g_c), s	11.7	0.0	18.5				0.0	16.1	4.5	3.5	6.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	749	0	605				0	1743	777	234	2256	0
V/C Ratio(X)	0.69	0.00	1.56				0.00	0.55	0.19	0.62	0.27	0.00
Avail Cap(c_a), veh/h	749	0	605				0	1743	777	603	2256	0
HCM Platoon Ratio	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				0.00	0.81	0.81	0.95	0.95	0.00
Uniform Delay (d), s/veh	31.1	0.0	33.8				0.0	15.3	12.3	39.0	6.9	0.0
Incr Delay (d2), s/veh	4.9	0.0	258.9				0.0	1.0	0.4	1.0	0.3	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
%ile BackOfQ(50%),veh/ln	5.2	0.0	27.8				0.0	5.9	1.5	1.5	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.0	0.0	292.6				0.0	16.3	12.7	40.0	7.2	0.0
LnGrp LOS	D	A	F				A	B	B	D	A	A
Approach Vol, veh/h		1457						1102			760	
Approach Delay, s/veh		201.9						15.8			13.5	
Approach LOS		F						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.4	48.7		24.9		61.1
Change Period (Y+Rc), s	* 6.6	6.5		* 6.4		6.5
Max Green Setting (Gmax), s	* 15	32.5		* 19		54.1
Max Q Clear Time (g_c+I1), s	15.5	18.1		20.5		8.6
Green Ext Time (p_c), s	0.1	9.4		0.0		9.2

Intersection Summary	
HCM 6th Ctrl Delay	97.0
HCM 6th LOS	F

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)	230	212	106	151	181	223	88	561	147	341	893	88
Future Volume (veh/h)	230	212	106	151	181	223	88	561	147	341	893	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	250	230	115	164	197	242	96	610	160	371	971	96
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	1	1	1
Cap, veh/h	267	544	263	188	675	301	118	1389	620	422	1623	724
Arrive On Green	0.15	0.23	0.23	0.11	0.19	0.19	0.07	0.39	0.39	0.12	0.45	0.45
Sat Flow, veh/h	1781	2323	1122	1781	3554	1585	1781	3554	1585	3483	3582	1598
Grp Volume(v), veh/h	250	174	171	164	197	242	96	610	160	371	971	96
Grp Sat Flow(s),veh/h/ln	1781	1777	1668	1781	1777	1585	1781	1777	1585	1742	1791	1598
Q Serve(g_s), s	19.4	11.6	12.2	12.7	6.7	20.4	7.4	17.7	9.6	14.7	28.5	4.9
Cycle Q Clear(g_c), s	19.4	11.6	12.2	12.7	6.7	20.4	7.4	17.7	9.6	14.7	28.5	4.9
Prop In Lane	1.00		0.67	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	416	391	188	675	301	118	1389	620	422	1623	724
V/C Ratio(X)	0.94	0.42	0.44	0.87	0.29	0.80	0.81	0.44	0.26	0.88	0.60	0.13
Avail Cap(c_a), veh/h	267	520	489	267	1041	464	267	1389	620	522	1623	724
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	0.72	0.72	0.72
Uniform Delay (d), s/veh	58.8	45.5	45.7	61.7	48.6	54.2	64.5	31.3	28.9	60.5	28.7	22.3
Incr Delay (d2), s/veh	37.6	1.9	2.2	15.0	0.7	13.1	5.0	1.0	1.0	8.9	1.2	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	11.4	5.3	5.2	6.4	3.0	9.1	3.5	7.7	3.8	6.9	12.1	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.4	47.4	48.0	76.7	49.3	67.3	69.5	32.4	29.9	69.4	29.9	22.6
LnGrp LOS	F	D	D	E	D	E	E	C	C	E	C	C
Approach Vol, veh/h		595			603			866			1438	
Approach Delay, s/veh		68.2			64.0			36.0			39.6	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	68.3	25.9	31.9	22.6	59.6	19.7	38.1
Change Period (Y+Rc), s	4.6	4.9	4.9	5.3	5.6	4.9	4.9	5.3
Max Green Setting (Gmax), s	21.3	37.3	21.0	41.0	21.0	36.3	21.0	41.0
Max Q Clear Time (g_c+I1), s	9.4	30.5	21.4	22.4	16.7	19.7	14.7	14.2
Green Ext Time (p_c), s	0.1	5.6	0.0	4.1	0.3	9.2	0.1	4.3

Intersection Summary	
HCM 6th Ctrl Delay	47.8
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	134.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	76	75	32	50	62	47	14	605	205	59	354	51
Future Vol, veh/h	76	75	32	50	62	47	14	605	205	59	354	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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	3	3	3
Mvmt Flow	83	82	35	54	67	51	15	658	223	64	385	55

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1400	1452	413	1399	1368	770	440	0	0	881	0	0
Stage 1	541	541	-	800	800	-	-	-	-	-	-	-
Stage 2	859	911	-	599	568	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.13	-	-
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	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	118	130	639	118	147	401	1120	-	-	763	-	-
Stage 1	525	521	-	379	397	-	-	-	-	-	-	-
Stage 2	351	353	-	488	506	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 54	112	639	~ 41	127	401	1120	-	-	763	-	-
Mov Cap-2 Maneuver	~ 54	112	-	~ 41	127	-	-	-	-	-	-	-
Stage 1	510	463	-	368	386	-	-	-	-	-	-	-
Stage 2	246	343	-	338	449	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 704	$ 562	0.1	1.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1120	-	-	86	87	763	-	-
HCM Lane V/C Ratio	0.014	-	-	2.313	1.987	0.084	-	-
HCM Control Delay (s)	8.3	0	-	$ 704	$ 562	10.2	0	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	18.2	15	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	6	5	23	4	13	8	640	74	13	404	31
Future Vol, veh/h	44	6	5	23	4	13	8	640	74	13	404	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	85	-	-	-	170	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	2	2	2	3	3	3
Mvmt Flow	47	6	5	25	4	14	9	688	80	14	434	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1234	1265	451	1230	1241	728	467	0	0	768	0	0
Stage 1	479	479	-	746	746	-	-	-	-	-	-	-
Stage 2	755	786	-	484	495	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.12	-	-	4.13	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.218	-	-	2.227	-	-
Pot Cap-1 Maneuver	154	170	610	154	175	423	1094	-	-	841	-	-
Stage 1	570	557	-	405	421	-	-	-	-	-	-	-
Stage 2	402	405	-	564	546	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	143	166	610	145	171	423	1094	-	-	841	-	-
Mov Cap-2 Maneuver	143	166	-	145	171	-	-	-	-	-	-	-
Stage 1	565	548	-	402	418	-	-	-	-	-	-	-
Stage 2	382	402	-	543	537	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	40.8	29.7	0.1	0.3
HCM LOS	E	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1094	-	-	145	610	188	841	-	-
HCM Lane V/C Ratio	0.008	-	-	0.371	0.009	0.229	0.017	-	-
HCM Control Delay (s)	8.3	-	-	43.8	11	29.7	9.4	-	-
HCM Lane LOS	A	-	-	E	B	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.6	0	0.8	0.1	-	-

9: Armstrong Avenue & Olive Avenue Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.1	0.2	142.5	0.0	142.8
Denied Del/Veh (s)	0.5	1.4	732.8	0.0	250.4
Total Delay (hr)	6.5	5.3	44.2	0.8	56.8
Total Del/Veh (s)	41.7	33.8	333.5	12.3	110.8
Stop Delay (hr)	5.7	4.2	46.1	0.6	56.6
Stop Del/Veh (s)	36.4	27.2	348.2	8.8	110.5

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	123	40	74	119	55	56	59	1505	112	108	889	41
Future Vol, veh/h	123	40	74	119	55	56	59	1505	112	108	889	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	140	-	-	140	-	140	155	-	-	155	-	-
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	1	1	1	2	2	2	1	1	1
Mvmt Flow	134	43	80	129	60	61	64	1636	122	117	966	45

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3109	3109	989	3109	3070	1697	1011	0	0	1758	0	0
Stage 1	1223	1223	-	1825	1825	-	-	-	-	-	-	-
Stage 2	1886	1886	-	1284	1245	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.11	6.51	6.21	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.509	4.009	3.309	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	~ 7	~ 12	299	~ 7	~ 12	115	686	-	-	358	-	-
Stage 1	219	252	-	~ 99	129	-	-	-	-	-	-	-
Stage 2	~ 91	119	-	203	247	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 7	299	-	~ 7	115	686	-	-	358	-	-
Mov Cap-2 Maneuver	-	~ 7	-	-	~ 7	-	-	-	-	-	-	-
Stage 1	199	170	-	~ 90	117	-	-	-	-	-	-	-
Stage 2	~ 19	108	-	~ 74	166	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.4	2.1
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBL	SBT	SBR
Capacity (veh/h)	686	-	-	-	19	-	7	115	358	-	-
HCM Lane V/C Ratio	0.093	-	-	-	6.522	-	8.54	0.529	0.328	-	-
HCM Control Delay (s)	10.8	-	-	-	$ 2885.9	-	$ 4419.2	67	19.9	-	-
HCM Lane LOS	B	-	-	-	F	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	16	-	9.1	2.5	1.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	0	12	1	0	0	3	1101	0	1	785	24
Future Vol, veh/h	16	0	12	1	0	0	3	1101	0	1	785	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	17	0	13	1	0	0	3	1159	0	1	826	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2006	2006	839	2012	2018	1159	851	0	0	1159	0	0
Stage 1	841	841	-	1165	1165	-	-	-	-	-	-	-
Stage 2	1165	1165	-	847	853	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	45	60	369	44	59	241	788	-	-	606	-	-
Stage 1	362	383	-	239	271	-	-	-	-	-	-	-
Stage 2	239	271	-	359	378	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	45	59	369	42	58	241	788	-	-	606	-	-
Mov Cap-2 Maneuver	45	59	-	42	58	-	-	-	-	-	-	-
Stage 1	358	382	-	236	268	-	-	-	-	-	-	-
Stage 2	236	268	-	346	377	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	86	92.9	0	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	788	-	-	72	42	606	-	-
HCM Lane V/C Ratio	0.004	-	-	0.409	0.025	0.002	-	-
HCM Control Delay (s)	9.6	0	-	86	92.9	11	0	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0	-	-	1.6	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	36	588	48	61	372
Future Vol, veh/h	29	36	588	48	61	372
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	2	0	0	3
Mvmt Flow	32	39	639	52	66	404

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1201	665	0	0	691	0
Stage 1	665	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	206	464	-	-	913	-
Stage 1	515	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	187	464	-	-	913	-
Mov Cap-2 Maneuver	187	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	536	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.2	0	1.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	279	913	-
HCM Lane V/C Ratio	-	-	0.253	0.073	-
HCM Control Delay (s)	-	-	22.2	9.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1	0.2	-

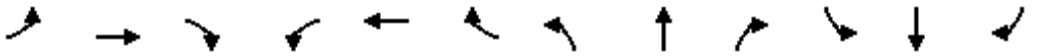
Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	71	58	65	12	7	42
Future Vol, veh/h	71	58	65	12	7	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	2	2	0	0	0
Mvmt Flow	77	63	71	13	8	46

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	84	0	-	0	295	78
Stage 1	-	-	-	-	78	-
Stage 2	-	-	-	-	217	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1526	-	-	-	700	988
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	824	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1526	-	-	-	664	988
Mov Cap-2 Maneuver	-	-	-	-	664	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	824	-

Approach	EB	WB	SB
HCM Control Delay, s	4.1	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1526	-	-	-	924
HCM Lane V/C Ratio	0.051	-	-	-	0.058
HCM Control Delay (s)	7.5	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	62	23	429	124	40	27	341	87	3	466	11
Future Volume (veh/h)	38	62	23	429	124	40	27	341	87	3	466	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	38	63	23	433	125	40	27	344	88	3	471	11
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	63	98	36	459	403	129	50	1223	309	7	1449	34
Arrive On Green	0.04	0.07	0.07	0.26	0.30	0.30	0.03	0.44	0.44	0.00	0.41	0.41
Sat Flow, veh/h	1781	1307	477	1781	1358	434	1767	2788	704	1753	3493	82
Grp Volume(v), veh/h	38	0	86	433	0	165	27	216	216	3	236	246
Grp Sat Flow(s),veh/h/ln	1781	0	1784	1781	0	1792	1767	1763	1729	1753	1749	1826
Q Serve(g_s), s	1.7	0.0	3.7	19.1	0.0	5.7	1.2	6.3	6.4	0.1	7.3	7.3
Cycle Q Clear(g_c), s	1.7	0.0	3.7	19.1	0.0	5.7	1.2	6.3	6.4	0.1	7.3	7.3
Prop In Lane	1.00		0.27	1.00		0.24	1.00		0.41	1.00		0.04
Lane Grp Cap(c), veh/h	63	0	133	459	0	531	50	774	759	7	725	757
V/C Ratio(X)	0.60	0.00	0.65	0.94	0.00	0.31	0.54	0.28	0.28	0.42	0.32	0.33
Avail Cap(c_a), veh/h	134	0	402	459	0	730	110	774	759	110	725	757
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	0.0	36.0	29.1	0.0	21.8	38.4	14.4	14.4	39.7	15.8	15.8
Incr Delay (d2), s/veh	8.7	0.0	5.2	28.4	0.0	0.3	8.8	0.9	0.9	35.7	1.2	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	0.8	0.0	1.7	11.0	0.0	2.2	0.6	2.4	2.4	0.1	2.7	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.7	0.0	41.1	57.5	0.0	22.1	47.2	15.3	15.3	75.4	17.0	17.0
LnGrp LOS	D	A	D	E	A	C	D	B	B	E	B	B
Approach Vol, veh/h		124			598			459			485	
Approach Delay, s/veh		42.9			47.8			17.2			17.4	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	39.6	25.1	10.5	6.8	37.7	7.4	28.2
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	5.0	18.4	20.6	18.0	5.0	18.4	6.0	32.6
Max Q Clear Time (g_c+I1), s	2.1	8.4	21.1	5.7	3.2	9.3	3.7	7.7
Green Ext Time (p_c), s	0.0	1.6	0.0	0.2	0.0	1.7	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	30.1
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	0	339	0	0	0	0	945	34	29	190	0
Future Volume (veh/h)	223	0	339	0	0	0	0	945	34	29	190	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	245	0	373				0	1038	37	32	209	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	568	0	458				0	2074	925	127	2465	0
Arrive On Green	0.16	0.00	0.16				0.00	0.58	0.58	0.04	0.69	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	245	0	373				0	1038	37	32	209	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	5.7	0.0	11.5				0.0	15.5	0.9	0.8	1.7	0.0
Cycle Q Clear(g_c), s	5.7	0.0	11.5				0.0	15.5	0.9	0.8	1.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	568	0	458				0	2074	925	127	2465	0
V/C Ratio(X)	0.43	0.00	0.81				0.00	0.50	0.04	0.25	0.08	0.00
Avail Cap(c_a), veh/h	604	0	487				0	2074	925	284	2465	0
HCM Platoon Ratio	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				0.00	0.90	0.90	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.9	0.0	36.3				0.0	11.0	8.0	42.1	4.5	0.0
Incr Delay (d2), s/veh	2.2	0.0	14.2				0.0	0.8	0.1	0.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	4.7				0.0	5.2	0.3	0.3	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.1	0.0	50.5				0.0	11.8	8.1	42.5	4.6	0.0
LnGrp LOS	D	A	D				A	B	A	D	A	A
Approach Vol, veh/h		618						1075			241	
Approach Delay, s/veh		44.8						11.7			9.6	
Approach LOS		D						B			A	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	9.9	59.0	21.1	68.9
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 7.4	47.5	* 16	61.5
Max Q Clear Time (g_c+I1), s	2.8	17.5	13.5	3.7
Green Ext Time (p_c), s	0.0	15.6	1.2	2.8

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

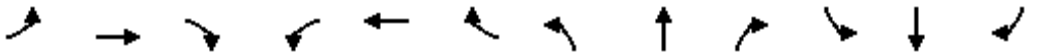
Notes

* 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)	5	2	9	72	1	90	3	347	67	72	559	2
Future Volume (veh/h)	5	2	9	72	1	90	3	347	67	72	559	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	6	2	10	82	1	102	3	394	76	82	635	2
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	1	1	1
Cap, veh/h	261	27	137	264	190	161	606	1120	216	729	1381	4
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	1291	271	1355	1413	1885	1598	791	1524	294	931	1878	6
Grp Volume(v), veh/h	6	0	12	82	1	102	3	0	470	82	0	637
Grp Sat Flow(s),veh/h/ln	1291	0	1626	1413	1885	1598	791	0	1817	931	0	1884
Q Serve(g_s), s	0.2	0.0	0.4	3.1	0.0	3.4	0.1	0.0	5.1	1.9	0.0	7.4
Cycle Q Clear(g_c), s	0.3	0.0	0.4	3.4	0.0	3.4	7.5	0.0	5.1	7.0	0.0	7.4
Prop In Lane	1.00		0.83	1.00		1.00	1.00		0.16	1.00		0.00
Lane Grp Cap(c), veh/h	261	0	164	264	190	161	606	0	1337	729	0	1386
V/C Ratio(X)	0.02	0.00	0.07	0.31	0.01	0.63	0.00	0.00	0.35	0.11	0.00	0.46
Avail Cap(c_a), veh/h	553	0	532	584	617	523	606	0	1337	729	0	1386
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	1.00
Uniform Delay (d), s/veh	22.4	0.0	22.4	24.0	22.2	23.7	4.4	0.0	2.6	3.8	0.0	2.9
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.7	0.0	4.1	0.0	0.0	0.7	0.3	0.0	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	0.1	0.0	0.1	0.9	0.0	1.3	0.0	0.0	0.6	0.2	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	0.0	22.6	24.6	22.3	27.8	4.4	0.0	3.3	4.2	0.0	4.0
LnGrp LOS	C	A	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		18			185			473			719	
Approach Delay, s/veh		22.5			26.4			3.3			4.0	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	44.9	10.1	44.9	10.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	28.0	18.0	28.0	18.0
Max Q Clear Time (g_c+I1), s	9.5	2.4	9.4	5.4
Green Ext Time (p_c), s	2.6	0.0	4.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	99	43	241	77	59	6	369	156	11	410	15
Future Volume (veh/h)	139	99	43	241	77	59	6	369	156	11	410	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	140	100	43	243	78	60	6	373	158	11	414	15
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	176	140	60	270	162	124	14	1128	471	24	1622	59
Arrive On Green	0.10	0.11	0.11	0.15	0.16	0.16	0.01	0.47	0.47	0.01	0.47	0.47
Sat Flow, veh/h	1781	1241	534	1781	980	754	1767	2424	1012	1753	3443	124
Grp Volume(v), veh/h	140	0	143	243	0	138	6	270	261	11	210	219
Grp Sat Flow(s),veh/h/ln	1781	0	1774	1781	0	1735	1767	1763	1673	1753	1749	1818
Q Serve(g_s), s	5.4	0.0	5.4	9.4	0.0	5.1	0.2	6.8	6.9	0.4	5.1	5.1
Cycle Q Clear(g_c), s	5.4	0.0	5.4	9.4	0.0	5.1	0.2	6.8	6.9	0.4	5.1	5.1
Prop In Lane	1.00		0.30	1.00		0.43	1.00		0.60	1.00		0.07
Lane Grp Cap(c), veh/h	176	0	200	270	0	286	14	820	778	24	824	857
V/C Ratio(X)	0.79	0.00	0.72	0.90	0.00	0.48	0.43	0.33	0.34	0.46	0.25	0.26
Avail Cap(c_a), veh/h	219	0	456	270	0	496	126	820	778	125	824	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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	30.0	29.2	0.0	26.5	34.6	11.8	11.9	34.3	11.1	11.1
Incr Delay (d2), s/veh	14.8	0.0	4.8	30.4	0.0	1.3	19.7	1.1	1.2	12.9	0.7	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	2.8	0.0	2.4	5.9	0.0	2.0	0.2	2.4	2.4	0.3	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.6	0.0	34.7	59.6	0.0	27.8	54.3	12.9	13.0	47.1	11.9	11.9
LnGrp LOS	D	A	C	E	A	C	D	B	B	D	B	B
Approach Vol, veh/h		283			381			537			440	
Approach Delay, s/veh		40.1			48.1			13.4			12.7	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	37.1	15.1	12.4	5.1	37.5	11.4	16.0
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	5.0	18.4	10.6	18.0	5.0	18.4	8.6	20.0
Max Q Clear Time (g_c+I1), s	2.4	8.9	11.4	7.4	2.2	7.1	7.4	7.1
Green Ext Time (p_c), s	0.0	2.0	0.0	0.4	0.0	1.6	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	0	727	0	0	0	0	534	22	75	298	0
Future Volume (veh/h)	360	0	727	0	0	0	0	534	22	75	298	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	396	0	799				0	587	24	82	327	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	1029	0	831				0	1527	681	201	1994	0
Arrive On Green	0.30	0.00	0.30				0.00	0.43	0.43	0.06	0.56	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	396	0	799				0	587	24	82	327	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	8.1	0.0	25.2				0.0	10.2	0.8	2.1	4.0	0.0
Cycle Q Clear(g_c), s	8.1	0.0	25.2				0.0	10.2	0.8	2.1	4.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1029	0	831				0	1527	681	201	1994	0
V/C Ratio(X)	0.38	0.00	0.96				0.00	0.38	0.04	0.41	0.16	0.00
Avail Cap(c_a), veh/h	1029	0	831				0	1527	681	284	1994	0
HCM Platoon Ratio	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				0.00	0.97	0.97	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.2	0.0	31.2				0.0	17.5	14.9	40.9	9.5	0.0
Incr Delay (d2), s/veh	1.0	0.0	23.1				0.0	0.7	0.1	0.5	0.2	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
%ile BackOfQ(50%),veh/ln	3.4	0.0	10.8				0.0	3.9	0.3	0.9	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	54.3				0.0	18.2	15.0	41.4	9.7	0.0
LnGrp LOS	C	A	D				A	B	B	D	A	A
Approach Vol, veh/h		1195						611			409	
Approach Delay, s/veh		45.0						18.1			16.1	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	11.8	45.2	33.0	57.0
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 7.4	36.5	* 27	50.5
Max Q Clear Time (g_c+I1), s	10.1	12.2	27.2	6.0
Green Ext Time (p_c), s	0.0	7.4	0.0	4.4

Intersection Summary	
HCM 6th Ctrl Delay	32.2
HCM 6th LOS	C

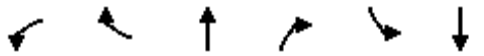
Notes

* 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)	3	1	6	62	2	48	10	486	56	95	429	6
Future Volume (veh/h)	3	1	6	62	2	48	10	486	56	95	429	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	3	1	7	70	2	55	11	552	64	108	488	7
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	1	1	1
Cap, veh/h	7	10	69	90	179	152	24	987	114	137	1228	18
Arrive On Green	0.00	0.05	0.05	0.05	0.09	0.09	0.01	0.60	0.60	0.08	0.66	0.66
Sat Flow, veh/h	1781	202	1414	1795	1885	1598	1781	1645	191	1795	1854	27
Grp Volume(v), veh/h	3	0	8	70	2	55	11	0	616	108	0	495
Grp Sat Flow(s),veh/h/ln	1781	0	1616	1795	1885	1598	1781	0	1836	1795	0	1880
Q Serve(g_s), s	0.1	0.0	0.4	3.1	0.1	2.6	0.5	0.0	16.2	4.7	0.0	9.6
Cycle Q Clear(g_c), s	0.1	0.0	0.4	3.1	0.1	2.6	0.5	0.0	16.2	4.7	0.0	9.6
Prop In Lane	1.00		0.88	1.00		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	7	0	79	90	179	152	24	0	1101	137	0	1246
V/C Ratio(X)	0.42	0.00	0.10	0.78	0.01	0.36	0.46	0.00	0.56	0.79	0.00	0.40
Avail Cap(c_a), veh/h	111	0	364	123	436	369	111	0	1101	146	0	1246
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	1.00
Uniform Delay (d), s/veh	39.7	0.0	36.4	37.6	32.8	33.9	39.2	0.0	9.6	36.3	0.0	6.2
Incr Delay (d2), s/veh	34.4	0.0	0.6	18.9	0.0	1.5	12.8	0.0	2.1	23.1	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	0.1	0.0	0.2	1.7	0.0	1.0	0.3	0.0	5.6	2.8	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.1	0.0	36.9	56.4	32.8	35.4	52.0	0.0	11.7	59.4	0.0	7.1
LnGrp LOS	E	A	D	E	C	D	D	A	B	E	A	A
Approach Vol, veh/h		11			127			627			603	
Approach Delay, s/veh		47.1			46.9			12.4			16.5	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	52.5	8.5	8.4	5.6	57.5	4.8	12.1
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	6.5	32.0	5.5	18.0	5.0	33.5	5.0	18.5
Max Q Clear Time (g_c+I1), s	16.7	18.2	5.1	2.4	2.5	11.6	2.1	4.6
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.0	2.8	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	32	98	603	40	99	814
Future Volume (veh/h)	32	98	603	40	99	814
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1841	1841	1885	1885
Adj Flow Rate, veh/h	35	107	655	43	108	885
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	4	4	1	1
Cap, veh/h	159	141	2281	150	137	2904
Arrive On Green	0.09	0.09	0.68	0.68	0.08	0.81
Sat Flow, veh/h	1781	1585	3424	219	1795	3676
Grp Volume(v), veh/h	35	107	344	354	108	885
Grp Sat Flow(s),veh/h/ln	1781	1585	1749	1801	1795	1791
Q Serve(g_s), s	1.6	5.9	6.9	7.0	5.3	5.6
Cycle Q Clear(g_c), s	1.6	5.9	6.9	7.0	5.3	5.6
Prop In Lane	1.00	1.00		0.12	1.00	
Lane Grp Cap(c), veh/h	159	141	1197	1233	137	2904
V/C Ratio(X)	0.22	0.76	0.29	0.29	0.79	0.30
Avail Cap(c_a), veh/h	505	449	1197	1233	170	2904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.96	0.96	1.00	1.00
Uniform Delay (d), s/veh	38.1	40.0	5.6	5.6	40.9	2.1
Incr Delay (d2), s/veh	0.6	7.5	0.6	0.6	17.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.5	1.9	2.0	2.9	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.7	47.5	6.1	6.1	58.8	2.4
LnGrp LOS	D	D	A	A	E	A
Approach Vol, veh/h	142		698			993
Approach Delay, s/veh	45.3		6.1			8.5
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.4	66.1			77.5	12.5
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	8.5	42.5			55.5	25.5
Max Q Clear Time (g_c+I1), s	7.3	9.0			7.6	7.9
Green Ext Time (p_c), s	0.0	4.0			6.5	0.3

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	70	71	572	103	131	715
Future Volume (veh/h)	70	71	572	103	131	715
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1826	1826	1841	1841	1885	1885
Adj Flow Rate, veh/h	72	73	590	106	135	737
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	4	4	1	1
Cap, veh/h	123	109	2036	365	166	2971
Arrive On Green	0.07	0.07	0.69	0.69	0.18	1.00
Sat Flow, veh/h	1739	1547	3055	531	1795	3676
Grp Volume(v), veh/h	72	73	348	348	135	737
Grp Sat Flow(s),veh/h/ln	1739	1547	1749	1745	1795	1791
Q Serve(g_s), s	3.6	4.1	7.0	7.0	6.5	0.0
Cycle Q Clear(g_c), s	3.6	4.1	7.0	7.0	6.5	0.0
Prop In Lane	1.00	1.00		0.30	1.00	
Lane Grp Cap(c), veh/h	123	109	1201	1199	166	2971
V/C Ratio(X)	0.59	0.67	0.29	0.29	0.81	0.25
Avail Cap(c_a), veh/h	493	438	1201	1199	269	2971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.82	0.82	0.97	0.97
Uniform Delay (d), s/veh	40.6	40.8	5.5	5.5	35.9	0.0
Incr Delay (d2), s/veh	4.4	6.9	0.5	0.5	9.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.8	1.9	1.9	2.9	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.0	47.7	6.0	6.0	45.0	0.2
LnGrp LOS	D	D	A	A	D	A
Approach Vol, veh/h	145		696			872
Approach Delay, s/veh	46.3		6.0			7.1
Approach LOS	D		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.8	66.3				79.2	10.8
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	13.5	37.5				55.5	25.5
Max Q Clear Time (g_c+I1), s	9.5	9.0				2.0	6.1
Green Ext Time (p_c), s	0.1	4.0				5.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	10.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	68	23	497	144	57	27	574	155	36	728	11
Future Volume (veh/h)	38	68	23	497	144	57	27	574	155	36	728	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	42	75	25	546	158	63	30	631	170	40	800	12
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, %	1	1	1	1	1	1	3	3	3	2	2	2
Cap, veh/h	62	105	35	512	421	168	50	1164	313	60	1538	23
Arrive On Green	0.03	0.08	0.08	0.28	0.33	0.33	0.03	0.42	0.42	0.03	0.43	0.43
Sat Flow, veh/h	1795	1353	451	1795	1282	511	1767	2746	739	1781	3584	54
Grp Volume(v), veh/h	42	0	100	546	0	221	30	405	396	40	397	415
Grp Sat Flow(s),veh/h/ln	1795	0	1804	1795	0	1793	1767	1763	1723	1781	1777	1861
Q Serve(g_s), s	2.3	0.0	5.4	28.5	0.0	9.4	1.7	17.2	17.2	2.2	16.4	16.4
Cycle Q Clear(g_c), s	2.3	0.0	5.4	28.5	0.0	9.4	1.7	17.2	17.2	2.2	16.4	16.4
Prop In Lane	1.00		0.25	1.00		0.29	1.00		0.43	1.00		0.03
Lane Grp Cap(c), veh/h	62	0	140	512	0	589	50	747	730	60	762	798
V/C Ratio(X)	0.68	0.00	0.71	1.07	0.00	0.38	0.60	0.54	0.54	0.67	0.52	0.52
Avail Cap(c_a), veh/h	118	0	451	512	0	841	88	747	730	89	762	798
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	1.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	47.7	0.0	45.0	35.8	0.0	25.7	48.0	21.5	21.6	47.8	21.0	21.0
Incr Delay (d2), s/veh	12.3	0.0	6.6	58.9	0.0	0.4	11.0	2.8	2.9	11.8	2.5	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	1.2	0.0	2.6	20.0	0.0	3.9	0.9	7.1	7.0	1.1	6.7	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.0	0.0	51.6	94.6	0.0	26.1	59.1	24.4	24.5	59.6	23.4	23.3
LnGrp LOS	E	A	D	F	A	C	E	C	C	E	C	C
Approach Vol, veh/h		142			767			831			852	
Approach Delay, s/veh		54.1			74.9			25.7			25.1	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	46.9	33.0	12.3	7.3	47.4	7.9	37.3
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	5.0	23.5	28.5	25.0	5.0	23.5	6.6	46.9
Max Q Clear Time (g_c+I1), s	4.3	19.2	30.5	7.4	3.7	18.4	4.3	11.4
Green Ext Time (p_c), s	0.0	1.8	0.0	0.4	0.0	2.0	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	41.6
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	315	0	438	0	0	0	0	1171	133	105	411	0
Future Volume (veh/h)	315	0	438	0	0	0	0	1171	133	105	411	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1841	0	1841				0	1856	1856	1870	1870	0
Adj Flow Rate, veh/h	339	0	471				0	1259	143	113	442	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	0	4				0	3	3	2	2	0
Cap, veh/h	856	0	691				0	1653	737	217	2150	0
Arrive On Green	0.25	0.00	0.25				0.00	0.47	0.47	0.06	0.60	0.00
Sat Flow, veh/h	3401	0	2745				0	3618	1572	3456	3647	0
Grp Volume(v), veh/h	339	0	471				0	1259	143	113	442	0
Grp Sat Flow(s),veh/h/ln	1700	0	1373				0	1763	1572	1728	1777	0
Q Serve(g_s), s	7.5	0.0	13.9				0.0	26.6	4.8	2.9	5.1	0.0
Cycle Q Clear(g_c), s	7.5	0.0	13.9				0.0	26.6	4.8	2.9	5.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	856	0	691				0	1653	737	217	2150	0
V/C Ratio(X)	0.40	0.00	0.68				0.00	0.76	0.19	0.52	0.21	0.00
Avail Cap(c_a), veh/h	1081	0	872				0	1653	737	284	2150	0
HCM Platoon Ratio	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				0.00	0.68	0.68	0.99	0.99	0.00
Uniform Delay (d), s/veh	28.0	0.0	30.4				0.0	19.7	14.0	40.9	8.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	5.0				0.0	2.3	0.4	0.7	0.2	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
%ile BackOfQ(50%),veh/ln	3.1	0.0	4.9				0.0	10.1	1.6	1.2	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.3	0.0	35.5				0.0	22.1	14.4	41.6	8.2	0.0
LnGrp LOS	C	A	D				A	C	B	D	A	A
Approach Vol, veh/h		810						1402			555	
Approach Delay, s/veh		32.9						21.3			15.0	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	12.2	48.7	29.1	60.9
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 7.4	34.5	* 29	48.5
Max Q Clear Time (g_c+I1), s	14.9	28.6	15.9	7.1
Green Ext Time (p_c), s	0.0	5.1	6.7	6.1

Intersection Summary	
HCM 6th Ctrl Delay	23.4
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)	0	130	9	49	102	62	28	316	31	53	768	0
Future Volume (veh/h)	0	130	9	49	102	62	28	316	31	53	768	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	0	141	10	53	111	67	30	343	34	58	835	0
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	3	3	3	1	1	1
Cap, veh/h	2	178	13	69	204	123	50	1057	105	75	1225	0
Arrive On Green	0.00	0.10	0.10	0.04	0.19	0.19	0.03	0.64	0.64	0.04	0.65	0.00
Sat Flow, veh/h	1781	1726	122	1781	1092	659	1767	1661	165	1795	1885	0
Grp Volume(v), veh/h	0	0	151	53	0	178	30	0	377	58	835	0
Grp Sat Flow(s),veh/h/ln	1781	0	1848	1781	0	1752	1767	0	1826	1795	1885	0
Q Serve(g_s), s	0.0	0.0	8.0	2.9	0.0	9.2	1.7	0.0	9.5	3.2	27.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	8.0	2.9	0.0	9.2	1.7	0.0	9.5	3.2	27.8	0.0
Prop In Lane	1.00		0.07	1.00		0.38	1.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	2	0	191	69	0	327	50	0	1162	75	1225	0
V/C Ratio(X)	0.00	0.00	0.79	0.77	0.00	0.54	0.60	0.00	0.32	0.77	0.68	0.00
Avail Cap(c_a), veh/h	91	0	333	175	0	398	90	0	1162	160	1225	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)	0.00	0.00	0.86	1.00	0.00	1.00	0.99	0.00	0.99	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	43.8	47.6	0.0	36.8	48.0	0.0	8.3	47.4	11.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	6.2	16.5	0.0	1.4	10.9	0.0	0.7	15.3	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.8	1.6	0.0	3.9	0.9	0.0	3.3	1.7	10.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	50.0	64.2	0.0	38.2	58.9	0.0	9.1	62.7	14.1	0.0
LnGrp LOS	A	A	D	E	A	D	E	A	A	E	B	A
Approach Vol, veh/h		151			231			407			893	
Approach Delay, s/veh		50.0			44.2			12.7			17.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	68.1	8.4	14.8	7.3	69.5	0.0	23.2
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	8.3	45.3	9.8	18.0	5.1	49.1	5.1	22.7
Max Q Clear Time (g_c+I1), s	5.2	11.5	4.9	10.0	3.7	29.8	0.0	11.2
Green Ext Time (p_c), s	0.0	2.2	0.0	0.4	0.0	5.5	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	8	20	63	8	18	5	280	21	3	814	43
Future Volume (veh/h)	26	8	20	63	8	18	5	280	21	3	814	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	29	9	22	69	9	20	5	308	23	3	895	47
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	1	1	1	2	2	2	1	1	1
Cap, veh/h	180	43	104	179	46	102	449	1395	104	895	1441	76
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	1381	482	1177	1389	520	1157	595	1719	128	1057	1775	93
Grp Volume(v), veh/h	29	0	31	69	0	29	5	0	331	3	0	942
Grp Sat Flow(s),veh/h/ln	1381	0	1659	1389	0	1677	595	0	1847	1057	0	1868
Q Serve(g_s), s	1.8	0.0	1.6	4.4	0.0	1.4	0.3	0.0	3.7	0.1	0.0	17.3
Cycle Q Clear(g_c), s	3.2	0.0	1.6	5.9	0.0	1.4	17.5	0.0	3.7	3.8	0.0	17.3
Prop In Lane	1.00		0.71	1.00		0.69	1.00		0.07	1.00		0.05
Lane Grp Cap(c), veh/h	180	0	147	179	0	148	449	0	1499	895	0	1516
V/C Ratio(X)	0.16	0.00	0.21	0.39	0.00	0.20	0.01	0.00	0.22	0.00	0.00	0.62
Avail Cap(c_a), veh/h	342	0	341	341	0	345	449	0	1499	895	0	1516
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)	0.80	0.00	0.80	1.00	0.00	1.00	0.80	0.00	0.80	0.63	0.00	0.63
Uniform Delay (d), s/veh	39.5	0.0	38.1	40.9	0.0	38.0	6.6	0.0	1.9	2.4	0.0	3.2
Incr Delay (d2), s/veh	0.3	0.0	0.6	1.4	0.0	0.6	0.0	0.0	0.3	0.0	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.7	1.6	0.0	0.6	0.0	0.0	0.6	0.0	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.9	0.0	38.7	42.2	0.0	38.7	6.6	0.0	2.2	2.4	0.0	4.4
LnGrp LOS	D	A	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		60			98			336			945	
Approach Delay, s/veh		39.3			41.2			2.3			4.4	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	77.5	12.5	77.5	12.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	62.5	18.5	62.5	18.5
Max Q Clear Time (g_c+I1), s	19.5	5.2	19.3	7.9
Green Ext Time (p_c), s	2.0	0.1	8.4	0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	177	45	107	391	19	72	203	194	50	294	554
Future Volume (veh/h)	83	177	45	107	391	19	72	203	194	50	294	554
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	99	211	54	127	465	23	86	242	231	60	350	660
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	1	1	1	2	2	2	1	1	1
Cap, veh/h	123	259	220	154	556	248	164	461	536	79	459	1003
Arrive On Green	0.07	0.14	0.14	0.09	0.16	0.16	0.34	0.34	0.34	0.29	0.29	0.29
Sat Flow, veh/h	1781	1870	1585	1795	3582	1598	484	1362	1585	274	1598	2812
Grp Volume(v), veh/h	99	211	54	127	465	23	328	0	231	410	0	660
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1795	1791	1598	1846	0	1585	1871	0	1406
Q Serve(g_s), s	6.6	13.1	3.6	8.4	15.1	1.5	17.2	0.0	13.5	24.0	0.0	23.7
Cycle Q Clear(g_c), s	6.6	13.1	3.6	8.4	15.1	1.5	17.2	0.0	13.5	24.0	0.0	23.7
Prop In Lane	1.00		1.00	1.00		1.00	0.26		1.00	0.15		1.00
Lane Grp Cap(c), veh/h	123	259	220	154	556	248	624	0	536	538	0	1003
V/C Ratio(X)	0.80	0.81	0.25	0.83	0.84	0.09	0.53	0.00	0.43	0.76	0.00	0.66
Avail Cap(c_a), veh/h	171	335	284	202	701	313	624	0	536	538	0	1003
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	0.77	0.00	0.77
Uniform Delay (d), s/veh	55.0	50.2	46.1	54.0	49.2	43.4	32.0	0.0	30.8	39.0	0.0	32.4
Incr Delay (d2), s/veh	17.1	11.2	0.6	18.7	7.1	0.2	3.1	0.0	2.5	7.7	0.0	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	3.5	6.8	1.4	4.5	7.1	0.6	7.9	0.0	5.4	11.7	0.0	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.1	61.3	46.7	72.7	56.3	43.6	35.1	0.0	33.3	46.7	0.0	35.1
LnGrp LOS	E	E	D	E	E	D	D	A	C	D	A	D
Approach Vol, veh/h		364			615			559			1070	
Approach Delay, s/veh		62.1			59.2			34.4			39.5	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	45.1	14.8	21.1	39.0	12.8	23.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	32.5	13.5	21.5	34.5	11.5	23.5
Max Q Clear Time (g_c+I1), s	19.2	10.4	15.1	26.0	8.6	17.1
Green Ext Time (p_c), s	2.1	0.1	0.6	3.4	0.0	1.5

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	185	22	207	140	104	7	361	342	104	576	6
Future Volume (veh/h)	14	185	22	207	140	104	7	361	342	104	576	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1811	1811	1811	1885	1885	1885
Adj Flow Rate, veh/h	16	215	26	241	163	121	8	420	398	121	670	7
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	3	3	3	6	6	6	1	1	1
Cap, veh/h	31	246	30	237	496	421	17	831	741	148	2017	21
Arrive On Green	0.02	0.15	0.15	0.13	0.27	0.27	0.01	0.48	0.48	0.08	0.56	0.56
Sat Flow, veh/h	1781	1637	198	1767	1856	1572	1725	1721	1535	1795	3631	38
Grp Volume(v), veh/h	16	0	241	241	163	121	8	420	398	121	330	347
Grp Sat Flow(s),veh/h/ln	1781	0	1835	1767	1856	1572	1725	1721	1535	1795	1791	1878
Q Serve(g_s), s	1.1	0.0	15.4	16.1	8.5	7.3	0.6	20.0	21.7	8.0	12.1	12.1
Cycle Q Clear(g_c), s	1.1	0.0	15.4	16.1	8.5	7.3	0.6	20.0	21.7	8.0	12.1	12.1
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	31	0	276	237	496	421	17	831	741	148	995	1043
V/C Ratio(X)	0.52	0.00	0.87	1.02	0.33	0.29	0.48	0.51	0.54	0.82	0.33	0.33
Avail Cap(c_a), veh/h	132	0	382	237	498	422	122	831	741	230	995	1043
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	0.0	49.8	52.0	35.3	34.9	59.1	21.2	21.7	54.2	14.5	14.5
Incr Delay (d2), s/veh	13.0	0.0	14.9	62.7	0.4	0.4	19.4	2.2	2.8	12.1	0.9	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	0.6	0.0	7.9	11.0	3.7	2.7	0.3	8.1	7.9	4.0	4.8	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.5	0.0	64.7	114.7	35.7	35.2	78.5	23.4	24.4	66.3	15.4	15.4
LnGrp LOS	E	A	E	F	D	D	E	C	C	E	B	B
Approach Vol, veh/h		257			525			826			798	
Approach Delay, s/veh		65.1			71.9			24.5			23.1	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	62.4	20.6	22.6	5.7	71.2	6.6	36.6
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	15.4	45.5	16.1	25.0	8.5	52.4	8.9	32.2
Max Q Clear Time (g_c+I1), s	10.0	23.7	18.1	17.4	2.6	14.1	3.1	10.5
Green Ext Time (p_c), s	0.1	5.0	0.0	0.7	0.0	4.0	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	38.7
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	0.3

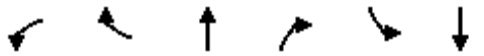
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	0	6	1	0	0	4	678	0	0	646	67
Future Vol, veh/h	21	0	6	1	0	0	4	678	0	0	646	67
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	5	5	5	0	0	0	4	4	4	1	1	1
Mvmt Flow	24	0	7	1	0	0	5	779	0	0	743	77

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1182	1571	410	1161	1609	390	820	0	0	779	0	0
Stage 1	782	782	-	789	789	-	-	-	-	-	-	-
Stage 2	400	789	-	372	820	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.5	6.5	6.9	4.18	-	-	4.12	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.5	4	3.3	2.24	-	-	2.21	-	-
Pot Cap-1 Maneuver	284	153	*815	*306	148	614	1092	-	-	840	-	-
Stage 1	692	624	-	*354	405	-	-	-	-	-	-	-
Stage 2	589	393	-	*780	602	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	283	152	*815	*302	147	614	1092	-	-	840	-	-
Mov Cap-2 Maneuver	283	152	-	*302	147	-	-	-	-	-	-	-
Stage 1	689	624	-	*352	403	-	-	-	-	-	-	-
Stage 2	586	391	-	*774	602	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	17	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1092	-	-	331	302	840	-	-
HCM Lane V/C Ratio	0.004	-	-	0.094	0.004	-	-	-
HCM Control Delay (s)	8.3	-	-	17	17	0	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	35	924	10	53	708
Future Volume (veh/h)	13	35	924	10	53	708
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1856	1856
Adj Flow Rate, veh/h	14	38	1004	11	58	770
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	3	3
Cap, veh/h	72	64	2762	30	75	3030
Arrive On Green	0.04	0.04	1.00	1.00	0.04	0.86
Sat Flow, veh/h	1781	1585	3694	39	1767	3618
Grp Volume(v), veh/h	14	38	495	520	58	770
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1863	1767	1763
Q Serve(g_s), s	0.7	2.1	0.0	0.0	2.9	3.5
Cycle Q Clear(g_c), s	0.7	2.1	0.0	0.0	2.9	3.5
Prop In Lane	1.00	1.00		0.02	1.00	
Lane Grp Cap(c), veh/h	72	64	1363	1429	75	3030
V/C Ratio(X)	0.19	0.59	0.36	0.36	0.77	0.25
Avail Cap(c_a), veh/h	505	449	1363	1429	167	3030
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.91	0.91	1.00	1.00
Uniform Delay (d), s/veh	41.8	42.5	0.0	0.0	42.7	1.1
Incr Delay (d2), s/veh	1.3	8.3	0.7	0.7	15.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.9	0.3	0.3	1.5	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.0	50.8	0.7	0.7	57.9	1.3
LnGrp LOS	D	D	A	A	E	A
Approach Vol, veh/h	52		1015			828
Approach Delay, s/veh	48.7		0.7			5.3
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.3	73.5			81.9	8.1
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	8.5	42.5			55.5	25.5
Max Q Clear Time (g_c+I1), s	4.9	2.0			5.5	4.1
Green Ext Time (p_c), s	0.0	6.7			5.4	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	104	100	834	85	102	619
Future Volume (veh/h)	104	100	834	85	102	619
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1811	1811	1870	1870	1856	1856
Adj Flow Rate, veh/h	106	102	851	87	104	632
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	2	2	3	3
Cap, veh/h	160	142	2224	227	131	2847
Arrive On Green	0.09	0.09	1.00	1.00	0.15	1.00
Sat Flow, veh/h	1725	1535	3348	333	1767	3618
Grp Volume(v), veh/h	106	102	465	473	104	632
Grp Sat Flow(s),veh/h/ln	1725	1535	1777	1810	1767	1763
Q Serve(g_s), s	5.3	5.8	0.0	0.0	5.1	0.0
Cycle Q Clear(g_c), s	5.3	5.8	0.0	0.0	5.1	0.0
Prop In Lane	1.00	1.00		0.18	1.00	
Lane Grp Cap(c), veh/h	160	142	1214	1237	131	2847
V/C Ratio(X)	0.66	0.72	0.38	0.38	0.79	0.22
Avail Cap(c_a), veh/h	489	435	1214	1237	265	2847
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.81	0.81	0.98	0.98
Uniform Delay (d), s/veh	39.5	39.7	0.0	0.0	37.7	0.0
Incr Delay (d2), s/veh	4.7	6.6	0.7	0.7	10.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.4	0.3	0.3	2.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.1	46.3	0.7	0.7	47.7	0.2
LnGrp LOS	D	D	A	A	D	A
Approach Vol, veh/h	208		938			736
Approach Delay, s/veh	45.2		0.7			6.9
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.2	66.0			77.2	12.8
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	13.5	37.5			55.5	25.5
Max Q Clear Time (g_c+I1), s	7.1	2.0			2.0	7.8
Green Ext Time (p_c), s	0.1	6.0			4.2	0.6

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	124	43	272	86	93	6	652	185	30	661	15
Future Volume (veh/h)	139	124	43	272	86	93	6	652	185	30	661	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	140	125	43	275	87	94	6	659	187	30	668	15
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	174	160	55	310	162	175	14	1291	366	51	1741	39
Arrive On Green	0.10	0.12	0.12	0.17	0.20	0.20	0.01	0.48	0.48	0.06	1.00	1.00
Sat Flow, veh/h	1781	1330	458	1781	822	888	1767	2711	769	1753	3497	78
Grp Volume(v), veh/h	140	0	168	275	0	181	6	428	418	30	334	349
Grp Sat Flow(s),veh/h/ln	1781	0	1788	1781	0	1710	1767	1763	1717	1753	1749	1827
Q Serve(g_s), s	6.9	0.0	8.2	13.6	0.0	8.6	0.3	15.1	15.2	1.5	0.1	0.1
Cycle Q Clear(g_c), s	6.9	0.0	8.2	13.6	0.0	8.6	0.3	15.1	15.2	1.5	0.1	0.1
Prop In Lane	1.00		0.26	1.00		0.52	1.00		0.45	1.00		0.04
Lane Grp Cap(c), veh/h	174	0	216	310	0	336	14	840	818	51	871	909
V/C Ratio(X)	0.80	0.00	0.78	0.89	0.00	0.54	0.44	0.51	0.51	0.58	0.38	0.38
Avail Cap(c_a), veh/h	279	0	497	327	0	511	98	840	818	97	871	909
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)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	39.8	0.0	38.4	36.3	0.0	32.5	44.5	16.3	16.3	41.8	0.1	0.1
Incr Delay (d2), s/veh	8.5	0.0	6.0	23.7	0.0	1.3	20.6	2.2	2.3	9.8	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	3.8	7.6	0.0	3.5	0.2	5.9	5.8	0.7	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	0.0	44.4	60.0	0.0	33.8	65.0	18.5	18.6	51.6	1.3	1.3
LnGrp LOS	D	A	D	E	A	C	E	B	B	D	A	A
Approach Vol, veh/h		308			456			852			713	
Approach Delay, s/veh		46.2			49.6			18.9			3.4	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	47.4	20.1	15.4	5.2	49.3	13.3	22.2
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	5.6	25.5	16.5	25.0	5.0	25.5	14.1	26.9
Max Q Clear Time (g_c+I1), s	3.5	17.2	15.6	10.2	2.3	2.1	8.9	10.6
Green Ext Time (p_c), s	0.0	3.1	0.1	0.6	0.0	3.7	0.1	0.8

Intersection Summary	
HCM 6th Ctrl Delay	23.8
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	453	0	826	0	0	0	0	766	129	128	539	0
Future Volume (veh/h)	453	0	826	0	0	0	0	766	129	128	539	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	498	0	908				0	842	142	141	592	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	1107	0	894				0	1425	635	224	1915	0
Arrive On Green	0.32	0.00	0.32				0.00	0.40	0.40	0.06	0.54	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	498	0	908				0	842	142	141	592	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	10.2	0.0	28.6				0.0	16.7	5.3	3.6	8.3	0.0
Cycle Q Clear(g_c), s	10.2	0.0	28.6				0.0	16.7	5.3	3.6	8.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1107	0	894				0	1425	635	224	1915	0
V/C Ratio(X)	0.45	0.00	1.02				0.00	0.59	0.22	0.63	0.31	0.00
Avail Cap(c_a), veh/h	1107	0	894				0	1425	635	284	1915	0
HCM Platoon Ratio	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				0.00	0.89	0.89	0.97	0.97	0.00
Uniform Delay (d), s/veh	24.4	0.0	30.7				0.0	21.2	17.7	41.0	11.5	0.0
Incr Delay (d2), s/veh	1.2	0.0	34.2				0.0	1.6	0.7	1.1	0.4	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
%ile BackOfQ(50%),veh/ln	4.2	0.0	13.4				0.0	6.6	1.9	1.5	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	64.9				0.0	22.8	18.5	42.1	11.9	0.0
LnGrp LOS	C	A	F				A	C	B	D	B	A
Approach Vol, veh/h		1406						984			733	
Approach Delay, s/veh		51.0						22.2			17.7	
Approach LOS		D						C			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	12.4	42.6	35.0	55.0
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 7.4	34.5	* 29	46.8
Max Q Clear Time (g_c+I1), s	15.6	18.7	30.6	10.3
Green Ext Time (p_c), s	0.0	9.1	0.0	8.4

Intersection Summary	
HCM 6th Ctrl Delay	34.1
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)	0	33	30	29	35	40	13	579	43	52	338	0
Future Volume (veh/h)	0	33	30	29	35	40	13	579	43	52	338	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	0	36	33	32	38	43	14	629	47	57	367	0
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	3	3	3
Cap, veh/h	2	56	51	54	114	129	29	1144	85	75	1283	0
Arrive On Green	0.00	0.06	0.06	0.03	0.14	0.14	0.03	1.00	1.00	0.04	0.69	0.00
Sat Flow, veh/h	1781	898	824	1781	801	906	1781	1719	128	1767	1856	0
Grp Volume(v), veh/h	0	0	69	32	0	81	14	0	676	57	367	0
Grp Sat Flow(s),veh/h/ln	1781	0	1722	1781	0	1707	1781	0	1847	1767	1856	0
Q Serve(g_s), s	0.0	0.0	3.5	1.6	0.0	3.8	0.7	0.0	0.0	2.9	6.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.5	1.6	0.0	3.8	0.7	0.0	0.0	2.9	6.9	0.0
Prop In Lane	1.00		0.48	1.00		0.53	1.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h	2	0	106	54	0	243	29	0	1229	75	1283	0
V/C Ratio(X)	0.00	0.00	0.65	0.59	0.00	0.33	0.48	0.00	0.55	0.76	0.29	0.00
Avail Cap(c_a), veh/h	105	0	348	101	0	341	99	0	1229	104	1283	0
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)	0.00	0.00	0.94	1.00	0.00	1.00	0.91	0.00	0.91	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	41.3	43.1	0.0	34.7	43.1	0.0	0.0	42.7	5.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	6.1	9.7	0.0	0.8	10.7	0.0	1.6	19.3	0.6	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	0.0	0.0	1.6	0.8	0.0	1.6	0.4	0.0	0.6	1.6	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	47.4	52.7	0.0	35.5	53.8	0.0	1.6	61.9	5.9	0.0
LnGrp LOS	A	A	D	D	A	D	D	A	A	E	A	A
Approach Vol, veh/h		69			113			690			424	
Approach Delay, s/veh		47.4			40.4			2.7			13.4	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	64.4	7.3	10.1	6.0	66.7	0.0	17.3
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	5.3	43.4	5.1	18.2	5.0	43.7	5.3	18.0
Max Q Clear Time (g_c+I1), s	4.9	2.0	3.6	5.5	2.7	8.9	0.0	5.8
Green Ext Time (p_c), s	0.0	4.8	0.0	0.2	0.0	2.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	6	5	17	4	12	8	611	33	12	341	30
Future Volume (veh/h)	42	6	5	17	4	12	8	611	33	12	341	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	45	6	5	18	4	13	9	657	35	13	367	32
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, %	1	1	1	2	2	2	2	2	2	3	3	3
Cap, veh/h	148	55	46	153	22	73	910	1482	79	638	1417	124
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.84	0.84	0.84	1.00	1.00	1.00
Sat Flow, veh/h	1407	951	792	1404	387	1257	986	1760	94	746	1682	147
Grp Volume(v), veh/h	45	0	11	18	0	17	9	0	692	13	0	399
Grp Sat Flow(s),veh/h/ln	1407	0	1743	1404	0	1644	986	0	1853	746	0	1829
Q Serve(g_s), s	2.8	0.0	0.5	1.1	0.0	0.9	0.1	0.0	8.5	0.2	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	0.5	1.6	0.0	0.9	0.1	0.0	8.5	8.6	0.0	0.0
Prop In Lane	1.00		0.45	1.00		0.76	1.00		0.05	1.00		0.08
Lane Grp Cap(c), veh/h	148	0	101	153	0	95	910	0	1561	638	0	1540
V/C Ratio(X)	0.30	0.00	0.11	0.12	0.00	0.18	0.01	0.00	0.44	0.02	0.00	0.26
Avail Cap(c_a), veh/h	355	0	358	360	0	338	910	0	1561	638	0	1540
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)	0.85	0.00	0.85	1.00	0.00	1.00	0.57	0.00	0.57	0.97	0.00	0.97
Uniform Delay (d), s/veh	42.1	0.0	40.2	41.0	0.0	40.4	1.1	0.0	1.8	0.5	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.4	0.3	0.0	0.9	0.0	0.0	0.5	0.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.2	0.4	0.0	0.4	0.0	0.0	0.7	0.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	0.0	40.6	41.3	0.0	41.2	1.1	0.0	2.3	0.5	0.0	0.4
LnGrp LOS	D	A	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		56			35			701			412	
Approach Delay, s/veh		42.6			41.3			2.3			0.4	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	80.3	9.7	80.3	9.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	62.5	18.5	62.5	18.5
Max Q Clear Time (g_c+I1), s	10.5	5.7	10.6	3.6
Green Ext Time (p_c), s	5.1	0.1	2.5	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	212	182	29	80	243	36	84	402	142	12	194	155
Future Volume (veh/h)	212	182	29	80	243	36	84	402	142	12	194	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	228	196	31	86	261	39	90	432	153	13	209	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, %	0	0	0	2	2	2	2	2	2	3	3	3
Cap, veh/h	255	337	285	109	346	154	129	619	639	23	363	966
Arrive On Green	0.14	0.18	0.18	0.06	0.10	0.10	0.40	0.40	0.40	0.21	0.21	0.21
Sat Flow, veh/h	1810	1900	1610	1781	3554	1585	320	1535	1585	108	1742	2768
Grp Volume(v), veh/h	228	196	31	86	261	39	522	0	153	222	0	167
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1781	1777	1585	1854	0	1585	1850	0	1384
Q Serve(g_s), s	14.9	11.4	1.9	5.7	8.6	2.7	28.0	0.0	7.6	13.0	0.0	5.0
Cycle Q Clear(g_c), s	14.9	11.4	1.9	5.7	8.6	2.7	28.0	0.0	7.6	13.0	0.0	5.0
Prop In Lane	1.00		1.00	1.00		1.00	0.17		1.00	0.06		1.00
Lane Grp Cap(c), veh/h	255	337	285	109	346	154	748	0	639	385	0	966
V/C Ratio(X)	0.89	0.58	0.11	0.79	0.75	0.25	0.70	0.00	0.24	0.58	0.00	0.17
Avail Cap(c_a), veh/h	264	413	350	184	622	277	748	0	639	385	0	966
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	0.98	0.00	0.98
Uniform Delay (d), s/veh	50.7	45.3	41.4	55.6	52.8	50.1	29.7	0.0	23.6	42.7	0.0	27.0
Incr Delay (d2), s/veh	29.2	1.6	0.2	11.9	3.3	0.8	5.3	0.0	0.9	6.0	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	8.6	5.4	0.8	2.9	3.9	1.1	13.0	0.0	2.9	6.4	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.9	46.9	41.6	67.5	56.1	51.0	35.1	0.0	24.5	48.8	0.0	27.4
LnGrp LOS	E	D	D	E	E	D	D	A	C	D	A	C
Approach Vol, veh/h		455			386			675			389	
Approach Delay, s/veh		63.1			58.1			32.7			39.6	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	52.9	11.8	25.8	29.5	21.4	16.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	38.5	12.4	26.1	25.0	17.5	21.0
Max Q Clear Time (g_c+I1), s	30.0	7.7	13.4	15.0	16.9	10.6
Green Ext Time (p_c), s	2.3	0.1	0.8	1.3	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	46.5
HCM 6th LOS	D

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	38	14	113	52	53	24	508	107	103	448	17
Future Volume (veh/h)	11	38	14	113	52	53	24	508	107	103	448	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	12	43	16	128	59	60	27	577	122	117	509	19
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	1	1	1
Cap, veh/h	24	66	24	148	225	191	44	1877	396	133	2438	91
Arrive On Green	0.01	0.05	0.05	0.08	0.12	0.12	0.02	0.64	0.64	0.07	0.69	0.69
Sat Flow, veh/h	1781	1300	484	1795	1885	1598	1781	2921	616	1795	3521	131
Grp Volume(v), veh/h	12	0	59	128	59	60	27	350	349	117	259	269
Grp Sat Flow(s),veh/h/ln	1781	0	1783	1795	1885	1598	1781	1777	1760	1795	1791	1862
Q Serve(g_s), s	0.8	0.0	3.9	8.5	3.4	4.1	1.8	10.5	10.6	7.7	6.2	6.3
Cycle Q Clear(g_c), s	0.8	0.0	3.9	8.5	3.4	4.1	1.8	10.5	10.6	7.7	6.2	6.3
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.35	1.00		0.07
Lane Grp Cap(c), veh/h	24	0	90	148	225	191	44	1142	1131	133	1240	1289
V/C Ratio(X)	0.49	0.00	0.65	0.86	0.26	0.31	0.61	0.31	0.31	0.88	0.21	0.21
Avail Cap(c_a), veh/h	150	0	374	148	393	333	147	1142	1131	133	1240	1289
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	0.0	55.9	54.4	48.0	48.4	57.9	9.5	9.5	55.0	6.6	6.6
Incr Delay (d2), s/veh	14.4	0.0	7.8	37.7	0.6	0.9	13.0	0.7	0.7	43.9	0.4	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	0.0	1.9	5.2	1.6	1.6	1.0	3.9	3.8	5.0	2.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.2	0.0	63.7	92.0	48.7	49.3	71.0	10.2	10.3	98.9	7.0	7.0
LnGrp LOS	E	A	E	F	D	D	E	B	B	F	A	A
Approach Vol, veh/h		71			247			726			645	
Approach Delay, s/veh		65.3			71.3			12.5			23.7	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	81.6	14.4	10.6	7.5	87.6	6.1	18.8
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	8.9	58.0	9.9	25.2	9.9	57.0	10.1	25.0
Max Q Clear Time (g_c+I1), s	10.7	12.6	10.5	5.9	3.8	8.3	2.8	6.1
Green Ext Time (p_c), s	0.0	4.4	0.0	0.2	0.0	3.0	0.0	0.3

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

Intersection	
Int Delay, s/veh	0.3

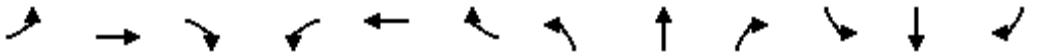
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	0	10	1	0	0	3	617	0	1	520	21
Future Vol, veh/h	15	0	10	1	0	0	3	617	0	1	520	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	16	0	11	1	0	0	3	649	0	1	547	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	891	1215	285	931	1226	325	569	0	0	649	0	0
Stage 1	560	560	-	655	655	-	-	-	-	-	-	-
Stage 2	331	655	-	276	571	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.22	-	-	2.21	-	-
Pot Cap-1 Maneuver	*445	*263	*879	*411	*258	677	*1307	-	-	940	-	-
Stage 1	*829	*725	-	*426	*466	-	-	-	-	-	-	-
Stage 2	*662	*466	-	*829	*725	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*444	*262	*879	*404	*257	677	*1307	-	-	940	-	-
Mov Cap-2 Maneuver	*444	*262	-	*404	*257	-	-	-	-	-	-	-
Stage 1	*827	*725	-	*425	*465	-	-	-	-	-	-	-
Stage 2	*660	*465	-	*818	*725	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.8	13.9	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 1307	-	-	554	404	940	-	-
HCM Lane V/C Ratio	0.002	-	-	0.048	0.003	0.001	-	-
HCM Control Delay (s)	7.8	-	-	11.8	13.9	8.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

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)	49	31	144	364	141	103	273	633	48	104	826	26
Future Volume (veh/h)	49	31	144	364	141	103	273	633	48	104	826	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1841	1841	1841	1885	1885	1885
Adj Flow Rate, veh/h	53	34	157	396	153	112	297	688	52	113	898	28
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	4	4	4	1	1	1
Cap, veh/h	68	40	183	384	315	230	292	1386	105	139	1174	37
Arrive On Green	0.04	0.14	0.14	0.22	0.31	0.31	0.17	0.42	0.42	0.08	0.33	0.33
Sat Flow, veh/h	1781	290	1339	1781	1004	735	1753	3296	249	1795	3546	111
Grp Volume(v), veh/h	53	0	191	396	0	265	297	365	375	113	454	472
Grp Sat Flow(s),veh/h/ln	1781	0	1629	1781	0	1738	1753	1749	1796	1795	1791	1865
Q Serve(g_s), s	3.5	0.0	13.8	25.9	0.0	14.8	20.0	18.3	18.4	7.4	27.2	27.2
Cycle Q Clear(g_c), s	3.5	0.0	13.8	25.9	0.0	14.8	20.0	18.3	18.4	7.4	27.2	27.2
Prop In Lane	1.00		0.82	1.00		0.42	1.00		0.14	1.00		0.06
Lane Grp Cap(c), veh/h	68	0	222	384	0	545	292	736	755	139	593	618
V/C Ratio(X)	0.77	0.00	0.86	1.03	0.00	0.49	1.02	0.50	0.50	0.82	0.76	0.76
Avail Cap(c_a), veh/h	135	0	339	384	0	605	292	736	755	169	593	618
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	0.38	0.00	0.38	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	0.0	50.7	47.0	0.0	33.3	50.0	25.4	25.5	54.5	35.9	35.9
Incr Delay (d2), s/veh	16.8	0.0	13.0	36.3	0.0	0.3	55.6	2.3	2.2	21.9	9.1	8.8
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	0.0	6.2	14.8	0.0	6.0	12.9	7.6	7.8	4.1	12.7	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	0.0	63.7	83.3	0.0	33.6	105.6	27.7	27.7	76.4	45.0	44.7
LnGrp LOS	E	A	E	F	A	C	F	C	C	E	D	D
Approach Vol, veh/h		244			661			1037			1039	
Approach Delay, s/veh		65.9			63.4			50.0			48.3	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	55.0	30.4	20.9	24.5	44.2	9.1	42.2
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	11.3	39.8	25.9	25.0	20.0	31.1	9.1	41.8
Max Q Clear Time (g_c+I1), s	9.4	20.4	27.9	15.8	22.0	29.2	5.5	16.8
Green Ext Time (p_c), s	0.0	3.9	0.0	0.6	0.0	1.0	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	53.7
HCM 6th LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	74	75	601	108	138	751		
Future Volume (veh/h)	74	75	601	108	138	751		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Work Zone On Approach	No		No			No		
Adj Sat Flow, veh/h/ln	1826	1826	1841	1841	1885	1885		
Adj Flow Rate, veh/h	76	77	620	111	142	774		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	5	5	4	4	1	1		
Cap, veh/h	128	114	2011	359	176	2960		
Arrive On Green	0.07	0.07	0.68	0.68	0.10	0.83		
Sat Flow, veh/h	1739	1547	3056	530	1795	3676		
Grp Volume(v), veh/h	76	77	365	366	142	774		
Grp Sat Flow(s),veh/h/ln	1739	1547	1749	1745	1795	1791		
Q Serve(g_s), s	3.8	4.4	7.6	7.7	7.0	4.3		
Cycle Q Clear(g_c), s	3.8	4.4	7.6	7.7	7.0	4.3		
Prop In Lane	1.00	1.00		0.30	1.00			
Lane Grp Cap(c), veh/h	128	114	1186	1184	176	2960		
V/C Ratio(X)	0.59	0.68	0.31	0.31	0.81	0.26		
Avail Cap(c_a), veh/h	493	438	1186	1184	269	2960		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.74	0.74	0.33	0.33		
Uniform Delay (d), s/veh	40.4	40.6	5.9	5.9	39.7	1.7		
Incr Delay (d2), s/veh	4.3	6.8	0.5	0.5	3.5	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	1.8	1.9	2.1	2.1	3.1	0.3		
Unsig. Movement Delay, s/veh								
LnGrp Delay(d),s/veh	44.7	47.5	6.4	6.4	43.2	1.8		
LnGrp LOS	D	D	A	A	D	A		
Approach Vol, veh/h	153		731			916		
Approach Delay, s/veh	46.1		6.4			8.2		
Approach LOS	D		A			A		
Timer - Assigned Phs	1	2				6	8	
Phs Duration (G+Y+Rc), s	13.3	65.5				78.9	11.1	
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5	
Max Green Setting (Gmax), s	13.5	37.5				55.5	25.5	
Max Q Clear Time (g_c+I1), s	9.6	9.7				6.3	6.4	
Green Ext Time (p_c), s	0.1	4.2				5.4	0.4	
Intersection Summary								
HCM 6th Ctrl Delay			10.7					
HCM 6th LOS			B					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	101	24	520	323	78	33	603	162	38	764	48
Future Volume (veh/h)	39	101	24	520	323	78	33	603	162	38	764	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	42	110	26	565	351	85	36	655	176	41	830	52
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, %	1	1	1	1	1	1	3	3	3	2	2	2
Cap, veh/h	62	144	34	512	511	124	56	1108	297	61	1378	86
Arrive On Green	0.03	0.10	0.10	0.28	0.35	0.35	0.03	0.40	0.40	0.03	0.41	0.41
Sat Flow, veh/h	1795	1474	348	1795	1466	355	1767	2748	738	1781	3396	213
Grp Volume(v), veh/h	42	0	136	565	0	436	36	420	411	41	434	448
Grp Sat Flow(s),veh/h/ln	1795	0	1822	1795	0	1821	1767	1763	1723	1781	1777	1832
Q Serve(g_s), s	2.3	0.0	7.3	28.5	0.0	20.5	2.0	18.7	18.7	2.3	19.2	19.2
Cycle Q Clear(g_c), s	2.3	0.0	7.3	28.5	0.0	20.5	2.0	18.7	18.7	2.3	19.2	19.2
Prop In Lane	1.00		0.19	1.00		0.19	1.00		0.43	1.00		0.12
Lane Grp Cap(c), veh/h	62	0	178	512	0	634	56	711	695	61	721	743
V/C Ratio(X)	0.68	0.00	0.76	1.10	0.00	0.69	0.64	0.59	0.59	0.68	0.60	0.60
Avail Cap(c_a), veh/h	118	0	456	512	0	854	88	711	695	89	721	743
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	1.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	47.7	0.0	44.0	35.8	0.0	27.9	47.9	23.4	23.4	47.8	23.4	23.4
Incr Delay (d2), s/veh	12.3	0.0	6.6	71.4	0.0	1.4	11.8	3.6	3.7	12.1	3.6	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	1.2	0.0	3.5	21.8	0.0	8.6	1.0	7.9	7.7	1.2	8.0	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.0	0.0	50.6	107.1	0.0	29.3	59.6	27.0	27.1	59.8	27.0	26.9
LnGrp LOS	E	A	D	F	A	C	E	C	C	E	C	C
Approach Vol, veh/h		178			1001			867			923	
Approach Delay, s/veh		52.8			73.2			28.4			28.4	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	44.8	33.0	14.3	7.7	45.1	7.9	39.3
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	5.0	23.5	28.5	25.0	5.0	23.5	6.6	46.9
Max Q Clear Time (g_c+I1), s	4.3	20.7	30.5	9.3	4.0	21.2	4.3	22.5
Green Ext Time (p_c), s	0.0	1.3	0.0	0.5	0.0	1.1	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	45.0
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	0	487	0	0	0	0	1229	140	110	431	0
Future Volume (veh/h)	330	0	487	0	0	0	0	1229	140	110	431	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1841	0	1841				0	1856	1856	1870	1870	0
Adj Flow Rate, veh/h	355	0	524				0	1322	151	118	463	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	0	4				0	3	3	2	2	0
Cap, veh/h	909	0	734				0	1596	712	218	2094	0
Arrive On Green	0.27	0.00	0.27				0.00	0.45	0.45	0.06	0.59	0.00
Sat Flow, veh/h	3401	0	2745				0	3618	1572	3456	3647	0
Grp Volume(v), veh/h	355	0	524				0	1322	151	118	463	0
Grp Sat Flow(s),veh/h/ln	1700	0	1373				0	1763	1572	1728	1777	0
Q Serve(g_s), s	7.7	0.0	15.6				0.0	29.5	5.2	3.0	5.5	0.0
Cycle Q Clear(g_c), s	7.7	0.0	15.6				0.0	29.5	5.2	3.0	5.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	909	0	734				0	1596	712	218	2094	0
V/C Ratio(X)	0.39	0.00	0.71				0.00	0.83	0.21	0.54	0.22	0.00
Avail Cap(c_a), veh/h	1081	0	872				0	1596	712	284	2094	0
HCM Platoon Ratio	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				0.00	0.68	0.68	0.98	0.98	0.00
Uniform Delay (d), s/veh	27.0	0.0	29.9				0.0	21.6	14.9	40.9	8.7	0.0
Incr Delay (d2), s/veh	1.2	0.0	5.5				0.0	3.5	0.5	0.8	0.2	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
%ile BackOfQ(50%),veh/ln	3.2	0.0	5.5				0.0	11.5	1.8	1.2	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	0.0	35.4				0.0	25.1	15.4	41.6	9.0	0.0
LnGrp LOS	C	A	D				A	C	B	D	A	A
Approach Vol, veh/h		879						1473			581	
Approach Delay, s/veh		32.5						24.1			15.6	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.3	47.3		30.5		59.5
Change Period (Y+Rc), s	* 6.6	6.5		* 6.4		6.5
Max Green Setting (Gmax), s	* 7.4	34.5		* 29		48.5
Max Q Clear Time (g_c+I1), s	15.0	31.5		17.6		7.5
Green Ext Time (p_c), s	0.0	2.7		6.5		6.5

Intersection Summary	
HCM 6th Ctrl Delay	24.9
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)	26	136	9	151	296	64	29	331	32	55	804	112
Future Volume (veh/h)	26	136	9	151	296	64	29	331	32	55	804	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	28	148	10	164	322	70	32	360	35	60	874	122
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	3	3	3	1	1	1
Cap, veh/h	48	270	18	175	338	73	52	870	85	78	868	121
Arrive On Green	0.03	0.16	0.16	0.10	0.23	0.23	0.03	0.52	0.52	0.04	0.54	0.54
Sat Flow, veh/h	1781	1732	117	1781	1489	324	1767	1665	162	1795	1619	226
Grp Volume(v), veh/h	28	0	158	164	0	392	32	0	395	60	0	996
Grp Sat Flow(s),veh/h/ln	1781	0	1849	1781	0	1812	1767	0	1826	1795	0	1845
Q Serve(g_s), s	1.6	0.0	7.9	9.1	0.0	21.3	1.8	0.0	13.2	3.3	0.0	53.7
Cycle Q Clear(g_c), s	1.6	0.0	7.9	9.1	0.0	21.3	1.8	0.0	13.2	3.3	0.0	53.7
Prop In Lane	1.00		0.06	1.00		0.18	1.00		0.09	1.00		0.12
Lane Grp Cap(c), veh/h	48	0	289	175	0	411	52	0	955	78	0	990
V/C Ratio(X)	0.58	0.00	0.55	0.94	0.00	0.95	0.61	0.00	0.41	0.77	0.00	1.01
Avail Cap(c_a), veh/h	91	0	333	175	0	411	90	0	955	160	0	990
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	0.00	0.70	1.00	0.00	1.00	0.98	0.00	0.98	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.1	0.0	38.9	44.8	0.0	38.1	48.0	0.0	14.5	47.3	0.0	23.2
Incr Delay (d2), s/veh	7.6	0.0	1.1	50.7	0.0	32.4	11.0	0.0	1.3	14.8	0.0	30.2
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	0.0	3.5	6.3	0.0	12.5	0.9	0.0	5.2	1.7	0.0	28.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.6	0.0	40.1	95.5	0.0	70.6	59.0	0.0	15.8	62.2	0.0	53.4
LnGrp LOS	E	A	D	F	A	E	E	A	B	E	A	F
Approach Vol, veh/h		186			556			427			1056	
Approach Delay, s/veh		42.4			77.9			19.1			53.9	
Approach LOS		D			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	56.8	14.3	20.1	7.4	58.2	7.2	27.2
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	8.3	45.3	9.8	18.0	5.1	49.1	5.1	22.7
Max Q Clear Time (g_c+I1), s	5.3	15.2	11.1	9.9	3.8	55.7	3.6	23.3
Green Ext Time (p_c), s	0.0	2.3	0.0	0.4	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.2
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	8	21	107	8	19	5	293	22	3	905	45
Future Volume (veh/h)	27	8	21	107	8	19	5	293	22	3	905	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	29	9	23	116	9	21	5	318	24	3	984	49
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	1	1	1	2	2	2	1	1	1
Cap, veh/h	228	57	147	227	62	144	354	1334	101	840	1383	69
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1380	466	1190	1388	502	1172	546	1717	130	1047	1781	89
Grp Volume(v), veh/h	29	0	32	116	0	30	5	0	342	3	0	1033
Grp Sat Flow(s),veh/h/ln	1380	0	1656	1388	0	1674	546	0	1847	1047	0	1869
Q Serve(g_s), s	1.7	0.0	1.6	7.3	0.0	1.4	0.4	0.0	4.6	0.1	0.0	24.8
Cycle Q Clear(g_c), s	3.2	0.0	1.6	8.9	0.0	1.4	25.2	0.0	4.6	4.6	0.0	24.8
Prop In Lane	1.00		0.72	1.00		0.70	1.00		0.07	1.00		0.05
Lane Grp Cap(c), veh/h	228	0	204	227	0	206	354	0	1435	840	0	1452
V/C Ratio(X)	0.13	0.00	0.16	0.51	0.00	0.15	0.01	0.00	0.24	0.00	0.00	0.71
Avail Cap(c_a), veh/h	342	0	340	341	0	344	354	0	1435	840	0	1452
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)	0.79	0.00	0.79	1.00	0.00	1.00	0.89	0.00	0.89	0.19	0.00	0.19
Uniform Delay (d), s/veh	36.6	0.0	35.3	39.3	0.0	35.2	11.3	0.0	2.7	3.4	0.0	5.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	1.8	0.0	0.3	0.1	0.0	0.3	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	0.6	0.0	0.6	2.6	0.0	0.6	0.1	0.0	1.0	0.0	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.8	0.0	35.6	41.0	0.0	35.6	11.4	0.0	3.1	3.4	0.0	5.6
LnGrp LOS	D	A	D	D	A	D	B	A	A	A	A	A
Approach Vol, veh/h		61			146			347			1036	
Approach Delay, s/veh		36.2			39.9			3.2			5.6	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	74.4	15.6	74.4	15.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	62.5	18.5	62.5	18.5
Max Q Clear Time (g_c+I1), s	27.2	5.2	26.8	10.9
Green Ext Time (p_c), s	2.0	0.1	9.8	0.2

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	186	47	131	411	23	76	213	244	67	298	632
Future Volume (veh/h)	86	186	47	131	411	23	76	213	244	67	298	632
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	93	202	51	142	447	25	83	232	265	73	324	687
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	1	1	1	2	2	2	1	1	1
Cap, veh/h	123	279	69	223	549	245	202	564	657	73	324	792
Arrive On Green	0.07	0.10	0.10	0.12	0.15	0.15	0.41	0.41	0.41	0.21	0.21	0.21
Sat Flow, veh/h	1781	2825	697	1795	3582	1598	486	1360	1585	343	1525	2812
Grp Volume(v), veh/h	93	125	128	142	447	25	315	0	265	397	0	687
Grp Sat Flow(s),veh/h/ln	1781	1777	1745	1795	1791	1598	1846	0	1585	1868	0	1406
Q Serve(g_s), s	6.2	8.2	8.5	9.0	14.5	1.6	14.4	0.0	14.1	25.5	0.0	19.5
Cycle Q Clear(g_c), s	6.2	8.2	8.5	9.0	14.5	1.6	14.4	0.0	14.1	25.5	0.0	19.5
Prop In Lane	1.00		0.40	1.00		1.00	0.26		1.00	0.18		1.00
Lane Grp Cap(c), veh/h	123	176	172	223	549	245	766	0	657	397	0	792
V/C Ratio(X)	0.75	0.71	0.74	0.64	0.81	0.10	0.41	0.00	0.40	1.00	0.00	0.87
Avail Cap(c_a), veh/h	364	600	589	223	791	353	766	0	657	397	0	792
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	0.63	0.00	0.63
Uniform Delay (d), s/veh	54.8	52.4	52.6	50.0	49.1	43.7	24.8	0.0	24.7	47.3	0.0	41.0
Incr Delay (d2), s/veh	8.9	5.3	6.1	6.0	4.3	0.2	1.6	0.0	1.8	35.9	0.0	6.6
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	3.0	3.8	3.9	4.3	6.6	0.6	6.4	0.0	5.4	15.4	0.0	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.7	57.7	58.7	56.0	53.5	43.9	26.4	0.0	26.5	83.1	0.0	47.6
LnGrp LOS	E	E	E	E	D	D	C	A	C	F	A	D
Approach Vol, veh/h		346			614			580			1084	
Approach Delay, s/veh		59.7			53.6			26.5			60.6	
Approach LOS		E			D			C			E	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	54.3	19.4	16.4	30.0	12.8	22.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	25.5	10.5	40.5	25.5	24.5	26.5
Max Q Clear Time (g_c+I1), s	16.4	11.0	10.5	27.5	8.2	16.5
Green Ext Time (p_c), s	1.8	0.0	1.3	0.0	0.2	1.9

Intersection Summary	
HCM 6th Ctrl Delay	51.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	194	23	217	147	109	105	472	359	109	1350	171
Future Volume (veh/h)	45	194	23	217	147	109	105	472	359	109	1350	171
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1856	1856	1811	1811	1811	1885	1885	1885
Adj Flow Rate, veh/h	49	211	25	236	160	118	114	513	390	118	1467	186
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	3	3	3	6	6	6	1	1	1
Cap, veh/h	63	243	29	237	457	388	122	907	689	145	1592	200
Arrive On Green	0.04	0.15	0.15	0.13	0.25	0.25	0.07	0.49	0.49	0.08	0.50	0.50
Sat Flow, veh/h	1781	1641	194	1767	1856	1572	1725	1862	1415	1795	3202	402
Grp Volume(v), veh/h	49	0	236	236	160	118	114	474	429	118	814	839
Grp Sat Flow(s),veh/h/ln	1781	0	1835	1767	1856	1572	1725	1721	1556	1795	1791	1813
Q Serve(g_s), s	3.3	0.0	15.1	16.0	8.5	7.3	7.9	23.4	23.4	7.8	50.2	52.0
Cycle Q Clear(g_c), s	3.3	0.0	15.1	16.0	8.5	7.3	7.9	23.4	23.4	7.8	50.2	52.0
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.91	1.00		0.22
Lane Grp Cap(c), veh/h	63	0	271	237	457	388	122	838	758	145	890	901
V/C Ratio(X)	0.78	0.00	0.87	1.00	0.35	0.30	0.93	0.57	0.57	0.81	0.91	0.93
Avail Cap(c_a), veh/h	132	0	382	237	498	422	122	838	758	230	890	901
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	0.0	50.0	51.9	37.3	36.8	55.5	21.8	21.8	54.3	27.8	28.3
Incr Delay (d2), s/veh	18.0	0.0	14.2	57.1	0.5	0.4	60.9	2.8	3.0	11.3	15.4	17.3
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	1.7	0.0	7.7	10.6	3.8	2.8	5.4	9.5	8.7	3.9	23.5	25.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	0.0	64.2	109.0	37.7	37.3	116.3	24.5	24.8	65.6	43.2	45.6
LnGrp LOS	E	A	E	F	D	D	F	C	C	E	D	D
Approach Vol, veh/h		285			514			1017			1771	
Approach Delay, s/veh		66.2			70.3			34.9			45.8	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	63.0	20.6	22.2	13.0	64.2	8.8	34.1
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	15.4	45.5	16.1	25.0	8.5	52.4	8.9	32.2
Max Q Clear Time (g_c+I1), s	9.8	25.4	18.0	17.1	9.9	54.0	5.3	10.5
Green Ext Time (p_c), s	0.1	5.5	0.0	0.7	0.0	0.0	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	47.9
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	0	6	1	0	0	4	712	0	0	960	70
Future Vol, veh/h	23	0	6	1	0	0	4	712	0	0	960	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
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, %	5	5	5	0	0	0	4	4	4	1	1	1
Mvmt Flow	25	0	7	1	0	0	4	774	0	0	1043	76

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1476	1863	560	1304	1901	387	1119	0	0	774	0	0
Stage 1	1081	1081	-	782	782	-	-	-	-	-	-	-
Stage 2	395	782	-	522	1119	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.5	6.5	6.9	4.18	-	-	4.12	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.5	4	3.3	2.24	-	-	2.21	-	-
Pot Cap-1 Maneuver	233	111	*689	*371	107	617	972	-	-	844	-	-
Stage 1	642	565	-	*358	408	-	-	-	-	-	-	-
Stage 2	593	396	-	*659	540	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	232	111	*689	*366	106	617	972	-	-	844	-	-
Mov Cap-2 Maneuver	232	111	-	*366	106	-	-	-	-	-	-	-
Stage 1	640	565	-	*357	406	-	-	-	-	-	-	-
Stage 2	591	394	-	*653	540	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.2	14.9	0	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	972	-	-	269	366	844	-	-
HCM Lane V/C Ratio	0.004	-	-	0.117	0.003	-	-	-
HCM Control Delay (s)	8.7	-	-	20.2	14.9	0	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0	-	-

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	50	307	77	73	37	318	970	160	56	743	68
Future Volume (veh/h)	112	50	307	77	73	37	318	970	160	56	743	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	122	54	334	84	79	40	346	1054	174	61	808	74
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	3	3	3
Cap, veh/h	133	59	366	107	290	147	346	1323	218	78	924	85
Arrive On Green	0.07	0.26	0.26	0.06	0.25	0.25	0.39	0.87	0.87	0.04	0.28	0.28
Sat Flow, veh/h	1781	225	1394	1781	1171	593	1781	3054	503	1767	3265	299
Grp Volume(v), veh/h	122	0	388	84	0	119	346	612	616	61	436	446
Grp Sat Flow(s),veh/h/ln	1781	0	1619	1781	0	1764	1781	1777	1780	1767	1763	1802
Q Serve(g_s), s	6.1	0.0	20.9	4.2	0.0	4.9	17.5	13.3	13.5	3.1	21.2	21.2
Cycle Q Clear(g_c), s	6.1	0.0	20.9	4.2	0.0	4.9	17.5	13.3	13.5	3.1	21.2	21.2
Prop In Lane	1.00		0.86	1.00		0.34	1.00		0.28	1.00		0.17
Lane Grp Cap(c), veh/h	133	0	425	107	0	438	346	770	771	78	499	510
V/C Ratio(X)	0.92	0.00	0.91	0.79	0.00	0.27	1.00	0.80	0.80	0.78	0.87	0.87
Avail Cap(c_a), veh/h	133	0	473	107	0	490	346	770	771	104	499	510
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	0.88	0.00	0.88	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	0.0	32.2	41.7	0.0	27.3	27.5	4.3	4.3	42.6	30.7	30.7
Incr Delay (d2), s/veh	54.4	0.0	20.8	28.0	0.0	0.3	45.6	7.6	7.7	23.5	18.8	18.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	9.9	2.6	0.0	1.9	9.4	3.2	3.3	1.8	10.8	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.8	0.0	52.9	69.7	0.0	27.6	73.1	11.9	12.0	66.0	49.6	49.3
LnGrp LOS	F	A	D	E	A	C	E	B	B	E	D	D
Approach Vol, veh/h		510			203			1574			943	
Approach Delay, s/veh		63.2			45.0			25.3			50.5	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	43.5	9.9	28.1	22.0	30.0	11.2	26.8
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	5.3	35.0	5.4	26.3	17.5	22.8	6.7	25.0
Max Q Clear Time (g_c+I1), s	5.1	15.5	6.2	22.9	19.5	23.2	8.1	6.9
Green Ext Time (p_c), s	0.0	7.4	0.0	0.7	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	39.9
HCM 6th LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	109	105	876	89	107	650
Future Volume (veh/h)	109	105	876	89	107	650
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1811	1811	1870	1870	1856	1856
Adj Flow Rate, veh/h	111	107	894	91	109	663
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	2	2	3	3
Cap, veh/h	166	148	2202	224	137	2834
Arrive On Green	0.10	0.10	1.00	1.00	0.15	1.00
Sat Flow, veh/h	1725	1535	3350	331	1767	3618
Grp Volume(v), veh/h	111	107	488	497	109	663
Grp Sat Flow(s),veh/h/ln	1725	1535	1777	1811	1767	1763
Q Serve(g_s), s	5.6	6.1	0.0	0.0	5.4	0.0
Cycle Q Clear(g_c), s	5.6	6.1	0.0	0.0	5.4	0.0
Prop In Lane	1.00	1.00		0.18	1.00	
Lane Grp Cap(c), veh/h	166	148	1202	1225	137	2834
V/C Ratio(X)	0.67	0.73	0.41	0.41	0.80	0.23
Avail Cap(c_a), veh/h	489	435	1202	1225	265	2834
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.40	0.40	0.54	0.54
Uniform Delay (d), s/veh	39.3	39.5	0.0	0.0	37.3	0.0
Incr Delay (d2), s/veh	4.6	6.6	0.4	0.4	5.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.6	0.1	0.1	2.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.9	46.1	0.4	0.4	43.0	0.1
LnGrp LOS	D	D	A	A	D	A
Approach Vol, veh/h	218		985			772
Approach Delay, s/veh	45.0		0.4			6.2
Approach LOS	D		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.5	65.4			76.8	13.2
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	13.5	37.5			55.5	25.5
Max Q Clear Time (g_c+I1), s	7.4	2.0			2.0	8.1
Green Ext Time (p_c), s	0.1	6.4			4.5	0.6

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	342	46	368	127	105	6	685	411	32	694	16
Future Volume (veh/h)	166	342	46	368	127	105	6	685	411	32	694	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	168	345	46	372	128	106	6	692	415	32	701	16
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	204	385	51	327	291	241	14	737	441	54	1295	30
Arrive On Green	0.11	0.24	0.24	0.18	0.31	0.31	0.01	0.35	0.35	0.06	0.74	0.74
Sat Flow, veh/h	1781	1616	215	1781	946	783	1767	2121	1269	1753	3495	80
Grp Volume(v), veh/h	168	0	391	372	0	234	6	575	532	32	351	366
Grp Sat Flow(s),veh/h/ln	1781	0	1832	1781	0	1729	1767	1763	1627	1753	1749	1826
Q Serve(g_s), s	8.3	0.0	18.6	16.5	0.0	9.8	0.3	28.4	28.5	1.6	7.8	7.8
Cycle Q Clear(g_c), s	8.3	0.0	18.6	16.5	0.0	9.8	0.3	28.4	28.5	1.6	7.8	7.8
Prop In Lane	1.00		0.12	1.00		0.45	1.00		0.78	1.00		0.04
Lane Grp Cap(c), veh/h	204	0	437	327	0	532	14	613	566	54	648	677
V/C Ratio(X)	0.83	0.00	0.90	1.14	0.00	0.44	0.44	0.94	0.94	0.60	0.54	0.54
Avail Cap(c_a), veh/h	279	0	509	327	0	532	98	613	566	97	648	677
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)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	39.0	0.0	33.2	36.8	0.0	25.0	44.5	28.4	28.5	41.7	8.3	8.3
Incr Delay (d2), s/veh	13.4	0.0	16.6	93.0	0.0	0.6	20.6	24.0	25.7	9.9	3.1	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	4.2	0.0	9.7	15.2	0.0	3.8	0.2	15.0	14.1	0.8	2.4	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.4	0.0	49.8	129.7	0.0	25.5	65.0	52.4	54.1	51.6	11.5	11.3
LnGrp LOS	D	A	D	F	A	C	E	D	D	D	B	B
Approach Vol, veh/h		559			606			1113			749	
Approach Delay, s/veh		50.6			89.5			53.3			13.1	
Approach LOS		D			F			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	35.8	21.0	26.0	5.2	37.8	14.8	32.2
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	5.0	25.5	16.5	25.0	5.0	25.5	14.1	27.4
Max Q Clear Time (g_c+I1), s	3.6	30.5	18.5	20.6	2.3	9.8	10.3	11.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	3.4	0.1	1.0

Intersection Summary	
HCM 6th Ctrl Delay	50.1
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	0	867	0	0	0	0	879	135	134	565	0
Future Volume (veh/h)	474	0	867	0	0	0	0	879	135	134	565	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	515	0	942				0	955	147	146	614	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	0	1				0	2	2	2	2	0
Cap, veh/h	1107	0	894				0	1424	635	224	1915	0
Arrive On Green	0.32	0.00	0.32				0.00	0.40	0.40	0.06	0.54	0.00
Sat Flow, veh/h	3483	0	2812				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	515	0	942				0	955	147	146	614	0
Grp Sat Flow(s),veh/h/ln	1742	0	1406				0	1777	1585	1728	1777	0
Q Serve(g_s), s	10.7	0.0	28.6				0.0	19.8	5.5	3.7	8.7	0.0
Cycle Q Clear(g_c), s	10.7	0.0	28.6				0.0	19.8	5.5	3.7	8.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1107	0	894				0	1424	635	224	1915	0
V/C Ratio(X)	0.47	0.00	1.05				0.00	0.67	0.23	0.65	0.32	0.00
Avail Cap(c_a), veh/h	1107	0	894				0	1424	635	284	1915	0
HCM Platoon Ratio	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				0.00	0.81	0.81	0.97	0.97	0.00
Uniform Delay (d), s/veh	24.6	0.0	30.7				0.0	22.1	17.8	41.1	11.6	0.0
Incr Delay (d2), s/veh	1.3	0.0	45.4				0.0	2.1	0.7	1.5	0.4	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
%ile BackOfQ(50%),veh/ln	4.4	0.0	14.8				0.0	7.9	2.0	1.6	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	0.0	76.1				0.0	24.2	18.5	42.6	12.0	0.0
LnGrp LOS	C	A	F				A	C	B	D	B	A
Approach Vol, veh/h		1457						1102			760	
Approach Delay, s/veh		58.4						23.4			17.9	
Approach LOS		E						C			B	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	12.4	42.6	35.0	55.0
Change Period (Y+Rc), s	* 6.6	6.5	* 6.4	6.5
Max Green Setting (Gmax), s	* 7.4	34.5	* 29	48.5
Max Q Clear Time (g_c+I1), s	15.7	21.8	30.6	10.7
Green Ext Time (p_c), s	0.0	8.5	0.0	8.9

Intersection Summary	
HCM 6th Ctrl Delay	37.5
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)	76	75	32	50	62	47	14	605	205	59	354	51
Future Volume (veh/h)	76	75	32	50	62	47	14	605	205	59	354	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	83	82	35	54	67	51	15	658	223	64	385	55
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	3	3	3
Cap, veh/h	105	136	58	73	91	69	31	806	273	82	1003	143
Arrive On Green	0.06	0.11	0.11	0.04	0.09	0.09	0.03	1.00	1.00	0.05	0.63	0.63
Sat Flow, veh/h	1781	1244	531	1781	985	750	1781	1336	453	1767	1588	227
Grp Volume(v), veh/h	83	0	117	54	0	118	15	0	881	64	0	440
Grp Sat Flow(s),veh/h/ln	1781	0	1775	1781	0	1735	1781	0	1789	1767	0	1815
Q Serve(g_s), s	4.1	0.0	5.7	2.7	0.0	6.0	0.7	0.0	0.0	3.2	0.0	10.6
Cycle Q Clear(g_c), s	4.1	0.0	5.7	2.7	0.0	6.0	0.7	0.0	0.0	3.2	0.0	10.6
Prop In Lane	1.00		0.30	1.00		0.43	1.00		0.25	1.00		0.13
Lane Grp Cap(c), veh/h	105	0	195	73	0	159	31	0	1079	82	0	1147
V/C Ratio(X)	0.79	0.00	0.60	0.74	0.00	0.74	0.48	0.00	0.82	0.78	0.00	0.38
Avail Cap(c_a), veh/h	105	0	359	101	0	347	99	0	1079	104	0	1147
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)	0.64	0.00	0.64	1.00	0.00	1.00	0.88	0.00	0.88	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	38.2	42.7	0.0	39.8	43.0	0.0	0.0	42.5	0.0	8.1
Incr Delay (d2), s/veh	22.6	0.0	1.9	16.3	0.0	6.6	10.0	0.0	6.1	24.9	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	2.4	1.5	0.0	2.7	0.4	0.0	1.8	1.9	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.4	0.0	40.1	59.0	0.0	46.4	53.0	0.0	6.1	67.3	0.0	9.0
LnGrp LOS	E	A	D	E	A	D	D	A	A	E	A	A
Approach Vol, veh/h		200			172			896			504	
Approach Delay, s/veh		50.2			50.4			6.9			16.4	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	58.8	8.2	14.4	6.1	61.4	9.8	12.8
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	5.3	43.4	5.1	18.2	5.0	43.7	5.3	18.0
Max Q Clear Time (g_c+I1), s	6.2	2.0	4.7	7.7	2.7	12.6	6.1	8.0
Green Ext Time (p_c), s	0.0	7.6	0.0	0.3	0.0	2.6	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	6	5	23	4	13	8	640	74	13	404	31
Future Volume (veh/h)	44	6	5	23	4	13	8	640	74	13	404	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	47	6	5	25	4	14	9	688	80	14	434	33
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, %	1	1	1	2	2	2	2	2	2	3	3	3
Cap, veh/h	151	58	48	157	22	78	857	1380	160	582	1428	109
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.84	0.84	0.84	1.00	1.00	1.00
Sat Flow, veh/h	1406	951	792	1404	365	1276	926	1645	191	695	1703	129
Grp Volume(v), veh/h	47	0	11	25	0	18	9	0	768	14	0	467
Grp Sat Flow(s),veh/h/ln	1406	0	1743	1404	0	1641	926	0	1836	695	0	1832
Q Serve(g_s), s	3.0	0.0	0.5	1.5	0.0	0.9	0.1	0.0	10.4	0.3	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	0.5	2.1	0.0	0.9	0.1	0.0	10.4	10.7	0.0	0.0
Prop In Lane	1.00		0.45	1.00		0.78	1.00		0.10	1.00		0.07
Lane Grp Cap(c), veh/h	151	0	107	157	0	100	857	0	1540	582	0	1537
V/C Ratio(X)	0.31	0.00	0.10	0.16	0.00	0.18	0.01	0.00	0.50	0.02	0.00	0.30
Avail Cap(c_a), veh/h	354	0	358	360	0	337	857	0	1540	582	0	1537
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)	0.85	0.00	0.85	1.00	0.00	1.00	0.20	0.00	0.20	0.93	0.00	0.93
Uniform Delay (d), s/veh	42.0	0.0	39.9	40.9	0.0	40.1	1.2	0.0	2.0	0.7	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.4	0.5	0.0	0.8	0.0	0.0	0.2	0.1	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	1.1	0.0	0.2	0.6	0.0	0.4	0.0	0.0	0.7	0.0	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.9	0.0	40.3	41.4	0.0	40.9	1.2	0.0	2.2	0.8	0.0	0.5
LnGrp LOS	D	A	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		58			43			777			481	
Approach Delay, s/veh		42.4			41.2			2.2			0.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	80.0	10.0	80.0	10.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	62.5	18.5	62.5	18.5
Max Q Clear Time (g_c+I1), s	12.4	5.9	12.7	4.1
Green Ext Time (p_c), s	6.0	0.1	3.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	352	501	30	106	355	46	88	421	167	20	203	201
Future Volume (veh/h)	352	501	30	106	355	46	88	421	167	20	203	201
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1870	1870	1870	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	378	539	32	114	382	49	95	453	180	22	218	216
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, %	0	0	0	2	2	2	2	2	2	3	3	3
Cap, veh/h	369	661	39	266	484	216	114	545	563	26	259	992
Arrive On Green	0.20	0.19	0.19	0.15	0.14	0.14	0.36	0.36	0.36	0.15	0.15	0.15
Sat Flow, veh/h	1810	3463	205	1781	3554	1585	321	1533	1585	169	1678	2768
Grp Volume(v), veh/h	378	281	290	114	382	49	548	0	180	240	0	216
Grp Sat Flow(s),veh/h/ln	1810	1805	1863	1781	1777	1585	1854	0	1585	1847	0	1384
Q Serve(g_s), s	24.5	17.9	17.9	7.0	12.5	3.3	32.4	0.0	9.9	15.2	0.0	0.0
Cycle Q Clear(g_c), s	24.5	17.9	17.9	7.0	12.5	3.3	32.4	0.0	9.9	15.2	0.0	0.0
Prop In Lane	1.00		0.11	1.00		1.00	0.17		1.00	0.09		1.00
Lane Grp Cap(c), veh/h	369	345	356	266	484	216	659	0	563	285	0	992
V/C Ratio(X)	1.02	0.81	0.82	0.43	0.79	0.23	0.83	0.00	0.32	0.84	0.00	0.22
Avail Cap(c_a), veh/h	369	609	629	266	785	350	659	0	563	393	0	1153
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	0.97	0.00	0.97
Uniform Delay (d), s/veh	47.8	46.5	46.5	46.4	50.2	46.2	35.4	0.0	28.1	49.3	0.0	26.8
Incr Delay (d2), s/veh	52.9	4.7	4.6	1.1	2.9	0.5	11.7	0.0	1.5	11.1	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	16.1	8.2	8.5	3.1	5.6	1.3	16.1	0.0	3.9	7.7	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	100.6	51.2	51.1	47.5	53.1	46.7	47.1	0.0	29.6	60.4	0.0	26.9
LnGrp LOS	F	D	D	D	D	D	D	A	C	E	A	C
Approach Vol, veh/h		949			545			728			456	
Approach Delay, s/veh		70.8			51.3			42.8			44.5	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	47.1	22.4	27.4	23.0	29.0	20.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	25.5	10.5	40.5	25.5	24.5	26.5
Max Q Clear Time (g_c+I1), s	34.4	9.0	19.9	17.2	26.5	14.5
Green Ext Time (p_c), s	0.0	0.0	3.0	1.4	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	54.8
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	40	74	119	55	56	59	1505	112	108	889	41
Future Volume (veh/h)	123	40	74	119	55	56	59	1505	112	108	889	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	134	43	80	129	60	61	64	1636	122	117	966	45
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	1	1	1	2	2	2	1	1	1
Cap, veh/h	150	54	100	148	171	145	82	2016	149	133	2192	102
Arrive On Green	0.08	0.09	0.09	0.08	0.09	0.09	0.05	0.60	0.60	0.07	0.63	0.63
Sat Flow, veh/h	1781	585	1089	1795	1885	1598	1781	3354	248	1795	3485	162
Grp Volume(v), veh/h	134	0	123	129	60	61	64	860	898	117	496	515
Grp Sat Flow(s),veh/h/ln	1781	0	1674	1795	1885	1598	1781	1777	1826	1795	1791	1856
Q Serve(g_s), s	8.9	0.0	8.6	8.5	3.6	4.3	4.3	44.9	46.3	7.7	17.1	17.1
Cycle Q Clear(g_c), s	8.9	0.0	8.6	8.5	3.6	4.3	4.3	44.9	46.3	7.7	17.1	17.1
Prop In Lane	1.00		0.65	1.00		1.00	1.00		0.14	1.00		0.09
Lane Grp Cap(c), veh/h	150	0	154	148	171	145	82	1068	1097	133	1127	1167
V/C Ratio(X)	0.89	0.00	0.80	0.87	0.35	0.42	0.78	0.81	0.82	0.88	0.44	0.44
Avail Cap(c_a), veh/h	150	0	352	148	393	333	147	1068	1097	133	1127	1167
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	53.4	54.4	51.3	51.6	56.6	18.5	18.8	55.0	11.4	11.4
Incr Delay (d2), s/veh	43.9	0.0	9.0	39.1	1.2	1.9	14.4	6.5	6.8	43.9	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	3.9	5.3	1.7	1.8	2.2	18.2	19.3	5.0	6.4	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.3	0.0	62.3	93.5	52.5	53.5	71.0	25.0	25.6	98.9	12.7	12.6
LnGrp LOS	F	A	E	F	D	D	E	C	C	F	B	B
Approach Vol, veh/h		257			250			1822			1128	
Approach Delay, s/veh		81.1			73.9			26.9			21.6	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	76.6	14.4	15.6	10.0	80.0	14.6	15.4
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	8.9	58.0	9.9	25.2	9.9	57.0	10.1	25.0
Max Q Clear Time (g_c+I1), s	10.7	48.3	10.5	10.6	6.3	19.1	10.9	6.3
Green Ext Time (p_c), s	0.0	7.1	0.0	0.4	0.0	6.9	0.0	0.4

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

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	12	1	0	0	3	1101	0	1	785	24
Future Vol, veh/h	16	0	12	1	0	0	3	1101	0	1	785	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	17	0	13	1	0	0	3	1159	0	1	826	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1427	2006	426	1580	2018	580	851	0	0	1159	0	0
Stage 1	841	841	-	1165	1165	-	-	-	-	-	-	-
Stage 2	586	1165	-	415	853	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.22	-	-	2.21	-	-
Pot Cap-1 Maneuver	*202	*76	*776	*141	*74	463	*1154	-	-	604	-	-
Stage 1	*732	*641	-	*210	*271	-	-	-	-	-	-	-
Stage 2	*468	*271	-	*732	*641	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*201	*75	*776	*138	*74	463	*1154	-	-	604	-	-
Mov Cap-2 Maneuver	*201	*75	-	*138	*74	-	-	-	-	-	-	-
Stage 1	*730	*639	-	*209	*270	-	-	-	-	-	-	-
Stage 2	*467	*270	-	*719	*639	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.6	31.3	0	0
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 1154	-	-	295	138	604	-	-
HCM Lane V/C Ratio	0.003	-	-	0.1	0.008	0.002	-	-
HCM Control Delay (s)	8.1	-	-	18.6	31.3	11	-	-
HCM Lane LOS	A	-	-	C	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX F

QUEUING ANALYSIS WORKSHEETS

Queuing and Blocking Report

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	54	64	300	388	307	1284
Average Queue (ft)	24	38	145	79	182	1042
95th Queue (ft)	46	61	280	246	291	1498
Link Distance (ft)		1019		1679	644	1276
Upstream Blk Time (%)						4
Queuing Penalty (veh)						21
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)			17			
Queuing Penalty (veh)			26			

Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	20	67	437	816	198	735
v/c Ratio	0.08	0.24	0.16	0.52	0.07	0.47
Control Delay	22.3	9.0	3.7	1.2	3.7	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	9.0	3.7	1.2	3.7	1.0
Queue Length 50th (ft)	6	0	27	0	11	0
Queue Length 95th (ft)	22	28	49	0	24	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	596	577	2757	1583	2730	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.12	0.16	0.52	0.07	0.47

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	235	373	1032	37	32	188
v/c Ratio	0.41	0.48	0.49	0.04	0.13	0.08
Control Delay	33.7	5.7	12.5	0.1	38.5	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	5.7	12.5	0.1	38.5	4.9
Queue Length 50th (ft)	58	0	180	0	8	15
Queue Length 95th (ft)	89	38	257	0	22	28
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	810	943	2102	992	602	2418
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.40	0.49	0.04	0.05	0.08

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	73	206	100	125	124	119	873	132	146	397	24
v/c Ratio	0.54	0.52	0.64	0.26	0.38	0.68	0.42	0.14	0.56	0.20	0.03
Control Delay	76.8	53.6	79.0	55.5	12.1	80.1	18.2	6.1	70.9	16.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.8	53.6	79.0	55.5	12.1	80.1	18.2	6.1	70.9	16.8	0.0
Queue Length 50th (ft)	65	78	90	55	0	107	221	15	67	89	0
Queue Length 95th (ft)	116	118	147	85	58	169	330	54	102	149	0
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	265	1021	265	1036	551	265	2057	958	520	2019	943
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.20	0.38	0.12	0.23	0.45	0.42	0.14	0.28	0.20	0.03

Intersection Summary

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	EB	WB
Directions Served	LT	R	LTR
Maximum Queue (ft)	31	51	73
Average Queue (ft)	9	13	35
95th Queue (ft)	32	39	57
Link Distance (ft)	2585		2583
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		85	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 9: Armstrong Avenue & Olive Avenue

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	40	76	10	219	233	201	40	111	66	114	121	64
Average Queue (ft)	16	24	3	48	83	27	12	54	36	65	61	30
95th Queue (ft)	29	50	9	109	147	89	28	97	61	95	101	54
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)					2			13	2			
Queuing Penalty (veh)					2			25	5			

Queuing and Blocking Report

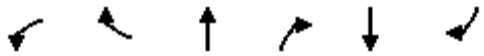
Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	WB	WB	SB
Directions Served	L	R	L
Maximum Queue (ft)	68	49	53
Average Queue (ft)	32	28	20
95th Queue (ft)	67	36	49
Link Distance (ft)		775	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	140		155
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	185	116	74	122	341	353
Average Queue (ft)	52	50	48	42	169	157
95th Queue (ft)	107	87	73	81	297	289
Link Distance (ft)		1019		1679	644	1276
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)	0					
Queuing Penalty (veh)	0					



Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	36	39	528	387	355	328
v/c Ratio	0.14	0.14	0.19	0.24	0.13	0.21
Control Delay	22.9	4.9	3.9	0.4	3.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	4.9	3.9	0.4	3.8	0.3
Queue Length 50th (ft)	12	0	35	0	22	0
Queue Length 95th (ft)	32	14	60	0	40	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	596	573	2742	1583	2716	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.07	0.19	0.24	0.13	0.21

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	362	799	564	24	82	313
v/c Ratio	0.50	0.66	0.31	0.03	0.30	0.14
Control Delay	32.0	5.0	14.2	0.0	39.8	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.0	5.0	14.2	0.0	39.8	6.7
Queue Length 50th (ft)	89	0	93	0	22	31
Queue Length 95th (ft)	122	46	149	0	43	55
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	829	1281	1821	876	602	2290
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.62	0.31	0.03	0.14	0.14

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	62	205	85	102	82	74	444	95	188	795	54
v/c Ratio	0.50	0.53	0.59	0.23	0.30	0.55	0.21	0.10	0.64	0.36	0.05
Control Delay	75.8	41.6	78.0	56.9	11.8	77.3	14.9	3.3	71.5	15.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.8	41.6	78.0	56.9	11.8	77.3	14.9	3.3	71.5	15.0	0.7
Queue Length 50th (ft)	56	58	76	45	0	66	94	0	87	180	0
Queue Length 95th (ft)	103	98	131	73	44	117	153	29	125	281	5
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	265	1032	265	1036	526	265	2087	972	520	2231	1033
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.20	0.32	0.10	0.16	0.28	0.21	0.10	0.36	0.36	0.05

Intersection Summary

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	WB
Directions Served	LT	LTR
Maximum Queue (ft)	56	51
Average Queue (ft)	6	9
95th Queue (ft)	30	32
Link Distance (ft)	2585	2583
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 9: Armstrong Avenue & Olive Avenue

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	45	104	9	75	126	44	20	502	150	104	63	45
Average Queue (ft)	27	40	3	35	56	9	9	168	80	41	25	5
95th Queue (ft)	47	77	9	60	96	29	20	375	174	72	46	22
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)		0			0			55	2			
Queuing Penalty (veh)		0			0			78	6			

Queuing and Blocking Report

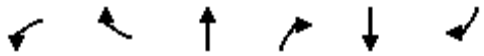
Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	67	30	22	54
Average Queue (ft)	29	22	1	26
95th Queue (ft)	59	33	8	55
Link Distance (ft)		775	1308	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	140			155
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	51	100	300	362	534	708
Average Queue (ft)	20	38	146	56	320	528
95th Queue (ft)	46	69	241	157	494	727
Link Distance (ft)		1019		1679	644	1276
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)			7			
Queuing Penalty (veh)			11			



Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	20	67	454	816	218	764
v/c Ratio	0.08	0.24	0.16	0.52	0.08	0.49
Control Delay	22.3	9.0	3.7	1.2	3.6	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	9.0	3.7	1.2	3.6	1.1
Queue Length 50th (ft)	6	0	28	0	12	0
Queue Length 95th (ft)	22	28	51	0	26	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	596	577	2757	1583	2730	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.12	0.16	0.52	0.08	0.49

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	245	373	1038	37	32	209
v/c Ratio	0.42	0.48	0.50	0.04	0.13	0.09
Control Delay	33.7	5.6	12.7	0.1	38.5	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	5.6	12.7	0.1	38.5	5.1
Queue Length 50th (ft)	61	0	182	0	8	17
Queue Length 95th (ft)	92	38	261	0	22	32
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	810	943	2092	988	602	2409
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.40	0.50	0.04	0.05	0.09

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	73	210	100	136	124	119	879	132	146	418	24
v/c Ratio	0.54	0.53	0.64	0.27	0.38	0.68	0.43	0.14	0.56	0.21	0.03
Control Delay	76.8	54.3	79.0	55.6	11.9	80.1	18.4	6.2	70.9	17.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.8	54.3	79.0	55.6	11.9	80.1	18.4	6.2	70.9	17.0	0.0
Queue Length 50th (ft)	65	81	90	60	0	107	224	15	67	95	0
Queue Length 95th (ft)	116	121	147	91	58	169	335	55	102	158	0
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	265	1020	265	1036	551	265	2051	956	520	2013	940
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.21	0.38	0.13	0.23	0.45	0.43	0.14	0.28	0.21	0.03

Intersection Summary

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	EB	WB	NB
Directions Served	LT	R	LTR	L
Maximum Queue (ft)	32	31	74	20
Average Queue (ft)	12	19	32	1
95th Queue (ft)	37	43	57	7
Link Distance (ft)	2585		2577	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		85		170
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 9: Armstrong Avenue & Olive Avenue

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	64	98	29	64	197	138	41	134	88	207	158	84
Average Queue (ft)	27	25	4	35	95	32	12	59	40	84	74	36
95th Queue (ft)	50	59	14	56	160	91	27	103	70	160	118	64
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)		0			1	0		15	5	1		
Queuing Penalty (veh)		0			2	0		29	10	6		

Queuing and Blocking Report

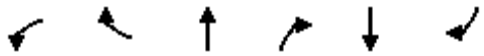
Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	T	R	L	TR	L
Maximum Queue (ft)	31	31	68	26	60	31	40	50
Average Queue (ft)	2	8	25	3	28	2	2	18
95th Queue (ft)	14	27	49	15	41	14	11	42
Link Distance (ft)		1820		776			1308	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	140		140		140	155		155
Storage Blk Time (%)								
Queuing Penalty (veh)								

Queuing and Blocking Report

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	74	74	136	72	345	294
Average Queue (ft)	44	47	67	43	178	143
95th Queue (ft)	65	77	106	64	305	257
Link Distance (ft)		1019		1679	644	1276
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	190		200			
Storage Blk Time (%)						
Queuing Penalty (veh)						



Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	36	39	585	387	370	348
v/c Ratio	0.14	0.14	0.21	0.24	0.14	0.22
Control Delay	22.9	4.9	4.0	0.4	3.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	4.9	4.0	0.4	3.8	0.3
Queue Length 50th (ft)	12	0	40	0	23	0
Queue Length 95th (ft)	32	14	66	0	42	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	596	573	2742	1583	2716	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.07	0.21	0.24	0.14	0.22

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	396	799	587	24	82	327
v/c Ratio	0.53	0.65	0.33	0.03	0.30	0.15
Control Delay	31.8	4.8	14.8	0.0	39.8	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	4.8	14.8	0.0	39.8	7.1
Queue Length 50th (ft)	97	0	99	0	22	33
Queue Length 95th (ft)	130	46	159	0	43	59
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	838	1286	1789	863	602	2268
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.62	0.33	0.03	0.14	0.14

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	62	219	85	110	82	74	467	95	188	809	54
v/c Ratio	0.50	0.54	0.59	0.24	0.29	0.55	0.23	0.10	0.64	0.37	0.05
Control Delay	75.8	43.2	78.0	56.5	11.6	77.3	15.4	3.4	71.5	15.4	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.8	43.2	78.0	56.5	11.6	77.3	15.4	3.4	71.5	15.4	0.7
Queue Length 50th (ft)	56	65	76	48	0	66	101	0	87	186	0
Queue Length 95th (ft)	103	105	131	77	43	117	162	29	125	290	5
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	265	1036	265	1036	526	265	2072	966	520	2216	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.21	0.32	0.11	0.16	0.28	0.23	0.10	0.36	0.37	0.05

Intersection Summary

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	EB	WB	SB
Directions Served	LT	R	LTR	L
Maximum Queue (ft)	31	32	31	27
Average Queue (ft)	7	3	12	2
95th Queue (ft)	28	19	37	13
Link Distance (ft)	2585		2577	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		85		100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 9: Armstrong Avenue & Olive Avenue

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	65	81	9	66	106	23	42	224	150	72	64	44
Average Queue (ft)	43	36	2	31	55	9	13	97	49	41	32	12
95th Queue (ft)	62	69	7	55	85	26	31	178	119	67	56	30
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)								38	1			
Queuing Penalty (veh)								55	5			

Queuing and Blocking Report

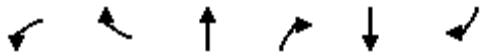
Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	T	R	L	TR	L
Maximum Queue (ft)	26	25	68	27	30	30	49	91
Average Queue (ft)	4	7	28	4	18	2	2	30
95th Queue (ft)	18	24	59	18	37	14	18	62
Link Distance (ft)		1820		776			1308	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	140		140		140	155		155
Storage Blk Time (%)								
Queuing Penalty (veh)								

Queuing and Blocking Report

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	B28	B28	NB	B34	B34	SB
Directions Served	L	TR	L	TR	T		LTR	T		LTR
Maximum Queue (ft)	53	97	300	1791	851	848	751	586	595	1286
Average Queue (ft)	20	39	298	1330	482	415	724	548	552	1280
95th Queue (ft)	44	63	308	2386	1121	1100	745	564	591	1284
Link Distance (ft)		1019		1679	821	821	644	533	533	1276
Upstream Blk Time (%)				53	26	9	100	59	31	30
Queuing Penalty (veh)				538	122	43	779	230	120	234
Storage Bay Dist (ft)	190		200							
Storage Blk Time (%)			97							
Queuing Penalty (veh)			195							



Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	120	126	731	941	416	905
v/c Ratio	0.35	0.32	0.31	0.59	0.17	0.57
Control Delay	23.3	7.0	6.5	1.7	5.8	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.3	7.0	6.5	1.7	5.8	1.5
Queue Length 50th (ft)	38	1	61	0	31	0
Queue Length 95th (ft)	73	35	105	0	57	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	613	624	2357	1583	2380	1599
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.20	0.31	0.59	0.17	0.57

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	339	471	1259	143	113	442
v/c Ratio	0.52	0.52	0.69	0.16	0.38	0.19
Control Delay	33.3	5.0	19.9	4.1	40.3	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.3	5.0	19.9	4.1	40.3	6.4
Queue Length 50th (ft)	84	0	269	4	30	43
Queue Length 95th (ft)	120	40	398	37	54	71
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	787	1000	1821	876	602	2313
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.47	0.69	0.16	0.19	0.19

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	133	331	159	206	293	143	1085	208	379	542	60
v/c Ratio	0.72	0.65	0.78	0.38	0.60	0.72	0.69	0.27	0.79	0.32	0.08
Control Delay	81.0	58.6	84.6	53.9	10.7	79.9	36.3	16.4	69.9	25.3	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.0	58.6	84.6	53.9	10.7	79.9	36.3	16.4	69.9	25.3	1.9
Queue Length 50th (ft)	119	143	142	88	0	128	415	61	174	158	0
Queue Length 95th (ft)	175	178	206	120	66	185	550	131	210	232	9
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	255	984	255	997	653	269	1574	757	533	1677	798
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.34	0.62	0.21	0.45	0.53	0.69	0.27	0.71	0.32	0.08

Intersection Summary

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	EB	WB	NB	SB	SB
Directions Served	LT	R	LTR	L	L	TR
Maximum Queue (ft)	94	76	203	20	27	222
Average Queue (ft)	23	19	61	1	1	8
95th Queue (ft)	62	54	145	9	9	44
Link Distance (ft)	2585		2577			1319
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		85		170	100	
Storage Blk Time (%)	1	0				1
Queuing Penalty (veh)	0	0				0

Queuing and Blocking Report

Intersection: 9: Armstrong Avenue & Olive Avenue

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	42	38	42	220	437	375	20	506	150	1255	315	250
Average Queue (ft)	24	23	7	63	225	168	9	189	100	438	195	133
95th Queue (ft)	41	41	24	172	368	318	24	415	189	1134	384	284
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)					0					1		
Queuing Penalty (veh)					0					6		
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)					52	14		63	8	24	33	29
Queuing Penalty (veh)					55	3		119	21	128	105	92

Queuing and Blocking Report

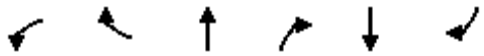
Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	EB	EB	B30	WB	WB	WB	NB	NB	SB
Directions Served	L	TR	T	L	T	R	L	TR	L
Maximum Queue (ft)	315	1892	83	315	839	80	30	52	67
Average Queue (ft)	68	1242	4	315	793	33	3	20	34
95th Queue (ft)	281	2036	30	316	809	67	17	48	64
Link Distance (ft)		1820	118		776			1308	
Upstream Blk Time (%)		7			99				
Queuing Penalty (veh)		14			0				
Storage Bay Dist (ft)	140			140		140	155		155
Storage Blk Time (%)		100		100	1				
Queuing Penalty (veh)		14		244	2				

Queuing and Blocking Report

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	NB	B34	B34	SB
Directions Served	L	TR	L	TR	LTR	T		LTR
Maximum Queue (ft)	96	96	181	65	752	577	577	1287
Average Queue (ft)	49	56	75	45	718	548	541	1280
95th Queue (ft)	77	91	123	64	733	565	610	1285
Link Distance (ft)		1019		1679	644	533	533	1276
Upstream Blk Time (%)					100	53	26	27
Queuing Penalty (veh)					883	236	116	193
Storage Bay Dist (ft)	190		200					
Storage Blk Time (%)			0					
Queuing Penalty (veh)			0					



Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	137	117	843	510	580	432
v/c Ratio	0.39	0.31	0.36	0.32	0.25	0.28
Control Delay	23.4	9.7	7.3	0.5	6.6	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	9.7	7.3	0.5	6.6	0.4
Queue Length 50th (ft)	43	9	75	0	47	0
Queue Length 95th (ft)	80	42	130	0	85	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	596	590	2322	1583	2300	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.20	0.36	0.32	0.25	0.28

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	498	908	842	142	141	592
v/c Ratio	0.61	0.84	0.54	0.18	0.44	0.27
Control Delay	32.5	20.0	19.7	3.6	40.6	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.5	20.0	19.7	3.6	40.6	8.3
Queue Length 50th (ft)	118	98	177	0	37	76
Queue Length 95th (ft)	174	#222	234	32	64	96
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	855	1109	1567	780	602	2217
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.82	0.54	0.18	0.23	0.27

Intersection Summary

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

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	105	302	158	190	249	92	625	154	357	935	88
v/c Ratio	0.65	0.62	0.77	0.34	0.54	0.61	0.38	0.19	0.77	0.50	0.10
Control Delay	79.2	55.3	82.7	53.1	10.2	78.5	26.8	7.8	70.1	24.5	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.2	55.3	82.7	53.1	10.2	78.5	26.8	7.8	70.1	24.5	4.3
Queue Length 50th (ft)	94	121	141	81	0	82	191	15	164	282	0
Queue Length 95th (ft)	153	166	215	116	76	139	287	67	211	417	31
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	265	1021	265	1036	639	265	1654	805	532	1869	880
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.30	0.60	0.18	0.39	0.35	0.38	0.19	0.67	0.50	0.10

Intersection Summary

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	L	L
Maximum Queue (ft)	75	31	31	21	52
Average Queue (ft)	28	2	16	2	7
95th Queue (ft)	61	12	40	11	30
Link Distance (ft)	2585		2577		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		85		170	100
Storage Blk Time (%)	0				
Queuing Penalty (veh)	0				

Intersection: 9: Armstrong Avenue & Olive Avenue

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	125	75	32	85	135	59	43	1124	150	136	83	37
Average Queue (ft)	48	32	6	40	62	11	13	788	138	65	35	16
95th Queue (ft)	96	56	19	69	107	34	31	1355	197	115	67	31
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)								47				
Queuing Penalty (veh)								0				
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)					0			97	4			
Queuing Penalty (veh)					0			138	20			

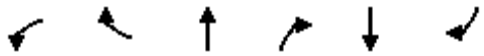
Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	T	R	L	TR	L
Maximum Queue (ft)	30	52	149	102	78	31	22	65
Average Queue (ft)	10	22	63	43	27	8	2	33
95th Queue (ft)	30	46	108	87	53	29	13	57
Link Distance (ft)		1820		776			1308	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	140		140		140	155		155
Storage Blk Time (%)			0					
Queuing Penalty (veh)			0					

Queuing and Blocking Report

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	NB	B34	B34	SB
Directions Served	L	TR	L	TR	LTR	T		LTR
Maximum Queue (ft)	50	75	300	554	752	601	585	1286
Average Queue (ft)	24	43	123	110	725	554	554	1220
95th Queue (ft)	46	64	273	337	749	574	590	1432
Link Distance (ft)		1019		1679	644	533	533	1276
Upstream Blk Time (%)					100	56	28	15
Queuing Penalty (veh)					785	221	111	124
Storage Bay Dist (ft)	190		200					
Storage Blk Time (%)			19	0				
Queuing Penalty (veh)			74	0				



Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	132	132	723	955	436	910
v/c Ratio	0.38	0.32	0.31	0.60	0.18	0.57
Control Delay	23.3	7.0	6.7	1.7	6.0	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.3	7.0	6.7	1.7	6.0	1.5
Queue Length 50th (ft)	42	1	62	0	33	0
Queue Length 95th (ft)	78	36	106	0	62	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	613	626	2338	1583	2361	1599
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.21	0.31	0.60	0.18	0.57

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	345	524	1315	151	118	443
v/c Ratio	0.52	0.55	0.72	0.17	0.39	0.19
Control Delay	33.4	5.1	21.0	4.4	40.4	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	5.1	21.0	4.4	40.4	6.5
Queue Length 50th (ft)	86	0	290	6	31	44
Queue Length 95th (ft)	122	41	#446	41	56	71
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	787	1040	1814	873	602	2310
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.50	0.72	0.17	0.20	0.19

Intersection Summary

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

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	130	323	157	280	289	168	1062	204	372	510	60
v/c Ratio	0.71	0.64	0.78	0.52	0.65	0.76	0.67	0.27	0.78	0.31	0.08
Control Delay	80.7	58.3	84.2	57.0	17.7	79.6	35.2	15.8	70.0	26.0	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.7	58.3	84.2	57.0	17.7	79.6	35.2	15.8	70.0	26.0	1.9
Queue Length 50th (ft)	116	138	140	123	37	150	398	58	171	150	0
Queue Length 95th (ft)	181	184	215	168	133	220	567	137	219	235	12
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	255	983	255	997	618	275	1593	766	530	1640	783
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.33	0.62	0.28	0.47	0.61	0.67	0.27	0.70	0.31	0.08

Intersection Summary

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	EB	WB	NB
Directions Served	LT	R	LTR	TR
Maximum Queue (ft)	523	178	1298	1256
Average Queue (ft)	156	15	511	735
95th Queue (ft)	409	72	1270	1673
Link Distance (ft)	2585		2577	1245
Upstream Blk Time (%)				47
Queuing Penalty (veh)				136
Storage Bay Dist (ft)		85		
Storage Blk Time (%)	55			67
Queuing Penalty (veh)	11			3

Intersection: 9: Armstrong Avenue & Olive Avenue

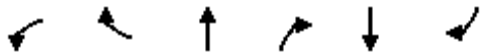
Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	263	448	9	74	221	224	191	1113	150	374	315	44
Average Queue (ft)	84	50	4	40	109	82	54	493	46	52	44	12
95th Queue (ft)	232	167	11	62	190	212	151	1297	125	212	176	37
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)								38				
Queuing Penalty (veh)								0				
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)	20	0			2	19	6	58	4	9		
Queuing Penalty (veh)	44	0			2	4	13	139	13	48		

Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	EB	EB	B30	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	T	L	T	L	TR	L	TR
Maximum Queue (ft)	314	1929	189	313	841	244	1321	134	371
Average Queue (ft)	48	1716	84	293	803	228	1229	22	54
95th Queue (ft)	200	2160	192	386	817	265	1714	86	259
Link Distance (ft)		1820	118		807		1308		356
Upstream Blk Time (%)		68	54		100		73		13
Queuing Penalty (veh)		132	104		0		541		0
Storage Bay Dist (ft)	140			140		155		155	
Storage Blk Time (%)		100		93	100	92			14
Queuing Penalty (veh)		40		239	326	763			14

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	NB	B34	B34	SB
Directions Served	L	TR	L	TR	LTR	T		LTR
Maximum Queue (ft)	340	762	286	97	752	574	578	1287
Average Queue (ft)	139	286	123	51	729	548	554	1273
95th Queue (ft)	368	680	257	78	749	561	574	1328
Link Distance (ft)		1019		1679	644	533	533	1276
Upstream Blk Time (%)					100	64	43	29
Queuing Penalty (veh)					927	296	201	224
Storage Bay Dist (ft)	190		200					
Storage Blk Time (%)		36	14					
Queuing Penalty (veh)		60	32					



Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	145	123	886	528	601	486
v/c Ratio	0.41	0.33	0.38	0.33	0.26	0.31
Control Delay	23.4	11.2	7.6	0.6	6.8	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	11.2	7.6	0.6	6.8	0.5
Queue Length 50th (ft)	46	14	82	0	50	0
Queue Length 95th (ft)	83	47	141	0	90	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	596	583	2308	1583	2286	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.21	0.38	0.33	0.26	0.31

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	482	942	933	147	146	600
v/c Ratio	0.60	0.88	0.59	0.19	0.45	0.28
Control Delay	32.5	24.0	20.5	3.5	40.7	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.5	24.0	20.5	3.5	40.7	8.2
Queue Length 50th (ft)	112	114	207	0	39	79
Queue Length 95th (ft)	168	#251	267	33	65	97
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	845	1096	1569	783	602	2213
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.86	0.59	0.19	0.24	0.27

Intersection Summary

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

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	250	332	164	189	242	96	587	160	371	957	96
v/c Ratio	0.95	0.59	0.78	0.44	0.60	0.62	0.37	0.20	0.78	0.53	0.11
Control Delay	103.4	48.0	83.4	59.5	12.6	78.7	28.1	7.1	70.0	26.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.4	48.0	83.4	59.5	12.6	78.7	28.1	7.1	70.0	26.3	5.2
Queue Length 50th (ft)	228	120	147	86	0	86	180	11	170	295	2
Queue Length 95th (ft)	#399	167	222	119	77	143	272	63	218	435	37
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	265	1032	265	1036	634	265	1577	781	536	1797	849
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.32	0.62	0.18	0.38	0.36	0.37	0.20	0.69	0.53	0.11

Intersection Summary

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

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	L	L
Maximum Queue (ft)	52	31	31	20	31
Average Queue (ft)	20	2	16	1	8
95th Queue (ft)	46	15	41	9	28
Link Distance (ft)	2585		2577		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		85		170	100
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Armstrong Avenue & Olive Avenue

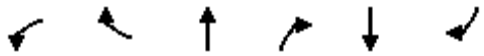
Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	280	385	279	220	307	193	60	1100	150	93	63	35
Average Queue (ft)	78	125	14	41	118	53	16	1082	150	46	26	8
95th Queue (ft)	179	284	98	104	227	160	38	1097	150	84	56	26
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)								100				
Queuing Penalty (veh)								0				
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)		32			14	0		100	6			
Queuing Penalty (veh)		103			16	0		167	27			

Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	L	TR	L	TR
Maximum Queue (ft)	311	1593	306	788	31	52	245	372
Average Queue (ft)	311	1247	306	788	4	3	233	352
95th Queue (ft)	311	1666	306	788	21	21	249	460
Link Distance (ft)		1820		807		1308		356
Upstream Blk Time (%)				100				87
Queuing Penalty (veh)				0				0
Storage Bay Dist (ft)	140		140		155		155	
Storage Blk Time (%)	100	100	100	100			98	
Queuing Penalty (veh)	107	120	109	175			909	

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	NB	B34	B34	SB
Directions Served	L	TR	L	TR	LTR	T		LTR
Maximum Queue (ft)	52	75	300	759	762	568	597	1284
Average Queue (ft)	22	48	171	280	723	549	554	1204
95th Queue (ft)	48	77	366	733	744	564	604	1413
Link Distance (ft)		1019		1679	644	533	533	1276
Upstream Blk Time (%)					100	56	29	16
Queuing Penalty (veh)					801	223	118	136
Storage Bay Dist (ft)	190		200					
Storage Blk Time (%)			42	0				
Queuing Penalty (veh)			171	0				



Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	132	132	740	955	457	939
v/c Ratio	0.38	0.33	0.32	0.60	0.19	0.59
Control Delay	23.3	7.7	6.8	1.7	6.1	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.3	7.7	6.8	1.7	6.1	1.6
Queue Length 50th (ft)	42	4	63	0	35	0
Queue Length 95th (ft)	78	38	109	0	65	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	613	622	2338	1583	2361	1599
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.21	0.32	0.60	0.19	0.59

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	355	524	1322	151	118	463
v/c Ratio	0.53	0.55	0.73	0.17	0.39	0.20
Control Delay	33.5	5.0	21.3	4.5	40.4	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.5	5.0	21.3	4.5	40.4	6.6
Queue Length 50th (ft)	88	0	294	6	31	46
Queue Length 95th (ft)	125	41	#471	41	56	74
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	787	1040	1807	870	602	2304
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.50	0.73	0.17	0.20	0.20

Intersection Summary

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

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	130	328	157	291	289	168	1068	204	372	530	60
v/c Ratio	0.71	0.64	0.78	0.53	0.65	0.76	0.67	0.27	0.78	0.32	0.08
Control Delay	80.7	58.3	84.2	56.9	19.2	79.6	35.6	16.0	70.0	26.5	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.7	58.3	84.2	56.9	19.2	79.6	35.6	16.0	70.0	26.5	2.0
Queue Length 50th (ft)	116	142	140	128	44	150	403	58	171	158	0
Queue Length 95th (ft)	181	186	215	173	141	220	577	139	219	247	13
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	255	983	255	997	611	275	1584	762	530	1631	779
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.33	0.62	0.29	0.47	0.61	0.67	0.27	0.70	0.32	0.08

Intersection Summary

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	EB	WB	NB
Directions Served	LT	R	LTR	TR
Maximum Queue (ft)	579	184	618	1245
Average Queue (ft)	139	15	176	460
95th Queue (ft)	443	73	504	1369
Link Distance (ft)	2585		2577	1245
Upstream Blk Time (%)				28
Queuing Penalty (veh)				87
Storage Bay Dist (ft)		85		
Storage Blk Time (%)	34			45
Queuing Penalty (veh)	7			2

Intersection: 9: Armstrong Avenue & Olive Avenue

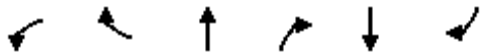
Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	245	251	9	219	266	210	60	1063	150	831	315	105
Average Queue (ft)	48	42	4	44	88	38	16	354	70	127	62	21
95th Queue (ft)	146	134	11	104	179	116	44	993	175	463	222	67
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)								19				
Queuing Penalty (veh)								0				
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)	7				6	0		64	7	20		
Queuing Penalty (veh)	16				8	0		156	21	129		

Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	EB	B30	WB	WB	NB	NB	SB	SB
Directions Served	TR	T	L	T	L	TR	L	TR
Maximum Queue (ft)	1892	122	297	813	245	1315	238	372
Average Queue (ft)	1811	91	297	813	154	702	116	165
95th Queue (ft)	2066	170	297	813	325	1779	296	451
Link Distance (ft)	1820	118		807		1308		356
Upstream Blk Time (%)	80	76		100		39		39
Queuing Penalty (veh)	168	162		0		295		0
Storage Bay Dist (ft)			140		155		155	
Storage Blk Time (%)	100		100	100	58		46	
Queuing Penalty (veh)	45		256	326	491		675	

Intersection: 3: Fowler Avenue & Olive Avenue

Movement	EB	EB	WB	WB	NB	B34	B34	SB
Directions Served	L	TR	L	TR	LTR	T		LTR
Maximum Queue (ft)	340	1071	300	790	752	564	593	1290
Average Queue (ft)	298	841	255	385	721	547	553	1273
95th Queue (ft)	467	1300	366	884	739	559	586	1329
Link Distance (ft)		1019		1679	644	533	533	1276
Upstream Blk Time (%)		47			100	65	33	35
Queuing Penalty (veh)		0			980	320	158	269
Storage Bay Dist (ft)	190		200					
Storage Blk Time (%)		100	67	1				
Queuing Penalty (veh)		166	157	3				



Lane Group	WBL	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	145	123	942	528	615	505
v/c Ratio	0.41	0.33	0.41	0.33	0.27	0.32
Control Delay	23.4	12.9	7.8	0.6	6.8	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	12.9	7.8	0.6	6.8	0.5
Queue Length 50th (ft)	46	18	90	0	52	0
Queue Length 95th (ft)	83	51	152	0	92	0
Internal Link Dist (ft)			504		515	
Turn Bay Length (ft)		650		420		
Base Capacity (vph)	596	575	2308	1583	2286	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.21	0.41	0.33	0.27	0.32

Intersection Summary

Lane Group	EBL	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	515	942	955	147	146	614
v/c Ratio	0.63	0.88	0.61	0.19	0.45	0.28
Control Delay	33.1	25.1	20.9	3.5	40.7	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.1	25.1	20.9	3.5	40.7	8.3
Queue Length 50th (ft)	122	121	212	0	39	81
Queue Length 95th (ft)	180	#260	276	33	65	100
Internal Link Dist (ft)			605			504
Turn Bay Length (ft)	380	230		180	260	
Base Capacity (vph)	849	1086	1560	780	602	2208
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.87	0.61	0.19	0.24	0.28

Intersection Summary

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

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	250	345	164	197	242	96	610	160	371	971	96
v/c Ratio	0.95	0.61	0.78	0.45	0.59	0.62	0.39	0.21	0.78	0.54	0.11
Control Delay	103.4	49.8	83.4	59.0	12.2	78.7	28.8	7.7	70.0	27.0	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.4	49.8	83.4	59.0	12.2	78.7	28.8	7.7	70.0	27.0	5.3
Queue Length 50th (ft)	228	130	147	90	0	86	190	14	170	305	2
Queue Length 95th (ft)	#399	177	222	122	77	143	286	68	218	448	38
Internal Link Dist (ft)		886		540			374			605	
Turn Bay Length (ft)	225		245		60	245		165	275		130
Base Capacity (vph)	265	1028	265	1036	634	265	1563	772	536	1783	843
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.34	0.62	0.19	0.38	0.36	0.39	0.21	0.69	0.54	0.11

Intersection Summary

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

Queuing and Blocking Report

Intersection: 8: Armstrong Avenue & Floradora Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	TR	L
Maximum Queue (ft)	114	32	74	1246	28
Average Queue (ft)	35	4	17	143	2
95th Queue (ft)	70	22	52	734	13
Link Distance (ft)	2585		2577	1245	
Upstream Blk Time (%)				6	
Queuing Penalty (veh)				44	
Storage Bay Dist (ft)		85			100
Storage Blk Time (%)	2			15	
Queuing Penalty (veh)	0			1	

Intersection: 9: Armstrong Avenue & Olive Avenue

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	T	R	LT	R	LT	R	R
Maximum Queue (ft)	280	322	280	219	247	222	43	1124	150	108	66	43
Average Queue (ft)	108	139	23	53	146	92	17	1083	145	37	32	10
95th Queue (ft)	255	310	141	114	241	202	39	1102	190	82	66	29
Link Distance (ft)		821			454	454		1061		1245		
Upstream Blk Time (%)								100				
Queuing Penalty (veh)								0				
Storage Bay Dist (ft)	200		105	145			145		50		185	185
Storage Blk Time (%)		39			17	1		100	3			
Queuing Penalty (veh)		152			18	0		167	16			

Intersection: 10: Temperance Avenue & McKinley Avenue

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	L	TR	L	TR
Maximum Queue (ft)	306	1735	178	804	114	52	241	372
Average Queue (ft)	306	1424	178	804	9	4	231	335
95th Queue (ft)	306	1847	178	804	52	25	257	443
Link Distance (ft)		1820		807		1308		356
Upstream Blk Time (%)				100				89
Queuing Penalty (veh)				0				0
Storage Bay Dist (ft)	140		140		155		155	
Storage Blk Time (%)	100	100	100	100			95	
Queuing Penalty (veh)	114	123	111	175			886	

APPENDIX G

TASAS AND TIMS TRAFFIC COLLISION REPORTS

Crash Diagram

Primary Street:
Fowler Avenue

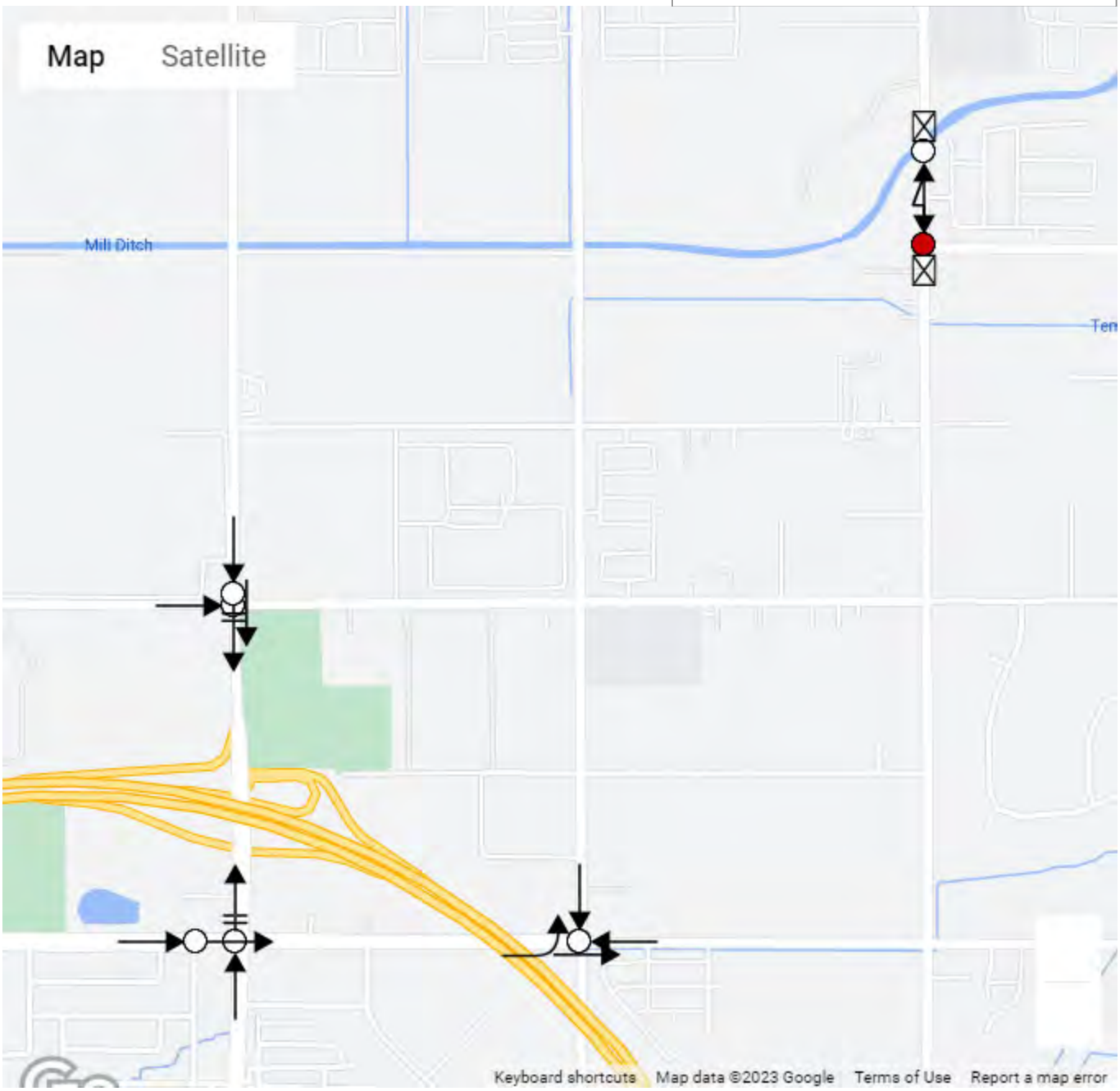
Secondary Street:
Temperance Avenue

Time Period:
Dec 2016 to Dec 2021

Agency Name:
LSA Associates

Mapping Summary:	
Fatal Crash	1
Injury Crash	7
Mapped	8
Not Drawn	4
Total	12

- Straight
- Left Turn
- Right Turn
- U-Turn
- Overturned
- Ran Off Road
- Stopped
- Parked
- Pedestrian
- Bicycle
- Object
- Fatal Crash
- Injury Crash



Date Created: 03/07/2023

ATP Maps & Summary Data

The tool is designed to support the California Active Transportation Program (ATP), as well as active transportation users and practitioners throughout California. The tool utilizes interactive crash maps to allow users to track and document pedestrian and bicycle crashes and generate data summaries within specified project and/or community limits.

Step 1: Select a County/City, Bike/Ped, Severity, and Years

County: Fresno

City: Fresno

Include 1 mile buffer outside of selected County/City: No

Include State Highway Related Crashes: Yes

Involved With: Pedestrian and Bicycle

Crash Severity: Fatal, Severe Injury, Other Visible Injury, and Complaint of Pain

Year: 2016 - 2021

Crash Summary for initial parameters defined above:

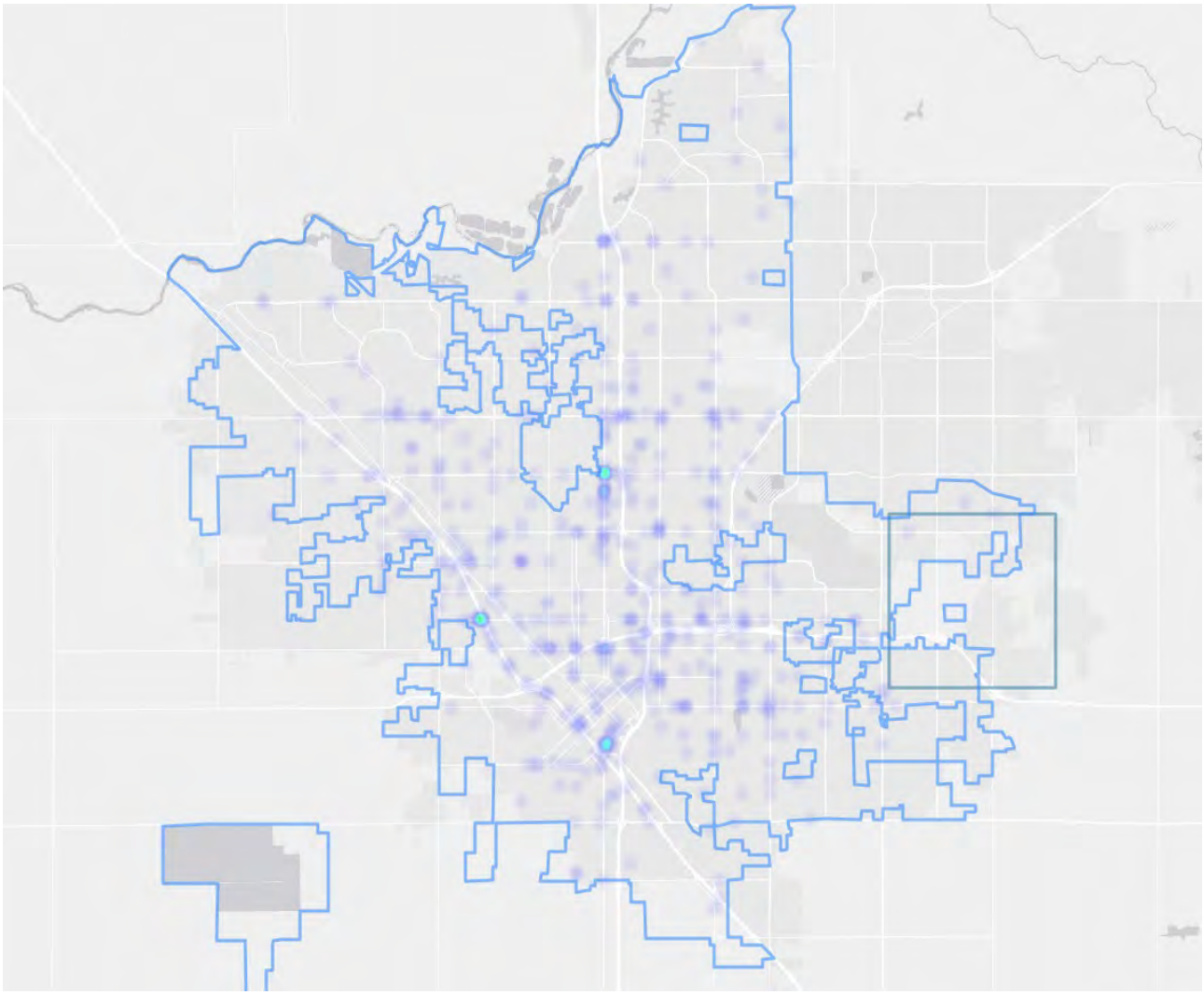
Number of Crashes by Crash Severity

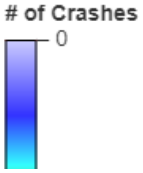
Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	17	20	56	55	148
Pedestrian	139	65	120	77	401

County/City Heat Map:

Step 2: Identify your project area to develop a more localized Community Heat Map

Select the size of your proposed project limits: Less than 3 miles across.

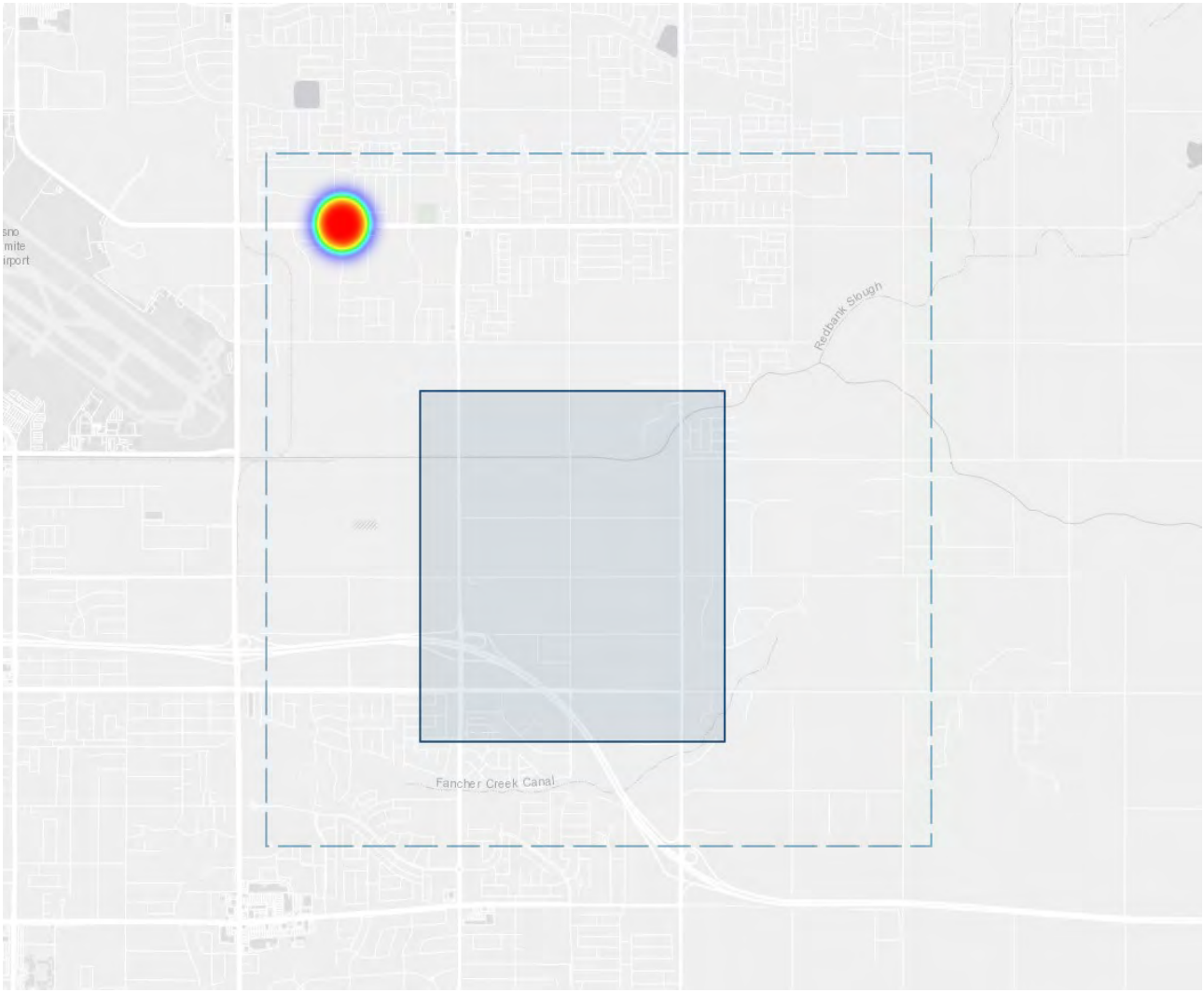




The heat map intensity scale is constant throughout the state.

Community Heat Map:

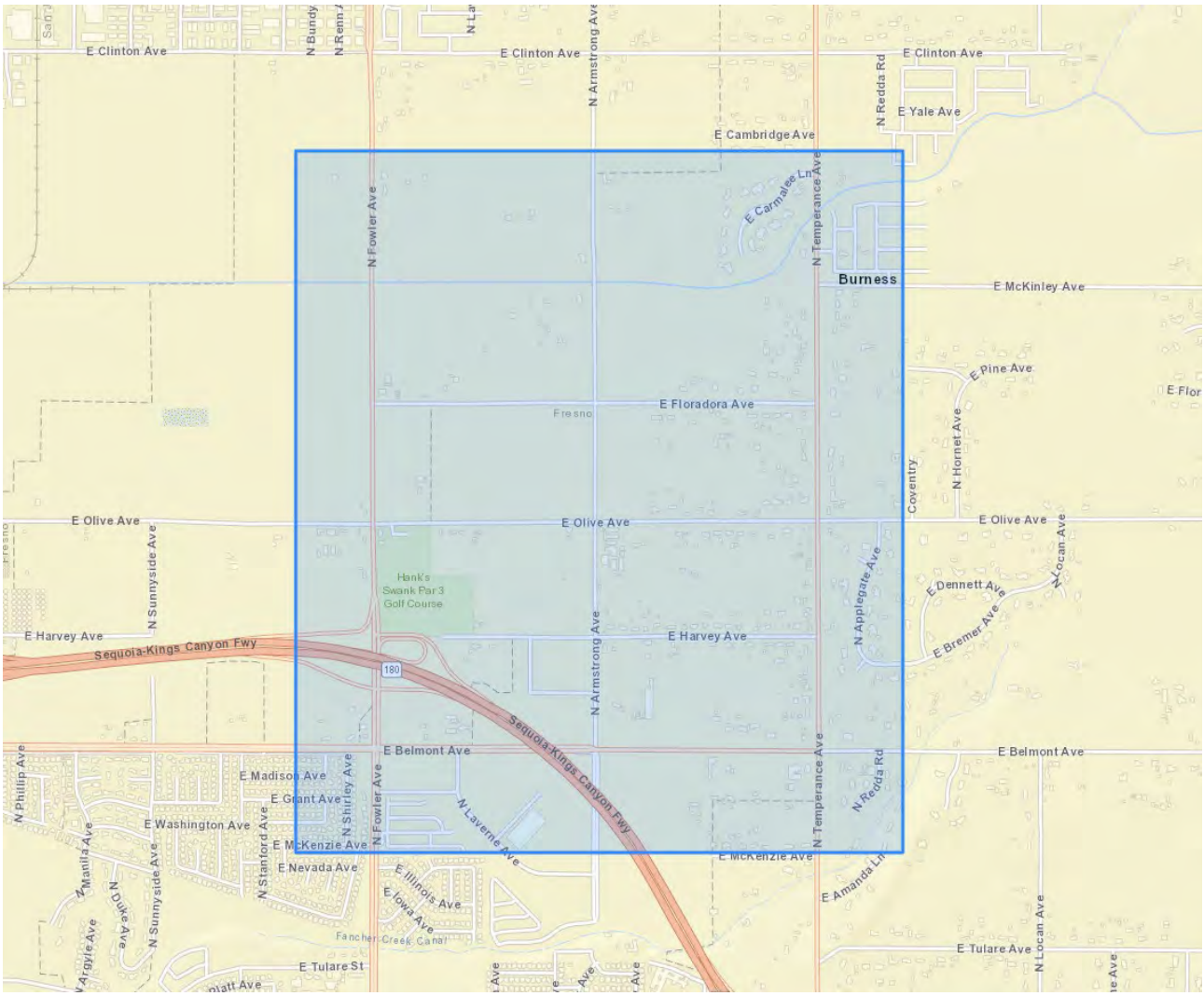
Step 3: Draw the project boundaries to get detailed crash data summaries and map



The heat map intensity scale is custom generated for the selected community.

Project Area Crash Map: 0 total crashes.

Step 4: Review the project-specific crash map



Step 5: Review the crash summary data, graphs and tables provided.

Summary Results

Involved With	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
Bicycle	0	0	0	0	0
Pedestrian	0	0	0	0	0

Crash List

CASE ID	Date	Time	Primary Rd	Secondary Rd	Dist & Dir from Int.	Bike	Ped	Killed	Injured

Traffic Accident Surveillance and Analysis System (TASAS)
Crash Data Summary:

Table 1 summarizes collision rates for the requested Route 180 mainline segment in eastbound and westbound directions from Postmile (PM) R62.902- to Postmile (PM) R65.328 in the County of Fresno. The Table B reports were generated on February 14, 2023, and they depict existing collision rates per million vehicle miles for the most recent 36-month period from August 1, 2019 to July 31, 2022 from the Traffic Accident Surveillance and Analysis System (TASAS).

TABLE 1

TASAS Table B Collision Rates (08-01-2019 to 07-31-2022)

Fre 180 Segment	TOTAL No. of Collisions	ACTUAL (per million vehicle miles)			AVERAGE (per million vehicle miles)		
		Fatal Collisions	Fatal + Injury Collisions	Total (1)	Fatal Collisions	Fatal + Injury Collisions	Total (1)
Eastbound PM R62.902 / R65.328	28	0.016	0.17	0.44	0.006	0.36	1.05
Westbound PM R62.902 / R65.328	53	0.000	0.22	0.84	0.006	0.36	1.05

(1) All reported collisions (includes Property Damage Only (PDO) Collisions)

Eastbound Fre 180 (PM R62.902 to R65.328)

Analysis of the TASAS Table B records provided in Table 1 shows a total of 28 collisions (1 Fatal, 10 Injury, 17 PDO) within the segment of eastbound Route 180 from PM R62.902 to PM R65.328. The total rate of fatal related collisions is above the average for similar facilities statewide. The total rate of injury related collisions and the total rate of collisions are below the average for similar facilities statewide. At PM R63.690, a fatal automobile versus pedestrian collision occurred when a man, for unknown reasons, entered the westbound Number 3 lane and was struck by a passenger car.

Detailed analysis per the TASAS Selective Accident Retrieval (TSAR) generated on February 14, 2023 shows that the primary collision factors in the eastbound segment were:

- 13 "Improper Turn,"
- 4 "Other Violations,"
- 4 "Speeding,"
- 4 "Influence of Alcohol,"
- 1 "Failure to Yield,"
- 1 "Other than Driver," and
- 1 "Unknown."

The types of collision included:

- 9 "Sideswipe,"
- 7 "Hit Object,"
- 6 "Rear End,"
- 2 "Overturn,"
- 2 "Broadside,"
- 1 "Head On," and
- 1 "Auto/Pedestrian."

The objects struck from the 7 hit object collisions included the following:

- 2 "Traffic Sign/Sign Post"
- 1 "Guardrail,"
- 1 "Barrier"
- 1 "Cut Slope or Embankment"
- 1 "Side of Bridge Railing," and
- 1 "Other Object on The Road."

Of the 28 total collisions, 18 occurred in daylight and 3 of the total occurred under wet conditions.

Westbound Fre 180 (PM R62.902 to R65.328)

Analysis of the TASAS Table B records provided in Table 1 shows a total of 53 collisions (0 Fatal, 14 Injury, 39 PDO) within the segment of westbound Route 180 from PM R62.902 to PM R65.328. The total rate of fatal related collisions, the total rate of injury related collisions, and the total rate of collisions are all below the average for similar facilities statewide.

Detailed analysis per the TASAS Selective Accident Retrieval (TSAR) generated on February 14, 2023, shows that the primary collision factors in the westbound segment were:

- 21 "Speeding,"
- 16 "Improper Turn,"
- 6 "Other Violations,"
- 6 "Influence of Alcohol,"
- 2 "Unknown,"
- 1 "Following Too Close," and
- 1 "Other than Driver."

The types of collision included:

- 22 "Hit Object,"
- 10 "Rear End,"
- 8 "Sideswipe,"
- 8 "Overturn,"
- 3 "Broadside," and
- 2 "Other."

The objects struck from the 22 hit object collisions included the following:

- 5 “Guardrail,”
- 3 “Traffic Sign/Sign Post”
- 3 “Barrier,”
- 2 “Dike or Curb,”
- 2 “Does Not Apply,”
- 1 “Traffic Island,”
- 1 “End of Guardrail,”
- 1 “Over Embankment,”
- 1 “Other Object Off Road,”
- 1 “Other Object On Road,”
- 1 “Unknown Object Struck,” and
- 1 “No Object Involved.”

Of the 53 total collisions, 38 occurred in daylight and 15 of the total occurred under wet conditions.

End of summary.

WB/TC

APPENDIX H

VMT CALCULATION WORKSHEETS

LSA

Appendix H
VMT Calculations
TTM 6360

2019	TTM 6360 (Project) *	City of Fresno **
Total project households	328	
Total project population (a)	987	
Percent Population traveling to outside (b) *	7.79%	
Project Population traveling to outside (c=b*a)	77	
Total Internal-Internal (II) Project VMT (d) **	13,812	
Internal project population (e=a-c)	910	
II VMT per capita (f=d/e)	15.2	
IX VMT per capita (g) ***	2.0	
Total IX VMT (h=g*c)	156	
Total project VMT (i=d+h)	13,968	
VMT per capita (j=i/a)	14.2	
VMT adjustment factor for new base model (k)	1.08	
Adjusted project VMT per capita (l = k*j)	15.3	14.0

** : Obtained from "Fresno_worker_ixxifractions.dat" from model inputs. Used same percentages/values as the parent TAZ (1029)*

***: Includes all tours and all sub-tours from the ABM model run for VMT estimation*

****: IX VMT per capita was estimated as weighted average for all TAZs in the CSTDM Zone 2417*

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