# TRAFFIC STUDY

## MAPES AND TRUMBLE INDUSTRIAL FACILITY PROJECT (PLN22-05023)

## CITY OF PERRIS

## RIVERSIDE COUNTY, CALIFORNIA

This Traffic Study has been prepared under the supervision of
Ambarish Mukherjee, P.E.


LSA

December 2022

# TRAFFIC STUDY

## MAPES AND TRUMBLE INDUSTRIAL FACILITY PROJECT

## CITY OF PERRIS

## RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

City of Perris
101 N D Street
Perris, California 92570

Prepared by:

LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, California 92507
(951) 781-9310

Project No. BAV2101

City Record ID PLN22-05023

LSA

December 2022

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# 1.0 INTRODUCTION

This Traffic Study (TS) has been prepared to assess the potential circulation impacts associated with the proposed Mapes Road and Trumble Road Industrial Facility Project to be located at the southwest corner of Mapes Road and Trumble Road, in the City of Perris (City). The project site is bounded by Mapes Road to the north, Exceed Road a commercial development with undeveloped property to the south, Interstate 215 (I-215) to the west, and Trumble Road to the east.

The site is currently undeveloped and the proposed project will add one high cube fulfillment center warehouse building with a total area of 395,500 square feet (SF). The project opening year is anticipated to be 2024. Figure 1-1 illustrates the regional and project location. (Figures and tables are located at the end of each chapter.)

The City has adopted the *Draft City of Perris Transportation Impact Analysis Guidelines for CEQA,* dated May 2020*.* However, this guideline does not provide guidance for Levels of Service (LOS) Analysis for General Plan consistency. Therefore, as recommended by City staff, the LOS analysis for the project was prepared in accordance with the *City of Perris LOS Standards and Threshold of Significance*. The scope of work for this TS, including trip generation, trip distribution, study area, and analysis methodologies, has been approved by City staff via the Scoping Agreement process. A copy of the approved Scoping Agreement is included as Appendix A. (Appendices are attached at the end of the TS.)

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

- Existing Conditions;
- Existing with Project Conditions;
- Cumulative (2024) without Project Conditions; and
- Cumulative (2024) with Project Conditions.

Traffic conditions in the study area were examined for weekday a.m. and p.m. peak hour conditions. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

## 1.1 PROJECT DESCRIPTION

As previously mentioned, the proposed project will add one high cube fulfillment center warehouse building with a total area of 395,500 SF. Figure 1-2 illustrates a conceptual site plan for the proposed project. As illustrated in Figure 1-2, access to the project will be provided via three driveways. Following are detailed access description of each driveway:

- Driveway 1 – This driveway located on Mapes Road will be used by only passenger vehicles.
- Driveway 2 – This driveway located on Trumble Road will be used by only passenger vehicles.

- Driveway 3 – This driveway located on Exceed Road will be used by only trucks.

All three project driveways will operate as full access driveways. The project will also be improving the project frontage by adding curb, gutter and sidewalk along the project frontage.

It should be noted that though the total area of the building is 395,500 SF, the traffic analysis was conducted using 396,000 SF as a conservative estimate and rounding up to the nearest thousand square feet (TSF).

Additionally, the project proposes to include 50 percent High-Cube Cold Storage Warehouse as an alternative. However, peak hour trip generation rate for High-Cube Cold Storage Warehouse is lower than corresponding trip generation rates for High Cube Fulfillment Center Warehouse – Non-Sort land use. Since this study evaluates the project's effect on adjacent circulation network under a.m. and p.m. peak hours, the project was considered as 100 percent High Cube Fulfillment Center Warehouse – Non-Sort as a conservative approach.

## 1.2 STUDY AREA

The study area was approved by City staff via the City's scoping agreement process (Appendix A). Based on discussion with City staff, the study area includes the following intersections:

### 1.2.1 Study Intersections

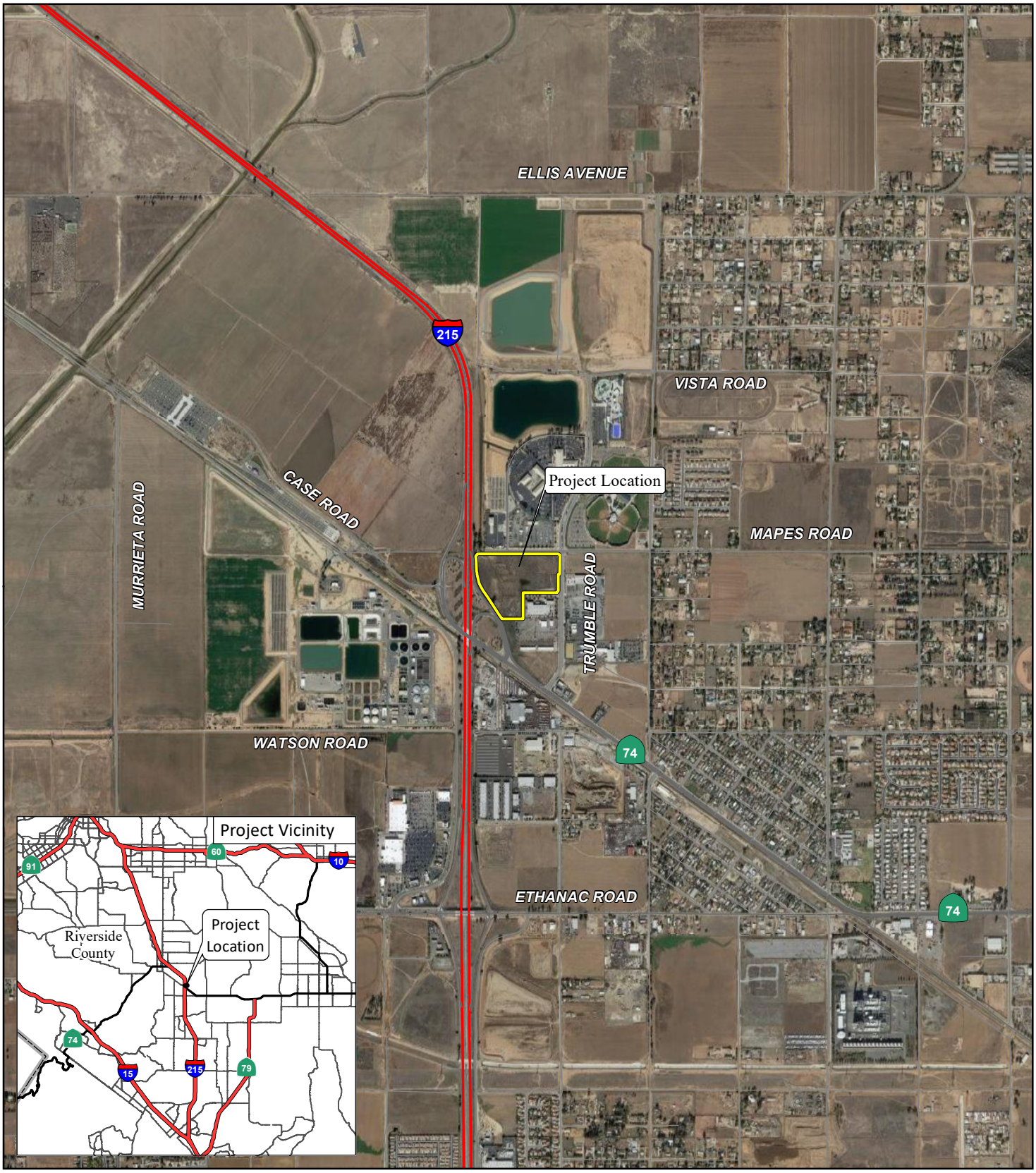
The following intersections are analyzed in this study:

1. Interstate 215 (I-215) Southbound Ramps/Bonnie Drive (Perris/Caltrans);
2. I-215 Northbound Ramps/California State Route 74 (CA-74) (Perris/Menifee/Caltrans);
3. Trumble Road/Mapes Road (Perris/Menifee);
4. Trumble Road/Exceed Road-Sturgeon Electric Driveway (Perris/Menifee);
5. Trumble Road/CA-74 (Menifee/Caltrans);
6. Project Driveway 1/Mapes Road (Perris); and
7. Project Driveway 2/Trumble Road (Perris/Menifee).

Figure 1-3 illustrates the study area intersections.

## 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




LSA

FIGURE 1-1

N

0 1000 2000

FEET

SOURCE: ESRI Streetmap, 2021; Google Earth, 2019.

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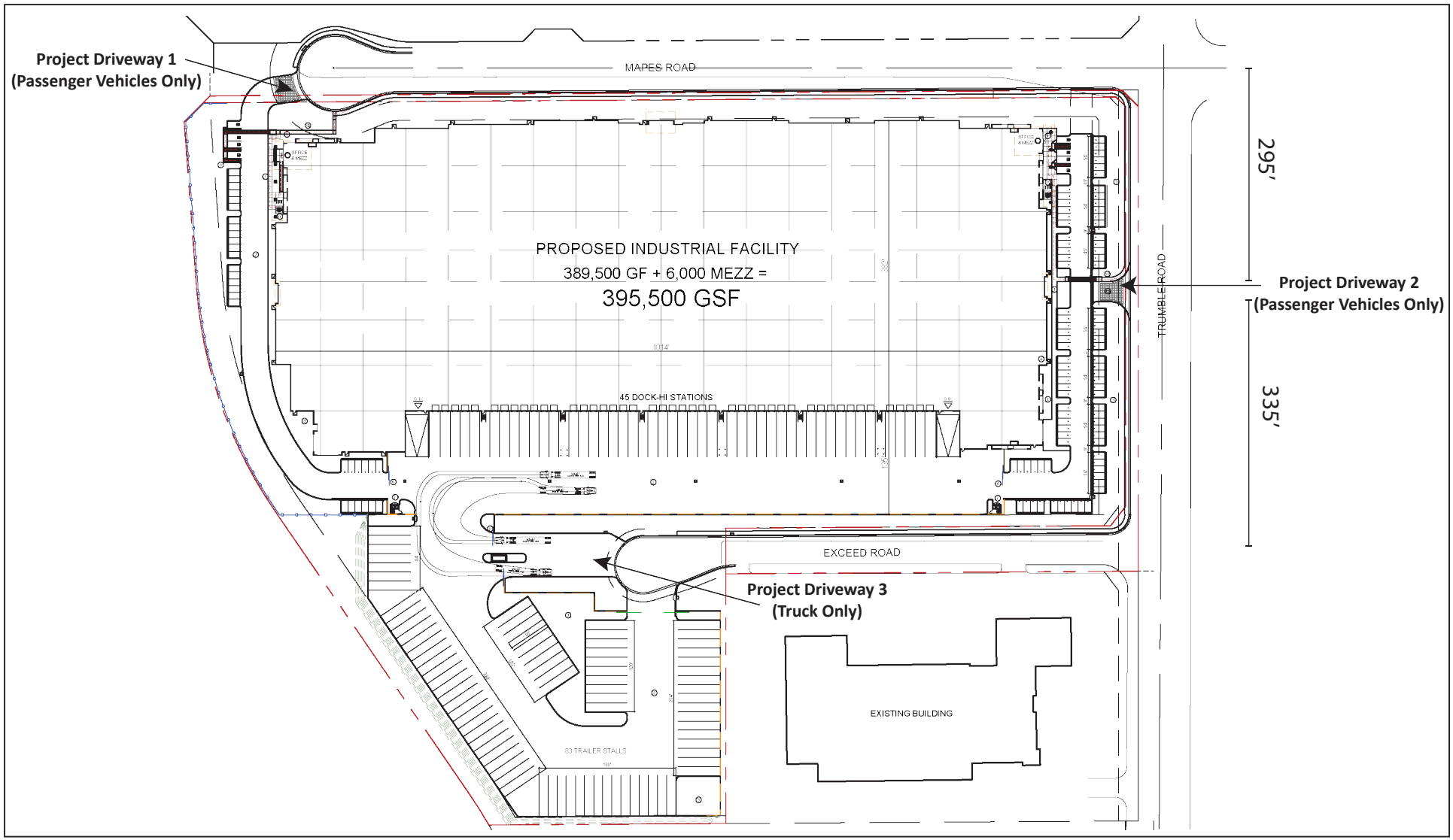
*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Regional and Project Location




LSA

FIGURE 2

N

0 95 190
FEET

SOURCE: AO Architects, June 2022

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*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Conceptual Site Plan

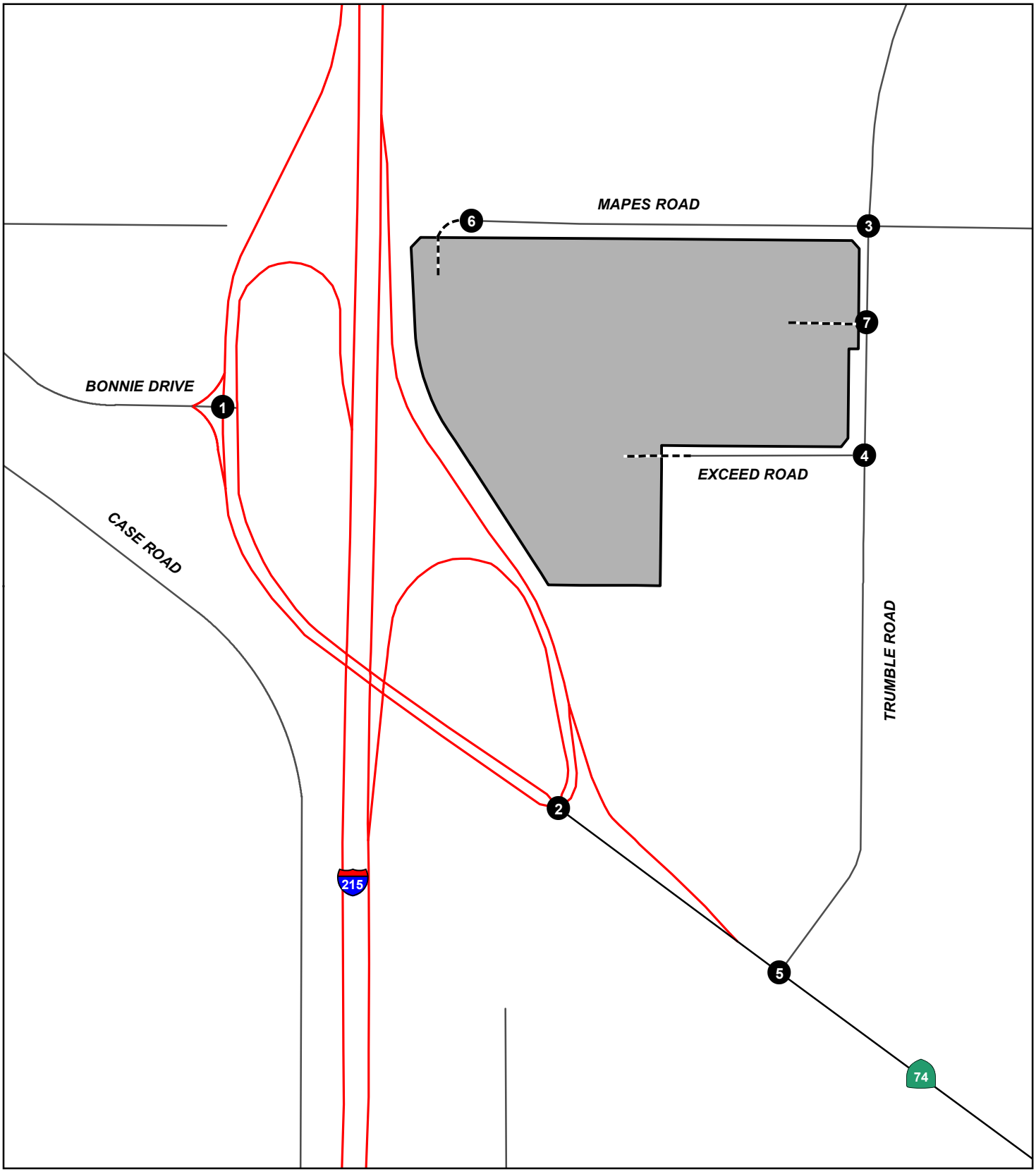


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FIGURE 1-3

LEGEND

Project Location

Study Area Intersections

Project Driveway

N

0 187.5 375

FEET

SOURCE: Riverside County, 2016

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*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Study Area Intesrections

# 2.0 ANALYSIS METHODOLOGY

## 2.1 LEVEL OF SERVICE DEFINITIONS

Level of service (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. The HCM establishes levels of service A through F for intersections as shown in Table 2-A.

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 Synchro 11 software, which uses HCM 6 methodologies. Table 2-B shows the level of service criteria for unsignalized and signalized intersections.

## 2.2 LEVEL OF SERVICE PROCEDURES AND THRESHOLDS

Study intersections analyzed in this report are under the jurisdictions of the City of Perris, at the border of City of Perris and Menifee or California Department of Transportation (Caltrans). Both Cities use LOS D as their minimum level of service criteria for intersections. Based on the City of Perris LOS standards, LOS E is acceptable at intersections of any arterials and Expressways with SR-74, the Ramona-Cajalco Expressway or at I-215 Freeway ramps, and may be allowed within the boundaries of the downtown specific plan area to the extent that would support transit-oriented developments and walkable communities.

## 2.3 LEVEL OF SERVICE REQUIREMENTS

As aforementioned, the City has identified LOS D as the standard for acceptable operating conditions for intersections and roadway segments, except intersections of any arterials and Expressways with SR-74, the Ramona-Cajalco Expressway or at I-215 Freeway ramps. Per the City, a direct project related operational deficiency occurs at a study intersection when it operates at an acceptable Level of Service (LOS) for existing conditions (without the project) and the addition of 50 or more a.m. or p.m. peak hour project trips causes the intersection to operate at an unacceptable LOS for existing plus project conditions. Additionally, a direct project related operational deficiency occurs at a study intersection when it operates at an unacceptable LOS for existing conditions (without the project) and the addition of 50 or more a.m. or p.m. peak hour project trips causes the intersection delay to increase by 2 seconds or more. A cumulative operational deficiency occurs when a study intersection is forecast to operate at an unacceptable LOS with the addition of cumulative/background traffic and 50 or more a.m. or p.m. peak hour project trips. Additionally, improvements needs to be recommended to conform to the City's LOS standards. As such, feasible improvements need to be recommended to eliminate or the existing or forecasted deficiency within the study area.

## 2.4 LIST OF CHAPTER 2.0 TABLES

## 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: 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)

# 3.0 CIRCULATION NETWORK SETTING

## 3.1 EXISTING CIRCULATION NETWORK

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

It should be noted that though the southbound right turn lane at intersection 1, I-215 Southbound Ramps/Bonnie Drive is channelized and free as constructed, it was coded as a yield in the synchro network, since it does not have its own dedicated merge lane and needs to yield to westbound through traffic. The turn pocket storage length was estimated from the yield point to the point where the north leg through lane expands enough to create a de facto space for cars making southbound right turn.

For the eastbound right turn lane, the channelized right turn was coded as a free right turn in the synchro network based on existing geometry. The turn pocket storage length was estimated from the merge point to the point where the west leg left turn lane expands enough to create a de facto space for cars making eastbound right turn.

As previously mentioned, the project could be accessed via three driveways located on Trumble Road, Mapes road and Exceed Road.

Within the City, all major roadways are classified based on the roadway classification provided in the City of Perris General Plan Circulation Element, updated January 2022. Figure 3-2 summarizes the classifications on major roadways within the City. Following is a brief description of major roadways within the study area:

- **Trumble Road**: Trumble Road is shared between the Cities of Perris and Menifee. Within the City of Perris, it designated as a Secondary Arterial between Ellis Avenue and City boundary in the City's General Plan. In the City of Menifee General Plan Circulation Element, it is designated as a 4-lane divided Major Roadway. Within the study area, Trumble Road is a four-lane roadway with a two-way left-turn lane (TWLTL) median. Currently there's no provision for on-street parking along Trumble Road between Mapes Road and SR-74.
- **Mapes Road**: Mapes Road is designated as a local road in the City's General Plan. Within the study area, Mapes Road is a two-lane, undivided local road. There is no provision for on-street parking along Mapes Road within the study area.
- **SR-74**: SR-74 is not designated in the City's General Plan Circulation Element. However, in the City of Menifee General Plan Circulation Element, it is designated as a 4-lane divided Major Roadway between I-215 and Antelope Road, and as Expressway east of Antelope Road. It is the major connection between I-215 and unincorporated Riverside County, City of Hemet and San Jacinto and City of Menifee east of the City of Perris. Within the study area, SR-74 is a 4-lane roadway that terminates at I-215. There is no provision for bicycle lanes or on-street parking along SR-74 within the study area.
- **Bonnie Drive**: Bonnie Drive is designated as an Arterial in the City's General Plan. Bonnie Drive Road is a two-lane, undivided road west of I-215 that merges with Case Road. There are no provision for bicycle lanes or on-street parking along Bonnie Drive within the study area.

## 3.2 CITY OF PERRIS MODES OF TRANSPORTATION

### 3.2.1 Bicycle Circulation

The City of Perris Active Transportation Plan (ATP), identifies goals and policies concerning pedestrian and bicycle accommodations. The ATP aims to improve health and equity for Perris residents, and to provide improved access to community destinations, supporting safe walking and biking. The ATP classifies six categories of bikeway network: Class I – Shared-Use Paths, Class II – Bike Lanes, Class IIB – Buffered Bike Lanes, Class III – Bicycle Routes, Class IIIB – Bicycle Boulevard, and Class IV – Separated Bikeway. Class I bikeways provide bicycle travel on a paths completely separated from motor vehicle traffic used by people walking and biking. Class II bikeways provide a dedicated striped lane adjacent to traffic. Class IIB bikeways provide a dedicated striped lane separated from vehicular traffic by a painted buffer. Class III bikeways are shared use pathways with motor vehicle traffic and are identified only by signing. Class IIIB bikeways shares use with motor vehicle traffic but within calm, local streets where cyclists have the priority. Class IV bikeways are on-street bikeway separated from motor-vehicle traffic by a curb, median, planters, parking delineations or other physical barriers. The City has proposed Class II bike lanes on Bonnie Drive in its ATP. Figure 3-3 illustrates the recommended bikeway network within the City of Perris.

### 3.2.2 Pedestrians

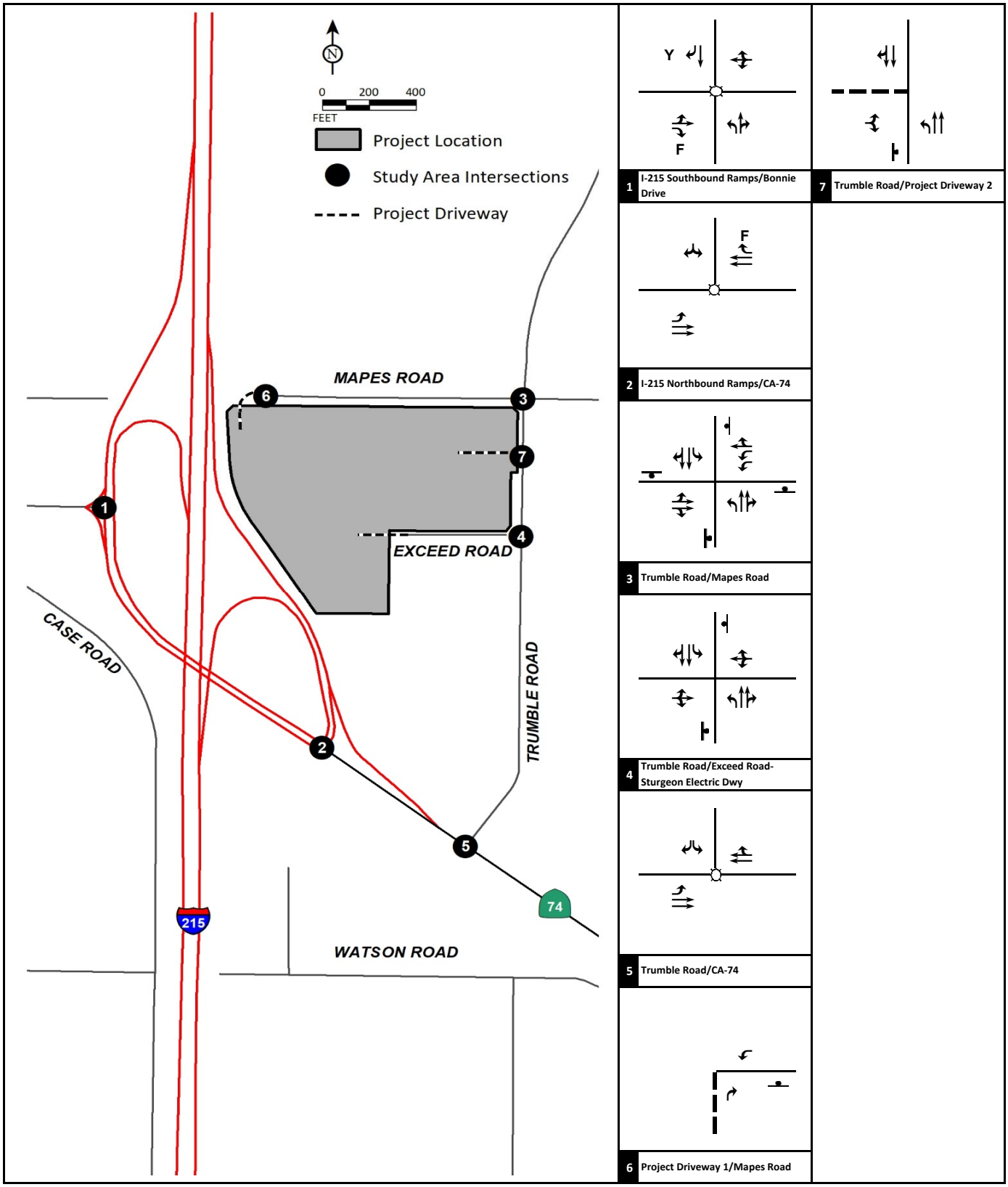
The implementation of enhanced pedestrian linkage with a comprehensive trails system links residential areas, schools, parks, and commercial centers so that residents can travel within the community without driving. Safe and attractive sidewalks and walkways improve the walkability of the City. Typically, sidewalks are generally provided on both sides of the streets within 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, provides safety features, and improves walkability in the City of Perris. Although there are no current or proposed trails within the study area, paved sidewalks are present on both sides of Trumble Road. Continuous sidewalks are present on westbound direction on Mapes Road within the Study Area.

### 3.2.3 Transit

Riverside Transit Agency (RTA) provides fixed route and Dial-a-Ride bus service within Perris and neighboring jurisdictions. RTA bus routes 28 and 74 operate within the study area, connecting Perris to neighboring communities.

## 3.3 LIST OF CHAPTER 3.0 FIGURES

- Figure 3-1: Existing with Project Study Intersection Geometrics and Traffic Control
- Figure 3-2: City of Perris Roadway Classification
- Figure 3-3: City of Perris Recommended Bikeway Network




LSA

FIGURE 3-1

Legend

Signal

Stop Sign

Project Driveway

O Overlap Phasing

F Free Right Turn

Y Yield to Through Traffic

*Mapes and Trumble Industrial Facility Project*

*Traffic Study*

Existing with Project Study Intersection Geometrics and Traffic Control

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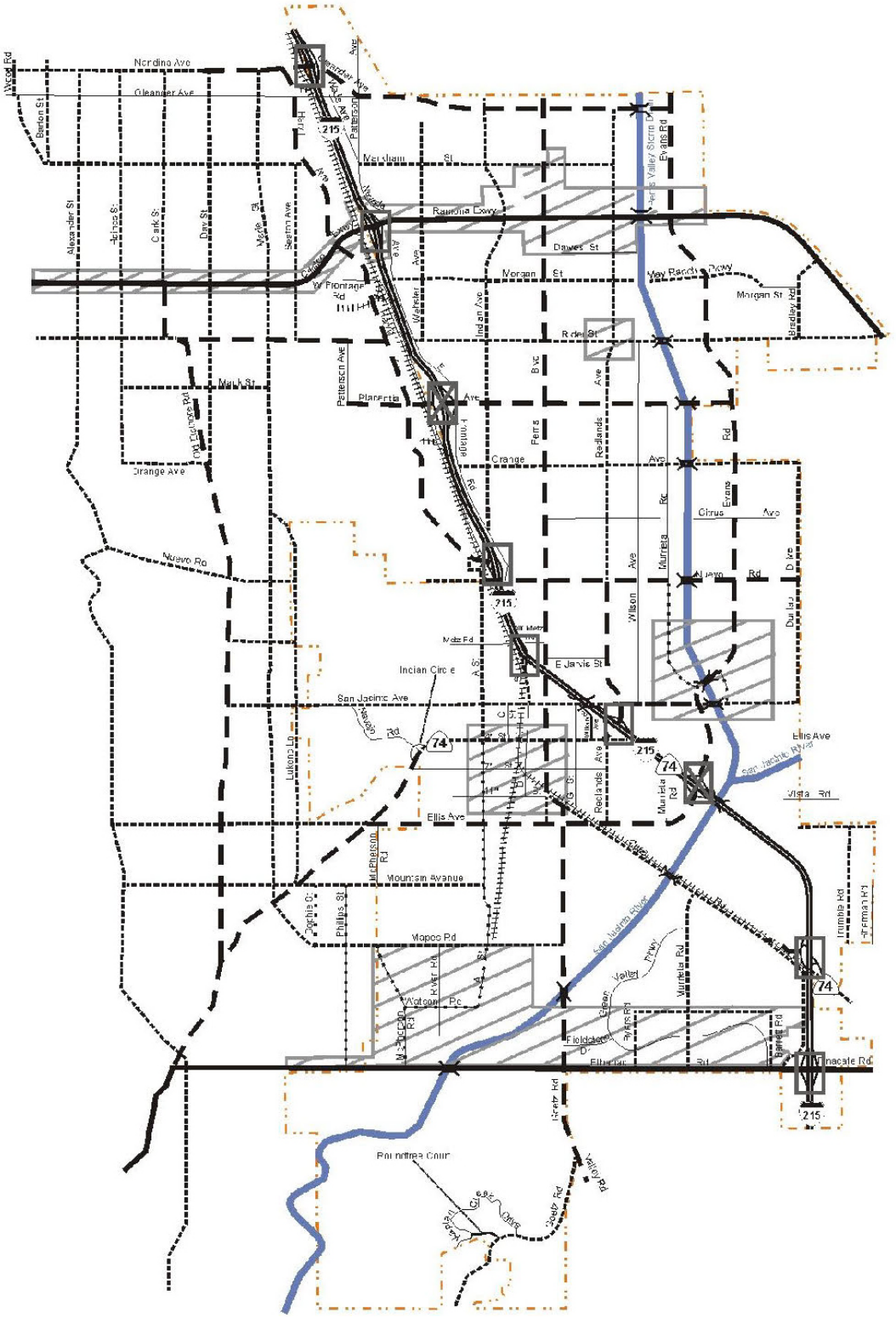


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**Legend:**

- Freeway
- Expressway (184' ROW)
- Arterial (128' ROW)
- Secondary Arterial (94' ROW)
- Major Collector (78' ROW)
- Collector (66' ROW)
- Railroad
- Bridge
- Water
- City Boundary
- Existing Interchange with Future Modifications
- Proposed Interchange
- Corridor Study Areas

N

FIGURE 3-2

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

City of Perris Future Roadway Network

SOURCE: City of Perris General Plan Circulation Element, January 2022

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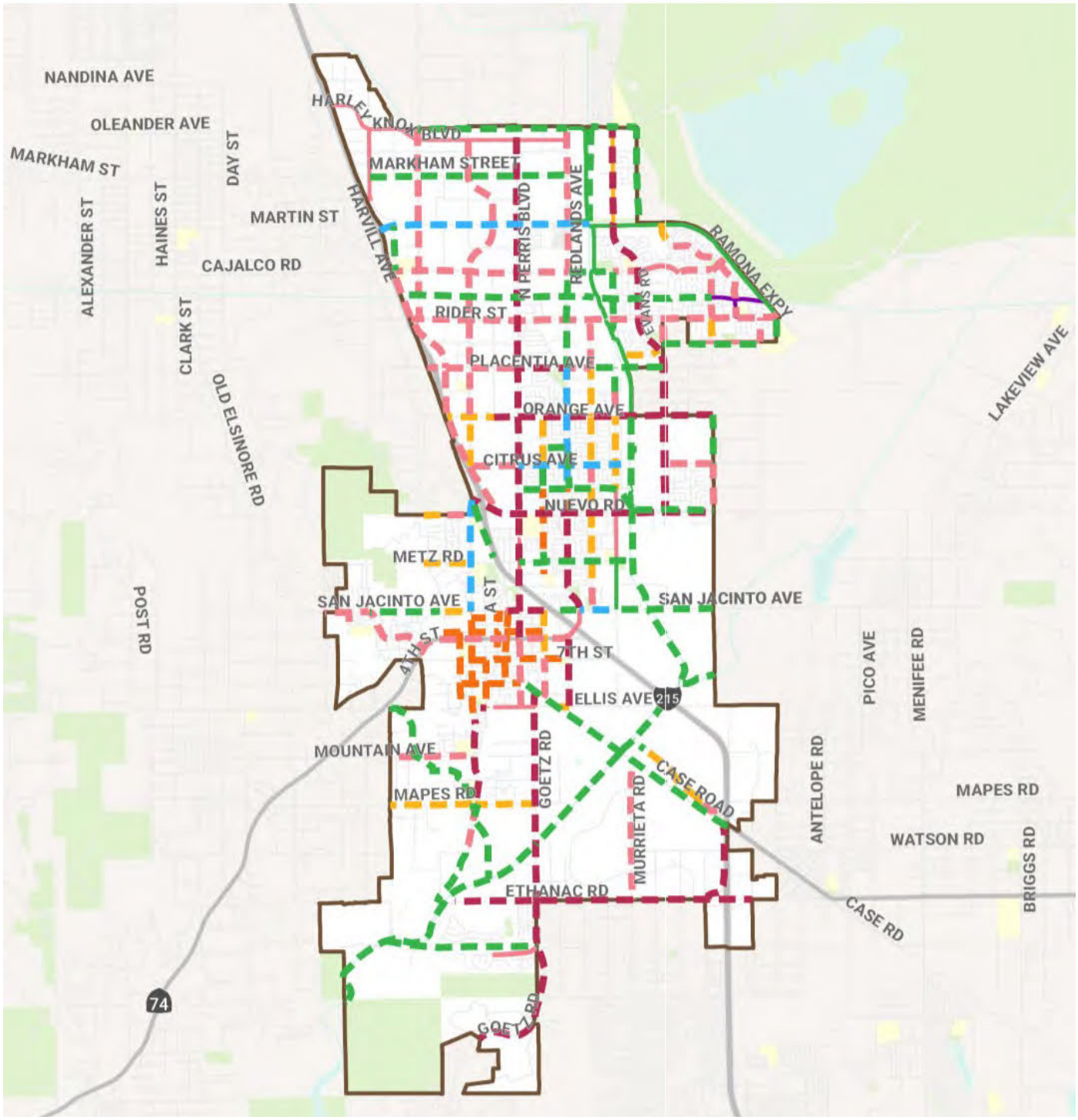


LSA

Legend

**Existing / Recommended Bikeways**

- Shared-Use Path (Class I)
- Bicycle Lane (Class II)
- Buffered Bike Lane (Class IIB)
- Bicycle Route (Class III)
- Bicycle Boulevard (Class IIIB)
- Separated Bikeway (Class IV)
- Walking Trail

**Destinations + Boundaries**

- City Boundary
- School
- Park or Open Space

N

0 1 2
MILES

SOURCE: City of Perris Active Transportation Plan, December 2020

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FIGURE 3-3

*Mapes and Trumble Industrial Facility Project Traffic Study*

City of Perris Recommended Bikeway Network

# 4.0 TRAFFIC VOLUMES FOR WITHOUT PROJECT SCENARIOS

## 4.1 EXISTING TRAFFIC VOLUMES

Traffic volumes for existing year traffic conditions are based on existing a.m., and p.m. peak hour traffic counts collected by Counts Unlimited in March 2022. A.m. and p.m. peak hour turning movement counts were collected at study intersections. Detailed count sheets are included in Appendix B.

Vehicle classification counts were conducted at the following intersections:

- I-215 Southbound Ramps/Bonnie Drive;
- I-215 Northbound Ramps/CA-74;
- Trumble Road/Mapes Road; and
- Trumble Road/CA-74 (Menifee/Caltrans).

At these locations, counts were converted to Passenger Car Equivalent (PCE) volumes. The concept of PCEs accounts for the larger impact of trucks on traffic operations. It does so by assigning each type of truck a PCE factor that represents the number of passenger vehicles that could travel through an intersection in the same time that a particular type of truck could. PCE volumes at study intersections were computed using a factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

The percentage of trucks at the remaining study intersections without classification counts was determined based on truck percentages derived from adjacent intersections with classification counts. At these locations, truck PCE volumes were computed using a PCE factor of 2.0 for all trucks, consistent with the HCM 6 methodologies.

Figure 4-1 illustrates existing peak hour traffic volumes at study intersections. Detailed counts are included in Appendix B. Detailed Volume development worksheets are included in Appendix C.

## 4.2 CUMULATIVE (2024) WITHOUT PROJECT TRAFFIC VOLUMES

As approved during the City's scoping agreement process (Appendix A), traffic volumes for Cumulative (2024) conditions were developed by applying a 3.0 percent per annum growth rate to the existing traffic volumes and by adding trips from cumulative projects in the area.

Information concerning cumulative projects in the vicinity of the proposed project was obtained from the City of Perris, City of Menifee, and County of Riverside. Figure 4-2 illustrates the cumulative project locations. The trip generation for cumulative projects was developed using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11$^{th}$ Edition), and/or using information from approved traffic studies where available. Table 4-A lists the cumulative projects included in this analysis, and shows the cumulative projects are expected to generate 4,926 a.m. peak hour trips, 6,023 p.m. peak hour trips, and 59,704 daily trips.

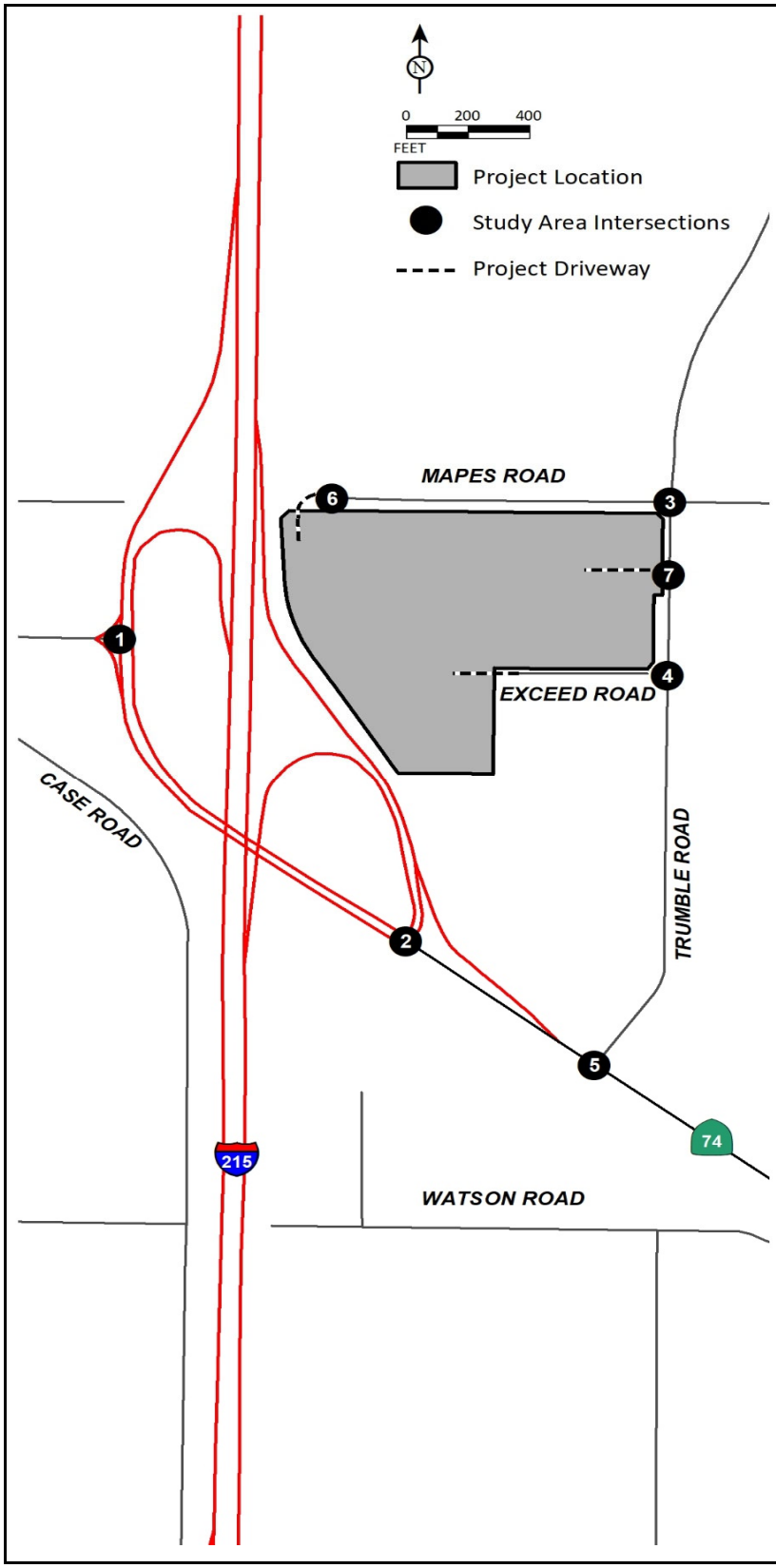
Cumulative project trips were assigned to the roadway network based on their locations in relation to surrounding land uses and regional arterials, and/or using information from approved traffic

studies where available. Figure 4-3 illustrates the peak hour cumulative project trip assignment at the study area intersections. Figure 4-4 illustrates the peak hour traffic volumes at study intersections under cumulative (2024) without project conditions.

Detailed volume development worksheets are included in Appendix C.

## 4.3 LIST OF CHAPTER 4.0 FIGURES AND TABLES

- Figure 4-1: Existing Peak Hour Traffic Volumes
- Figure 4-2: Cumulative Project Locations
- Figure 4-3: Cumulative Projects Trip Assignment
- Figure 4-4: Cumulative (2024) Peak Hour Traffic Volumes
- Table 4-A: Cumulative Projects Trip Generation




25 / 23
599 / 774
28 / 32
159 / 269
233 / 250
493 / 297

1 I-215 Southbound Ramps/Bonnie Drive

16 / 39
170 / 231
784 / 713
710 / 508
14 / 14
744 / 1029

2 I-215 Northbound Ramps/CA-74

2 / 0
48 / 132
1 / 27
3 / 28
17 / 1
214 / 131
3 / 2
18 / 1
55 / 5
55 / 1
31 / 117
79 / 219

3 Trumble Road/Mapes Road

2 / 0
315 / 267
0 / 1
1 / 1
1 / 0
54 / 28
1 / 5
5 / 2
164 / 336
9 / 1

4 Trumble Road/Exceed Road-Sturgeon Electric Dwy

457 / 382
43 / 50
30 / 22
1037 / 839
177 / 304
737 / 956

5 Trumble Road/CA-74

*Future Intersection*

6 Project Driveway 1/Mapes Road

*Future Intersection*

7 Trumble Road/Project Driveway 2

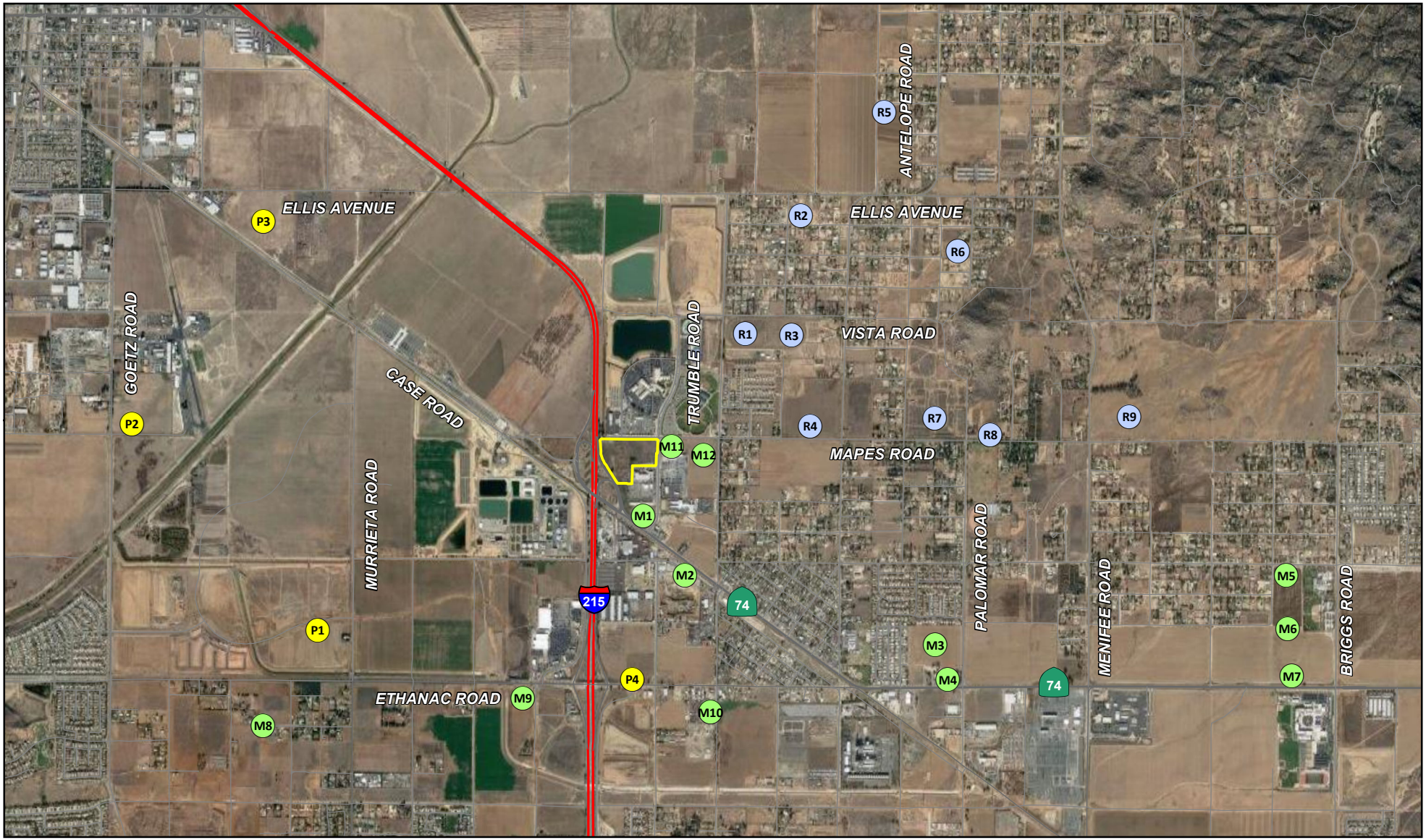
FIGURE 4-1

LSA

XXXX / YYYY
AM / PM Peak Hour Traffic Volumes (In PCE)
Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Existing Peak Hour Traffic Volumes

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LEGEND

- Project Location
- City of Perris Cumulative Project
- County of Riverside Cumulative Project
- City of Menifee Cumulative Project

0 1500 3000
FEET

SOURCE: ESRI Streetmap, 2021; Google Earth, 2018.

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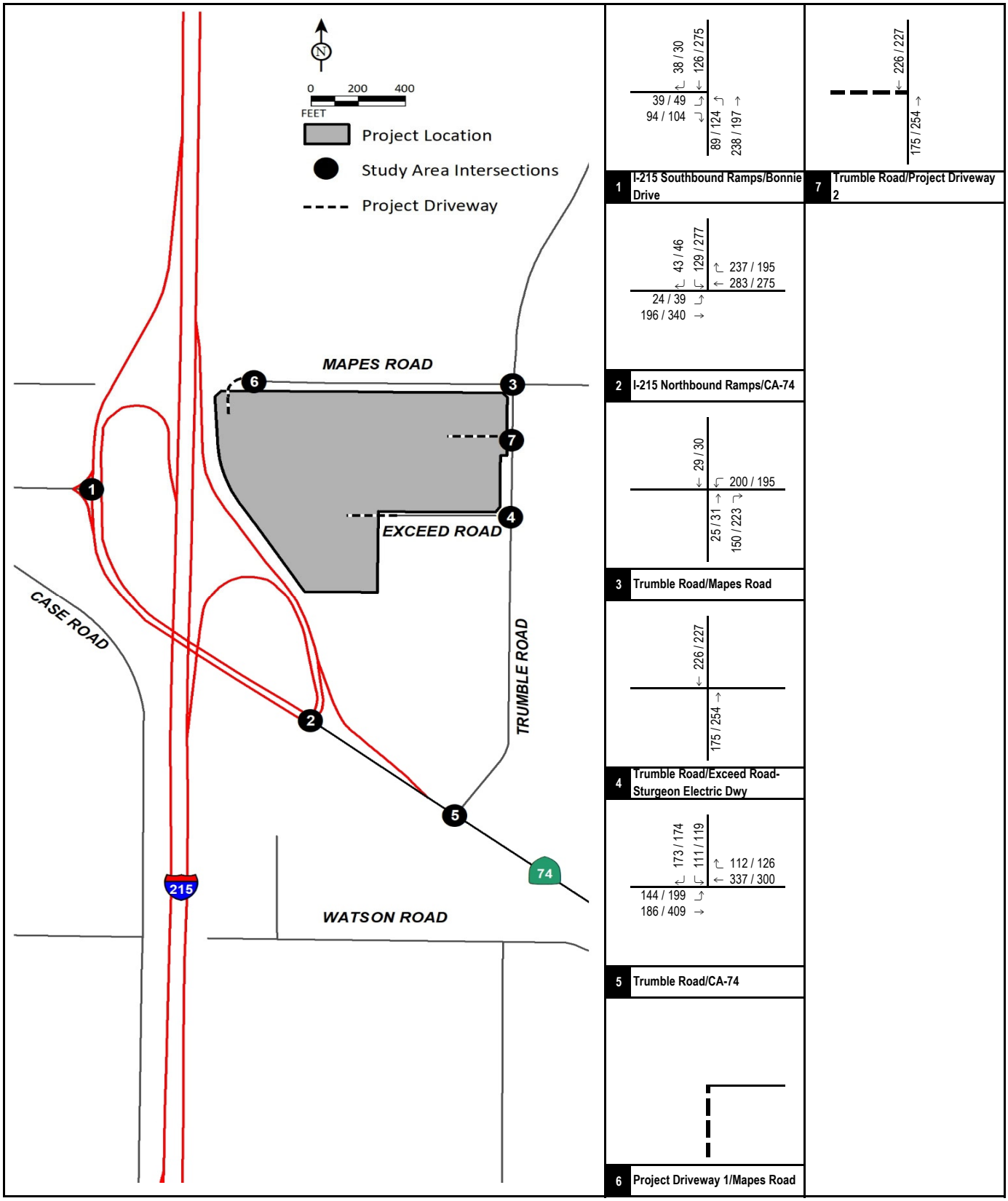
FIGURE 4-2

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Cumulative Project Locations



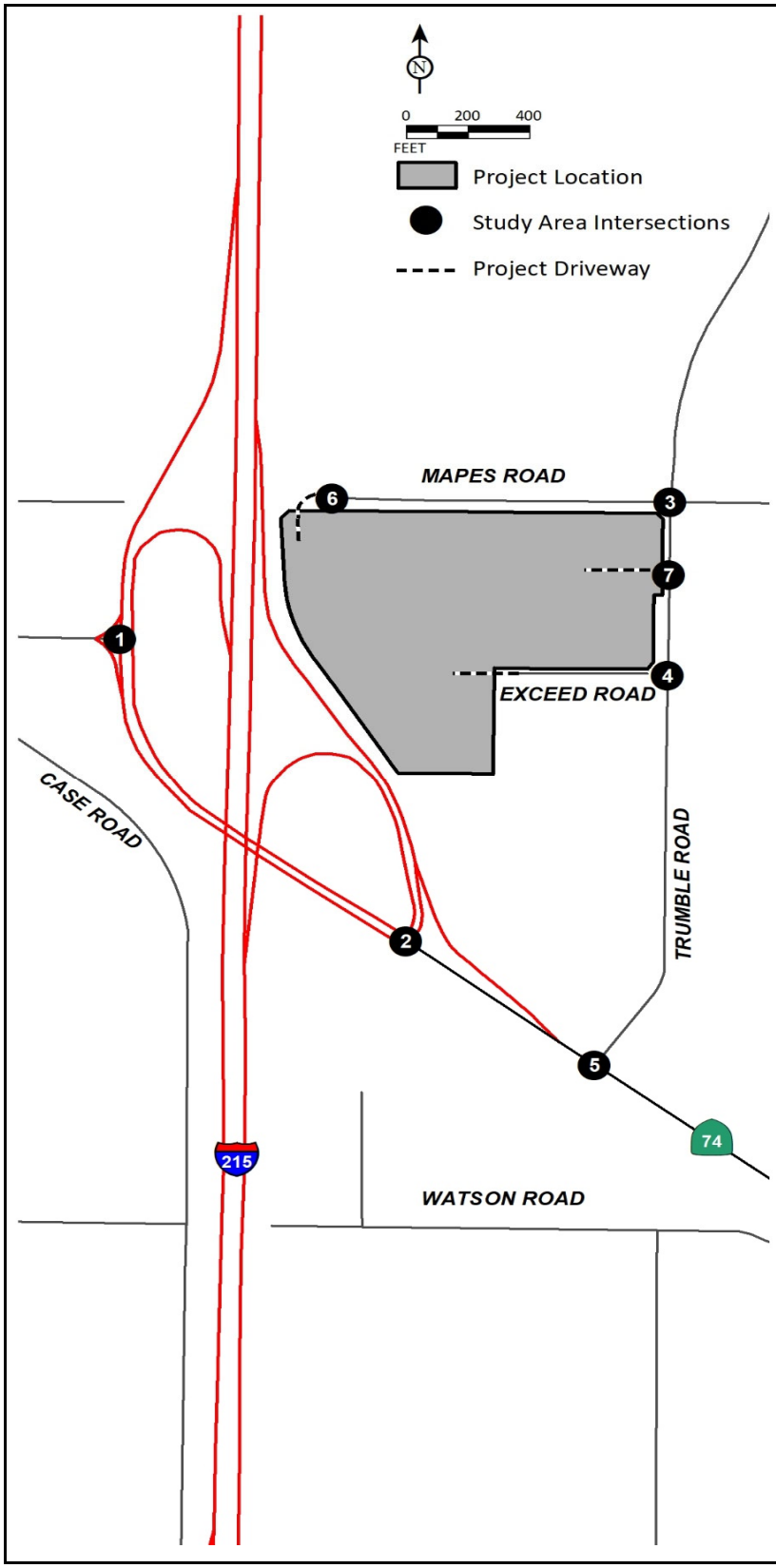

LSA

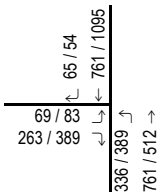
FIGURE 4-3

XXX / YYY
AM / PM Peak Hour Traffic Volumes (In PCE)
Project Driveway

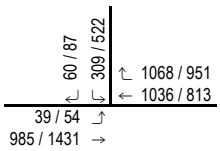
*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Cumulative Project Trip Assignment

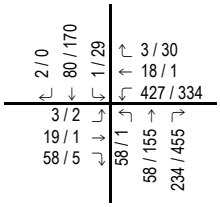


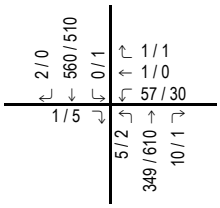

1 I-215 Southbound Ramps/Bonnie Drive



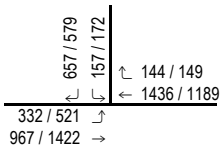

2 I-215 Northbound Ramps/CA-74




3 Trumble Road/Mapes Road




4 Trumble Road/Exceed Road-Sturgeon Electric Dwy




5 Trumble Road/CA-74

*Future Intersection*

6 Project Driveway 1/Mapes Road

*Future Intersection*

7 Trumble Road/Project Driveway 2

FIGURE 4-4

LSA

XXXX / YYYY
AM / PM Peak Hour Traffic Volumes (In PCE)
Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Cumulative (2024) Peak Hour Traffic Volumes

P:\BAV2101\Traffic\z30_Vol_OY.xlsx\Figure (6/17/2022)

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## Table 4-A - Cumulative Projects Trip Generation

| Project No. | Project Name/Land Use/Builder/Applicant | 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 |
|---|---|---|---|---|---|---|---|---|---|
| **M1 .** | **On-Deck** | | | | | | | | |
| | **North corner of Trumble Road and CA-74** | | | | | | | | |
| | **Hotel** | 108 RM | | | | | | | |
| | Trips/Unit[1] | | 0.26 | 0.20 | 0.46 | 0.30 | 0.29 | 0.59 | 7.99 |
| | Trip Generation | | **28** | **22** | **50** | **32** | **31** | **64** | **863** |
| | **Convenience Store/Gas Station - GFA (2-4k)** | 12 VFP | | | | | | | |
| | Trips/Unit[2] | | 8.03 | 8.03 | 16.06 | 9.21 | 9.21 | 18.42 | 265.12 |
| | Trip Generation | | 96 | 96 | 193 | 111 | 111 | 221 | 3,181 |
| | Total Pass-By Trips[3] | | (73) | (73) | (147) | (83) | (83) | (166) | (2402) |
| | **Total Net Trip Generation** | | **23** | **23** | **46** | **28** | **28** | **55** | **779** |
| | **Fast-Food Restaurant with Drive-Through Window** | 3.000 TSF | | | | | | | |
| | Trips/Unit[4] | | 22.75 | 21.86 | 44.61 | 17.18 | 15.85 | 33.03 | 467.48 |
| | Trip Generation | | 68 | 66 | 134 | 52 | 48 | 99 | 1,402 |
| | Total Pass-By Trips[5] | | (34) | (33) | (67) | (29) | (26) | (54) | (736) |
| | **Total Net Trip Generation** | | **34** | **33** | **67** | **23** | **22** | **45** | **666** |
| | **High-Turnover Sit Down Restaurant** | 5.500 TSF | | | | | | | |
| | Trips/Unit[6] | | 5.26 | 4.31 | 9.57 | 5.52 | 3.53 | 9.05 | 107.20 |
| | Trip Generation | | 29 | 24 | 53 | 30 | 19 | 50 | 590 |
| | Total Pass-By Trips[7] | | 0 | 0 | 0 | (13) | (8) | (22) | (254) |
| | **Total Net Trip Generation** | | **29** | **24** | **53** | **17** | **11** | **28** | **336** |
| | **Carwash** | 110.00 Li Ft | | | | | | | |
| | Trips/Unit[8] | | 0.38 | 0.28 | 0.66 | 0.62 | 0.63 | 1.25 | 11.87 |
| | Trip Generation | | 42 | 31 | 73 | 68 | 69 | 137 | 1,306 |
| | Total Pass-By Trips | | (4) | (3) | (7) | (23) | (23) | (46) | (131) |
| | **Total Net Trip Generation** | | 38 | 28 | 66 | 45 | 46 | 91 | 1,175 |
| | **Total Net Project Trip Generation** | | **152** | **130** | **282** | **145** | **138** | **283** | **3,819** |
| **M2 .** | **Paragon Framing** | | | | | | | | |
| | **Southeast corner of Trumble Road and Watson Road** | | | | | | | | |
| | **Single Tenant Office Building** | 5.45 TSF | | | | | | | |
| | Trips/Unit[9] | | 1.65 | 0.20 | 1.85 | 0.26 | 1.50 | 1.76 | 13.07 |
| | Trip Generation | | **9** | **1** | **10** | **1** | **8** | **10** | **71** |
| | **Utility** | 5.00 TSF | | | | | | | |
| | Trips/Unit[10] | | 2.03 | 0.30 | 2.33 | 0.39 | 1.77 | 2.16 | 12.29 |
| | Trip Generation | | **10** | **2** | **12** | **2** | **9** | **11** | **61** |
| | **Total Project Trip Generation** | | **19** | **3** | **22** | **3** | **17** | **21** | **132** |
| **M3 .** | **MR-27 LLC (Rancon)** | | | | | | | | |
| | **West of Palomar Road between Cider St and CA-74** | | | | | | | | |
| | **Single-Family Detached Housing** | 85 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **15** | **44** | **60** | **50** | **30** | **80** | **802** |
| | **Single-Family Attached Housing** | 87 DU | | | | | | | |
| | Trips/Unit[12] | | 0.15 | 0.33 | 0.48 | 0.54 | 0.40 | 0.94 | 7.20 |
| | Trip Generation | | **13** | **29** | **42** | **47** | **35** | **82** | **626** |
| | **Total Project Trip Generation** | | **28** | **73** | **102** | **97** | **65** | **162** | **1,428** |

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## Table 4-A - Cumulative Projects Trip Generation

| Project No. | Project Name/Land Use/Builder/Applicant | 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 |
|---|---|---|---|---|---|---|---|---|---|
| **M4 .** | **Motte Country Plaza** | | | | | | | | |
| | **Northwest corner of Palomar Rd and CA-74** | | | | | | | | |
| | **Convenience Store/Gas Station - GFA (2-4k)** | 12 VFP | | | | | | | |
| | Trips/Unit[2] | | 8.03 | 8.03 | 16.06 | 9.21 | 9.21 | 18.42 | 265.12 |
| | Trip Generation | | 96 | 96 | 193 | 111 | 111 | 221 | 3,181 |
| | Total Pass-By Trips[3] | | (73) | (73) | (147) | (83) | (83) | (166) | (2402) |
| | **Total Net Trip Generation[X]** | | **23** | **23** | **46** | **28** | **28** | **55** | **779** |
| **M5 .** | **MR 56 LLC (Rancon)** | | | | | | | | |
| | **Southeast corner of Malone Ave and Watson Rd** | | | | | | | | |
| | **Single-Family Detached Housing** | 52 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **9** | **27** | **36** | **31** | **18** | **49** | **490** |
| **M6 .** | **MR-27 LLC (Rancon)** | | | | | | | | |
| | **Southeast corner of Malone Ave and Varela Ln** | | | | | | | | |
| | **Single-Family Attached Housing** | 153 DU | | | | | | | |
| | Trips/Unit[12] | | 0.15 | 0.33 | 0.48 | 0.54 | 0.40 | 0.94 | 7.20 |
| | Trip Generation | | **23** | **50** | **73** | **83** | **61** | **144** | **1,102** |
| **M7 .** | **Harvest Glen Marketplace** | | | | | | | | |
| | **Northwest corner of Briggs Rd and CA-74** | | | | | | | | |
| | **Convenience Store/Gas Station - GFA (4-5.5k)** | 16 VFP | | | | | | | |
| | Trips/Unit[13] | | 13.52 | 13.52 | 27.04 | 11.38 | 11.38 | 22.76 | 257.13 |
| | Trip Generation | | 216 | 216 | 433 | 182 | 182 | 364 | 4,114 |
| | Total Pass-By Trips[3] | | (164) | (164) | (329) | (137) | (137) | (273) | (3106) |
| | **Total Net Trip Generation** | | **52** | **52** | **104** | **45** | **45** | **91** | **1,008** |
| | **Fast-Food Restaurant with Drive-Through Window** | 3.268 TSF | | | | | | | |
| | Trips/Unit[4] | | 22.75 | 21.86 | 44.61 | 17.18 | 15.85 | 33.03 | 467.48 |
| | Trip Generation | | 74 | 71 | 146 | 56 | 52 | 108 | 1,528 |
| | Total Pass-By Trips[5] | | (37) | (36) | (73) | (31) | (29) | (59) | (802) |
| | **Total Net Trip Generation** | | **37** | **35** | **73** | **25** | **23** | **49** | **726** |
| | **Total Net Project Trip Generation** | | **89** | **87** | **177** | **70** | **68** | **140** | **1,734** |
| **M8 .** | **Northern Gateway Commerce Center I** | | | | | | | | |
| | **South of Ethanac Rd between Byers Rd and Geary St** | | | | | | | | |
| | **Warehouse[14]** | 1,170.871 TSF | | | | | | | |
| | Total Trip Generation | | 152 | 47 | 199 | 60 | 151 | 211 | 2,003 |
| | Auto Trips | | 104 | 33 | 137 | 40 | 105 | 145 | 1,382 |
| | Truck PCE Trips | | 120 | 35 | 155 | 50 | 115 | 165 | 1,549 |
| | **Total PCE Trip Generation** | | **224** | **68** | **292** | **90** | **220** | **310** | **2,931** |
| **M9 .** | **Northern Gateway Commerce Center II** | | | | | | | | |
| | **South of Ethanac Rd between Hull St and Evans Rd** | | | | | | | | |
| | **High-Cube Fulfillment Center Warehouse[15]** | 1,316.754 TSF | | | | | | | |
| | Total Trip Generation | | 140 | 57 | 197 | 87 | 123 | 210 | 2,383 |
| | Auto Trips | | 110 | 26 | 136 | 57 | 88 | 145 | 1,644 |
| | Truck PCE Trips | | 75 | 78 | 153 | 75 | 88 | 163 | 1,843 |
| | **Total PCE Trip Generation** | | **185** | **104** | **289** | **132** | **176** | **308** | **3,487** |

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## Table 4-A - Cumulative Projects Trip Generation

| Project No. | Project Name/Land Use/Builder/Applicant | 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 |
|---|---|---|---|---|---|---|---|---|---|
| **M10 .** | **Menifee Commerce Center (Core 5)** [16] | | | | | | | | |
| | **South of Ethanac Rd between Trumble Rd and Dawson Rd** | | | | | | | | |
| | **Building 1- High-Cube Fulfillment Center Warehouse** | 1,249.317 TSF | | | | | | | |
| | Total Trip Generation | | 884 | 208 | 1,092 | 586 | 918 | 1,504 | 8,077 |
| | Auto Trips | | 871 | 195 | 1,066 | 575 | 905 | 1,480 | 7,839 |
| | Truck PCE Trips | | 33 | 33 | 66 | 28 | 33 | 61 | 605 |
| | Total PCE Trip Generation | | 904 | 228 | 1,132 | 603 | 938 | 1,541 | 8,444 |
| | **Building 2-Warehouse**[14] | 385.596 TSF | | | | | | | |
| | Total Trip Generation | | 52 | 15 | 67 | 20 | 53 | 73 | 672 |
| | Auto Trips | | 47 | 11 | 58 | 14 | 48 | 62 | 440 |
| | Truck PCE Trips | | 13 | 10 | 23 | 16 | 13 | 29 | 590 |
| | Total PCE Trip Generation | | 60 | 21 | 81 | 30 | 61 | 91 | 1,030 |
| | **Total Project Trip Generation** | | **936** | **223** | **1,159** | **606** | **971** | **1,577** | **8,749** |
| | **Total Project Auto Trips** | | **918** | **206** | **1,124** | **589** | **953** | **1,542** | **8,279** |
| | **Total Project Truck PCE Trips** | | **46** | **43** | **89** | **44** | **46** | **90** | **1,195** |
| | **Total Project PCE Trip Generation** | | **964** | **249** | **1,213** | **633** | **999** | **1,632** | **9,474** |
| **M11 .** | **United Carports Facility** | | | | | | | | |
| | **Southeast corner of Trumble Rd and Mapes Road** | | | | | | | | |
| | **Manufacturing**[17] | 58.640 TSF | | | | | | | |
| | Total Trip Generation | | 29 | 11 | 40 | 15 | 29 | 44 | 278 |
| | Auto Trips | | 24 | 7 | 31 | 11 | 23 | 34 | 219 |
| | Truck PCE Trips | | 11 | 10 | 21 | 10 | 14 | 24 | 133 |
| | **Total PCE Trip Generation** | | **35** | **17** | **52** | **21** | **37** | **58** | **352** |
| **M12 .** | **Mapes and Sherman Warehouse** | | | | | | | | |
| | **Southwest corner of Sherman Rd and Mapes Rd** | | | | | | | | |
| | **High-Cube Fulfillment Center Warehouse**[15] | 277.578 TSF | | | | | | | |
| | Total Trip Generation | | 29 | 13 | 42 | 18 | 26 | 44 | 503 |
| | Auto Trips | | 23 | 6 | 29 | 12 | 19 | 31 | 347 |
| | Truck PCE Trips | | 16 | 17 | 33 | 16 | 17 | 33 | 389 |
| | **Total PCE Trip Generation** | | **39** | **23** | **62** | **28** | **36** | **64** | **736** |
| **R1 .** | **Tentative Parcel Map 37727** | | | | | | | | |
| | **Southeast corner of Sherman Rd and Vista Rd** | | | | | | | | |
| | **Single-Family Detached Housing** | 4 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **1** | **2** | **3** | **2** | **1** | **4** | **38** |
| **R2 .** | **Tentative Parcel Map 37213** | | | | | | | | |
| | **Northeast corner of Dawson Rd and Patti Ln** | | | | | | | | |
| | **Single-Family Detached Housing** | 4 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **1** | **2** | **3** | **2** | **1** | **4** | **38** |
| **R3 .** | **Tentative Tract Map 37728** | | | | | | | | |
| | **Southwest corner of Antelope Rd and Vista Rd** | | | | | | | | |
| | **Single-Family Detached Housing** | 228 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **41** | **119** | **160** | **135** | **80** | **214** | **2,150** |

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## Table 4-A - Cumulative Projects Trip Generation

| Project No. | Project Name/Land Use/Builder/Applicant | 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 |
|---|---|---|---|---|---|---|---|---|---|
| **R4 .** | **Tentative Tract Map 37358** | | | | | | | | |
| | **Northwest corner of Antelope Rd and Mapes Rd** | | | | | | | | |
| | **Single-Family Detached Housing** | 154 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **28** | **80** | **108** | **91** | **54** | **145** | **1,452** |
| **R5 .** | **Tentative Parcel Map 37919** | | | | | | | | |
| | **Southwest corner of Antelope Rd and Roan Ranch Rd** | | | | | | | | |
| | **Single-Family Detached Housing** | 4 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **1** | **2** | **3** | **2** | **1** | **4** | **38** |
| **R6 .** | **Tentative Parcel Map 37589** | | | | | | | | |
| | **Northeast corner of Pico Ave and Benigni Ave** | | | | | | | | |
| | **Single-Family Detached Housing** | 4 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **1** | **2** | **3** | **2** | **1** | **4** | **38** |
| **R7 .** | **Tract 31687** | | | | | | | | |
| | **Northeast corner of Tradewinds Dr and Mapes Rd** | | | | | | | | |
| | **Single-Family Detached Housing** | 65 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **12** | **34** | **46** | **38** | **23** | **61** | **613** |
| **R8 .** | **RV Storage Facility** | | | | | | | | |
| | **North of Mapes Road between Palomar Rd and Rocky Peak Rd** | | | | | | | | |
| | **RV and Boat Storage** | 121 Stalls | | | | | | | |
| | Trips/Unit[18] | | 0.02 | 0.01 | 0.03 | 0.02 | 0.02 | 0.04 | 0.48 |
| | Trip Generation | | **2** | **1** | **3** | **2** | **2** | **4** | **58** |
| **R9 .** | **Residential Subdivision** | | | | | | | | |
| | **Northeast corner of Menifee Rd and Mapes Rd** | | | | | | | | |
| | **Single-Family Detached Housing** | 712 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **128** | **370** | **498** | **420** | **249** | **669** | **6,714** |
| **P1 .** | **Green Valley Specific Plan Phase 1** | | | | | | | | |
| | **South of Case Rd, North of Ethanac Rd, West of Green Valley Pkwy, East of Goetz Rd** | | | | | | | | |
| | **Phase 1** | | | | | | | | |
| | **Single-Family Detached Housing** | 542 DU | | | | | | | |
| | Trips/Unit[11] | | 0.18 | 0.52 | 0.70 | 0.59 | 0.35 | 0.94 | 9.43 |
| | Trip Generation | | **98** | **282** | **379** | **320** | **190** | **509** | **5,111** |
| | **Multifamily Housing (Low-Rise) Not Close to Rail Transit** | 699 DU | | | | | | | |
| | Trips/Unit[19] | | 0.10 | 0.30 | 0.40 | 0.32 | 0.19 | 0.51 | 6.74 |
| | Trip Generation | | **70** | **210** | **280** | **224** | **133** | **356** | **4,711** |
| | **Total Project Trip Generation** | | **168** | **492** | **659** | **544** | **323** | **865** | **9,822** |
| **P2 .** | **TPM 38412** | | | | | | | | |
| | **Southeast corner of Ellis Ave and Case Rd** | | | | | | | | |
| | **High-Cube Fulfillment Center Warehouse[15]** | 742.560 TSF | | | | | | | |
| | Total Trip Generation | | 79 | 33 | 112 | 49 | 70 | 119 | 1,343 |
| | Auto Trips | | 62 | 15 | 77 | 32 | 50 | 82 | 927 |
| | Truck PCE Trips | | 42 | 45 | 87 | 42 | 50 | 92 | 1,038 |
| | **Total PCE Trip Generation** | | **104** | **60** | **164** | **74** | **100** | **174** | **1,965** |

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## Table 4-A - Cumulative Projects Trip Generation

| Project No. | Project Name/Land Use/Builder/Applicant | 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 |
|---|---|---|---|---|---|---|---|---|---|
| **P3 .** | **DPR22-00002** | | | | | | | | |
| | **Northwest corner of Goetz Rd and Mapes Rd** | | | | | | | | |
| | **High-Cube Fulfillment Center Warehouse[15]** | 659.000 TSF | | | | | | | |
| | Total Trip Generation | | 70 | 28 | 98 | 43 | 63 | 106 | 1,193 |
| | Auto Trips | | 55 | 13 | 68 | 28 | 45 | 73 | 823 |
| | Truck PCE Trips | | 38 | 37 | 75 | 38 | 45 | 83 | 923 |
| | **Total PCE Trip Generation** | | **93** | **50** | **143** | **66** | **90** | **156** | **1,746** |
| **P4 .** | **Pilot J Travel center** | | | | | | | | |
| | **Northwest corner of Ethanac Rd and Trumble Rd** | | | | | | | | |
| | **Project Net Trip Generation[20]** | | **241** | **247** | **488** | **258** | **238** | **496** | **8,568** |
| | **Total Net PCE Trip Generation** | | **2,611** | **2,315** | **4,926** | **2,997** | **3,026** | **6,023** | **59,704** |

**Notes:**

RM = Rooms; DU = Dwelling Units; VFP = Vehicle Fueling Positions; TSF = Thousand Square Feet; Li ft = Linear Feet; Stalls = Parking Stalls.

[1] Rates based on Land Use 310 - "Hotel" from Institute of Transportation Engineers (ITE) *Trip Generation Manual* , 11th Edition. Setting/Location used is General Urban/Suburban.

[2] Rates based on Land Use 945 - "Convenience Store/Gas Station - GFA (2-4k)" from Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition. Setting/Location used is General Urban/Suburban.

[3] Pass-by rates obtained from the ITE *Trip Generation Manual* (11th Edition) for Land Use 945. a.m. peak period pass-by rate for this land use is 76% and p.m. peak period pass-by rate for this land use in the ITE handbook is 75%. No daily pass-by rates are provided. Therefore, the daily pass-by rate was taken to be the average of the a.m. and p.m. peak period pass-by rate.

[4] Rates based on Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" from Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition. Setting/Location used is General Urban/Suburban.

[5] Pass-by rates obtained from the ITE *Trip Generation Manual* (11th Edition) for Land Use 934. a.m. peak period pass-by rate for this land use is 50% and p.m. peak period pass-by rate for this land use in the ITE handbook is 55%. No daily pass-by rates are provided. Therefore, the daily pass-by rate was taken to be the average of the a.m. and p.m. peak period pass-by rate.

[6] Rates based on Land Use 932 - "High-Turnover Sit-Down Restaurant" from Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition. Setting/Location used is General Urban/Suburban.

[7] Pass-by rates obtained from the ITE *Trip Generation Manual* (11th Edition) for Land Use 932. P.m. peak period pass-by rate for this land use in the ITE handbook is 43%. No a.m. peak hour or daily pass-by rates are provided. Therefore, the daily pass-by rate was taken to be the p.m. peak period pass-by rate.

[8] Trip generation rate and pass-by rate were obtained from the *Newport Pointe Traffic Impact Analysis Report* , dated April 2021, by Linscott, Law, and Greenspan, Engineers for a similar car-wash facility.

[9] Rates based on Land Use 715 - "Single Tenant Office Building" from Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition. Setting/Location used is General Urban/Suburban.

[10] Rates based on Land Use 170 - "Utility" from Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition. Setting/Location used is General Urban/Suburban.

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

[12] Rates based on Land Use 215 - "Single-Family Attached Housing" from Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition. Setting/Location used is General Urban/Suburban.

[13] Rates based on Land Use 945 - "Convenience Store/Gas Station - GFA (4-5.5k)" from Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition. Setting/Location used is General Urban/Suburban.

[14] The trip generation was developed based on the ITE *Trip Generation Manual* (11th edition) rates for Land Use 150 – "Warehousing." The resulting trips were converted to trucks and passenger vehicles based on the South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, 31 percent of project traffic will be trucks. Based on Vehicle Mix from the SCAQMD, Warehouse Truck Trip Study Data Results and Usage, dated December 2014, the truck mix was considered as 18.7% 4-axle, 5.5% 3-axle, and 6.8% 2-axle trucks. All truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4- and more axle trucks.

[15] Rates based on the ITE *Trip* Generation Manual *(11th Edition)* for Land Use 155 - "High-Cube Fulfillment Center Warehouse - Non-Sort", Setting Location - "General Urban/Suburban." Passenger vehicles and truck in/out splits from Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) rates for Land Use 155 – "High-Cube Fulfillment Center Warehouse - Non-Sort", Setting/Location - "General Urban/Suburban." ' The resulting trips were converted to trucks and passenger vehicles based on the South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, 31 percent of project traffic will be trucks. Based on Vehicle Mix from the SCAQMD, Warehouse Truck Trip Study Data Results and Usage, dated December 2014, the truck mix was considered as 18.7% 4+ axle, 5.5% 3-axle, and 6.8% 2-axle trucks. All truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4- and more axle trucks.

[16] Trip generation and distribution was obtained from the *Menifee Commerce Center Project Traffic Impact Analysis,* dated August 2021, by Albert A. Webb Associates.

[17] The trip generation was developed using rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 140 – "Manufacturing." The resulting trips were converted to trucks and passenger vehicles based on the vehicle mix from the City of Fontana's Truck Trip Generation Study (August 2003). As such, 78.6% of project traffic will be passenger vehicles and 21.4% of project traffic will be trucks. All truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4- and more axle trucks.

[18] Trip generation rates are based on Great park RV Storage Study, Prepared by LSA Associates, 2021.

[19] Rates based on Land Use 220 - "Multifamily Housing (Low-Rise) Not Close to Rail Transit" from Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition. Setting/Location used is General Urban/Suburban.

[20] Trip generation were obtained from the *Perris Travel Center TIA Scoping Agreement,* dated May 2022, by Kimley-Horn and Associates.

# 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) Land Use 155 – "High-Cube Fulfillment Center Warehouse – Non-Sort." That was because the project is not proposing a "Sort" use at the proposed facility.

As previously mentioned, the project proposes to include 50 percent High-Cube Cold Storage Warehouse as an alternative. However, peak hour trip generation rate for High-Cube Cold Storage Warehouse is lower than corresponding trip generation rates for High Cube Fulfillment Center Warehouse – Non-Sort" land use. Since this study evaluates the project's effect on adjacent circulation network under a.m. and p.m. peak hours, the project was considered as 100 percent High-Cube Fulfillment Center Warehouse – Non-Sort" as a conservative approach.

The resulting trips were converted to passenger vehicles and trucks based on the South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, 31% of project traffic will be trucks. Based on the truck mix from the SCAQMD Warehouse Truck Trip Study Data Results and Usage, dated December 2014, the truck mix was considered as 6.8% 2-axle trucks, 5.5% 3-axle trucks, and 18.7% as 4 or more axle trucks.

Inbound/Outbound splits for passenger vehicles were obtained from the ITE Trip Generation (11th Edition) for Land Use 155 – High-Cube Fulfillment Center Warehouse - Non-Sort, vehicle Trip generation inbound/outbound splits for a.m. peak hour, p.m. peak hour and daily trips. Inbound/outbound splits for trucks were obtained from ITE Trip Generation 11th Edition Supplemental for a.m. peak hour, p.m. peak hour and daily trips.

All truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4 or more axle trucks. Table 5-A summarizes the project trip generation. As shown in Table 5-A, the proposed project is estimated to generate 1,054 daily PCE trips, with 86 trips occurring the a.m. peak hour and 92 trips occurring during the p.m. peak hour.

## 5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

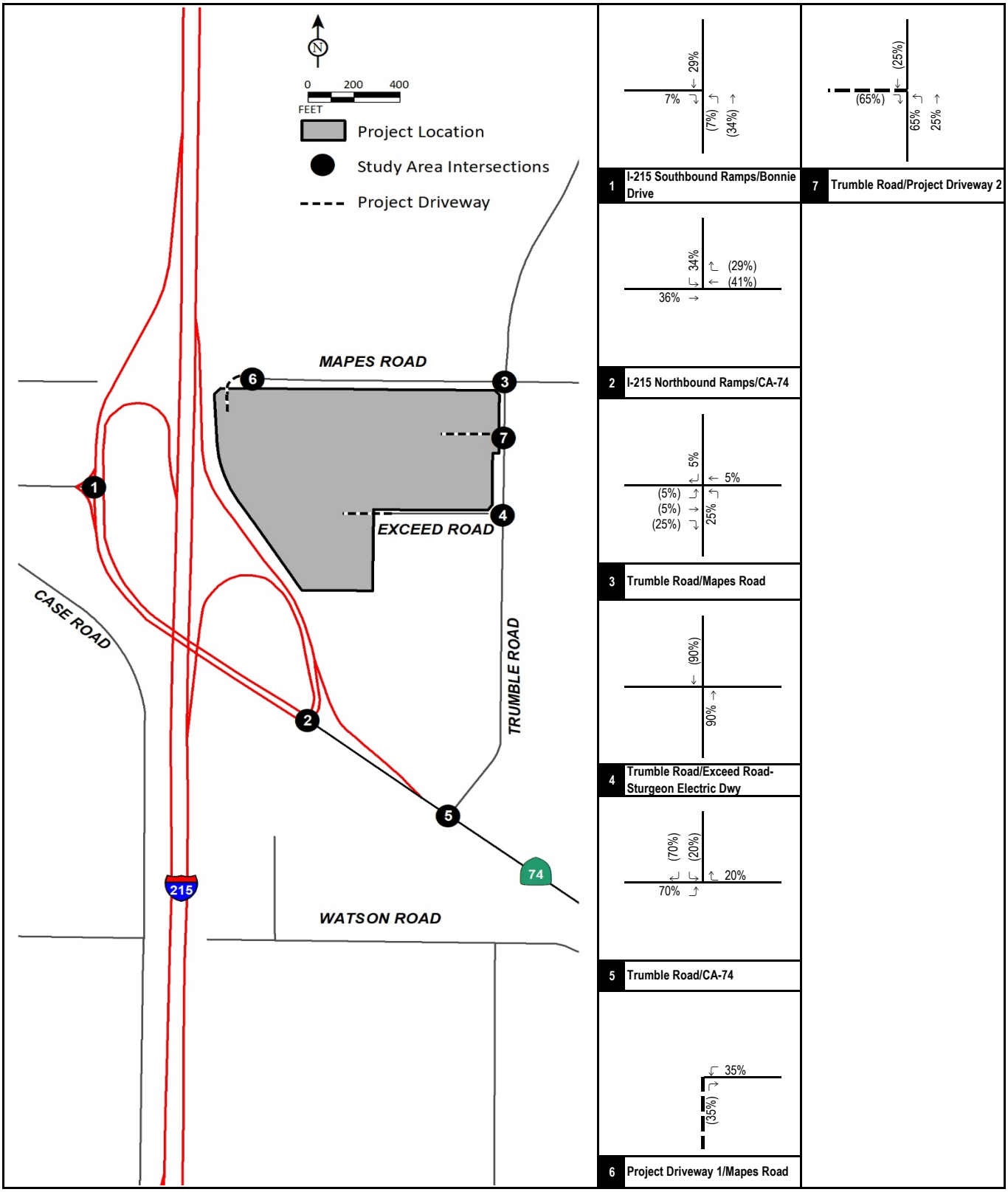
Trip distribution patterns were obtained from select zone model runs of the Riverside County Model version 3.0 (RIVCOM). Separate select zone trip distributions for passenger vehicles and truck trips were obtained from RIVCOM. The select zone distribution plots are included in Appendix D. Project trip distributions were further refined based on the location of the proposed project in relation to surrounding land uses, regional roadway network and truck routes, and in consultation with the City staff. Additionally, as shown in Figure 1-2, all project truck traffic will be accessing the project through the Exceed Road Driveway. Figure 5-1 illustrates the project passenger vehicle trip distribution. Figure 5-2 illustrates the project truck trip distribution.

The project trip assignment is the product of the project trip generation and trip distribution percentages. Figure 5-3 illustrates the project passenger vehicle trip assignment. Figure 5-4

illustrates the project truck trip assignment (in PCE). Figure 5-5 illustrates the total project trip assignment (in PCE) for the proposed project.

## 5.3 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Project Trip Distribution – Passenger Vehicles
- Figure 5-2: Project Trip Distribution – Trucks
- Figure 5-3: Project Trip Assignment – Passenger Vehicles
- Figure 5-4: Project Trip Assignment – Trucks
- Figure 5-5: Total Project Trip Assignment
- Table 5-A: Project Trip Generation




LSA

FIGURE 5-1

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

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Project Trip Distribution - Passenger Vehicles

P:\BAV2101\Traffic\z30_Dist_PV.xlsx\Figure (6/16/2022)

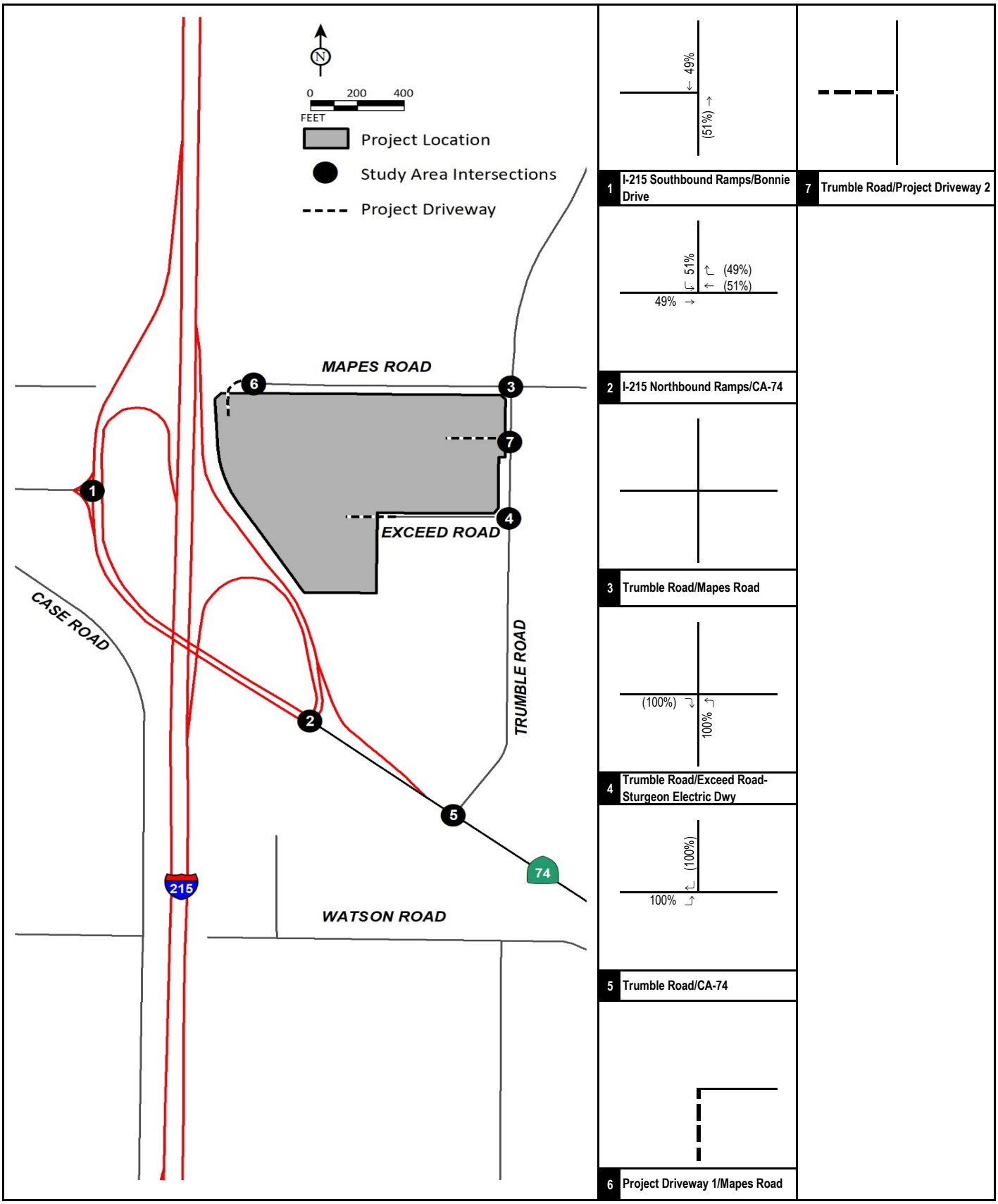



FIGURE 5-2

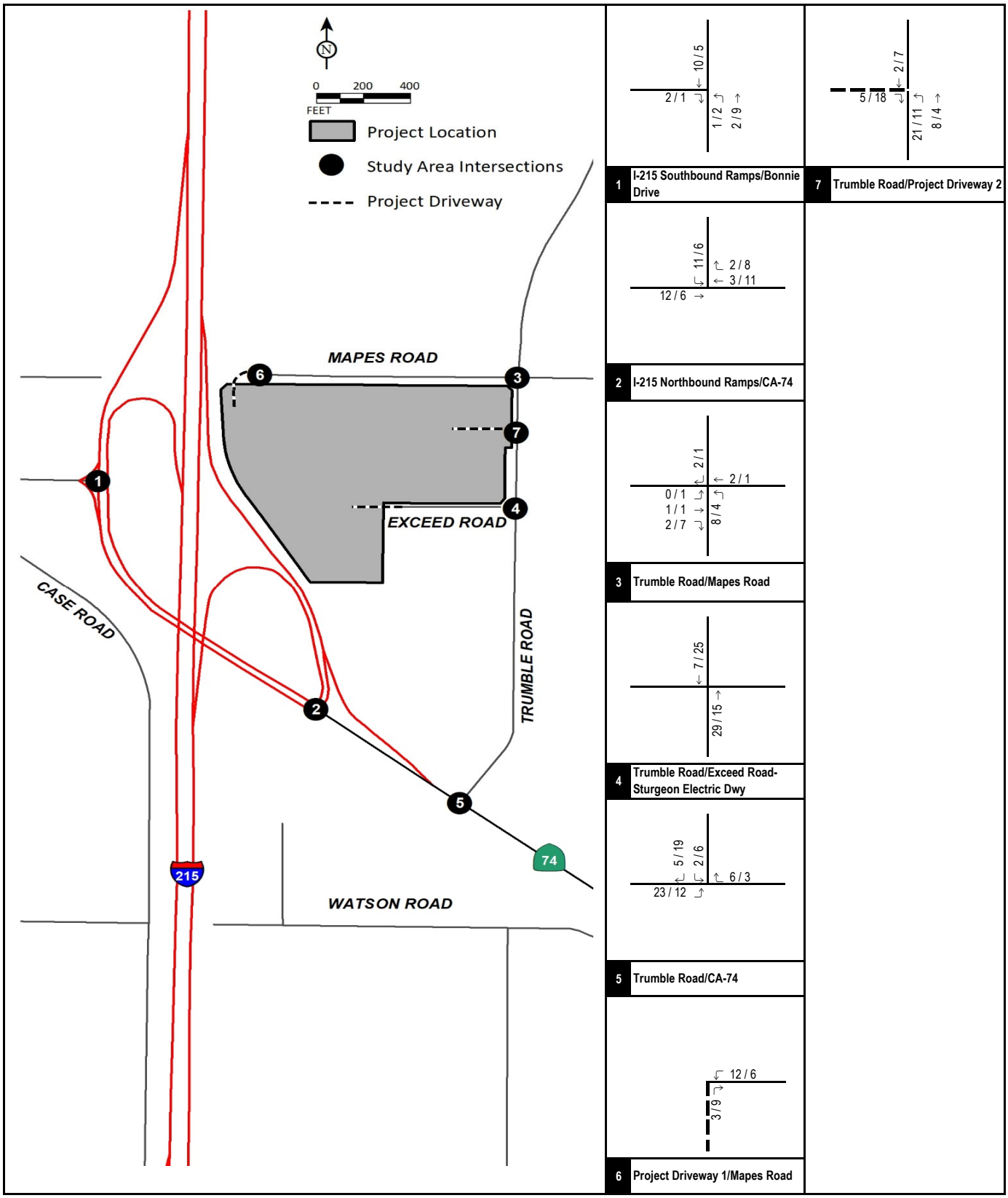
LSA

XXX% (YYY%)
Inbound (Outbound) Trip Distribution
---- Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Project Trip Distribution - Trucks

P:\BAV2101\Traffic\z30_Dist_Trucks.xlsx\Figure (6/16/2022)



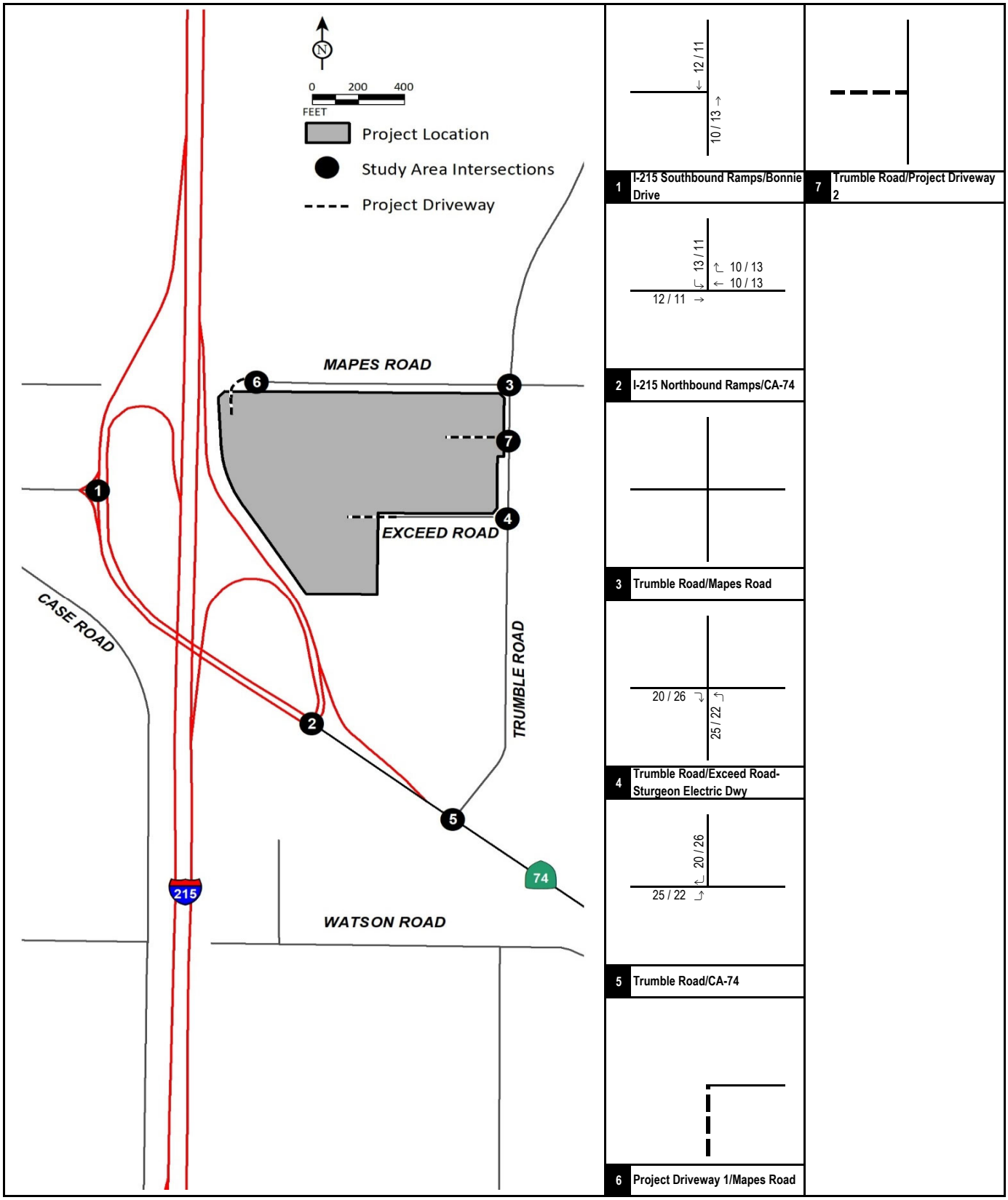

LSA

FIGURE 5-3

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

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*
Project Trip Assignment - Passenger Vehicles

P:\BAV2101\Traffic\z30_Assn_PV.xlsx\Figure (6/16/2022)




LSA

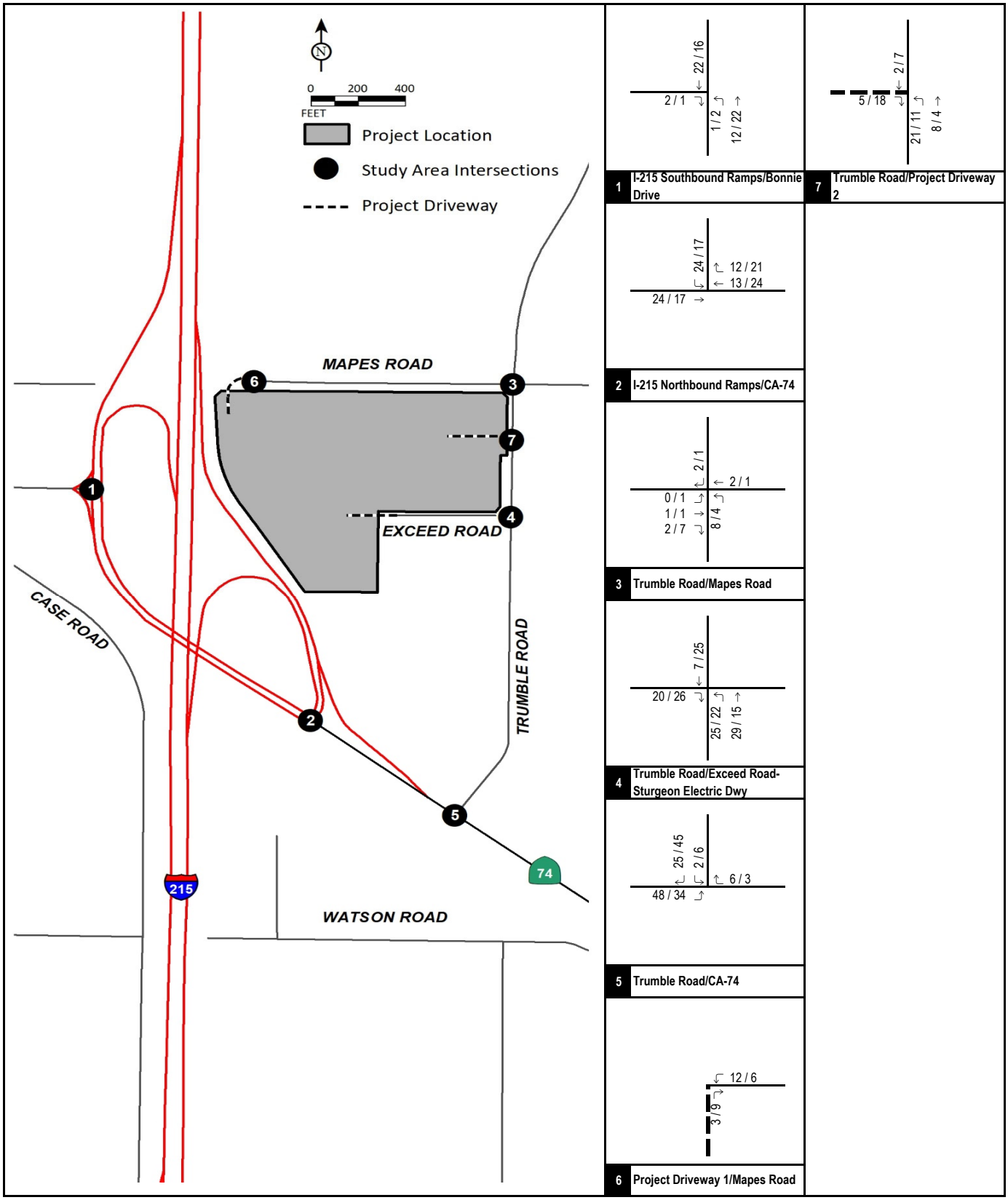
FIGURE 5-4

XX / YY
AM / PM Peak Hour PCE Volumes
Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Project Trip Assignment - Trucks

P:\BAV2101\Traffic\z30_Assn_Trucks.xlsx\Figure (6/16/2022)




LSA

FIGURE 5-5

XX / YY
AM / PM Peak Hour Traffic Volumes (In PCE)
Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Project Total Trip Assignment

P:\BAV2101\Traffic\z30_Assn_zTotal.xlsx\Figure (6/16/2022)

LSA

## Table 5-A - Project Trip Generation

| Land Uses | 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 |
|---|---|---|---|---|---|---|---|---|
| **High-Cube Fulfillment Center**[1,2,3] | | | | | | | | |
| | 396 TSF | | | | | | | |
| Trips/Unit (Cars) | | 0.084 | 0.020 | 0.104 | 0.043 | 0.067 | 0.110 | 1.249 |
| Trips/Unit (2-Axle Trucks) | | 0.005 | 0.005 | 0.010 | 0.005 | 0.006 | 0.011 | 0.123 |
| Trips/Unit (3-Axle Trucks) | | 0.004 | 0.004 | 0.008 | 0.004 | 0.005 | 0.009 | 0.100 |
| Trips/Unit (4+ Axle Trucks) | | 0.014 | 0.014 | 0.028 | 0.014 | 0.016 | 0.030 | 0.338 |
| Trips/Unit (Total) | | 0.107 | 0.043 | 0.150 | 0.066 | 0.094 | 0.160 | 1.810 |
| Trip Generation (Cars) | | 33 | 8 | 41 | 17 | 27 | 44 | 495 |
| Trip Generation (2-Axle Trucks) | | 2 | 2 | 4 | 2 | 2 | 4 | 49 |
| Trip Generation (3-Axle Trucks) | | 2 | 1 | 3 | 2 | 1 | 3 | 40 |
| Trip Generation (4+ Axle Trucks) | | 6 | 5 | 11 | 5 | 7 | 12 | 135 |
| Trip Generation (Total Trucks) | | 10 | 8 | 18 | 9 | 10 | 19 | 224 |
| Trip Generation (Total) | | 43 | 16 | 59 | 26 | 37 | 63 | 719 |
| Trip Generation (Cars) | | 33 | 8 | 41 | 17 | 27 | 44 | 495 |
| PCE Trip Generation (2-Axle Trucks) | | 3 | 3 | 6 | 3 | 3 | 6 | 74 |
| PCE Trip Generation (3-Axle Trucks) | | 4 | 2 | 6 | 4 | 2 | 6 | 80 |
| PCE Trip Generation (4+ Axle Trucks) | | 18 | 15 | 33 | 15 | 21 | 36 | 405 |
| PCE Trip Generation (Total Trucks) | | 25 | 20 | 45 | 22 | 26 | 48 | 559 |
| **PCE Trip Generation (Total)** | | **58** | **28** | **86** | **39** | **53** | **92** | **1,054** |

**Notes:**

TSF = thousand square-feet

[1] Rates based on the ITE *Trip* Generation Manual *(11th Edition)* for Land Use 155 - "High-Cube Fulfillment Center Warehouse - Non-Sort", Setting Location - "General Urban/Suburban."

[2] Passenger vehicles and truck in/out splits from Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) rates for Land Use 155 – "High-Cube Fulfillment Center Warehouse - Non-Sort", Setting/Location - "General Urban/Suburban."

[3] The resulting trips were converted to trucks and passenger vehicles based on the South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, 31 percent of project traffic will be trucks. Based on Vehicle Mix from the SCAQMD, Warehouse Truck Trip Study Data Results and Usage, dated December 2014, the truck mix was considered as 18.7% 4+ axle, 5.5% 3-axle, and 6.8% 2-axle trucks. All truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4- and more axle trucks.

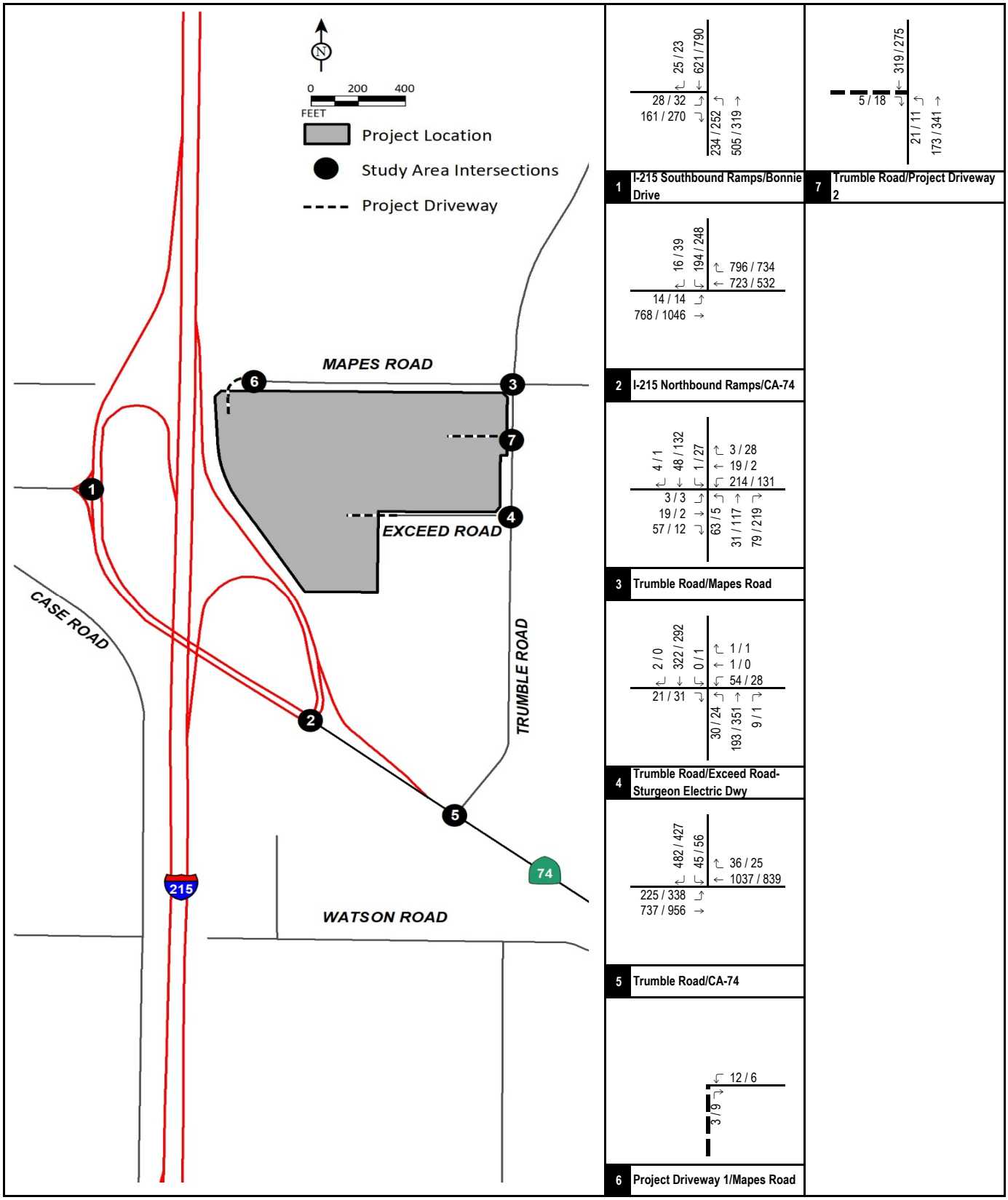
# 6.0 TRAFFIC VOLUMES FOR WITH PROJECT SCENARIOS

Existing and Cumulative (2024) with project traffic volumes were developed by adding project traffic to the corresponding without project scenarios. Figures 6-1 and 6-2 illustrate "with project" peak hour traffic volumes at study intersections under existing and Cumulative (2024) conditions, respectively.

Detailed volume development worksheets are included in Appendix C.

## 6.1 LIST OF CHAPTER 6.0 FIGURES

- Figure 6-1: Existing with Project Peak Hour Traffic Volumes
- Figure 6-2: Cumulative (2024) with Project Peak Hour Traffic Volumes




LSA

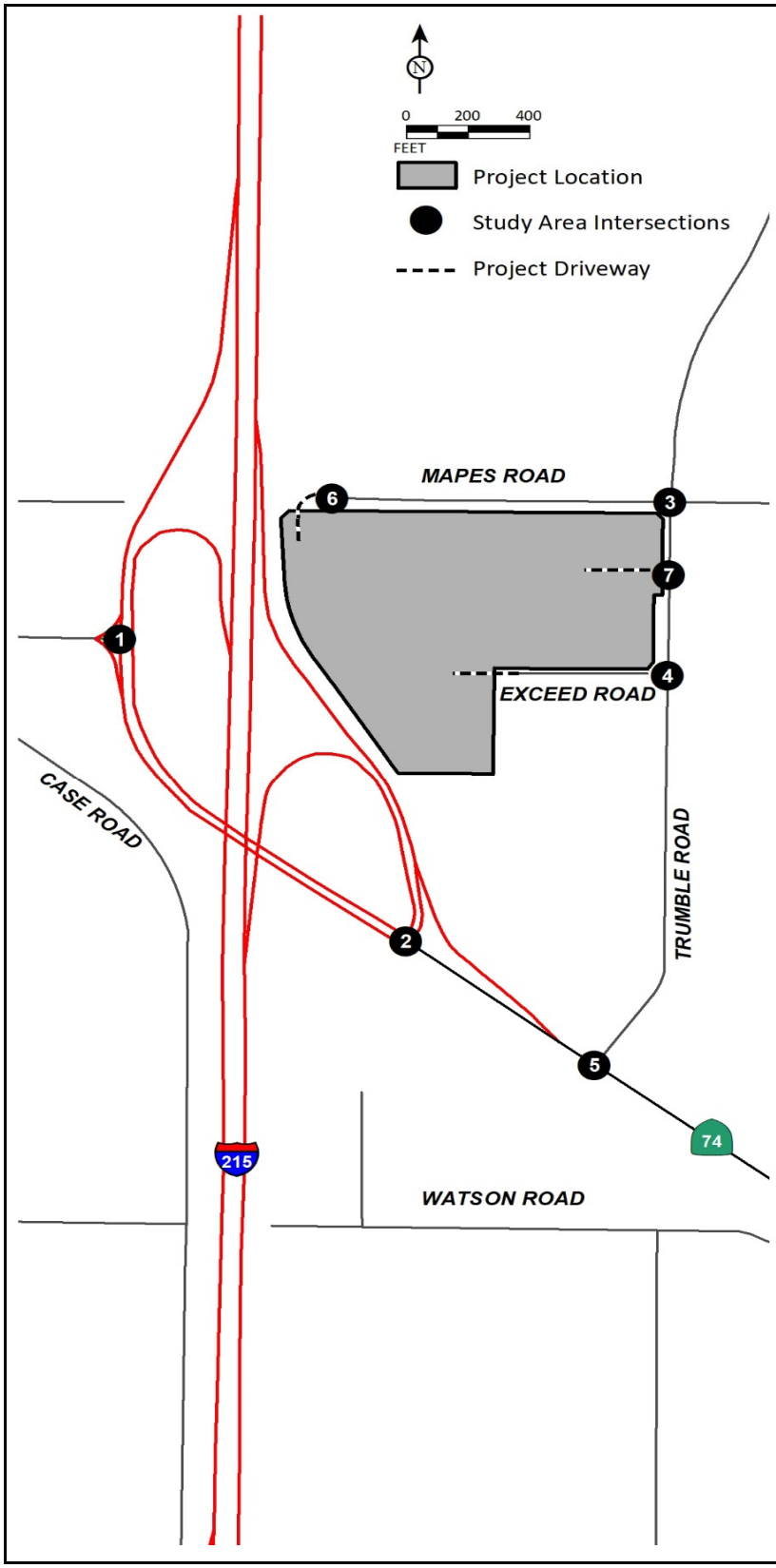
FIGURE 6-1

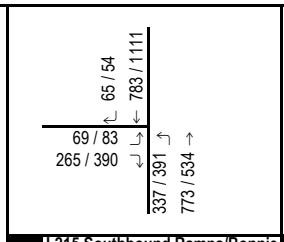
XXXX / YYYY
AM / PM Peak Hour Traffic Volumes (In PCE)
Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

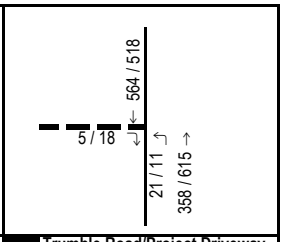
Existing with Project Peak Hour Traffic Volumes

P:\BAV2101\Traffic\z30_Vol_exist_P.xlsx\Figure (6/16/2022)

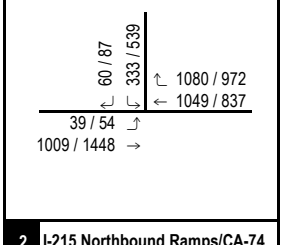


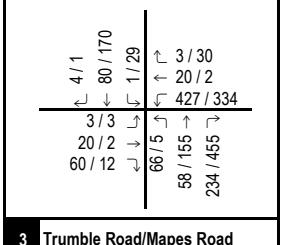

1 I-215 Southbound Ramps/Bonnie Drive



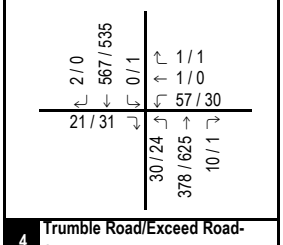

7 Trumble Road/Project Driveway 2



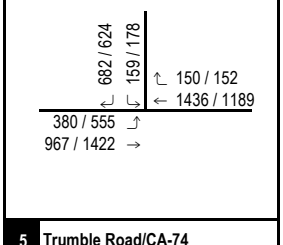

2 I-215 Northbound Ramps/CA-74



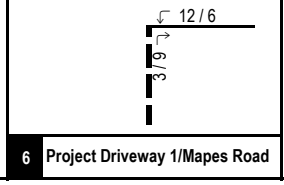

3 Trumble Road/Mapes Road




4 Trumble Road/Exceed Road-Sturgeon Electric Dwy




5 Trumble Road/CA-74




6 Project Driveway 1/Mapes Road

FIGURE 6-2

LSA

XXXX / YYYY
AM / PM Peak Hour Traffic Volumes (In PCE)
Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Cumulative (2024) with Project Peak Hour Traffic Volumes

# 7.0 INTERSECTION AND ROADWAY SEGMENT LEVELS OF SERVICE

## 7.1 EXISTING LEVELS OF SERVICE

### 7.1.1 Study Intersections

Previously referenced Figure 3-1 illustrates existing study intersection geometrics and traffic control. 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 all intersections are currently operating at a satisfactory LOS.

Detailed intersection levels of service worksheets are included in Appendix D.

## 7.2 EXISTING WITH 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.

### 7.2.1 Study Intersections

An intersection LOS analysis was conducted for existing with project conditions using the methodologies previously discussed. Previously referenced Table 7-A summarizes the results of this analysis and shows that all intersections are forecast to operate at a satisfactory LOS under existing with project conditions.

As such, there is no direct project related operational deficiency caused by the project within the study area.

Detailed intersection levels of service worksheets are included in Appendix D.

## 7.3 CUMULATIVE (2024) WITHOUT PROJECT LEVELS OF SERVICE

### 7.3.1 Study Intersections

An intersection LOS analysis was conducted for Cumulative (2024) without project conditions using the methodologies previously discussed. Table 7-B summarizes the results of this analysis and shows that all intersections are forecast to operate at a satisfactory LOS under Cumulative (2024) without project conditions with the exception of the following:

- I-215 Southbound Ramps/Bonnie Drive (p.m. peak hour);
- Trumble Road/Mapes Road (p.m. peak hour); and
- Trumble Road/CA-74 (a.m. and p.m. peak hours).

Detailed intersection levels of service worksheets are included in Appendix D.

## 7.4 CUMULATIVE (2024) WITH PROJECT LEVELS OF SERVICE

### 7.4.1 Study Intersections

An intersection LOS analysis was conducted for project completion with project conditions using the methodologies previously discussed. Previously referenced Table 7-B summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under Cumulative (2024) with project conditions with the exception of the following:

- I-215 Southbound Ramps/Bonnie Drive (p.m. peak hour);
- Trumble Road/Mapes Road (p.m. peak hour);
- Trumble Road/Exceed Road-Sturgeon Electric Driveway (p.m. peak hour); and
- Trumble Road/CA-74 (a.m. and p.m. peak hours).

It should be noted that except for the intersection of Trumble Road/Exceed Road-Sturgeon Electric Driveway, all other intersections also forecast to operate at a deficient LOS under Cumulative (2024) no project condition. As such, there is a cumulative operational deficiency at these intersections. Additionally, implementation of recommended improvements at the intersection of Trumble Road/Mapes Road alleviates the operational deficiency at the intersection of Trumble Road/Exceed Road-Sturgeon Electric Driveway under Cumulative (2024) with project condition. This has also been described in the Circulation Improvement section of this TS.

Detailed intersection levels of service worksheets are included in Appendix D.

For intersections forecasted to operate at a deficient LOS, corresponding improvements have been identified in Chapter 8 of this report.

## 7.5 LIST OF CHAPTER 7.0 TABLES

- Table 7-A: Existing Intersection Levels of Service
- Table 7-B: Cumulative (2024) Intersection Levels of Service

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## Table 7-A - Existing Intersection Levels of Service

| Intersection | Control | Without Project | | | | With Project | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| | | Delay (sec.) | LOS | Delay (sec.) | LOS | Delay (sec.) | LOS | Delay (sec.) | LOS |
| 1 . I-215 Southbound Ramps/Bonnie Drive | Signal | 18.3 | B | 23.8 | C | 18.3 | B | 23.8 | C |
| 2 . I-215 Northbound Ramps/CA-74 | Signal | 9.7 | A | 12.5 | B | 10.5 | B | 13.3 | B |
| 3 . Trumble Road/Mapes Road | AWSC | 9.1 | A | 10.6 | B | 9.2 | A | 11.1 | B |
| 4 . Trumble Road/Exceed Road-Sturgeon Electric Dwy | TWSC | 12.1 | B | 15.2 | C | 13.9 | B | 17.7 | C |
| 5 . Trumble Road/CA-74 | Signal | 31.4 | C | 30.9 | C | 38.5 | D | 38.6 | D |
| 6 . Project Driveway 1/Mapes Road | OWSC | *Future Intersection* | | *Future Intersection* | | 8.3 | A | 8.4 | A |
| 7 . Trumble Road/Project Driveway 2 | OWSC | *Future Intersection* | | *Future Intersection* | | 9.3 | A | 9.2 | A |

**Notes:**

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All way Stop Control.

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

LOS = Level of Service

* Exceeds LOS Standard

LSA

## Table 7-B - Cumulative (2024) Intersection Levels of Service

| Intersection | Control | Without Project | | | | With Project | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | PM Peak Hour | | AM Peak Hour | | PM Peak Hour | |
| | | Delay (sec.) | LOS | Delay (sec.) | LOS | Delay (sec.) | LOS | Delay (sec.) | LOS |
| 1 . I-215 Southbound Ramps/Bonnie Drive | Signal | 33.0 | C | 78.0 | E * | 33.2 | C | 80.6 | F * |
| 2 . I-215 Northbound Ramps/CA-74 | Signal | 17.8 | B | 41.6 | D | 18.9 | B | 44.8 | D |
| 3 . Trumble Road/Mapes Road | AWSC | 12.9 | B | 55.5 | F * | 12.9 | B | 60.0 | F * |
| 4 . Trumble Road/Exceed Road-Sturgeon Electric Dwy | TWSC | 18.8 | C | 32.4 | D | 22.9 | C | 41.9 | E * |
| 5 . Trumble Road/CA-74 | Signal | >100 | F * | >100 | F * | >100 | F * | >100 | F * |
| 6 . Project Driveway 1/Mapes Road | OWSC | *Future Intersection* | | *Future Intersection* | | 8.3 | A | 8.4 | A |
| 7 . Trumble Road/Project Driveway 2 | OWSC | *Future Intersection* | | *Future Intersection* | | 10.3 | B | 10.2 | B |

**Notes:**

OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All way Stop Control.

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

LOS = Level of Service

* Exceeds LOS Standard

# 8.0 CIRCULATION IMPROVEMENTS AND FUNDING SOURCES

## 8.1 RECOMMENDED IMPROVEMENTS

Improvements have been recommended at study intersections where an operational deficiency has been identified or where the project contributes to an unsatisfactory LOS. The recommended improvements are as follows:

### 8.1.1 Cumulative (2024) with Project Conditions Intersection Improvements

- I-215 Southbound Ramps/Bonnie Drive: Add a second southbound through lane. Align this lane with the receiving lane of the free eastbound right turn lane in the south leg of the intersection. Convert the free eastbound right turn lane to yield to the southbound through traffic. Optimize the signal timing.
- Trumble Road/Mapes Road: Install a signal. A peak hour signal warrant analysis was conducted to determine the feasibility of this improvement under Cumulative (2024) without and with project conditions. Figure 8-1 illustrates the result of this warrant analysis and shows that this intersection meets the signal warrant for both a.m. and p.m. peak hour for both without and with project condition. As such, installing a signal at this intersection is recommended.
- Trumble Road/Exceed Road-Sturgeon Electric Driveway: Installing a signal at the intersection of Trumble Road/Mapes Road eliminates the operational deficiency at this intersection. No further improvement is required at this intersection. It should be noted that the inclusion of a traffic signal at Trumble Road/Mapes Road improves traffic operations at this intersection to an acceptable LOS, because the nearby traffic signal produces larger gaps in traffic along Trumble Road. This has been further evaluated through a simulation analysis (SimTraffic), and has been discussed in detail in chapter 10.
- Trumble Road/CA-74: Add a second southbound right-turn lane. Optimize the signal timing with southbound right overlap phasing.

Table 8-A summarizes the level of service at these intersections with the recommended improvements under Cumulative (2024) with project conditions. Figure 8-2 illustrates the Cumulative (2024) with project with improvements intersection lane geometrics and traffic control. Figure 8-3 illustrates a conceptual striping plan for the proposed improvements at the intersection of I-215 Southbound Ramps/Bonnie Drive.

Detailed Level of Service Worksheets are included in Appendix D.

## 8.2 FUNDING SOURCES AND MECHANISMS

Where there is a funding mechanism (fee program) is in place 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 improvements. 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.

### 8.2.1 Transportation Uniform Mitigation Fee (TUMF) Program

The underlying purpose of the TUMF program is "the need to establish a comprehensive funding source to mitigate the cumulative regional transportation impacts of new development on regional arterial highways." As new development occurs in western Riverside County, the cumulative transportation impacts of this new development are reflected in increased demand for transportation infrastructure leading to decreased levels of service, increased delay and increased congestion on regional transportation facilities, and an overall decline in regional mobility. Therefore, the need to invest in additional transportation infrastructure to meet the increased travel demand and to sustain pre-development traffic conditions to "keep traffic flowing" represents the fundamental premise of the TUMF program. TUMF program includes I-215/SR-74 interchange improvement including recommended improvements at the intersection of I-215 Southbound Ramps/Bonnie Drive. Therefore, the project will be paying into the TUMF program for this improvement.

### 8.2.2 Project Fair Share

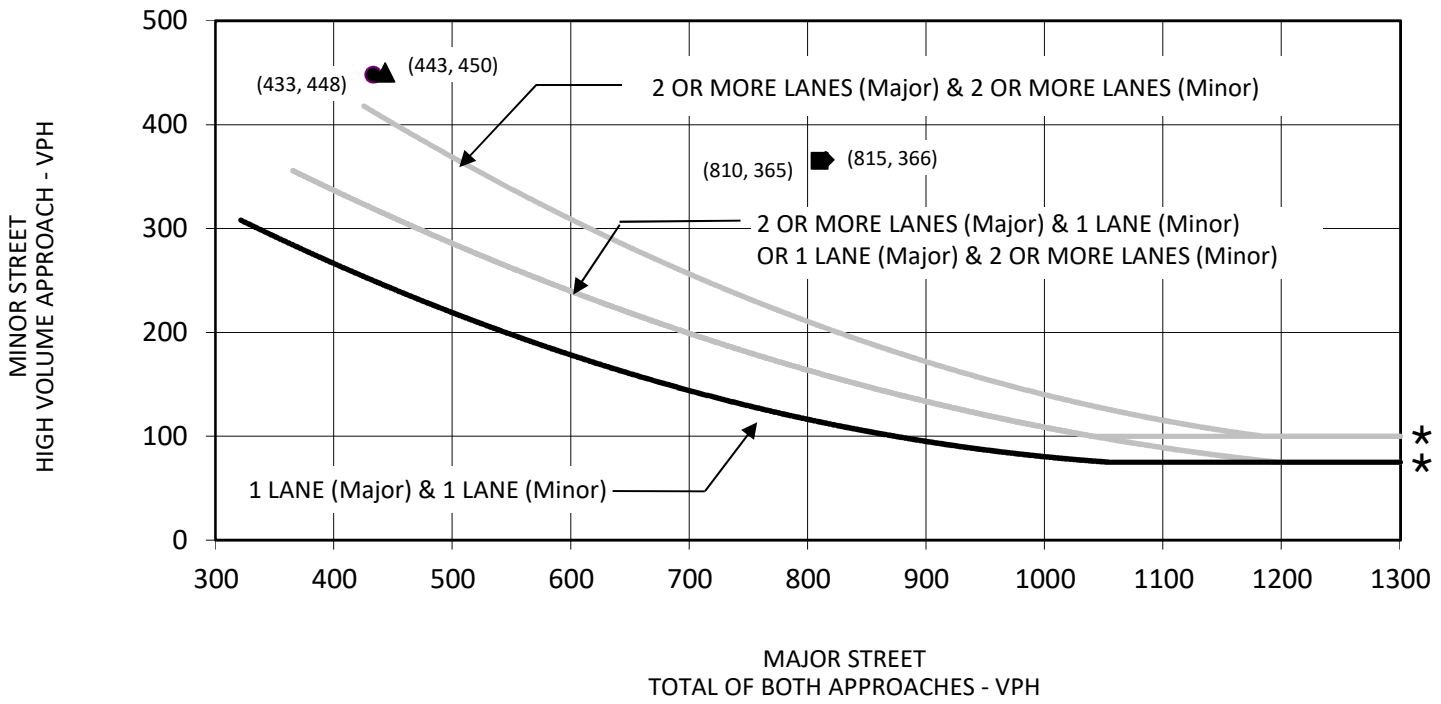
In the absence of a fee program where the project has an impact on the roadway network, the project will pay its respective fair share for the proposed improvements. The project's fair share has been calculated based on project traffic as a percentage of total growth from existing to cumulative (2024) with project conditions. Table 8-B summarizes the project fair share for the deficient intersections. However, it should be noted that since the project will be paying to the TUMF fee program, a fair share payment will not be required for the intersection of I-215 Southbound Ramps/Bonnie Drive. Since the project has a cumulative operational deficiency at the intersections of Trumble Road/Mapes Road, and Trumble Road/SR-74, the project will be required to pay its fair share.

## 8.3 LIST OF CHAPTER 8.0 FIGURES AND TABLES

- Figure 8-1: Warrant 3: Peak Hour- Trumble Road/Mapes Road – Cumulative (2024) Conditions
- Figure 8-2: Cumulative (2024) with project with Improvements Intersection Geometrics and Traffic Control
- Figure 8-3: Conceptual Striping Plan - I-215 Southbound Ramps/Bonnie Drive
- Table 8-A: Cumulative (2024) with Project With Improvements Intersection Levels of Service
- Table 8-B: Project Fair-Share

# 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

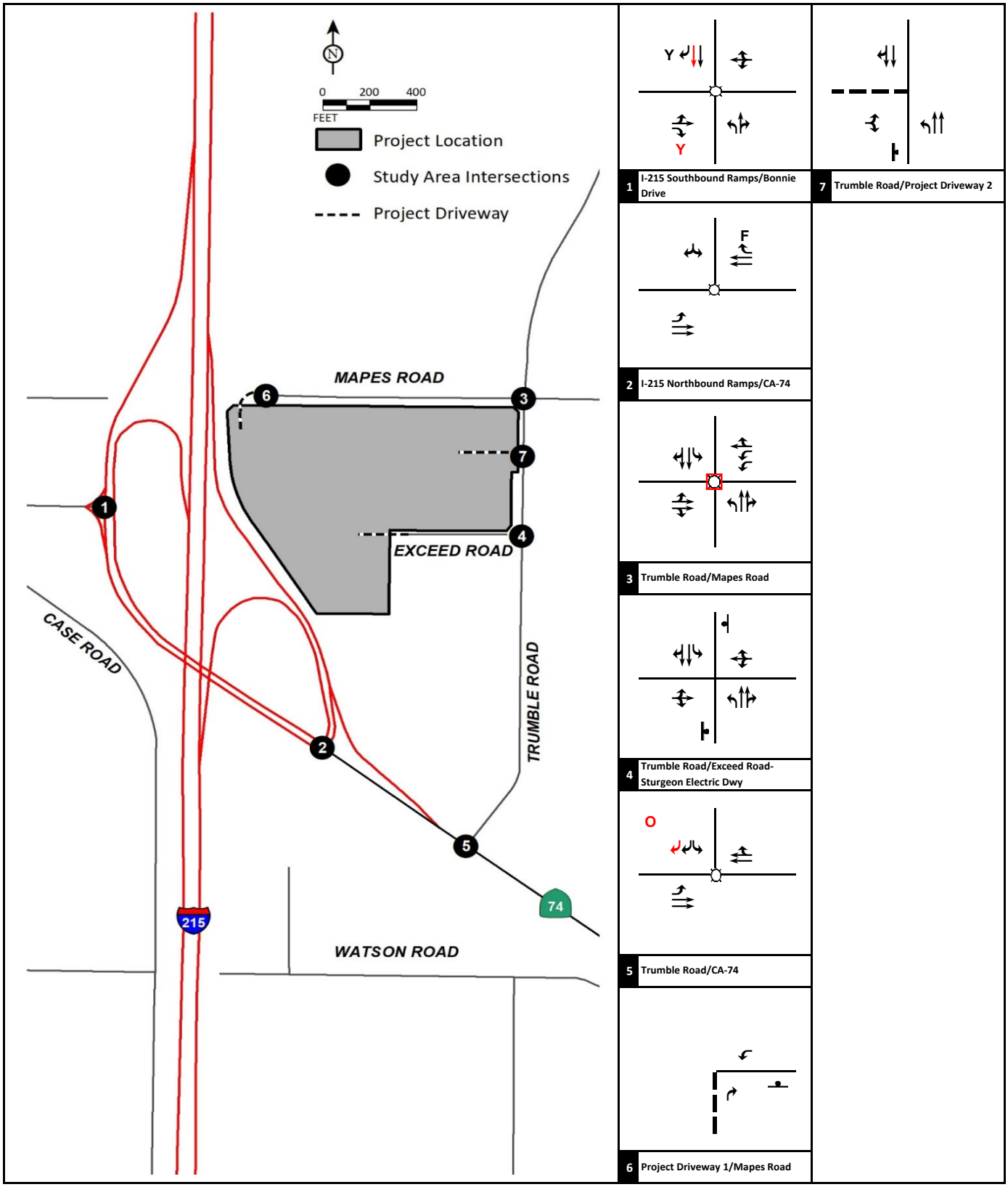
● No Project AM Peak Hour
▲ With Project AM Peak Hour
■ No Project PM Peak Hour
◆ With Project PM Peak Hour

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

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

Warrant 3: Peak Hour- Trumble Road/Mapes Road – Cumulative (2024) Conditions

P:\BAV2101\Traffic\SW_OY_Int 3.xlsx (6/8/2022)




LSA

FIGURE 8-2

Legend

Signal

Stop Sign

Project Driveway

O Overlap Phasing

F Free Right Turn

Proposed Improvements

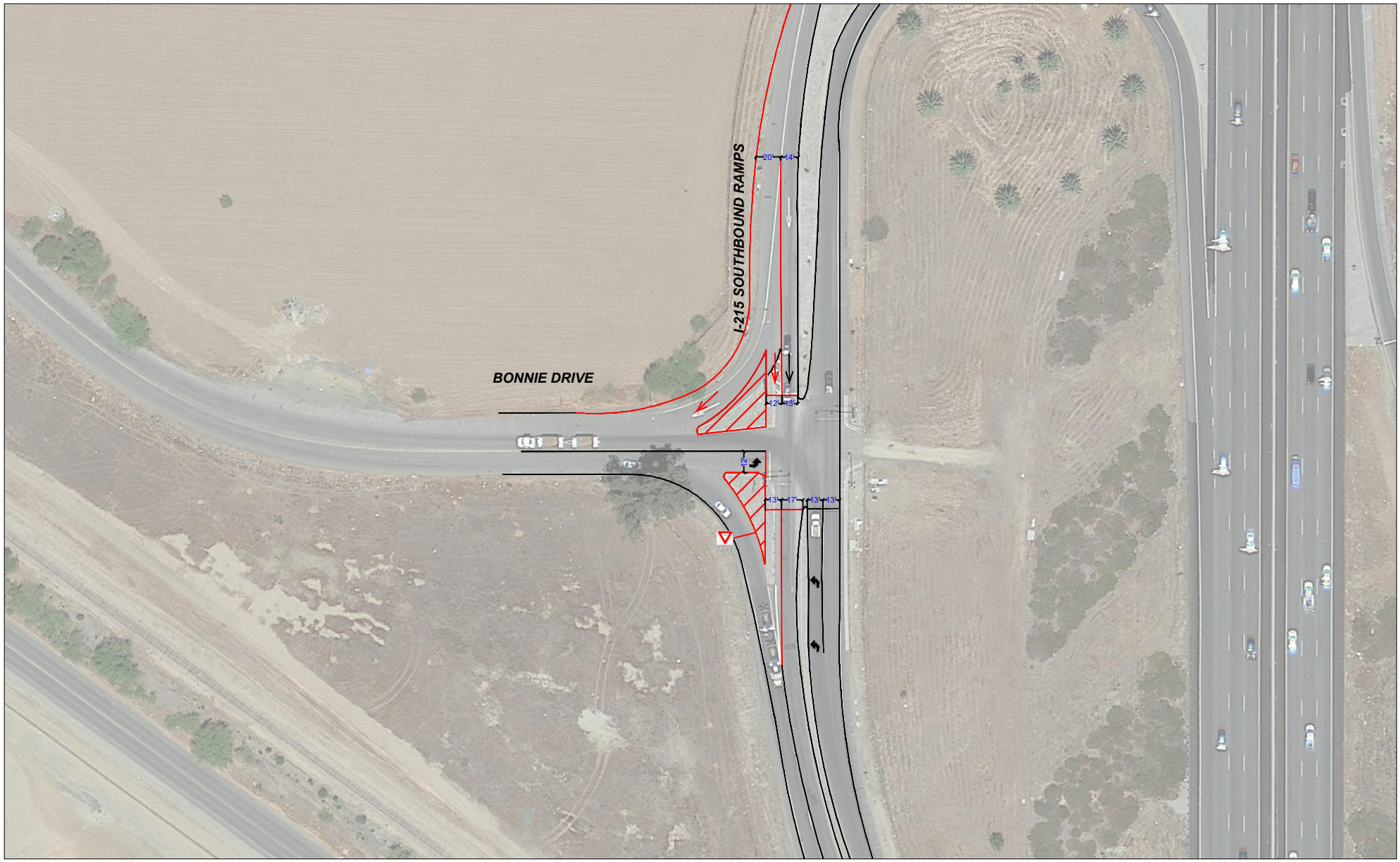
Y Yield to Through Traffic

*Mapes and Trumble Industrial Facility Project*

*Traffic Study*

Cumulative (2024) with project with Improvements Intersection Geometrics and Traffic Control

P:\BAV2101\Traffic\g30- Geo_OY_P_MIT.xlsx\Figure (12/6/2022)




LSA

LEGEND

— Existing Lane

— Proposed Lane

FIGURE 8-3

N

0 30 60

FEET

SOURCE: Google Earth, 2018.

I:\BAV2101-RIV\Traffic\Reports\striping.dwg (06/06/2022)

*Mapes and Trumble Industrial Facility Project*

*Traffic Study*

Conceptual Striping Plan

I-215 southbound Ramps/Bonnie Drive

LSA

## Table 8-A - Cumulative (2024) With Project with Improvements Intersection Levels of Service

| Intersection | With Project Without Improvements | | | | | | With Project With Improvements | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AM Peak Hour | | PM Peak Hour | | | | AM Peak Hour | | PM Peak Hour | |
| | Control | Delay (sec.) | LOS | Delay (sec.) | LOS | | Control | Delay (sec.) | LOS | Delay (sec.) | LOS |
| 1 . I-215 Southbound Ramps/Bonnie Drive | Signal | 33.2 | C | 80.6 | F | * | Signal | 30.1 | C | 29.8 | C |
| 3 . Trumble Road/Mapes Road | AWSC | 12.9 | B | 60.0 | F | * | Signal | 20.3 | C | 15.6 | B |
| 4 . Trumble Road/Exceed Road-Sturgeon Electric Dwy | TWSC | 22.9 | C | 41.9 | E | * | TWSC | 22.9 | C | 25.6 | D |
| 5 . Trumble Road/CA-74 | Signal | >100 | F | * >100 | F | * | Signal | 50.8 | D | 43.2 | D |

**Notes:**

Delay = Average control delay in seconds.

LOS = Level of Service

* Exceeds LOS Standard

LSA

## Table 8-B - Project Fair-Share

| Intersection | A.M. Peak Hour | | | | | P.M. Peak Hour | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Volume | | Total Growth | Project Trips | AM Fair Share % | Total Volume | | Total Growth | Project Trips | PM Fair Share % | Project Fair Share % |
| | Existing | Cumul + Project | | | | Existing | Cumul + Project | | | | |
| 1 . I-215 Southbound Ramps/Bonnie Drive | 1,537 | 2,292 | 755 | 37 | N/A | 1,645 | 2,563 | 918 | 41 | 4.47% | **4.47%** |
| 3 . Trumble Road/Mapes Road | 526 | 976 | 450 | 15 | N/A | 664 | 1,198 | 534 | 15 | 2.81% | **2.81%** |
| 4 . Trumble Road/Exceed Road-Sturgeon Electric Dwy | 552 | 1,067 | 515 | 81 | N/A | 641 | 1,248 | 607 | 88 | 14.50% | **14.50%** |
| 5 . Trumble Road/CA-74 | 2,481 | 3,776 | 1,295 | 81 | 6.25% | 2,553 | 4,124 | 1,571 | 88 | 5.60% | **6.25%** |

Notes:

N/A = Not Applicable

N/A indicates that since the project does not create an operational deficiency for the said peak hour.

**Bold** = Project Fair Share Percentage is the highest fair share value of the AM and PM peak hour when both peak hours are impacted by the project, or only in the peak hour where the project has an impact.

# 9.0 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).

For projects within the City, the VMT analysis is based upon the methodology and significance impact criteria set in the *City of Perris Transportation Impact Analysis Guidelines for CEQA* (VMT Guidelines), dated May 2020. The City's Guidelines 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 impact.

## 9.1 METHODOLOGY

### 9.1.1 Project Screening Criteria

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 could be screened out from a detailed VMT analysis. Following is a brief description about the project in relation with the project screening criteria:

- **Transit Priority Area (TPA) Screening:** The project is not located within a TPA. Therefore, this screening criteria does not apply to the project.
- **Low Trip Generator:** The VMT Guidelines identifies that projects generating less than 500 daily trips could also be screened out. As discussed in the project trip generation section, the project is estimated to generate 719 daily trips. Therefore, the project does not satisfy this screening criteria.
- **Affordable Housing/Local Serving Land Use:** The project is not an affordable housing project nor it could be classified as retail, institutional/government uses or public service uses. Therefore, these criteria do not apply for the project.
- **Located in a Low VMT Area:** The project is located within RIVCOM TAZ 1847. The project was evaluated using the WRCOG screening tool to determine whether the project is located within a low VMT area. As analyzed in the WRCOG screening tool, the base year (2018) project location/project TAZ VMT per employee is 19.5, that is greater than the citywide average VMT per employee, 17.1. As such, the project TAZ's VMT per employee is 14.26% higher than City's VMT per employee under base year 2018 conditions. Therefore, the project is not located within a low VMT area and cannot be screened out from a detailed VMT analysis. The WRCOG screening tool result is included in Appendix E.

Since the project could not be screened out from a detailed VMT analysis, a detailed VMT analysis for the project was conducted to evaluate whether the project will have any significant VMT impact.

### 9.1.2 Methodology and Thresholds of Significance for Detailed VMT Analysis

This VMT analysis was conducted using the recommended methodology included in the VMT Impact Analysis section of the VMT Guidelines. As such, RIVCOM was used for VMT calculations for the project. The RIVCOM model was used to calculate the project and Citywide VMT per service population. The VMT Guidelines recommends comparing the project generated VMT per service population for both the base and future year with the City's threshold of significance to identify potential VMT impacts. The VMT Guidelines also establishes City of Perris Base year VMT per service population as the significance threshold for both base and future year. The project VMT was calculated from RIVCOM model run as described below:

### 9.1.3 Project Traffic Analysis Zone Update

The first step in preparation of this analysis was to update the traffic analysis zone (TAZ) in the model that includes the project area. The project land uses were converted into model socioeconomic categories using appropriate rates from ITE *Trip Generation Manual*, 11$^{th}$ Edition. The socioeconomic data for the project TAZ in both RIVCOM base year and future year model scenario was updated. Project socioeconomic data was added to the project TAZ for both scenarios. Non-project related socioeconomic data was shifted to an adjacent TAZ to isolate project form other land uses. Non-project related socioeconomic data for the future scenario was adjusted to account for the project.

### 9.1.4 Model Runs and Project VMT Estimation

Model run was conducted for this updated model upon completion of the socioeconomic data update for both base and future year. The outputs from these with project model runs were utilized to calculate the base and future year project VMT per service population. The Citywide VMT per service population for the base year was calculated from the base year no project model run.

## 9.2 PROJECT VMT ANALYSIS

Table 9-A summarizes the significant threshold and project VMT per service population for the base year. As shown in Table 9-A, the project VMT per service population under base year is 19.17% lower than the Citywide VMT per service population for the base year.

Table 9-B summarizes the significant threshold and project VMT per service population for the future year. As shown in Table 9-B, the project VMT per service population under future year is 27.71% lower than the Citywide VMT per service population for the base year.

Therefore, based on the City's significance threshold as established in the VMT Guidelines, the project will not have any significant VMT impact.

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

## 9.3 LIST OF CHAPTER 9.0 TABLES

- Table 9-A: Base Year Significant Threshold and Project VMT per Service Population
- Table 9-B: Future Year Significant Threshold and Project VMT per Service Population

**Table 9-A: Base Year Significant Threshold and Project VMT per Service Population**

| Significant Threshold* | Project | Difference | Percentage Difference | Significant Impact |
|---|---|---|---|---|
| 32.4 | 26.2 | 6.2 | -19.17% | No |

* *Obtained from RIVCOM Base Year No Project Model Run.*

**Table 9-B: Future Year Significant Threshold and Project VMT per Service Population**

| Significant Threshold* | Project | Difference | Percentage Difference | Significant Impact |
|---|---|---|---|---|
| 32.4 | 23.5 | 8.9 | -27.71% | No |

* *Obtained from RIVCOM Base Year No Project Model Run.*

# 10.0 ACCESS ANALYSIS

## 10.1 ACCESS ANALYSIS

As discussed previously and shown in Figure 1-2, access to the project will be provided via three driveways. The driveway located on Mapes Road, and the driveway located on Trumble Road will be used by only passenger vehicles, while the driveway located on Exceed Road will be used by only trucks.

### 10.1.1 Truck Turning Analysis

As previously mentioned, project related truck traffic will access the project using the driveway and the gated entrance located at the western end of Exceed Road. Additionally, as summarized in the project trip distribution section, project truck traffic are anticipated to access the site using Trumble Road. Therefore, this analysis evaluates the adequacy of truck turning radii at the intersection of Trumble Road/Exceed Road-Sturgeon Electric Driveway for truck ingress and egress. As a conservative estimate, large semitrailer (WB-67) templates were used to evaluate the adequacy of truck turning radii. The truck template is in accordance with the 2018 Edition of the American Association of State Highway and Transportation Officials (AASHTO) Green Book. Figure 10-1 illustrates the ingress truck turning template for the project at this intersection. Figure 10-2 illustrates the egress truck turning template. As illustrated in Figures 10-1 and 10-2, there is adequate roadway width to accommodate both inbound and outbound truck turning radii. It should be noted that currently there is provision for on-street parking on Exceed Road. However, for a smooth maneuver of project truck traffic, the on-street parking provision needs to be removed along Exceed Road as Follows:

- Along the southern edge of Exceed Road, on-street parking provision needs to be removed between the intersection of Trumble Road/Exceed Road-Sturgeon Electric Driveway and the easterly driveway for Brenthel Industries project (approximately 100 feet).
- Similarly, along the northern edge of Exceed Road, on-street parking provision needs to be removed for approximately 100 feet from the intersection of Trumble Road/Exceed Road-Sturgeon Electric Driveway.

### 10.1.2 Truck Ingress Gate Stacking Analysis

As previously mentioned, project truck access will be restricted with an entry gate, located at the west end of Exceed Road. Project truck traffic needs to wait in front of the entry gate before entering the project site. Therefore, it was evaluated whether project ingress traffic will spill over on Trumble Road due to the gated access at the project entrance.

The length of Exceed Road is approximately 520 feet. As such, considering that an average WB-67 truck would take up approximately 100 ft. per truck, Exceed Road can accommodate up to five trucks without spilling over to Trumble Road. As summarized in Table 5-A, the highest project ingress traffic occurs during the a.m. peak hour, with 10 inbound trucks.

As such, considering an even distribution of ingress project truck traffic arriving during the a.m. peak hour, it is anticipated a truck would be arriving in every six minutes. That would provide adequate time for a truck to enter the project site without creating a queue along Exceed Road. Therefore, it is estimated that the ingress project truck traffic would not spill over to Trumble Road.

## 10.2 INTERSECTION QUEUING AND BLOCKING

As included in Chapter 8.0, a signal has been recommended for the intersection of Trumble Road/Mapes Road as a recommended improvement. Typically, signalization at nearby intersection helps cross street traffic by providing larger gaps in traffic flow along the major travel route (Trumble Road). However, it can also adversely affect unsignalized minor cross streets by creating a long enough queue to restrict the movements of cross street traffic at these nearby unsignalized locations. To identify whether the recommended signal would adversely affect the cross-street traffic at the intersection of Trumble Road/Exceed Road-Sturgeon Electric Driveway, a simulation analysis was prepared using SimTraffic to assess the queuing and whether it would potentially block cross traffic at this intersection.

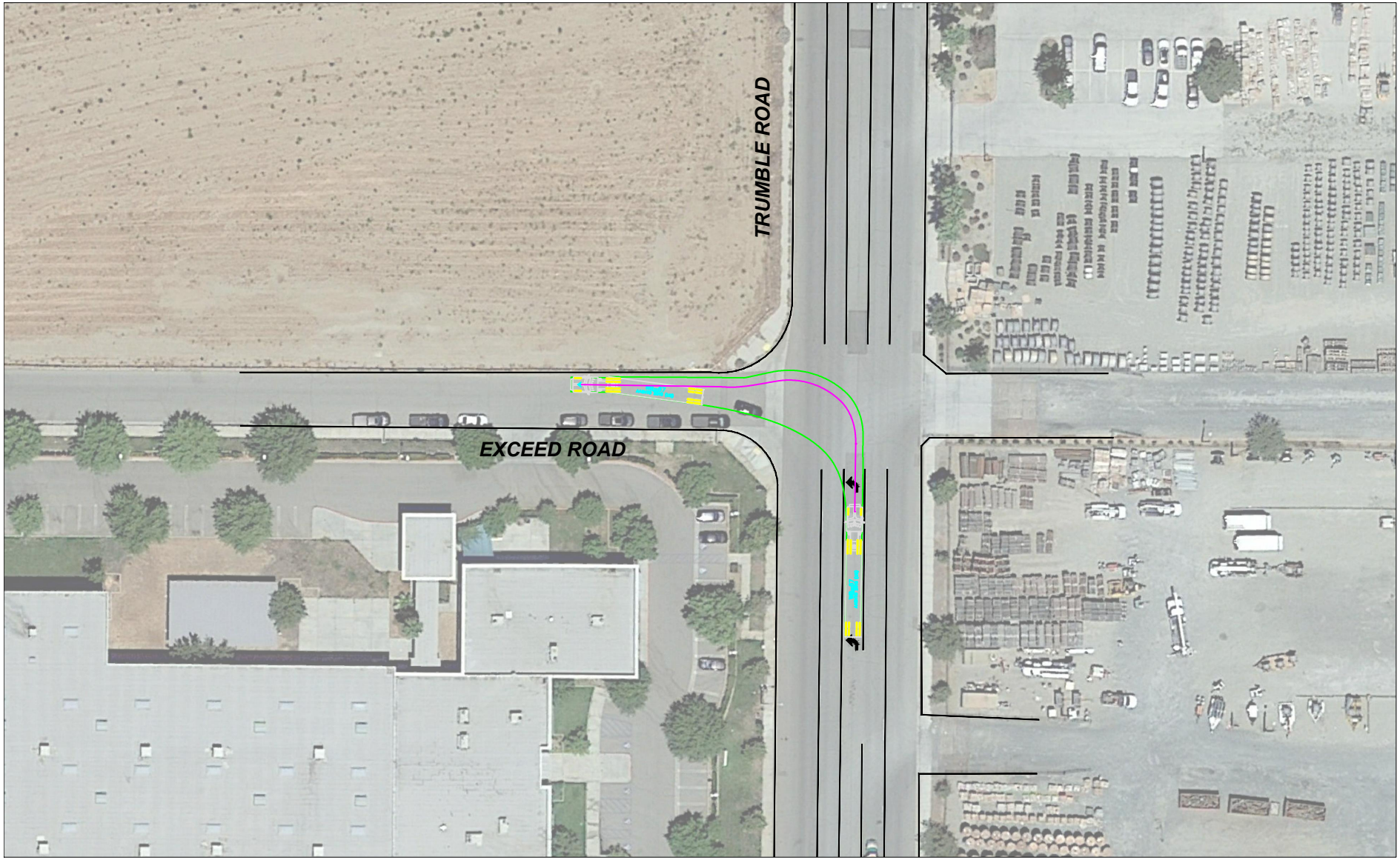
As part of the simulation analysis, a 95$^{th}$ percentile queuing analysis was conducted at the intersection of Trumble Road/Mapes Road to determine whether queues resulting from signalization are estimated to block any other driveways adjacent to the intersection. The highest queue forecast at this intersection after signalization is for westbound left turn movement, 130 feet in the a.m. peak hour, and 105 feet in the p.m. peak hour. All other forecasted queues reported at this intersection is less than 50 feet. The nearest driveway distance from the intersection is currently 390 feet on the north leg, and 475 feet along the south leg. The project proposes to construct a driveway which will be approximately 295 feet from this intersection along the south leg. As such, queues resulting from signalization at this intersection is not estimated to block any of the existing or proposed driveways.

In summary, based on the simulation analysis, signalization of Trumble Road/Mapes Road is not estimated to have any upstream or storage blockage for any movements at this intersection. The signalization at Trumble Road/Mapes Road is not estimated to adversely affect the cross-street traffic. As such, this improvement helps eliminate the forecasted deficiency at Trumble Road/Exceed Road-Sturgeon Electric Driveway.

Detailed queuing analysis worksheets are included in Appendix F.

## 10.3 LIST OF CHAPTER 10.0 FIGURES

- Figure 10-1: (WB-67) Truck Turning Template- Ingress -Trumble Road/Exceed Road-Sturgeon Electric Driveway
- Figure 10-2: (WB-67) Truck Turning Template- Egress -Trumble Road/Exceed Road-Sturgeon Electric Driveway




LSA

LEGEND

— Existing Lane

WB-67 Truck Turning Path

N

0 30 60

FEET

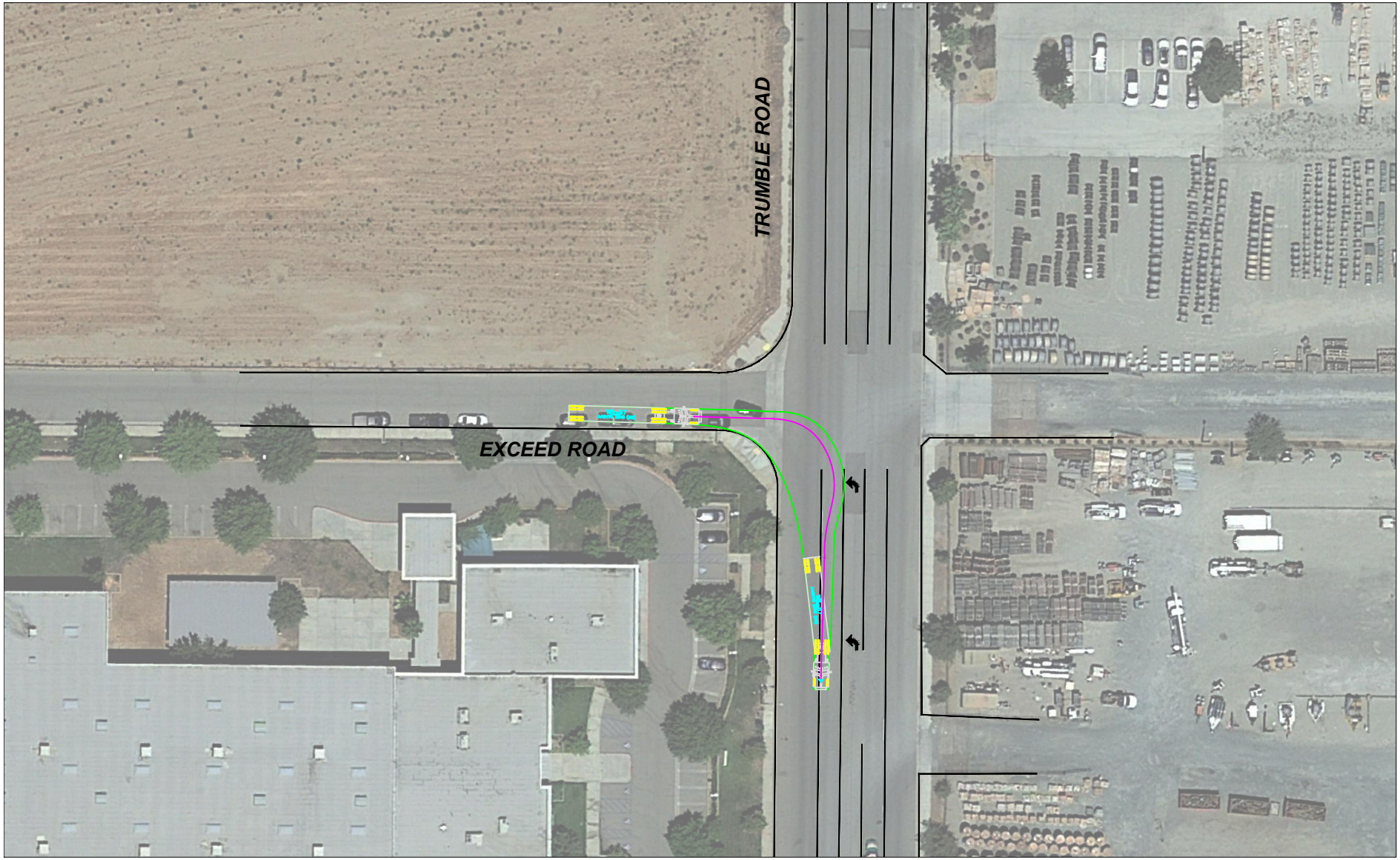
SOURCE: Google Earth, 2018.

I:\BAV2101\Traffic\Reports\Truck Turning.dwg (06/06/2022)

FIGURE 10-1

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

(WB-67) Truck Turning Template- Ingress
Trumble Road/Exceed Road-Sturgeon Electric Driveway




LSA

LEGEND

— Existing Lane

WB-67 Truck Turning Path

N

0 30 60

FEET

SOURCE: Google Earth, 2018.

I:\BAV2101\Traffic\Reports\Truck Turning.dwg (06/06/2022)

FIGURE 10-2

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

(WB-67) Truck Turning Template- Egress
Trumble Road/Exceed Road-Sturgeon Electric Driveway

# 11.0 CALTRANS QUEUING ANALYSIS

Consistent with Caltrans requirements, an off-ramp queuing analysis was performed at the intersections under the jurisdiction of Caltrans, i.e., I-215 Southbound Ramps/Bonnie Drive, and I-215 Northbound Ramps/CA-74 to determine the adequacy of off-ramp storage length. The queuing analysis at these locations has been prepared for disclosure purposes only.

Table 11-A lists the available turn-pocket storage lengths and summarize the 95$^{th}$ percentile back-of-queue lengths at this intersection under existing and Cumulative (2024) conditions. The queues have been reported from Synchro. As shown in Table 11-A, queues for the off-ramp movements are not estimated to exceed the existing available turn-pocket storage lengths under existing and Cumulative (2024) conditions.

Detailed queuing analysis worksheets are included in Appendix F.

## 11.1 LIST OF CHAPTER 11.0 TABLES

LSA

## Table 11-A - Intersection Queuing Analysis

| Intersection | Movement | Storage Length[1] (ft/ln) | Queue Lengths[2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Existing | | | | Cumulative (2024) | | | |
| | | | No Project | | With Project | | No Project | | With Project | |
| | | | AM | PM | AM | PM | AM | PM | AM | PM |
| 1. I-215 Southbound Ramps/Bonnie Drive Signalized | **SBT** | 1600 | 445 | 795 | 470 | 825 | 850 | 1495 | 885 | 1520 |
| | **SBR** | 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2. I-215 Northbound Ramps/CA-74 Signalized | **SBLR** | 1420 | 130 | 195 | 150 | 205 | 260 | 285 | 60 | 645 |

Notes:

ft/ln = feet per lane

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

L = Left; R = Right

**Bold** = Queue exceeds available storage.

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

[2] All queues reported are 95th percentile queues. All queues for signalized intersections have been reported from Synchro.

# 12.0 SUMMARY AND CONCLUSIONS

The proposed project will add one high cube fulfillment center warehouse building with a total area of 395,000 SF. Access to the project will be provided via three driveways. The driveway located on Mapes Road and the driveway located on Trumble Road will be used by only passenger vehicles, while the driveway located on Exceed Road will be used by only trucks. The project will also be improving the project frontage by adding curb, gutter and sidewalk along the project frontage. The project is estimated to generate 1,054 daily PCE trips, with 86 trips occurring the a.m. peak hour and 92 trips occurring during the p.m. peak hour. The project is anticipated to be completed by 2024.

## 12.1 EXISTING CONDITIONS SUMMARY

All study intersections operate at a satisfactory LOS under existing without and with project conditions.

## 12.2 CUMULATIVE (2024) CONDITIONS SUMMARY

All study intersections are forecast to operate at a satisfactory LOS under Cumulative (2024) without and with project conditions with the exception of four intersections.

## 12.3 IMPROVEMENTS SUMMARY

Based on the improvements discussed in Section 8.1 “Recommended Improvements” of this report, the recommended improvements include, lane addition and signal timing optimization at the intersection of I-215 Southbound Ramps/Bonnie Drive, installing signal at the intersection of Trumble Road/Mapes Road, and lane addition with adding a southbound right overlap phasing at the intersection of Trumble Road/CA-74. Improvements at the intersection of I-215 Southbound Ramps/Bonnie Drive is covered under WRCOG TUMF program and the project will be paying fair-share percentages for remaining improvements.

## 12.4 CEQA VMT ANALYSIS SUMMARY

Though the project could be screened out being located in a low VMT zone, a detailed VMT analysis was performed due to the project’s land use and size. Based on the results of this analysis, the project would not have any significant VMT impact.

## 12.5 ACCESS ANALYSIS SUMMARY

There is adequate space for truck turning radii for project ingress and egress truck traffic. Though project access for trucks will be restricted, it is estimated that the project traffic would not spill over to Trumble Road. Additionally, installing signal at Trumble Road/Mapes road is not estimated to adversely affect the Exceed Road Driveways

## 12.6 QUEUING ANALYSIS SUMMARY

The queues for off-ramp movements at the Caltrans ramps are not projected to exceed the available turn-pocket storage lengths under existing and Cumulative (2024) conditions.

# APPENDIX A:

# SCOPING AGREEMENT

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

March 13, 2022

Ms. Lupita Garcia
Associate Planner, Planning Division
City of Perris
101 N D Street
Perris, California 92570

Subject: Scope of Work for Mapes Road and Trumble Road Industrial Facility Project Traffic Study (LSA Project No. BAV2101; City Record ID PLN22-05023)

Dear Ms. Garcia:

LSA is under contract to prepare a Traffic Study (TS) for the proposed Mapes Road and Trumble Road Industrial Facility Project to be located at the southwest corner of Mapes Road and Trumble Road, in the City of Perris (City). The project is bounded by Mapes Road to the north, Exceed Road to the south, Interstate 215 (I-215) to the west, and Trumble Road to the east.

The site is currently undeveloped and the proposed project will add one high cube fulfillment center warehouse building with a total area of 396,000 square feet (SF). Figure 1 (all figures attached) illustrates the regional and project location. Figure 2 illustrates the conceptual site plan. As illustrated in Figure 2, access to the project will be provided via three driveways. Following are detailed access description of each driveway:

- Driveway 1 – This driveway located on Mapes Road will be used by only passenger vehicles.
- Driveway 2 – This driveway located on Trumble Road will be used by only passenger vehicles.
- Driveway 3 – This driveway located on Exceed Road will be used by only trucks.

The City has adopted the *Draft City of Perris Transportation Impact Analysis Guidelines for CEQA* (TIA Guidelines), dated May 2020 *(TIA).* However, this guideline does not provide guidance for Levels of Service (LOS) Analysis for general Plan consistency. Therefore, as recommended by City staff, the LOS analysis for the project will be prepared in accordance with the *City of Perris LOS Standards and Threshold of Significance*. This document is included under Appendix A as part of this scoping letter.

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



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

## SCOPE OF WORK: LEVELS OF SERVICE ANALYSIS

### Study Intersection Analysis

All study intersections will be analyzed during the weekday a.m. and p.m. peak hours. 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 levels of service (LOS) will be calculated using the Highway Capacity Manual 6 (HCM 6) analysis methodologies and using Synchro 11 software. The TS will examine the following intersections:

1. Interstate 215 (I-215) Southbound Ramps/Bonnie Drive (Perris/Caltrans);
2. I-215 Northbound Ramps/California State Route 74 (CA-74) (Perris/Menifee/Caltrans);
3. Trumble Road/Mapes Road (Perris/Menifee);
4. Trumble Road/Exceed Road (Perris/Menifee);
5. Trumble Road/CA-74 (Menifee/Caltrans);
6. Project Driveway 1/Mapes Road (Perris);
7. Project Driveway 2/Trumble Road (Perris/Menifee).

Figure 3 illustrates the study area intersections.

### Trip Generation, Trip Distribution, and Trip Assignment

The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11$^{th}$ Edition) Land Use 155 – "High-Cube Fulfillment Center Warehouse – Non-Sort." The resulting trips were converted to passenger vehicles and trucks based on the South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, 31% of project traffic will be trucks. Based on the truck mix from the SCAQMD, Warehouse Truck Trip Study Data Results and Usage, dated December 2014, the truck mix was considered as 6.8% 2-axle trucks, 5.5% 3-axle trucks, and 18.7% as 4 or more axle trucks.

Inbound/Outbound splits for passenger vehicles were obtained from the ITE Trip Generation (11th Edition) for Land Use 155 – High-Cube Fulfillment Center Warehouse - Non-Sort, vehicle Trip generation inbound/outbound splits for a.m. peak hour, p.m. peak hour and daily trips. Inbound/outbound splits for trucks were obtained from ITE Trip Generation 11th Edition Supplemental for a.m. peak hour, p.m. peak hour and daily trips.

All truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4 or more axle trucks. Table A summarizes the daily, a.m., and p.m. peak hour project trip. As shown in Table A, the proposed project is estimated to generate 1,054 daily PCE trips, with 86 trips occurring the a.m. peak hour and 92 trips occurring during the p.m. peak hour. The ITE Trip Generation rates is included in Appendix B. The SCAQMD Truck Rates are included in Appendix C.

Trip distribution patterns were obtained from select zone model runs of the Riverside County Model version 3.0 (RIVCOM). Separate select zone trip distributions for passenger car and truck trips were obtained from RIVCOM. The select zone distribution plots are included in Appendix D. Project trip distributions were further refined based on the location of the proposed project in relation to surrounding land uses, regional roadway network and truck routes, and in consultation with the City staff. Additionally, as shown in Figure 2, all project truck traffic will be accessing the project through the Exceed Road Driveway. Figure 4 illustrates the project passenger vehicle trip distribution. Figure 5 illustrates the project truck trip distribution.

The project trip assignment is the product of the project trip generation and trip distribution percentages. Figure 6 illustrates the project passenger vehicle trip assignment. Figure 7 illustrates the project truck trip assignment (in PCE). Figure 8 illustrates the total project trip assignment (in PCE) for the proposed project.

## Analysis Scenarios

The Traffic Study will be prepared based on consultation with City staff and to meet the requirements of the City's General Plan Levels of Service Standards. The project opening year is anticipated to be 2024. The TS will examine traffic conditions and project related operational deficiencies under the following scenarios:

- Existing Conditions;
- Existing with Project Conditions;
- Cumulative (2024) without Project Conditions; and
- Cumulative (2024) with Project Conditions.

## Volume Development and Analysis Methodology

Traffic volumes for existing year traffic conditions will be based on existing a.m., and p.m. peak hour traffic counts collected for the intersections. Cumulative (2024) conditions traffic volumes will be developed by applying a 3 percent per annum growth rate to existing traffic volumes and by adding trips from other projects in the vicinity to the project completion year volumes. Attached Table B summarizes the list of cumulative projects to be included in this analysis.

Existing and cumulative (2024) with project volumes will be developed by adding project traffic to the corresponding without project scenario traffic volumes.

As previously stated, the TS will analyze study intersections during the a.m. and p.m. peak hours. Intersection LOS will be calculated using HCM 6 analysis methodologies by using the Synchro 11 software.

## Analysis of Traffic Operations and Recommended Circulation Improvements

LOS without the project will be compared to LOS with the project for all analysis scenarios to determine potential operational deficiencies. Determination of operational deficiencies will be made based on the City's LOS standards as applicable.

Necessary improvements will be recommended at locations operating at an unsatisfactory LOS or where the project causes operational deficiencies. Improvements may include the addition of intersection turn lanes, and signalization. The LOS with recommended improvements will be calculated and summarized, along with a comparison of the LOS without improvements.

### TUMF/DIF/Mitigation Fair Share

LSA will evaluate whether the recommended improvements identified in the TS are included as part of WRCOG Transportation Uniform Mitigation Fee (TUMF), or the City's Development Impact Fee (DIF) programs. If it is determined that an improvement is not covered through the DIF or the TUMF program, the project's fair share contribution will be calculated based on the project traffic as percentage of total growth from existing conditions to cumulative with project conditions.

### Signal Warrant Analysis

A signal warrant analysis would be conducted at unsignalized intersections if a signal is recommended as an improvement. Peak hour approach volumes for the study intersections will be examined to determine whether signalization may be warranted per the criteria defined in the California supplement of the *Manual on Uniform traffic Control Devices* (CA-MUTCD).

### Queuing Analysis

Caltrans typically requires a queuing analysis for the intersections under its jurisdictions. A queuing analysis will be performed for all the study intersections under the jurisdiction of Caltrans. Additionally, an inbound queuing analysis would be conducted at the gated access for project truck access located the western end of Exceed Road to identify whether the project trucks would be causing a vehicle backup on Exceed Road and any spillover along Trumble Road. 95th percentile queues will be reported from Synchro/SimTraffic to evaluate the adequacy of turn pocket lengths.

### Truck Turning Templates

Truck turning templates will be created for the project driveway accessed by trucks. Truck turning template will be based on AASTHO Guidelines.

### Concept Striping Plan

A conceptual striping plan for Trumble Road would be created for Trumble in the vicinity of the proposed project to illustrate and identify ingress and egress movements of the project traffic.

## SCOPE OF WORK: CEQA VEHICLE MILES TRAVELED (VMT) ANALYSIS

Typically, for projects within the City, the VMT analysis needs to be based upon the methodology and significant impact criteria set in the *Draft City of Perris Transportation Impact Analysis Guidelines for CEQA* (TIA Guidelines), dated May 2020. As shown in attached Table A, the project is estimated to generate 719 daily trips. Therefore, based on the screening criteria mentioned in the TIA Guidelines, the project could be potentially screened out, since it generates less than 2,500 daily trips. However, it is our understanding that the project may require additional analysis to determine whether the project would be eligible to be screened out from a VMT analysis as explained below.

The TIA Guidelines recommends that for projects that does not require a General Plan Amendment and forecast to generate less than 2,500 daily trips, the City's VMT scoping form may be used to determine project's potential VMT impact. As such, if the project VMT rate calculated from the VMT scoping form is higher than the Citywide average, the project would recommend mitigation measures and VMT reduction percentages attributable to these measures to bring the project VMT rate lower than the citywide average. Since the project is forecast to generate less than 2,500 daily trips and does not require a General Plan Amendment, the project may be eligible to use the VMT scoping form for project VMT screening analysis.

LSA reviewed the City's VMT scoping form which states that the baseline VMT data was created using information from the Riverside County Transportation Analysis model (RIVTAM) model. Based on RIVTAM, the project is within TAZ 3893. The baseline VMT per employee for TAZ 3893 is 12.35 compared to the City's VMT per employee which is 11.62. Therefore, as per RIVTAM data, the City's VMT per employee is 5.91% lower than the baseline project TAZ VMT per employee under base year 2012 conditions. It should be noted that the baseline project TAZ VMT per employee do not include the project's influence on VMT per employee with addition of the proposed project.

Currently, RIVCOM is the most recent travel demand model for Riverside County, which replaces RIVTAM for VMT analysis. RIVCOM base year is 2018 compared to 2012 for RIVTAM. Additionally, under RIVCOM, the project is located within RIVCOM TAZ 1847. As calculated from RIVCOM, the base year (2018) project location/project TAZ VMT per employee is 23.9, and the Citywide average VMT per employee for the City of Perris is 24.33. Therefore, the project's VMT per employee is 1.77% lower than City's VMT per employee under base year 2018 conditions using RIVCOM. Therefore, pursuant to the recommended methodology included in the VMT Screening Criteria section of the TIA Guidelines, the project is located within a low VMT zone and could be potentially screened out from further VMT analysis.

It should be noted that, using the baseline TAZ VMT profile, as recommended in the City's TIA guidelines for VMT analysis, may be appropriate when the project size do not affect regional traffic pattern. Given the size of the project, using the baseline TAZ VMT per employee may not be appropriate to conclude that the project would not have a significant VMT impact based on low VMT zone criteria. Therefore, as a conservative approach, LSA proposes to conduct a detailed VMT analysis for the project to evaluate whether the project will have any significant VMT impact. This VMT analysis will be conducted using the recommended methodology included in the VMT Impact Analysis section of the TIA Guidelines.

As such, LSA recommends using RIVCOM for VMT calculations for the project. The RIVCOM model will be used to calculate the project and Citywide VMT per service population. The TIA Guidelines recommends comparing the project generated VMT per service population for both the base and future year with the City's threshold of significance to identify potential VMT impacts. The scope of work for the detailed VMT analysis is as follows:

### Project Traffic Analysis Zone Update

The first step in preparation of this analysis will be to update the traffic analysis zone (TAZ) in the model that includes the project area. LSA will convert the project land use into model

socioeconomic categories using regional conversion factors. The socioeconomic data for the project TAZ in both RIVCOM base year and future year model scenario will be updated. Project socioeconomic data will be added to the project TAZ for both scenarios. Non-project related socioeconomic data will be shifted to an adjacent TAZ to isolate project form other land uses. Non-project related socioeconomic data for the future scenario will be adjusted to account for the project.

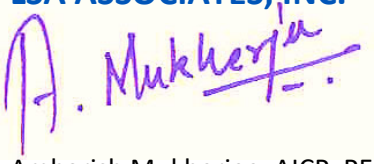
### Project VMT Analysis

Upon completion of the socioeconomic data update, LSA will conduct model runs for both base and future scenarios. The outputs from these with project model runs will be utilized to calculate the base and future year project VMT per service population. The Citywide VMT per service population for the base year will be calculated from the base year no project run. If the project VMT per service population under either the base year or future year scenario exceeds the citywide base year VMT per service population, then the project would create significant VMT impact.

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
Table B: Cumulative Projects
Figure 1: Regional and Project Location
Figure 2: Conceptual Site Plan
Figure 3: Study Area Intersections
Figure 4: Project Trip Distribution - Passenger Vehicles
Figure 5: Project Trip Distribution - Trucks
Figure 6: Project Trip Assignment - Passenger Vehicles
Figure 7: Project Trip Assignment - Trucks
Figure 8: Project Total Trip Assignment
Appendix A: City of Perris LOS Standards and Threshold of Significance
Appendix B: ITE Trip Generation Rates for Land Use 155 – High-Cube Fulfillment Center Warehouse - Non-Sort
Appendix C: South Coast Air Quality Management District Truck Trip Generation Rates

Appendix D: RIVCOM Select Zone Plots

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## Table A - Project Trip Generation

| Land Uses | 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 |
|---|---|---|---|---|---|---|---|---|
| **High-Cube Fulfillment Center[1,2,3]** | | | | | | | | |
| | 396 TSF | | | | | | | |
| Trips/Unit (Cars) | | 0.084 | 0.020 | 0.104 | 0.043 | 0.067 | 0.110 | 1.249 |
| Trips/Unit (2-Axle Trucks) | | 0.005 | 0.005 | 0.010 | 0.005 | 0.006 | 0.011 | 0.123 |
| Trips/Unit (3-Axle Trucks) | | 0.004 | 0.004 | 0.008 | 0.004 | 0.005 | 0.009 | 0.100 |
| Trips/Unit (4+ Axle Trucks) | | 0.014 | 0.014 | 0.028 | 0.014 | 0.016 | 0.030 | 0.338 |
| Trips/Unit (Total) | | 0.107 | 0.043 | 0.150 | 0.066 | 0.094 | 0.160 | 1.810 |
| Trip Generation (Cars) | | 33 | 8 | 41 | 17 | 27 | 44 | 495 |
| Trip Generation (2-Axle Trucks) | | 2 | 2 | 4 | 2 | 2 | 4 | 49 |
| Trip Generation (3-Axle Trucks) | | 2 | 1 | 3 | 2 | 1 | 3 | 40 |
| Trip Generation (4+ Axle Trucks) | | 6 | 5 | 11 | 5 | 7 | 12 | 135 |
| Trip Generation (Total Trucks) | | 10 | 8 | 18 | 9 | 10 | 19 | 224 |
| Trip Generation (Total) | | 43 | 16 | 59 | 26 | 37 | 63 | 719 |
| Trip Generation (Cars) | | 33 | 8 | 41 | 17 | 27 | 44 | 495 |
| PCE Trip Generation (2-Axle Trucks) | | 3 | 3 | 6 | 3 | 3 | 6 | 74 |
| PCE Trip Generation (3-Axle Trucks) | | 4 | 2 | 6 | 4 | 2 | 6 | 80 |
| PCE Trip Generation (4+ Axle Trucks) | | 18 | 15 | 33 | 15 | 21 | 36 | 405 |
| PCE Trip Generation (Total Trucks) | | 25 | 20 | 45 | 22 | 26 | 48 | 559 |
| **PCE Trip Generation (Total)** | | **58** | **28** | **86** | **39** | **53** | **92** | **1,054** |

**Notes:**

TSF = thousand square-feet

[1] Rates based on the ITE *Trip* Generation Manual *(11th Edition)* for Land Use 155 - "High-Cube Fulfillment Center Warehouse - Non-Sort", Setting Location - "General Urban/Suburban."

[2] Passenger vehicles and truck in/out splits from Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) rates for Land Use 155 – "High-Cube Fulfillment Center Warehouse - Non-Sort", Setting/Location - "General Urban/Suburban."

[3] The resulting trips were converted to trucks and passenger vehicles based on the South Coast Air Quality Management District (SCAQMD) recommendations for warehousing projects. As such, 31 percent of project traffic will be trucks. Based on Vehicle Mix from the SCAQMD, Warehouse Truck Trip Study Data Results and Usage, dated December 2014, the truck mix was considered as 18.7% 4+ axle, 5.5% 3-axle, and 6.8% 2-axle trucks. All truck trips were converted to passenger car equivalents (PCEs) using a 1.5 PCE factor for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4- and more axle trucks.

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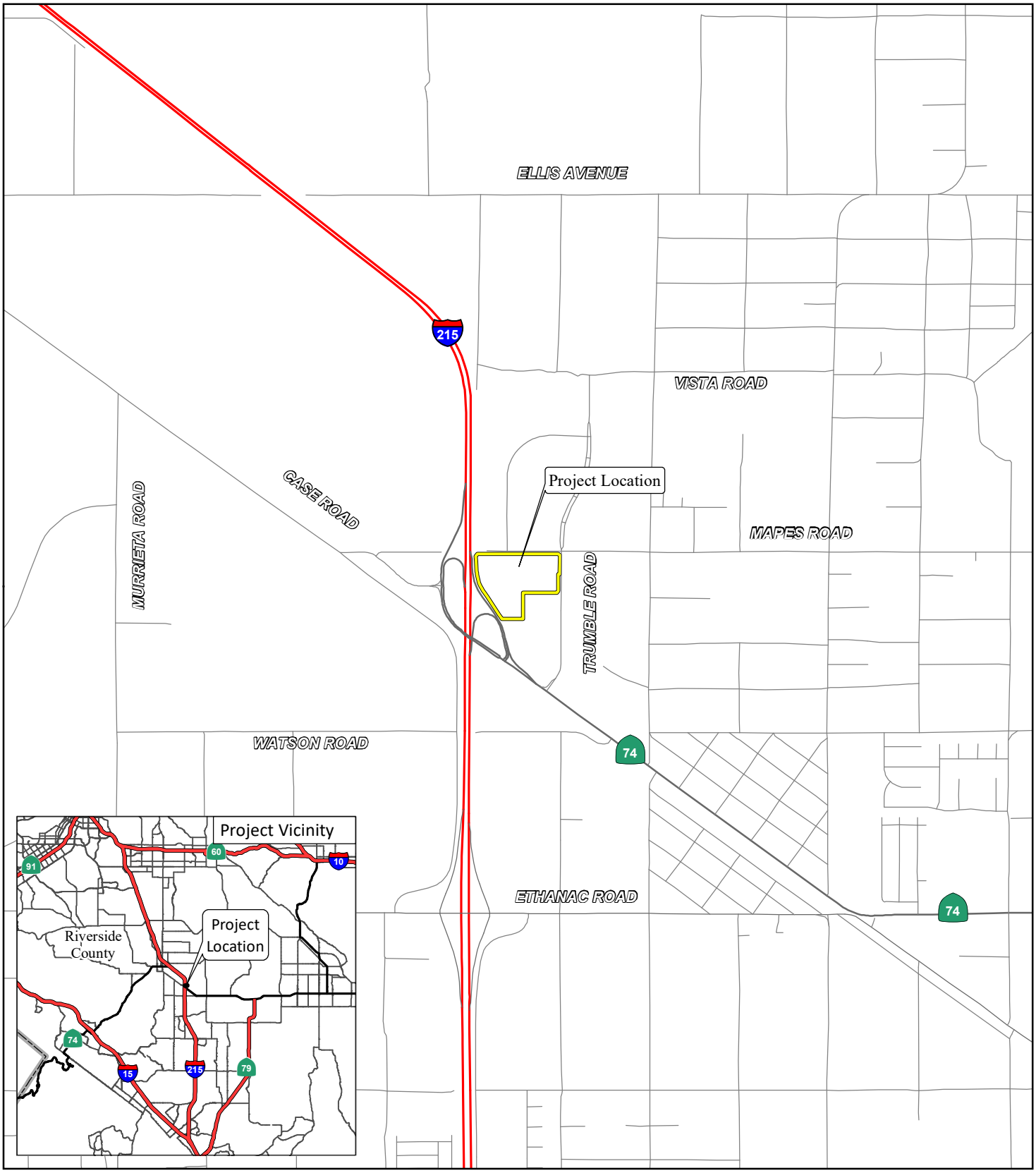
**Table B - Cumulative Projects**

| Sr. No. | Project No. | Project Name/Reference | Address/Location | Project Description | Project Units/Area/Other |
|---|---|---|---|---|---|
| M1 | CUP 2016-290, PM 2016-291 | On-Deck | North corner of Trumble Road and CA-74 | 120 Hotel Rooms, sit down resturant, fast food resturant with drive through and a gas station/convenience store/car wash | 120 RM Hotel, sit down resturant, fast food resturant with drive through and a gas station with convenience store/car wash |
| M2 | CUP 2018-126 | Paragon Framing | Southeast corner of Trumble Road and Watson Road | 3.76 acres - 5,454 sf office building - 5,000 sf workshop/storage building | 5.454 TSF Office Building, 5.0 TSF Workshop/Storage Building |
| M3 | TTM 34118 | MR-27 LLC (Rancon) | West of Palomar Road between Cider St and CA-74 | 27.58 acres - 85 residential lots - 4,000 sq ft min. and 87 attached garden court condos (6 du/ac) with rec center and pool | 85 Detached SFDU, 87 Attached SFDU |
| M4 | PP 2018-300, TPM 2018-320 | Motte Country Plaza | Northwest corner of Palomar Rd and CA-74 | 3.8 acres - Redevelopment of the Motte Country Plaza - Relocation of the train car restaurant; new 4,700 sq. ft. 6-dual pump gas station; new 3,838 sf Concenience store with drive-thru restaurant; new 1,050 sf car wash | Train car restaurant, 12 VFP Gas Station w/ 3.838 TSF Convenience Store, and 1.050 TSF Car Wash |
| M5 | SP 2018-181 /TM37573 | Menifee Valley SP (Brookfield) | South of CA-74 between Menifee Road and Briggs Road | 205.2 acres - 559 residential lots - | 559 Detached SFDU |
| M6 | TTM 33738 | MR 56 LLC (Rancon) | Southeast corner of Malone Ave and Watson Rd | 11.37 acres - 52 residential lots - 5,000 sq ft min. lot size | 52 Detached SFDU |
| M7 | TTM 34600 | MR-27 LLC (Rancon) | Southeast corner of Malone Ave and Varela Ln | 18.3 acres - 153 condominium units (8.36 du/ac) with rec center and pool | 153 MFDU |
| M8 | PP 2017-225 | Harvest Glen Marketplace | Northwest corner of Briggs Rd and CA-74 | 5.04 acres - 18,501 sq. ft. commercial buildings (gas station with canopy, convenience store, two (2) drive thru restaurants and a car wash with vacuums | 18,501 Square Ft Commerical with gas station with convenience store and car wash, two drive-through restaurants. |
| R1 | TPM37727 | Tentative Parcel Map 37727 | Southeast corner of Sherman Rd and Vista Rd | 4 Lot Parcel Map | 4 Detached SFDU |
| R2 | TPM37213 | Tentative Parcel Map 37213 | Northeast corner of Dawson Rd and Patti Ln | 4 Lot Subdivision | 4 Detached SFDU |
| R3 | TTM37728 | Tentative Tract Map 37728 | Southwest corner of Antelope Rd and Vista Rd | 228 Lot Tentative Tract Map | 228 Detached SFDU |
| R4 | TTM37358 | Tentative Tract Map 37358 | Northwest corner of Antelope Rd and Mapes Rd | 154 Lot Tract Map | 154 Detached SFDU |
| R5 | TPM37919 | Tentative Parcel Map 37919 | Southwest corner of Antelope Rd and Roan Ranch Rd | Subdivide 5 Acre Parcel into 4 half acre developable lots | 4 Detached SFDU |
| R6 | TPM37589 | Tentative Parcel Map 37589 | Northeast corner of Pico Ave and Benigni Ave | Subdivide 4.72 acre lot into 4 parcels | 4 Detached SFDU |
| R7 | TR31687 | Tract 31687 | Northeast corner of Tradewinds Dr and Mapes Rd | Subdivide 40.17 acre lot into 65 SFR lots and 2 open space lots | 65 Detached SFDU |
| R8 | CUP180002 | RV Storage Facility | North of Mapes Road between Palomar Rd and Rocky Peak Rd | 121 Storage/Parking Stalls for RV Storage | 121 RV Parking Stalls |
| R9 | TR35045 | Residential Subdivision | Northeast corner of Menifee Rd and Mapes Rd | 712 Single Family Lots Subdivision Lots, 1 School and 1 Park | 712 Detached SFDU |
| P1 | | Green Valley Specific Plan Phase 2 | South of Case Rd, North of Ethanac Rd, West of Green Valley Pkwy, East of Goetz Rd | Single Family Residential, Multifamily Residential, and Commericial Development within the Green Valley Specific Plan Phase 2 | 385 Detached SFDU, 1294 MFDU, 278.8 TSF Retail |

**Notes:**

SFDU = Single-Family Dwelling Units; DU = Dwelling Units; TSF = Thousand Square Feet; RM = Rooms.




LSA

FIGURE 1

N

0 1000 2000

FEET

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Regional and Project Location

SOURCE: ESRI Streetmap, 2021; Google Earth, 2019.

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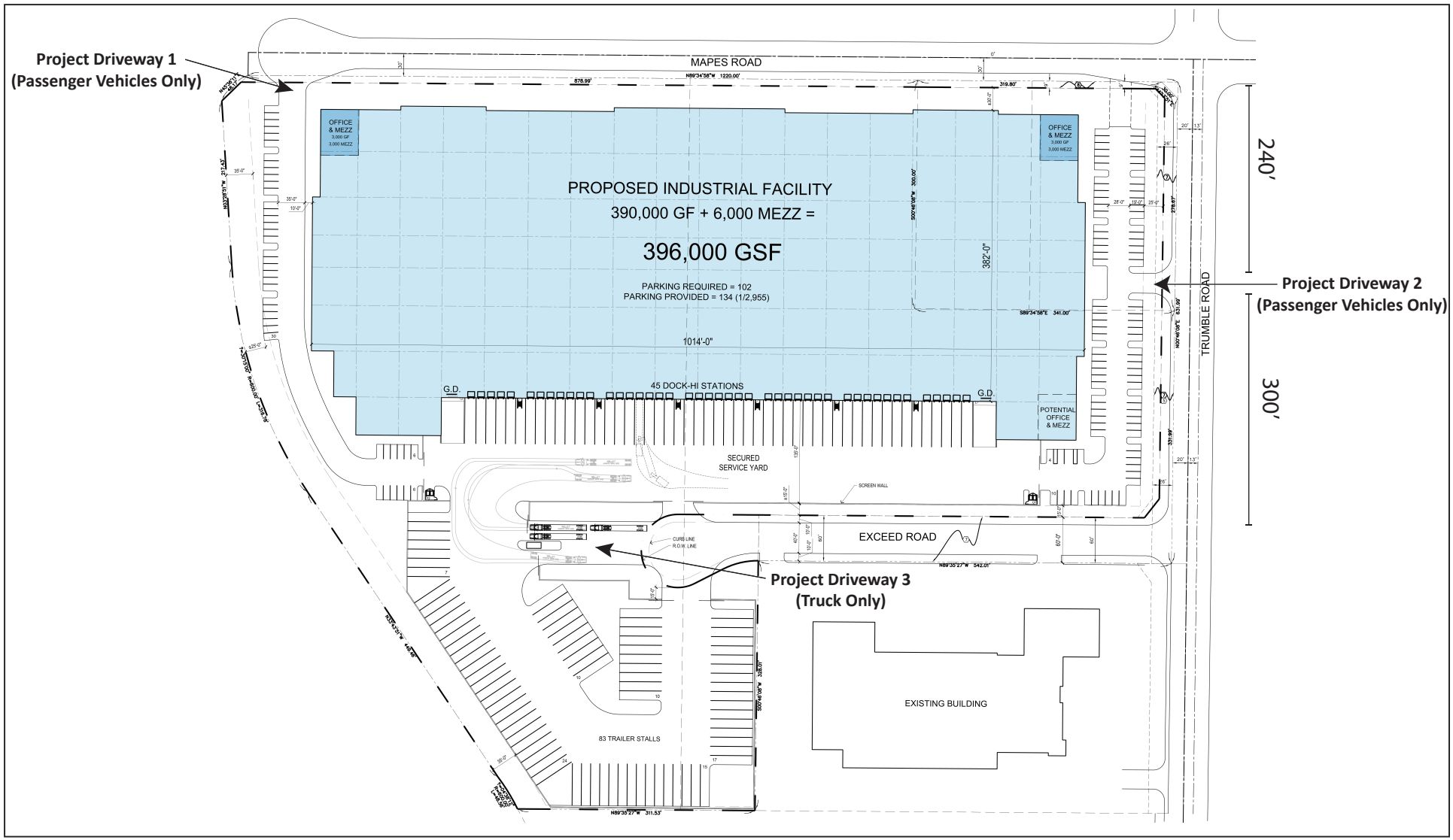


LSA

FIGURE 2

N

0 95 190
FEET

*Trumble and Mapes Warehouse Project*
*Traffic Study*

Conceptual Site Plan

SOURCE: AO Architects, October 2021

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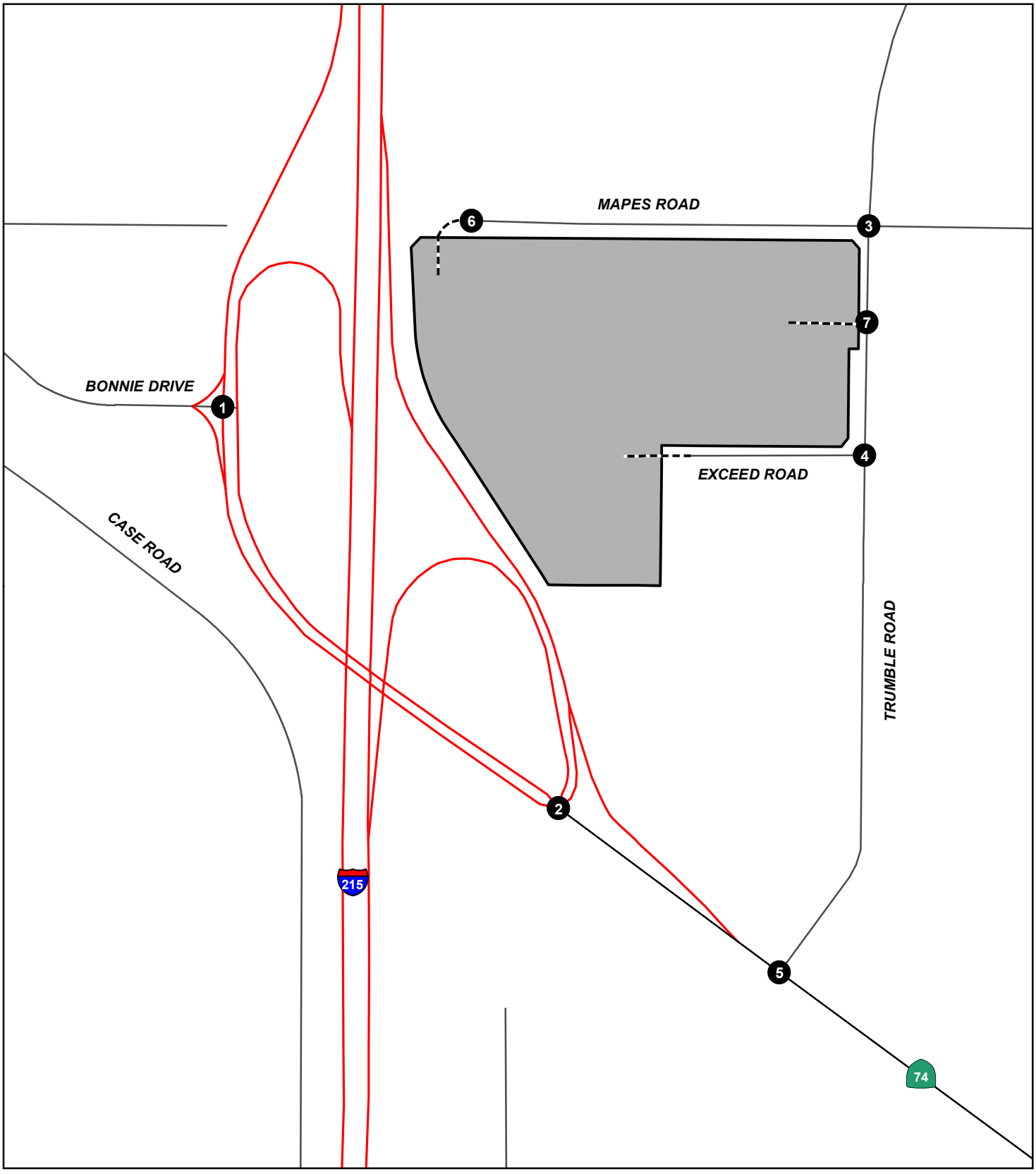


LSA

FIGURE 3

LEGEND

Project Location

Study Area Intersections

Project Driveway

N

0 187.5 375

FEET

SOURCE: Riverside County, 2016

*Horizon Business Park Warehouse Project*
*Traffic Study*

Study Area Intesrections

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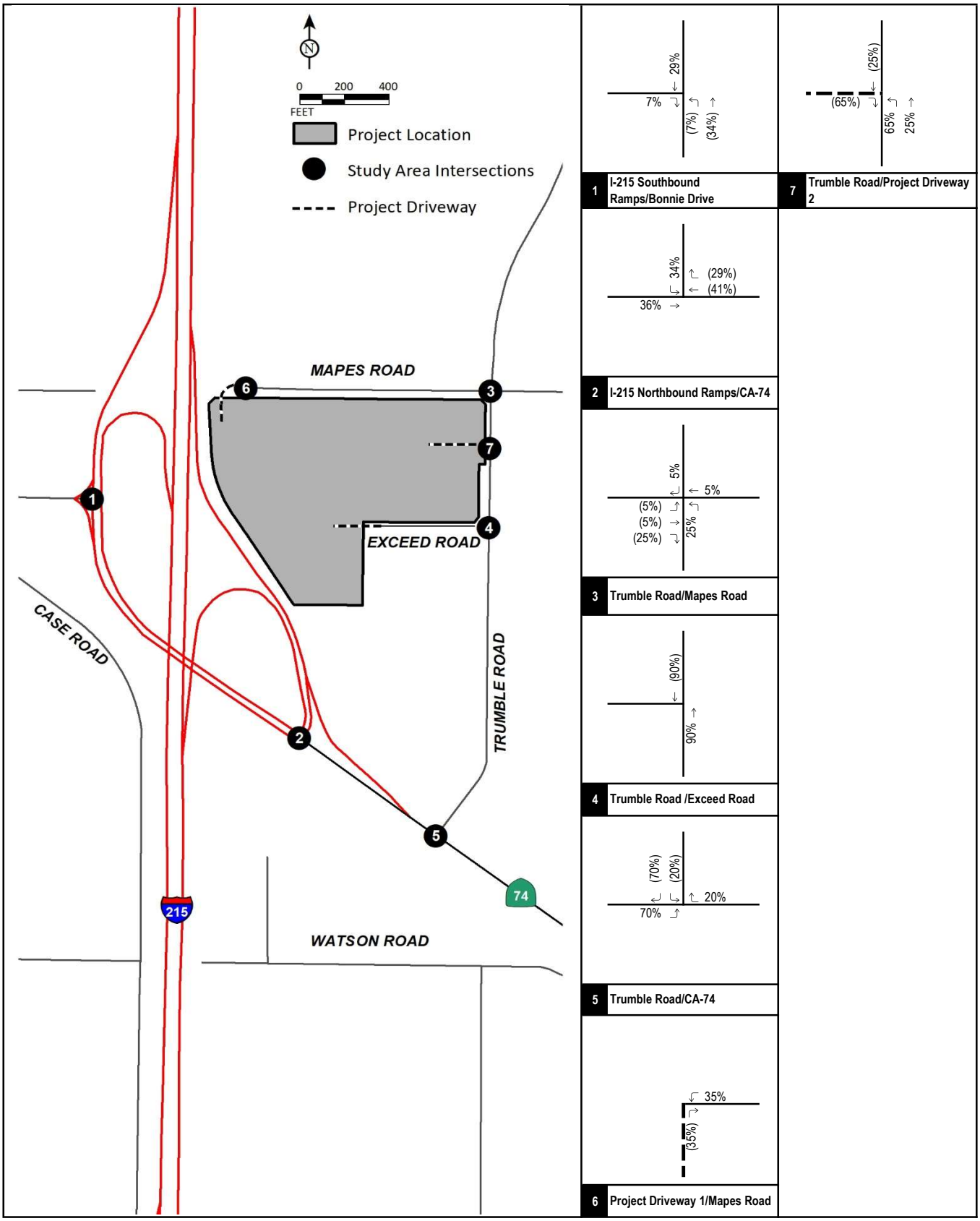


LSA

FIGURE 4

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

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Project Trip Distribution - Passenger Vehicles

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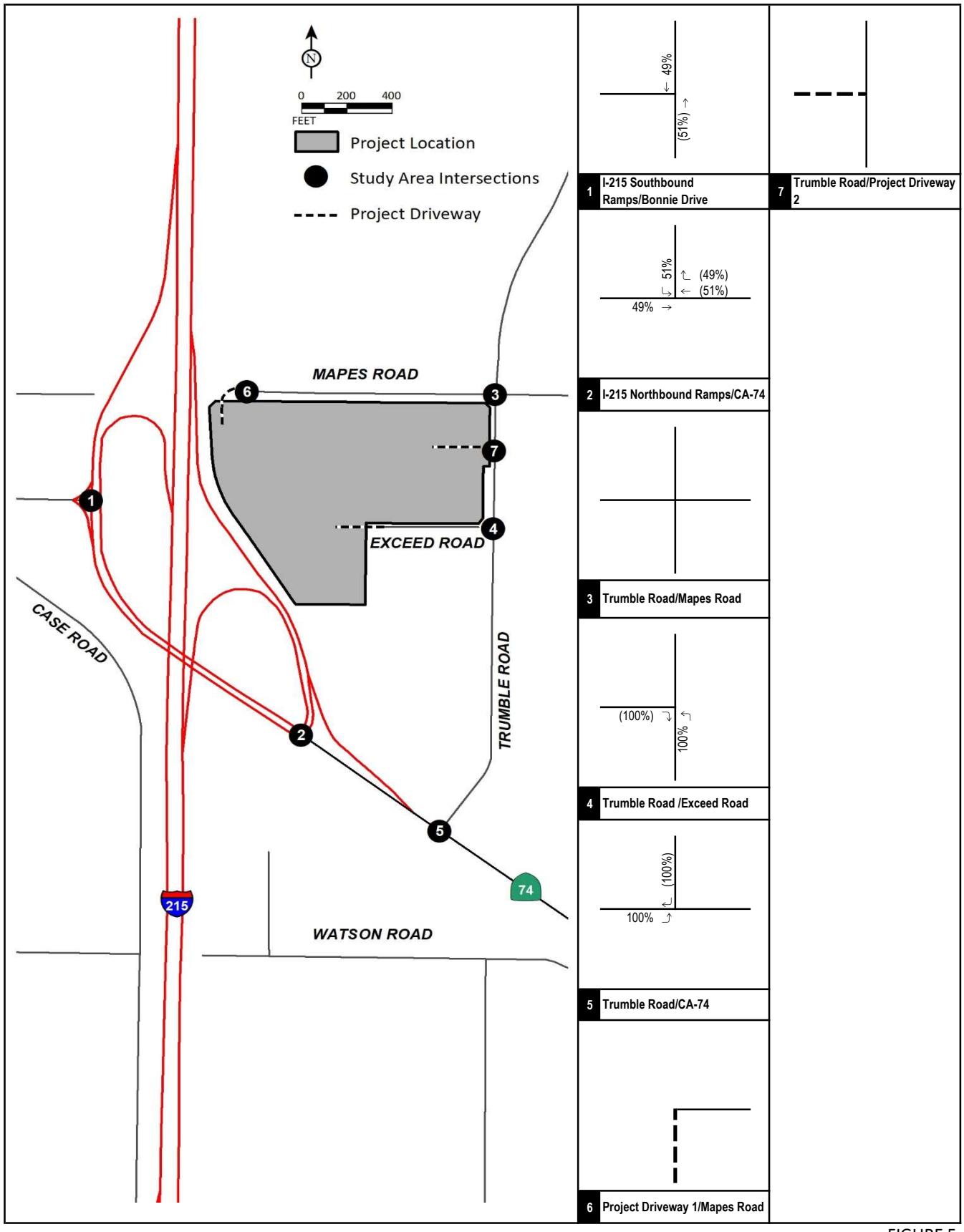


LSA

FIGURE 5

XXX% (YYY%)
Inbound (Outbound) Trip Distribution
Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Project Trip Distribution - Trucks

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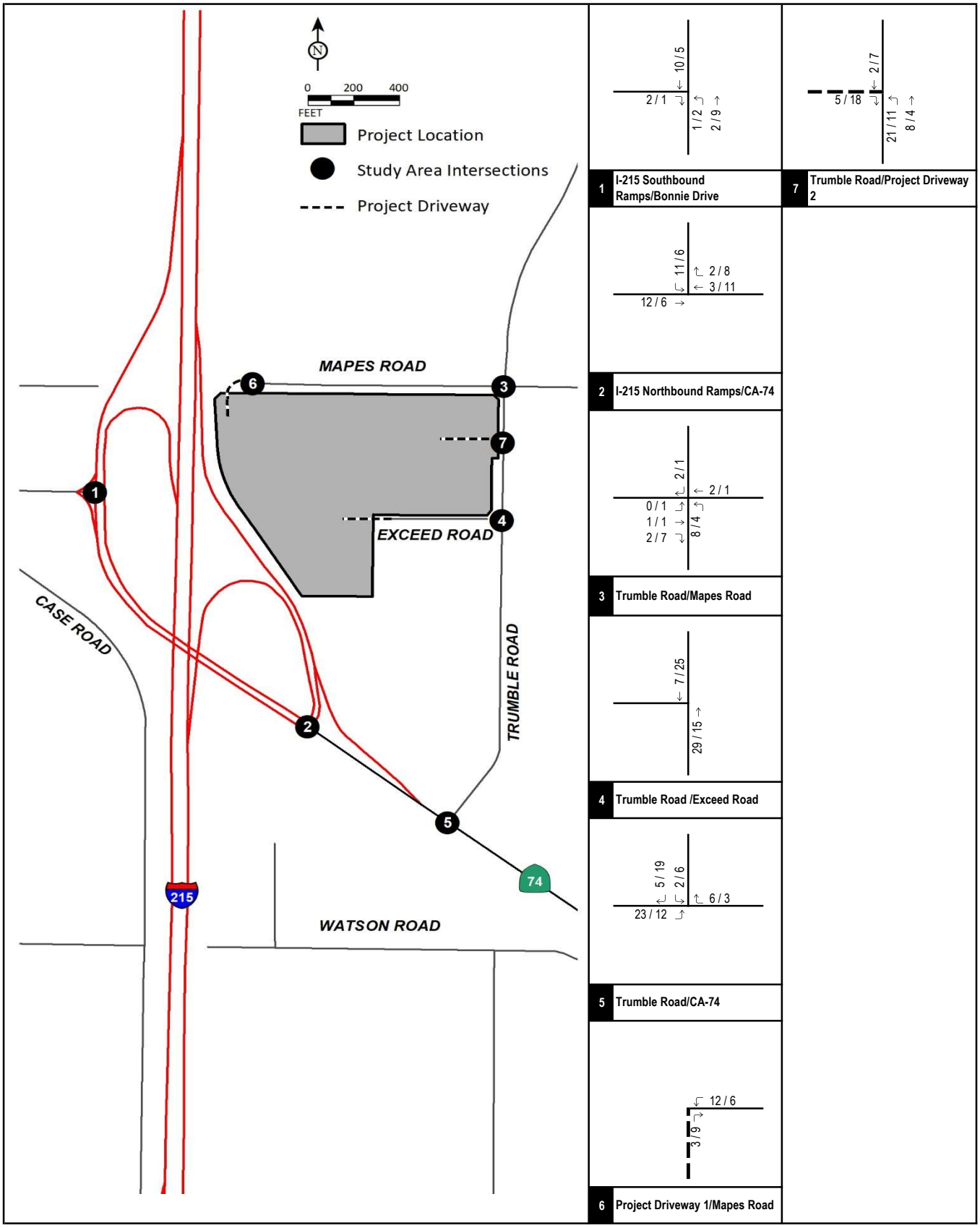


LSA

FIGURE 6

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

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*
Project Trip Assignment - Passenger Vehicles

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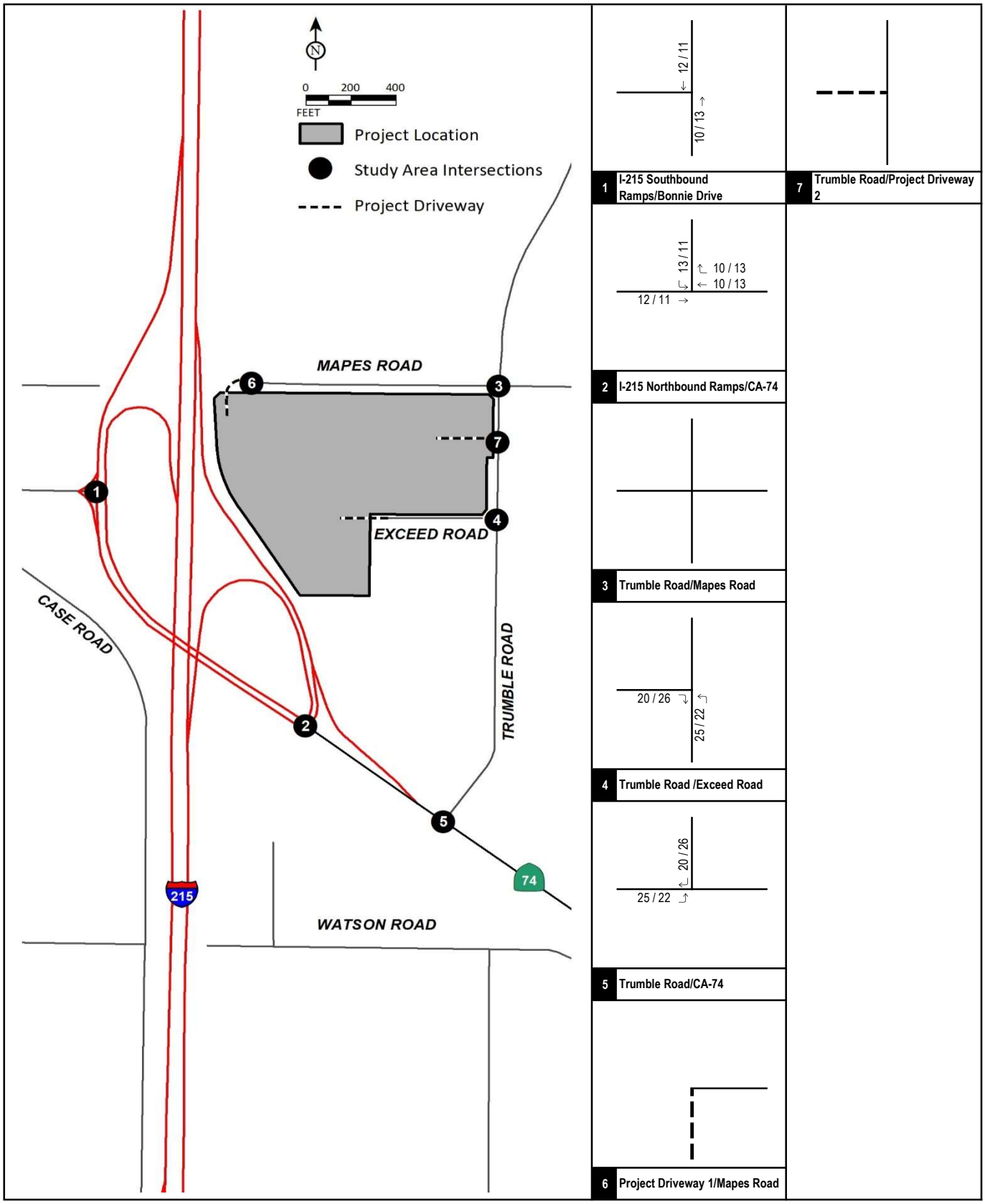


LSA

FIGURE 7

XX / YY
AM / PM Peak Hour PCE Volumes
Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Project Trip Assignment - Trucks

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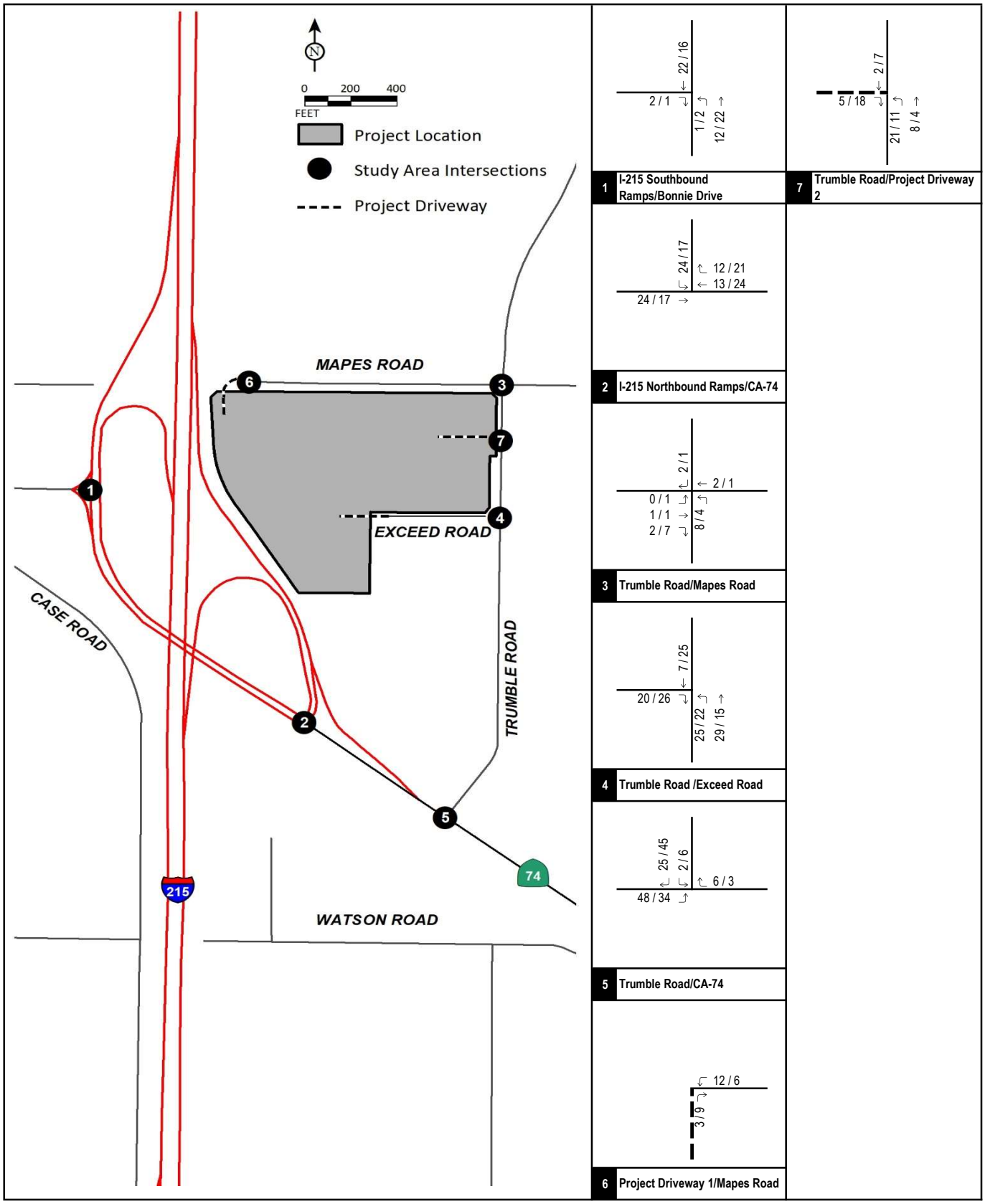


LSA

FIGURE 8

XX / YY
AM / PM Peak Hour Traffic Volumes (In PCE)
Project Driveway

*Mapes and Trumble Industrial Facility Project*
*Traffic Study*

Project Total Trip Assignment

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# City of Perris
# LOS Standards

**I.A.5** Consider ancillary parking facilities with transit connections to activity centers such as downtown.

**I.A.6** Require parking facility design that minimizes visual and physical impacts while maintaining pedestrian and motorist safety and supporting adjacent activities.

**Policy I.B**

Support development of a variety of transportation options for major employment and activity centers including direct access to commuter facilities, primary arterial highways, bikeways, park-n-ride facilities, and pedestrian facilities.

**I.B.1** Require on-site improvements that accommodate public transit vehicles (i.e. bus pullouts and transit stops and cueing lanes, bus turnarounds and other improvements) at major trip attractions (i.e. community centers, tourist and employment centers, etc.).

**Policy I.C**

Cooperate with local, regional, State and federal agencies to establish an efficient multi-modal circulation system.

**Policy I.D**

Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation.

**Goal II**

A well planned, designed, constructed and maintained street and highway system that facilitates the movement of vehicles and provides safe and convenient access to surrounding developments.

**Policy II.A**

Maintain the following target Levels of Service:

- LOS "D" along all City maintained roads (including intersections) and LOS "D" along I-215 and SR 74 (including intersections with local streets and roads). An exception to the local road standard is LOS "E", at intersections of any Arterials and Expressways with SR 74, the Ramona-Cajalco Expressway or at I-215 freeway ramps.
- LOS "E" may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit-oriented development and walkable communities. Increased congestion in this area will facilitate an increase in transit ridership and encourage development of a complementary mix of land uses within a comfortable walking distance from light rail stations.

**Implementation Measures**

**II.A.1** Utilize existing infrastructure (lanes, median islands, turn lanes, available right-of-way) and rights-of-way to the maximum extent practicable.

# Threshold of Significance

**Table 1**
**LOS & Delay Ranges**

| LOS | Delay (seconds/vehicle) | |
|---|---|---|
| | Signalized Intersections | Unsignalized Intersections |
| A | ≤ 10.0 | ≤ 10.0 |
| B | > 10.0 to ≤ 20.0 | > 10.0 to ≤ 15.0 |
| C | > 20.0 to ≤ 35.0 | > 15.0 to ≤ 25.0 |
| D | > 35.0 to ≤ 55.0 | > 25.0 to ≤ 35.0 |
| E | > 55.0 to ≤ 80.0 | > 35.0 to ≤ 50.0 |
| F | > 80.0 | > 50.0 |

**Source:** *2000 Highway Capacity Manual*

Level of service is based on the average stopped delay per vehicle for all movements of signalized intersections and all-way stop-controlled intersections; for one-way or two-way stop-controlled intersections, LOS is based on the worst stop-controlled approach.

**Peak Hour Performance Criteria**

Level of Service (LOS) D or better is generally considered acceptable based on City of Perris, Caltrans, and County of Riverside performance criteria, except at the following intersections for which LOS E or better shall be considered acceptable based the City of Perris General Plan Circulation Element Policy II.A:

- I-215 Southbound Ramps/Harley Knox Boulevard;
- I-215 Northbound Ramps/Harley Knox Boulevard;
- I-215 Southbound Ramps/Cajalco Expressway;
- I-215 Northbound Ramps/Ramona Expressway;
- Webster Avenue/Ramona Expressway;
- Indian Street/Ramona Expressway;
- Perris Boulevard/Ramona Expressway;
- Redlands Avenue/Ramona Expressway; and
- Evans Road/Ramona Expressway.

**Thresholds of Significance**

To determine whether the addition of project-generated trips (or alternative-generated trips) results in a significant impact, and thus requires mitigation, the analysis shall evaluate significant impacts based on the following criteria:

- A project-related impact is considered direct and significant when a study intersection operates at an acceptable Level of Service for existing conditions (without the project) and the addition of 50 or more a.m. or p.m. peak hour project trips causes the intersection to operate at an unacceptable Level of Service for existing plus project conditions.

- A project-related impact is considered direct and significant when a study intersection operates at an unacceptable Level of Service for existing conditions (without the project) and the addition of 50 or more a.m. or p.m. peak hour project trips causes the intersection delay to increase by 2 seconds or more.
- A cumulative impact is considered significant when a study intersection is forecast to operate at an unacceptable Level of Service with the addition of cumulative/background traffic and 50 or more a.m. or p.m. peak hour project trips.

## EXISTING CONDITIONS

### Roadway Description

The characteristics of the roadway system in the vicinity of the project site are described below:

**I-215 Freeway** provides regional access for the project site as a freeway facility, traversing the Inland Empire in a north-south direction. I-215 begins at its southern terminus at the junction with I-15 in Murrieta and continues northbound through Perris. I-215 merges with SR-60 from Moreno Valley to Riverside, splits at SR-90, continues northbound through San Bernardino and terminates at the junction with I-15 just before the Cajon Pass. In the project vicinity, I-215 is a six-lane freeway providing access to the project site via the Harley Knox Boulevard and Cajalco/Ramona Expressway interchanges.

**Day Street** is a two-lane undivided roadway trending in a north-south direction within the project vicinity. Day Street is unpaved south of Cajalco Expressway. The posted speed limit on Day Street is 45 miles per hour; on-street parking is permitted.

**Decker Road** is a two-lane undivided roadway trending in a north-south direction. There is no posted speed limit on Decker Road within the project vicinity; on-street parking is permitted.

**Seaton Avenue** is a two-lane undivided roadway trending in a north-south direction. There is no posted speed limit on Seaton Avenue within the project vicinity; on-street parking is permitted.

**Harvill Avenue** is a four-lane divided roadway with a painted median trending in a north-south direction. The posted speed limit on Harvill Avenue is 50 miles per hour within the project vicinity; on-street parking is permitted.

**Webster Avenue** is a two-lane undivided roadway north of Ramona Expressway and a four-lane divided roadway with a painted median trending in a north-south direction. The posted speed limit on Webster Avenue is 35 miles per hour within the project vicinity; on-street parking is permitted north of Ramona Expressway only.

**Western Way** is a two-lane undivided roadway trending in a north-south direction. There is no visible posted speed limit on Western Way within the project vicinity; on-street parking is permitted.

**Indian Street** is a four-lane divided roadway with a raised median trending in a north-south direction. The posted speed limit on Indian Street is 40 miles per hour within the project vicinity; on-street parking is permitted.

# Land Use: 155
# High-Cube Fulfillment Center Warehouse

## Description

A high-cube warehouse (HCW) is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW. A high-cube warehouse can be free-standing or located in an industrial park.

Warehousing (Land Use 150), high-cube transload and short-term storage warehouse (Land Use 154), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related land uses.

## Land Use Subcategory

Each fulfillment center in the ITE database has been categorized as either a sort or non-sort facility. A sort facility is a fulfillment center that ships out smaller items, requiring extensive sorting, typically by manual means. A non-sort facility is a fulfillment center that ships large box items that are processed primarily with automation rather than through manual means. Separate sets of data plots are presented for the sort and non-sort fulfillment centers. Some limited assembly and repackaging may occur within the facility.

## Additional Data

A high-cube warehouse may contain a mezzanine. In a HCW setting, a mezzanine is a free-standing, semi-permanent structure that is commonly supported by structural steel columns and that is lined with racks or shelves. The gross floor area (GFA) values for the study sites in the database for this land use do NOT include the floor area of the mezzanine. The GFA values represent only the permanent ground-floor square footage.

The amount of office/employee welfare space that is provided within a HCW can be highly variable but is typically an insignificant portion of the overall building square footage. Within the trip generation database, common values are between 3,000 and 5,000 square feet for a Cold Storage HCW and between 5,000 and 10,000 square feet for Transload, Fulfillment Center, and Parcel Hub HCW (all of which are less than one percent of total GFA for a site). Therefore, for the trip generation data plots, any office space that is part of the normal operation of the warehouse is included in the total GFA.

The High-Cube Warehouse/Distribution Center-related land uses underwent specialized consideration through a commissioned study titled “High-Cube Warehouse Vehicle Trip Generation Analysis,” published in October 2016. The results of this study are posted on the ITE website at http://library.ite.org/pub/a3e6679a-e3a8-bf38-7f29-2961becdd498.

The sites were surveyed in the 2000s and the 2010s in California, New Jersey, and Texas.

### Source Numbers

752, 941, 1001, 1002, 1011

# High-Cube Fulfillment Center Warehouse - Non-Sort (155)

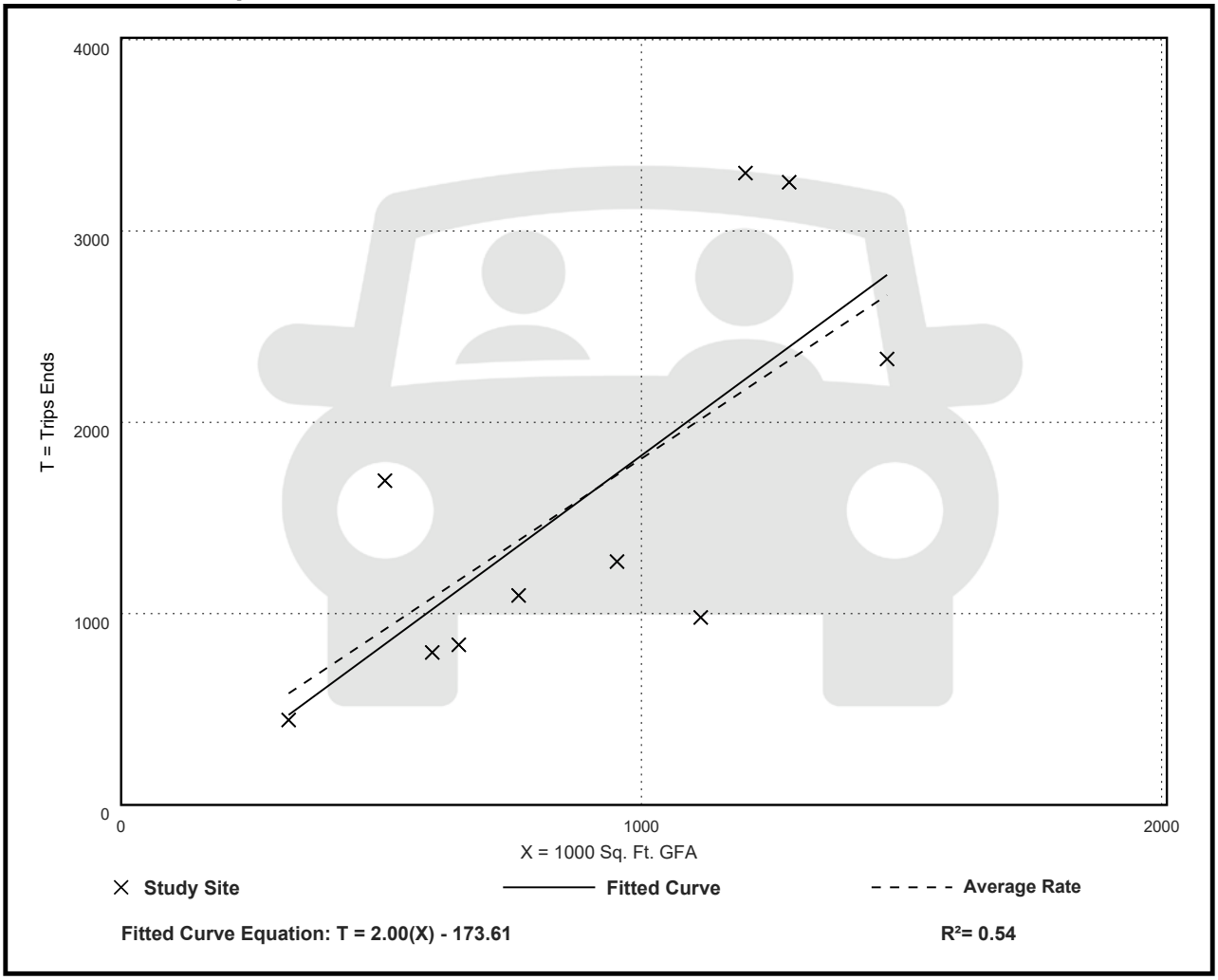
**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**
**On a: Weekday**

**Setting/Location: General Urban/Suburban**
Number of Studies: 10
Avg. 1000 Sq. Ft. GFA: 886
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 1.81 | 0.88 - 3.34 | 0.76 |

## Data Plot and Equation



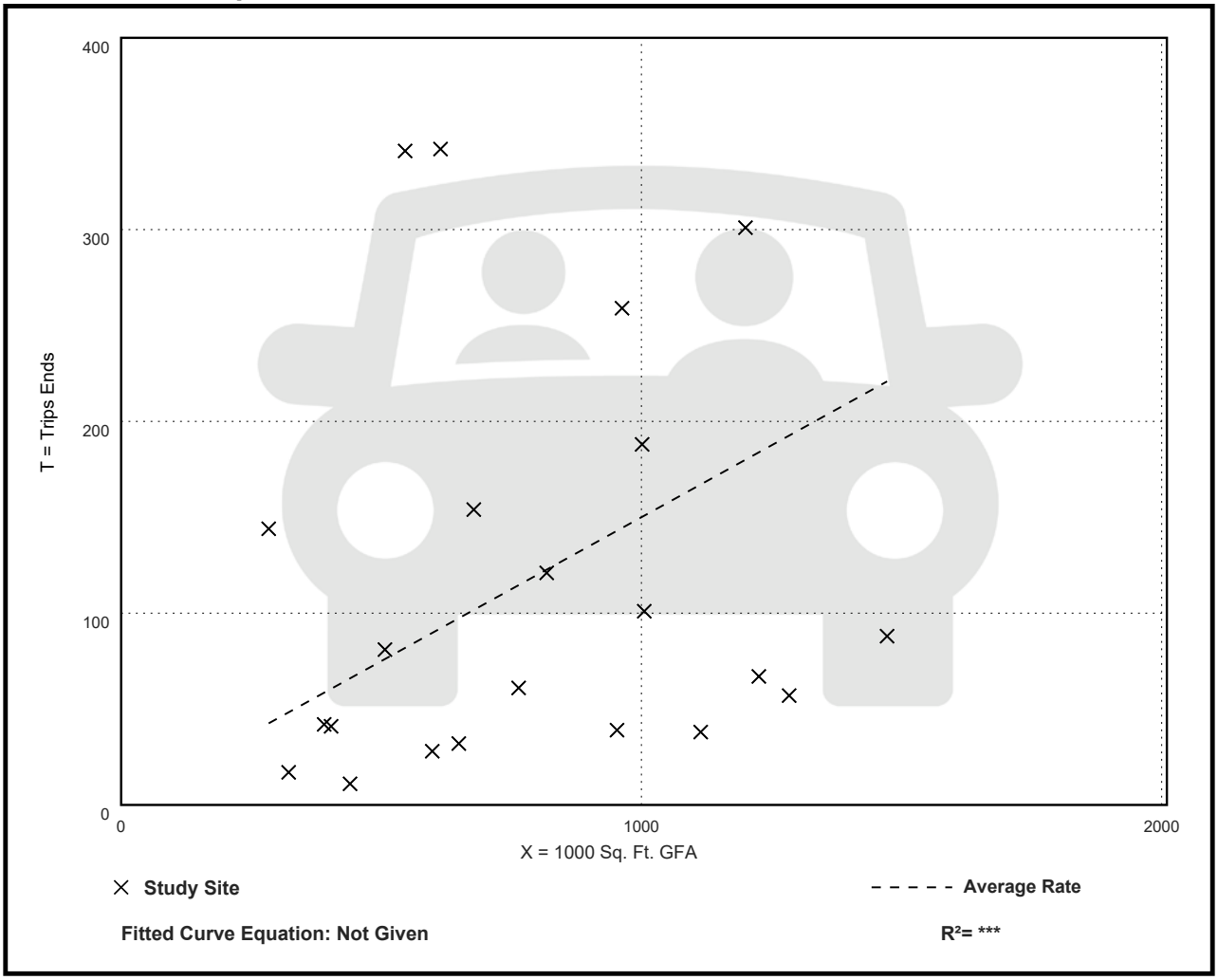
# High-Cube Fulfillment Center Warehouse - Non-Sort (155)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**
**On a: Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 7 and 9 a.m.**
**Setting/Location: General Urban/Suburban**
Number of Studies: 22
Avg. 1000 Sq. Ft. GFA: 783
Directional Distribution: 81% entering, 19% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.15 | 0.03 - 0.62 | 0.15 |

## Data Plot and Equation



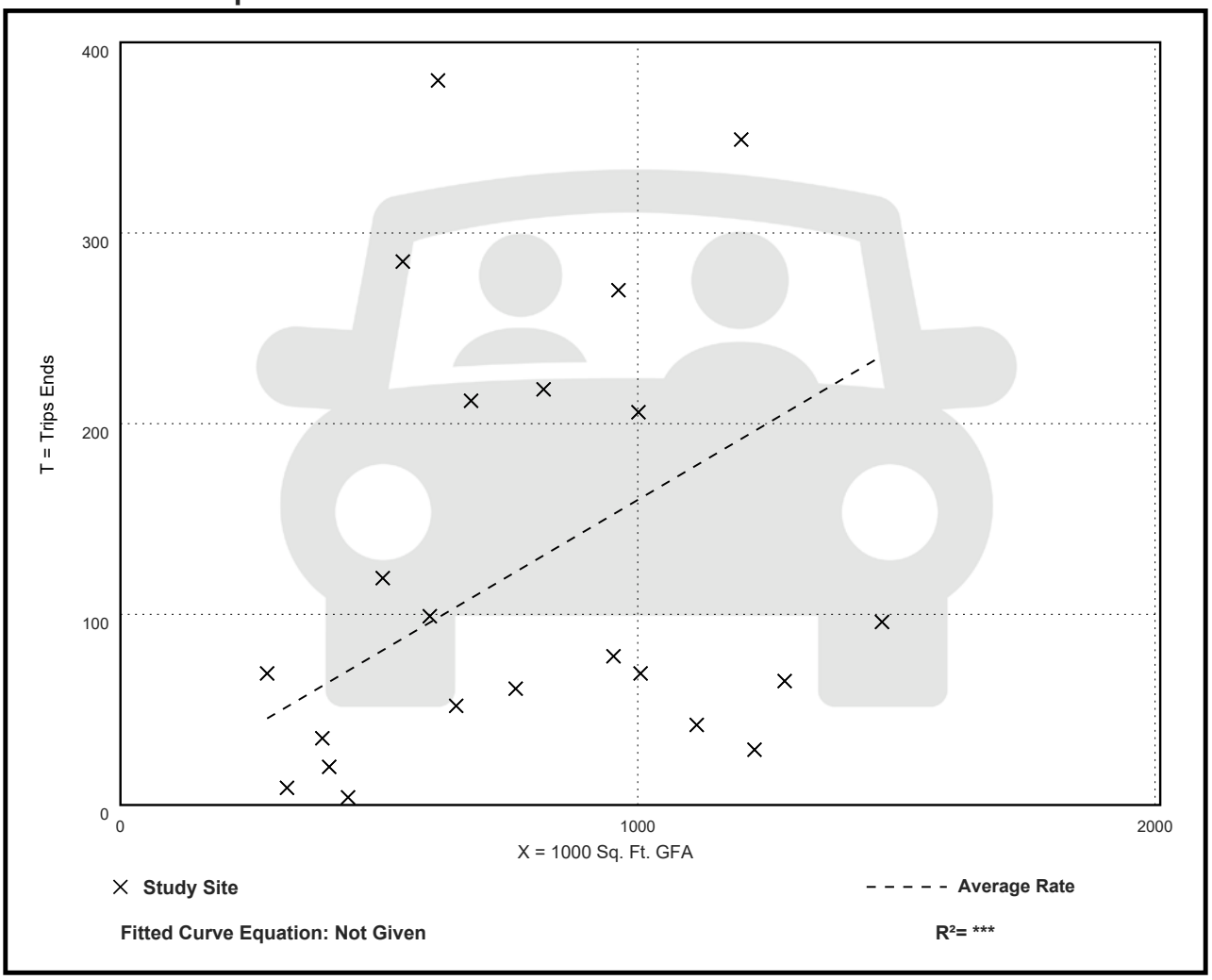
# High-Cube Fulfillment Center Warehouse - Non-Sort (155)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**
**On a: Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 4 and 6 p.m.**
**Setting/Location: General Urban/Suburban**
Number of Studies: 22
Avg. 1000 Sq. Ft. GFA: 783
Directional Distribution: 39% entering, 61% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.16 | 0.01 - 0.62 | 0.15 |

## Data Plot and Equation



# High-Cube Fulfillment Center Warehouse - Non-Sort (155)

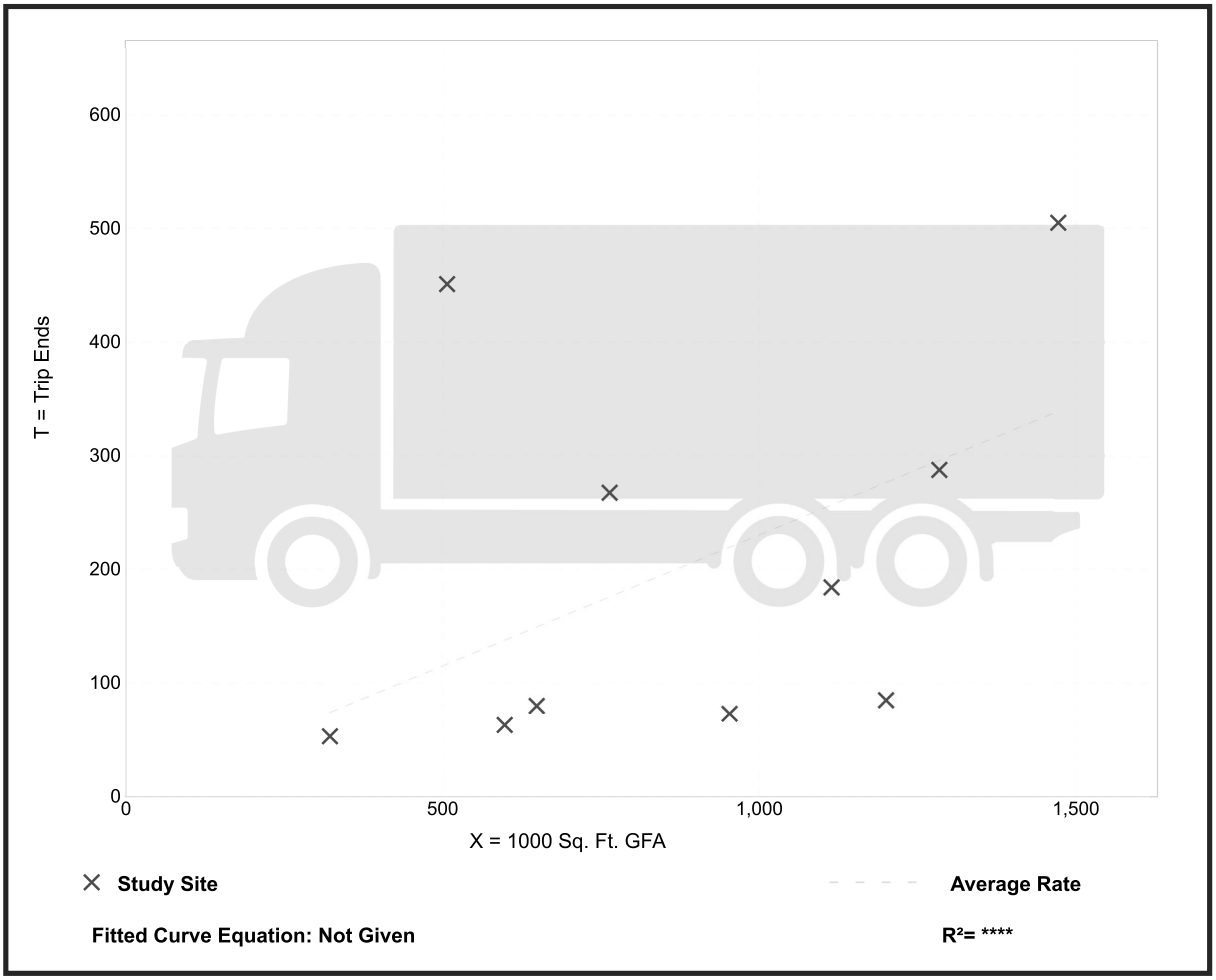
**Truck Trip Ends vs:** **1000 Sq. Ft. GFA**
**On a:** **Weekday**

**Setting/Location:** **General Urban/Suburban**
Number of Studies: 10
Avg. 1000 Sq. Ft. GFA: 886
Directional Distribution: 50% entering, 50% exiting

## Truck Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.23 | 0.07 - 0.89 | 0.20 |

## Data Plot and Equation

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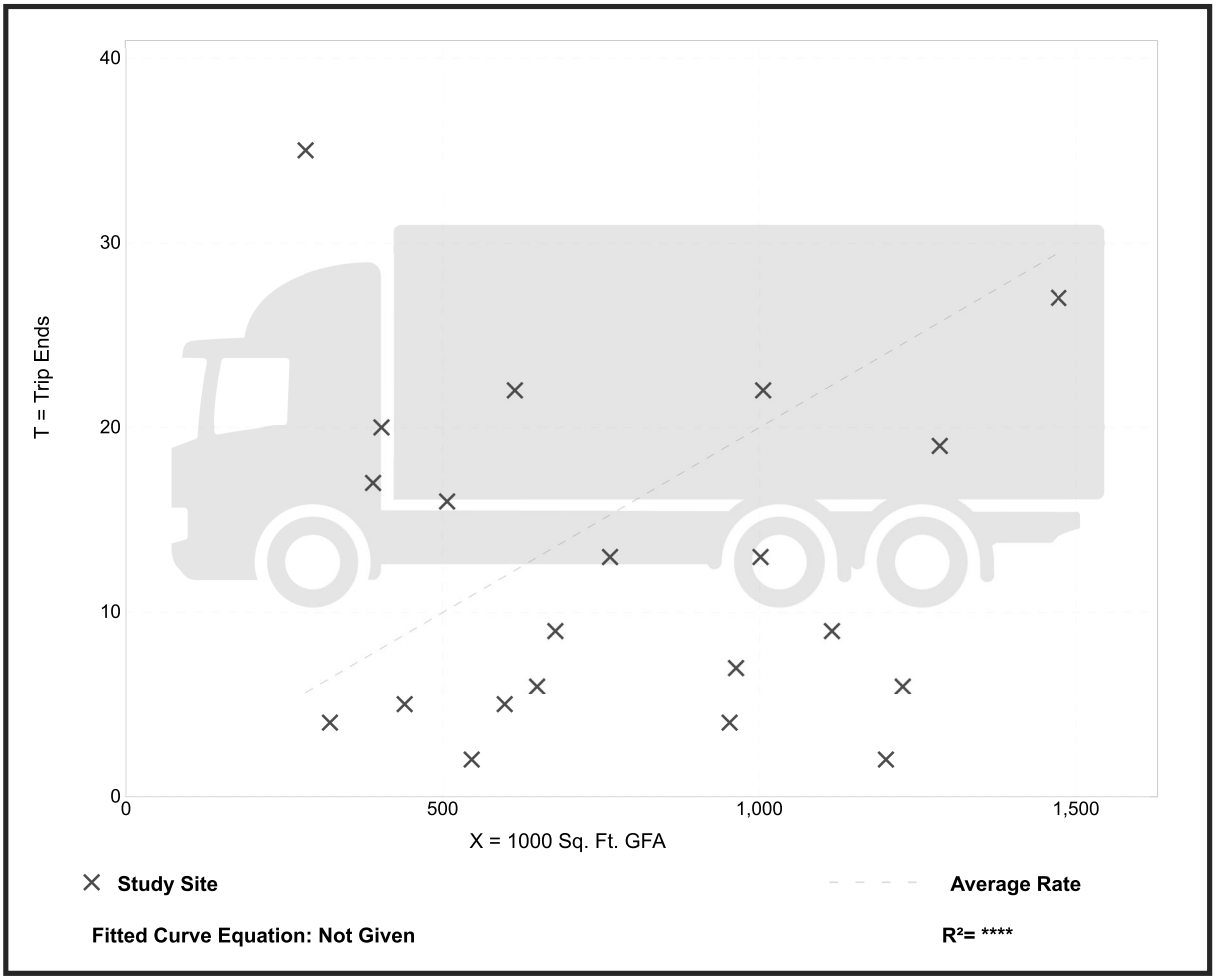
# High-Cube Fulfillment Center Warehouse - Non-Sort
(155)

**Truck Trip Ends vs:** **1000 Sq. Ft. GFA**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 7 and 9 a.m.**
**Setting/Location:** **General Urban/Suburban**
Number of Studies: 21
Avg. 1000 Sq. Ft. GFA: 782
Directional Distribution: 50% entering, 50% exiting

## Truck Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.02 | 0.00 - 0.12 | 0.02 |

## Data Plot and Equation

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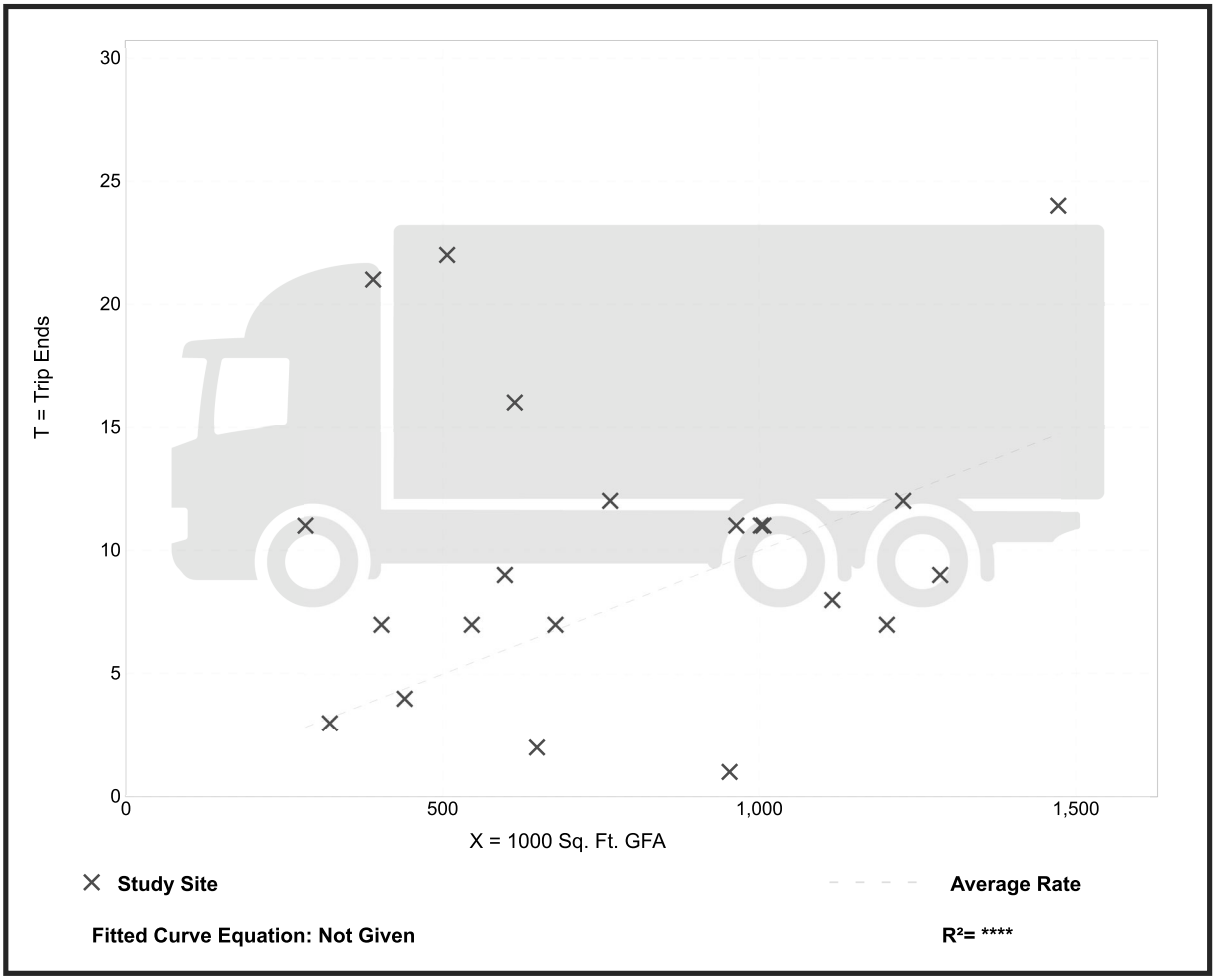
# High-Cube Fulfillment Center Warehouse - Non-Sort
(155)

**Truck Trip Ends vs:** **1000 Sq. Ft. GFA**
**On a:** **Weekday,**
**Peak Hour of Adjacent Street Traffic,**
**One Hour Between 4 and 6 p.m.**
**Setting/Location:** **General Urban/Suburban**
Number of Studies: 21
Avg. 1000 Sq. Ft. GFA: 782
Directional Distribution: 46% entering, 54% exiting

## Truck Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|---|---|---|
| 0.01 | 0.00 - 0.05 | 0.01 |

## Data Plot and Equation

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# BACK UP SLIDES

# Warehouse Truck Trip Study Data Results and Usage

Stakeholder Working Group
July 17, 2014

South Coast AQMD

*Cleaning the Air That We Breathe…*

# SCAQMD Warehouse Truck Study – Peaking Factor from Business Survey

- Business Survey Question
  - *"How much more trucking occurs at your facility during peak months compared to average months?"*
- Response
  - 30 high cube warehouse facilities responded

| Statistical Measure | Percent Increase |
|---|---|
| Minimum | 5% |
| Maximum | 100% |
| Overall Average | 27% |
| **Cold Storage Average** *(N=14)* | **20%** |
| **Non Cold Storage Average** *(N=16)* | **33%** |

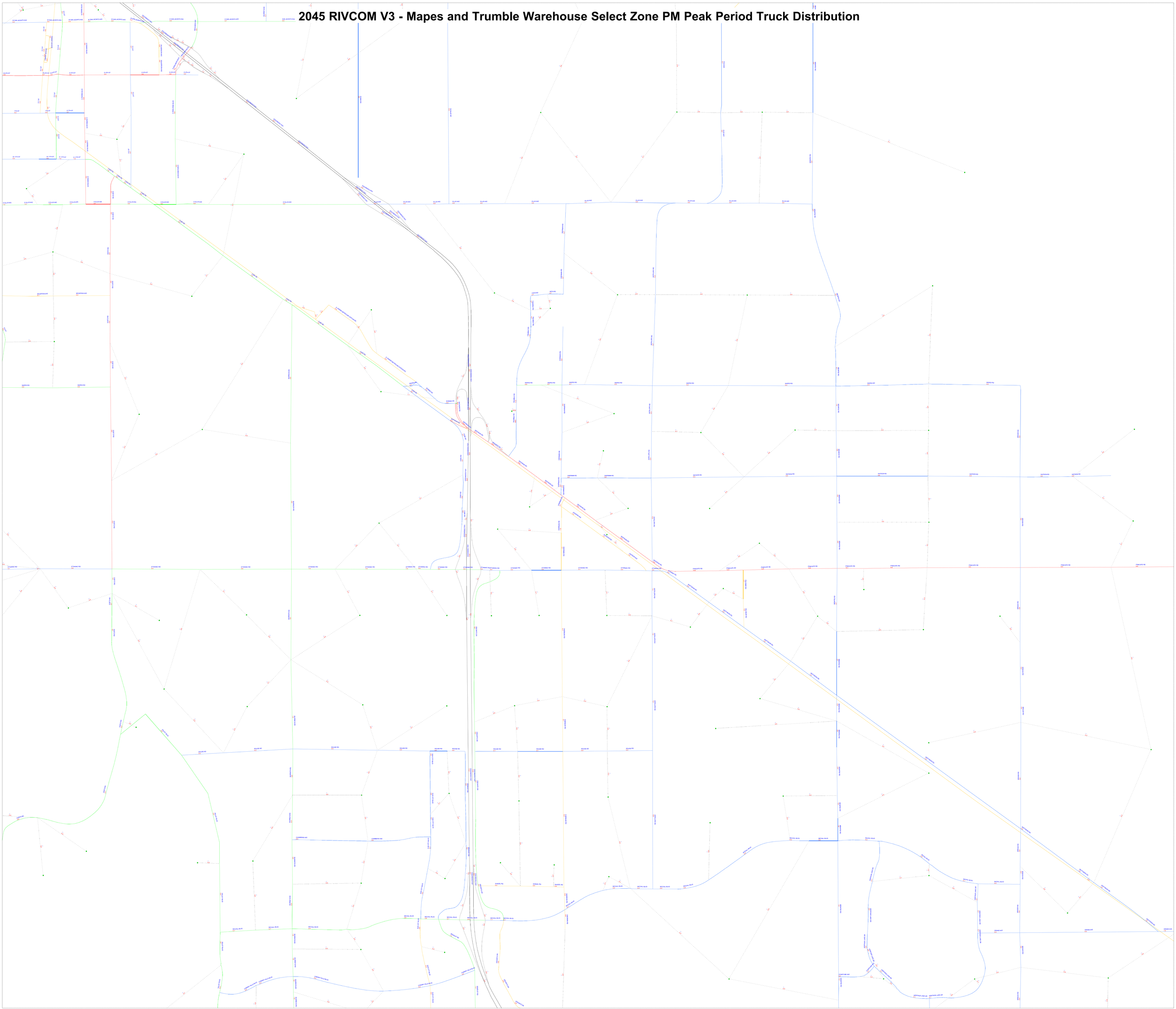
# SCAQMD Warehouse Truck Study Truck Fleet Mix

| Grouping | All Trucks | Actual % | | |
|---|---|---|---|---|
| | | 2-Axle | 3-Axle | 4+ Axle |
| SCAQMD Composite | 31.0% | 6.8% | 5.5% | 18.7% |
| With Cold Storage | 44.7% | 15.5% | 4.9% | 24.3% |
| Without Cold Storage | 27.5% | 4.6% | 5.7% | 17.2% |
| Fontana Study | 20.4% | 3.5% | 4.6% | 12.3% |

| Grouping | All Trucks | Normalized % | | |
|---|---|---|---|---|
| | | 2-Axle | 3-Axle | 4+ Axle |
| SCAQMD Composite | 31.0% | 21.9% | 17.7% | 60.3% |
| With Cold Storage | 44.7% | 34.7% | 11.0% | 54.4% |
| Without Cold Storage | 27.5% | 16.7% | 20.7% | 62.5% |
| Fontana Study | 20.4% | 17.2% | 22.5% | 60.3% |

# 2045 RIVCOM V3 - Mapes and Trumble Warehouse Select Zone PM Peak Period Auto Distribution (Transportation Employment)

# 2045 RIVCOM V3 - Mapes and Trumble Warehouse Select Zone PM Peak Period Truck Distribution



April 13, 2022

Ms. Lupita Garcia
CITY OF PERRIS (Planning Division)
135 North "D" Street
Perris, CA 92570

**Subject: Mapes Road and Trumble Road Industrial Facility Project (PLN 22 - 05023) Traffic Study Scoping Agreement and VMT Analysis Review #2, City of Perris**

## Introduction

RK ENGINEERING GROUP, INC. (RK) has reviewed the traffic study scoping agreement and VMT analysis #2 for the Mapes Road and Trumble Road Industrial Facility Project in the City of Perris. The project is located south of Mapes Road, west of Trumble Road, and east of the I-215 freeway in the City of Perris. The project will have three (3) access points including a driveway for passenger vehicles on Mapes Road, a driveway on Trumble Road for passenger cars, and a driveway located on Exceed Road that will be used by trucks.

RK has reviewed the traffic study scoping agreement and VMT analysis for the Mapes and Trumble Industrial Facility Project traffic study prepared by LSA Consultants, dated March 13, 2022, and it is acceptable as revised. LSA has adequately addressed all of the comments provided by RK in the February 16, 2022 Review #1 comment letter.

## Comments

RK has the following comments on the traffic study scoping agreement and VMT analysis #2.

1. The traffic study scoping agreement and VMT analysis are acceptable from a technical standpoint. **As part of the Traffic Study and VMT Analysis submittal, please include details on the project's socioeconomic data and how the project TAZ is updated as part of the model runs.**

## Conclusions

RK has reviewed the Traffic Study Scoping Agreement and VMT Analysis #2 for the Mapes and Trumble Industrial Facility Project (PLN 22 – 05023) prepared by LSA Consultants and it is acceptable as revised. LSA may proceed with the preparation of the traffic study.

RK appreciates this opportunity to work with the City of Perris on this project and if you have any questions, please contact me at (949) 474-0809.

Sincerely,
RK ENGINEERING GROUP, INC.

Robert Kahn, P.E.
Founding Principal

Justin Tucker, P.E.
Principal

Registered Civil Engineer 20285
Registered Traffic Engineer 0555

XC: Kenneth Phung, City of Perris,
Nathan Perez, City of Perris
Stuart McKibben, City of Peris
John Pourkazemi, Tri-Lake Consultants

Attachment

*RK17305.DOC*
*JN: 2126-2022-01*

# APPENDIX B:

# TRAFFIC COUNT SHEETS AND SIGNAL TIMING SHEETS

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

City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

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

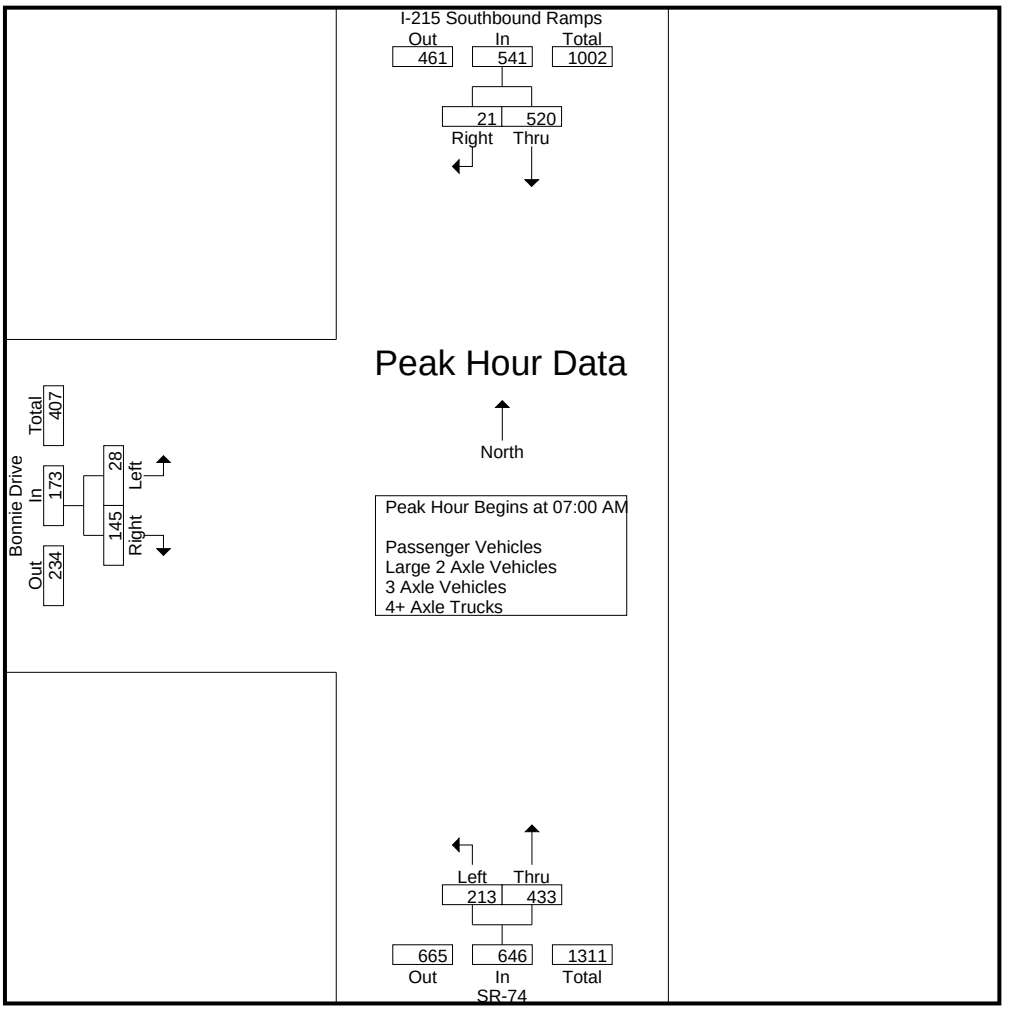
| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 07:00 AM | 130 | 7 | 137 | 38 | 103 | 141 | 6 | 34 | 40 | 318 |
| 07:15 AM | 145 | 2 | 147 | 58 | 109 | 167 | 9 | 45 | 54 | 368 |
| 07:30 AM | 124 | 3 | 127 | 51 | 104 | 155 | 3 | 34 | 37 | 319 |
| 07:45 AM | 121 | 9 | 130 | 66 | 117 | 183 | 10 | 32 | 42 | 355 |
| Total | 520 | 21 | 541 | 213 | 433 | 646 | 28 | 145 | 173 | 1360 |
| | | | | | | | | | | |
| 08:00 AM | 125 | 9 | 134 | 40 | 95 | 135 | 4 | 35 | 39 | 308 |
| 08:15 AM | 124 | 5 | 129 | 41 | 82 | 123 | 7 | 34 | 41 | 293 |
| 08:30 AM | 127 | 10 | 137 | 42 | 61 | 103 | 3 | 27 | 30 | 270 |
| 08:45 AM | 118 | 5 | 123 | 38 | 62 | 100 | 5 | 22 | 27 | 250 |
| Total | 494 | 29 | 523 | 161 | 300 | 461 | 19 | 118 | 137 | 1121 |
| | | | | | | | | | | |
| Grand Total | 1014 | 50 | 1064 | 374 | 733 | 1107 | 47 | 263 | 310 | 2481 |
| Apprch % | 95.3 | 4.7 | | 33.8 | 66.2 | | 15.2 | 84.8 | | |
| Total % | 40.9 | 2 | 42.9 | 15.1 | 29.5 | 44.6 | 1.9 | 10.6 | 12.5 | |
| Passenger Vehicles | 864 | 38 | 902 | 336 | 633 | 969 | 46 | 232 | 278 | 2149 |
| % Passenger Vehicles | 85.2 | 76 | 84.8 | 89.8 | 86.4 | 87.5 | 97.9 | 88.2 | 89.7 | 86.6 |
| Large 2 Axle Vehicles | 83 | 9 | 92 | 29 | 85 | 114 | 1 | 21 | 22 | 228 |
| % Large 2 Axle Vehicles | 8.2 | 18 | 8.6 | 7.8 | 11.6 | 10.3 | 2.1 | 8 | 7.1 | 9.2 |
| 3 Axle Vehicles | 27 | 2 | 29 | 7 | 12 | 19 | 0 | 8 | 8 | 56 |
| % 3 Axle Vehicles | 2.7 | 4 | 2.7 | 1.9 | 1.6 | 1.7 | 0 | 3 | 2.6 | 2.3 |
| 4+ Axle Trucks | 40 | 1 | 41 | 2 | 3 | 5 | 0 | 2 | 2 | 48 |
| % 4+ Axle Trucks | 3.9 | 2 | 3.9 | 0.5 | 0.4 | 0.5 | 0 | 0.8 | 0.6 | 1.9 |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | 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 07:00 AM | | | | | | | | | | |
| 07:00 AM | 130 | 7 | 137 | 38 | 103 | 141 | 6 | 34 | 40 | 318 |
| 07:15 AM | **145** | 2 | **147** | 58 | 109 | 167 | 9 | **45** | **54** | **368** |
| 07:30 AM | 124 | 3 | 127 | 51 | 104 | 155 | 3 | 34 | 37 | 319 |
| 07:45 AM | 121 | **9** | 130 | **66** | **117** | **183** | **10** | 32 | 42 | 355 |
| Total Volume | 520 | 21 | 541 | 213 | 433 | 646 | 28 | 145 | 173 | 1360 |
| % App. Total | 96.1 | 3.9 | | 33 | 67 | | 16.2 | 83.8 | | |
| PHF | .897 | .583 | .920 | .807 | .925 | .883 | .700 | .806 | .801 | .924 |

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

City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022
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:

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 130 | 7 | 137 | 38 | 103 | 141 | 6 | 34 | 40 |
| +15 mins. | **145** | 2 | **147** | 58 | 109 | 167 | 9 | **45** | **54** |
| +30 mins. | 124 | 3 | 127 | 51 | 104 | 155 | 3 | 34 | 37 |
| +45 mins. | 121 | **9** | 130 | **66** | **117** | **183** | **10** | 32 | 42 |
| Total Volume | 520 | 21 | 541 | 213 | 433 | 646 | 28 | 145 | 173 |
| % App. Total | 96.1 | 3.9 | | 33 | 67 | | 16.2 | 83.8 | |
| PHF | .897 | .583 | .920 | .807 | .925 | .883 | .700 | .806 | .801 |

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PO Box 1178
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City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 07:00 AM | 106 | 6 | 112 | 35 | 70 | 105 | 6 | 29 | 35 | 252 |
| 07:15 AM | 127 | 2 | 129 | 52 | 89 | 141 | 9 | 38 | 47 | 317 |
| 07:30 AM | 100 | 1 | 101 | 47 | 87 | 134 | 3 | 31 | 34 | 269 |
| 07:45 AM | 106 | 8 | 114 | 59 | 110 | 169 | 10 | 27 | 37 | 320 |
| Total | 439 | 17 | 456 | 193 | 356 | 549 | 28 | 125 | 153 | 1158 |
| | | | | | | | | | | |
| 08:00 AM | 103 | 8 | 111 | 35 | 90 | 125 | 4 | 34 | 38 | 274 |
| 08:15 AM | 111 | 3 | 114 | 37 | 74 | 111 | 7 | 31 | 38 | 263 |
| 08:30 AM | 111 | 7 | 118 | 36 | 55 | 91 | 2 | 24 | 26 | 235 |
| 08:45 AM | 100 | 3 | 103 | 35 | 58 | 93 | 5 | 18 | 23 | 219 |
| Total | 425 | 21 | 446 | 143 | 277 | 420 | 18 | 107 | 125 | 991 |
| | | | | | | | | | | |
| Grand Total | 864 | 38 | 902 | 336 | 633 | 969 | 46 | 232 | 278 | 2149 |
| Apprch % | 95.8 | 4.2 | | 34.7 | 65.3 | | 16.5 | 83.5 | | |
| Total % | 40.2 | 1.8 | 42 | 15.6 | 29.5 | 45.1 | 2.1 | 10.8 | 12.9 | |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | 106 | 6 | 112 | 35 | 70 | 105 | 6 | 29 | 35 | 252 |
| 07:15 AM | **127** | 2 | **129** | 52 | 89 | 141 | 9 | **38** | **47** | 317 |
| 07:30 AM | 100 | 1 | 101 | 47 | 87 | 134 | 3 | 31 | 34 | 269 |
| 07:45 AM | 106 | **8** | 114 | **59** | **110** | **169** | **10** | 27 | 37 | **320** |
| Total Volume | 439 | 17 | 456 | 193 | 356 | 549 | 28 | 125 | 153 | 1158 |
| % App. Total | 96.3 | 3.7 | | 35.2 | 64.8 | | 18.3 | 81.7 | | |
| PHF | .864 | .531 | .884 | .818 | .809 | .812 | .700 | .822 | .814 | .905 |

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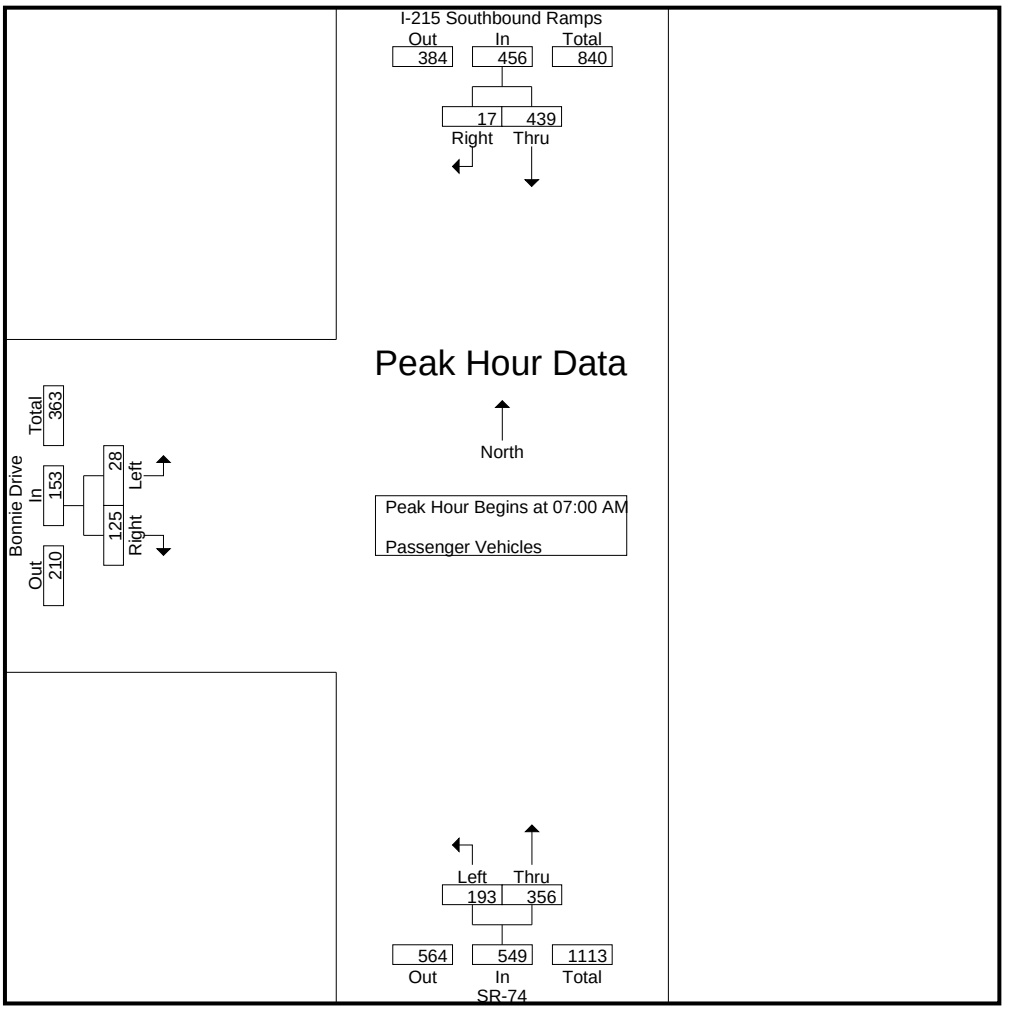
City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 106 | 6 | 112 | 35 | 70 | 105 | 6 | 29 | 35 |
| +15 mins. | **127** | 2 | **129** | 52 | 89 | 141 | 9 | **38** | **47** |
| +30 mins. | 100 | 1 | 101 | 47 | 87 | 134 | 3 | 31 | 34 |
| +45 mins. | 106 | **8** | 114 | **59** | **110** | **169** | **10** | 27 | 37 |
| Total Volume | 439 | 17 | 456 | 193 | 356 | 549 | 28 | 125 | 153 |
| % App. Total | 96.3 | 3.7 | | 35.2 | 64.8 | | 18.3 | 81.7 | |
| PHF | .864 | .531 | .884 | .818 | .809 | .812 | .700 | .822 | .814 |

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City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 07:00 AM | 11 | 1 | 12 | 2 | 28 | 30 | 0 | 4 | 4 | 46 |
| 07:15 AM | 12 | 0 | 12 | 5 | 17 | 22 | 0 | 5 | 5 | 39 |
| 07:30 AM | 13 | 1 | 14 | 4 | 15 | 19 | 0 | 2 | 2 | 35 |
| 07:45 AM | 9 | 1 | 10 | 6 | 7 | 13 | 0 | 2 | 2 | 25 |
| Total | 45 | 3 | 48 | 17 | 67 | 84 | 0 | 13 | 13 | 145 |
| | | | | | | | | | | |
| 08:00 AM | 13 | 0 | 13 | 3 | 4 | 7 | 0 | 1 | 1 | 21 |
| 08:15 AM | 7 | 2 | 9 | 3 | 7 | 10 | 0 | 2 | 2 | 21 |
| 08:30 AM | 7 | 3 | 10 | 5 | 3 | 8 | 1 | 1 | 2 | 20 |
| 08:45 AM | 11 | 1 | 12 | 1 | 4 | 5 | 0 | 4 | 4 | 21 |
| Total | 38 | 6 | 44 | 12 | 18 | 30 | 1 | 8 | 9 | 83 |
| | | | | | | | | | | |
| Grand Total | 83 | 9 | 92 | 29 | 85 | 114 | 1 | 21 | 22 | 228 |
| Apprch % | 90.2 | 9.8 | | 25.4 | 74.6 | | 4.5 | 95.5 | | |
| Total % | 36.4 | 3.9 | 40.4 | 12.7 | 37.3 | 50 | 0.4 | 9.2 | 9.6 | |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | 11 | **1** | 12 | 2 | **28** | **30** | 0 | 4 | 4 | **46** |
| 07:15 AM | 12 | 0 | 12 | 5 | 17 | 22 | 0 | **5** | **5** | 39 |
| 07:30 AM | **13** | 1 | **14** | 4 | 15 | 19 | 0 | 2 | 2 | 35 |
| 07:45 AM | 9 | 1 | 10 | **6** | 7 | 13 | 0 | 2 | 2 | 25 |
| Total Volume | 45 | 3 | 48 | 17 | 67 | 84 | 0 | 13 | 13 | 145 |
| % App. Total | 93.8 | 6.2 | | 20.2 | 79.8 | | 0 | 100 | | |
| PHF | .865 | .750 | .857 | .708 | .598 | .700 | .000 | .650 | .650 | .788 |

Counts Unlimited, Inc.
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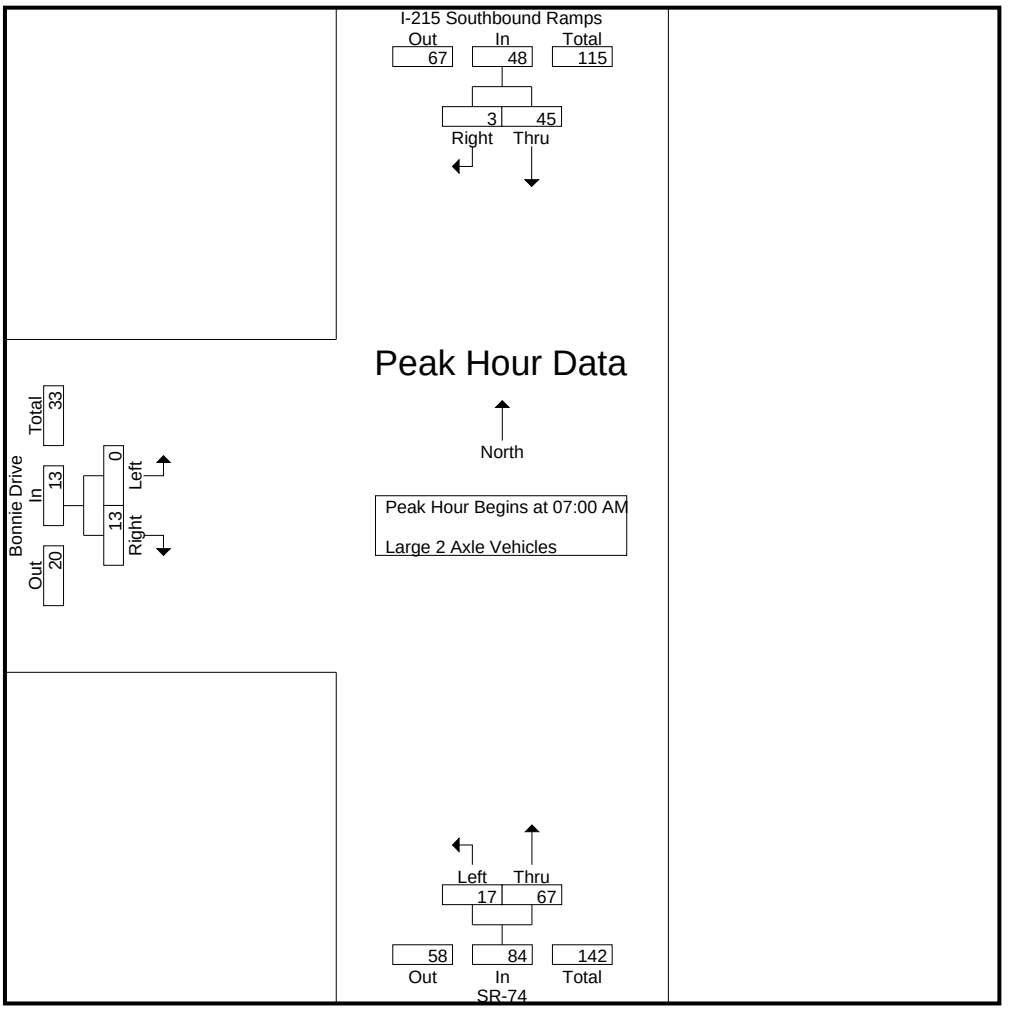
City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 11 | **1** | 12 | 2 | **28** | **30** | 0 | 4 | 4 |
| +15 mins. | 12 | 0 | 12 | 5 | 17 | 22 | 0 | **5** | **5** |
| +30 mins. | **13** | 1 | **14** | 4 | 15 | 19 | 0 | 2 | 2 |
| +45 mins. | 9 | 1 | 10 | **6** | 7 | 13 | 0 | 2 | 2 |
| Total Volume | 45 | 3 | 48 | 17 | 67 | 84 | 0 | 13 | 13 |
| % App. Total | 93.8 | 6.2 | | 20.2 | 79.8 | | 0 | 100 | |
| PHF | .865 | .750 | .857 | .708 | .598 | .700 | .000 | .650 | .650 |

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City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022


Groups Printed- 3 Axle Vehicles

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 07:00 AM | 7 | 0 | 7 | 1 | 4 | 5 | 0 | 1 | 1 | 13 |
| 07:15 AM | 2 | 0 | 2 | 1 | 2 | 3 | 0 | 2 | 2 | 7 |
| 07:30 AM | 2 | 0 | 2 | 0 | 2 | 2 | 0 | 1 | 1 | 5 |
| 07:45 AM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 3 |
| Total | 12 | 0 | 12 | 2 | 8 | 10 | 0 | 6 | 6 | 28 |
| | | | | | | | | | | |
| 08:00 AM | 3 | 1 | 4 | 2 | 1 | 3 | 0 | 0 | 0 | 7 |
| 08:15 AM | 3 | 0 | 3 | 1 | 1 | 2 | 0 | 1 | 1 | 6 |
| 08:30 AM | 5 | 0 | 5 | 0 | 2 | 2 | 0 | 1 | 1 | 8 |
| 08:45 AM | 4 | 1 | 5 | 2 | 0 | 2 | 0 | 0 | 0 | 7 |
| Total | 15 | 2 | 17 | 5 | 4 | 9 | 0 | 2 | 2 | 28 |
| | | | | | | | | | | |
| Grand Total | 27 | 2 | 29 | 7 | 12 | 19 | 0 | 8 | 8 | 56 |
| Apprch % | 93.1 | 6.9 | | 36.8 | 63.2 | | 0 | 100 | | |
| Total % | 48.2 | 3.6 | 51.8 | 12.5 | 21.4 | 33.9 | 0 | 14.3 | 14.3 | |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | **7** | 0 | **7** | **1** | **4** | **5** | 0 | 1 | 1 | **13** |
| 07:15 AM | 2 | 0 | 2 | 1 | 2 | 3 | 0 | **2** | **2** | 7 |
| 07:30 AM | 2 | 0 | 2 | 0 | 2 | 2 | 0 | 1 | 1 | 5 |
| 07:45 AM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 | 3 |
| Total Volume | 12 | 0 | 12 | 2 | 8 | 10 | 0 | 6 | 6 | 28 |
| % App. Total | 100 | 0 | | 20 | 80 | | 0 | 100 | | |
| PHF | .429 | .000 | .429 | .500 | .500 | .500 | .000 | .750 | .750 | .538 |

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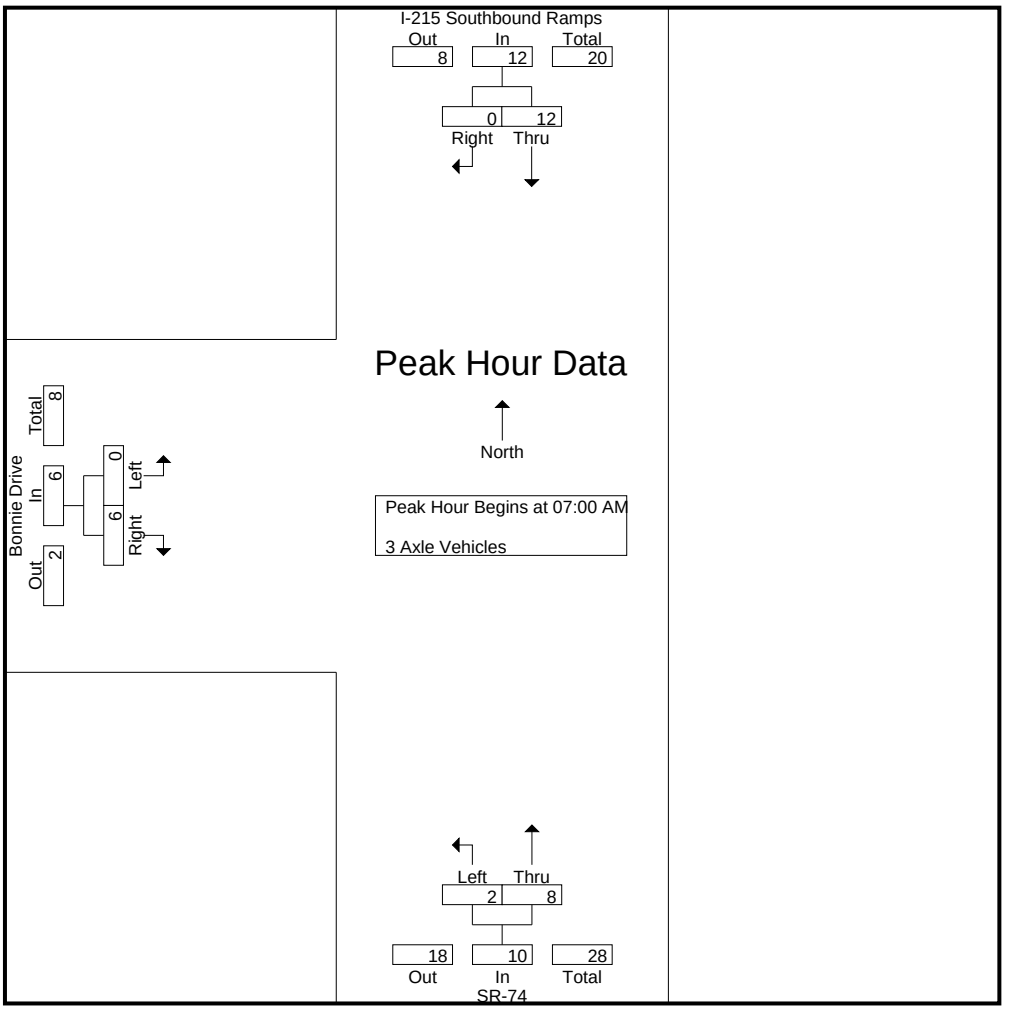
City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | **7** | 0 | **7** | **1** | **4** | **5** | 0 | 1 | 1 |
| +15 mins. | 2 | 0 | 2 | 1 | 2 | 3 | 0 | **2** | **2** |
| +30 mins. | 2 | 0 | 2 | 0 | 2 | 2 | 0 | 1 | 1 |
| +45 mins. | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2 |
| Total Volume | 12 | 0 | 12 | 2 | 8 | 10 | 0 | 6 | 6 |
| % App. Total | 100 | 0 | | 20 | 80 | | 0 | 100 | |
| PHF | .429 | .000 | .429 | .500 | .500 | .500 | .000 | .750 | .750 |

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City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 07:00 AM | 6 | 0 | 6 | 0 | 1 | 1 | 0 | 0 | 0 | 7 |
| 07:15 AM | 4 | 0 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 5 |
| 07:30 AM | 9 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 07:45 AM | 5 | 0 | 5 | 1 | 0 | 1 | 0 | 1 | 1 | 7 |
| Total | 24 | 1 | 25 | 1 | 2 | 3 | 0 | 1 | 1 | 29 |
| | | | | | | | | | | |
| 08:00 AM | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 08:15 AM | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 08:30 AM | 4 | 0 | 4 | 1 | 1 | 2 | 0 | 1 | 1 | 7 |
| 08:45 AM | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total | 16 | 0 | 16 | 1 | 1 | 2 | 0 | 1 | 1 | 19 |
| | | | | | | | | | | |
| Grand Total | 40 | 1 | 41 | 2 | 3 | 5 | 0 | 2 | 2 | 48 |
| Apprch % | 97.6 | 2.4 | | 40 | 60 | | 0 | 100 | | |
| Total % | 83.3 | 2.1 | 85.4 | 4.2 | 6.2 | 10.4 | 0 | 4.2 | 4.2 | |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | 6 | 0 | 6 | 0 | **1** | **1** | 0 | 0 | 0 | 7 |
| 07:15 AM | 4 | 0 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 5 |
| 07:30 AM | **9** | **1** | **10** | 0 | 0 | 0 | 0 | 0 | 0 | **10** |
| 07:45 AM | 5 | 0 | 5 | **1** | 0 | 1 | 0 | **1** | **1** | 7 |
| Total Volume | 24 | 1 | 25 | 1 | 2 | 3 | 0 | 1 | 1 | 29 |
| % App. Total | 96 | 4 | | 33.3 | 66.7 | | 0 | 100 | | |
| PHF | .667 | .250 | .625 | .250 | .500 | .750 | .000 | .250 | .250 | .725 |

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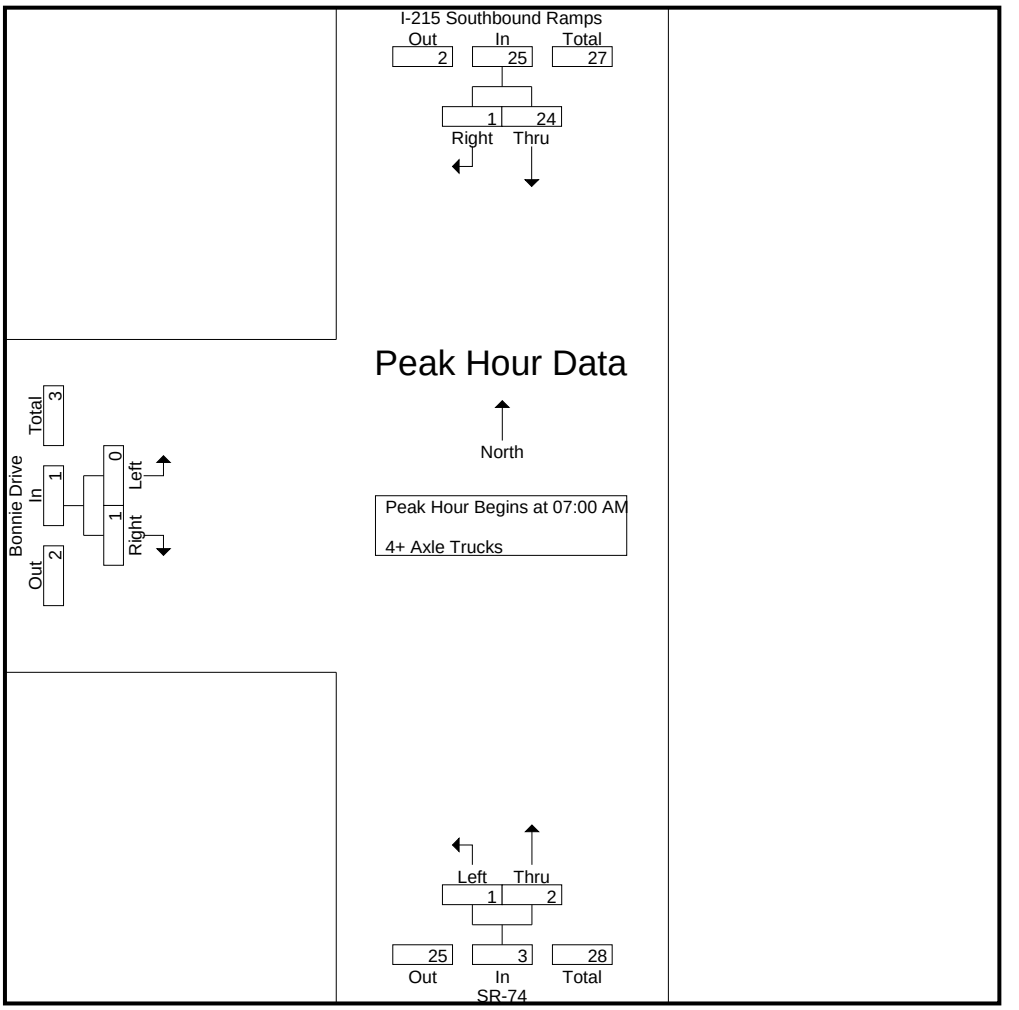
City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 6 | 0 | 6 | 0 | **1** | **1** | 0 | 0 | 0 |
| +15 mins. | 4 | 0 | 4 | 0 | 1 | 1 | 0 | 0 | 0 |
| +30 mins. | **9** | **1** | **10** | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 5 | 0 | 5 | **1** | 0 | 1 | 0 | **1** | **1** |
| Total Volume | 24 | 1 | 25 | 1 | 2 | 3 | 0 | 1 | 1 |
| % App. Total | 96 | 4 | | 33.3 | 66.7 | | 0 | 100 | |
| PHF | .667 | .250 | .625 | .250 | .500 | .750 | .000 | .250 | .250 |

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City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

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

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 04:00 PM | 193 | 5 | 198 | 61 | 76 | 137 | 9 | 73 | 82 | 417 |
| 04:15 PM | 177 | 8 | 185 | 63 | 71 | 134 | 7 | 69 | 76 | 395 |
| 04:30 PM | 177 | 9 | 186 | 46 | 90 | 136 | 10 | 71 | 81 | 403 |
| 04:45 PM | 178 | 4 | 182 | 44 | 54 | 98 | 3 | 64 | 67 | 347 |
| Total | 725 | 26 | 751 | 214 | 291 | 505 | 29 | 277 | 306 | 1562 |
| | | | | | | | | | | |
| 05:00 PM | 189 | 8 | 197 | 71 | 109 | 180 | 4 | 66 | 70 | 447 |
| 05:15 PM | 177 | 7 | 184 | 45 | 69 | 114 | 7 | 64 | 71 | 369 |
| 05:30 PM | 178 | 5 | 183 | 52 | 58 | 110 | 4 | 72 | 76 | 369 |
| 05:45 PM | 207 | 3 | 210 | 67 | 56 | 123 | 16 | 66 | 82 | 415 |
| Total | 751 | 23 | 774 | 235 | 292 | 527 | 31 | 268 | 299 | 1600 |
| | | | | | | | | | | |
| Grand Total | 1476 | 49 | 1525 | 449 | 583 | 1032 | 60 | 545 | 605 | 3162 |
| Apprch % | 96.8 | 3.2 | | 43.5 | 56.5 | | 9.9 | 90.1 | | |
| Total % | 46.7 | 1.5 | 48.2 | 14.2 | 18.4 | 32.6 | 1.9 | 17.2 | 19.1 | |
| Passenger Vehicles | 1418 | 49 | 1467 | 411 | 568 | 979 | 57 | 538 | 595 | 3041 |
| % Passenger Vehicles | 96.1 | 100 | 96.2 | 91.5 | 97.4 | 94.9 | 95 | 98.7 | 98.3 | 96.2 |
| Large 2 Axle Vehicles | 48 | 0 | 48 | 22 | 13 | 35 | 3 | 5 | 8 | 91 |
| % Large 2 Axle Vehicles | 3.3 | 0 | 3.1 | 4.9 | 2.2 | 3.4 | 5 | 0.9 | 1.3 | 2.9 |
| 3 Axle Vehicles | 3 | 0 | 3 | 16 | 1 | 17 | 0 | 1 | 1 | 21 |
| % 3 Axle Vehicles | 0.2 | 0 | 0.2 | 3.6 | 0.2 | 1.6 | 0 | 0.2 | 0.2 | 0.7 |
| 4+ Axle Trucks | 7 | 0 | 7 | 0 | 1 | 1 | 0 | 1 | 1 | 9 |
| % 4+ Axle Trucks | 0.5 | 0 | 0.5 | 0 | 0.2 | 0.1 | 0 | 0.2 | 0.2 | 0.3 |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | 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 | 189 | **8** | 197 | **71** | **109** | **180** | 4 | 66 | 70 | **447** |
| 05:15 PM | 177 | 7 | 184 | 45 | 69 | 114 | 7 | 64 | 71 | 369 |
| 05:30 PM | 178 | 5 | 183 | 52 | 58 | 110 | 4 | **72** | 76 | 369 |
| 05:45 PM | **207** | 3 | **210** | 67 | 56 | 123 | **16** | 66 | **82** | 415 |
| Total Volume | 751 | 23 | 774 | 235 | 292 | 527 | 31 | 268 | 299 | 1600 |
| % App. Total | 97 | 3 | | 44.6 | 55.4 | | 10.4 | 89.6 | | |
| PHF | .907 | .719 | .921 | .827 | .670 | .732 | .484 | .931 | .912 | .895 |

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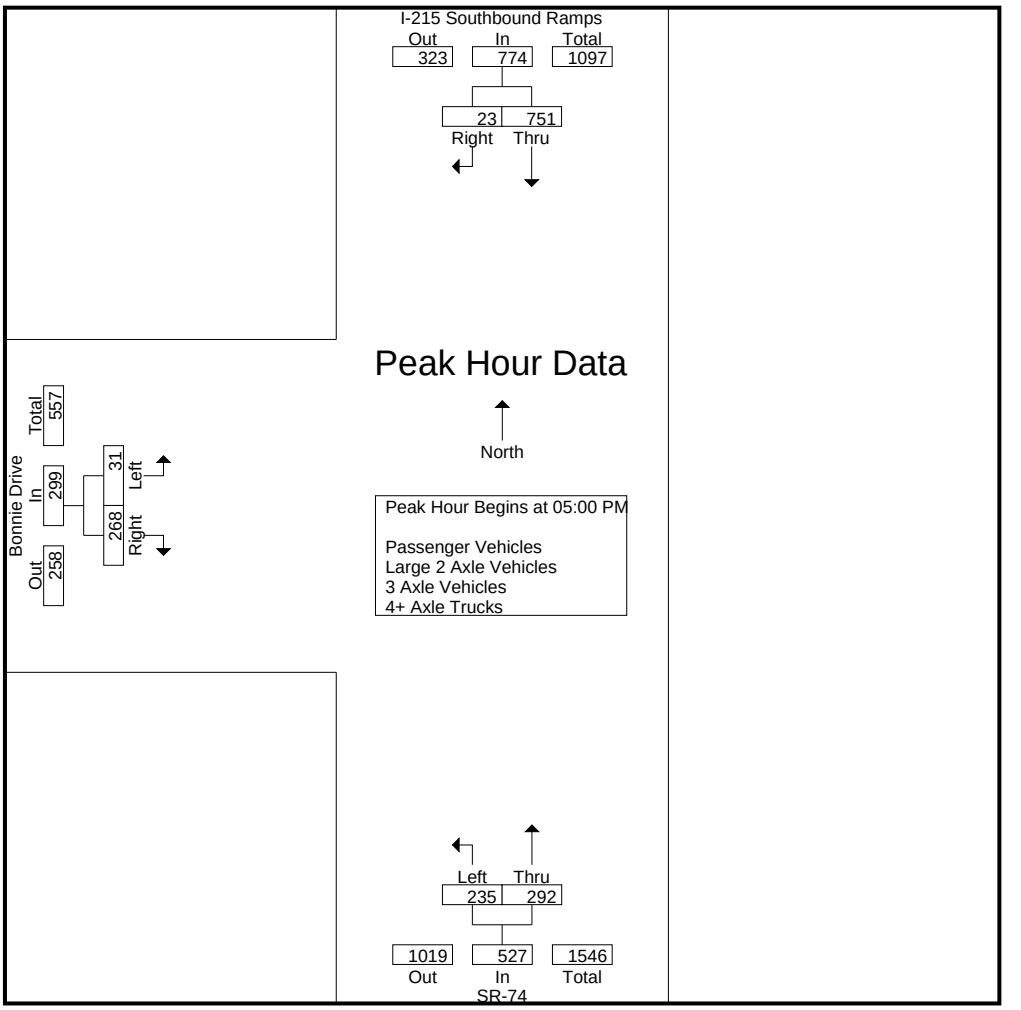
City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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 | | | 04:00 PM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 189 | **8** | 197 | 63 | 71 | 134 | 9 | **73** | **82** |
| +15 mins. | 177 | 7 | 184 | 46 | 90 | 136 | 7 | 69 | 76 |
| +30 mins. | 178 | 5 | 183 | 44 | 54 | 98 | **10** | 71 | 81 |
| +45 mins. | **207** | 3 | **210** | **71** | **109** | **180** | 3 | 64 | 67 |
| Total Volume | 751 | 23 | 774 | 224 | 324 | 548 | 29 | 277 | 306 |
| % App. Total | 97 | 3 | | 40.9 | 59.1 | | 9.5 | 90.5 | |
| PHF | .907 | .719 | .921 | .789 | .743 | .761 | .725 | .949 | .933 |

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City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 04:00 PM | 187 | 5 | 192 | 57 | 73 | 130 | 9 | 70 | 79 | 401 |
| 04:15 PM | 168 | 8 | 176 | 58 | 70 | 128 | 7 | 68 | 75 | 379 |
| 04:30 PM | 172 | 9 | 181 | 40 | 88 | 128 | 8 | 70 | 78 | 387 |
| 04:45 PM | 172 | 4 | 176 | 40 | 52 | 92 | 3 | 64 | 67 | 335 |
| Total | 699 | 26 | 725 | 195 | 283 | 478 | 27 | 272 | 299 | 1502 |
| | | | | | | | | | | |
| 05:00 PM | 181 | 8 | 189 | 65 | 108 | 173 | 3 | 66 | 69 | 431 |
| 05:15 PM | 166 | 7 | 173 | 40 | 68 | 108 | 7 | 64 | 71 | 352 |
| 05:30 PM | 168 | 5 | 173 | 49 | 58 | 107 | 4 | 71 | 75 | 355 |
| 05:45 PM | 204 | 3 | 207 | 62 | 51 | 113 | 16 | 65 | 81 | 401 |
| Total | 719 | 23 | 742 | 216 | 285 | 501 | 30 | 266 | 296 | 1539 |
| | | | | | | | | | | |
| Grand Total | 1418 | 49 | 1467 | 411 | 568 | 979 | 57 | 538 | 595 | 3041 |
| Apprch % | 96.7 | 3.3 | | 42 | 58 | | 9.6 | 90.4 | | |
| Total % | 46.6 | 1.6 | 48.2 | 13.5 | 18.7 | 32.2 | 1.9 | 17.7 | 19.6 | |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | 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 | 181 | **8** | 189 | **65** | **108** | **173** | 3 | 66 | 69 | **431** |
| 05:15 PM | 166 | 7 | 173 | 40 | 68 | 108 | 7 | 64 | 71 | 352 |
| 05:30 PM | 168 | 5 | 173 | 49 | 58 | 107 | 4 | **71** | 75 | 355 |
| 05:45 PM | **204** | 3 | **207** | 62 | 51 | 113 | **16** | 65 | **81** | 401 |
| Total Volume | 719 | 23 | 742 | 216 | 285 | 501 | 30 | 266 | 296 | 1539 |
| % App. Total | 96.9 | 3.1 | | 43.1 | 56.9 | | 10.1 | 89.9 | | |
| PHF | .881 | .719 | .896 | .831 | .660 | .724 | .469 | .937 | .914 | .893 |

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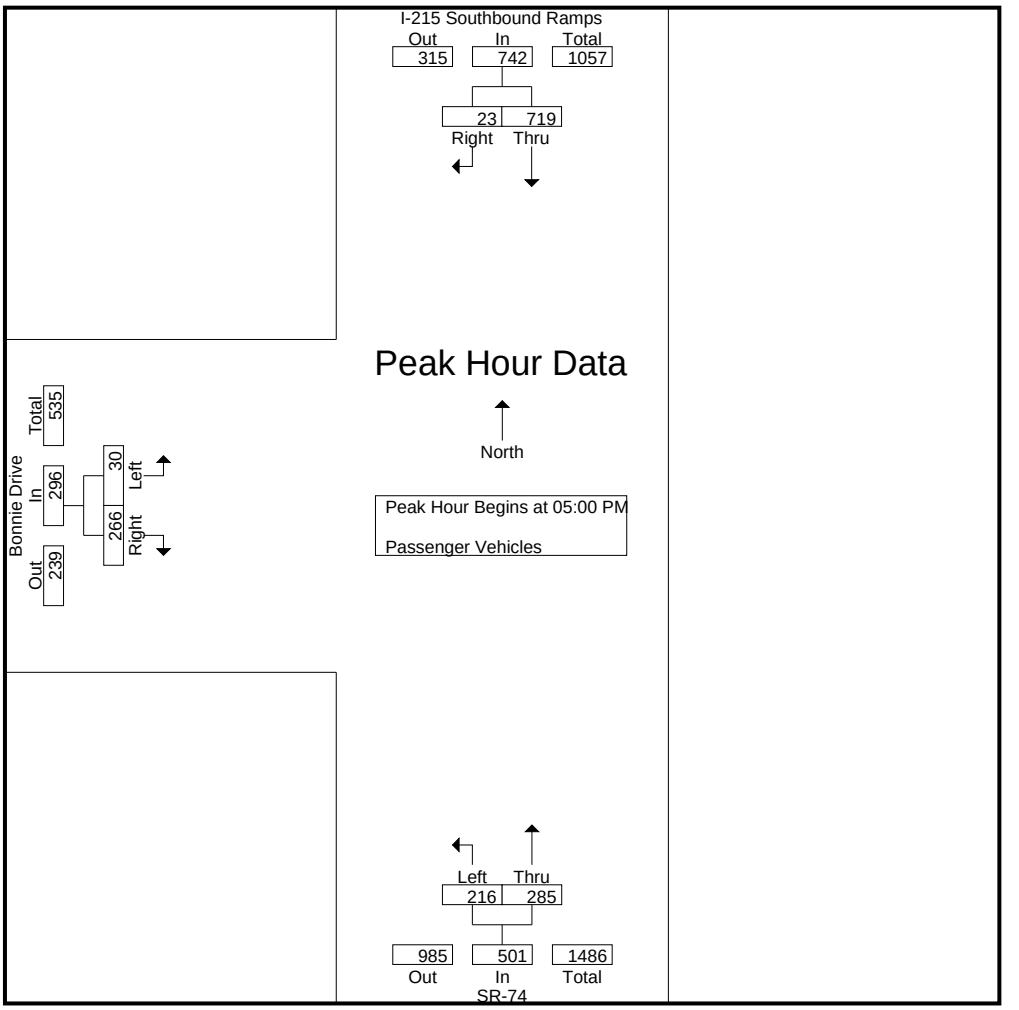
City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 181 | **8** | 189 | **65** | **108** | **173** | 3 | 66 | 69 |
| +15 mins. | 166 | 7 | 173 | 40 | 68 | 108 | 7 | 64 | 71 |
| +30 mins. | 168 | 5 | 173 | 49 | 58 | 107 | 4 | **71** | 75 |
| +45 mins. | **204** | 3 | **207** | 62 | 51 | 113 | **16** | 65 | **81** |
| Total Volume | 719 | 23 | 742 | 216 | 285 | 501 | 30 | 266 | 296 |
| % App. Total | 96.9 | 3.1 | | 43.1 | 56.9 | | 10.1 | 89.9 | |
| PHF | .881 | .719 | .896 | .831 | .660 | .724 | .469 | .937 | .914 |

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City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 04:00 PM | 3 | 0 | 3 | 4 | 3 | 7 | 0 | 2 | 2 | 12 |
| 04:15 PM | 8 | 0 | 8 | 3 | 1 | 4 | 0 | 0 | 0 | 12 |
| 04:30 PM | 4 | 0 | 4 | 4 | 2 | 6 | 2 | 1 | 3 | 13 |
| 04:45 PM | 6 | 0 | 6 | 2 | 1 | 3 | 0 | 0 | 0 | 9 |
| Total | 21 | 0 | 21 | 13 | 7 | 20 | 2 | 3 | 5 | 46 |
| | | | | | | | | | | |
| 05:00 PM | 8 | 0 | 8 | 3 | 1 | 4 | 1 | 0 | 1 | 13 |
| 05:15 PM | 9 | 0 | 9 | 3 | 1 | 4 | 0 | 0 | 0 | 13 |
| 05:30 PM | 8 | 0 | 8 | 1 | 0 | 1 | 0 | 1 | 1 | 10 |
| 05:45 PM | 2 | 0 | 2 | 2 | 4 | 6 | 0 | 1 | 1 | 9 |
| Total | 27 | 0 | 27 | 9 | 6 | 15 | 1 | 2 | 3 | 45 |
| | | | | | | | | | | |
| Grand Total | 48 | 0 | 48 | 22 | 13 | 35 | 3 | 5 | 8 | 91 |
| Apprch % | 100 | 0 | | 62.9 | 37.1 | | 37.5 | 62.5 | | |
| Total % | 52.7 | 0 | 52.7 | 24.2 | 14.3 | 38.5 | 3.3 | 5.5 | 8.8 | |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | 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 | 8 | 0 | 8 | **3** | 1 | 4 | **1** | 0 | **1** | **13** |
| 05:15 PM | **9** | 0 | **9** | 3 | 1 | 4 | 0 | 0 | 0 | 13 |
| 05:30 PM | 8 | 0 | 8 | 1 | 0 | 1 | 0 | **1** | 1 | 10 |
| 05:45 PM | 2 | 0 | 2 | 2 | **4** | **6** | 0 | 1 | 1 | 9 |
| Total Volume | 27 | 0 | 27 | 9 | 6 | 15 | 1 | 2 | 3 | 45 |
| % App. Total | 100 | 0 | | 60 | 40 | | 33.3 | 66.7 | | |
| PHF | .750 | .000 | .750 | .750 | .375 | .625 | .250 | .500 | .750 | .865 |

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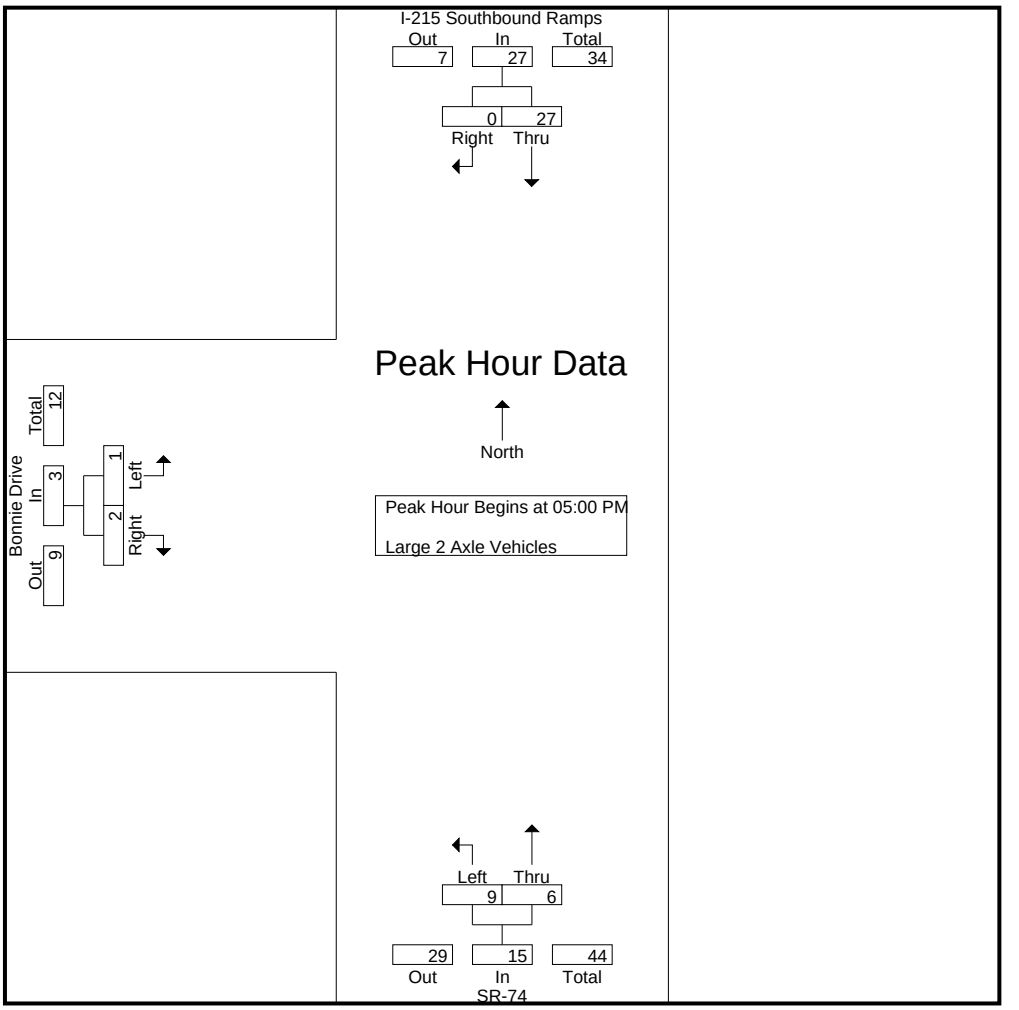
City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 8 | 0 | 8 | **3** | 1 | 4 | **1** | 0 | **1** |
| +15 mins. | **9** | 0 | **9** | 3 | 1 | 4 | 0 | 0 | 0 |
| +30 mins. | 8 | 0 | 8 | 1 | 0 | 1 | 0 | **1** | 1 |
| +45 mins. | 2 | 0 | 2 | 2 | **4** | **6** | 0 | 1 | 1 |
| Total Volume | 27 | 0 | 27 | 9 | 6 | 15 | 1 | 2 | 3 |
| % App. Total | 100 | 0 | | 60 | 40 | | 33.3 | 66.7 | |
| PHF | .750 | .000 | .750 | .750 | .375 | .625 | .250 | .500 | .750 |

Counts Unlimited, Inc.
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City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 04:00 PM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:15 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 1 | 3 |
| 04:30 PM | 1 | 0 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 3 |
| 04:45 PM | 0 | 0 | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 3 |
| Total | 2 | 0 | 2 | 6 | 1 | 7 | 0 | 1 | 1 | 10 |
| | | | | | | | | | | |
| 05:00 PM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 |
| 05:15 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 |
| 05:30 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 |
| 05:45 PM | 1 | 0 | 1 | 3 | 0 | 3 | 0 | 0 | 0 | 4 |
| Total | 1 | 0 | 1 | 10 | 0 | 10 | 0 | 0 | 0 | 11 |
| | | | | | | | | | | |
| Grand Total | 3 | 0 | 3 | 16 | 1 | 17 | 0 | 1 | 1 | 21 |
| Apprch % | 100 | 0 | | 94.1 | 5.9 | | 0 | 100 | | |
| Total % | 14.3 | 0 | 14.3 | 76.2 | 4.8 | 81 | 0 | 4.8 | 4.8 | |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | 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 | **3** | 0 | **3** | 0 | 0 | 0 | 3 |
| 05:15 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 |
| 05:30 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 |
| 05:45 PM | **1** | 0 | **1** | 3 | 0 | 3 | 0 | 0 | 0 | **4** |
| Total Volume | 1 | 0 | 1 | 10 | 0 | 10 | 0 | 0 | 0 | 11 |
| % App. Total | 100 | 0 | | 100 | 0 | | 0 | 0 | | |
| PHF | .250 | .000 | .250 | .833 | .000 | .833 | .000 | .000 | .000 | .688 |

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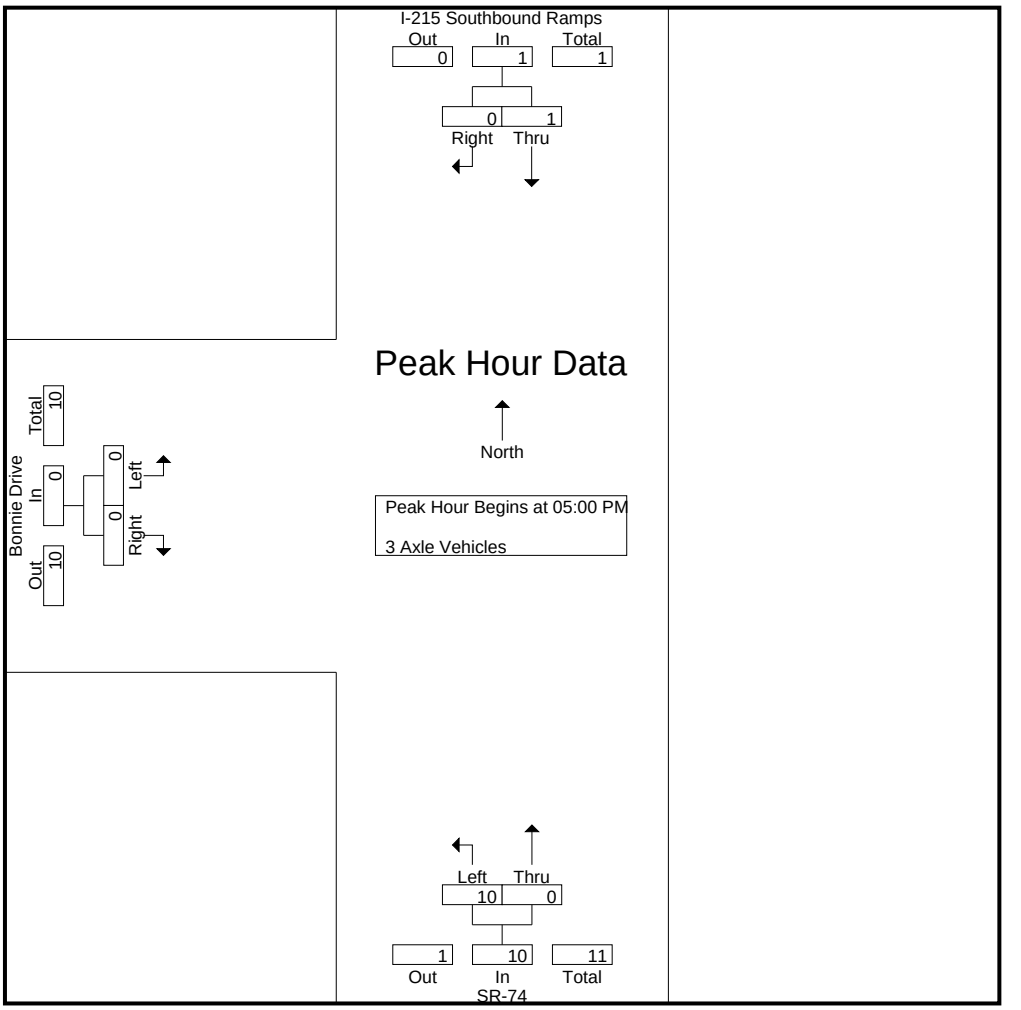
City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | **3** | 0 | **3** | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 |
| +45 mins. | **1** | 0 | **1** | 3 | 0 | 3 | 0 | 0 | 0 |
| Total Volume | 1 | 0 | 1 | 10 | 0 | 10 | 0 | 0 | 0 |
| % App. Total | 100 | 0 | | 100 | 0 | | 0 | 0 | |
| PHF | .250 | .000 | .250 | .833 | .000 | .833 | .000 | .000 | .000 |

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City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | Right | App. Total | Int. Total |
| 04:00 PM | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 1 | 3 |
| 04:15 PM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 4 |
| | | | | | | | | | | |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:15 PM | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 05:30 PM | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 05:45 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| Total | 4 | 0 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 5 |
| | | | | | | | | | | |
| Grand Total | 7 | 0 | 7 | 0 | 1 | 1 | 0 | 1 | 1 | 9 |
| Apprch % | 100 | 0 | | 0 | 100 | | 0 | 100 | | |
| Total % | 77.8 | 0 | 77.8 | 0 | 11.1 | 11.1 | 0 | 11.1 | 11.1 | |

| | I-215 Southbound Ramps Southbound | | | SR-74 Northbound | | | Bonnie Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Right | App. Total | Left | Thru | App. Total | Left | 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 |
| 05:15 PM | **2** | 0 | **2** | 0 | 0 | 0 | 0 | 0 | 0 | **2** |
| 05:30 PM | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 05:45 PM | 0 | 0 | 0 | 0 | **1** | **1** | 0 | 0 | 0 | 1 |
| Total Volume | 4 | 0 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 5 |
| % App. Total | 100 | 0 | | 0 | 100 | | 0 | 0 | | |
| PHF | .500 | .000 | .500 | .000 | .250 | .250 | .000 | .000 | .000 | .625 |

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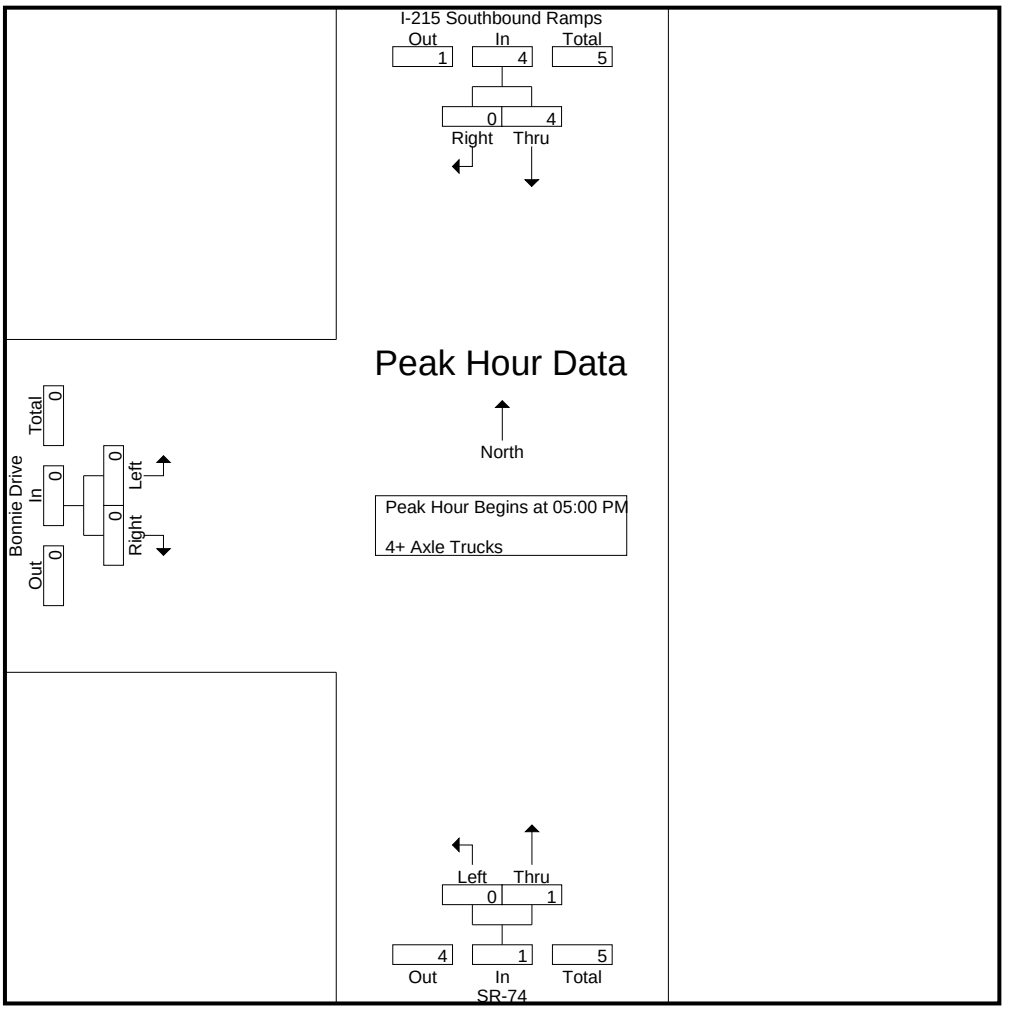
City of Perris
N/S: I-215 Southbound Ramps/SR-74
E/W: Bonnie Drive
Weather: Clear

File Name : 01_PER_215S_Bonnie PM
Site Code : 00322221
Start Date : 3/10/2022
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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. | **2** | 0 | **2** | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 0 | 0 | 0 | **1** | **1** | 0 | 0 | 0 |
| Total Volume | 4 | 0 | 4 | 0 | 1 | 1 | 0 | 0 | 0 |
| % App. Total | 100 | 0 | | 0 | 100 | | 0 | 0 | |
| PHF | .500 | .000 | .500 | .000 | .250 | .250 | .000 | .000 | .000 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

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

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 32 | 5 | 37 | 145 | 175 | 320 | 8 | 155 | 163 | 520 |
| 07:15 AM | 48 | 4 | 52 | 150 | 199 | 349 | 2 | 179 | 181 | 582 |
| 07:30 AM | 41 | 2 | 43 | 153 | 185 | 338 | 3 | 150 | 153 | 534 |
| 07:45 AM | 28 | 2 | 30 | 177 | 184 | 361 | 1 | 160 | 161 | 552 |
| Total | 149 | 13 | 162 | 625 | 743 | 1368 | 14 | 644 | 658 | 2188 |
| | | | | | | | | | | |
| 08:00 AM | 27 | 4 | 31 | 131 | 198 | 329 | 3 | 147 | 150 | 510 |
| 08:15 AM | 26 | 0 | 26 | 119 | 150 | 269 | 1 | 159 | 160 | 455 |
| 08:30 AM | 30 | 5 | 35 | 103 | 150 | 253 | 2 | 149 | 151 | 439 |
| 08:45 AM | 24 | 2 | 26 | 107 | 145 | 252 | 3 | 133 | 136 | 414 |
| Total | 107 | 11 | 118 | 460 | 643 | 1103 | 9 | 588 | 597 | 1818 |
| | | | | | | | | | | |
| Grand Total | 256 | 24 | 280 | 1085 | 1386 | 2471 | 23 | 1232 | 1255 | 4006 |
| Apprch % | 91.4 | 8.6 | | 43.9 | 56.1 | | 1.8 | 98.2 | | |
| Total % | 6.4 | 0.6 | 7 | 27.1 | 34.6 | 61.7 | 0.6 | 30.8 | 31.3 | |
| Passenger Vehicles | 231 | 18 | 249 | 971 | 1300 | 2271 | 22 | 1062 | 1084 | 3604 |
| % Passenger Vehicles | 90.2 | 75 | 88.9 | 89.5 | 93.8 | 91.9 | 95.7 | 86.2 | 86.4 | 90 |
| Large 2 Axle Vehicles | 12 | 2 | 14 | 68 | 42 | 110 | 0 | 86 | 86 | 210 |
| % Large 2 Axle Vehicles | 4.7 | 8.3 | 5 | 6.3 | 3 | 4.5 | 0 | 7 | 6.9 | 5.2 |
| 3 Axle Vehicles | 2 | 1 | 3 | 18 | 12 | 30 | 0 | 37 | 37 | 70 |
| % 3 Axle Vehicles | 0.8 | 4.2 | 1.1 | 1.7 | 0.9 | 1.2 | 0 | 3 | 2.9 | 1.7 |
| 4+ Axle Trucks | 11 | 3 | 14 | 28 | 32 | 60 | 1 | 47 | 48 | 122 |
| % 4+ Axle Trucks | 4.3 | 12.5 | 5 | 2.6 | 2.3 | 2.4 | 4.3 | 3.8 | 3.8 | 3 |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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 07:00 AM | | | | | | | | | | |
| 07:00 AM | 32 | **5** | 37 | 145 | 175 | 320 | **8** | 155 | 163 | 520 |
| 07:15 AM | **48** | 4 | **52** | 150 | **199** | 349 | 2 | **179** | **181** | **582** |
| 07:30 AM | 41 | 2 | 43 | 153 | 185 | 338 | 3 | 150 | 153 | 534 |
| 07:45 AM | 28 | 2 | 30 | **177** | 184 | **361** | 1 | 160 | 161 | 552 |
| Total Volume | 149 | 13 | 162 | 625 | 743 | 1368 | 14 | 644 | 658 | 2188 |
| % App. Total | 92 | 8 | | 45.7 | 54.3 | | 2.1 | 97.9 | | |
| PHF | .776 | .650 | .779 | .883 | .933 | .947 | .438 | .899 | .909 | .940 |

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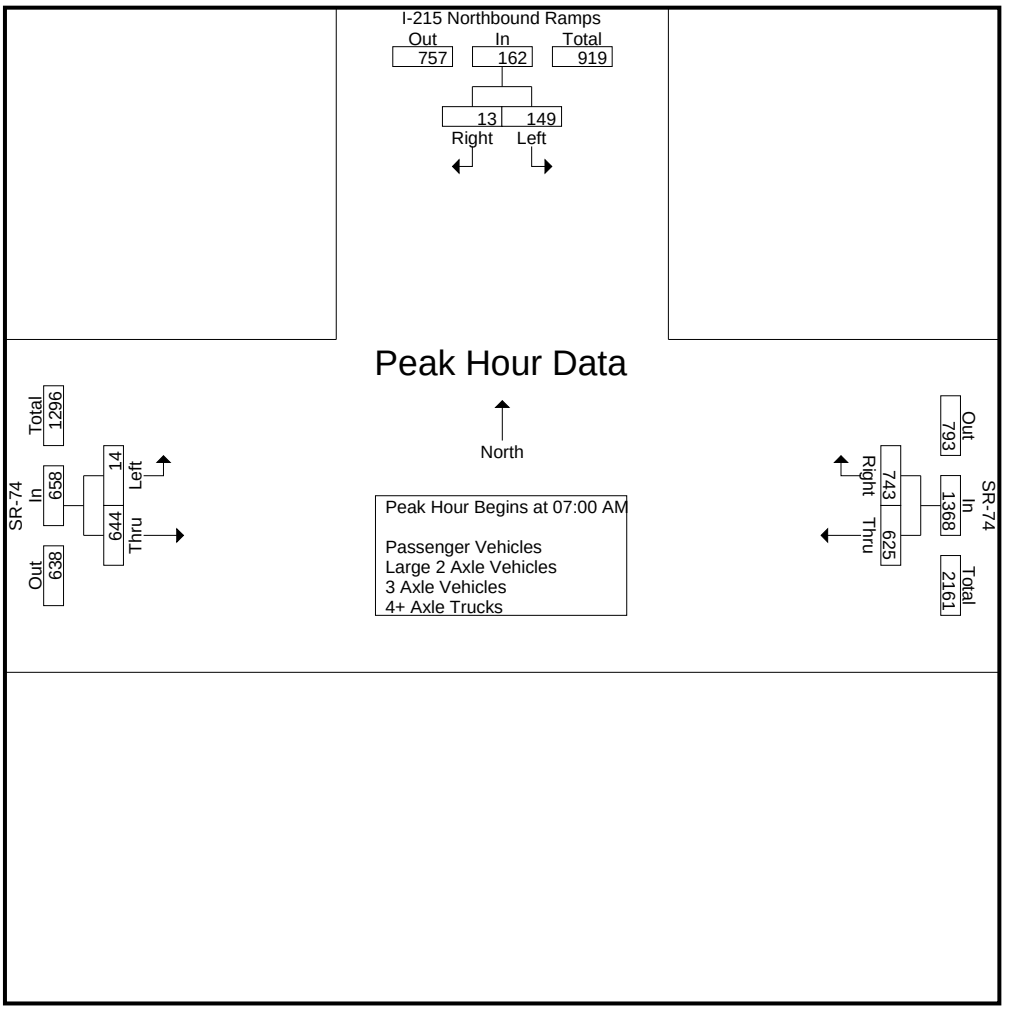
City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
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:

| | 07:00 AM | | | 07:15 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 32 | **5** | 37 | 150 | **199** | 349 | **8** | 155 | 163 |
| +15 mins. | **48** | 4 | **52** | 153 | 185 | 338 | 2 | **179** | **181** |
| +30 mins. | 41 | 2 | 43 | **177** | 184 | **361** | 3 | 150 | 153 |
| +45 mins. | 28 | 2 | 30 | 131 | 198 | 329 | 1 | 160 | 161 |
| Total Volume | 149 | 13 | 162 | 611 | 766 | 1377 | 14 | 644 | 658 |
| % App. Total | 92 | 8 | | 44.4 | 55.6 | | 2.1 | 97.9 | |
| PHF | .776 | .650 | .779 | .863 | .962 | .954 | .438 | .899 | .909 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 30 | 5 | 35 | 105 | 162 | 267 | 8 | 127 | 135 | 437 |
| 07:15 AM | 44 | 3 | 47 | 131 | 188 | 319 | 2 | 156 | 158 | 524 |
| 07:30 AM | 35 | 1 | 36 | 133 | 177 | 310 | 3 | 126 | 129 | 475 |
| 07:45 AM | 24 | 1 | 25 | 171 | 178 | 349 | 1 | 139 | 140 | 514 |
| Total | 133 | 10 | 143 | 540 | 705 | 1245 | 14 | 548 | 562 | 1950 |
| | | | | | | | | | | |
| 08:00 AM | 24 | 3 | 27 | 126 | 180 | 306 | 3 | 125 | 128 | 461 |
| 08:15 AM | 23 | 0 | 23 | 109 | 138 | 247 | 1 | 142 | 143 | 413 |
| 08:30 AM | 28 | 4 | 32 | 95 | 144 | 239 | 2 | 131 | 133 | 404 |
| 08:45 AM | 23 | 1 | 24 | 101 | 133 | 234 | 2 | 116 | 118 | 376 |
| Total | 98 | 8 | 106 | 431 | 595 | 1026 | 8 | 514 | 522 | 1654 |
| | | | | | | | | | | |
| Grand Total | 231 | 18 | 249 | 971 | 1300 | 2271 | 22 | 1062 | 1084 | 3604 |
| Apprch % | 92.8 | 7.2 | | 42.8 | 57.2 | | 2 | 98 | | |
| Total % | 6.4 | 0.5 | 6.9 | 26.9 | 36.1 | 63 | 0.6 | 29.5 | 30.1 | |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | 30 | **5** | 35 | 105 | 162 | 267 | **8** | 127 | 135 | 437 |
| 07:15 AM | **44** | 3 | **47** | 131 | **188** | 319 | 2 | **156** | **158** | **524** |
| 07:30 AM | 35 | 1 | 36 | 133 | 177 | 310 | 3 | 126 | 129 | 475 |
| 07:45 AM | 24 | 1 | 25 | **171** | 178 | **349** | 1 | 139 | 140 | 514 |
| Total Volume | 133 | 10 | 143 | 540 | 705 | 1245 | 14 | 548 | 562 | 1950 |
| % App. Total | 93 | 7 | | 43.4 | 56.6 | | 2.5 | 97.5 | | |
| PHF | .756 | .500 | .761 | .789 | .938 | .892 | .438 | .878 | .889 | .930 |

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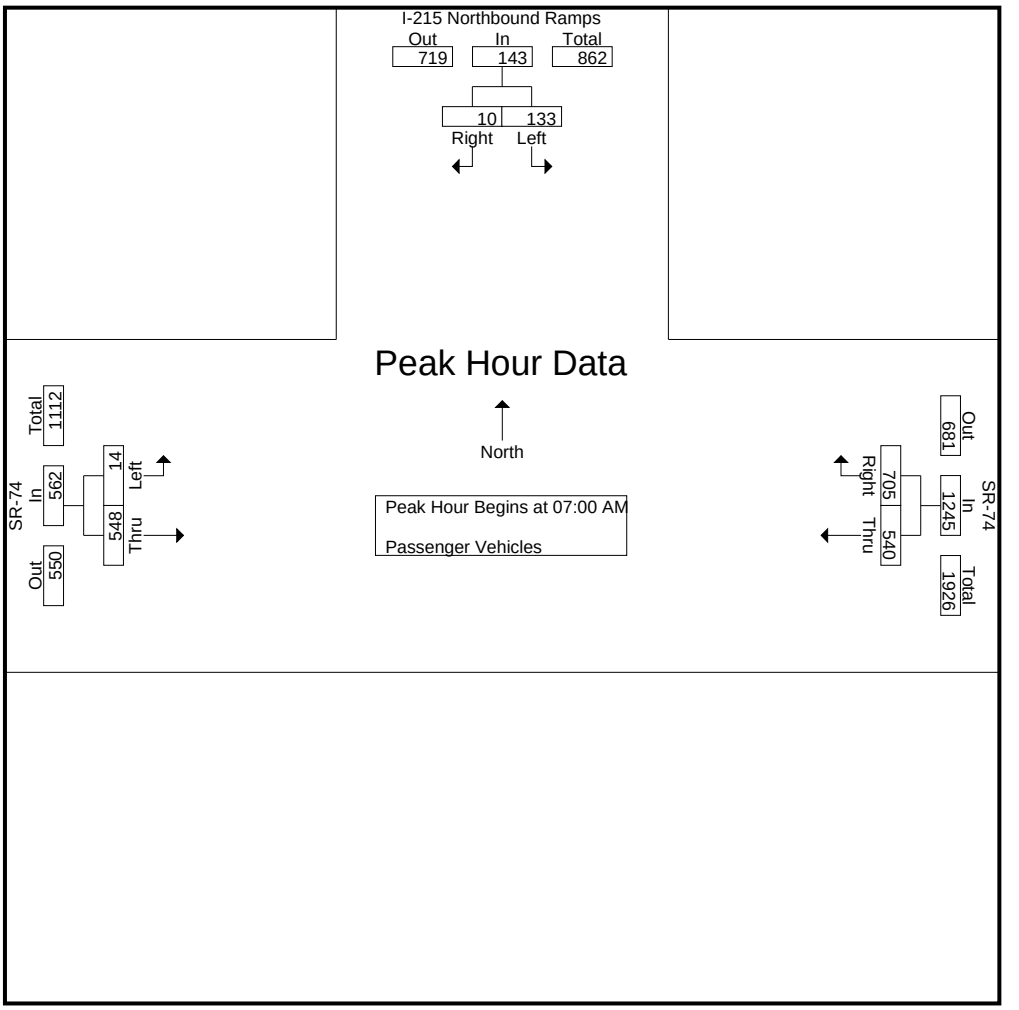
City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 30 | **5** | 35 | 105 | 162 | 267 | **8** | 127 | 135 |
| +15 mins. | **44** | 3 | **47** | 131 | **188** | 319 | 2 | **156** | **158** |
| +30 mins. | 35 | 1 | 36 | 133 | 177 | 310 | 3 | 126 | 129 |
| +45 mins. | 24 | 1 | 25 | **171** | 178 | **349** | 1 | 139 | 140 |
| Total Volume | 133 | 10 | 143 | 540 | 705 | 1245 | 14 | 548 | 562 |
| % App. Total | 93 | 7 | | 43.4 | 56.6 | | 2.5 | 97.5 | |
| PHF | .756 | .500 | .761 | .789 | .938 | .892 | .438 | .878 | .889 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 1 | 0 | 1 | 22 | 6 | 28 | 0 | 12 | 12 | 41 |
| 07:15 AM | 2 | 0 | 2 | 10 | 6 | 16 | 0 | 14 | 14 | 32 |
| 07:30 AM | 2 | 1 | 3 | 13 | 5 | 18 | 0 | 10 | 10 | 31 |
| 07:45 AM | 2 | 1 | 3 | 5 | 3 | 8 | 0 | 13 | 13 | 24 |
| Total | 7 | 2 | 9 | 50 | 20 | 70 | 0 | 49 | 49 | 128 |
| | | | | | | | | | | |
| 08:00 AM | 1 | 0 | 1 | 1 | 10 | 11 | 0 | 11 | 11 | 23 |
| 08:15 AM | 3 | 0 | 3 | 7 | 6 | 13 | 0 | 9 | 9 | 25 |
| 08:30 AM | 1 | 0 | 1 | 5 | 0 | 5 | 0 | 6 | 6 | 12 |
| 08:45 AM | 0 | 0 | 0 | 5 | 6 | 11 | 0 | 11 | 11 | 22 |
| Total | 5 | 0 | 5 | 18 | 22 | 40 | 0 | 37 | 37 | 82 |
| | | | | | | | | | | |
| Grand Total | 12 | 2 | 14 | 68 | 42 | 110 | 0 | 86 | 86 | 210 |
| Apprch % | 85.7 | 14.3 | | 61.8 | 38.2 | | 0 | 100 | | |
| Total % | 5.7 | 1 | 6.7 | 32.4 | 20 | 52.4 | 0 | 41 | 41 | |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | 1 | 0 | 1 | **22** | **6** | **28** | 0 | 12 | 12 | **41** |
| 07:15 AM | **2** | 0 | 2 | 10 | 6 | 16 | 0 | **14** | **14** | 32 |
| 07:30 AM | 2 | **1** | **3** | 13 | 5 | 18 | 0 | 10 | 10 | 31 |
| 07:45 AM | 2 | 1 | 3 | 5 | 3 | 8 | 0 | 13 | 13 | 24 |
| Total Volume | 7 | 2 | 9 | 50 | 20 | 70 | 0 | 49 | 49 | 128 |
| % App. Total | 77.8 | 22.2 | | 71.4 | 28.6 | | 0 | 100 | | |
| PHF | .875 | .500 | .750 | .568 | .833 | .625 | .000 | .875 | .875 | .780 |

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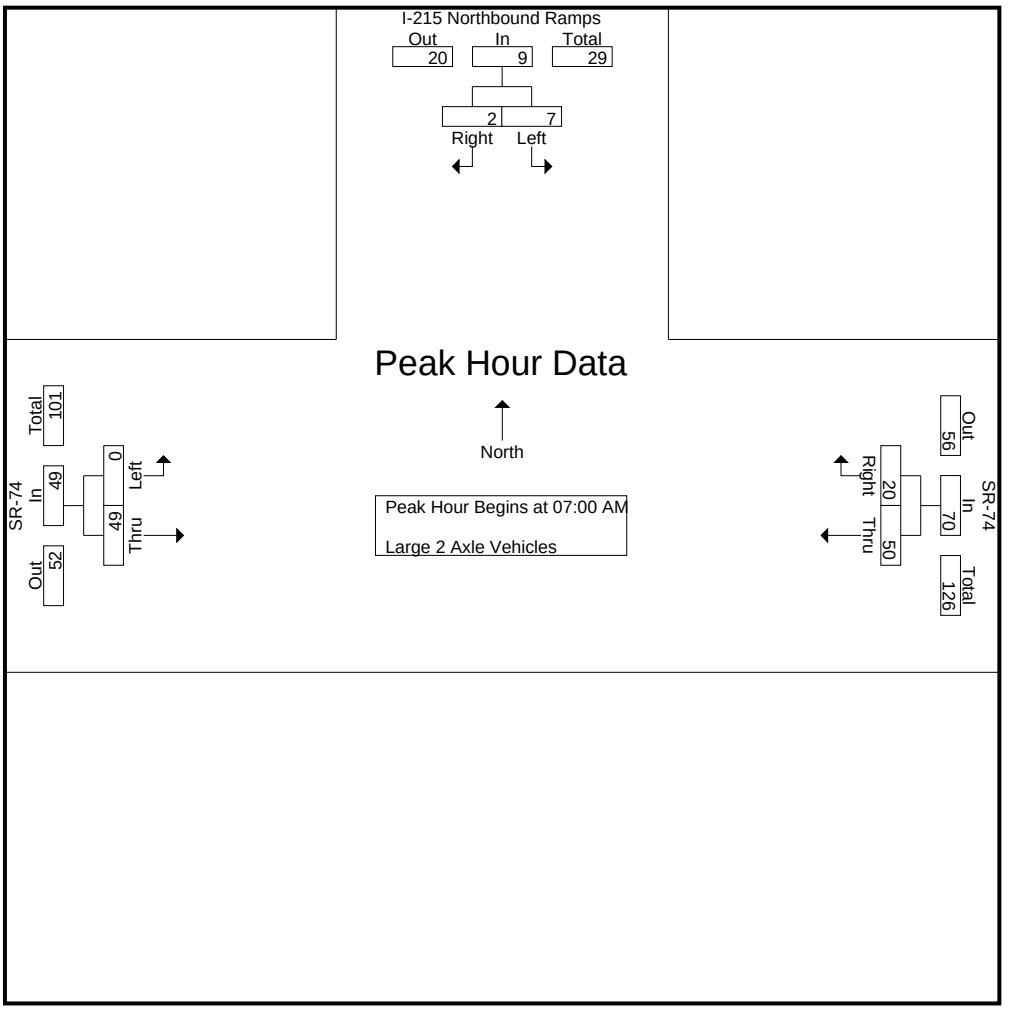
City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 1 | 0 | 1 | **22** | **6** | **28** | 0 | 12 | 12 |
| +15 mins. | **2** | 0 | 2 | 10 | 6 | 16 | 0 | **14** | **14** |
| +30 mins. | 2 | **1** | **3** | 13 | 5 | 18 | 0 | 10 | 10 |
| +45 mins. | 2 | 1 | 3 | 5 | 3 | 8 | 0 | 13 | 13 |
| Total Volume | 7 | 2 | 9 | 50 | 20 | 70 | 0 | 49 | 49 |
| % App. Total | 77.8 | 22.2 | | 71.4 | 28.6 | | 0 | 100 | |
| PHF | .875 | .500 | .750 | .568 | .833 | .625 | .000 | .875 | .875 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 5 | 2 | 7 | 0 | 8 | 8 | 15 |
| 07:15 AM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 5 | 5 | 8 |
| 07:30 AM | 1 | 0 | 1 | 2 | 2 | 4 | 0 | 4 | 4 | 9 |
| 07:45 AM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 3 |
| Total | 1 | 0 | 1 | 10 | 5 | 15 | 0 | 19 | 19 | 35 |
| | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 3 | 3 | 6 | 0 | 4 | 4 | 10 |
| 08:15 AM | 0 | 0 | 0 | 2 | 1 | 3 | 0 | 4 | 4 | 7 |
| 08:30 AM | 1 | 0 | 1 | 2 | 1 | 3 | 0 | 6 | 6 | 10 |
| 08:45 AM | 0 | 1 | 1 | 1 | 2 | 3 | 0 | 4 | 4 | 8 |
| Total | 1 | 1 | 2 | 8 | 7 | 15 | 0 | 18 | 18 | 35 |
| | | | | | | | | | | |
| Grand Total | 2 | 1 | 3 | 18 | 12 | 30 | 0 | 37 | 37 | 70 |
| Apprch % | 66.7 | 33.3 | | 60 | 40 | | 0 | 100 | | |
| Total % | 2.9 | 1.4 | 4.3 | 25.7 | 17.1 | 42.9 | 0 | 52.9 | 52.9 | |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | 0 | 0 | 0 | **5** | **2** | **7** | 0 | **8** | **8** | **15** |
| 07:15 AM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 5 | 5 | 8 |
| 07:30 AM | **1** | 0 | **1** | 2 | 2 | 4 | 0 | 4 | 4 | 9 |
| 07:45 AM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 3 |
| Total Volume | 1 | 0 | 1 | 10 | 5 | 15 | 0 | 19 | 19 | 35 |
| % App. Total | 100 | 0 | | 66.7 | 33.3 | | 0 | 100 | | |
| PHF | .250 | .000 | .250 | .500 | .625 | .536 | .000 | .594 | .594 | .583 |

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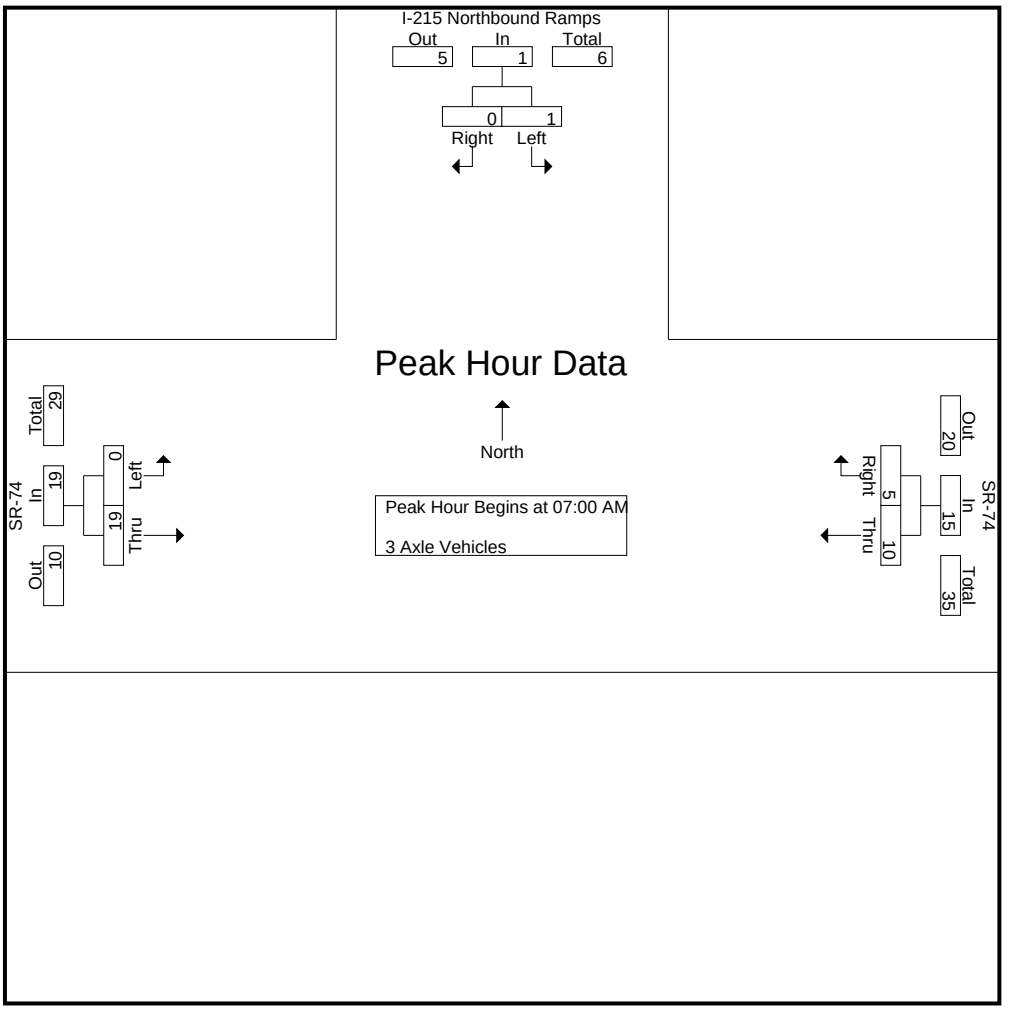
City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | **5** | **2** | **7** | 0 | **8** | **8** |
| +15 mins. | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 5 | 5 |
| +30 mins. | **1** | 0 | **1** | 2 | 2 | 4 | 0 | 4 | 4 |
| +45 mins. | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 |
| Total Volume | 1 | 0 | 1 | 10 | 5 | 15 | 0 | 19 | 19 |
| % App. Total | 100 | 0 | | 66.7 | 33.3 | | 0 | 100 | |
| PHF | .250 | .000 | .250 | .500 | .625 | .536 | .000 | .594 | .594 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 1 | 0 | 1 | 13 | 5 | 18 | 0 | 8 | 8 | 27 |
| 07:15 AM | 2 | 1 | 3 | 6 | 5 | 11 | 0 | 4 | 4 | 18 |
| 07:30 AM | 3 | 0 | 3 | 5 | 1 | 6 | 0 | 10 | 10 | 19 |
| 07:45 AM | 2 | 0 | 2 | 1 | 2 | 3 | 0 | 6 | 6 | 11 |
| Total | 8 | 1 | 9 | 25 | 13 | 38 | 0 | 28 | 28 | 75 |
| | | | | | | | | | | |
| 08:00 AM | 2 | 1 | 3 | 1 | 5 | 6 | 0 | 7 | 7 | 16 |
| 08:15 AM | 0 | 0 | 0 | 1 | 5 | 6 | 0 | 4 | 4 | 10 |
| 08:30 AM | 0 | 1 | 1 | 1 | 5 | 6 | 0 | 6 | 6 | 13 |
| 08:45 AM | 1 | 0 | 1 | 0 | 4 | 4 | 1 | 2 | 3 | 8 |
| Total | 3 | 2 | 5 | 3 | 19 | 22 | 1 | 19 | 20 | 47 |
| | | | | | | | | | | |
| Grand Total | 11 | 3 | 14 | 28 | 32 | 60 | 1 | 47 | 48 | 122 |
| Apprch % | 78.6 | 21.4 | | 46.7 | 53.3 | | 2.1 | 97.9 | | |
| Total % | 9 | 2.5 | 11.5 | 23 | 26.2 | 49.2 | 0.8 | 38.5 | 39.3 | |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | 1 | 0 | 1 | **13** | **5** | **18** | 0 | 8 | 8 | **27** |
| 07:15 AM | 2 | **1** | **3** | 6 | 5 | 11 | 0 | 4 | 4 | 18 |
| 07:30 AM | **3** | 0 | 3 | 5 | 1 | 6 | 0 | **10** | **10** | 19 |
| 07:45 AM | 2 | 0 | 2 | 1 | 2 | 3 | 0 | 6 | 6 | 11 |
| Total Volume | 8 | 1 | 9 | 25 | 13 | 38 | 0 | 28 | 28 | 75 |
| % App. Total | 88.9 | 11.1 | | 65.8 | 34.2 | | 0 | 100 | | |
| PHF | .667 | .250 | .750 | .481 | .650 | .528 | .000 | .700 | .700 | .694 |

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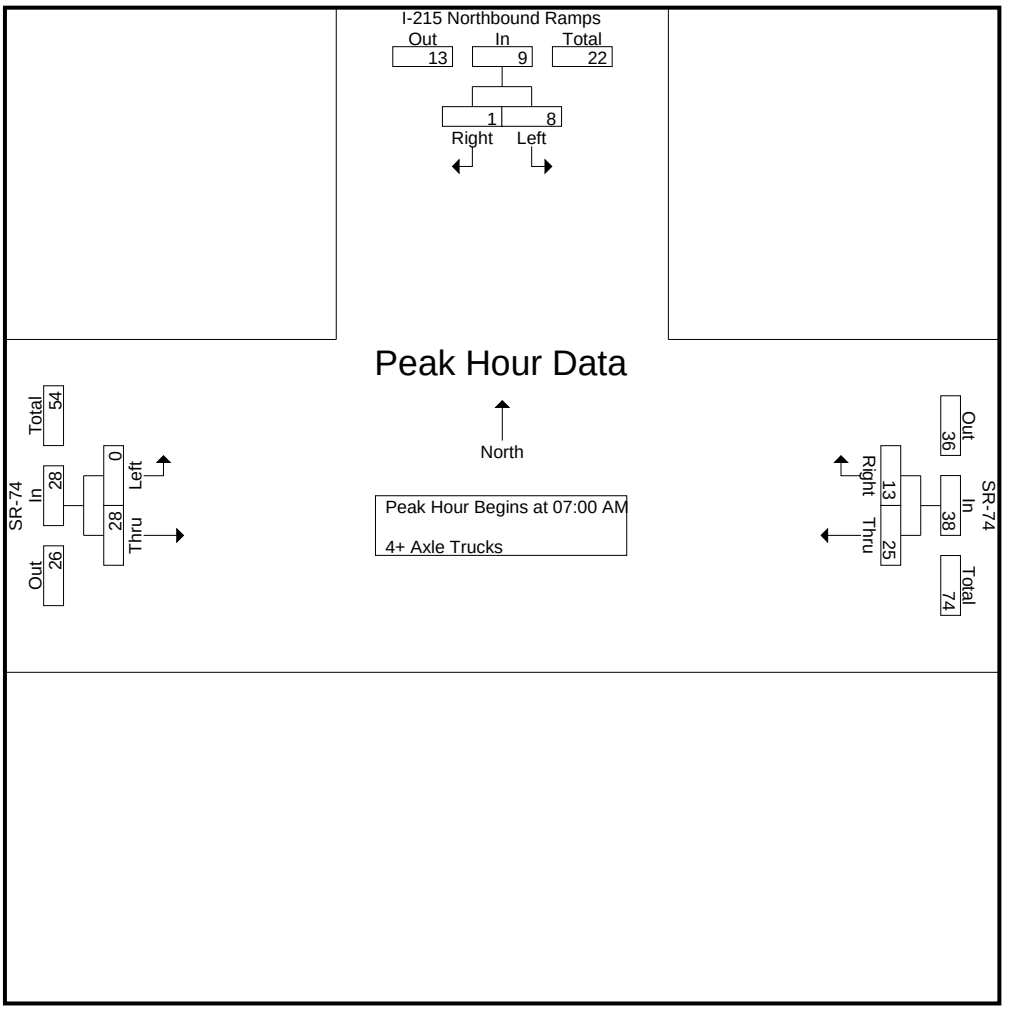
City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 1 | 0 | 1 | **13** | **5** | **18** | 0 | 8 | 8 |
| +15 mins. | 2 | **1** | **3** | 6 | 5 | 11 | 0 | 4 | 4 |
| +30 mins. | **3** | 0 | 3 | 5 | 1 | 6 | 0 | **10** | **10** |
| +45 mins. | 2 | 0 | 2 | 1 | 2 | 3 | 0 | 6 | 6 |
| Total Volume | 8 | 1 | 9 | 25 | 13 | 38 | 0 | 28 | 28 |
| % App. Total | 88.9 | 11.1 | | 65.8 | 34.2 | | 0 | 100 | |
| PHF | .667 | .250 | .750 | .481 | .650 | .528 | .000 | .700 | .700 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

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

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 52 | 5 | 57 | 126 | 169 | 295 | 4 | 268 | 272 | 624 |
| 04:15 PM | 54 | 9 | 63 | 132 | 178 | 310 | 3 | 246 | 249 | 622 |
| 04:30 PM | 44 | 9 | 53 | 125 | 169 | 294 | 3 | 236 | 239 | 586 |
| 04:45 PM | 65 | 7 | 72 | 94 | 158 | 252 | 3 | 246 | 249 | 573 |
| Total | 215 | 30 | 245 | 477 | 674 | 1151 | 13 | 996 | 1009 | 2405 |
| | | | | | | | | | | |
| 05:00 PM | 46 | 13 | 59 | 168 | 175 | 343 | 3 | 247 | 250 | 652 |
| 05:15 PM | 49 | 12 | 61 | 100 | 162 | 262 | 2 | 243 | 245 | 568 |
| 05:30 PM | 65 | 11 | 76 | 96 | 179 | 275 | 4 | 248 | 252 | 603 |
| 05:45 PM | 83 | 28 | 111 | 99 | 126 | 225 | 2 | 265 | 267 | 603 |
| Total | 243 | 64 | 307 | 463 | 642 | 1105 | 11 | 1003 | 1014 | 2426 |
| | | | | | | | | | | |
| Grand Total | 458 | 94 | 552 | 940 | 1316 | 2256 | 24 | 1999 | 2023 | 4831 |
| Apprch % | 83 | 17 | | 41.7 | 58.3 | | 1.2 | 98.8 | | |
| Total % | 9.5 | 1.9 | 11.4 | 19.5 | 27.2 | 46.7 | 0.5 | 41.4 | 41.9 | |
| Passenger Vehicles | 404 | 90 | 494 | 901 | 1253 | 2154 | 23 | 1951 | 1974 | 4622 |
| % Passenger Vehicles | 88.2 | 95.7 | 89.5 | 95.9 | 95.2 | 95.5 | 95.8 | 97.6 | 97.6 | 95.7 |
| Large 2 Axle Vehicles | 42 | 3 | 45 | 20 | 43 | 63 | 0 | 34 | 34 | 142 |
| % Large 2 Axle Vehicles | 9.2 | 3.2 | 8.2 | 2.1 | 3.3 | 2.8 | 0 | 1.7 | 1.7 | 2.9 |
| 3 Axle Vehicles | 5 | 0 | 5 | 17 | 7 | 24 | 1 | 2 | 3 | 32 |
| % 3 Axle Vehicles | 1.1 | 0 | 0.9 | 1.8 | 0.5 | 1.1 | 4.2 | 0.1 | 0.1 | 0.7 |
| 4+ Axle Trucks | 7 | 1 | 8 | 2 | 13 | 15 | 0 | 12 | 12 | 35 |
| % 4+ Axle Trucks | 1.5 | 1.1 | 1.4 | 0.2 | 1 | 0.7 | 0 | 0.6 | 0.6 | 0.7 |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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 | 54 | 9 | 63 | 132 | **178** | 310 | **3** | 246 | 249 | 622 |
| 04:30 PM | 44 | 9 | 53 | 125 | 169 | 294 | 3 | 236 | 239 | 586 |
| 04:45 PM | **65** | 7 | **72** | 94 | 158 | 252 | 3 | 246 | 249 | 573 |
| 05:00 PM | 46 | **13** | 59 | **168** | 175 | **343** | 3 | **247** | **250** | **652** |
| Total Volume | 209 | 38 | 247 | 519 | 680 | 1199 | 12 | 975 | 987 | 2433 |
| % App. Total | 84.6 | 15.4 | | 43.3 | 56.7 | | 1.2 | 98.8 | | |
| PHF | .804 | .731 | .858 | .772 | .955 | .874 | 1.00 | .987 | .987 | .933 |

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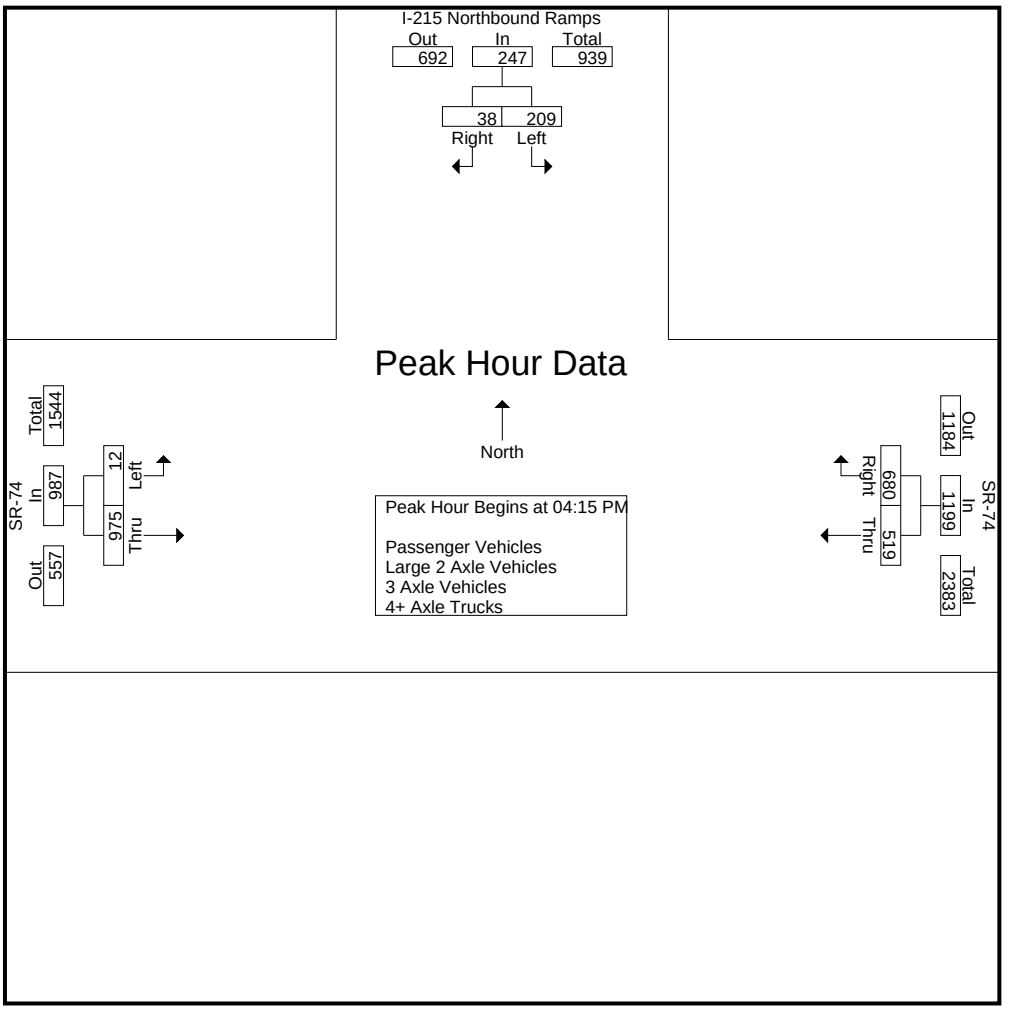
City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 46 | 13 | 59 | 132 | **178** | 310 | 3 | 247 | 250 |
| +15 mins. | 49 | 12 | 61 | 125 | 169 | 294 | 2 | 243 | 245 |
| +30 mins. | 65 | 11 | 76 | 94 | 158 | 252 | **4** | 248 | 252 |
| +45 mins. | **83** | **28** | **111** | **168** | 175 | **343** | 2 | **265** | **267** |
| Total Volume | 243 | 64 | 307 | 519 | 680 | 1199 | 11 | 1003 | 1014 |
| % App. Total | 79.2 | 20.8 | | 43.3 | 56.7 | | 1.1 | 98.9 | |
| PHF | .732 | .571 | .691 | .772 | .955 | .874 | .688 | .946 | .949 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 46 | 5 | 51 | 121 | 156 | 277 | 4 | 258 | 262 | 590 |
| 04:15 PM | 48 | 9 | 57 | 126 | 165 | 291 | 2 | 241 | 243 | 591 |
| 04:30 PM | 37 | 8 | 45 | 119 | 164 | 283 | 3 | 231 | 234 | 562 |
| 04:45 PM | 57 | 7 | 64 | 90 | 150 | 240 | 3 | 242 | 245 | 549 |
| Total | 188 | 29 | 217 | 456 | 635 | 1091 | 12 | 972 | 984 | 2292 |
| | | | | | | | | | | |
| 05:00 PM | 41 | 12 | 53 | 164 | 165 | 329 | 3 | 243 | 246 | 628 |
| 05:15 PM | 43 | 12 | 55 | 95 | 157 | 252 | 2 | 234 | 236 | 543 |
| 05:30 PM | 59 | 11 | 70 | 94 | 174 | 268 | 4 | 241 | 245 | 583 |
| 05:45 PM | 73 | 26 | 99 | 92 | 122 | 214 | 2 | 261 | 263 | 576 |
| Total | 216 | 61 | 277 | 445 | 618 | 1063 | 11 | 979 | 990 | 2330 |
| | | | | | | | | | | |
| Grand Total | 404 | 90 | 494 | 901 | 1253 | 2154 | 23 | 1951 | 1974 | 4622 |
| Apprch % | 81.8 | 18.2 | | 41.8 | 58.2 | | 1.2 | 98.8 | | |
| Total % | 8.7 | 1.9 | 10.7 | 19.5 | 27.1 | 46.6 | 0.5 | 42.2 | 42.7 | |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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 | 48 | 9 | 57 | 126 | **165** | 291 | 2 | 241 | 243 | 591 |
| 04:30 PM | 37 | 8 | 45 | 119 | 164 | 283 | **3** | 231 | 234 | 562 |
| 04:45 PM | **57** | 7 | **64** | 90 | 150 | 240 | 3 | 242 | 245 | 549 |
| 05:00 PM | 41 | **12** | 53 | **164** | 165 | **329** | 3 | **243** | **246** | **628** |
| Total Volume | 183 | 36 | 219 | 499 | 644 | 1143 | 11 | 957 | 968 | 2330 |
| % App. Total | 83.6 | 16.4 | | 43.7 | 56.3 | | 1.1 | 98.9 | | |
| PHF | .803 | .750 | .855 | .761 | .976 | .869 | .917 | .985 | .984 | .928 |

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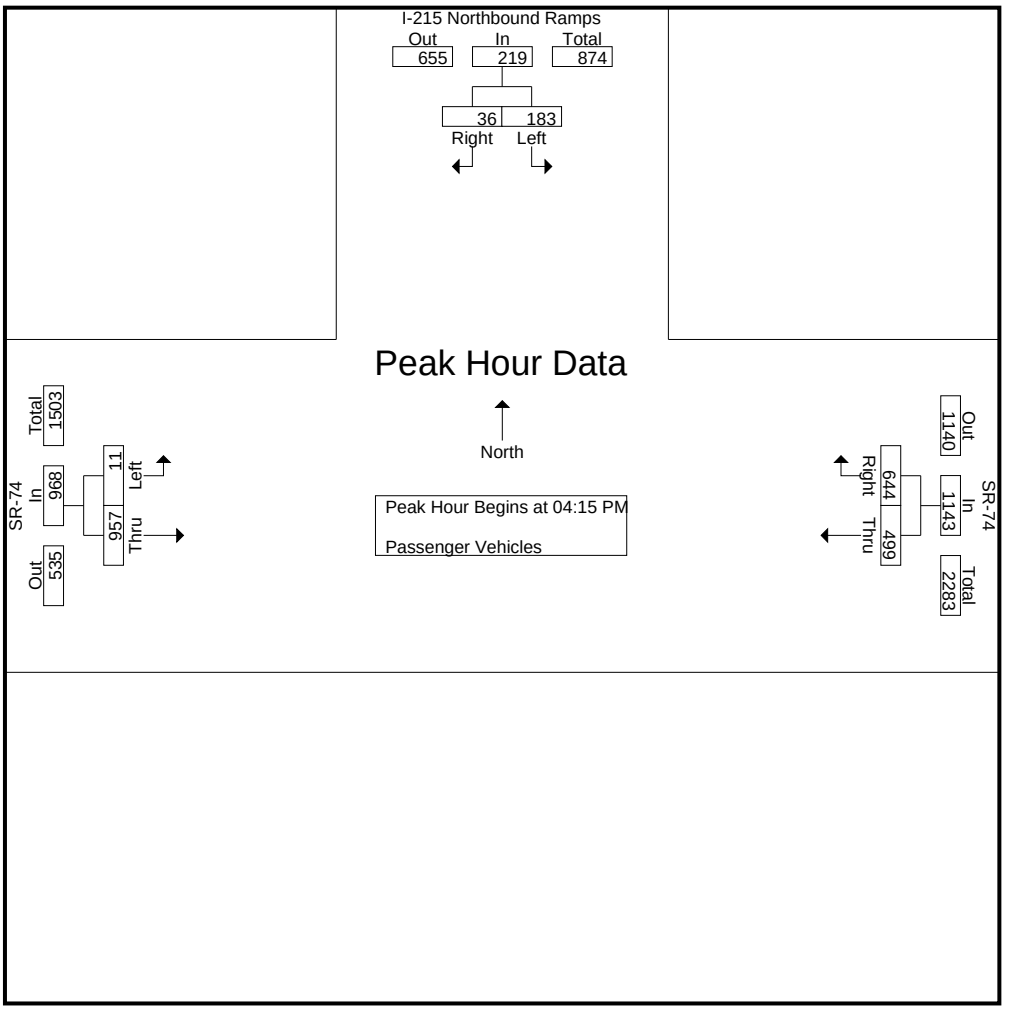
City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 48 | 9 | 57 | 126 | **165** | 291 | 2 | 241 | 243 |
| +15 mins. | 37 | 8 | 45 | 119 | 164 | 283 | **3** | 231 | 234 |
| +30 mins. | **57** | 7 | **64** | 90 | 150 | 240 | 3 | 242 | 245 |
| +45 mins. | 41 | **12** | 53 | **164** | 165 | **329** | 3 | **243** | **246** |
| Total Volume | 183 | 36 | 219 | 499 | 644 | 1143 | 11 | 957 | 968 |
| % App. Total | 83.6 | 16.4 | | 43.7 | 56.3 | | 1.1 | 98.9 | |
| PHF | .803 | .750 | .855 | .761 | .976 | .869 | .917 | .985 | .984 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 6 | 0 | 6 | 5 | 10 | 15 | 0 | 5 | 5 | 26 |
| 04:15 PM | 4 | 0 | 4 | 3 | 8 | 11 | 0 | 4 | 4 | 19 |
| 04:30 PM | 6 | 0 | 6 | 4 | 3 | 7 | 0 | 3 | 3 | 16 |
| 04:45 PM | 5 | 0 | 5 | 1 | 4 | 5 | 0 | 4 | 4 | 14 |
| Total | 21 | 0 | 21 | 13 | 25 | 38 | 0 | 16 | 16 | 75 |
| | | | | | | | | | | |
| 05:00 PM | 4 | 1 | 5 | 1 | 10 | 11 | 0 | 4 | 4 | 20 |
| 05:15 PM | 6 | 0 | 6 | 3 | 3 | 6 | 0 | 6 | 6 | 18 |
| 05:30 PM | 5 | 0 | 5 | 0 | 4 | 4 | 0 | 5 | 5 | 14 |
| 05:45 PM | 6 | 2 | 8 | 3 | 1 | 4 | 0 | 3 | 3 | 15 |
| Total | 21 | 3 | 24 | 7 | 18 | 25 | 0 | 18 | 18 | 67 |
| | | | | | | | | | | |
| Grand Total | 42 | 3 | 45 | 20 | 43 | 63 | 0 | 34 | 34 | 142 |
| Apprch % | 93.3 | 6.7 | | 31.7 | 68.3 | | 0 | 100 | | |
| Total % | 29.6 | 2.1 | 31.7 | 14.1 | 30.3 | 44.4 | 0 | 23.9 | 23.9 | |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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 | 4 | 0 | 4 | 3 | 8 | **11** | 0 | **4** | **4** | 19 |
| 04:30 PM | **6** | 0 | **6** | **4** | 3 | 7 | 0 | 3 | 3 | 16 |
| 04:45 PM | 5 | 0 | 5 | 1 | 4 | 5 | 0 | 4 | 4 | 14 |
| 05:00 PM | 4 | **1** | 5 | 1 | **10** | 11 | 0 | 4 | 4 | **20** |
| Total Volume | 19 | 1 | 20 | 9 | 25 | 34 | 0 | 15 | 15 | 69 |
| % App. Total | 95 | 5 | | 26.5 | 73.5 | | 0 | 100 | | |
| PHF | .792 | .250 | .833 | .563 | .625 | .773 | .000 | .938 | .938 | .863 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
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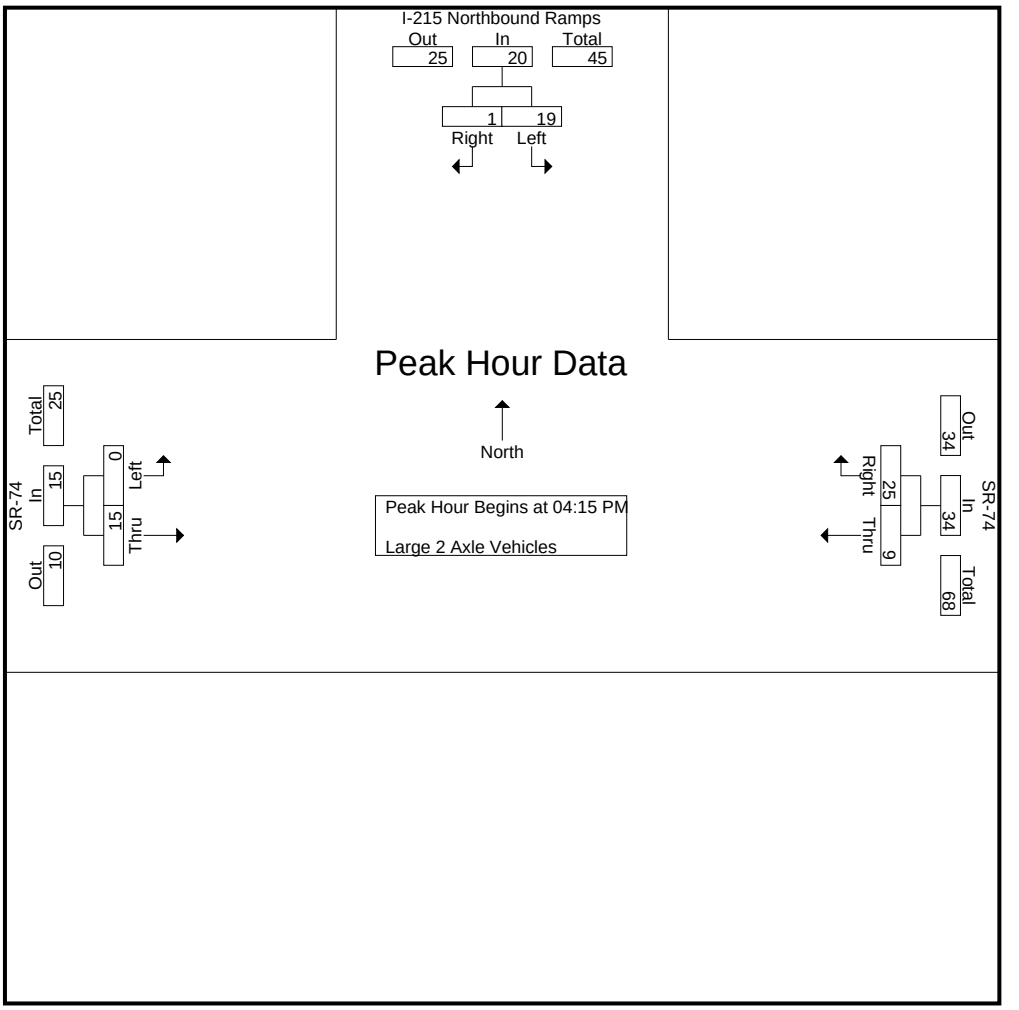


Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:15 PM | | | 04:15 PM | | | 04:15 PM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 4 | 0 | 4 | 3 | 8 | **11** | 0 | **4** | **4** |
| +15 mins. | **6** | 0 | **6** | **4** | 3 | 7 | 0 | 3 | 3 |
| +30 mins. | 5 | 0 | 5 | 1 | 4 | 5 | 0 | 4 | 4 |
| +45 mins. | 4 | **1** | 5 | 1 | **10** | 11 | 0 | 4 | 4 |
| Total Volume | 19 | 1 | 20 | 9 | 25 | 34 | 0 | 15 | 15 |
| % App. Total | 95 | 5 | | 26.5 | 73.5 | | 0 | 100 | |
| PHF | .792 | .250 | .833 | .563 | .625 | .773 | .000 | .938 | .938 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 1 | 3 |
| 04:15 PM | 0 | 0 | 0 | 2 | 1 | 3 | 1 | 0 | 1 | 4 |
| 04:30 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 |
| 04:45 PM | 2 | 0 | 2 | 3 | 1 | 4 | 0 | 0 | 0 | 6 |
| Total | 2 | 0 | 2 | 7 | 4 | 11 | 1 | 1 | 2 | 15 |
| | | | | | | | | | | |
| 05:00 PM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 |
| 05:15 PM | 0 | 0 | 0 | 2 | 2 | 4 | 0 | 0 | 0 | 4 |
| 05:30 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 |
| 05:45 PM | 3 | 0 | 3 | 3 | 1 | 4 | 0 | 1 | 1 | 8 |
| Total | 3 | 0 | 3 | 10 | 3 | 13 | 0 | 1 | 1 | 17 |
| | | | | | | | | | | |
| Grand Total | 5 | 0 | 5 | 17 | 7 | 24 | 1 | 2 | 3 | 32 |
| Apprch % | 100 | 0 | | 70.8 | 29.2 | | 33.3 | 66.7 | | |
| Total % | 15.6 | 0 | 15.6 | 53.1 | 21.9 | 75 | 3.1 | 6.2 | 9.4 | |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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 | 2 | **1** | 3 | **1** | 0 | **1** | 4 |
| 04:30 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 |
| 04:45 PM | **2** | 0 | **2** | **3** | 1 | **4** | 0 | 0 | 0 | **6** |
| 05:00 PM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 |
| Total Volume | 2 | 0 | 2 | 10 | 2 | 12 | 1 | 0 | 1 | 15 |
| % App. Total | 100 | 0 | | 83.3 | 16.7 | | 100 | 0 | | |
| PHF | .250 | .000 | .250 | .833 | .500 | .750 | .250 | .000 | .250 | .625 |

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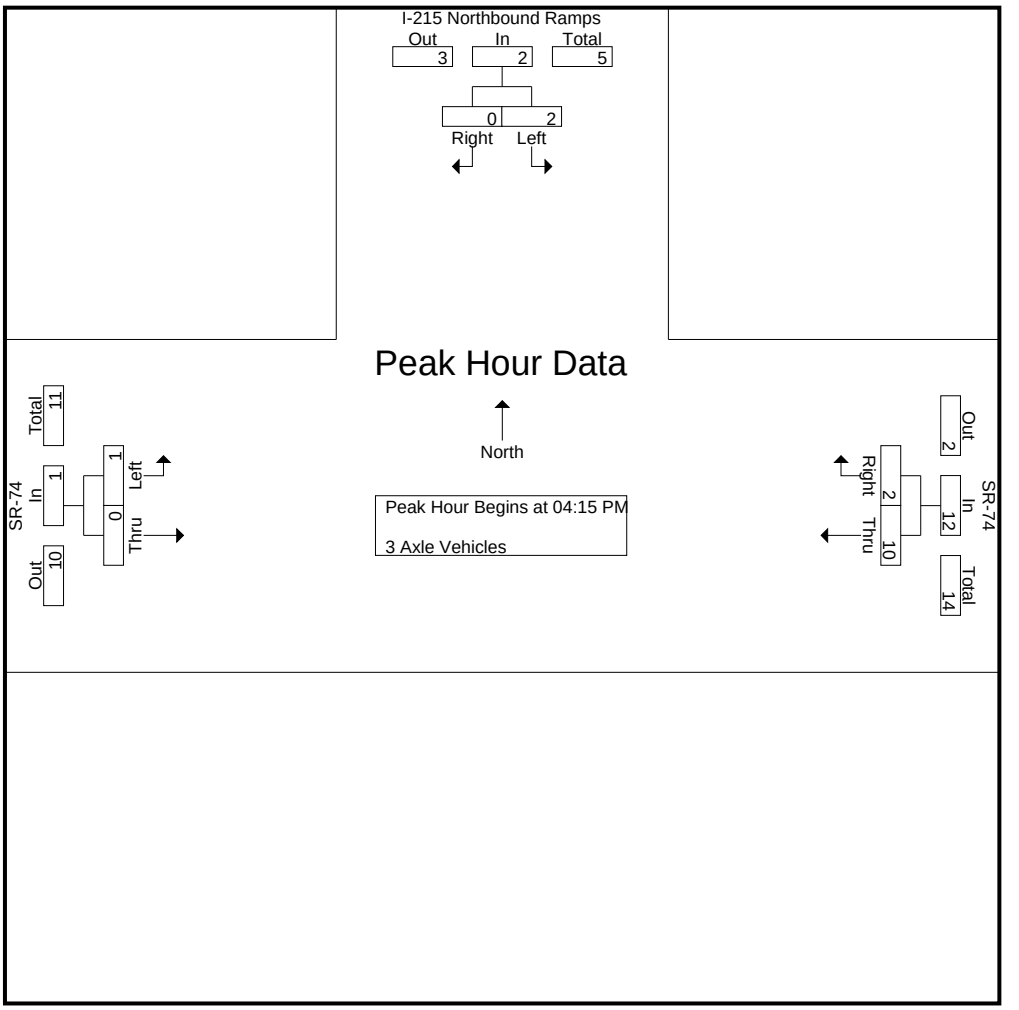
City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 2 | **1** | 3 | **1** | 0 | **1** |
| +15 mins. | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 |
| +30 mins. | **2** | 0 | **2** | **3** | 1 | **4** | 0 | 0 | 0 |
| +45 mins. | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 |
| Total Volume | 2 | 0 | 2 | 10 | 2 | 12 | 1 | 0 | 1 |
| % App. Total | 100 | 0 | | 83.3 | 16.7 | | 100 | 0 | |
| PHF | .250 | .000 | .250 | .833 | .500 | .750 | .250 | .000 | .250 |

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City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 4 | 4 | 5 |
| 04:15 PM | 2 | 0 | 2 | 1 | 4 | 5 | 0 | 1 | 1 | 8 |
| 04:30 PM | 1 | 1 | 2 | 0 | 2 | 2 | 0 | 2 | 2 | 6 |
| 04:45 PM | 1 | 0 | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 4 |
| Total | 4 | 1 | 5 | 1 | 10 | 11 | 0 | 7 | 7 | 23 |
| | | | | | | | | | | |
| 05:00 PM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 |
| 05:30 PM | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 2 | 2 | 4 |
| 05:45 PM | 1 | 0 | 1 | 1 | 2 | 3 | 0 | 0 | 0 | 4 |
| Total | 3 | 0 | 3 | 1 | 3 | 4 | 0 | 5 | 5 | 12 |
| | | | | | | | | | | |
| Grand Total | 7 | 1 | 8 | 2 | 13 | 15 | 0 | 12 | 12 | 35 |
| Apprch % | 87.5 | 12.5 | | 13.3 | 86.7 | | 0 | 100 | | |
| Total % | 20 | 2.9 | 22.9 | 5.7 | 37.1 | 42.9 | 0 | 34.3 | 34.3 | |

| | I-215 Northbound Ramps Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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 | **2** | 0 | **2** | **1** | **4** | **5** | 0 | 1 | 1 | **8** |
| 04:30 PM | 1 | **1** | 2 | 0 | 2 | 2 | 0 | **2** | **2** | 6 |
| 04:45 PM | 1 | 0 | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 4 |
| 05:00 PM | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total Volume | 5 | 1 | 6 | 1 | 9 | 10 | 0 | 3 | 3 | 19 |
| % App. Total | 83.3 | 16.7 | | 10 | 90 | | 0 | 100 | | |
| PHF | .625 | .250 | .750 | .250 | .563 | .500 | .000 | .375 | .375 | .594 |

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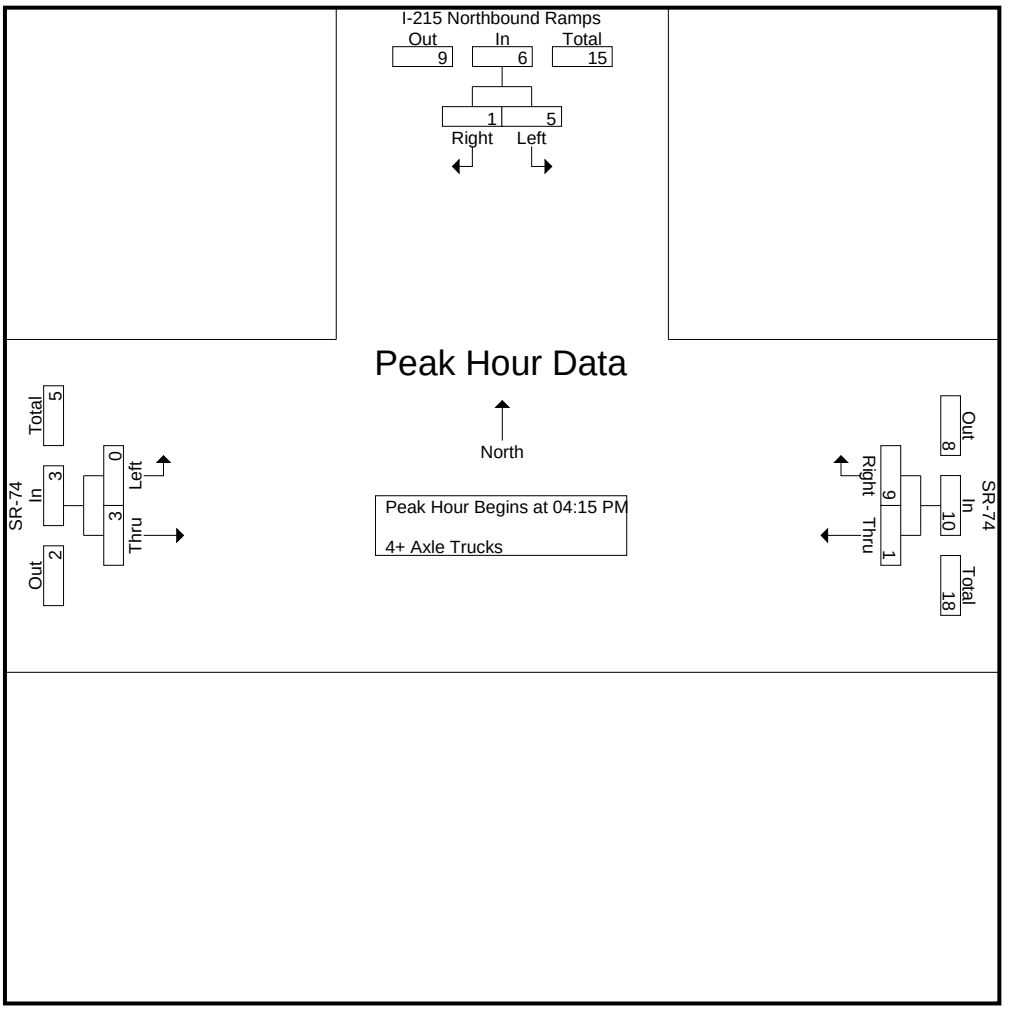
City of Perris
N/S: I-215 Northbound Ramps
E/W: SR-74
Weather: Clear

File Name : 02_PER_215N_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | **2** | 0 | **2** | **1** | **4** | **5** | 0 | 1 | 1 |
| +15 mins. | 1 | **1** | 2 | 0 | 2 | 2 | 0 | **2** | **2** |
| +30 mins. | 1 | 0 | 1 | 0 | 3 | 3 | 0 | 0 | 0 |
| +45 mins. | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Volume | 5 | 1 | 6 | 1 | 9 | 10 | 0 | 3 | 3 |
| % App. Total | 83.3 | 16.7 | | 10 | 90 | | 0 | 100 | |
| PHF | .625 | .250 | .750 | .250 | .563 | .500 | .000 | .375 | .375 |

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City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

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

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 14 | 1 | 15 | 46 | 10 | 1 | 57 | 10 | 6 | 17 | 33 | 0 | 4 | 6 | 10 | 115 |
| 07:15 AM | 0 | 9 | 1 | 10 | 51 | 5 | 2 | 58 | 23 | 4 | 17 | 44 | 0 | 4 | 13 | 17 | 129 |
| 07:30 AM | 1 | 11 | 0 | 12 | 54 | 1 | 0 | 55 | 13 | 8 | 17 | 38 | 2 | 4 | 10 | 16 | 121 |
| 07:45 AM | 0 | 8 | 0 | 8 | 56 | 1 | 0 | 57 | 3 | 11 | 22 | 36 | 1 | 2 | 13 | 16 | 117 |
| Total | 1 | 42 | 2 | 45 | 207 | 17 | 3 | 227 | 49 | 29 | 73 | 151 | 3 | 14 | 42 | 59 | 482 |
| | | | | | | | | | | | | | | | | | |
| 08:00 AM | 0 | 7 | 0 | 7 | 63 | 1 | 0 | 64 | 5 | 6 | 13 | 24 | 0 | 3 | 6 | 9 | 104 |
| 08:15 AM | 0 | 8 | 0 | 8 | 28 | 1 | 1 | 30 | 4 | 9 | 35 | 48 | 1 | 0 | 10 | 11 | 97 |
| 08:30 AM | 1 | 4 | 1 | 6 | 44 | 1 | 1 | 46 | 7 | 4 | 30 | 41 | 0 | 1 | 3 | 4 | 97 |
| 08:45 AM | 1 | 5 | 0 | 6 | 32 | 1 | 2 | 35 | 2 | 4 | 21 | 27 | 0 | 0 | 6 | 6 | 74 |
| Total | 2 | 24 | 1 | 27 | 167 | 4 | 4 | 175 | 18 | 23 | 99 | 140 | 1 | 4 | 25 | 30 | 372 |
| | | | | | | | | | | | | | | | | | |
| Grand Total | 3 | 66 | 3 | 72 | 374 | 21 | 7 | 402 | 67 | 52 | 172 | 291 | 4 | 18 | 67 | 89 | 854 |
| Apprch % | 4.2 | 91.7 | 4.2 | | 93 | 5.2 | 1.7 | | 23 | 17.9 | 59.1 | | 4.5 | 20.2 | 75.3 | | |
| Total % | 0.4 | 7.7 | 0.4 | 8.4 | 43.8 | 2.5 | 0.8 | 47.1 | 7.8 | 6.1 | 20.1 | 34.1 | 0.5 | 2.1 | 7.8 | 10.4 | |
| Passenger Vehicles | 2 | 61 | 3 | 66 | 364 | 20 | 7 | 391 | 56 | 49 | 161 | 266 | 4 | 10 | 37 | 51 | 774 |
| % Passenger Vehicles | 66.7 | 92.4 | 100 | 91.7 | 97.3 | 95.2 | 100 | 97.3 | 83.6 | 94.2 | 93.6 | 91.4 | 100 | 55.6 | 55.2 | 57.3 | 90.6 |
| Large 2 Axle Vehicles | 1 | 3 | 0 | 4 | 7 | 1 | 0 | 8 | 10 | 3 | 7 | 20 | 0 | 8 | 28 | 36 | 68 |
| % Large 2 Axle Vehicles | 33.3 | 4.5 | 0 | 5.6 | 1.9 | 4.8 | 0 | 2 | 14.9 | 5.8 | 4.1 | 6.9 | 0 | 44.4 | 41.8 | 40.4 | 8 |
| 3 Axle Vehicles | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 4 | 0 | 0 | 2 | 2 | 7 |
| % 3 Axle Vehicles | 0 | 1.5 | 0 | 1.4 | 0 | 0 | 0 | 0 | 1.5 | 0 | 1.7 | 1.4 | 0 | 0 | 3 | 2.2 | 0.8 |
| 4+ Axle Trucks | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 5 |
| % 4+ Axle Trucks | 0 | 1.5 | 0 | 1.4 | 0.8 | 0 | 0 | 0.7 | 0 | 0 | 0.6 | 0.3 | 0 | 0 | 0 | 0 | 0.6 |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 07:00 AM | | | | | | | | | | | | | | | | | |
| 07:00 AM | 0 | **14** | **1** | **15** | 46 | **10** | 1 | 57 | 10 | 6 | 17 | 33 | 0 | **4** | 6 | 10 | 115 |
| 07:15 AM | 0 | 9 | 1 | 10 | 51 | 5 | **2** | **58** | **23** | 4 | 17 | **44** | 0 | 4 | **13** | **17** | **129** |
| 07:30 AM | **1** | 11 | 0 | 12 | 54 | 1 | 0 | 55 | 13 | 8 | 17 | 38 | **2** | 4 | 10 | 16 | 121 |
| 07:45 AM | 0 | 8 | 0 | 8 | **56** | 1 | 0 | 57 | 3 | **11** | **22** | 36 | 1 | 2 | 13 | 16 | 117 |
| Total Volume | 1 | 42 | 2 | 45 | 207 | 17 | 3 | 227 | 49 | 29 | 73 | 151 | 3 | 14 | 42 | 59 | 482 |
| % App. Total | 2.2 | 93.3 | 4.4 | | 91.2 | 7.5 | 1.3 | | 32.5 | 19.2 | 48.3 | | 5.1 | 23.7 | 71.2 | | |
| PHF | .250 | .750 | .500 | .750 | .924 | .425 | .375 | .978 | .533 | .659 | .830 | .858 | .375 | .875 | .808 | .868 | .934 |

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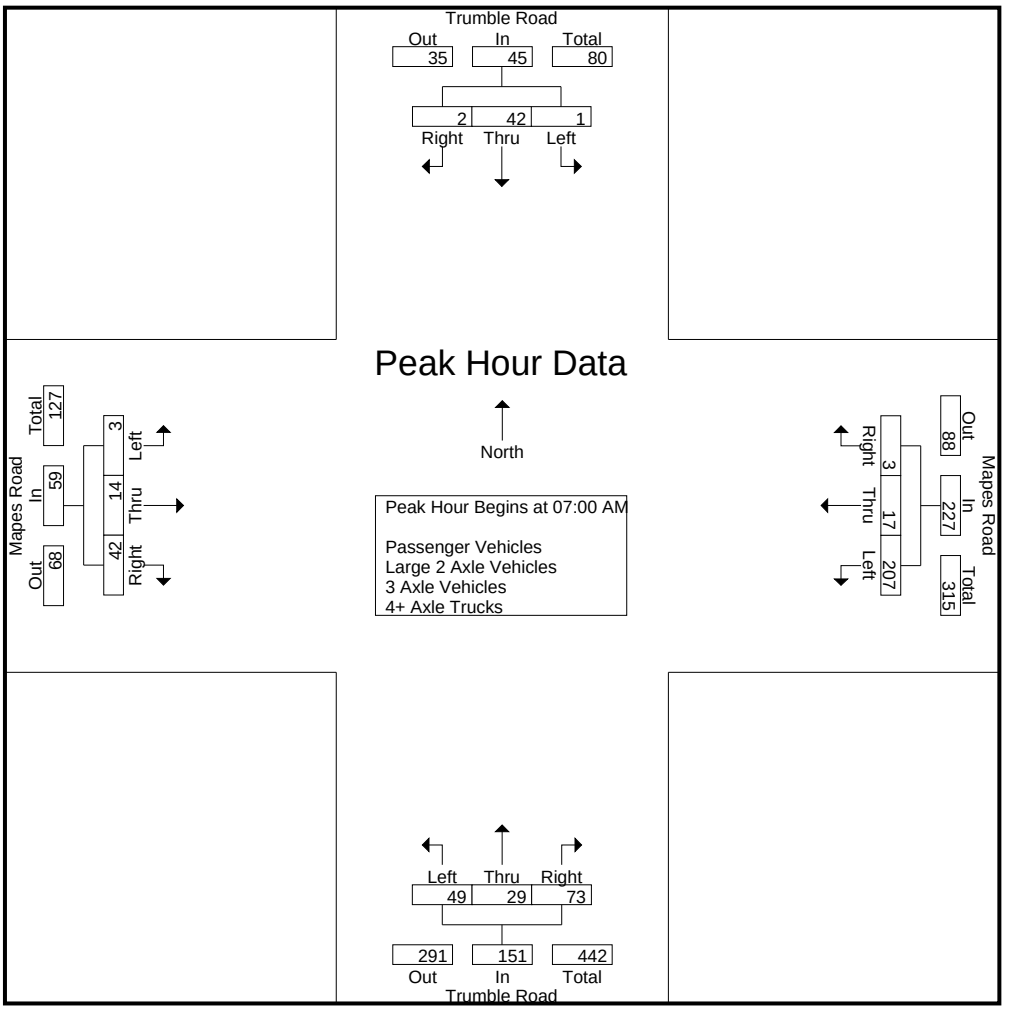
City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
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:

| | 07:00 AM | | | | 07:15 AM | | | | 07:00 AM | | | | 07:00 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **14** | **1** | **15** | 51 | **5** | **2** | 58 | 10 | 6 | 17 | 33 | 0 | **4** | 6 | 10 |
| +15 mins. | 0 | 9 | 1 | 10 | 54 | 1 | 0 | 55 | **23** | 4 | 17 | **44** | 0 | 4 | **13** | **17** |
| +30 mins. | **1** | 11 | 0 | 12 | 56 | 1 | 0 | 57 | 13 | 8 | 17 | 38 | **2** | 4 | 10 | 16 |
| +45 mins. | 0 | 8 | 0 | 8 | **63** | 1 | 0 | **64** | 3 | **11** | **22** | 36 | 1 | 2 | 13 | 16 |
| Total Volume | 1 | 42 | 2 | 45 | 224 | 8 | 2 | 234 | 49 | 29 | 73 | 151 | 3 | 14 | 42 | 59 |
| % App. Total | 2.2 | 93.3 | 4.4 | | 95.7 | 3.4 | 0.9 | | 32.5 | 19.2 | 48.3 | | 5.1 | 23.7 | 71.2 | |
| PHF | .250 | .750 | .500 | .750 | .889 | .400 | .250 | .914 | .533 | .659 | .830 | .858 | .375 | .875 | .808 | .868 |

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City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 13 | 1 | 14 | 46 | 10 | 1 | 57 | 6 | 4 | 16 | 26 | 0 | 3 | 3 | 6 | 103 |
| 07:15 AM | 0 | 7 | 1 | 8 | 51 | 5 | 2 | 58 | 21 | 4 | 16 | 41 | 0 | 2 | 4 | 6 | 113 |
| 07:30 AM | 1 | 10 | 0 | 11 | 54 | 1 | 0 | 55 | 12 | 8 | 15 | 35 | 2 | 1 | 6 | 9 | 110 |
| 07:45 AM | 0 | 8 | 0 | 8 | 56 | 1 | 0 | 57 | 3 | 11 | 20 | 34 | 1 | 1 | 8 | 10 | 109 |
| Total | 1 | 38 | 2 | 41 | 207 | 17 | 3 | 227 | 42 | 27 | 67 | 136 | 3 | 7 | 21 | 31 | 435 |
| | | | | | | | | | | | | | | | | | |
| 08:00 AM | 0 | 7 | 0 | 7 | 58 | 1 | 0 | 59 | 3 | 6 | 11 | 20 | 0 | 2 | 5 | 7 | 93 |
| 08:15 AM | 0 | 7 | 0 | 7 | 27 | 1 | 1 | 29 | 4 | 8 | 34 | 46 | 1 | 0 | 4 | 5 | 87 |
| 08:30 AM | 0 | 4 | 1 | 5 | 41 | 0 | 1 | 42 | 5 | 4 | 28 | 37 | 0 | 1 | 1 | 2 | 86 |
| 08:45 AM | 1 | 5 | 0 | 6 | 31 | 1 | 2 | 34 | 2 | 4 | 21 | 27 | 0 | 0 | 6 | 6 | 73 |
| Total | 1 | 23 | 1 | 25 | 157 | 3 | 4 | 164 | 14 | 22 | 94 | 130 | 1 | 3 | 16 | 20 | 339 |
| | | | | | | | | | | | | | | | | | |
| Grand Total | 2 | 61 | 3 | 66 | 364 | 20 | 7 | 391 | 56 | 49 | 161 | 266 | 4 | 10 | 37 | 51 | 774 |
| Apprch % | 3 | 92.4 | 4.5 | | 93.1 | 5.1 | 1.8 | | 21.1 | 18.4 | 60.5 | | 7.8 | 19.6 | 72.5 | | |
| Total % | 0.3 | 7.9 | 0.4 | 8.5 | 47 | 2.6 | 0.9 | 50.5 | 7.2 | 6.3 | 20.8 | 34.4 | 0.5 | 1.3 | 4.8 | 6.6 | |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 07:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | |
| 07:00 AM | 0 | **13** | **1** | **14** | 46 | **10** | 1 | 57 | 6 | 4 | 16 | 26 | 0 | **3** | 3 | 6 | 103 |
| 07:15 AM | 0 | 7 | 1 | 8 | 51 | 5 | **2** | **58** | **21** | 4 | 16 | **41** | 0 | 2 | 4 | 6 | **113** |
| 07:30 AM | **1** | 10 | 0 | 11 | 54 | 1 | 0 | 55 | 12 | 8 | 15 | 35 | **2** | 1 | 6 | 9 | 110 |
| 07:45 AM | 0 | 8 | 0 | 8 | **56** | 1 | 0 | 57 | 3 | **11** | **20** | 34 | 1 | 1 | **8** | **10** | 109 |
| Total Volume | 1 | 38 | 2 | 41 | 207 | 17 | 3 | 227 | 42 | 27 | 67 | 136 | 3 | 7 | 21 | 31 | 435 |
| % App. Total | 2.4 | 92.7 | 4.9 | | 91.2 | 7.5 | 1.3 | | 30.9 | 19.9 | 49.3 | | 9.7 | 22.6 | 67.7 | | |
| PHF | .250 | .731 | .500 | .732 | .924 | .425 | .375 | .978 | .500 | .614 | .838 | .829 | .375 | .583 | .656 | .775 | .962 |

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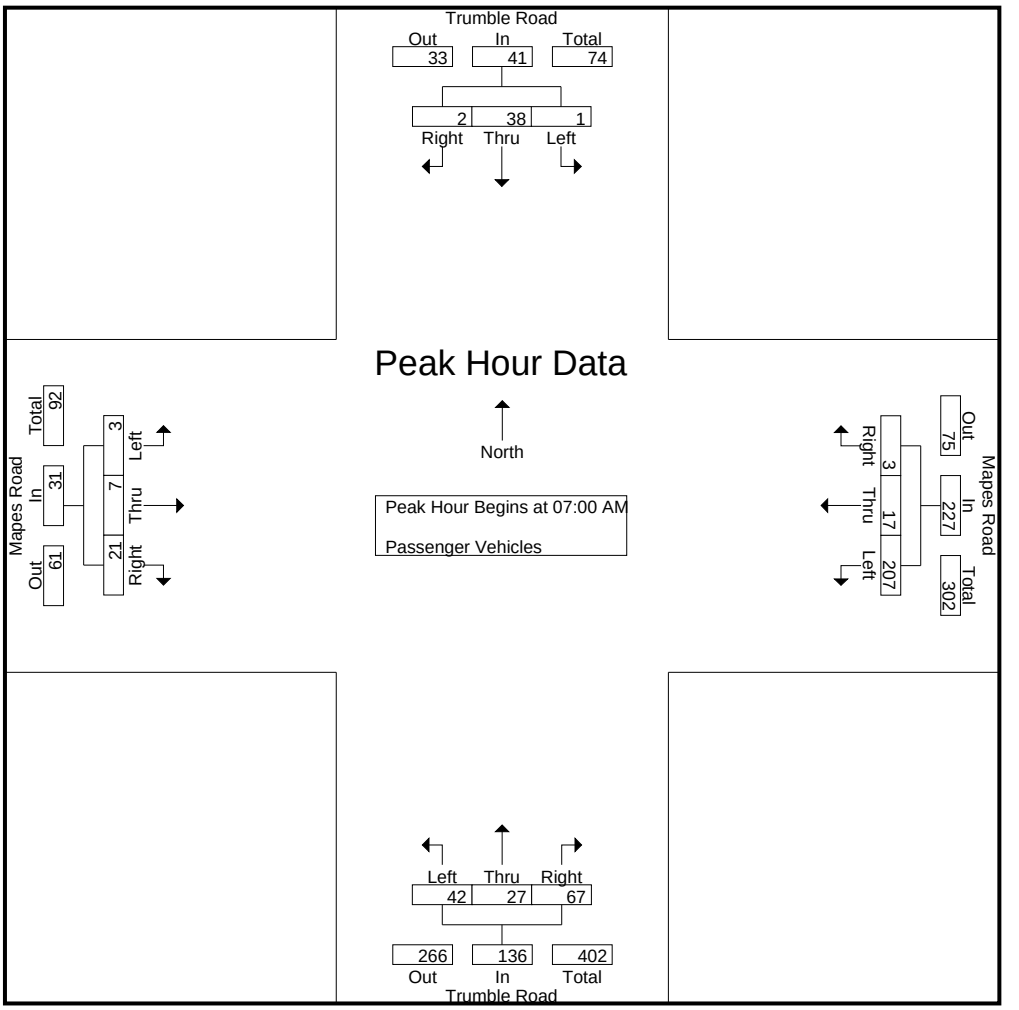
City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | | 07:00 AM | | | | 07:00 AM | | | | 07:00 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **13** | **1** | **14** | 46 | **10** | 1 | 57 | 6 | 4 | 16 | 26 | 0 | **3** | 3 | 6 |
| +15 mins. | 0 | 7 | 1 | 8 | 51 | 5 | **2** | **58** | **21** | 4 | 16 | **41** | 0 | 2 | 4 | 6 |
| +30 mins. | **1** | 10 | 0 | 11 | 54 | 1 | 0 | 55 | 12 | 8 | 15 | 35 | **2** | 1 | 6 | 9 |
| +45 mins. | 0 | 8 | 0 | 8 | **56** | 1 | 0 | 57 | 3 | **11** | **20** | 34 | 1 | 1 | **8** | **10** |
| Total Volume | 1 | 38 | 2 | 41 | 207 | 17 | 3 | 227 | 42 | 27 | 67 | 136 | 3 | 7 | 21 | 31 |
| % App. Total | 2.4 | 92.7 | 4.9 | | 91.2 | 7.5 | 1.3 | | 30.9 | 19.9 | 49.3 | | 9.7 | 22.6 | 67.7 | |
| PHF | .250 | .731 | .500 | .732 | .924 | .425 | .375 | .978 | .500 | .614 | .838 | .829 | .375 | .583 | .656 | .775 |

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City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 4 | 2 | 0 | 6 | 0 | 1 | 3 | 4 | 10 |
| 07:15 AM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 0 | 2 | 9 | 11 | 15 |
| 07:30 AM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 3 | 3 | 6 | 9 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 5 | 6 | 8 |
| Total | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 7 | 2 | 4 | 13 | 0 | 7 | 20 | 27 | 42 |
| 08:00 AM | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 2 | 6 |
| 08:15 AM | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 5 | 5 | 9 |
| 08:30 AM | 1 | 0 | 0 | 1 | 3 | 1 | 0 | 4 | 2 | 0 | 1 | 3 | 0 | 0 | 2 | 2 | 10 |
| 08:45 AM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total | 1 | 1 | 0 | 2 | 7 | 1 | 0 | 8 | 3 | 1 | 3 | 7 | 0 | 1 | 8 | 9 | 26 |
| Grand Total | 1 | 3 | 0 | 4 | 7 | 1 | 0 | 8 | 10 | 3 | 7 | 20 | 0 | 8 | 28 | 36 | 68 |
| Apprch % | 25 | 75 | 0 | | 87.5 | 12.5 | 0 | | 50 | 15 | 35 | | 0 | 22.2 | 77.8 | | |
| Total % | 1.5 | 4.4 | 0 | 5.9 | 10.3 | 1.5 | 0 | 11.8 | 14.7 | 4.4 | 10.3 | 29.4 | 0 | 11.8 | 41.2 | 52.9 | |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 07:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **4** | **2** | 0 | **6** | 0 | 1 | 3 | 4 | 10 |
| 07:15 AM | 0 | **1** | 0 | **1** | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 0 | 2 | **9** | **11** | **15** |
| 07:30 AM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | **3** | 3 | 6 | 9 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **2** | 2 | 0 | 1 | 5 | 6 | 8 |
| Total Volume | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 7 | 2 | 4 | 13 | 0 | 7 | 20 | 27 | 42 |
| % App. Total | 0 | 100 | 0 | | 0 | 0 | 0 | | 53.8 | 15.4 | 30.8 | | 0 | 25.9 | 74.1 | | |
| PHF | .000 | .500 | .000 | .500 | .000 | .000 | .000 | .000 | .438 | .250 | .500 | .542 | .000 | .583 | .556 | .614 | .700 |

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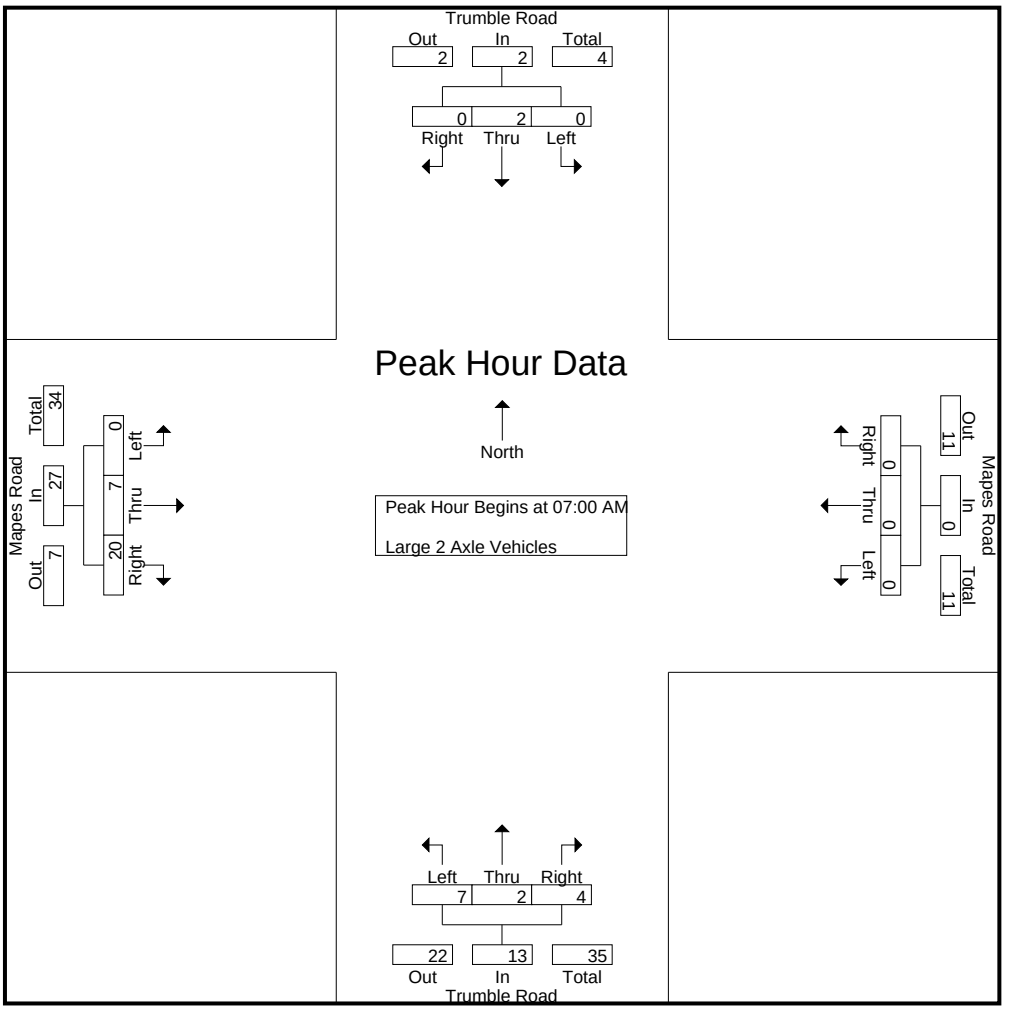
City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | | 07:00 AM | | | | 07:00 AM | | | | 07:00 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **4** | **2** | 0 | **6** | 0 | 1 | 3 | 4 |
| +15 mins. | 0 | **1** | 0 | **1** | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 0 | 2 | **9** | **11** |
| +30 mins. | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | **3** | 3 | 6 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **2** | 2 | 0 | 1 | 5 | 6 |
| Total Volume | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 7 | 2 | 4 | 13 | 0 | 7 | 20 | 27 |
| % App. Total | 0 | 100 | 0 | | 0 | 0 | 0 | | 53.8 | 15.4 | 30.8 | | 0 | 25.9 | 74.1 | |
| PHF | .000 | .500 | .000 | .500 | .000 | .000 | .000 | .000 | .438 | .250 | .500 | .542 | .000 | .583 | .556 | .614 |

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City of Perris
N/S: Trumble Road
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Weather: Clear

File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 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 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 2 |
| 07:45 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 | 2 | 2 | 0 | 0 | 1 | 1 | 4 |
| 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 | 1 | 1 | 1 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 1 | 1 | 3 |
| Grand Total | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 4 | 0 | 0 | 2 | 2 | 7 |
| Apprch % | 0 | 100 | 0 | | 0 | 0 | 0 | | 25 | 0 | 75 | | 0 | 0 | 100 | | |
| Total % | 0 | 14.3 | 0 | 14.3 | 0 | 0 | 0 | 0 | 14.3 | 0 | 42.9 | 57.1 | 0 | 0 | 28.6 | 28.6 | |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 07:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | **1** | 0 | 0 | 0 | 0 | 1 |
| 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 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | **1** | **1** | **2** |
| 07:45 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 | 2 | 2 | 0 | 0 | 1 | 1 | 4 |
| % App. Total | 0 | 100 | 0 | | 0 | 0 | 0 | | 0 | 0 | 100 | | 0 | 0 | 100 | | |
| PHF | .000 | .250 | .000 | .250 | .000 | .000 | .000 | .000 | .000 | .000 | .500 | .500 | .000 | .000 | .250 | .250 | .500 |

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City of Perris
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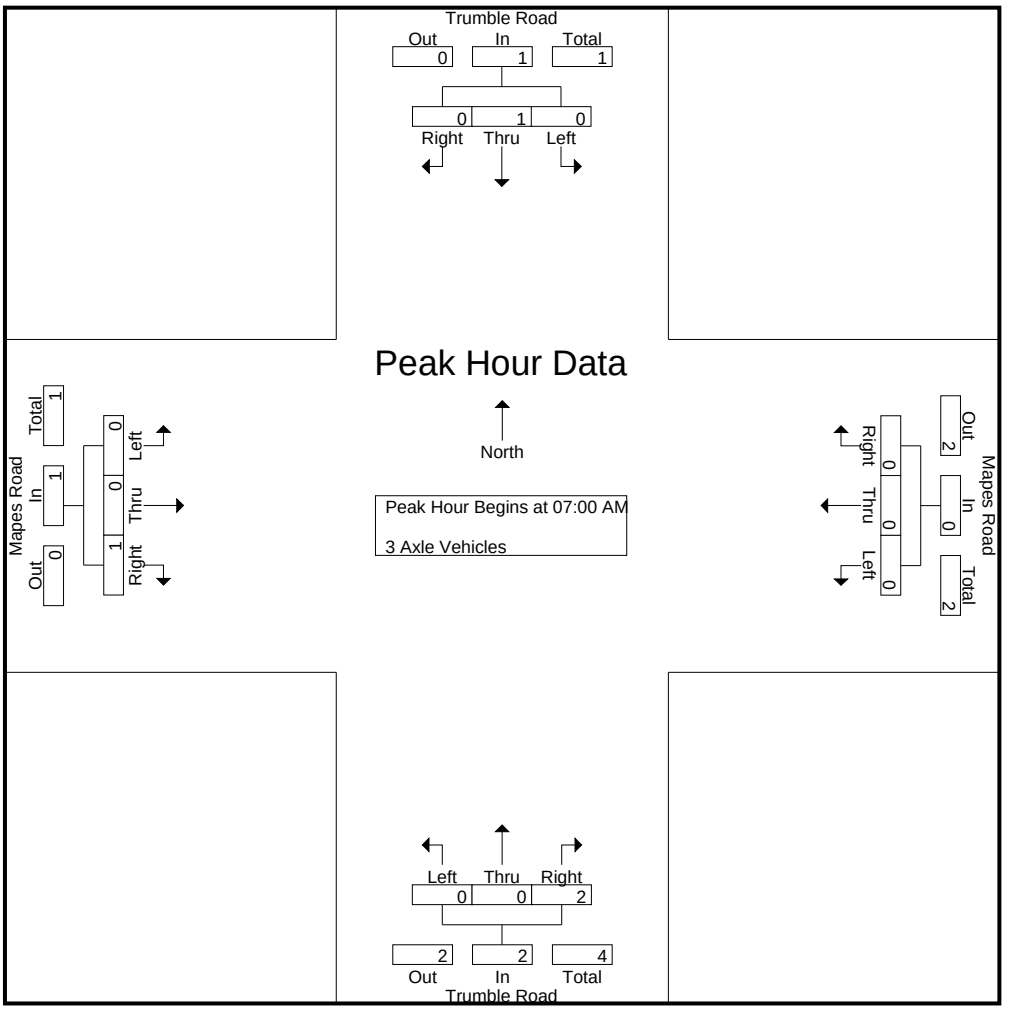
Weather: Clear

File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | | 07:00 AM | | | | 07:00 AM | | | | 07:00 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | **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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | **1** | **1** |
| +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 | 2 | 2 | 0 | 0 | 1 | 1 |
| % App. Total | 0 | 100 | 0 | | 0 | 0 | 0 | | 0 | 0 | 100 | | 0 | 0 | 100 | |
| PHF | .000 | .250 | .000 | .250 | .000 | .000 | .000 | .000 | .000 | .000 | .500 | .500 | .000 | .000 | .250 | .250 |

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City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 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 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 08:00 AM | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 4 |
| 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 | 3 | 0 | 0 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 4 |
| Grand Total | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 5 |
| Apprch % | 0 | 100 | 0 | | 100 | 0 | 0 | | 0 | 0 | 100 | | 0 | 0 | 0 | | |
| Total % | 0 | 20 | 0 | 20 | 60 | 0 | 0 | 60 | 0 | 0 | 20 | 20 | 0 | 0 | 0 | 0 | |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 07:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | |
| 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 | 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 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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City of Perris
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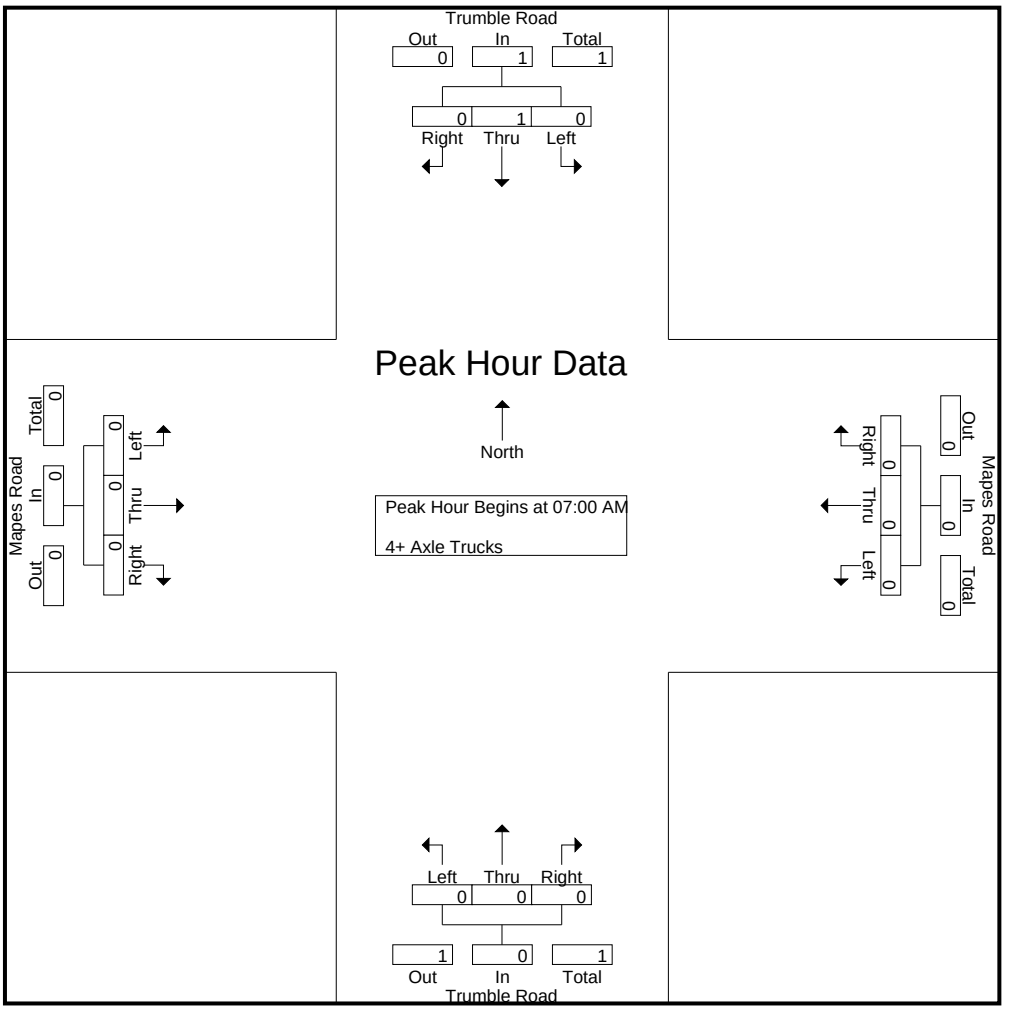
File Name : 03_PER_Trumble_Mapes AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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

| | 07:00 AM | | | | 07:00 AM | | | | 07:00 AM | | | | 07:00 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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City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

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

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 15 | 38 | 1 | 54 | 38 | 0 | 0 | 38 | 1 | 11 | 40 | 52 | 0 | 1 | 1 | 2 | 146 |
| 04:15 PM | 4 | 17 | 0 | 21 | 47 | 2 | 2 | 51 | 6 | 11 | 48 | 65 | 0 | 0 | 6 | 6 | 143 |
| 04:30 PM | 14 | 51 | 0 | 65 | 37 | 0 | 0 | 37 | 5 | 16 | 37 | 58 | 0 | 3 | 4 | 7 | 167 |
| 04:45 PM | 3 | 14 | 0 | 17 | 39 | 0 | 0 | 39 | 0 | 15 | 48 | 63 | 0 | 1 | 3 | 4 | 123 |
| Total | 36 | 120 | 1 | 157 | 161 | 2 | 2 | 165 | 12 | 53 | 173 | 238 | 0 | 5 | 14 | 19 | 579 |
| | | | | | | | | | | | | | | | | | |
| 05:00 PM | 20 | 84 | 0 | 104 | 30 | 0 | 4 | 34 | 0 | 19 | 52 | 71 | 0 | 1 | 1 | 2 | 211 |
| 05:15 PM | 3 | 18 | 0 | 21 | 35 | 1 | 5 | 41 | 1 | 21 | 52 | 74 | 1 | 0 | 0 | 1 | 137 |
| 05:30 PM | 4 | 22 | 0 | 26 | 23 | 0 | 11 | 34 | 0 | 36 | 51 | 87 | 1 | 0 | 3 | 4 | 151 |
| 05:45 PM | 0 | 7 | 0 | 7 | 39 | 0 | 7 | 46 | 0 | 41 | 57 | 98 | 0 | 0 | 1 | 1 | 152 |
| Total | 27 | 131 | 0 | 158 | 127 | 1 | 27 | 155 | 1 | 117 | 212 | 330 | 2 | 1 | 5 | 8 | 651 |
| | | | | | | | | | | | | | | | | | |
| Grand Total | 63 | 251 | 1 | 315 | 288 | 3 | 29 | 320 | 13 | 170 | 385 | 568 | 2 | 6 | 19 | 27 | 1230 |
| Apprch % | 20 | 79.7 | 0.3 | | 90 | 0.9 | 9.1 | | 2.3 | 29.9 | 67.8 | | 7.4 | 22.2 | 70.4 | | |
| Total % | 5.1 | 20.4 | 0.1 | 25.6 | 23.4 | 0.2 | 2.4 | 26 | 1.1 | 13.8 | 31.3 | 46.2 | 0.2 | 0.5 | 1.5 | 2.2 | |
| Passenger Vehicles | 63 | 250 | 1 | 314 | 273 | 3 | 28 | 304 | 8 | 169 | 367 | 544 | 2 | 6 | 15 | 23 | 1185 |
| % Passenger Vehicles | 100 | 99.6 | 100 | 99.7 | 94.8 | 100 | 96.6 | 95 | 61.5 | 99.4 | 95.3 | 95.8 | 100 | 100 | 78.9 | 85.2 | 96.3 |
| Large 2 Axle Vehicles | 0 | 1 | 0 | 1 | 12 | 0 | 1 | 13 | 5 | 1 | 12 | 18 | 0 | 0 | 3 | 3 | 35 |
| % Large 2 Axle Vehicles | 0 | 0.4 | 0 | 0.3 | 4.2 | 0 | 3.4 | 4.1 | 38.5 | 0.6 | 3.1 | 3.2 | 0 | 0 | 15.8 | 11.1 | 2.8 |
| 3 Axle Vehicles | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 3 | 3 | 0 | 0 | 1 | 1 | 7 |
| % 3 Axle Vehicles | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0.9 | 0 | 0 | 0.8 | 0.5 | 0 | 0 | 5.3 | 3.7 | 0.6 |
| 4+ Axle Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 3 |
| % 4+ Axle Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.5 | 0 | 0 | 0 | 0 | 0.2 |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | **20** | **84** | 0 | **104** | 30 | 0 | 4 | 34 | 0 | 19 | 52 | 71 | 0 | **1** | 1 | 2 | **211** |
| 05:15 PM | 3 | 18 | 0 | 21 | 35 | **1** | 5 | 41 | **1** | 21 | 52 | 74 | **1** | 0 | 0 | 1 | 137 |
| 05:30 PM | 4 | 22 | 0 | 26 | 23 | 0 | **11** | 34 | 0 | 36 | 51 | 87 | 1 | 0 | **3** | **4** | 151 |
| 05:45 PM | 0 | 7 | 0 | 7 | **39** | 0 | 7 | **46** | 0 | **41** | **57** | **98** | 0 | 0 | 1 | 1 | 152 |
| Total Volume | 27 | 131 | 0 | 158 | 127 | 1 | 27 | 155 | 1 | 117 | 212 | 330 | 2 | 1 | 5 | 8 | 651 |
| % App. Total | 17.1 | 82.9 | 0 | | 81.9 | 0.6 | 17.4 | | 0.3 | 35.5 | 64.2 | | 25 | 12.5 | 62.5 | | |
| PHF | .338 | .390 | .000 | .380 | .814 | .250 | .614 | .842 | .250 | .713 | .930 | .842 | .500 | .250 | .417 | .500 | .771 |

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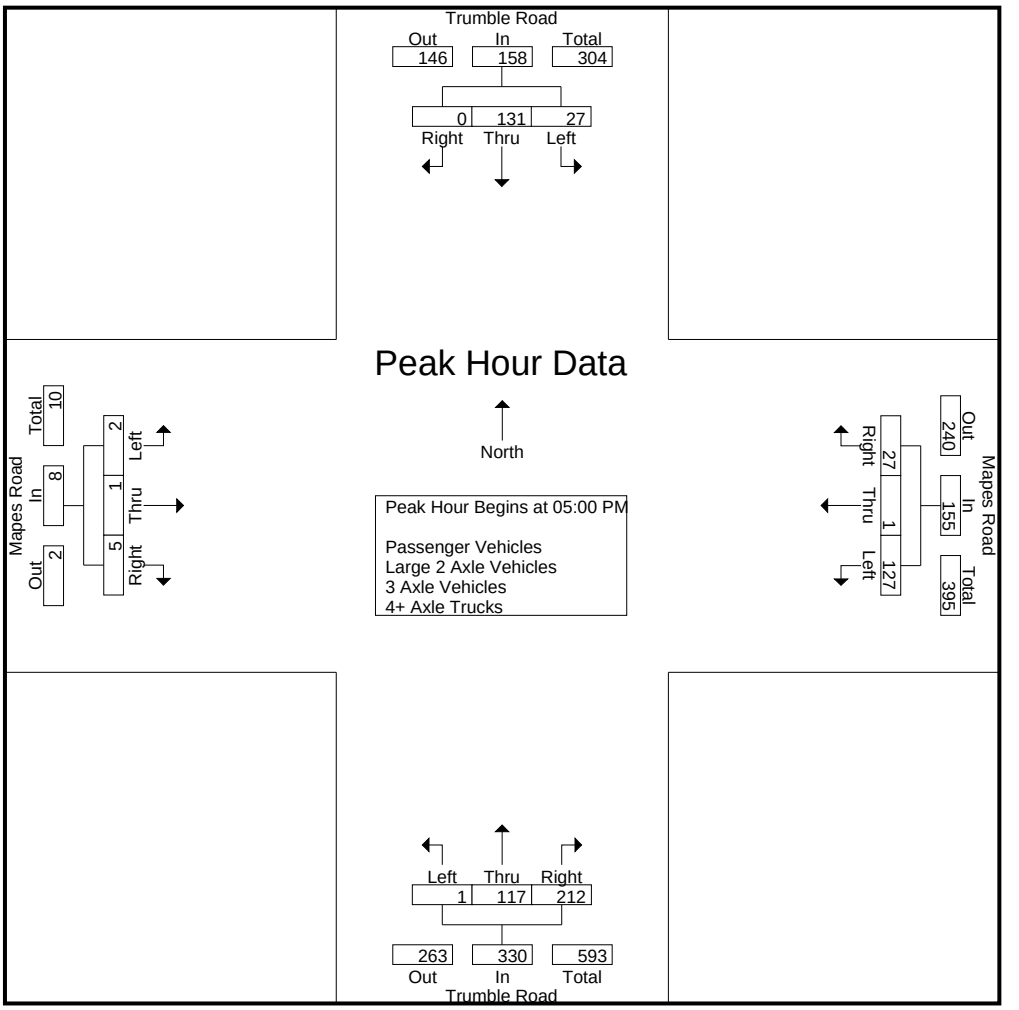
File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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 | | | | 04:00 PM | | | | 05:00 PM | | | | 04:00 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 4 | 17 | 0 | 21 | 38 | 0 | 0 | 38 | 0 | 19 | 52 | 71 | 0 | 1 | 1 | 2 |
| +15 mins. | 14 | 51 | 0 | 65 | **47** | **2** | **2** | **51** | **1** | 21 | 52 | 74 | 0 | 0 | **6** | 6 |
| +30 mins. | 3 | 14 | 0 | 17 | 37 | 0 | 0 | 37 | 0 | 36 | 51 | 87 | 0 | **3** | 4 | **7** |
| +45 mins. | **20** | **84** | 0 | **104** | 39 | 0 | 0 | 39 | 0 | **41** | **57** | **98** | 0 | 1 | 3 | 4 |
| Total Volume | 41 | 166 | 0 | 207 | 161 | 2 | 2 | 165 | 1 | 117 | 212 | 330 | 0 | 5 | 14 | 19 |
| % App. Total | 19.8 | 80.2 | 0 | | 97.6 | 1.2 | 1.2 | | 0.3 | 35.5 | 64.2 | | 0 | 26.3 | 73.7 | |
| PHF | .513 | .494 | .000 | .498 | .856 | .250 | .250 | .809 | .250 | .713 | .930 | .842 | .000 | .417 | .583 | .679 |

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City of Perris
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E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 15 | 38 | 1 | 54 | 31 | 0 | 0 | 31 | 0 | 10 | 38 | 48 | 0 | 1 | 1 | 2 | 135 |
| 04:15 PM | 4 | 17 | 0 | 21 | 46 | 2 | 2 | 50 | 4 | 11 | 48 | 63 | 0 | 0 | 4 | 4 | 138 |
| 04:30 PM | 14 | 51 | 0 | 65 | 36 | 0 | 0 | 36 | 3 | 16 | 35 | 54 | 0 | 3 | 4 | 7 | 162 |
| 04:45 PM | 3 | 14 | 0 | 17 | 38 | 0 | 0 | 38 | 0 | 15 | 44 | 59 | 0 | 1 | 1 | 2 | 116 |
| Total | 36 | 120 | 1 | 157 | 151 | 2 | 2 | 155 | 7 | 52 | 165 | 224 | 0 | 5 | 10 | 15 | 551 |
| | | | | | | | | | | | | | | | | | |
| 05:00 PM | 20 | 83 | 0 | 103 | 29 | 0 | 4 | 33 | 0 | 19 | 50 | 69 | 0 | 1 | 1 | 2 | 207 |
| 05:15 PM | 3 | 18 | 0 | 21 | 33 | 1 | 5 | 39 | 1 | 21 | 50 | 72 | 1 | 0 | 0 | 1 | 133 |
| 05:30 PM | 4 | 22 | 0 | 26 | 23 | 0 | 10 | 33 | 0 | 36 | 48 | 84 | 1 | 0 | 3 | 4 | 147 |
| 05:45 PM | 0 | 7 | 0 | 7 | 37 | 0 | 7 | 44 | 0 | 41 | 54 | 95 | 0 | 0 | 1 | 1 | 147 |
| Total | 27 | 130 | 0 | 157 | 122 | 1 | 26 | 149 | 1 | 117 | 202 | 320 | 2 | 1 | 5 | 8 | 634 |
| | | | | | | | | | | | | | | | | | |
| Grand Total | 63 | 250 | 1 | 314 | 273 | 3 | 28 | 304 | 8 | 169 | 367 | 544 | 2 | 6 | 15 | 23 | 1185 |
| Apprch % | 20.1 | 79.6 | 0.3 | | 89.8 | 1 | 9.2 | | 1.5 | 31.1 | 67.5 | | 8.7 | 26.1 | 65.2 | | |
| Total % | 5.3 | 21.1 | 0.1 | 26.5 | 23 | 0.3 | 2.4 | 25.7 | 0.7 | 14.3 | 31 | 45.9 | 0.2 | 0.5 | 1.3 | 1.9 | |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | **20** | **83** | 0 | **103** | 29 | 0 | 4 | 33 | 0 | 19 | 50 | 69 | 0 | **1** | 1 | 2 | **207** |
| 05:15 PM | 3 | 18 | 0 | 21 | 33 | **1** | 5 | 39 | **1** | 21 | 50 | 72 | **1** | 0 | 0 | 1 | 133 |
| 05:30 PM | 4 | 22 | 0 | 26 | 23 | 0 | **10** | 33 | 0 | 36 | 48 | 84 | 1 | 0 | **3** | **4** | 147 |
| 05:45 PM | 0 | 7 | 0 | 7 | **37** | 0 | 7 | **44** | 0 | **41** | **54** | **95** | 0 | 0 | 1 | 1 | 147 |
| Total Volume | 27 | 130 | 0 | 157 | 122 | 1 | 26 | 149 | 1 | 117 | 202 | 320 | 2 | 1 | 5 | 8 | 634 |
| % App. Total | 17.2 | 82.8 | 0 | | 81.9 | 0.7 | 17.4 | | 0.3 | 36.6 | 63.1 | | 25 | 12.5 | 62.5 | | |
| PHF | .338 | .392 | .000 | .381 | .824 | .250 | .650 | .847 | .250 | .713 | .935 | .842 | .500 | .250 | .417 | .500 | .766 |

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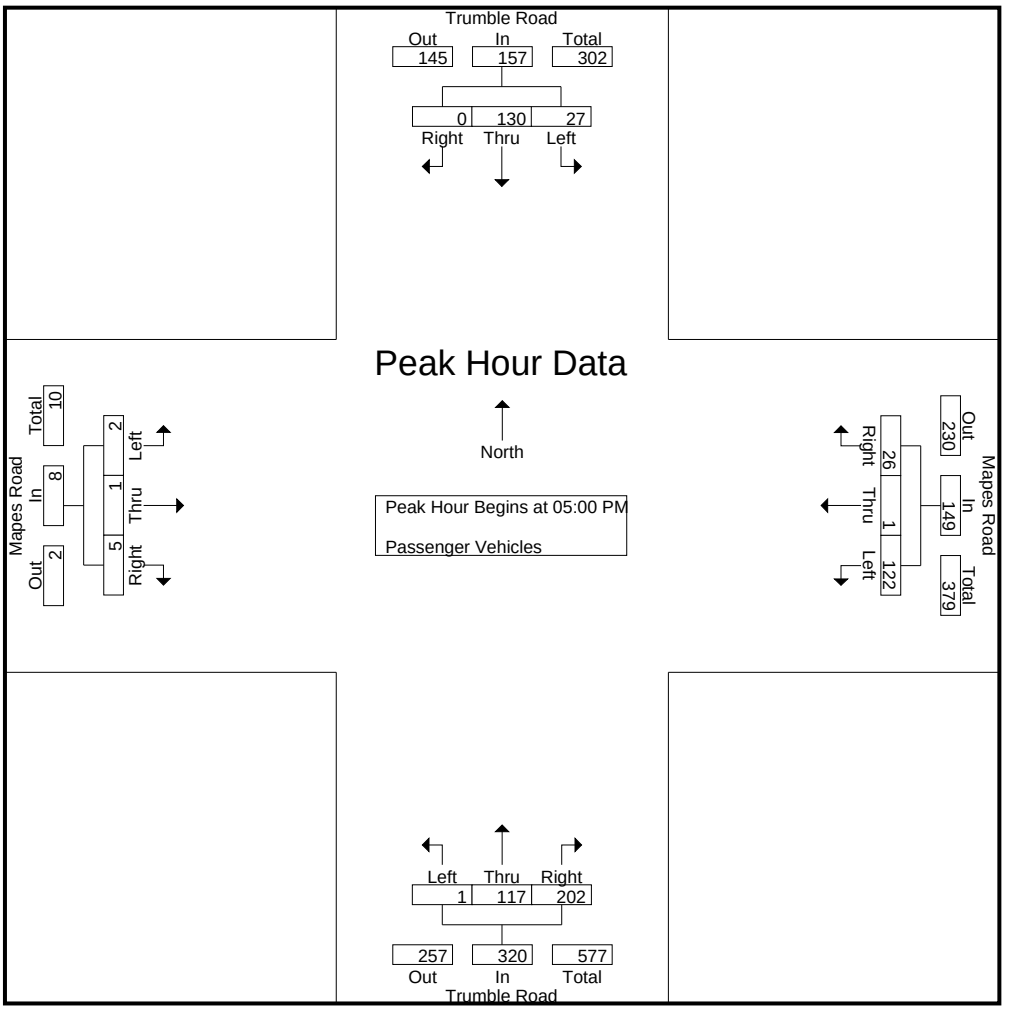
City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022
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. | **20** | **83** | 0 | **103** | 29 | 0 | 4 | 33 | 0 | 19 | 50 | 69 | 0 | **1** | 1 | 2 |
| +15 mins. | 3 | 18 | 0 | 21 | 33 | **1** | 5 | 39 | **1** | 21 | 50 | 72 | **1** | 0 | 0 | 1 |
| +30 mins. | 4 | 22 | 0 | 26 | 23 | 0 | **10** | 33 | 0 | 36 | 48 | 84 | 1 | 0 | **3** | **4** |
| +45 mins. | 0 | 7 | 0 | 7 | **37** | 0 | 7 | **44** | 0 | **41** | **54** | **95** | 0 | 0 | 1 | 1 |
| Total Volume | 27 | 130 | 0 | 157 | 122 | 1 | 26 | 149 | 1 | 117 | 202 | 320 | 2 | 1 | 5 | 8 |
| % App. Total | 17.2 | 82.8 | 0 | | 81.9 | 0.7 | 17.4 | | 0.3 | 36.6 | 63.1 | | 25 | 12.5 | 62.5 | |
| PHF | .338 | .392 | .000 | .381 | .824 | .250 | .650 | .847 | .250 | .713 | .935 | .842 | .500 | .250 | .417 | .500 |

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City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 7 | 0 | 0 | 7 | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 10 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 3 |
| 04:30 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 4 |
| 04:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 2 | 5 |
| Total | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 | 5 | 1 | 4 | 10 | 0 | 0 | 3 | 3 | 22 |
| | | | | | | | | | | | | | | | | | |
| 05:00 PM | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 3 |
| 05:45 PM | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| Total | 0 | 1 | 0 | 1 | 3 | 0 | 1 | 4 | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 13 |
| | | | | | | | | | | | | | | | | | |
| Grand Total | 0 | 1 | 0 | 1 | 12 | 0 | 1 | 13 | 5 | 1 | 12 | 18 | 0 | 0 | 3 | 3 | 35 |
| Apprch % | 0 | 100 | 0 | | 92.3 | 0 | 7.7 | | 27.8 | 5.6 | 66.7 | | 0 | 0 | 100 | | |
| Total % | 0 | 2.9 | 0 | 2.9 | 34.3 | 0 | 2.9 | 37.1 | 14.3 | 2.9 | 34.3 | 51.4 | 0 | 0 | 8.6 | 8.6 | |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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** | 1 | 0 | 0 | 1 | 0 | 0 | **2** | **2** | 0 | 0 | 0 | 0 | **4** |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 3 |
| 05:45 PM | 0 | 0 | 0 | 0 | **2** | 0 | 0 | **2** | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 4 |
| Total Volume | 0 | 1 | 0 | 1 | 3 | 0 | 1 | 4 | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 13 |
| % App. Total | 0 | 100 | 0 | | 75 | 0 | 25 | | 0 | 0 | 100 | | 0 | 0 | 0 | | |
| PHF | .000 | .250 | .000 | .250 | .375 | .000 | .250 | .500 | .000 | .000 | 1.00 | 1.00 | .000 | .000 | .000 | .000 | .813 |

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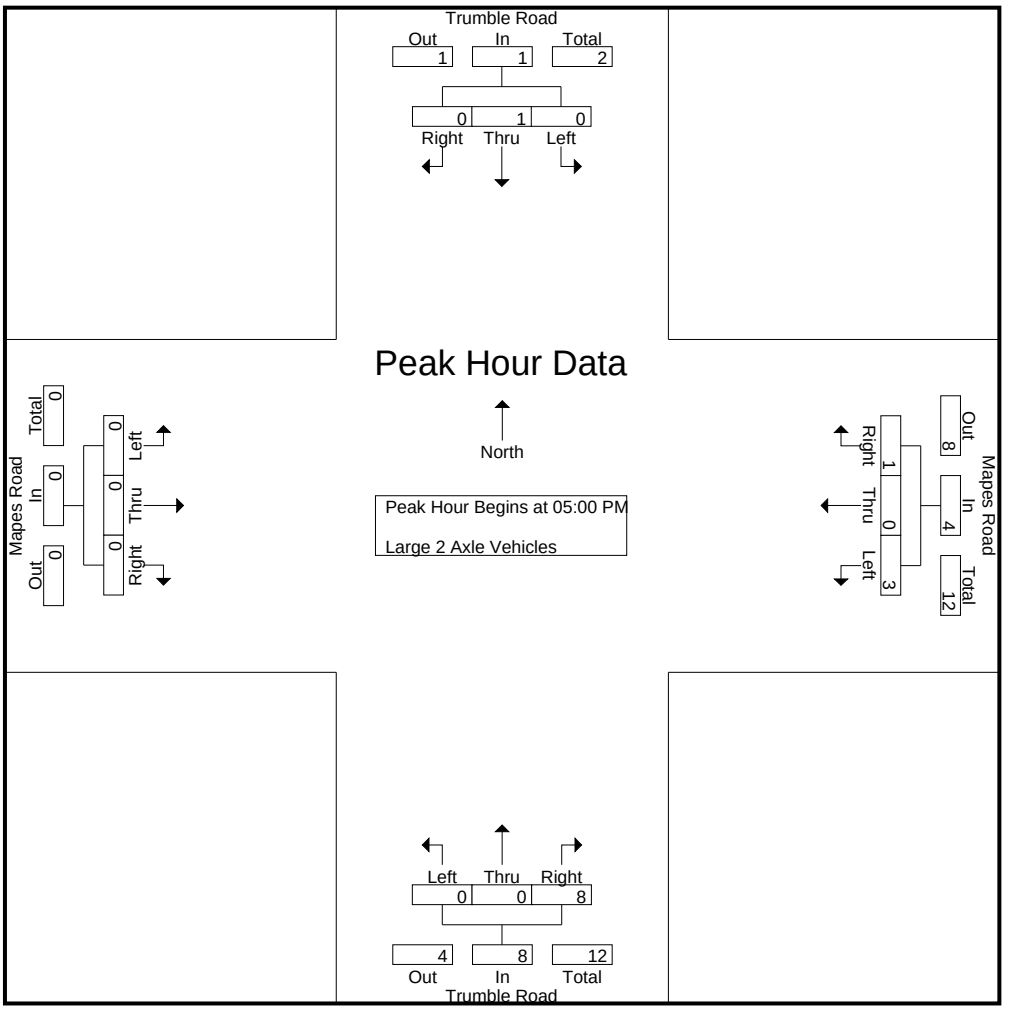
City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022


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** | 1 | 0 | 0 | 1 | 0 | 0 | **2** | **2** | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 0 | 0 | 0 | **2** | 0 | 0 | **2** | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 1 | 0 | 1 | 3 | 0 | 1 | 4 | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 0 |
| % App. Total | 0 | 100 | 0 | | 75 | 0 | 25 | | 0 | 0 | 100 | | 0 | 0 | 0 | |
| PHF | .000 | .250 | .000 | .250 | .375 | .000 | .250 | .500 | .000 | .000 | 1.000 | 1.000 | .000 | .000 | .000 | .000 |

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City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 |
| Total | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 1 | 1 | 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 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 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 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 |
| Grand Total | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 3 | 3 | 0 | 0 | 1 | 1 | 7 |
| Apprch % | 0 | 0 | 0 | | 100 | 0 | 0 | | 0 | 0 | 100 | | 0 | 0 | 100 | | |
| Total % | 0 | 0 | 0 | 0 | 42.9 | 0 | 0 | 42.9 | 0 | 0 | 42.9 | 42.9 | 0 | 0 | 14.3 | 14.3 | |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | **2** | 0 | 0 | **2** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **2** |
| 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 | **1** | **1** | 0 | 0 | 0 | 0 | 1 |
| Total Volume | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 3 |
| % App. Total | 0 | 0 | 0 | | 100 | 0 | 0 | | 0 | 0 | 100 | | 0 | 0 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .250 | .000 | .000 | .250 | .000 | .000 | .250 | .250 | .000 | .000 | .000 | .000 | .375 |

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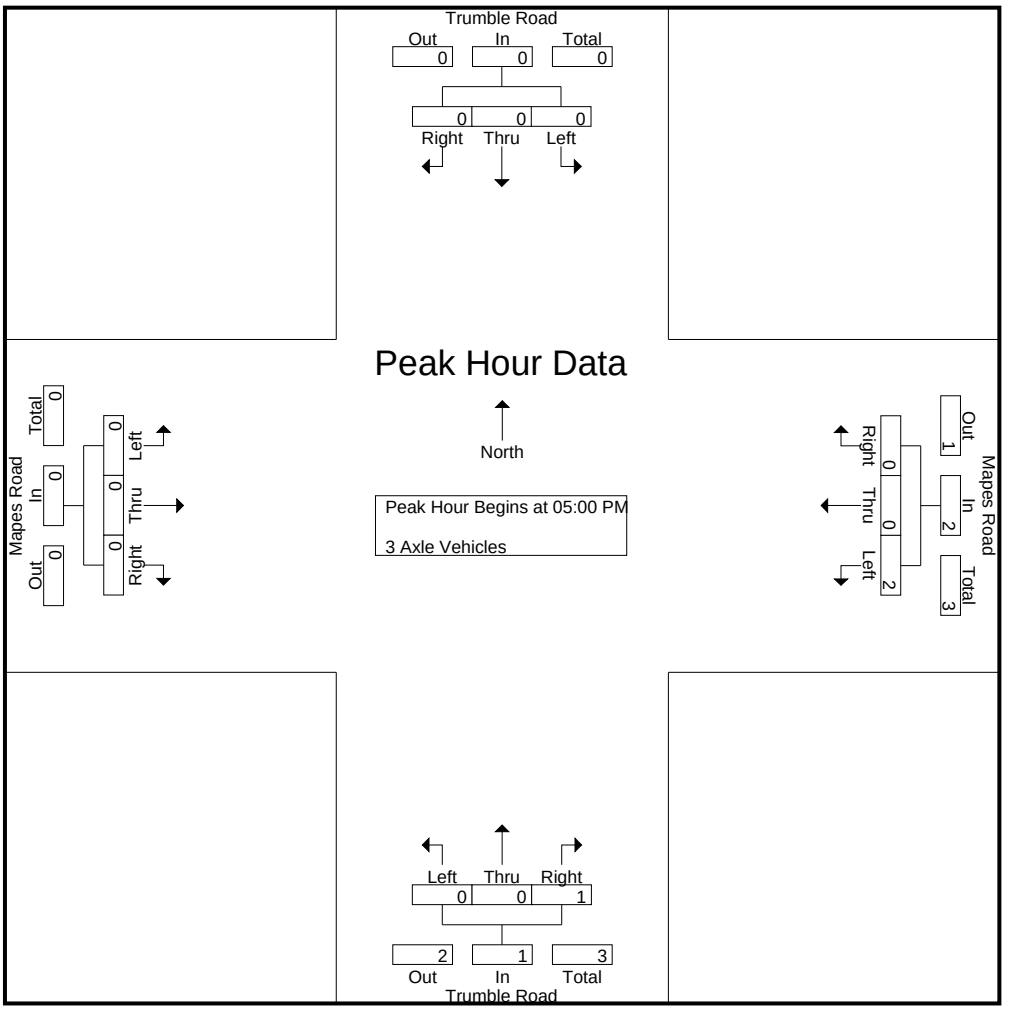
City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022
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 | **2** | 0 | 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 | **1** | **1** | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| % App. Total | 0 | 0 | 0 | | 100 | 0 | 0 | | 0 | 0 | 100 | | 0 | 0 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .250 | .000 | .000 | .250 | .000 | .000 | .250 | .250 | .000 | .000 | .000 | .000 |

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City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 1 | 1 | 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 | 0 | 0 | 0 | 0 | 0 | 1 | 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 | 0 | 2 | 2 | 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 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 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 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Grand Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 3 |
| Apprch % | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 100 | | 0 | 0 | 0 | | |
| Total % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 0 | 0 | 0 | |

| | Trumble Road Southbound | | | | Mapes Road Westbound | | | | Trumble Road Northbound | | | | Mapes Road 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | **1** | 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 Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| % App. Total | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 100 | | 0 | 0 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .250 | .250 | .000 | .000 | .000 | .000 | .250 |

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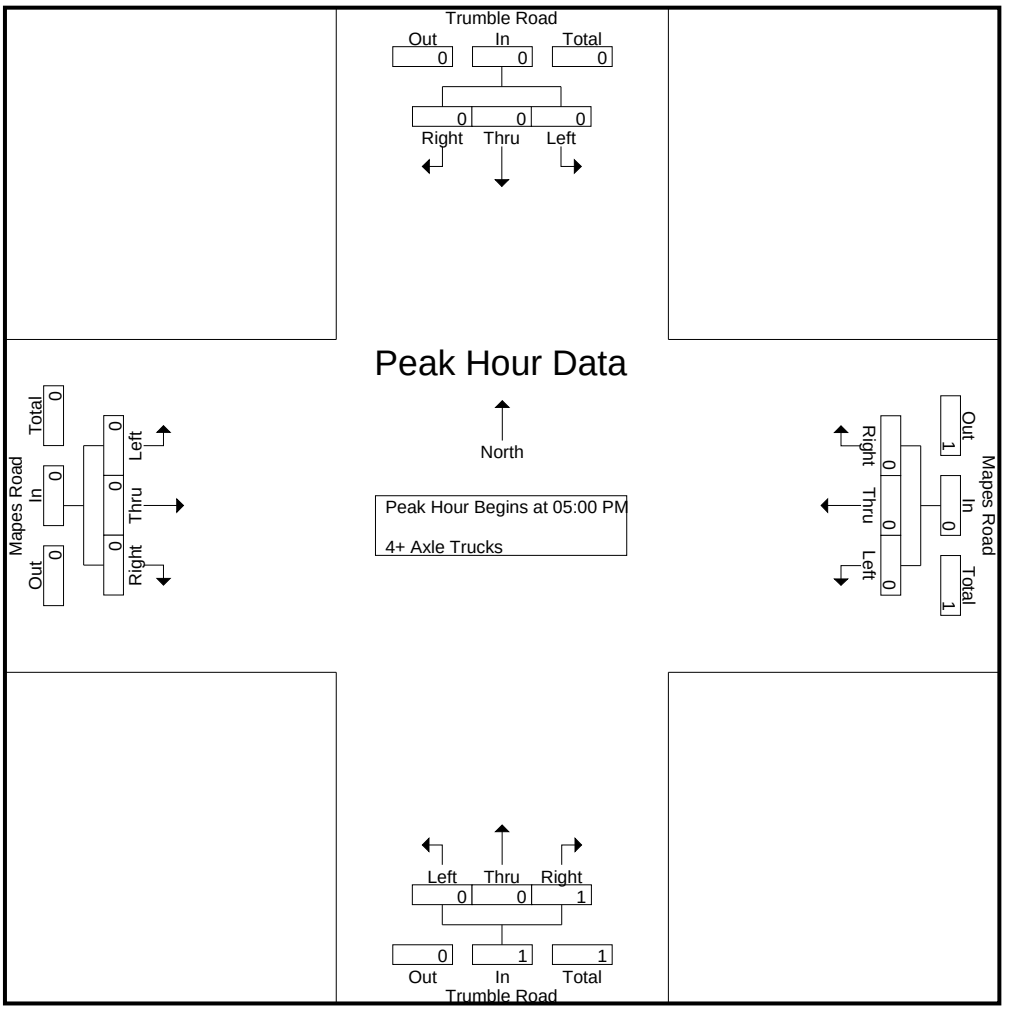
City of Perris
N/S: Trumble Road
E/W: Mapes Road
Weather: Clear

File Name : 03_PER_Trumble_Mapes PM
Site Code : 00322221
Start Date : 3/10/2022
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 | 0 | 0 | 0 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| % App. Total | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 100 | | 0 | 0 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .250 | .250 | .000 | .000 | .000 | .000 |

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Corona, CA 92878
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City of Perris
N/S: Trumble Road
E/W: Exceed Road
Weather: Clear

File Name : 04_PER_Trumble_Exceed AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Total Volume

| | Trumble Road Southbound | | | | Sturgeon Electric CA Driveway Westbound | | | | Trumble Road Northbound | | | | Exceed Road 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 | 19 | 0 | 1 | 20 | 1 | 33 | 1 | 35 | 0 | 0 | 0 | 0 | 121 |
| 07:15 AM | 0 | 72 | 0 | 72 | 18 | 0 | 0 | 18 | 0 | 44 | 6 | 50 | 0 | 0 | 0 | 0 | 140 |
| 07:30 AM | 0 | 76 | 0 | 76 | 11 | 1 | 0 | 12 | 1 | 37 | 1 | 39 | 0 | 0 | 1 | 1 | 128 |
| 07:45 AM | 0 | 75 | 2 | 77 | 6 | 0 | 0 | 6 | 3 | 36 | 1 | 40 | 0 | 0 | 0 | 0 | 123 |
| Total | 0 | 289 | 2 | 291 | 54 | 1 | 1 | 56 | 5 | 150 | 9 | 164 | 0 | 0 | 1 | 1 | 512 |
| | | | | | | | | | | | | | | | | | |
| 08:00 AM | 0 | 76 | 0 | 76 | 2 | 0 | 0 | 2 | 1 | 30 | 0 | 31 | 0 | 0 | 0 | 0 | 109 |
| 08:15 AM | 0 | 45 | 0 | 45 | 2 | 0 | 0 | 2 | 2 | 43 | 0 | 45 | 0 | 0 | 0 | 0 | 92 |
| 08:30 AM | 0 | 52 | 0 | 52 | 1 | 0 | 0 | 1 | 0 | 39 | 0 | 39 | 0 | 0 | 1 | 1 | 93 |
| 08:45 AM | 1 | 42 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 29 | 2 | 31 | 0 | 0 | 0 | 0 | 74 |
| Total | 1 | 215 | 0 | 216 | 5 | 0 | 0 | 5 | 3 | 141 | 2 | 146 | 0 | 0 | 1 | 1 | 368 |
| | | | | | | | | | | | | | | | | | |
| Grand Total | 1 | 504 | 2 | 507 | 59 | 1 | 1 | 61 | 8 | 291 | 11 | 310 | 0 | 0 | 2 | 2 | 880 |
| Apprch % | 0.2 | 99.4 | 0.4 | | 96.7 | 1.6 | 1.6 | | 2.6 | 93.9 | 3.5 | | 0 | 0 | 100 | | |
| Total % | 0.1 | 57.3 | 0.2 | 57.6 | 6.7 | 0.1 | 0.1 | 6.9 | 0.9 | 33.1 | 1.2 | 35.2 | 0 | 0 | 0.2 | 0.2 | |

| | Trumble Road Southbound | | | | Sturgeon Electric CA Driveway Westbound | | | | Trumble Road Northbound | | | | Exceed Road 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 07:00 AM | | | | | | | | | | | | | | | | | |
| 07:00 AM | 0 | 66 | 0 | 66 | **19** | 0 | **1** | **20** | 1 | 33 | 1 | 35 | 0 | 0 | 0 | 0 | 121 |
| 07:15 AM | 0 | 72 | 0 | 72 | 18 | 0 | 0 | 18 | 0 | **44** | **6** | **50** | 0 | 0 | 0 | 0 | **140** |
| 07:30 AM | 0 | **76** | 0 | 76 | 11 | **1** | 0 | 12 | 1 | 37 | 1 | 39 | 0 | 0 | **1** | **1** | 128 |
| 07:45 AM | 0 | 75 | **2** | **77** | 6 | 0 | 0 | 6 | **3** | 36 | 1 | 40 | 0 | 0 | 0 | 0 | 123 |
| Total Volume | 0 | 289 | 2 | 291 | 54 | 1 | 1 | 56 | 5 | 150 | 9 | 164 | 0 | 0 | 1 | 1 | 512 |
| % App. Total | 0 | 99.3 | 0.7 | | 96.4 | 1.8 | 1.8 | | 3 | 91.5 | 5.5 | | 0 | 0 | 100 | | |
| PHF | .000 | .951 | .250 | .945 | .711 | .250 | .250 | .700 | .417 | .852 | .375 | .820 | .000 | .000 | .250 | .250 | .914 |

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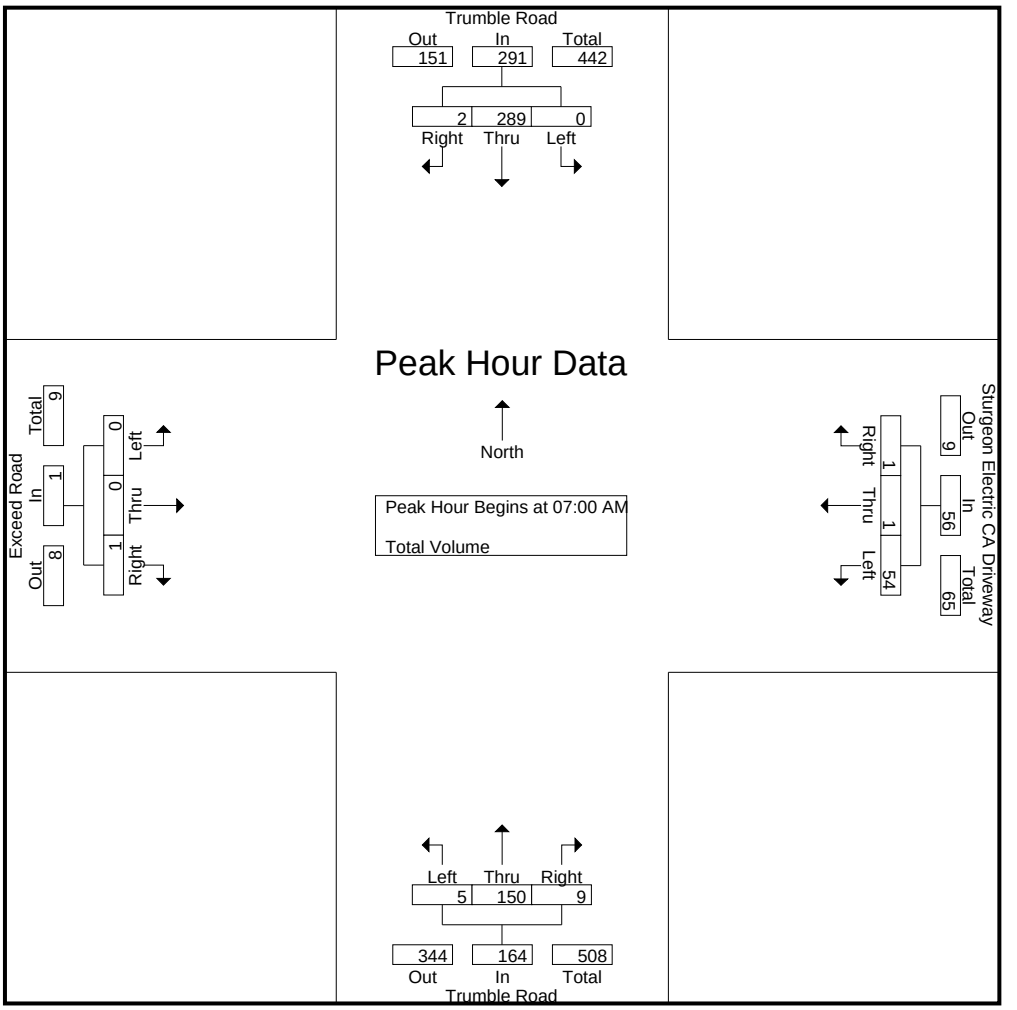
City of Perris
N/S: Trumble Road
E/W: Exceed Road
Weather: Clear

File Name : 04_PER_Trumble_Exceed AM
Site Code : 00322221
Start Date : 3/10/2022
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:

| | 07:15 AM | | | | 07:00 AM | | | | 07:00 AM | | | | 07:00 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 72 | 0 | 72 | **19** | 0 | **1** | **20** | 1 | 33 | 1 | 35 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | **76** | 0 | 76 | 18 | 0 | 0 | 18 | 0 | **44** | **6** | **50** | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 75 | **2** | **77** | 11 | **1** | 0 | 12 | 1 | 37 | 1 | 39 | 0 | 0 | **1** | **1** |
| +45 mins. | 0 | 76 | 0 | 76 | 6 | 0 | 0 | 6 | **3** | 36 | 1 | 40 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 299 | 2 | 301 | 54 | 1 | 1 | 56 | 5 | 150 | 9 | 164 | 0 | 0 | 1 | 1 |
| % App. Total | 0 | 99.3 | 0.7 | | 96.4 | 1.8 | 1.8 | | 3 | 91.5 | 5.5 | | 0 | 0 | 100 | |
| PHF | .000 | .984 | .250 | .977 | .711 | .250 | .250 | .700 | .417 | .852 | .375 | .820 | .000 | .000 | .250 | .250 |

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City of Perris
N/S: Trumble Road
E/W: Exceed Road
Weather: Clear

File Name : 04_PER_Trumble_Exceed PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Total Volume

| | Trumble Road Southbound | | | | Sturgeon Electric CA Driveway Westbound | | | | Trumble Road Northbound | | | | Exceed Road 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 | 75 | 1 | 76 | 8 | 0 | 0 | 8 | 1 | 53 | 1 | 55 | 1 | 0 | 4 | 5 | 144 |
| 04:15 PM | 0 | 67 | 0 | 67 | 5 | 0 | 0 | 5 | 0 | 63 | 1 | 64 | 0 | 0 | 1 | 1 | 137 |
| 04:30 PM | 0 | 93 | 0 | 93 | 4 | 0 | 1 | 5 | 1 | 58 | 0 | 59 | 0 | 0 | 2 | 2 | 159 |
| 04:45 PM | 1 | 55 | 0 | 56 | 12 | 0 | 0 | 12 | 0 | 61 | 0 | 61 | 0 | 0 | 0 | 0 | 129 |
| Total | 1 | 290 | 1 | 292 | 29 | 0 | 1 | 30 | 2 | 235 | 2 | 239 | 1 | 0 | 7 | 8 | 569 |
| | | | | | | | | | | | | | | | | | |
| 05:00 PM | 0 | 115 | 0 | 115 | 7 | 0 | 0 | 7 | 1 | 72 | 0 | 73 | 0 | 0 | 2 | 2 | 197 |
| 05:15 PM | 0 | 53 | 0 | 53 | 2 | 0 | 0 | 2 | 0 | 69 | 0 | 69 | 0 | 0 | 1 | 1 | 125 |
| 05:30 PM | 0 | 48 | 0 | 48 | 2 | 0 | 0 | 2 | 0 | 90 | 0 | 90 | 0 | 0 | 0 | 0 | 140 |
| 05:45 PM | 0 | 46 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 96 | 6 | 102 | 0 | 0 | 0 | 0 | 148 |
| Total | 0 | 262 | 0 | 262 | 11 | 0 | 0 | 11 | 1 | 327 | 6 | 334 | 0 | 0 | 3 | 3 | 610 |
| | | | | | | | | | | | | | | | | | |
| Grand Total | 1 | 552 | 1 | 554 | 40 | 0 | 1 | 41 | 3 | 562 | 8 | 573 | 1 | 0 | 10 | 11 | 1179 |
| Apprch % | 0.2 | 99.6 | 0.2 | | 97.6 | 0 | 2.4 | | 0.5 | 98.1 | 1.4 | | 9.1 | 0 | 90.9 | | |
| Total % | 0.1 | 46.8 | 0.1 | 47 | 3.4 | 0 | 0.1 | 3.5 | 0.3 | 47.7 | 0.7 | 48.6 | 0.1 | 0 | 0.8 | 0.9 | |

| | Trumble Road Southbound | | | | Sturgeon Electric CA Driveway Westbound | | | | Trumble Road Northbound | | | | Exceed Road 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 | 0 | 67 | 0 | 67 | 5 | 0 | 0 | 5 | 0 | 63 | **1** | 64 | 0 | 0 | 1 | 1 | 137 |
| 04:30 PM | 0 | 93 | 0 | 93 | 4 | 0 | **1** | 5 | **1** | 58 | 0 | 59 | 0 | 0 | **2** | **2** | 159 |
| 04:45 PM | **1** | 55 | 0 | 56 | **12** | 0 | 0 | **12** | 0 | 61 | 0 | 61 | 0 | 0 | 0 | 0 | 129 |
| 05:00 PM | 0 | **115** | 0 | **115** | 7 | 0 | 0 | 7 | 1 | **72** | 0 | **73** | 0 | 0 | 2 | 2 | **197** |
| Total Volume | 1 | 330 | 0 | 331 | 28 | 0 | 1 | 29 | 2 | 254 | 1 | 257 | 0 | 0 | 5 | 5 | 622 |
| % App. Total | 0.3 | 99.7 | 0 | | 96.6 | 0 | 3.4 | | 0.8 | 98.8 | 0.4 | | 0 | 0 | 100 | | |
| PHF | .250 | .717 | .000 | .720 | .583 | .000 | .250 | .604 | .500 | .882 | .250 | .880 | .000 | .000 | .625 | .625 | .789 |

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City of Perris
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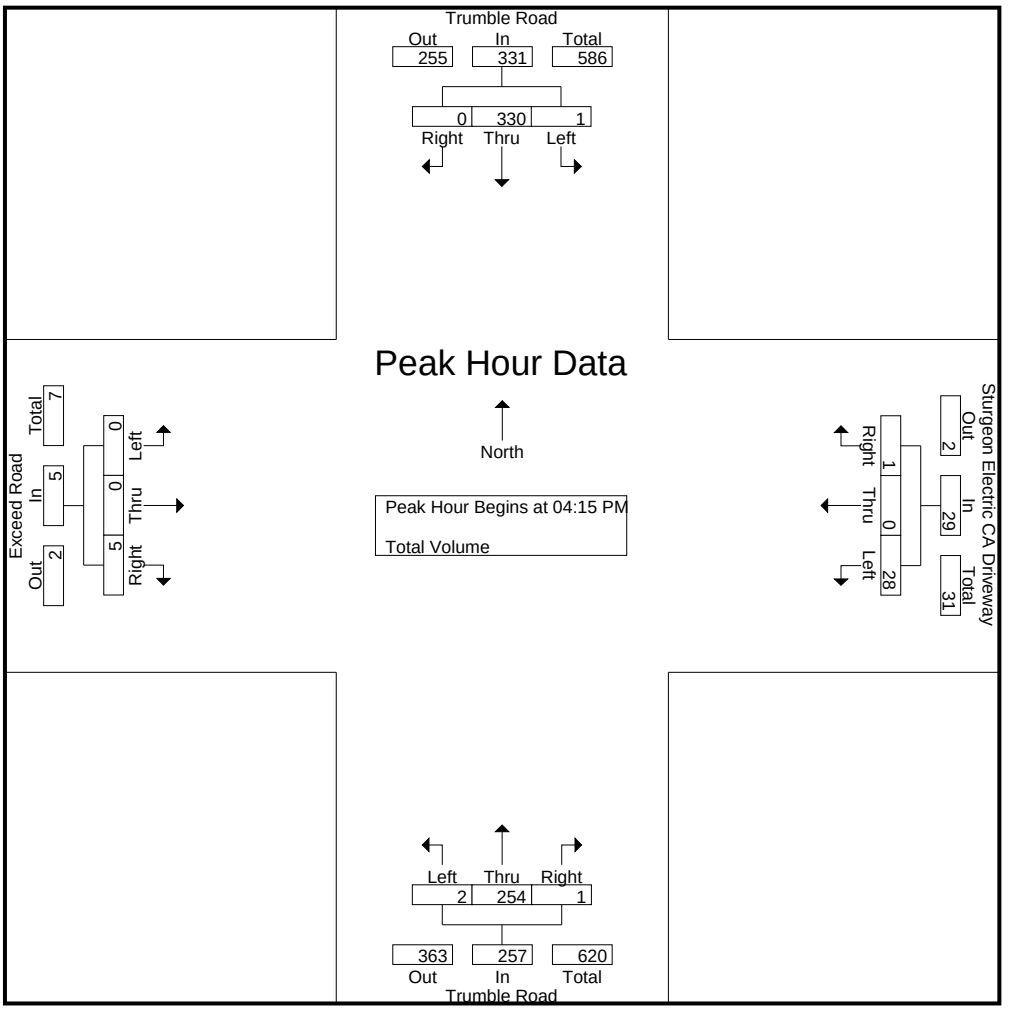
E/W: Exceed Road
Weather: Clear

File Name : 04_PER_Trumble_Exceed PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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 | | | | 04:00 PM | | | | 05:00 PM | | | | 04:00 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 67 | 0 | 67 | 8 | 0 | 0 | 8 | **1** | 72 | 0 | 73 | **1** | 0 | **4** | **5** |
| +15 mins. | 0 | 93 | 0 | 93 | 5 | 0 | 0 | 5 | 0 | 69 | 0 | 69 | 0 | 0 | 1 | 1 |
| +30 mins. | **1** | 55 | 0 | 56 | 4 | 0 | **1** | 5 | 0 | 90 | 0 | 90 | 0 | 0 | 2 | 2 |
| +45 mins. | 0 | **115** | 0 | **115** | **12** | 0 | 0 | **12** | 0 | **96** | **6** | **102** | 0 | 0 | 0 | 0 |
| Total Volume | 1 | 330 | 0 | 331 | 29 | 0 | 1 | 30 | 1 | 327 | 6 | 334 | 1 | 0 | 7 | 8 |
| % App. Total | 0.3 | 99.7 | 0 | | 96.7 | 0 | 3.3 | | 0.3 | 97.9 | 1.8 | | 12.5 | 0 | 87.5 | |
| PHF | .250 | .717 | .000 | .720 | .604 | .000 | .250 | .625 | .250 | .852 | .250 | .819 | .250 | .000 | .438 | .400 |

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City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

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

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 6 | 117 | 123 | 211 | 8 | 219 | 39 | 152 | 191 | 533 |
| 07:15 AM | 13 | 107 | 120 | 236 | 5 | 241 | 52 | 190 | 242 | 603 |
| 07:30 AM | 5 | 101 | 106 | 231 | 4 | 235 | 38 | 154 | 192 | 533 |
| 07:45 AM | 16 | 94 | 110 | 267 | 11 | 278 | 37 | 142 | 179 | 567 |
| Total | 40 | 419 | 459 | 945 | 28 | 973 | 166 | 638 | 804 | 2236 |
| | | | | | | | | | | |
| 08:00 AM | 7 | 94 | 101 | 249 | 8 | 257 | 42 | 151 | 193 | 551 |
| 08:15 AM | 5 | 68 | 73 | 187 | 7 | 194 | 45 | 142 | 187 | 454 |
| 08:30 AM | 6 | 57 | 63 | 193 | 3 | 196 | 35 | 140 | 175 | 434 |
| 08:45 AM | 1 | 55 | 56 | 180 | 4 | 184 | 36 | 130 | 166 | 406 |
| Total | 19 | 274 | 293 | 809 | 22 | 831 | 158 | 563 | 721 | 1845 |
| | | | | | | | | | | |
| Grand Total | 59 | 693 | 752 | 1754 | 50 | 1804 | 324 | 1201 | 1525 | 4081 |
| Apprch % | 7.8 | 92.2 | | 97.2 | 2.8 | | 21.2 | 78.8 | | |
| Total % | 1.4 | 17 | 18.4 | 43 | 1.2 | 44.2 | 7.9 | 29.4 | 37.4 | |
| Passenger Vehicles | 51 | 582 | 633 | 1668 | 45 | 1713 | 293 | 1041 | 1334 | 3680 |
| % Passenger Vehicles | 86.4 | 84 | 84.2 | 95.1 | 90 | 95 | 90.4 | 86.7 | 87.5 | 90.2 |
| Large 2 Axle Vehicles | 8 | 76 | 84 | 46 | 4 | 50 | 23 | 75 | 98 | 232 |
| % Large 2 Axle Vehicles | 13.6 | 11 | 11.2 | 2.6 | 8 | 2.8 | 7.1 | 6.2 | 6.4 | 5.7 |
| 3 Axle Vehicles | 0 | 8 | 8 | 23 | 1 | 24 | 4 | 35 | 39 | 71 |
| % 3 Axle Vehicles | 0 | 1.2 | 1.1 | 1.3 | 2 | 1.3 | 1.2 | 2.9 | 2.6 | 1.7 |
| 4+ Axle Trucks | 0 | 27 | 27 | 17 | 0 | 17 | 4 | 50 | 54 | 98 |
| % 4+ Axle Trucks | 0 | 3.9 | 3.6 | 1 | 0 | 0.9 | 1.2 | 4.2 | 3.5 | 2.4 |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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 07:15 AM | | | | | | | | | | |
| 07:15 AM | 13 | **107** | **120** | 236 | 5 | 241 | **52** | **190** | **242** | **603** |
| 07:30 AM | 5 | 101 | 106 | 231 | 4 | 235 | 38 | 154 | 192 | 533 |
| 07:45 AM | **16** | 94 | 110 | **267** | **11** | **278** | 37 | 142 | 179 | 567 |
| 08:00 AM | 7 | 94 | 101 | 249 | 8 | 257 | 42 | 151 | 193 | 551 |
| Total Volume | 41 | 396 | 437 | 983 | 28 | 1011 | 169 | 637 | 806 | 2254 |
| % App. Total | 9.4 | 90.6 | | 97.2 | 2.8 | | 21 | 79 | | |
| PHF | .641 | .925 | .910 | .920 | .636 | .909 | .813 | .838 | .833 | .934 |

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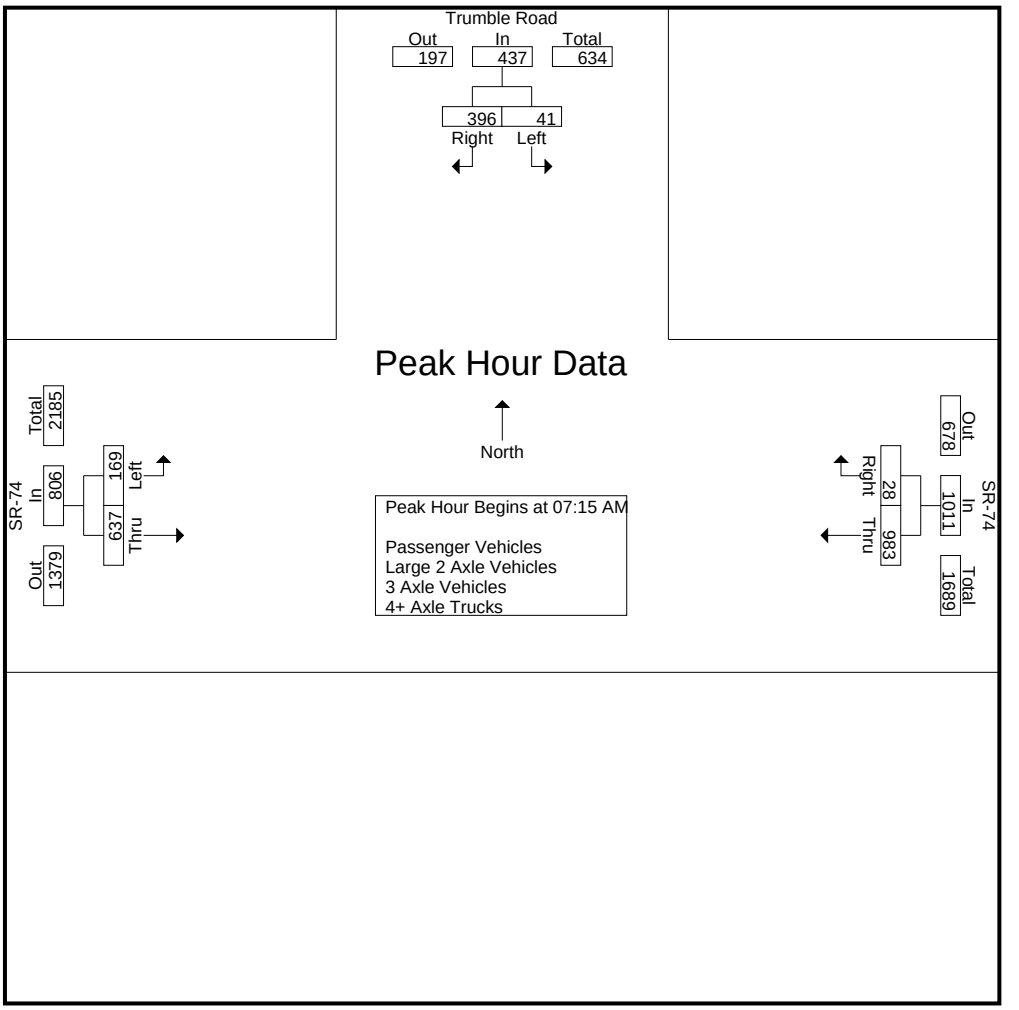
City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
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:

| | 07:00 AM | | | 07:15 AM | | | 07:15 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 6 | **117** | **123** | 236 | 5 | 241 | **52** | **190** | **242** |
| +15 mins. | 13 | 107 | 120 | 231 | 4 | 235 | 38 | 154 | 192 |
| +30 mins. | 5 | 101 | 106 | **267** | **11** | **278** | 37 | 142 | 179 |
| +45 mins. | **16** | 94 | 110 | 249 | 8 | 257 | 42 | 151 | 193 |
| Total Volume | 40 | 419 | 459 | 983 | 28 | 1011 | 169 | 637 | 806 |
| % App. Total | 8.7 | 91.3 | | 97.2 | 2.8 | | 21 | 79 | |
| PHF | .625 | .895 | .933 | .920 | .636 | .909 | .813 | .838 | .833 |

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City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Passenger Vehicles

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 3 | 75 | 78 | 195 | 7 | 202 | 33 | 130 | 163 | 443 |
| 07:15 AM | 12 | 86 | 98 | 228 | 5 | 233 | 50 | 165 | 215 | 546 |
| 07:30 AM | 5 | 85 | 90 | 220 | 4 | 224 | 35 | 128 | 163 | 477 |
| 07:45 AM | 14 | 87 | 101 | 259 | 10 | 269 | 35 | 120 | 155 | 525 |
| Total | 34 | 333 | 367 | 902 | 26 | 928 | 153 | 543 | 696 | 1991 |
| | | | | | | | | | | |
| 08:00 AM | 7 | 84 | 91 | 240 | 7 | 247 | 36 | 130 | 166 | 504 |
| 08:15 AM | 4 | 59 | 63 | 175 | 6 | 181 | 38 | 130 | 168 | 412 |
| 08:30 AM | 5 | 52 | 57 | 186 | 2 | 188 | 31 | 125 | 156 | 401 |
| 08:45 AM | 1 | 54 | 55 | 165 | 4 | 169 | 35 | 113 | 148 | 372 |
| Total | 17 | 249 | 266 | 766 | 19 | 785 | 140 | 498 | 638 | 1689 |
| | | | | | | | | | | |
| Grand Total | 51 | 582 | 633 | 1668 | 45 | 1713 | 293 | 1041 | 1334 | 3680 |
| Apprch % | 8.1 | 91.9 | | 97.4 | 2.6 | | 22 | 78 | | |
| Total % | 1.4 | 15.8 | 17.2 | 45.3 | 1.2 | 46.5 | 8 | 28.3 | 36.2 | |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | |
| 07:15 AM | 12 | 86 | 98 | 228 | 5 | 233 | **50** | **165** | **215** | **546** |
| 07:30 AM | 5 | 85 | 90 | 220 | 4 | 224 | 35 | 128 | 163 | 477 |
| 07:45 AM | **14** | **87** | **101** | **259** | **10** | **269** | 35 | 120 | 155 | 525 |
| 08:00 AM | 7 | 84 | 91 | 240 | 7 | 247 | 36 | 130 | 166 | 504 |
| Total Volume | 38 | 342 | 380 | 947 | 26 | 973 | 156 | 543 | 699 | 2052 |
| % App. Total | 10 | 90 | | 97.3 | 2.7 | | 22.3 | 77.7 | | |
| PHF | .679 | .983 | .941 | .914 | .650 | .904 | .780 | .823 | .813 | .940 |

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City of Perris
N/S: Trumble Road
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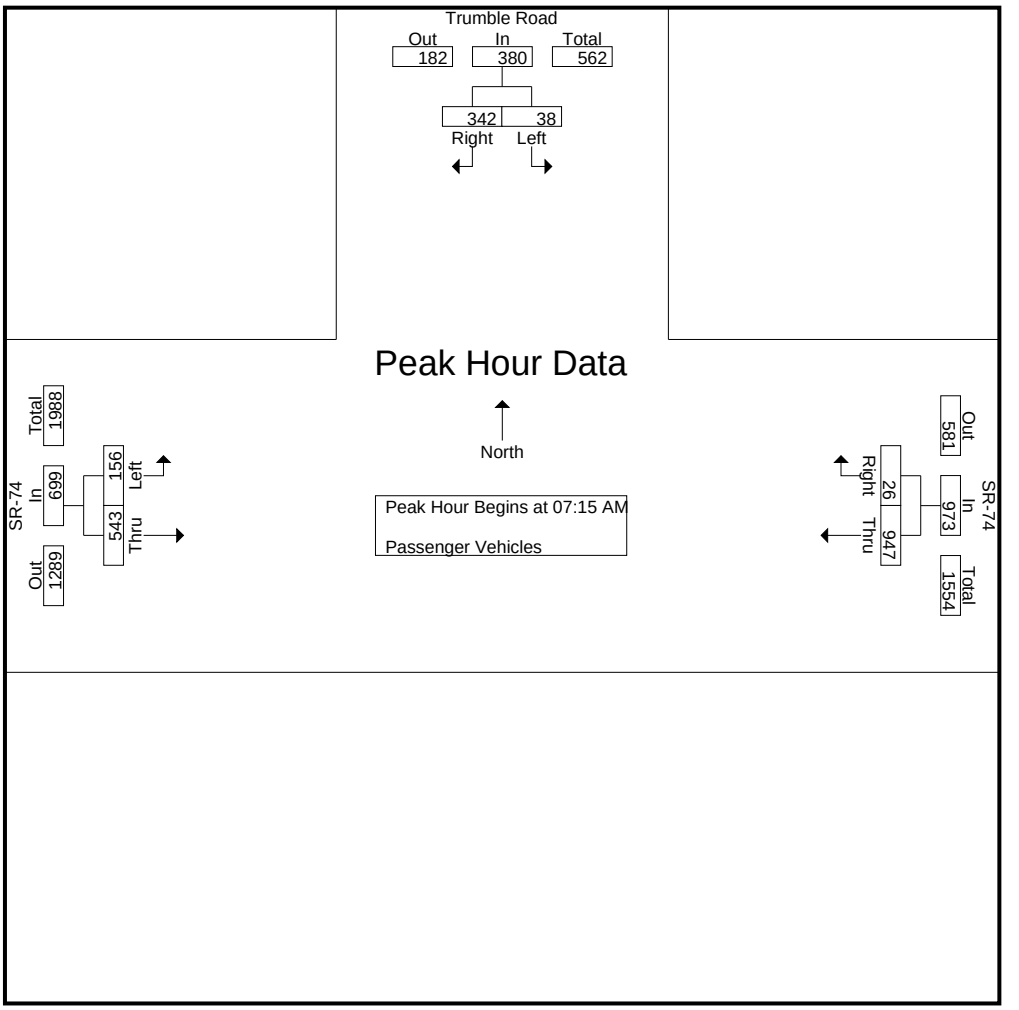
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:15 AM | | | 07:15 AM | | | 07:15 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 12 | 86 | 98 | 228 | 5 | 233 | **50** | **165** | **215** |
| +15 mins. | 5 | 85 | 90 | 220 | 4 | 224 | 35 | 128 | 163 |
| +30 mins. | **14** | **87** | **101** | **259** | **10** | **269** | 35 | 120 | 155 |
| +45 mins. | 7 | 84 | 91 | 240 | 7 | 247 | 36 | 130 | 166 |
| Total Volume | 38 | 342 | 380 | 947 | 26 | 973 | 156 | 543 | 699 |
| % App. Total | 10 | 90 | | 97.3 | 2.7 | | 22.3 | 77.7 | |
| PHF | .679 | .983 | .941 | .914 | .650 | .904 | .780 | .823 | .813 |

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City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 3 | 28 | 31 | 7 | 1 | 8 | 4 | 7 | 11 | 50 |
| 07:15 AM | 1 | 12 | 13 | 5 | 0 | 5 | 2 | 14 | 16 | 34 |
| 07:30 AM | 0 | 12 | 12 | 7 | 0 | 7 | 2 | 10 | 12 | 31 |
| 07:45 AM | 2 | 5 | 7 | 5 | 0 | 5 | 2 | 12 | 14 | 26 |
| Total | 6 | 57 | 63 | 24 | 1 | 25 | 10 | 43 | 53 | 141 |
| | | | | | | | | | | |
| 08:00 AM | 0 | 7 | 7 | 3 | 1 | 4 | 4 | 11 | 15 | 26 |
| 08:15 AM | 1 | 8 | 9 | 7 | 1 | 8 | 6 | 6 | 12 | 29 |
| 08:30 AM | 1 | 3 | 4 | 2 | 1 | 3 | 2 | 5 | 7 | 14 |
| 08:45 AM | 0 | 1 | 1 | 10 | 0 | 10 | 1 | 10 | 11 | 22 |
| Total | 2 | 19 | 21 | 22 | 3 | 25 | 13 | 32 | 45 | 91 |
| | | | | | | | | | | |
| Grand Total | 8 | 76 | 84 | 46 | 4 | 50 | 23 | 75 | 98 | 232 |
| Apprch % | 9.5 | 90.5 | | 92 | 8 | | 23.5 | 76.5 | | |
| Total % | 3.4 | 32.8 | 36.2 | 19.8 | 1.7 | 21.6 | 9.9 | 32.3 | 42.2 | |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | |
| 07:15 AM | 1 | **12** | **13** | 5 | 0 | 5 | 2 | **14** | **16** | **34** |
| 07:30 AM | 0 | 12 | 12 | **7** | 0 | **7** | 2 | 10 | 12 | 31 |
| 07:45 AM | **2** | 5 | 7 | 5 | 0 | 5 | 2 | 12 | 14 | 26 |
| 08:00 AM | 0 | 7 | 7 | 3 | **1** | 4 | **4** | 11 | 15 | 26 |
| Total Volume | 3 | 36 | 39 | 20 | 1 | 21 | 10 | 47 | 57 | 117 |
| % App. Total | 7.7 | 92.3 | | 95.2 | 4.8 | | 17.5 | 82.5 | | |
| PHF | .375 | .750 | .750 | .714 | .250 | .750 | .625 | .839 | .891 | .860 |

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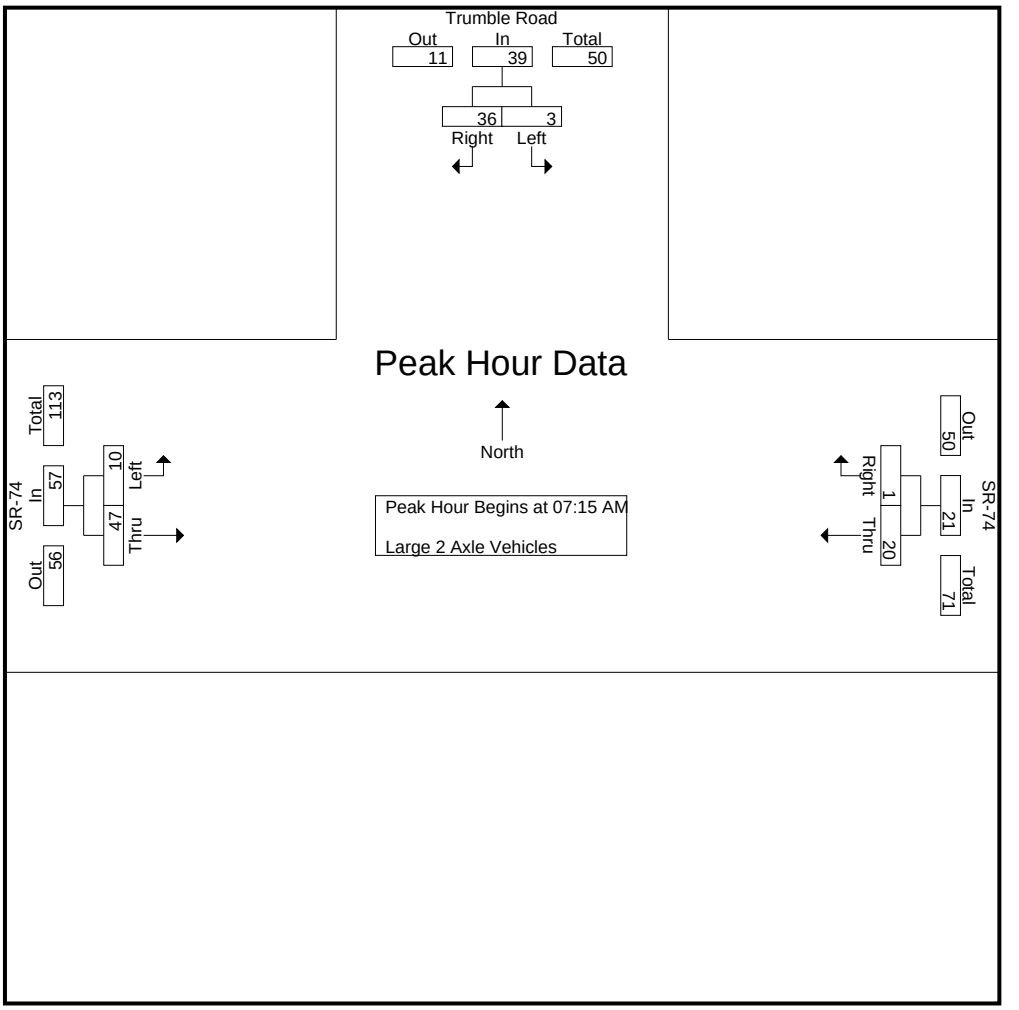
City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:15 AM | | | 07:15 AM | | | 07:15 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 1 | **12** | **13** | 5 | 0 | 5 | 2 | **14** | **16** |
| +15 mins. | 0 | 12 | 12 | **7** | 0 | **7** | 2 | 10 | 12 |
| +30 mins. | **2** | 5 | 7 | 5 | 0 | 5 | 2 | 12 | 14 |
| +45 mins. | 0 | 7 | 7 | 3 | **1** | 4 | **4** | 11 | 15 |
| Total Volume | 3 | 36 | 39 | 20 | 1 | 21 | 10 | 47 | 57 |
| % App. Total | 7.7 | 92.3 | | 95.2 | 4.8 | | 17.5 | 82.5 | |
| PHF | .375 | .750 | .750 | .714 | .250 | .750 | .625 | .839 | .891 |

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City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 0 | 3 | 3 | 4 | 0 | 4 | 1 | 7 | 8 | 15 |
| 07:15 AM | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 5 | 5 | 8 |
| 07:30 AM | 0 | 1 | 1 | 3 | 0 | 3 | 1 | 4 | 5 | 9 |
| 07:45 AM | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 2 | 2 | 5 |
| Total | 0 | 6 | 6 | 10 | 1 | 11 | 2 | 18 | 20 | 37 |
| | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 5 | 0 | 5 | 1 | 3 | 4 | 9 |
| 08:15 AM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 4 | 4 | 7 |
| 08:30 AM | 0 | 2 | 2 | 2 | 0 | 2 | 1 | 6 | 7 | 11 |
| 08:45 AM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 4 | 4 | 7 |
| Total | 0 | 2 | 2 | 13 | 0 | 13 | 2 | 17 | 19 | 34 |
| | | | | | | | | | | |
| Grand Total | 0 | 8 | 8 | 23 | 1 | 24 | 4 | 35 | 39 | 71 |
| Apprch % | 0 | 100 | | 95.8 | 4.2 | | 10.3 | 89.7 | | |
| Total % | 0 | 11.3 | 11.3 | 32.4 | 1.4 | 33.8 | 5.6 | 49.3 | 54.9 | |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | |
| 07:15 AM | 0 | **1** | **1** | 2 | 0 | 2 | 0 | **5** | **5** | 8 |
| 07:30 AM | 0 | 1 | 1 | 3 | 0 | 3 | **1** | 4 | 5 | **9** |
| 07:45 AM | 0 | 1 | 1 | 1 | **1** | 2 | 0 | 2 | 2 | 5 |
| 08:00 AM | 0 | 0 | 0 | **5** | 0 | **5** | 1 | 3 | 4 | 9 |
| Total Volume | 0 | 3 | 3 | 11 | 1 | 12 | 2 | 14 | 16 | 31 |
| % App. Total | 0 | 100 | | 91.7 | 8.3 | | 12.5 | 87.5 | | |
| PHF | .000 | .750 | .750 | .550 | .250 | .600 | .500 | .700 | .800 | .861 |

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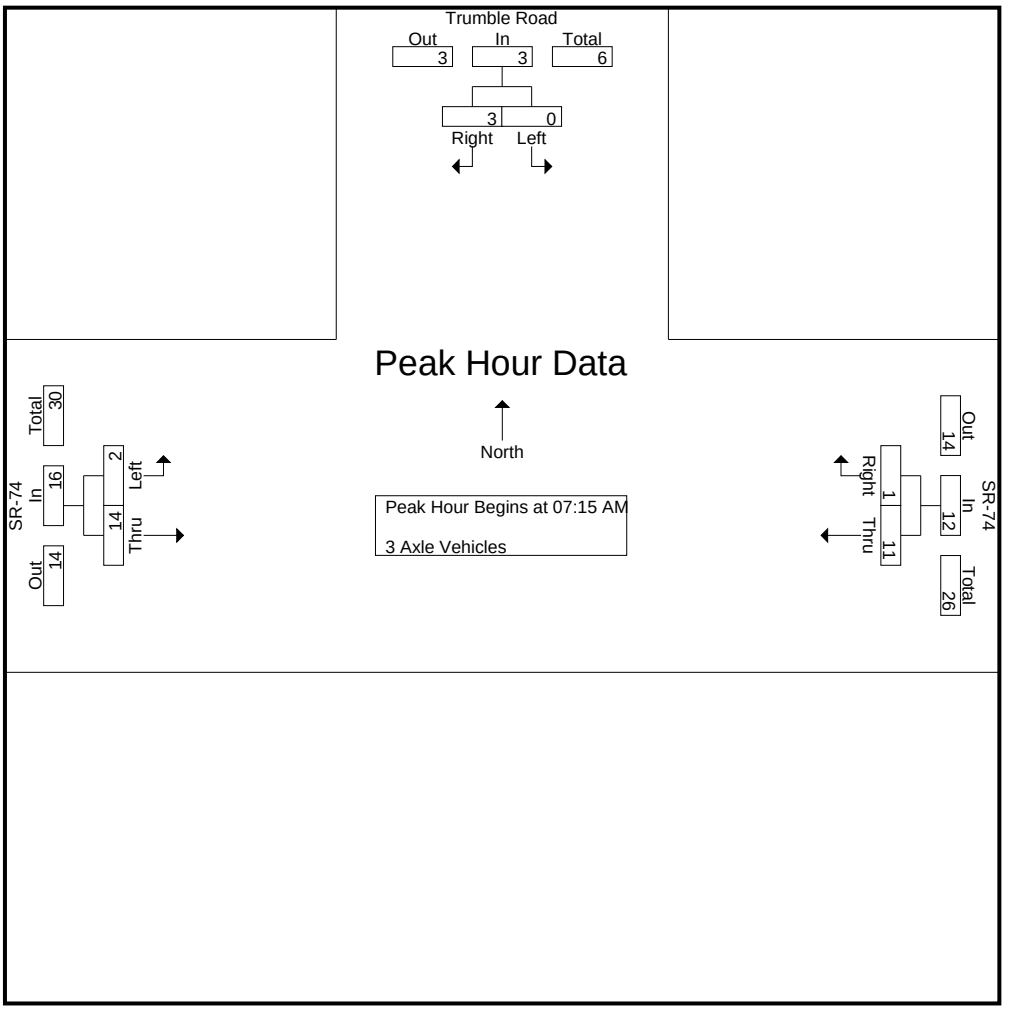
City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:15 AM | | | 07:15 AM | | | 07:15 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **1** | **1** | 2 | 0 | 2 | 0 | **5** | **5** |
| +15 mins. | 0 | 1 | 1 | 3 | 0 | 3 | **1** | 4 | 5 |
| +30 mins. | 0 | 1 | 1 | 1 | **1** | 2 | 0 | 2 | 2 |
| +45 mins. | 0 | 0 | 0 | **5** | 0 | **5** | 1 | 3 | 4 |
| Total Volume | 0 | 3 | 3 | 11 | 1 | 12 | 2 | 14 | 16 |
| % App. Total | 0 | 100 | | 91.7 | 8.3 | | 12.5 | 87.5 | |
| PHF | .000 | .750 | .750 | .550 | .250 | .600 | .500 | .700 | .800 |

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City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 0 | 11 | 11 | 5 | 0 | 5 | 1 | 8 | 9 | 25 |
| 07:15 AM | 0 | 8 | 8 | 1 | 0 | 1 | 0 | 6 | 6 | 15 |
| 07:30 AM | 0 | 3 | 3 | 1 | 0 | 1 | 0 | 12 | 12 | 16 |
| 07:45 AM | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 8 | 8 | 11 |
| Total | 0 | 23 | 23 | 9 | 0 | 9 | 1 | 34 | 35 | 67 |
| | | | | | | | | | | |
| 08:00 AM | 0 | 3 | 3 | 1 | 0 | 1 | 1 | 7 | 8 | 12 |
| 08:15 AM | 0 | 1 | 1 | 2 | 0 | 2 | 1 | 2 | 3 | 6 |
| 08:30 AM | 0 | 0 | 0 | 3 | 0 | 3 | 1 | 4 | 5 | 8 |
| 08:45 AM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 3 | 3 | 5 |
| Total | 0 | 4 | 4 | 8 | 0 | 8 | 3 | 16 | 19 | 31 |
| | | | | | | | | | | |
| Grand Total | 0 | 27 | 27 | 17 | 0 | 17 | 4 | 50 | 54 | 98 |
| Apprch % | 0 | 100 | | 100 | 0 | | 7.4 | 92.6 | | |
| Total % | 0 | 27.6 | 27.6 | 17.3 | 0 | 17.3 | 4.1 | 51 | 55.1 | |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | |
| 07:15 AM | 0 | **8** | **8** | 1 | 0 | 1 | 0 | 6 | 6 | 15 |
| 07:30 AM | 0 | 3 | 3 | 1 | 0 | 1 | 0 | **12** | **12** | **16** |
| 07:45 AM | 0 | 1 | 1 | **2** | 0 | **2** | 0 | 8 | 8 | 11 |
| 08:00 AM | 0 | 3 | 3 | 1 | 0 | 1 | **1** | 7 | 8 | 12 |
| Total Volume | 0 | 15 | 15 | 5 | 0 | 5 | 1 | 33 | 34 | 54 |
| % App. Total | 0 | 100 | | 100 | 0 | | 2.9 | 97.1 | | |
| PHF | .000 | .469 | .469 | .625 | .000 | .625 | .250 | .688 | .708 | .844 |

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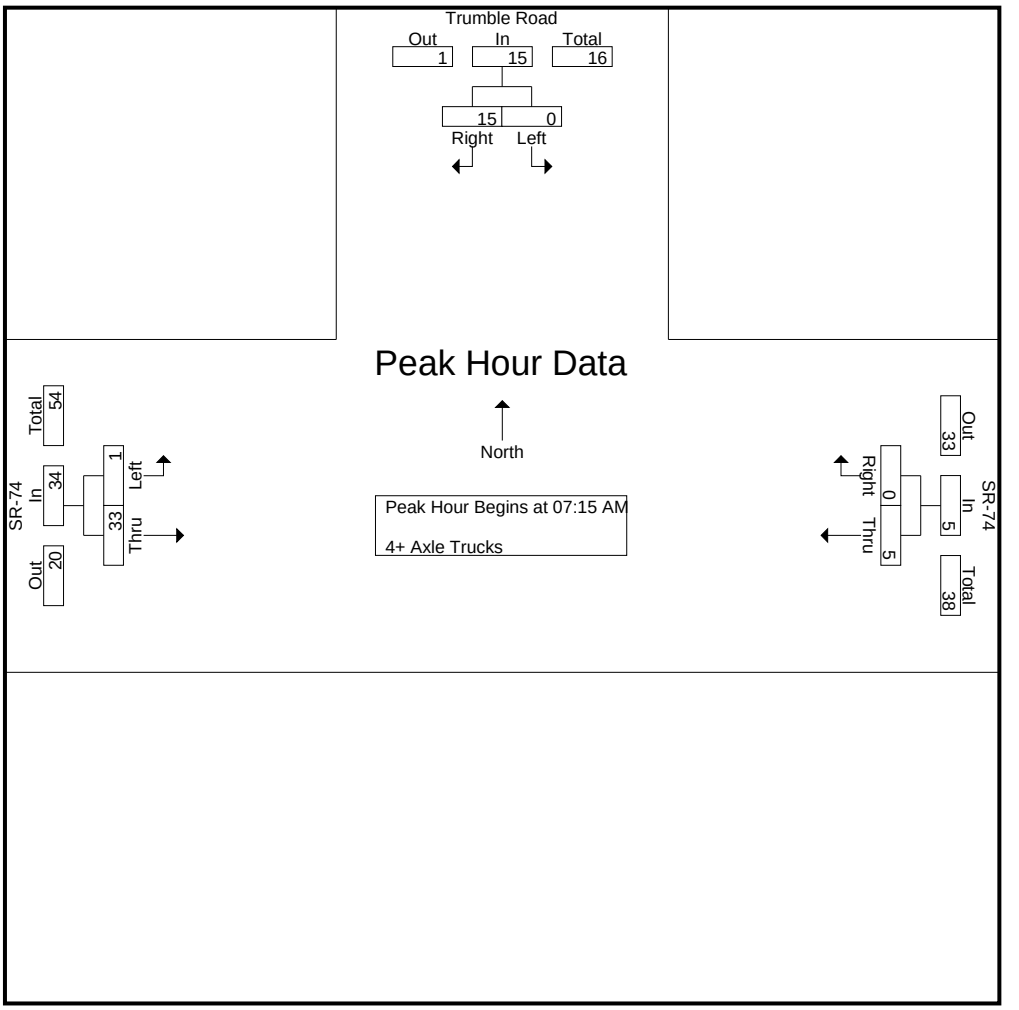
City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 AM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:15 AM | | | 07:15 AM | | | 07:15 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **8** | **8** | 1 | 0 | 1 | 0 | 6 | 6 |
| +15 mins. | 0 | 3 | 3 | 1 | 0 | 1 | 0 | **12** | **12** |
| +30 mins. | 0 | 1 | 1 | **2** | 0 | **2** | 0 | 8 | 8 |
| +45 mins. | 0 | 3 | 3 | 1 | 0 | 1 | **1** | 7 | 8 |
| Total Volume | 0 | 15 | 15 | 5 | 0 | 5 | 1 | 33 | 34 |
| % App. Total | 0 | 100 | | 100 | 0 | | 2.9 | 97.1 | |
| PHF | .000 | .469 | .469 | .625 | .000 | .625 | .250 | .688 | .708 |

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City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

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

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 17 | 87 | 104 | 200 | 2 | 202 | 57 | 263 | 320 | 626 |
| 04:15 PM | 12 | 79 | 91 | 216 | 6 | 222 | 60 | 220 | 280 | 593 |
| 04:30 PM | 12 | 103 | 115 | 178 | 7 | 185 | 62 | 237 | 299 | 599 |
| 04:45 PM | 11 | 61 | 72 | 180 | 4 | 184 | 70 | 240 | 310 | 566 |
| Total | 52 | 330 | 382 | 774 | 19 | 793 | 249 | 960 | 1209 | 2384 |
| | | | | | | | | | | |
| 05:00 PM | 14 | 123 | 137 | 215 | 2 | 217 | 77 | 207 | 284 | 638 |
| 05:15 PM | 10 | 60 | 70 | 187 | 4 | 191 | 80 | 219 | 299 | 560 |
| 05:30 PM | 11 | 53 | 64 | 213 | 11 | 224 | 90 | 227 | 317 | 605 |
| 05:45 PM | 5 | 53 | 58 | 162 | 11 | 173 | 101 | 249 | 350 | 581 |
| Total | 40 | 289 | 329 | 777 | 28 | 805 | 348 | 902 | 1250 | 2384 |
| | | | | | | | | | | |
| Grand Total | 92 | 619 | 711 | 1551 | 47 | 1598 | 597 | 1862 | 2459 | 4768 |
| Apprch % | 12.9 | 87.1 | | 97.1 | 2.9 | | 24.3 | 75.7 | | |
| Total % | 1.9 | 13 | 14.9 | 32.5 | 1 | 33.5 | 12.5 | 39.1 | 51.6 | |
| Passenger Vehicles | 89 | 595 | 684 | 1477 | 41 | 1518 | 535 | 1825 | 2360 | 4562 |
| % Passenger Vehicles | 96.7 | 96.1 | 96.2 | 95.2 | 87.2 | 95 | 89.6 | 98 | 96 | 95.7 |
| Large 2 Axle Vehicles | 3 | 20 | 23 | 43 | 6 | 49 | 45 | 30 | 75 | 147 |
| % Large 2 Axle Vehicles | 3.3 | 3.2 | 3.2 | 2.8 | 12.8 | 3.1 | 7.5 | 1.6 | 3.1 | 3.1 |
| 3 Axle Vehicles | 0 | 2 | 2 | 22 | 0 | 22 | 6 | 0 | 6 | 30 |
| % 3 Axle Vehicles | 0 | 0.3 | 0.3 | 1.4 | 0 | 1.4 | 1 | 0 | 0.2 | 0.6 |
| 4+ Axle Trucks | 0 | 2 | 2 | 9 | 0 | 9 | 11 | 7 | 18 | 29 |
| % 4+ Axle Trucks | 0 | 0.3 | 0.3 | 0.6 | 0 | 0.6 | 1.8 | 0.4 | 0.7 | 0.6 |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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 | 12 | 79 | 91 | **216** | 6 | **222** | 60 | 220 | 280 | 593 |
| 04:30 PM | 12 | 103 | 115 | 178 | **7** | 185 | 62 | 237 | 299 | 599 |
| 04:45 PM | 11 | 61 | 72 | 180 | 4 | 184 | 70 | **240** | **310** | 566 |
| 05:00 PM | **14** | **123** | **137** | 215 | 2 | 217 | **77** | 207 | 284 | **638** |
| Total Volume | 49 | 366 | 415 | 789 | 19 | 808 | 269 | 904 | 1173 | 2396 |
| % App. Total | 11.8 | 88.2 | | 97.6 | 2.4 | | 22.9 | 77.1 | | |
| PHF | .875 | .744 | .757 | .913 | .679 | .910 | .873 | .942 | .946 | .939 |

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City of Perris
N/S: Trumble Road
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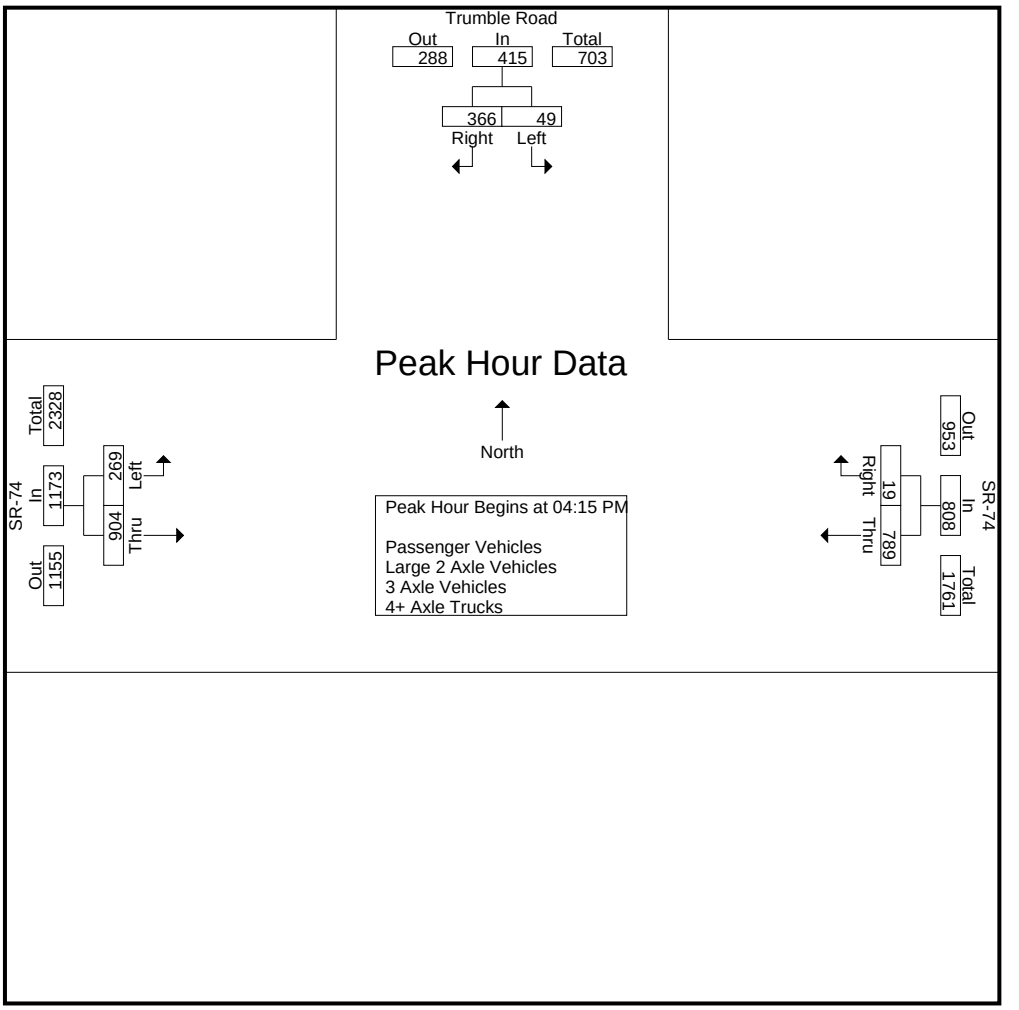
Weather: Clear

File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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 | | | 04:45 PM | | | 05:00 PM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 12 | 79 | 91 | 180 | 4 | 184 | 77 | 207 | 284 |
| +15 mins. | 12 | 103 | 115 | **215** | 2 | 217 | 80 | 219 | 299 |
| +30 mins. | 11 | 61 | 72 | 187 | 4 | 191 | 90 | 227 | 317 |
| +45 mins. | **14** | **123** | **137** | 213 | **11** | **224** | **101** | **249** | **350** |
| Total Volume | 49 | 366 | 415 | 795 | 21 | 816 | 348 | 902 | 1250 |
| % App. Total | 11.8 | 88.2 | | 97.4 | 2.6 | | 27.8 | 72.2 | |
| PHF | .875 | .744 | .757 | .924 | .477 | .911 | .861 | .906 | .893 |

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City of Perris
N/S: Trumble Road
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Weather: Clear

File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
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Groups Printed- Passenger Vehicles

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 17 | 83 | 100 | 187 | 2 | 189 | 50 | 255 | 305 | 594 |
| 04:15 PM | 11 | 74 | 85 | 204 | 3 | 207 | 55 | 215 | 270 | 562 |
| 04:30 PM | 12 | 100 | 112 | 170 | 5 | 175 | 54 | 233 | 287 | 574 |
| 04:45 PM | 10 | 60 | 70 | 169 | 4 | 173 | 62 | 237 | 299 | 542 |
| Total | 50 | 317 | 367 | 730 | 14 | 744 | 221 | 940 | 1161 | 2272 |
| | | | | | | | | | | |
| 05:00 PM | 14 | 119 | 133 | 204 | 2 | 206 | 72 | 203 | 275 | 614 |
| 05:15 PM | 10 | 58 | 68 | 181 | 4 | 185 | 71 | 215 | 286 | 539 |
| 05:30 PM | 11 | 51 | 62 | 208 | 10 | 218 | 81 | 222 | 303 | 583 |
| 05:45 PM | 4 | 50 | 54 | 154 | 11 | 165 | 90 | 245 | 335 | 554 |
| Total | 39 | 278 | 317 | 747 | 27 | 774 | 314 | 885 | 1199 | 2290 |
| | | | | | | | | | | |
| Grand Total | 89 | 595 | 684 | 1477 | 41 | 1518 | 535 | 1825 | 2360 | 4562 |
| Apprch % | 13 | 87 | | 97.3 | 2.7 | | 22.7 | 77.3 | | |
| Total % | 2 | 13 | 15 | 32.4 | 0.9 | 33.3 | 11.7 | 40 | 51.7 | |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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 | 11 | 74 | 85 | **204** | 3 | **207** | 55 | 215 | 270 | 562 |
| 04:30 PM | 12 | 100 | 112 | 170 | **5** | 175 | 54 | 233 | 287 | 574 |
| 04:45 PM | 10 | 60 | 70 | 169 | 4 | 173 | 62 | **237** | **299** | 542 |
| 05:00 PM | **14** | **119** | **133** | 204 | 2 | 206 | **72** | 203 | 275 | **614** |
| Total Volume | 47 | 353 | 400 | 747 | 14 | 761 | 243 | 888 | 1131 | 2292 |
| % App. Total | 11.8 | 88.2 | | 98.2 | 1.8 | | 21.5 | 78.5 | | |
| PHF | .839 | .742 | .752 | .915 | .700 | .919 | .844 | .937 | .946 | .933 |

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City of Perris
N/S: Trumble Road
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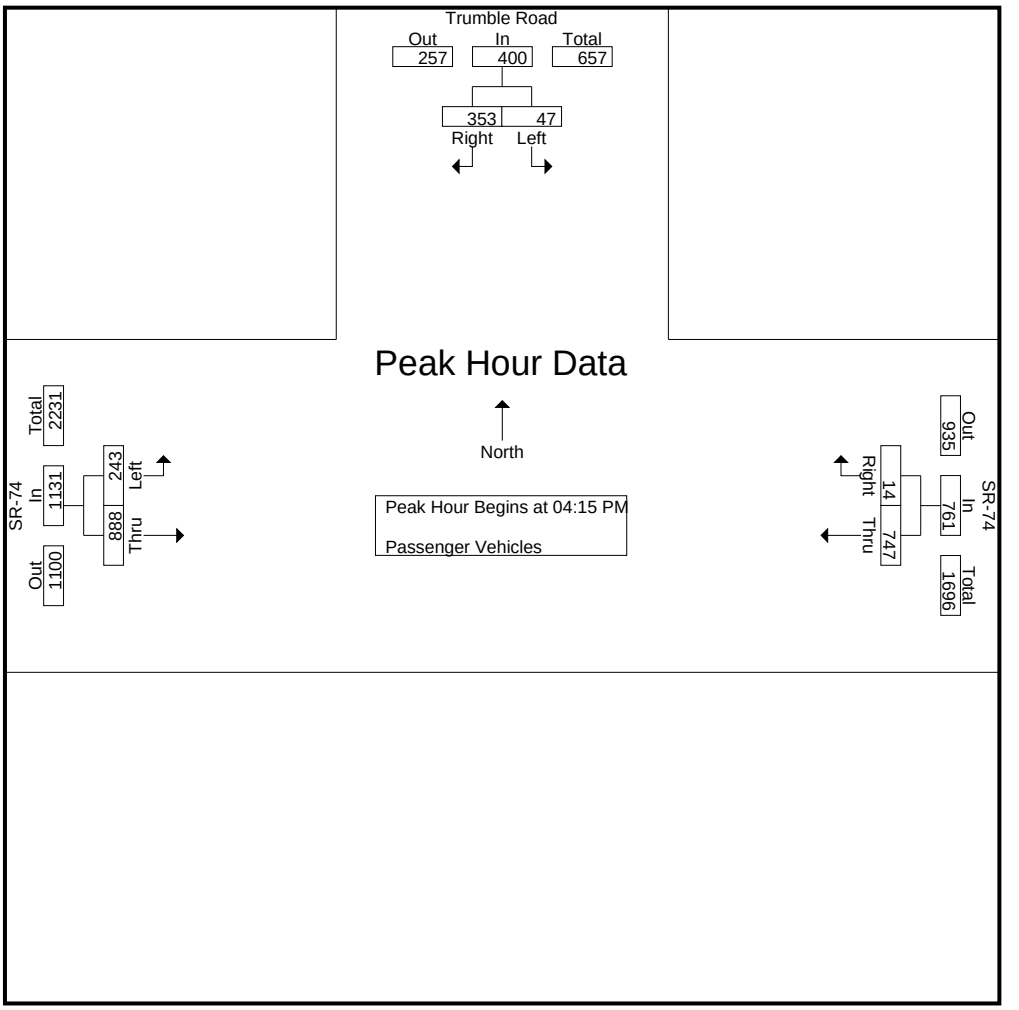
File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 2




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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 11 | 74 | 85 | **204** | 3 | **207** | 55 | 215 | 270 |
| +15 mins. | 12 | 100 | 112 | 170 | **5** | 175 | 54 | 233 | 287 |
| +30 mins. | 10 | 60 | 70 | 169 | 4 | 173 | 62 | **237** | **299** |
| +45 mins. | **14** | **119** | **133** | 204 | 2 | 206 | **72** | 203 | 275 |
| Total Volume | 47 | 353 | 400 | 747 | 14 | 761 | 243 | 888 | 1131 |
| % App. Total | 11.8 | 88.2 | | 98.2 | 1.8 | | 21.5 | 78.5 | |
| PHF | .839 | .742 | .752 | .915 | .700 | .919 | .844 | .937 | .946 |

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City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 0 | 4 | 4 | 10 | 0 | 10 | 6 | 5 | 11 | 25 |
| 04:15 PM | 1 | 3 | 4 | 7 | 3 | 10 | 4 | 4 | 8 | 22 |
| 04:30 PM | 0 | 3 | 3 | 4 | 2 | 6 | 6 | 3 | 9 | 18 |
| 04:45 PM | 1 | 1 | 2 | 5 | 0 | 5 | 5 | 3 | 8 | 15 |
| Total | 2 | 11 | 13 | 26 | 5 | 31 | 21 | 15 | 36 | 80 |
| | | | | | | | | | | |
| 05:00 PM | 0 | 4 | 4 | 8 | 0 | 8 | 4 | 4 | 8 | 20 |
| 05:15 PM | 0 | 1 | 1 | 4 | 0 | 4 | 8 | 3 | 11 | 16 |
| 05:30 PM | 0 | 1 | 1 | 3 | 1 | 4 | 6 | 4 | 10 | 15 |
| 05:45 PM | 1 | 3 | 4 | 2 | 0 | 2 | 6 | 4 | 10 | 16 |
| Total | 1 | 9 | 10 | 17 | 1 | 18 | 24 | 15 | 39 | 67 |
| | | | | | | | | | | |
| Grand Total | 3 | 20 | 23 | 43 | 6 | 49 | 45 | 30 | 75 | 147 |
| Apprch % | 13 | 87 | | 87.8 | 12.2 | | 60 | 40 | | |
| Total % | 2 | 13.6 | 15.6 | 29.3 | 4.1 | 33.3 | 30.6 | 20.4 | 51 | |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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** | 3 | **4** | 7 | **3** | **10** | 4 | **4** | 8 | **22** |
| 04:30 PM | 0 | 3 | 3 | 4 | 2 | 6 | **6** | 3 | **9** | 18 |
| 04:45 PM | 1 | 1 | 2 | 5 | 0 | 5 | 5 | 3 | 8 | 15 |
| 05:00 PM | 0 | **4** | 4 | **8** | 0 | 8 | 4 | 4 | 8 | 20 |
| Total Volume | 2 | 11 | 13 | 24 | 5 | 29 | 19 | 14 | 33 | 75 |
| % App. Total | 15.4 | 84.6 | | 82.8 | 17.2 | | 57.6 | 42.4 | | |
| PHF | .500 | .688 | .813 | .750 | .417 | .725 | .792 | .875 | .917 | .852 |

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City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
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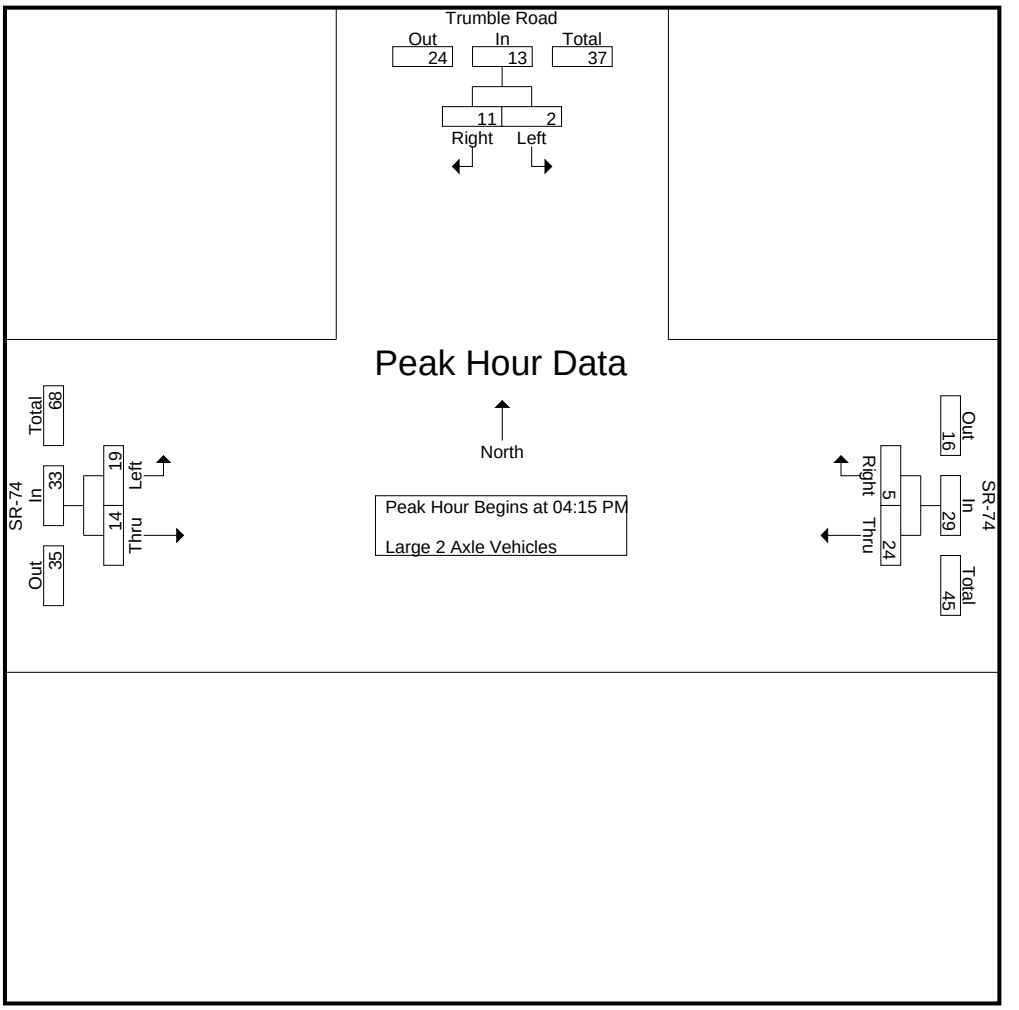


Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:15 PM | | | 04:15 PM | | | 04:15 PM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | **1** | 3 | **4** | 7 | **3** | **10** | 4 | **4** | 8 |
| +15 mins. | 0 | 3 | 3 | 4 | 2 | 6 | **6** | 3 | **9** |
| +30 mins. | 1 | 1 | 2 | 5 | 0 | 5 | 5 | 3 | 8 |
| +45 mins. | 0 | **4** | 4 | **8** | 0 | 8 | 4 | 4 | 8 |
| Total Volume | 2 | 11 | 13 | 24 | 5 | 29 | 19 | 14 | 33 |
| % App. Total | 15.4 | 84.6 | | 82.8 | 17.2 | | 57.6 | 42.4 | |
| PHF | .500 | .688 | .813 | .750 | .417 | .725 | .792 | .875 | .917 |

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City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
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Groups Printed- 3 Axle Vehicles

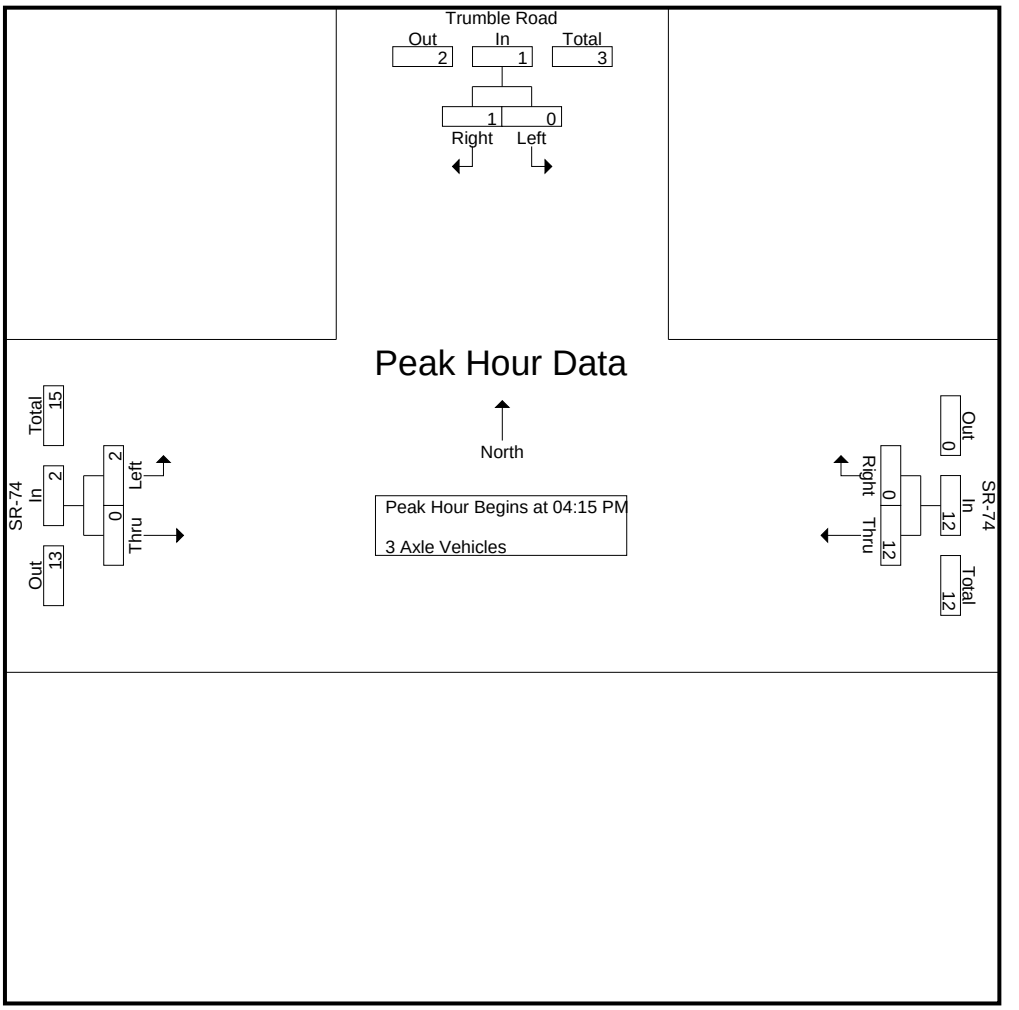
| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 |
| 04:15 PM | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 3 |
| 04:30 PM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 |
| 04:45 PM | 0 | 0 | 0 | 4 | 0 | 4 | 2 | 0 | 2 | 6 |
| Total | 0 | 1 | 1 | 11 | 0 | 11 | 2 | 0 | 2 | 14 |
| | | | | | | | | | | |
| 05:00 PM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 |
| 05:15 PM | 0 | 1 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 3 |
| 05:30 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 |
| 05:45 PM | 0 | 0 | 0 | 4 | 0 | 4 | 4 | 0 | 4 | 8 |
| Total | 0 | 1 | 1 | 11 | 0 | 11 | 4 | 0 | 4 | 16 |
| | | | | | | | | | | |
| Grand Total | 0 | 2 | 2 | 22 | 0 | 22 | 6 | 0 | 6 | 30 |
| Apprch % | 0 | 100 | | 100 | 0 | | 100 | 0 | | |
| Total % | 0 | 6.7 | 6.7 | 73.3 | 0 | 73.3 | 20 | 0 | 20 | |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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** | **1** | 2 | 0 | 2 | 0 | 0 | 0 | 3 |
| 04:30 PM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 |
| 04:45 PM | 0 | 0 | 0 | **4** | 0 | **4** | **2** | 0 | **2** | **6** |
| 05:00 PM | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 3 |
| Total Volume | 0 | 1 | 1 | 12 | 0 | 12 | 2 | 0 | 2 | 15 |
| % App. Total | 0 | 100 | | 100 | 0 | | 100 | 0 | | |
| PHF | .000 | .250 | .250 | .750 | .000 | .750 | .250 | .000 | .250 | .625 |

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

City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **1** | **1** | 2 | 0 | 2 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | **4** | 0 | **4** | **2** | 0 | **2** |
| +45 mins. | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 |
| Total Volume | 0 | 1 | 1 | 12 | 0 | 12 | 2 | 0 | 2 |
| % App. Total | 0 | 100 | | 100 | 0 | | 100 | 0 | |
| PHF | .000 | .250 | .250 | .750 | .000 | .750 | .250 | .000 | .250 |

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File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 3 | 4 | 5 |
| 04:15 PM | 0 | 1 | 1 | 3 | 0 | 3 | 1 | 1 | 2 | 6 |
| 04:30 PM | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 1 | 3 | 4 |
| 04:45 PM | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 3 |
| Total | 0 | 1 | 1 | 7 | 0 | 7 | 5 | 5 | 10 | 18 |
| | | | | | | | | | | |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 |
| 05:30 PM | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 1 | 4 | 5 |
| 05:45 PM | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 3 |
| Total | 0 | 1 | 1 | 2 | 0 | 2 | 6 | 2 | 8 | 11 |
| | | | | | | | | | | |
| Grand Total | 0 | 2 | 2 | 9 | 0 | 9 | 11 | 7 | 18 | 29 |
| Apprch % | 0 | 100 | | 100 | 0 | | 61.1 | 38.9 | | |
| Total % | 0 | 6.9 | 6.9 | 31 | 0 | 31 | 37.9 | 24.1 | 62.1 | |

| | Trumble Road Southbound | | | SR-74 Westbound | | | SR-74 Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | 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** | **1** | **3** | 0 | **3** | 1 | **1** | 2 | **6** |
| 04:30 PM | 0 | 0 | 0 | 1 | 0 | 1 | **2** | 1 | **3** | 4 |
| 04:45 PM | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 3 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| Total Volume | 0 | 1 | 1 | 6 | 0 | 6 | 5 | 2 | 7 | 14 |
| % App. Total | 0 | 100 | | 100 | 0 | | 71.4 | 28.6 | | |
| PHF | .000 | .250 | .250 | .500 | .000 | .500 | .625 | .500 | .583 | .583 |

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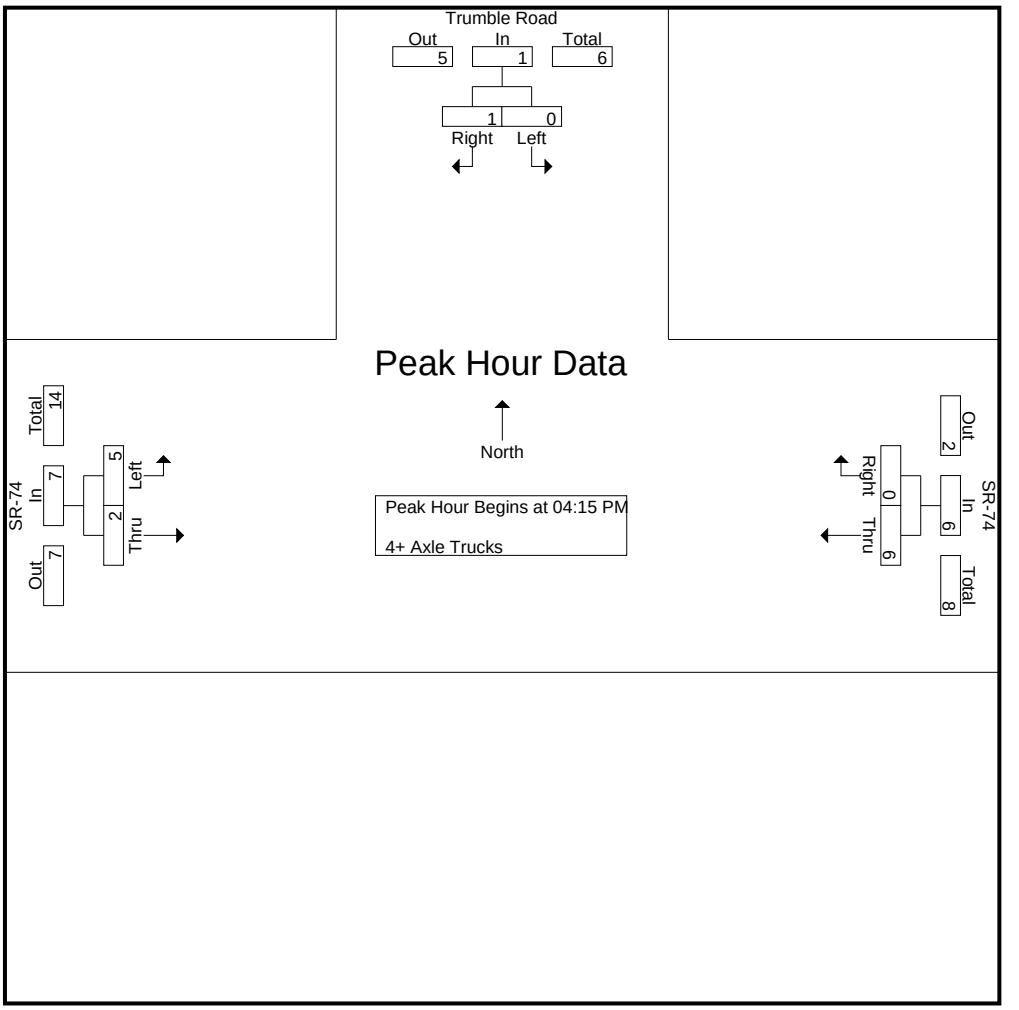
City of Perris
N/S: Trumble Road
E/W: SR-74
Weather: Clear

File Name : 05_PER_Trumble_SR-74 PM
Site Code : 00322221
Start Date : 3/10/2022
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 | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **1** | **1** | **3** | 0 | **3** | 1 | **1** | 2 |
| +15 mins. | 0 | 0 | 0 | 1 | 0 | 1 | **2** | 1 | **3** |
| +30 mins. | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total Volume | 0 | 1 | 1 | 6 | 0 | 6 | 5 | 2 | 7 |
| % App. Total | 0 | 100 | | 100 | 0 | | 71.4 | 28.6 | |
| PHF | .000 | .250 | .250 | .500 | .000 | .500 | .625 | .500 | .583 |

**Location:** SR 74 @ BONNIE DRIVE
**Designed By:**
**System:** **District:** **Installed By:** SAFWAN SAYED
**Master At:** **I/C:** **Service Info:**

| Timing Change: | Date Start: | Date End: | Designed: | Installed: |
|---|---|---|---|---|
| 11/17/2020 | 5/19/2016 | | | 5/19/2016 |

| | | FLASH |
|---|---|---|
| PHASE | 1) W/B SR 74 - LEFT TURN | [ R ] |
| | 2) E/B SR 74 | [ R ] |
| | 3) | [ ] |
| | 4) | [ ] |
| | 5) | [ ] |
| | 6) W/B SR 74 | [ R ] |
| | 7) W/B BONNIE DRIVE | [ R ] |
| | 8) E/B BONNIE DRIVE | [ R ] |
| OVERLAP | A) | [ ] |
| | B) | [ ] |
| | C) | [ ] |
| | D) | [ ] |
| | E) | [ ] |
| | F) | [ ] |

## Intersection Layout

**Comments and Notes:**
1. Phase 8 stop Bar is too far from the front Loop, the Red and Yellow lock is turned-on (5/4/17)
2. The Advanced and Mid Loops, 8J6U and 8J6L, are placed on Count+Extend only

**RAM Checksum**

| | |
|---|---|
| Page 2: 4132 | Page 8: 85AF |
| Page 3: 774B | Page 9: D2FD |
| Page 4: F29E | Page 10: 637B |
| Page 5: 191A | Page 11: C3CB |
| Page 6: 191A | Page 12: D68F |
| Page 7: 398C | Page 13: 86F7 |

# CONFIGURATION PHASE FLAGS

| Cabinet |
|---|
| 332 |
| Configuration |
| CALTRANS |

| Phases ( 2-1-1-1 ) | |
|---|---|
| Permitted | 1 2 . . . 6 7 8 |
| Restricted | . . . . . |

| Phase Recalls ( 2-1-1-2 ) | |
|---|---|
| Vehicle Min | . 2 . . . 6 . . |
| Vehicle Max | . . . . . |
| Pedestrian | . . . . . |
| Bicycle | . . . . . |

| Phase Locks ( 2-1-1-3 ) | |
|---|---|
| Red | . . . . . 8 |
| Yellow | . . . . . 8 |
| Force/Max | . . . . . |

| Phase Features ( 2-1-1-4 ) | |
|---|---|
| Double Entry | . . . . . |
| Rest In Walk | . . . . . |
| Rest In Red | . . . . . |
| Walk 2 | . . . . . |
| Max Green 2 | . . . . . |
| Max Green 3 | . . . . . |

| Startup ( 2-1-1-5 ) | |
|---|---|
| First Green Phases | . 2 . . . 6 . . |
| Yellow Start Phases | . . . . . |
| Vehicle Calls | 1 2 . . . 6 7 8 |
| Pedestrian Calls | . . . . . |
| 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 | . . . . . |
| P3 | . . . . . |
| P4 | . . . . . |
| P5 | . . . . . |
| P6 | . . . . . |
| P7 | . . . . . |
| P8 | . . . . . |

| Overlap ( 2-1-4 ) | | | | |
|---|---|---|---|---|
| Overlap | Parent | Omit | No Start | Not |
| A | . . . . . | . . . . . | . . . . . | . . . . . |
| B | . . . . . | . . . . . | . . . . . | . . . . . |
| C | . . . . . | . . . . . | . . . . . | . . . . . |
| D | . . . . . | . . . . . | . . . . . | . . . . . |
| E | . . . . . | . . . . . | . . . . . | . . . . . |
| F | . . . . . | . . . . . | . . . . . | . . . . . |

## PHASE TIMING

| Phase ( 2-2 ) | -1- | -2- | -3- | -4- | -5- | -6- | -7- | -8- |
|---|---|---|---|---|---|---|---|---|
| --- Walk 1 --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Flash Don't Walk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Minimum Green | 5 | 5 | 0 | 0 | 0 | 5 | 5 | 5 |
| Det Limit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Initial | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Green 1 | 25 | 35 | 0 | 0 | 0 | 35 | 15 | 25 |
| Max Green 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Green 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Extension | 2.0 | 2.0 | 0.0 | 0.0 | 0.0 | 2.0 | 2.0 | 2.0 |
| Maximum Gap | 2.0 | 2.0 | 0.0 | 0.0 | 0.0 | 2.0 | 2.0 | 2.0 |
| Minimum Gap | 2.0 | 2.0 | 0.0 | 0.0 | 0.0 | 2.0 | 2.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Reduce Every | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 4.0 | 5.0 | 3.0 | 3.0 | 3.0 | 5.0 | 3.0 | 5.0 |
| All-Red | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | 1.0 |
| **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 | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 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

| Red Revert ( 2-5 ) | |
|---|---|
| Time | 5.0 |
| **All-Red Sec/Min ( 2-6 )** | |
| All-Red Sec/Min: | OFF |

### Max 2 Extension

| Max/Gap Out ( 2-7 ) | |
|---|---|
| Max Cnt | 0 |
| Gap Cnt | 0 |

## Local Plan 1...9 (7-1) 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 1 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 2 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 3 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 4 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 5 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 6 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 7 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 8 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 9 | Green Factor | | | ..... | | | | | | | | | | | |

| Master Timer Sync ( 7-A ) | |
|---|---|
| Enable in Plans | |
| 1-9 | ..... |
| 11-19 | ..... |
| 21-29 | ..... |

| Master Sub Master | |
|---|---|
| Input | |
| Output | |

### FREE PLAN PHASE FLAGS

| ( 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 |
| | 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 |

## 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 | | | ..... | | | | | | | | | | | |
| Plan 12 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 13 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 14 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 15 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 16 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 17 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 18 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 19 | Green Factor | | | ..... | | | | | | | | | | | |

## 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 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Plan 15 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 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 | | | ..... | | | | | | | | | | | |
| Plan 22 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 23 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 24 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 25 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 26 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 27 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 28 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 29 | Green Factor | | | ..... | | | | | | | | | | | |

## 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 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I3L |
| 7 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I4U |
| 8 | COUNT+CALL+EXTEND | . 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 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I7L |
| 15 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I8U |
| 16 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I8L |
| 17 | COUNT+CALL+EXTEND | 1 . . . . . | NO | I9U |
| 18 | COUNT+CALL+EXTEND | . . 3 . . . . | NO | I9L |
| 19 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I10U |
| 20 | COUNT+CALL+EXTEND | . . . 4 . . . | 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 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J3L |
| 27 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J4U |
| 28 | COUNT+CALL+EXTEND | . . . . . 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 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J7L |
| 35 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J8U |
| 36 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J8L |
| 37 | COUNT+CALL+EXTEND | . . . . 5 . . . | NO | J9U |
| 38 | COUNT+CALL+EXTEND | . . . . . 7 . | NO | J9L |
| 39 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J10U |
| 40 | COUNT+CALL+EXTEND | . . . . . 8 | 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 | | | 10 | 3.2 |
| 2 | | | 10 | 7.2 |
| 3 | | | 10 | 1.1 |
| 4 | | | 10 | 1.5 |
| 5 | | | 10 | 4.5 |
| 6 | | | 10 | 6.2 |
| 7 | | | 10 | 2.1 |
| 8 | | | 10 | 7.4 |
| 9 | | | 10 | 3.4 |
| 10 | | | 10 | 7.6 |
| 11 | | | 10 | 1.3 |
| 12 | | | 10 | 1.7 |
| 13 | | | 10 | 4.7 |
| 14 | | | 10 | 6.4 |
| 15 | | | 10 | 2.3 |
| 16 | | | 10 | 7.8 |
| 17 | | | 10 | 3.6 |
| 18 | | | 10 | 3.8 |
| 19 | | | 10 | 4.1 |
| 20 | | | 10 | 4.2 |
| 21 | | | 10 | 3.1 |
| 22 | | | 10 | 7.1 |
| 23 | | | 10 | 1.2 |
| 24 | | | 10 | 1.6 |
| 25 | | | 10 | 4.6 |
| 26 | | | 10 | 6.3 |
| 27 | | | 10 | 2.2 |
| 28 | | | 10 | 7.3 |
| 29 | | | 10 | 3.3 |
| 30 | | | 10 | 7.5 |
| 31 | | | 10 | 1.4 |
| 32 | | | 10 | 1.8 |
| 33 | | | 10 | 4.8 |
| 34 | | | 10 | 6.5 |
| 35 | | | 10 | 2.4 |
| 36 | | | 10 | 7.7 |
| 37 | | | 10 | 3.5 |
| 38 | | | 10 | 3.7 |
| 39 | | | 10 | 4.3 |
| 40 | | | 10 | 4.4 |
| 41 | | | 10 | 5.1 |
| 42 | | | 10 | 5.3 |
| 43 | | | 10 | 5.2 |
| 44 | | | 10 | 5.4 |

| Failure Times(5-3) | Minutes |
|---|---|
| Maximum On Time | |
| Fail Reset Time | |

| Failure Override (5-4) | |
|---|---|
| Detectors 1-8 | . . . . . |
| Detectors 9-16 | . . . . . |
| Detectors17-24 | . . . . . |
| 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 Nu | | | | | | | | |
| Sys Det | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Det Nu | | | | | | | | |

| 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 | 1.00 | |

Detector-to-Phase Assignment (5-6-3)

| Sys Det | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | |
| Sys Det | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Phase | | | | | | | | |

## 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 |

# TOD SCHEDULE

| Table 1 (8-2-1) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 2 (8-2-2) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 3 (8-2-3) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 4 (8-2-4) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 5 (8-2-5) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 6 (8-2-6) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

# WEEKDAY ASSIGNMENT

| Weekday Table Assignments (8-2-7) | | | | | | |
|---|---|---|---|---|---|---|
| Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| 1 | 1 | 1 | 1 | 1 | 2 | 2 |

## HOLIDAY TABLES

**Floating Holiday Table (8-2-8)**

| # | Mnth | Week | DOW | Table |
|---|---|---|---|---|
| 1 | | | ..... | |
| 2 | | | ..... | |
| 3 | | | ..... | |
| 4 | | | ..... | |
| 5 | | | ..... | |
| 6 | | | ..... | |
| 7 | | | ..... | |
| 8 | | | ..... | |
| 9 | | | ..... | |
| 10 | | | ..... | |
| 11 | | | ..... | |
| 12 | | | ..... | |
| 13 | | | ..... | |
| 14 | | | ..... | |
| 15 | | | ..... | |
| 16 | | | ..... | |

**Fixed Holiday Table (8-2-9)**

| # | Mnth | Day | DOW | Table |
|---|---|---|---|---|
| 1 | | | ..... | |
| 2 | | | ..... | |
| 3 | | | ..... | |
| 4 | | | ..... | |
| 5 | | | ..... | |
| 6 | | | ..... | |
| 7 | | | ..... | |
| 8 | | | ..... | |
| 9 | | | ..... | |
| 10 | | | ..... | |
| 11 | | | ..... | |
| 12 | | | ..... | |
| 13 | | | ..... | |
| 14 | | | ..... | |
| 15 | | | ..... | |
| 16 | | | ..... | |

**Solar Clock Data (8-4)**

| | |
|---|---|
| North Latitude | 34 |
| West Longitude | 118 |
| Local Time Zone | 8 |

**Sabbatical Clock (8-5)**

| Hebrew | Ped Recall |
|---|---|
| Sabbath | ..... |
| Holiday | ..... |

**Daylight Saving (8-6)**

| | |
|---|---|
| Enabled | YES |

## TOD FUNCTIONS

**TOD Functions (8-3)**

| # | Start | End | DOW | Action | Phases |
|---|---|---|---|---|---|
| 1 | | | ..... | | ..... |
| 2 | | | ..... | | ..... |
| 3 | | | ..... | | ..... |
| 4 | | | ..... | | ..... |
| 5 | | | ..... | | ..... |
| 6 | | | ..... | | ..... |
| 7 | | | ..... | | ..... |
| 8 | | | ..... | | ..... |
| 9 | | | ..... | | ..... |
| 10 | | | ..... | | ..... |
| 11 | | | ..... | | ..... |
| 12 | | | ..... | | ..... |
| 13 | | | ..... | | ..... |
| 14 | | | ..... | | ..... |
| 15 | | | ..... | | ..... |
| 16 | | | ..... | | ..... |

**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
27. Traffic Actuated Max 2
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 | |
| Protocol | AB3418 |
| Access Level | 0 |
| Baud | 1200 |
| Parity | NONE |
| Data Bits | 8 |
| Stop Bits | 1 |
| RTS On Time | 20 |
| RTS Off Time | 20 |
| Handshaking | NORMAL |

| C20 (6-1-2) | |
|---|---|
| Address | |
| Protocol | AB3418 |
| Access Level | 0 |
| Baud | 1200 |
| Parity | NONE |
| Data Bits | 8 |
| Stop Bits | 1 |
| RTS On Time | 20 |
| RTS Off Time | 20 |
| Handshaking | NORMAL |

| C21 (6-1-3) | |
|---|---|
| Address | |
| Protocol | AB3418 |
| Access Level | 0 |
| Baud | 1200 |
| Parity | NONE |
| Data Bits | 8 |
| Stop Bits | 1 |
| RTS On Time | 20 |
| RTS Off Time | 20 |
| Handshaking | NORMAL |

**Access Levels:**

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

# SOFT LOGIC

Soft Logic ( 6-2 )

| # | Data | OP | Data | OP | Data | OP | Data |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |

*Refer to User's Manual for Data and OP Codes

# CALLBACK NUMBERS

| Callback Numbers (6-3...3) | |
|---|---|
| Line Out | |
| Local Toll | |
| Long Distance | |
| Delay | 10 |
| Area Code | |
| Phone Number | |

| | |
|---|---|
| Line Out | |
| Local Toll | |
| Long Distance | |
| Delay | 10 |
| Area Code | |
| Phone Number | |

| | |
|---|---|
| Line Out | |
| Local Toll | |
| Long Distance | |
| Delay | 10 |
| Area Code | |
| Phone Number | |

# NETWORK

| Network (6-4) | |
|---|---|
| Address | 1 |
| Protocol | AB3418 |
| Port | 27001 |
| Type | STATIC |
| Central Access | 6 |
| Field Access | 7 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| IP Address | 172 | . | 25 | . | 52 | . | 5 |
| Netmask | 255 | . | 255 | . | 255 | . | 192 |
| Broadcast | 172 | . | 25 | . | 52 | . | 255 |
| Gateway | 172 | . | 25 | . | 52 | . | 1 |

# RAILROAD PREEMPTION

**RR 1**

| ( 3-1-1 ) | Timing | Phase Flags (3-1-2) | | | Pedestrian Flags (3-1-3) | | | Overlap Flags (3-1-4) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Delay | | Grn Hold | Yel Flash | Red Flash | Walk | Flash DW | Solid DW | Grn Hold | Yel Flash | Red Flash |
| Clear 1 | 10 | . 2 . . 5 . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . 2 . 4 . 6 . 8 | . . . . . . | . . . . . . | . . . . . . |
| Clear 2 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | . . . . . . |
| Clear 3 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | . . . . . . |
| Hold | | . . . . . . . . | . . . . . . . . | 1 2 3 4 5 6 7 8 | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | A B C D E F |
| Exit | | | | | | | | | | |
| Min Grn | | | | | | | | | | |
| Ped Clr | | | | | | | | | | |

| Exit Parameters (3-1-5) | | | |
|---|---|---|---|
| Phase Green | Overlap Green | Vehicle Call | Ped Call |
| . . . . . . . . | . . . . . . | 1 2 3 4 5 6 7 8 | . 2 . 4 . 6 . 8 |

| Configuration (3-1-6) | | | |
|---|---|---|---|
| Primary Port | Secondary 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) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Delay | | Grn Hold | Yel Flash | Red Flash | Walk | Flash DW | Solid DW | Grn Hold | Yel Flash | Red Flash |
| Clear 1 | 10 | . . . 4 . . 7 . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . 2 . 4 . 6 . 8 | . . . . . . | . . . . . . | . . . . . . |
| Clear 2 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | . . . . . . |
| Clear 3 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | . . . . . . |
| Hold | | 1 2 3 . . 6 . . | . . . . . . . . | . . . . . . . . | . 2 . . . 6 . . | . . . . . . . . | . . . 4 . . . 8 | . . . . . . | . . . . . . | . . . . . . |
| Exit | | | | | | | | | | |
| Min Grn | | | | | | | | | | |
| Ped Clr | | | | | | | | | | |

| Exit Parameters (3-2-5) | | | |
|---|---|---|---|
| Phase Green | Overlap Green | Vehicle Call | Ped Call |
| . . . . . . . . | . . . . . . | . . . 4 . . 7 . | . . . . . . . . |

| Configuration (3-2-6) | | | |
|---|---|---|---|
| Primary Port | Secondary Port | Latching | Power-up |
| 2.6 | 0.0 | YES | DARK |

# EMERGENCY VEHICLE PREEMPTION

**EVA (3-A)**

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | . 2 . . 5 . . . | . . . . . . |

| Port | Latching | Phase Termination |
|---|---|---|
| 5.5 | NO | ADVANCE |

**EVB (3-B)**

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | . . . 4 . . 7 . | . . . . . . |

| Port | Latching | Phase Termination |
|---|---|---|
| 5.6 | NO | ADVANCE |

**EVC (3-C)**

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | 1 . . . . 6 . . | . . . . . . |

| Port | Latching | Phase Termination |
|---|---|---|
| 5.7 | NO | ADVANCE |

**EVD (3-D)**

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | . . 3 . . . . 8 | . . . . . . |

| Port | Latching | 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 | | R2 | 3.5 | D2 | 2.8 |
| Max OFF | | R3 | 3.7 | D3 | 6.1 |

| Manual Control ( 2-1-5-2 ) | |
|---|---|
| Input | Port |
| Manual Advance | |
| Advance Enable | |

| Cabinet Status ( 2-1-5-3 ) | |
|---|---|
| Input | Port |
| Flash Bus | |
| Door Ajar | |
| Flash Sense | 6.7 |
| Stop Time | 6.8 |

| Special Function (2-1-5-4) | |
|---|---|
| Input | Port |
| 1 | |
| 2 | |
| 3 | |
| 4 | |

| Battery Backup ( 2-1-5-5 ) | |
|---|---|
| Port | Operation |
| 2.7 | FLASHING |

| 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 Channel 9 and 10

## TRANSIT PRIORITY

| Local Plans (3-E) 1...9 11...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 | | | | | | | | | | | |
| Plan 2 | Green Factor | | | | | | | | | | | |
| Plan 3 | Green Factor | | | | | | | | | | | |
| Plan 4 | Green Factor | | | | | | | | | | | |
| Plan 5 | Green Factor | | | | | | | | | | | |
| Plan 6 | Green Factor | | | | | | | | | | | |
| Plan 7 | Green Factor | | | | | | | | | | | |
| Plan 8 | Green Factor | | | | | | | | | | | |
| Plan 9 | Green Factor | | | | | | | | | | | |
| Plan 11 | Green Factor | | | | | | | | | | | |
| Plan 12 | Green Factor | | | | | | | | | | | |
| Plan 13 | Green Factor | | | | | | | | | | | |
| Plan 14 | Green Factor | | | | | | | | | | | |
| Plan 15 | Green Factor | | | | | | | | | | | |
| Plan 16 | Green Factor | | | | | | | | | | | |
| Plan 17 | Green Factor | | | | | | | | | | | |
| Plan 18 | Green Factor | | | | | | | | | | | |
| Plan 19 | Green Factor | | | | | | | | | | | |

| Transit Priority Configuration (3-E-A) | | | | Indicator Output | |
|---|---|---|---|---|---|
| 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 |
| | . . . . . |
| | . . . . . |

| Free Plans (3-E-E) | |
|---|---|
| Max Grn Hold | Hold Phase |
| | . . . . . |

| Access Utilities (9-5) | |
|---|---|
| Password | *** |
| Timeout | 30 |

## 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 | | | | | | | | | | | | | . 2 . . . 6 . . | . 2 . 4 . 6 . 8 | . . . . . | . . . . . |
| Plan D | | | | | | | | | | | | | . 2 . . . 6 . . | . 2 . 4 . 6 . 8 | . . . . . | . . . . . |

## 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 |

**Location:**
**System:** **District:**
**Master At:** **I/C:**

**Designed By:**
**Installed By:** SAFWAN
**Service Info:**

| Timing Change: | Date Start: | Date End: | Designed: | Installed: |
|---|---|---|---|---|
| 11/17/2020 | 3/28/2013 | | | 3/28/2013 |

| | | | FLASH |
|---|---|---|---|
| PHASE | 1) | | [ ] |
| | 2) | EASTBOUND RTE 74 | [ R ] |
| | 3) | | [ ] |
| | 4) | I-215 NORTHBOUND OFF RAMP | [ R ] |
| | 5) | EASTBOUND RTE 74 --LEFT TURN | [ R ] |
| | 6) | WESTBOUND RTE 74 | [ R ] |
| | 7) | | [ ] |
| | 8) | | [ ] |
| OVERLAP | A) | | [ ] |
| | B) | | [ ] |
| | C) | | [ ] |
| | D) | | [ ] |
| | E) | | [ ] |
| | F) | | [ ] |

## Intersection Layout

**Comments and Notes:**

**RAM Checksum**

| | |
|---|---|
| Page 2: EA5F | Page 8: 85AF |
| Page 3: C5C2 | Page 9: D2FD |
| Page 4: F29E | Page 10: 4365 |
| Page 5: 191A | Page 11: C3CB |
| Page 6: 191A | Page 12: D68F |
| Page 7: 398C | Page 13: 86F7 |

# CONFIGURATION PHASE FLAGS

| Cabinet |
|---|
| 332 |
| **Configuration** |
| CALTRANS |

| Phases ( 2-1-1-1 ) | |
|---|---|
| Permitted | . 2 . 4 5 6 . . |
| Restricted | . . . . . |

| Phase Recalls ( 2-1-1-2 ) | |
|---|---|
| Vehicle Min | . 2 . . . 6 . . |
| Vehicle Max | . . . . . |
| Pedestrian | . . . . . |
| Bicycle | . . . . . |

| Phase Locks ( 2-1-1-3 ) | |
|---|---|
| Red | . . . . . |
| Yellow | . . . . . |
| Force/Max | . . . . . |

| Phase Features ( 2-1-1-4 ) | |
|---|---|
| Double Entry | . . . . . |
| Rest In Walk | . . . . . |
| Rest In Red | . . . . . |
| Walk 2 | . . . . . |
| Max Green 2 | . . . . . |
| Max Green 3 | . . . . . |

| Startup ( 2-1-1-5 ) | |
|---|---|
| First Green Phases | . 2 . . . 6 . . |
| Yellow Start Phases | . . . . . |
| Vehicle Calls | . 2 . 4 5 6 . . |
| Pedestrian Calls | . . . . . |
| 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 | . . . . . |
| P3 | . . . . . |
| P4 | . . . . . |
| P5 | . . . . . |
| P6 | . . . . . |
| P7 | . . . . . |
| P8 | . . . . . |

| Overlap ( 2-1-4 ) | | | | |
|---|---|---|---|---|
| Overlap | Parent | Omit | No Start | Not |
| A | . . . . . | . . . . . | . . . . . | . . . . . |
| B | . . . . . | . . . . . | . . . . . | . . . . . |
| C | . . . . . | . . . . . | . . . . . | . . . . . |
| D | . . . . . | . . . . . | . . . . . | . . . . . |
| E | . . . . . | . . . . . | . . . . . | . . . . . |
| F | . . . . . | . . . . . | . . . . . | . . . . . |

## PHASE TIMING

| Phase ( 2-2 ) | -1- | -2- | -3- | -4- | -5- | -6- | -7- | -8- |
|---|---|---|---|---|---|---|---|---|
| --- Walk 1 --- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Flash Don't Walk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Minimum Green | 0 | 5 | 0 | 5 | 5 | 5 | 0 | 0 |
| Det Limit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Initial | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Green 1 | 0 | 35 | 0 | 35 | 25 | 35 | 0 | 0 |
| Max Green 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Green 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Extension | 0.0 | 2.0 | 0.0 | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 |
| Maximum Gap | 0.0 | 2.0 | 0.0 | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 |
| Minimum Gap | 0.0 | 2.0 | 0.0 | 2.0 | 2.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Reduce Every | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 4.3 | 3.0 | 4.3 | 4.3 | 4.3 | 3.0 | 3.0 |
| All-Red | 0.0 | 1.0 | 0.0 | 1.0 | 1.0 | 1.0 | 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 | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 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

| Red Revert ( 2-5 ) | |
|---|---|
| Time | 5.0 |
| **All-Red Sec/Min ( 2-6 )** | |
| All-Red Sec/Min: | OFF |

### Max 2 Extension

| Max/Gap Out ( 2-7 ) | |
|---|---|
| Max Cnt | 0 |
| Gap Cnt | 0 |

## Local Plan 1...9 (7-1) 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 1 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 2 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 3 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 4 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 5 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 6 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 7 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 8 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 9 | Green Factor | | | ..... | | | | | | | | | | | |

| Master Timer Sync ( 7-A ) | |
|---|---|
| Enable in Plans | |
| 1-9 | ..... |
| 11-19 | ..... |
| 21-29 | ..... |

| Master Sub Master | |
|---|---|
| Input | |
| Output | |

**FREE PLAN PHASE FLAGS**

| ( 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 |
| | 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 |

## 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 | | | ..... | | | | | | | | | | | |
| Plan 12 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 13 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 14 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 15 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 16 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 17 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 18 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 19 | Green Factor | | | ..... | | | | | | | | | | | |

## 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 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Plan 15 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 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 | | | ..... | | | | | | | | | | | |
| Plan 22 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 23 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 24 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 25 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 26 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 27 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 28 | Green Factor | | | ..... | | | | | | | | | | | |
| Plan 29 | Green Factor | | | ..... | | | | | | | | | | | |

## 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 | | | 10 | 3.2 |
| 2 | COUNT+CALL+EXTEND | 1 . . . . . | NO | I1L | 2 | | | 10 | 7.2 |
| 3 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I2U | 3 | | | 10 | 1.1 |
| 4 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I2L | 4 | | | 10 | 1.5 |
| 5 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I3U | 5 | | | 10 | 4.5 |
| 6 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I3L | 6 | | | 10 | 6.2 |
| 7 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I4U | 7 | | | 10 | 2.1 |
| 8 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I4L | 8 | | | 10 | 7.4 |
| 9 | COUNT+CALL+EXTEND | . . 3 . . . . | NO | I5U | 9 | | | 10 | 3.4 |
| 10 | COUNT+CALL+EXTEND | . . 3 . . . . | NO | I5L | 10 | | | 10 | 7.6 |
| 11 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I6U | 11 | | | 10 | 1.3 |
| 12 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I6L | 12 | | | 10 | 1.7 |
| 13 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I7U | 13 | | | 10 | 4.7 |
| 14 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I7L | 14 | | | 10 | 6.4 |
| 15 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I8U | 15 | | | 10 | 2.3 |
| 16 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I8L | 16 | | | 10 | 7.8 |
| 17 | COUNT+CALL+EXTEND | 1 . . . . . | NO | I9U | 17 | | | 10 | 3.6 |
| 18 | COUNT+CALL+EXTEND | . . 3 . . . . | NO | I9L | 18 | | | 10 | 3.8 |
| 19 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I10U | 19 | | | 10 | 4.1 |
| 20 | COUNT+CALL+EXTEND | . . . 4 . . . | NO | I10L | 20 | | | 10 | 4.2 |
| 21 | COUNT+CALL+EXTEND | . . . . 5 . . . | NO | J1U | 21 | | | 10 | 3.1 |
| 22 | COUNT+CALL+EXTEND | . . . . 5 . . . | NO | J1L | 22 | | | 10 | 7.1 |
| 23 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J2U | 23 | | | 10 | 1.2 |
| 24 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J2L | 24 | | | 10 | 1.6 |
| 25 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J3U | 25 | | | 10 | 4.6 |
| 26 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J3L | 26 | | | 10 | 6.3 |
| 27 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J4U | 27 | | | 10 | 2.2 |
| 28 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J4L | 28 | | | 10 | 7.3 |
| 29 | COUNT+CALL+EXTEND | . . . . . 7 . | NO | J5U | 29 | | | 10 | 3.3 |
| 30 | COUNT+CALL+EXTEND | . . . . . 7 . | NO | J5L | 30 | | | 10 | 7.5 |
| 31 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J6U | 31 | | | 10 | 1.4 |
| 32 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J6L | 32 | | | 10 | 1.8 |
| 33 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J7U | 33 | | | 10 | 4.8 |
| 34 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J7L | 34 | | | 10 | 6.5 |
| 35 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J8U | 35 | | | 10 | 2.4 |
| 36 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J8L | 36 | | | 10 | 7.7 |
| 37 | COUNT+CALL+EXTEND | . . . . 5 . . . | NO | J9U | 37 | | | 10 | 3.5 |
| 38 | COUNT+CALL+EXTEND | . . . . . 7 . | NO | J9L | 38 | | | 10 | 3.7 |
| 39 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J10U | 39 | | | 10 | 4.3 |
| 40 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J10L | 40 | | | 10 | 4.4 |
| 41 | PEDESTRIAN | . 2 . . . . . | NO | I12U | 41 | | | 10 | 5.1 |
| 42 | PEDESTRIAN | . . . 4 . . . | NO | I12L | 42 | | | 10 | 5.3 |
| 43 | PEDESTRIAN | . . . . . 6 . . | NO | I13U | 43 | | | 10 | 5.2 |
| 44 | PEDESTRIAN | . . . . . 8 | NO | I13L | 44 | | | 10 | 5.4 |

| Failure Times(5-3) | Minutes |
|---|---|
| Maximum On Time | |
| Fail Reset Time | |

| Failure Override (5-4) | |
|---|---|
| Detectors 1-8 | . . . . . |
| Detectors 9-16 | . . . . . |
| Detectors17-24 | . . . . . |
| 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 Nu | | | | | | | | |
| Sys Det | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Det Nu | | | | | | | | |

| 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 | 1.00 | |

Detector-to-Phase Assignment (5-6-3)

| Sys Det | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | |
| Sys Det | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Phase | | | | | | | | |

## 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 |

# TOD SCHEDULE

| Table 1 (8-2-1) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
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| | | A |

| Table 2 (8-2-2) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
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| | | A |

| Table 3 (8-2-3) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
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| | | A |

| Table 4 (8-2-4) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
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| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 5 (8-2-5) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
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| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 6 (8-2-6) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

# WEEKDAY ASSIGNMENT

| Weekday Table Assignments (8-2-7) | | | | | | |
|---|---|---|---|---|---|---|
| Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| 1 | 1 | 1 | 1 | 1 | 2 | 2 |

## HOLIDAY TABLES

**Floating Holiday Table (8-2-8)**

| # | Mnth | Week | DOW | Table |
|---|---|---|---|---|
| 1 | | | ..... | |
| 2 | | | ..... | |
| 3 | | | ..... | |
| 4 | | | ..... | |
| 5 | | | ..... | |
| 6 | | | ..... | |
| 7 | | | ..... | |
| 8 | | | ..... | |
| 9 | | | ..... | |
| 10 | | | ..... | |
| 11 | | | ..... | |
| 12 | | | ..... | |
| 13 | | | ..... | |
| 14 | | | ..... | |
| 15 | | | ..... | |
| 16 | | | ..... | |

**Fixed Holiday Table (8-2-9)**

| # | Mnth | Day | DOW | Table |
|---|---|---|---|---|
| 1 | | | ..... | |
| 2 | | | ..... | |
| 3 | | | ..... | |
| 4 | | | ..... | |
| 5 | | | ..... | |
| 6 | | | ..... | |
| 7 | | | ..... | |
| 8 | | | ..... | |
| 9 | | | ..... | |
| 10 | | | ..... | |
| 11 | | | ..... | |
| 12 | | | ..... | |
| 13 | | | ..... | |
| 14 | | | ..... | |
| 15 | | | ..... | |
| 16 | | | ..... | |

**Solar Clock Data (8-4)**

| | |
|---|---|
| North Latitude | 34 |
| West Longitude | 118 |
| Local Time Zone | 8 |

**Sabbatical Clock (8-5)**

| Hebrew | Ped Recall |
|---|---|
| Sabbath | ..... |
| Holiday | ..... |

**Daylight Saving (8-6)**

| | |
|---|---|
| Enabled | YES |

## TOD FUNCTIONS

**TOD Functions (8-3)**

| # | Start | End | DOW | Action | Phases |
|---|---|---|---|---|---|
| 1 | | | ..... | | ..... |
| 2 | | | ..... | | ..... |
| 3 | | | ..... | | ..... |
| 4 | | | ..... | | ..... |
| 5 | | | ..... | | ..... |
| 6 | | | ..... | | ..... |
| 7 | | | ..... | | ..... |
| 8 | | | ..... | | ..... |
| 9 | | | ..... | | ..... |
| 10 | | | ..... | | ..... |
| 11 | | | ..... | | ..... |
| 12 | | | ..... | | ..... |
| 13 | | | ..... | | ..... |
| 14 | | | ..... | | ..... |
| 15 | | | ..... | | ..... |
| 16 | | | ..... | | ..... |

**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
27. Traffic Actuated Max 2
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 | |
| Protocol | AB3418 |
| Access Level | 0 |
| Baud | 1200 |
| Parity | NONE |
| Data Bits | 8 |
| Stop Bits | 1 |
| RTS On Time | 20 |
| RTS Off Time | 20 |
| Handshaking | NORMAL |

| C20 (6-1-2) | |
|---|---|
| Address | |
| Protocol | AB3418 |
| Access Level | 0 |
| Baud | 1200 |
| Parity | NONE |
| Data Bits | 8 |
| Stop Bits | 1 |
| RTS On Time | 20 |
| RTS Off Time | 20 |
| Handshaking | NORMAL |

| C21 (6-1-3) | |
|---|---|
| Address | |
| Protocol | AB3418 |
| Access Level | 0 |
| Baud | 1200 |
| Parity | NONE |
| Data Bits | 8 |
| Stop Bits | 1 |
| RTS On Time | 20 |
| RTS Off Time | 20 |
| Handshaking | NORMAL |

**Access Levels:**

0-Full Access
1-Status Only
2-Status, Set Pattern, Time
3-Status, Set Pattern, Time, Manual Plan
4-Reserved
5-Full Access with No Set Pattern
6-Full Access with No Set Time
7-Full Access with No Set Pattern, Manual Plan
8-Full Access with No Set Time, Pattern, Manual Plan

# SOFT LOGIC

Soft Logic ( 6-2 )

| # | Data | OP | Data | OP | Data | OP | Data |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |

*Refer to User's Manual for Data and OP Codes

# CALLBACK NUMBERS

| Callback Numbers (6-3...3) | |
|---|---|
| Line Out | |
| Local Toll | |
| Long Distance | |
| Delay | 10 |
| Area Code | |
| Phone Number | |

| | |
|---|---|
| Line Out | |
| Local Toll | |
| Long Distance | |
| Delay | 10 |
| Area Code | |
| Phone Number | |

| | |
|---|---|
| Line Out | |
| Local Toll | |
| Long Distance | |
| Delay | 10 |
| Area Code | |
| Phone Number | |

# NETWORK

| Network (6-4) | |
|---|---|
| Address | 1 |
| Protocol | AB3418 |
| Port | 27001 |
| Type | STATIC |
| Central Access | 6 |
| Field Access | 7 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IP Address | 172 | . | 25 | . | 52 | . | 7 |
| Netmask | 255 | . | 255 | . | 255 | . | 192 |
| Broadcast | 172 | . | 25 | . | 52 | . | 255 |
| Gateway | 172 | . | 25 | . | 52 | . | 1 |

# RAILROAD PREEMPTION

## RR 1

| ( 3-1-1 ) | Timing | Phase Flags (3-1-2) | | | Pedestrian Flags (3-1-3) | | | Overlap Flags (3-1-4) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Delay | | Grn Hold | Yel Flash | Red Flash | Walk | Flash DW | Solid DW | Grn Hold | Yel Flash | Red Flash |
| Clear 1 | 10 | . 2 . . 5 . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . 2 . 4 . 6 . 8 | . . . . . . | . . . . . . | . . . . . . |
| Clear 2 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | . . . . . . |
| Clear 3 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | . . . . . . |
| Hold | | . . . . . . . . | . . . . . . . . | 1 2 3 4 5 6 7 8 | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | A B C D E F |
| Exit | | | | | | | | | | |
| Min Grn | | | | | | | | | | |
| Ped Clr | | | | | | | | | | |

| Exit Parameters (3-1-5) | | | |
|---|---|---|---|
| Phase Green | Overlap Green | Vehicle Call | Ped Call |
| . . . . . . . . | . . . . . . | 1 2 3 4 5 6 7 8 | . 2 . 4 . 6 . 8 |

| Configuration (3-1-6) | | | |
|---|---|---|---|
| Primary Port | Secondary 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) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Delay | | Grn Hold | Yel Flash | Red Flash | Walk | Flash DW | Solid DW | Grn Hold | Yel Flash | Red Flash |
| Clear 1 | 10 | . . . 4 . . 7 . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . 2 . 4 . 6 . 8 | . . . . . . | . . . . . . | . . . . . . |
| Clear 2 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | . . . . . . |
| Clear 3 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . | . . . . . . | . . . . . . |
| Hold | | 1 2 3 . . 6 . . | . . . . . . . . | . . . . . . . . | . 2 . . . 6 . . | . . . . . . . . | . . . 4 . . . 8 | . . . . . . | . . . . . . | . . . . . . |
| Exit | | | | | | | | | | |
| Min Grn | | | | | | | | | | |
| Ped Clr | | | | | | | | | | |

| Exit Parameters (3-2-5) | | | |
|---|---|---|---|
| Phase Green | Overlap Green | Vehicle Call | Ped Call |
| . . . . . . . . | . . . . . . | . . . 4 . . 7 . | . . . . . . . . |

| Configuration (3-2-6) | | | |
|---|---|---|---|
| Primary Port | Secondary Port | Latching | Power-up |
| 2.6 | 0.0 | YES | DARK |

# EMERGENCY VEHICLE PREEMPTION

## EVA (3-A)

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | . 2 . . 5 . . . | . . . . . . |

| Port | Latching | Phase Termination |
|---|---|---|
| 5.5 | NO | ADVANCE |

## EVB (3-B)

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | . . . 4 . . 7 . | . . . . . . |

| Port | Latching | Phase Termination |
|---|---|---|
| 5.6 | NO | ADVANCE |

## EVC (3-C)

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | 1 . . . . 6 . . | . . . . . . |

| Port | Latching | Phase Termination |
|---|---|---|
| 5.7 | NO | ADVANCE |

## EVD (3-D)

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | . . 3 . . . . 8 | . . . . . . |

| Port | Latching | 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 | | R2 | 3.5 | D2 | 2.8 |
| Max OFF | | R3 | 3.7 | D3 | 6.1 |

| Manual Control ( 2-1-5-2 ) | |
|---|---|
| Input | Port |
| Manual Advance | |
| Advance Enable | |

| Cabinet Status ( 2-1-5-3 ) | |
|---|---|
| Input | Port |
| Flash Bus | |
| Door Ajar | |
| Flash Sense | 6.7 |
| Stop Time | 6.8 |

| Special Function (2-1-5-4) | |
|---|---|
| Input | Port |
| 1 | |
| 2 | |
| 3 | |
| 4 | |

| Battery Backup ( 2-1-5-5 ) | |
|---|---|
| Port | Operation |
| 2.7 | FLASHING |

| 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 Channel 9 and 10

## TRANSIT PRIORITY

| Local Plans (3-E) 1...9 11...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 | | | | | | | | | | | |
| Plan 2 | Green Factor | | | | | | | | | | | |
| Plan 3 | Green Factor | | | | | | | | | | | |
| Plan 4 | Green Factor | | | | | | | | | | | |
| Plan 5 | Green Factor | | | | | | | | | | | |
| Plan 6 | Green Factor | | | | | | | | | | | |
| Plan 7 | Green Factor | | | | | | | | | | | |
| Plan 8 | Green Factor | | | | | | | | | | | |
| Plan 9 | Green Factor | | | | | | | | | | | |
| Plan 11 | Green Factor | | | | | | | | | | | |
| Plan 12 | Green Factor | | | | | | | | | | | |
| Plan 13 | Green Factor | | | | | | | | | | | |
| Plan 14 | Green Factor | | | | | | | | | | | |
| Plan 15 | Green Factor | | | | | | | | | | | |
| Plan 16 | Green Factor | | | | | | | | | | | |
| Plan 17 | Green Factor | | | | | | | | | | | |
| Plan 18 | Green Factor | | | | | | | | | | | |
| Plan 19 | Green Factor | | | | | | | | | | | |

| Transit Priority Configuration (3-E-A) | | | | Indicator Output | |
|---|---|---|---|---|---|
| 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 |
| | . . . . . |
| | . . . . . |

| Free Plans (3-E-E) | |
|---|---|
| Max Grn Hold | Hold Phase |
| | . . . . . |

| Access Utilities (9-5) | |
|---|---|
| Password | *** |
| Timeout | 30 |

## 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 | | | | | | | | | | | | | . 2 . . . 6 . . | . 2 . 4 . 6 . 8 | . . . . . | . . . . . |
| Plan D | | | | | | | | | | | | | . 2 . . . 6 . . | . 2 . 4 . 6 . 8 | . . . . . | . . . . . |

## 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 |

Location: SR 74 @ TRUMBLE ROAD
Designed By:
System: ISOLATED
District: 08-RIVERSIDE
Installed By: SAFWAN SAYED
Master At:
I/C:
Service Info:

| Timing Change: | Date Start: | Date End: | Designed: | Installed: |
|---|---|---|---|---|
| 3/23/2010 | 5/23/1995 | | | 3/23/2010 |

## Intersection Layout

| | | FLASH |
|---|---|---|
| PHASE | 1) | [ ] |
| | 2) E/B SR 74 | [ ] |
| | 3) | [ ] |
| | 4) S/B TRUMBLE ROAD | [ ] |
| | 5) N/B SR 74 - LEFT TURN | [ ] |
| | 6) W/B SR 74 | [ ] |
| | 7) | [ ] |
| | 8) | [ ] |
| OVERLAP | A) | [ ] |
| | B) | [ ] |
| | C) | [ ] |
| | D) | [ ] |
| | E) | [ ] |
| | F) | [ ] |

Comments and Notes:

RAM Checksum

| | |
|---|---|
| Page 2: F8D8 | Page 7: D2FD |
| Page 3: BACE | Page 8: D364 |
| Page 4: 3C9A | Page 9: 0ED8 |
| Page 5: 296F | Page 10: 1611 |
| Page 6: 85AF | Page 11: C381 |

# CONFIGURATION PHASE FLAGS

| Phases ( 2-1-1-1 ) * | |
|---|---|
| Permitted | . 2 . 4 5 6 . . |
| Restricted | . . . . . |

| Phase Recalls ( 2-1-1-2 ) | |
|---|---|
| Vehicle Min | . 2 . . . 6 . . |
| Vehicle Max | . . . . . |
| Pedestrian | . . . . . |
| Bicycle | . . . . . |

| Phase Locks ( 2-1-1-3 ) * | |
|---|---|
| Red | . . . . . |
| Yellow | . . . . . |
| Force/Max | . . . . . |

| Phase Features ( 2-1-1-4 ) | |
|---|---|
| Double Entry | . . . . . |
| Rest In Walk | . . . . . |
| Rest In Red | . . . . . |
| Walk 2 | . . . . . |
| Max Green 2 | . . . . . |
| Max Green 3 | . . . . . |

| Startup ( 2-1-1-5 ) | * |
|---|---|
| First Green Phases | . . . 4 . . . . |
| Yellow Start Phases | . 2 . . . 6 . . |
| Yellow Start Overlaps | . . . . . |
| Startup All-Red | 5.0 |
| Vehicle Calls | . 2 . 4 5 6 . . |
| Pedestrian Calls | . . . 4 . 6 . . |

| 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 | . . . . . |
| P3 | . . . . . |
| P4 | . . . 4 . . . . |
| P5 | . . . . . |
| P6 | . . . . . 6 . . |
| P7 | . . . . . |
| P8 | . . . . . |

Overlap ( 2-1-4 )

| Overlap | Parent | Omit | No Start | Not |
|---|---|---|---|---|
| A | . . . . . | . . . . . | . . . . . | . . . . . |
| B | . . . . . | . . . . . | . . . . . | . . . . . |
| C | . . . . . | . . . . . | . . . . . | . . . . . |
| D | . . . . . | . . . . . | . . . . . | . . . . . |
| E | . . . . . | . . . . . | . . . . . | . . . . . |
| F | . . . . . | . . . . . | . . . . . | . . . . . |

## PHASE TIMING

| Phase ( 2-2 ) | -1- * | -2- * | -3- * | -4- * | -5- * | -6- * | -7- * | -8- * |
|---|---|---|---|---|---|---|---|---|
| --- Walk 1 --- | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 |
| Flash Don't Walk | 0 | 0 | 0 | 19 | 0 | 22 | 0 | 0 |
| Minimum Green | 0 | 5 | 0 | 5 | 5 | 5 | 0 | 0 |
| Det Limit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Initial | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Green 1 | 0 | 35 | 0 | 20 | 20 | 35 | 0 | 0 |
| Max Green 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Green 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Extension | 0.0 | 3.0 | 0.0 | 2.0 | 2.0 | 3.0 | 0.0 | 0.0 |
| Maximum Gap | 0.0 | 3.0 | 0.0 | 2.0 | 2.0 | 3.0 | 0.0 | 0.0 |
| Minimum Gap | 0.0 | 3.0 | 0.0 | 2.0 | 2.0 | 3.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Reduce Every | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Yellow | 3.0 | 5.0 | 3.0 | 3.5 | 3.0 | 5.0 | 3.0 | 3.0 |
| All-Red | 0.0 | 1.0 | 0.0 | 1.0 | 1.0 | 1.0 | 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 | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 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

| Red Revert ( 2-5 ) | |
|---|---|
| Time | 5.0 |
| Red To Sec ( 2-6 ) | |
| Red To Sec | OFF |

# COORDINATION

## Local Plan (7-1...9) TIMING DATA [ Offsets ]

Green Factors or Press [F] to Select Force-Off

| | | Cycle | Multi | Perm | A | B | C | -1- | -2- | -3- | -4- | -5- | -6- | -7- | -8- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Plan 1 | Green Factor | | | | | | | | | | | | | | |
| Plan 2 | Green Factor | | | | | | | | | | | | | | |
| Plan 3 | Green Factor | | | | | | | | | | | | | | |
| Plan 4 | Green Factor | | | | | | | | | | | | | | |
| Plan 5 | Green Factor | | | | | | | | | | | | | | |
| Plan 6 | Green Factor | | | | | | | | | | | | | | |
| Plan 7 | Green Factor | | | | | | | | | | | | | | |
| Plan 8 | Green Factor | | | | | | | | | | | | | | |
| Plan 9 | Green Factor | | | | | | | | | | | | | | |

## Local Plan (7-1...9) 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 | . . . . . | . . . . . | . . . . . | . . . . . | . . . . . | . . . . . | . . . . . | . . . . . |

| Master Timer Sync ( 7-A ) |
|---|
| Enable in Plans |
| . . . . . |

| Master Sub Master | |
|---|---|
| Input | |
| Output | |

### FREE PLAN PHASE FLAGS

| ( 7-E ) Free | |
|---|---|
| Lag | Omit |
| . 2 . 4 . 6 . 8 | . . . . . |
| Veh Min | Veh Max |
| . 2 . . . 6 . . | . . . . . |
| Ped | Bike |
| . . . . . | . . . . . |
| Cond | Cond Grn |
| . . . . . | 10 |

### MANUAL COMMANDS

| Manual Plan (4-1) | |
|---|---|
| Plan | OffSet |
| | 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 |

# DETECTORS

| Detector Attributes (5-1) * | | | | Slot | Detector Configuration (5-2) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Det | Type | Phases | Lock | | Det | Delay | Extend | Recall | Port |
| 1 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I2U | 1 | | | 10 | 1.1 |
| 2 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J2U | 2 | | | 10 | 1.2 |
| 3 | COUNT+CALL+EXTEND | . . . 4 . . . . | NO | I6U | 3 | | | 10 | 1.3 |
| 4 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J6U | 4 | | | 10 | 1.4 |
| 5 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I2L | 5 | | | 10 | 1.5 |
| 6 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J2L | 6 | | | 10 | 1.6 |
| 7 | COUNT+CALL+EXTEND | . . . 4 . . . . | NO | I6L | 7 | | | 10 | 1.7 |
| 8 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J6L | 8 | | | 10 | 1.8 |
| 9 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I4 | 9 | | | 10 | 2.1 |
| 10 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J4 | 10 | | | 10 | 2.2 |
| 11 | COUNT+CALL+EXTEND | . . . 4 . . . . | NO | I8 | 11 | | | 10 | 2.3 |
| 12 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J8 | 12 | | | 10 | 2.4 |
| 13 | COUNT+CALL+EXTEND | . . . . 5 . . . | NO | J1 | 13 | | | 10 | 3.1 |
| 14 | COUNT+CALL+EXTEND | 1 . . . . . | NO | I1 | 14 | | | 10 | 3.2 |
| 15 | COUNT+CALL+EXTEND | . . . . . 7 . | NO | J5 | 15 | | | 10 | 3.3 |
| 16 | COUNT+CALL+EXTEND | . . 3 . . . . . | NO | I5 | 16 | | | 10 | 3.4 |
| 17 | COUNT+CALL+EXTEND | . . . . 5 . . . | NO | J9U | 17 | | | 10 | 3.5 |
| 18 | COUNT+CALL+EXTEND | 1 . . . . . | NO | I9U | 18 | | | 10 | 3.6 |
| 19 | COUNT+CALL+EXTEND | . . . . . 7 . | NO | J9L | 19 | | | 10 | 3.7 |
| 20 | COUNT+CALL+EXTEND | . . 3 . . . . . | NO | I9L | 20 | | | 10 | 3.8 |
| 21 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I3L | 21 | | | 10 | 6.2 |
| 22 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J3L | 22 | | | 10 | 6.3 |
| 23 | COUNT+CALL+EXTEND | . . . 4 . . . . | NO | I7L | 23 | | | 10 | 6.4 |
| 24 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J7L | 24 | | | 10 | 6.5 |
| 25 | COUNT+CALL+EXTEND | . 2 . . . . . | NO | I3U | 25 | | | 10 | 4.5 |
| 26 | COUNT+CALL+EXTEND | . . . . . 6 . . | NO | J3U | 26 | | | 10 | 4.6 |
| 27 | COUNT+CALL+EXTEND | . . . 4 . . . . | NO | I7U | 27 | | | 10 | 4.7 |
| 28 | COUNT+CALL+EXTEND | . . . . . 8 | NO | J7U | 28 | | | 10 | 4.8 |
| 29 | PEDESTRIAN | . 2 . . . . . | NO | I 12U | 29 | | | 10 | 5.1 |
| 30 | PEDESTRIAN | . . . . . 6 . . | NO | I 13U | 30 | | | 10 | 5.2 |
| 31 | PEDESTRIAN | . . . 4 . . . . | NO | I 12L | 31 | | | 10 | 5.3 |
| 32 | PEDESTRIAN | . . . . . 8 | NO | I 13L | 32 | | | 10 | 5.4 |

| Failure Times(5-3) | Minutes |
|---|---|
| Maximum On Time | |
| Fail Reset Time | |

| Failure Override (5-4) | |
|---|---|
| Detectors 1-8 | . . . . . |
| Detectors 9-16 | . . . . . |
| Detectors 17-24 | . . . . . |
| Detectors 25-32 | . . . . . |

| System Detector Assignment (5-5) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sys Det | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Det Num | | | | | | | | |
| Sys Det | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Det Num | | | | | | | | |

| 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 | 1.00 | |

| Detector-to-Phase Assignment (5-6-3) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sys Det | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phase | | | | | | | | |
| Sys Det | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Phase | | | | | | | | |

## 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 | | 6.6 | 5.1 | 5.2 | 6.7 |
| | | 1.5 | 6.2 | | | 1.7 | 6.4 | | 3.8 | | 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 | | 2.8 | 5.5 | 5.6 | 2.5 |
| | | 1.6 | 6.3 | | | 1.8 | 6.5 | | 3.7 | | 6.1 | 5.7 | 5.8 | 2.6 |

# TOD SCHEDULE

| Table 1 (8-2-1) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 2 (8-2-2) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 3 (8-2-3) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 4 (8-2-4) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 5 (8-2-5) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

| Table 6 (8-2-6) | | |
|---|---|---|
| Time | Plan | OS |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |
| | | A |

# WEEKDAY ASSIGNMENT

| Weekday Table Assignments (8-2-7) | | | | | | |
|---|---|---|---|---|---|---|
| Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| 1 | 1 | 1 | 1 | 1 | 2 | 2 |

## HOLIDAY TABLES

**Floating Holiday Table (8-2-8)**

| # | Mnth | Week | DOW | Table |
|---|---|---|---|---|
| 1 | | | ..... | |
| 2 | | | ..... | |
| 3 | | | ..... | |
| 4 | | | ..... | |
| 5 | | | ..... | |
| 6 | | | ..... | |
| 7 | | | ..... | |
| 8 | | | ..... | |
| 9 | | | ..... | |
| 10 | | | ..... | |
| 11 | | | ..... | |
| 12 | | | ..... | |
| 13 | | | ..... | |
| 14 | | | ..... | |
| 15 | | | ..... | |
| 16 | | | ..... | |

**Fixed Holiday Table (8-2-9)**

| # | Mnth | Day | DOW | Table |
|---|---|---|---|---|
| 1 | | | ..... | |
| 2 | | | ..... | |
| 3 | | | ..... | |
| 4 | | | ..... | |
| 5 | | | ..... | |
| 6 | | | ..... | |
| 7 | | | ..... | |
| 8 | | | ..... | |
| 9 | | | ..... | |
| 10 | | | ..... | |
| 11 | | | ..... | |
| 12 | | | ..... | |
| 13 | | | ..... | |
| 14 | | | ..... | |
| 15 | | | ..... | |
| 16 | | | ..... | |

**Solar Clock Data (8-4)**

| | |
|---|---|
| North Latitude | 34 |
| West Longitude | 118 |
| Local Time Zone | 8 |

**Sabbatical Clock (8-5)**

| Hebrew | Ped Recall |
|---|---|
| Sabbath | ..... |
| Holiday | ..... |

**Daylight Saving (8-6)**

| | |
|---|---|
| Enabled | YES |

## TOD FUNCTIONS

**TOD Functions (8-3)**

| # | Start | End | DOW | Action | Phases |
|---|---|---|---|---|---|
| 1 | | | ..... | | ..... |
| 2 | | | ..... | | ..... |
| 3 | | | ..... | | ..... |
| 4 | | | ..... | | ..... |
| 5 | | | ..... | | ..... |
| 6 | | | ..... | | ..... |
| 7 | | | ..... | | ..... |
| 8 | | | ..... | | ..... |
| 9 | | | ..... | | ..... |
| 10 | | | ..... | | ..... |
| 11 | | | ..... | | ..... |
| 12 | | | ..... | | ..... |
| 13 | | | ..... | | ..... |
| 14 | | | ..... | | ..... |
| 15 | | | ..... | | ..... |
| 16 | | | ..... | | ..... |

**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 | |
| Protocol | AB3418 |
| Limit Access | |
| Baud | 1200 |
| Parity | NONE |
| Data Bits | 8 |
| Stop Bits | 1 |
| RTS On Time | 20 |
| RTS Off Time | 20 |
| Handshaking | NORMAL |

| C20 (6-1-2) | |
|---|---|
| Address | |
| Protocol | AB3418 |
| Limit Access | |
| Baud | 1200 |
| Parity | NONE |
| Data Bits | 8 |
| Stop Bits | 1 |
| RTS On Time | 20 |
| RTS Off Time | 20 |
| Handshaking | NORMAL |

| C21 (6-1-3) | |
|---|---|
| Address | |
| Protocol | AB3418 |
| Limit Access | |
| Baud | 1200 |
| Parity | NONE |
| Data Bits | 8 |
| Stop Bits | 1 |
| RTS On Time | 20 |
| RTS Off Time | 20 |
| Handshaking | NORMAL |

**Limit Access:**

**0-None**

**1-Status Only**

**2-Status, Set Pattern, Time**

**3-Status, Set Pattern, Time, Manual Plan**

## SOFT LOGIC

| Soft Logic ( 6-2 ) | | | | | | | |
|---|---|---|---|---|---|---|---|
| # | Data | OP | Data | OP | Data | OP | Data |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |

***Refer to User's Manual for Data and OP Codes**

## CALLBACK NUMBERS

| Callback Numbers (6-3...3) | |
|---|---|
| Line Out | |
| Local Toll | |
| Long Distance | |
| Delay | 10 |
| Area Code | |
| Phone Number | |

| | |
|---|---|
| Line Out | |
| Local Toll | |
| Long Distance | |
| Delay | 10 |
| Area Code | |
| Phone Number | |

| | |
|---|---|
| Line Out | |
| Local Toll | |
| Long Distance | |
| Delay | 10 |
| Area Code | |
| Phone Number | |

# RAILROAD PREEMPTION

**RR 1**

| ( 3-1-1 ) | Timing | Phase Flags (3-1-2) | | | Pedestrian Flags (3-1-3) | | | Overlap Flags (3-1-4) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Delay | | Grn Hold | Yel Flash | Red Flash | Walk | Flash DW | Solid DW | Grn Hold | Yel Flash | Red Flash |
| Clear1 | 10 | . 2 . . 5 . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . 2 . 4 . 6 . 8 | . . . . . | . . . . . | . . . . . |
| Clear 2 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . | . . . . . | . . . . . |
| Clear 3 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . | . . . . . | . . . . . |
| Hold | | . . . . . . . . | . . . . . . . . | 1 2 3 4 5 6 7 8 | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . | . . . . . | A B C D E F |
| Exit | 5 | | | | | | | | | |
| Min Grn | | | | | | | | | | |
| Ped Clr | | | | | | | | | | |

| 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 | Latching | Power-Up |
| 2.5 | YES | FLASHING |

**RR 2**

| ( 3-2-1 ) | Timing | Phase Flags (3-2-2) | | | Pedestrian Flags (3-2-3) | | | Overlap Flags (3-2-4) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Delay | | Grn Hold | Yel Flash | Red Flash | Walk | Flash DW | Solid DW | Grn Hold | Yel Flash | Red Flash |
| Clear1 | 10 | . . . 4 . . 7 . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . 2 . 4 . 6 . 8 | . . . . . | . . . . . | . . . . . |
| Clear 2 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . | . . . . . | . . . . . |
| Clear 3 | | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . . . . | . . . . . | . . . . . | . . . . . |
| Hold | | 1 2 3 . . 6 . . | . . . . . . . . | . . . . . . . . | . 2 . . . 6 . . | . . . . . . . . | . . . 4 . . . 8 | . . . . . | . . . . . | . . . . . |
| Exit | | | | | | | | | | |
| Min Grn | | | | | | | | | | |
| Ped Clr | | | | | | | | | | |

| Exit Parameters (3-2-5) | | | |
|---|---|---|---|
| Phase Green | Overlap Green | Vehicle Recall | Ped Recall |
| . . . . . . . . | . . . . . . | . . . 4 . . 7 . | . . . . . . . . |

| Configuration (3-2-6) | | |
|---|---|---|
| Port | Latching | Power-up |
| 2.6 | YES | DARK |

# EMERGENCY VEHICLE PREEMPTION

**EVA (3-A)**

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | . 2 . . 5 . . . | . . . . . . |

| Port | Latching | Phase Termination |
|---|---|---|
| 5.5 | NO | ADVANCE |

**EVB (3-B)**

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | . . . 4 . . 7 . | . . . . . . |

| Port | Latching | Phase Termination |
|---|---|---|
| 5.6 | NO | ADVANCE |

**EVC (3-C)**

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | 1 . . . . 6 . . | . . . . . . |

| Port | Latching | Phase Termination |
|---|---|---|
| 5.7 | NO | ADVANCE |

**EVD (3-D)**

| Preempt Timers | | | Phase Green | Overlap Green |
|---|---|---|---|---|
| Delay | Clear | Max | | |
| | 30 | 30 | . . 3 . . . . 8 | . . . . . . |

| Port | Latching | 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 | | R2 | 3.5 | D2 | 2.8 |
| Max OFF | | R3 | 3.7 | D3 | 6.1 |

| Manual Control ( 2-1-5-2 ) | |
|---|---|
| Input | Port |
| Manual Advance | 6.6 |
| Advance Enable | 6.6 |

| Cabinet Status ( 2-1-5-3 ) | |
|---|---|
| Input | Port |
| Flash Bus | |
| Door Ajar | |
| Flash Sense | 6.7 |
| Stop Time | 6.8 |

| Special Function (2-1-5-4) | |
|---|---|
| Input | Port |
| 1 | |
| 2 | |
| 3 | |
| 4 | |

| Battery Backup ( 2-1-5-5 ) * | |
|---|---|
| Port | Operation |
| 2.7 | NORMAL |

| 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
Channel 9 and 10

## YELLOW YIELD COOORDINATION

| | | | | | 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 | | | | | | | | | | | | | . 2 . . . 6 . . | . 2 . 4 . 6 . 8 | . . . . . | . . . . . |
| Plan D | | | | | | | | | | | | | . 2 . . . 6 . . | . 2 . 4 . 6 . 8 | . . . . . | . . . . . |

## TRANSIT PRIORITY

| Local Plans (3-E1...9) | | 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 | | | | | | | | | | | |
| Plan 2 | Green Factor | | | | | | | | | | | |
| Plan 3 | Green Factor | | | | | | | | | | | |
| Plan 4 | Green Factor | | | | | | | | | | | |
| Plan 5 | Green Factor | | | | | | | | | | | |
| Plan 6 | Green Factor | | | | | | | | | | | |
| Plan 7 | Green Factor | | | | | | | | | | | |
| Plan 8 | Green Factor | | | | | | | | | | | |
| Plan 9 | Green Factor | | | | | | | | | | | |

| Enable Priority (3-E-A) | |
|---|---|
| Enable in Plan | . . . . . |

| Free Plans (3-E-F) | |
|---|---|
| Max Green Hold | Hold Phase |
| | . . . . . |

| Access Utilities (9-5) | |
|---|---|
| Password | *** |
| Timeout | |

## TRUCK PREEMPTION

| Truck Preemption (3-F) | Passage | CarryOver | Clearance | Next Preempt | Phase Green | Det 2 Port | Det 3 Port | Det 4 Port | Sign Output | Slave Input | Slave Output |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |

# APPENDIX C:

# VOLUME DEVELOPMENT WORKSHEETS

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## Table C-1 - Existing Peak Hour PCE Volume Summary

| | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|
| | Existing Without Project | Project Trips | Existing With Project | Existing Without Project | Project Trips | Existing With Project |
| **1 I-215 Southbound Ramps/Bonnie Drive** | | | | | | |
| NBL | 233 | 1 | 234 | 250 | 2 | 252 |
| NBT | 493 | 12 | 505 | 297 | 22 | 319 |
| NBR | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | 599 | 22 | 621 | 774 | 16 | 790 |
| SBR | 25 | 0 | 25 | 23 | 0 | 23 |
| EBL | 28 | 0 | 28 | 32 | 0 | 32 |
| EBT | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | 159 | 2 | 161 | 269 | 1 | 270 |
| WBL | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | 0 | 0 | 0 | 0 | 0 | 0 |
| North Leg | | | | | | |
| Approach | 624 | 22 | 646 | 797 | 16 | 813 |
| Departure | 521 | 12 | 533 | 329 | 22 | 351 |
| Total | 1,145 | 34 | 1,179 | 1,126 | 38 | 1,164 |
| South Leg | | | | | | |
| Approach | 726 | 13 | 739 | 547 | 24 | 571 |
| Departure | 758 | 24 | 782 | 1,043 | 17 | 1,060 |
| Total | 1,484 | 37 | 1,521 | 1,590 | 41 | 1,631 |
| East Leg | | | | | | |
| Approach | 0 | 0 | 0 | 0 | 0 | 0 |
| Departure | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 |
| West Leg | | | | | | |
| Approach | 187 | 2 | 189 | 301 | 1 | 302 |
| Departure | 258 | 1 | 259 | 273 | 2 | 275 |
| Total | 445 | 3 | 448 | 574 | 3 | 577 |
| Total Approaches | | | | | | |
| Approach | 1,537 | 37 | 1,574 | 1,645 | 41 | 1,686 |
| Departure | 1,537 | 37 | 1,574 | 1,645 | 41 | 1,686 |
| Total | 3,074 | 74 | 3,148 | 3,290 | 82 | 3,372 |

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## Table C-1 - Existing Peak Hour PCE Volume Summary

| | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|
| | Existing Without Project | Project Trips | Existing With Project | Existing Without Project | Project Trips | Existing With Project |
| **2 I-215 Northbound Ramps/CA-74** | | | | | | |
| NBL | 0 | 0 | 0 | 0 | 0 | 0 |
| NBT | 0 | 0 | 0 | 0 | 0 | 0 |
| NBR | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | 170 | 24 | 194 | 231 | 17 | 248 |
| SBT | 0 | 0 | 0 | 0 | 0 | 0 |
| SBR | 16 | 0 | 16 | 39 | 0 | 39 |
| EBL | 14 | 0 | 14 | 14 | 0 | 14 |
| EBT | 744 | 24 | 768 | 1,029 | 17 | 1,046 |
| EBR | 0 | 0 | 0 | 0 | 0 | 0 |
| WBL | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | 710 | 13 | 723 | 508 | 24 | 532 |
| WBR | 784 | 12 | 796 | 713 | 21 | 734 |
| North Leg | | | | | | |
| Approach | 186 | 24 | 210 | 270 | 17 | 287 |
| Departure | 798 | 12 | 810 | 727 | 21 | 748 |
| Total | 984 | 36 | 1,020 | 997 | 38 | 1,035 |
| 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 | 1,494 | 25 | 1,519 | 1,221 | 45 | 1,266 |
| Departure | 914 | 48 | 962 | 1,260 | 34 | 1,294 |
| Total | 2,408 | 73 | 2,481 | 2,481 | 79 | 2,560 |
| West Leg | | | | | | |
| Approach | 758 | 24 | 782 | 1,043 | 17 | 1,060 |
| Departure | 726 | 13 | 739 | 547 | 24 | 571 |
| Total | 1,484 | 37 | 1,521 | 1,590 | 41 | 1,631 |
| Total Approaches | | | | | | |
| Approach | 2,438 | 73 | 2,511 | 2,534 | 79 | 2,613 |
| Departure | 2,438 | 73 | 2,511 | 2,534 | 79 | 2,613 |
| Total | 4,876 | 146 | 5,022 | 5,068 | 158 | 5,226 |

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## Table C-1 - Existing Peak Hour PCE Volume Summary

| | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|
| | Existing Without Project | Project Trips | Existing With Project | Existing Without Project | Project Trips | Existing With Project |
| **3 Trumble Road/Mapes Road** | | | | | | |
| NBL | 55 | 8 | 63 | 1 | 4 | 5 |
| NBT | 31 | 0 | 31 | 117 | 0 | 117 |
| NBR | 79 | 0 | 79 | 219 | 0 | 219 |
| SBL | 1 | 0 | 1 | 27 | 0 | 27 |
| SBT | 48 | 0 | 48 | 132 | 0 | 132 |
| SBR | 2 | 2 | 4 | 0 | 1 | 1 |
| EBL | 3 | 0 | 3 | 2 | 1 | 3 |
| EBT | 18 | 1 | 19 | 1 | 1 | 2 |
| EBR | 55 | 2 | 57 | 5 | 7 | 12 |
| WBL | 214 | 0 | 214 | 131 | 0 | 131 |
| WBT | 17 | 2 | 19 | 1 | 1 | 2 |
| WBR | 3 | 0 | 3 | 28 | 0 | 28 |
| North Leg | | | | | | |
| Approach | 51 | 2 | 53 | 159 | 1 | 160 |
| Departure | 37 | 0 | 37 | 147 | 1 | 148 |
| Total | 88 | 2 | 90 | 306 | 2 | 308 |
| South Leg | | | | | | |
| Approach | 165 | 8 | 173 | 337 | 4 | 341 |
| Departure | 317 | 2 | 319 | 268 | 7 | 275 |
| Total | 482 | 10 | 492 | 605 | 11 | 616 |
| East Leg | | | | | | |
| Approach | 234 | 2 | 236 | 160 | 1 | 161 |
| Departure | 98 | 1 | 99 | 247 | 1 | 248 |
| Total | 332 | 3 | 335 | 407 | 2 | 409 |
| West Leg | | | | | | |
| Approach | 76 | 3 | 79 | 8 | 9 | 17 |
| Departure | 74 | 12 | 86 | 2 | 6 | 8 |
| Total | 150 | 15 | 165 | 10 | 15 | 25 |
| Total Approaches | | | | | | |
| Approach | 526 | 15 | 541 | 664 | 15 | 679 |
| Departure | 526 | 15 | 541 | 664 | 15 | 679 |
| Total | 1,052 | 30 | 1,082 | 1,328 | 30 | 1,358 |

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## Table C-1 - Existing Peak Hour PCE Volume Summary

| | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|
| | Existing Without Project | Project Trips | Existing With Project | Existing Without Project | Project Trips | Existing With Project |
| **4 Trumble Road/Exceed Road-Sturgeon Electric Dwy** | | | | | | |
| NBL | 5 | 25 | 30 | 2 | 22 | 24 |
| NBT | 164 | 29 | 193 | 336 | 15 | 351 |
| NBR | 9 | 0 | 9 | 1 | 0 | 1 |
| SBL | 0 | 0 | 0 | 1 | 0 | 1 |
| SBT | 315 | 7 | 322 | 267 | 25 | 292 |
| SBR | 2 | 0 | 2 | 0 | 0 | 0 |
| EBL | 0 | 0 | 0 | 0 | 0 | 0 |
| EBT | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | 1 | 20 | 21 | 5 | 26 | 31 |
| WBL | 54 | 0 | 54 | 28 | 0 | 28 |
| WBT | 1 | 0 | 1 | 0 | 0 | 0 |
| WBR | 1 | 0 | 1 | 1 | 0 | 1 |
| North Leg | | | | | | |
| Approach | 317 | 7 | 324 | 268 | 25 | 293 |
| Departure | 165 | 29 | 194 | 337 | 15 | 352 |
| Total | 482 | 36 | 518 | 605 | 40 | 645 |
| South Leg | | | | | | |
| Approach | 178 | 54 | 232 | 339 | 37 | 376 |
| Departure | 370 | 27 | 397 | 300 | 51 | 351 |
| Total | 548 | 81 | 629 | 639 | 88 | 727 |
| East Leg | | | | | | |
| Approach | 56 | 0 | 56 | 29 | 0 | 29 |
| Departure | 9 | 0 | 9 | 2 | 0 | 2 |
| Total | 65 | 0 | 65 | 31 | 0 | 31 |
| West Leg | | | | | | |
| Approach | 1 | 20 | 21 | 5 | 26 | 31 |
| Departure | 8 | 25 | 33 | 2 | 22 | 24 |
| Total | 9 | 45 | 54 | 7 | 48 | 55 |
| Total Approaches | | | | | | |
| Approach | 552 | 81 | 633 | 641 | 88 | 729 |
| Departure | 552 | 81 | 633 | 641 | 88 | 729 |
| Total | 1,104 | 162 | 1,266 | 1,282 | 176 | 1,458 |

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## Table C-1 - Existing Peak Hour PCE Volume Summary

| | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|
| | Existing Without Project | Project Trips | Existing With Project | Existing Without Project | Project Trips | Existing With Project |
| **5 Trumble Road/CA-74** | | | | | | |
| NBL | 0 | 0 | 0 | 0 | 0 | 0 |
| NBT | 0 | 0 | 0 | 0 | 0 | 0 |
| NBR | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | 43 | 2 | 45 | 50 | 6 | 56 |
| SBT | 0 | 0 | 0 | 0 | 0 | 0 |
| SBR | 457 | 25 | 482 | 382 | 45 | 427 |
| EBL | 177 | 48 | 225 | 304 | 34 | 338 |
| EBT | 737 | 0 | 737 | 956 | 0 | 956 |
| EBR | 0 | 0 | 0 | 0 | 0 | 0 |
| WBL | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | 1,037 | 0 | 1,037 | 839 | 0 | 839 |
| WBR | 30 | 6 | 36 | 22 | 3 | 25 |
| North Leg | | | | | | |
| Approach | 500 | 27 | 527 | 432 | 51 | 483 |
| Departure | 207 | 54 | 261 | 326 | 37 | 363 |
| Total | 707 | 81 | 788 | 758 | 88 | 846 |
| 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 | 1,067 | 6 | 1,073 | 861 | 3 | 864 |
| Departure | 780 | 2 | 782 | 1,006 | 6 | 1,012 |
| Total | 1,847 | 8 | 1,855 | 1,867 | 9 | 1,876 |
| West Leg | | | | | | |
| Approach | 914 | 48 | 962 | 1,260 | 34 | 1,294 |
| Departure | 1,494 | 25 | 1,519 | 1,221 | 45 | 1,266 |
| Total | 2,408 | 73 | 2,481 | 2,481 | 79 | 2,560 |
| Total Approaches | | | | | | |
| Approach | 2,481 | 81 | 2,562 | 2,553 | 88 | 2,641 |
| Departure | 2,481 | 81 | 2,562 | 2,553 | 88 | 2,641 |
| Total | 4,962 | 162 | 5,124 | 5,106 | 176 | 5,282 |

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## Table C-1 - Existing Peak Hour PCE Volume Summary

| | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|
| | Existing Without Project | Project Trips | Existing With Project | Existing Without Project | Project Trips | Existing With Project |
| **6 Project Driveway 1/Mapes Road** | | | | | | |
| NBL | 0 | 0 | 0 | 0 | 0 | 0 |
| NBT | 0 | 0 | 0 | 0 | 0 | 0 |
| NBR | 0 | 3 | 3 | 0 | 9 | 9 |
| SBL | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | 0 | 0 | 0 | 0 | 0 | 0 |
| 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 | 12 | 12 | 0 | 6 | 6 |
| WBT | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | 0 | 0 | 0 | 0 | 0 | 0 |
| North Leg | | | | | | |
| Approach | 0 | 0 | 0 | 0 | 0 | 0 |
| Departure | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 |
| South Leg | | | | | | |
| Approach | 0 | 3 | 3 | 0 | 9 | 9 |
| Departure | 0 | 12 | 12 | 0 | 6 | 6 |
| Total | 0 | 15 | 15 | 0 | 15 | 15 |
| East Leg | | | | | | |
| Approach | 0 | 12 | 12 | 0 | 6 | 6 |
| Departure | 0 | 3 | 3 | 0 | 9 | 9 |
| Total | 0 | 15 | 15 | 0 | 15 | 15 |
| 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 | 0 | 15 | 15 | 0 | 15 | 15 |
| Departure | 0 | 15 | 15 | 0 | 15 | 15 |
| Total | 0 | 30 | 30 | 0 | 30 | 30 |

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## Table C-1 - Existing Peak Hour PCE Volume Summary

| | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|
| | Existing Without Project | Project Trips | Existing With Project | Existing Without Project | Project Trips | Existing With Project |
| **7 Trumble Road/Project Driveway 2** | | | | | | |
| NBL | 0 | 21 | 21 | 0 | 11 | 11 |
| NBT | 165 | 8 | 173 | 337 | 4 | 341 |
| NBR | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | 317 | 2 | 319 | 268 | 7 | 275 |
| SBR | 0 | 0 | 0 | 0 | 0 | 0 |
| EBL | 0 | 0 | 0 | 0 | 0 | 0 |
| EBT | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | 0 | 5 | 5 | 0 | 18 | 18 |
| WBL | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | 0 | 0 | 0 | 0 | 0 | 0 |
| North Leg | | | | | | |
| Approach | 317 | 2 | 319 | 268 | 7 | 275 |
| Departure | 165 | 8 | 173 | 337 | 4 | 341 |
| Total | 482 | 10 | 492 | 605 | 11 | 616 |
| South Leg | | | | | | |
| Approach | 165 | 29 | 194 | 337 | 15 | 352 |
| Departure | 317 | 7 | 324 | 268 | 25 | 293 |
| Total | 482 | 36 | 518 | 605 | 40 | 645 |
| East Leg | | | | | | |
| Approach | 0 | 0 | 0 | 0 | 0 | 0 |
| Departure | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 |
| West Leg | | | | | | |
| Approach | 0 | 5 | 5 | 0 | 18 | 18 |
| Departure | 0 | 21 | 21 | 0 | 11 | 11 |
| Total | 0 | 26 | 26 | 0 | 29 | 29 |
| Total Approaches | | | | | | |
| Approach | 482 | 36 | 518 | 605 | 40 | 645 |
| Departure | 482 | 36 | 518 | 605 | 40 | 645 |
| Total | 964 | 72 | 1,036 | 1,210 | 80 | 1,290 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | AM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **1** | **I-215 Southbound Ramps/Bonnie Drive** | | | | | | | |
| NBL | | 233 | 14 | 247 | 89 | 336 | 1 | 337 |
| NBT | | 493 | 30 | 523 | 238 | 761 | 12 | 773 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | | 599 | 36 | 635 | 126 | 761 | 22 | 783 |
| SBR | | 25 | 2 | 27 | 38 | 65 | 0 | 65 |
| EBL | | 28 | 2 | 30 | 39 | 69 | 0 | 69 |
| EBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | | 159 | 10 | 169 | 94 | 263 | 2 | 265 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Leg | | | | | | | | |
| | Approach | 624 | 38 | 662 | 164 | 826 | 22 | 848 |
| | Departure | 521 | 32 | 553 | 277 | 830 | 12 | 842 |
| | Total | 1,145 | 70 | 1,215 | 441 | 1,656 | 34 | 1,690 |
| South Leg | | | | | | | | |
| | Approach | 726 | 44 | 770 | 327 | 1,097 | 13 | 1,110 |
| | Departure | 758 | 46 | 804 | 220 | 1,024 | 24 | 1,048 |
| | Total | 1,484 | 90 | 1,574 | 547 | 2,121 | 37 | 2,158 |
| East Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Leg | | | | | | | | |
| | Approach | 187 | 12 | 199 | 133 | 332 | 2 | 334 |
| | Departure | 258 | 16 | 274 | 127 | 401 | 1 | 402 |
| | Total | 445 | 28 | 473 | 260 | 733 | 3 | 736 |
| Total Approaches | | | | | | | | |
| | Approach | 1,537 | 94 | 1,631 | 624 | 2,255 | 37 | 2,292 |
| | Departure | 1,537 | 94 | 1,631 | 624 | 2,255 | 37 | 2,292 |
| | Total | 3,074 | 188 | 3,262 | 1,248 | 4,510 | 74 | 4,584 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | AM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **2** | **I-215 Northbound Ramps/CA-74** | | | | | | | |
| NBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | | 170 | 10 | 180 | 129 | 309 | 24 | 333 |
| SBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBR | | 16 | 1 | 17 | 43 | 60 | 0 | 60 |
| EBL | | 14 | 1 | 15 | 24 | 39 | 0 | 39 |
| EBT | | 744 | 45 | 789 | 196 | 985 | 24 | 1,009 |
| EBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | | 710 | 43 | 753 | 283 | 1,036 | 13 | 1,049 |
| WBR | | 784 | 47 | 831 | 237 | 1,068 | 12 | 1,080 |
| North Leg | | | | | | | | |
| | Approach | 186 | 11 | 197 | 172 | 369 | 24 | 393 |
| | Departure | 798 | 48 | 846 | 261 | 1,107 | 12 | 1,119 |
| | Total | 984 | 59 | 1,043 | 433 | 1,476 | 36 | 1,512 |
| South Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| East Leg | | | | | | | | |
| | Approach | 1,494 | 90 | 1,584 | 520 | 2,104 | 25 | 2,129 |
| | Departure | 914 | 55 | 969 | 325 | 1,294 | 48 | 1,342 |
| | Total | 2,408 | 145 | 2,553 | 845 | 3,398 | 73 | 3,471 |
| West Leg | | | | | | | | |
| | Approach | 758 | 46 | 804 | 220 | 1,024 | 24 | 1,048 |
| | Departure | 726 | 44 | 770 | 326 | 1,096 | 13 | 1,109 |
| | Total | 1,484 | 90 | 1,574 | 546 | 2,120 | 37 | 2,157 |
| Total Approaches | | | | | | | | |
| | Approach | 2,438 | 147 | 2,585 | 912 | 3,497 | 73 | 3,570 |
| | Departure | 2,438 | 147 | 2,585 | 912 | 3,497 | 73 | 3,570 |
| | Total | 4,876 | 294 | 5,170 | 1,824 | 6,994 | 146 | 7,140 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | AM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **3** | **Trumble Road/Mapes Road** | | | | | | | |
| NBL | | 55 | 3 | 58 | 0 | 58 | 8 | 66 |
| NBT | | 31 | 2 | 33 | 25 | 58 | 0 | 58 |
| NBR | | 79 | 5 | 84 | 150 | 234 | 0 | 234 |
| SBL | | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| SBT | | 48 | 3 | 51 | 29 | 80 | 0 | 80 |
| SBR | | 2 | 0 | 2 | 0 | 2 | 2 | 4 |
| EBL | | 3 | 0 | 3 | 0 | 3 | 0 | 3 |
| EBT | | 18 | 1 | 19 | 0 | 19 | 1 | 20 |
| EBR | | 55 | 3 | 58 | 0 | 58 | 2 | 60 |
| WBL | | 214 | 13 | 227 | 200 | 427 | 0 | 427 |
| WBT | | 17 | 1 | 18 | 0 | 18 | 2 | 20 |
| WBR | | 3 | 0 | 3 | 0 | 3 | 0 | 3 |
| North Leg | | | | | | | | |
| | Approach | 51 | 3 | 54 | 29 | 83 | 2 | 85 |
| | Departure | 37 | 2 | 39 | 25 | 64 | 0 | 64 |
| | Total | 88 | 5 | 93 | 54 | 147 | 2 | 149 |
| South Leg | | | | | | | | |
| | Approach | 165 | 10 | 175 | 175 | 350 | 8 | 358 |
| | Departure | 317 | 19 | 336 | 229 | 565 | 2 | 567 |
| | Total | 482 | 29 | 511 | 404 | 915 | 10 | 925 |
| East Leg | | | | | | | | |
| | Approach | 234 | 14 | 248 | 200 | 448 | 2 | 450 |
| | Departure | 98 | 6 | 104 | 150 | 254 | 1 | 255 |
| | Total | 332 | 20 | 352 | 350 | 702 | 3 | 705 |
| West Leg | | | | | | | | |
| | Approach | 76 | 4 | 80 | 0 | 80 | 3 | 83 |
| | Departure | 74 | 4 | 78 | 0 | 78 | 12 | 90 |
| | Total | 150 | 8 | 158 | 0 | 158 | 15 | 173 |
| Total Approaches | | | | | | | | |
| | Approach | 526 | 31 | 557 | 404 | 961 | 15 | 976 |
| | Departure | 526 | 31 | 557 | 404 | 961 | 15 | 976 |
| | Total | 1,052 | 62 | 1,114 | 808 | 1,922 | 30 | 1,952 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | AM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **4** | **Trumble Road/Exceed Road-Sturgeon Electric Dwy** | | | | | | | |
| NBL | | 5 | 0 | 5 | 0 | 5 | 25 | 30 |
| NBT | | 164 | 10 | 174 | 175 | 349 | 29 | 378 |
| NBR | | 9 | 1 | 10 | 0 | 10 | 0 | 10 |
| SBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | | 315 | 19 | 334 | 226 | 560 | 7 | 567 |
| SBR | | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| EBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | | 1 | 0 | 1 | 0 | 1 | 20 | 21 |
| WBL | | 54 | 3 | 57 | 0 | 57 | 0 | 57 |
| WBT | | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| WBR | | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| North Leg | | | | | | | | |
| | Approach | 317 | 19 | 336 | 226 | 562 | 7 | 569 |
| | Departure | 165 | 10 | 175 | 175 | 350 | 29 | 379 |
| | Total | 482 | 29 | 511 | 401 | 912 | 36 | 948 |
| South Leg | | | | | | | | |
| | Approach | 178 | 11 | 189 | 175 | 364 | 54 | 418 |
| | Departure | 370 | 22 | 392 | 226 | 618 | 27 | 645 |
| | Total | 548 | 33 | 581 | 401 | 982 | 81 | 1,063 |
| East Leg | | | | | | | | |
| | Approach | 56 | 3 | 59 | 0 | 59 | 0 | 59 |
| | Departure | 9 | 1 | 10 | 0 | 10 | 0 | 10 |
| | Total | 65 | 4 | 69 | 0 | 69 | 0 | 69 |
| West Leg | | | | | | | | |
| | Approach | 1 | 0 | 1 | 0 | 1 | 20 | 21 |
| | Departure | 8 | 0 | 8 | 0 | 8 | 25 | 33 |
| | Total | 9 | 0 | 9 | 0 | 9 | 45 | 54 |
| Total Approaches | | | | | | | | |
| | Approach | 552 | 33 | 585 | 401 | 986 | 81 | 1,067 |
| | Departure | 552 | 33 | 585 | 401 | 986 | 81 | 1,067 |
| | Total | 1,104 | 66 | 1,170 | 802 | 1,972 | 162 | 2,134 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | AM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **5** | **Trumble Road/CA-74** | | | | | | | |
| NBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | | 43 | 3 | 46 | 111 | 157 | 2 | 159 |
| SBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBR | | 457 | 27 | 484 | 173 | 657 | 25 | 682 |
| EBL | | 177 | 11 | 188 | 144 | 332 | 48 | 380 |
| EBT | | 737 | 44 | 781 | 186 | 967 | 0 | 967 |
| EBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | | 1,037 | 62 | 1,099 | 337 | 1,436 | 0 | 1,436 |
| WBR | | 30 | 2 | 32 | 112 | 144 | 6 | 150 |
| North Leg | | | | | | | | |
| | Approach | 500 | 30 | 530 | 284 | 814 | 27 | 841 |
| | Departure | 207 | 13 | 220 | 256 | 476 | 54 | 530 |
| | Total | 707 | 43 | 750 | 540 | 1,290 | 81 | 1,371 |
| South Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| East Leg | | | | | | | | |
| | Approach | 1,067 | 64 | 1,131 | 449 | 1,580 | 6 | 1,586 |
| | Departure | 780 | 47 | 827 | 297 | 1,124 | 2 | 1,126 |
| | Total | 1,847 | 111 | 1,958 | 746 | 2,704 | 8 | 2,712 |
| West Leg | | | | | | | | |
| | Approach | 914 | 55 | 969 | 330 | 1,299 | 48 | 1,347 |
| | Departure | 1,494 | 89 | 1,583 | 510 | 2,093 | 25 | 2,118 |
| | Total | 2,408 | 144 | 2,552 | 840 | 3,392 | 73 | 3,465 |
| Total Approaches | | | | | | | | |
| | Approach | 2,481 | 149 | 2,630 | 1,063 | 3,693 | 81 | 3,774 |
| | Departure | 2,481 | 149 | 2,630 | 1,063 | 3,693 | 81 | 3,774 |
| | Total | 4,962 | 298 | 5,260 | 2,126 | 7,386 | 162 | 7,548 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | AM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **6** | **Project Driveway 1/Mapes Road** | | | | | | | |
| NBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| SBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 12 | 12 |
| WBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 12 | 12 |
| | Total | 0 | 0 | 0 | 0 | 0 | 15 | 15 |
| East Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 12 | 12 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| | Total | 0 | 0 | 0 | 0 | 0 | 15 | 15 |
| West Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Approaches | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 15 | 15 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 15 | 15 |
| | Total | 0 | 0 | 0 | 0 | 0 | 30 | 30 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | AM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **7** | **Trumble Road/Project Driveway 2** | | | | | | | |
| NBL | | 0 | 0 | 0 | 0 | 0 | 21 | 21 |
| NBT | | 165 | 10 | 175 | 175 | 350 | 8 | 358 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | | 317 | 19 | 336 | 226 | 562 | 2 | 564 |
| SBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Leg | | | | | | | | |
| | Approach | 317 | 19 | 336 | 226 | 562 | 2 | 564 |
| | Departure | 165 | 10 | 175 | 175 | 350 | 8 | 358 |
| | Total | 482 | 29 | 511 | 401 | 912 | 10 | 922 |
| South Leg | | | | | | | | |
| | Approach | 165 | 10 | 175 | 175 | 350 | 29 | 379 |
| | Departure | 317 | 19 | 336 | 226 | 562 | 7 | 569 |
| | Total | 482 | 29 | 511 | 401 | 912 | 36 | 948 |
| East Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 21 | 21 |
| | Total | 0 | 0 | 0 | 0 | 0 | 26 | 26 |
| Total Approaches | | | | | | | | |
| | Approach | 482 | 29 | 511 | 401 | 912 | 36 | 948 |
| | Departure | 482 | 29 | 511 | 401 | 912 | 36 | 948 |
| | Total | 964 | 58 | 1,022 | 802 | 1,824 | 72 | 1,896 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | PM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **1** | **I-215 Southbound Ramps/Bonnie Drive** | | | | | | | |
| NBL | | 250 | 15 | 265 | 124 | 389 | 2 | 391 |
| NBT | | 297 | 18 | 315 | 197 | 512 | 22 | 534 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | | 774 | 46 | 820 | 275 | 1,095 | 16 | 1,111 |
| SBR | | 23 | 1 | 24 | 30 | 54 | 0 | 54 |
| EBL | | 32 | 2 | 34 | 49 | 83 | 0 | 83 |
| EBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | | 269 | 16 | 285 | 104 | 389 | 1 | 390 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Leg | | | | | | | | |
| | Approach | 797 | 47 | 844 | 305 | 1,149 | 16 | 1,165 |
| | Departure | 329 | 20 | 349 | 246 | 595 | 22 | 617 |
| | Total | 1,126 | 67 | 1,193 | 551 | 1,744 | 38 | 1,782 |
| South Leg | | | | | | | | |
| | Approach | 547 | 33 | 580 | 321 | 901 | 24 | 925 |
| | Departure | 1,043 | 62 | 1,105 | 379 | 1,484 | 17 | 1,501 |
| | Total | 1,590 | 95 | 1,685 | 700 | 2,385 | 41 | 2,426 |
| East Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Leg | | | | | | | | |
| | Approach | 301 | 18 | 319 | 153 | 472 | 1 | 473 |
| | Departure | 273 | 16 | 289 | 154 | 443 | 2 | 445 |
| | Total | 574 | 34 | 608 | 307 | 915 | 3 | 918 |
| Total Approaches | | | | | | | | |
| | Approach | 1,645 | 98 | 1,743 | 779 | 2,522 | 41 | 2,563 |
| | Departure | 1,645 | 98 | 1,743 | 779 | 2,522 | 41 | 2,563 |
| | Total | 3,290 | 196 | 3,486 | 1,558 | 5,044 | 82 | 5,126 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | PM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **2** | **I-215 Northbound Ramps/CA-74** | | | | | | | |
| NBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | | 231 | 14 | 245 | 277 | 522 | 17 | 539 |
| SBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBR | | 39 | 2 | 41 | 46 | 87 | 0 | 87 |
| EBL | | 14 | 1 | 15 | 39 | 54 | 0 | 54 |
| EBT | | 1,029 | 62 | 1,091 | 340 | 1,431 | 17 | 1,448 |
| EBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | | 508 | 30 | 538 | 275 | 813 | 24 | 837 |
| WBR | | 713 | 43 | 756 | 195 | 951 | 21 | 972 |
| North Leg | | | | | | | | |
| | Approach | 270 | 16 | 286 | 323 | 609 | 17 | 626 |
| | Departure | 727 | 44 | 771 | 234 | 1,005 | 21 | 1,026 |
| | Total | 997 | 60 | 1,057 | 557 | 1,614 | 38 | 1,652 |
| South Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| East Leg | | | | | | | | |
| | Approach | 1,221 | 73 | 1,294 | 470 | 1,764 | 45 | 1,809 |
| | Departure | 1,260 | 76 | 1,336 | 617 | 1,953 | 34 | 1,987 |
| | Total | 2,481 | 149 | 2,630 | 1,087 | 3,717 | 79 | 3,796 |
| West Leg | | | | | | | | |
| | Approach | 1,043 | 63 | 1,106 | 379 | 1,485 | 17 | 1,502 |
| | Departure | 547 | 32 | 579 | 321 | 900 | 24 | 924 |
| | Total | 1,590 | 95 | 1,685 | 700 | 2,385 | 41 | 2,426 |
| Total Approaches | | | | | | | | |
| | Approach | 2,534 | 152 | 2,686 | 1,172 | 3,858 | 79 | 3,937 |
| | Departure | 2,534 | 152 | 2,686 | 1,172 | 3,858 | 79 | 3,937 |
| | Total | 5,068 | 304 | 5,372 | 2,344 | 7,716 | 158 | 7,874 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | PM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| t | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **3** | **Trumble Road/Mapes Road** | | | | | | | |
| NBL | | 1 | 0 | 1 | 0 | 1 | 4 | 5 |
| NBT | | 117 | 7 | 124 | 31 | 155 | 0 | 155 |
| NBR | | 219 | 13 | 232 | 223 | 455 | 0 | 455 |
| SBL | | 27 | 2 | 29 | 0 | 29 | 0 | 29 |
| SBT | | 132 | 8 | 140 | 30 | 170 | 0 | 170 |
| SBR | | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| EBL | | 2 | 0 | 2 | 0 | 2 | 1 | 3 |
| EBT | | 1 | 0 | 1 | 0 | 1 | 1 | 2 |
| EBR | | 5 | 0 | 5 | 0 | 5 | 7 | 12 |
| WBL | | 131 | 8 | 139 | 195 | 334 | 0 | 334 |
| WBT | | 1 | 0 | 1 | 0 | 1 | 1 | 2 |
| WBR | | 28 | 2 | 30 | 0 | 30 | 0 | 30 |
| North Leg | | | | | | | | |
| | Approach | 159 | 10 | 169 | 30 | 199 | 1 | 200 |
| | Departure | 147 | 9 | 156 | 31 | 187 | 1 | 188 |
| | Total | 306 | 19 | 325 | 61 | 386 | 2 | 388 |
| South Leg | | | | | | | | |
| | Approach | 337 | 20 | 357 | 254 | 611 | 4 | 615 |
| | Departure | 268 | 16 | 284 | 225 | 509 | 7 | 516 |
| | Total | 605 | 36 | 641 | 479 | 1,120 | 11 | 1,131 |
| East Leg | | | | | | | | |
| | Approach | 160 | 10 | 170 | 195 | 365 | 1 | 366 |
| | Departure | 247 | 15 | 262 | 223 | 485 | 1 | 486 |
| | Total | 407 | 25 | 432 | 418 | 850 | 2 | 852 |
| West Leg | | | | | | | | |
| | Approach | 8 | 0 | 8 | 0 | 8 | 9 | 17 |
| | Departure | 2 | 0 | 2 | 0 | 2 | 6 | 8 |
| | Total | 10 | 0 | 10 | 0 | 10 | 15 | 25 |
| Total Approaches | | | | | | | | |
| | Approach | 664 | 40 | 704 | 479 | 1,183 | 15 | 1,198 |
| | Departure | 664 | 40 | 704 | 479 | 1,183 | 15 | 1,198 |
| | Total | 1,328 | 80 | 1,408 | 958 | 2,366 | 30 | 2,396 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | PM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **4** | **Trumble Road/Exceed Road-Sturgeon Electric Dwy** | | | | | | | |
| NBL | | 2 | 0 | 2 | 0 | 2 | 22 | 24 |
| NBT | | 336 | 20 | 356 | 254 | 610 | 15 | 625 |
| NBR | | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| SBL | | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| SBT | | 267 | 16 | 283 | 227 | 510 | 25 | 535 |
| SBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | | 5 | 0 | 5 | 0 | 5 | 26 | 31 |
| WBL | | 28 | 2 | 30 | 0 | 30 | 0 | 30 |
| WBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| North Leg | | | | | | | | |
| | Approach | 268 | 16 | 284 | 227 | 511 | 25 | 536 |
| | Departure | 337 | 20 | 357 | 254 | 611 | 15 | 626 |
| | Total | 605 | 36 | 641 | 481 | 1,122 | 40 | 1,162 |
| South Leg | | | | | | | | |
| | Approach | 339 | 20 | 359 | 254 | 613 | 37 | 650 |
| | Departure | 300 | 18 | 318 | 227 | 545 | 51 | 596 |
| | Total | 639 | 38 | 677 | 481 | 1,158 | 88 | 1,246 |
| East Leg | | | | | | | | |
| | Approach | 29 | 2 | 31 | 0 | 31 | 0 | 31 |
| | Departure | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| | Total | 31 | 2 | 33 | 0 | 33 | 0 | 33 |
| West Leg | | | | | | | | |
| | Approach | 5 | 0 | 5 | 0 | 5 | 26 | 31 |
| | Departure | 2 | 0 | 2 | 0 | 2 | 22 | 24 |
| | Total | 7 | 0 | 7 | 0 | 7 | 48 | 55 |
| Total Approaches | | | | | | | | |
| | Approach | 641 | 38 | 679 | 481 | 1,160 | 88 | 1,248 |
| | Departure | 641 | 38 | 679 | 481 | 1,160 | 88 | 1,248 |
| | Total | 1,282 | 76 | 1,358 | 962 | 2,320 | 176 | 2,496 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | PM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| t | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **5** | **Trumble Road/CA-74** | | | | | | | |
| NBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | | 50 | 3 | 53 | 119 | 172 | 6 | 178 |
| SBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBR | | 382 | 23 | 405 | 174 | 579 | 45 | 624 |
| EBL | | 304 | 18 | 322 | 199 | 521 | 34 | 555 |
| EBT | | 956 | 57 | 1,013 | 409 | 1,422 | 0 | 1,422 |
| EBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | | 839 | 50 | 889 | 300 | 1,189 | 0 | 1,189 |
| WBR | | 22 | 1 | 23 | 126 | 149 | 3 | 152 |
| North Leg | | | | | | | | |
| | Approach | 432 | 26 | 458 | 293 | 751 | 51 | 802 |
| | Departure | 326 | 19 | 345 | 325 | 670 | 37 | 707 |
| | Total | 758 | 45 | 803 | 618 | 1,421 | 88 | 1,509 |
| South Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| East Leg | | | | | | | | |
| | Approach | 861 | 51 | 912 | 426 | 1,338 | 3 | 1,341 |
| | Departure | 1,006 | 60 | 1,066 | 528 | 1,594 | 6 | 1,600 |
| | Total | 1,867 | 111 | 1,978 | 954 | 2,932 | 9 | 2,941 |
| West Leg | | | | | | | | |
| | Approach | 1,260 | 75 | 1,335 | 608 | 1,943 | 34 | 1,977 |
| | Departure | 1,221 | 73 | 1,294 | 474 | 1,768 | 45 | 1,813 |
| | Total | 2,481 | 148 | 2,629 | 1,082 | 3,711 | 79 | 3,790 |
| Total Approaches | | | | | | | | |
| | Approach | 2,553 | 152 | 2,705 | 1,327 | 4,032 | 88 | 4,120 |
| | Departure | 2,553 | 152 | 2,705 | 1,327 | 4,032 | 88 | 4,120 |
| | Total | 5,106 | 304 | 5,410 | 2,654 | 8,064 | 176 | 8,240 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | PM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| t | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **6** | **Project Driveway 1/Mapes Road** | | | | | | | |
| NBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 9 | 9 |
| SBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 6 | 6 |
| WBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 9 | 9 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 6 | 6 |
| | Total | 0 | 0 | 0 | 0 | 0 | 15 | 15 |
| East Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 6 | 6 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 9 | 9 |
| | Total | 0 | 0 | 0 | 0 | 0 | 15 | 15 |
| West Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Approaches | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 15 | 15 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 15 | 15 |
| | Total | 0 | 0 | 0 | 0 | 0 | 30 | 30 |

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## Table C-2 - Cumulative (2024) Peak Hour PCE Volume Summary

| | | PM Peak Hour | | | | | | |
|---|---|---|---|---|---|---|---|---|
| t | | Existing (2022) PCE Volume | 2022-2024 Growth | 2024 Volumes | Cumul Proj Trips | Cumul 2024 Volumes | Project Trips | Cumul 2024 With Project |
| **7** | **Trumble Road/Project Driveway 2** | | | | | | | |
| NBL | | 0 | 0 | 0 | 0 | 0 | 11 | 11 |
| NBT | | 337 | 20 | 357 | 254 | 611 | 4 | 615 |
| NBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SBT | | 268 | 16 | 284 | 227 | 511 | 7 | 518 |
| SBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBR | | 0 | 0 | 0 | 0 | 0 | 18 | 18 |
| WBL | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBT | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WBR | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Leg | | | | | | | | |
| | Approach | 268 | 16 | 284 | 227 | 511 | 7 | 518 |
| | Departure | 337 | 20 | 357 | 254 | 611 | 4 | 615 |
| | Total | 605 | 36 | 641 | 481 | 1,122 | 11 | 1,133 |
| South Leg | | | | | | | | |
| | Approach | 337 | 20 | 357 | 254 | 611 | 15 | 626 |
| | Departure | 268 | 16 | 284 | 227 | 511 | 25 | 536 |
| | Total | 605 | 36 | 641 | 481 | 1,122 | 40 | 1,162 |
| East Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Leg | | | | | | | | |
| | Approach | 0 | 0 | 0 | 0 | 0 | 18 | 18 |
| | Departure | 0 | 0 | 0 | 0 | 0 | 11 | 11 |
| | Total | 0 | 0 | 0 | 0 | 0 | 29 | 29 |
| Total Approaches | | | | | | | | |
| | Approach | 605 | 36 | 641 | 481 | 1,122 | 40 | 1,162 |
| | Departure | 605 | 36 | 641 | 481 | 1,122 | 40 | 1,162 |
| | Total | 1,210 | 72 | 1,282 | 962 | 2,244 | 80 | 2,324 |

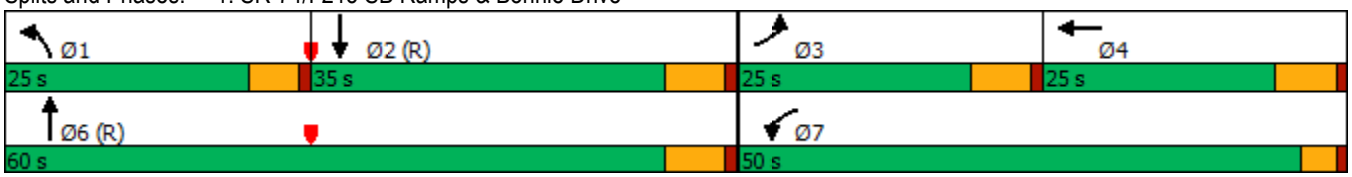
# APPENDIX D:

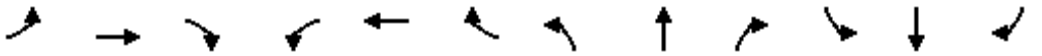
# LEVEL OF SERVICE WORKSHEETS

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 28 | 159 | 233 | 493 | 599 | 25 | | |
| Future Volume (vph) | 28 | 159 | 233 | 493 | 599 | 25 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 25.0 | | 25.0 | 60.0 | 35.0 | | 25.0 | 50.0 |
| Total Split (%) | 22.7% | | 22.7% | 54.5% | 31.8% | | 23% | 45% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 6.5 | 110.0 | 20.0 | 98.4 | 70.9 | 110.0 | | |
| Actuated g/C Ratio | 0.06 | 1.00 | 0.18 | 0.89 | 0.64 | 1.00 | | |
| v/c Ratio | 0.28 | 0.11 | 0.77 | 0.32 | 0.53 | 0.02 | | |
| Control Delay | 55.6 | 0.1 | 58.2 | 2.3 | 15.0 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 55.6 | 0.1 | 58.2 | 2.3 | 15.0 | 0.0 | | |
| LOS | E | A | E | A | B | A | | |
| Approach Delay | | | | 20.2 | 14.4 | | | |
| Approach LOS | | | | C | B | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 23 (21%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 75 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.77 | |
| Intersection Signal Delay: 16.4 | Intersection LOS: B |
| Intersection Capacity Utilization 60.3% | ICU Level of Service B |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 28 | 0 | 159 | 0 | 0 | 0 | 233 | 493 | 0 | 0 | 599 | 25 |
| Future Volume (veh/h) | 28 | 0 | 159 | 0 | 0 | 0 | 233 | 493 | 0 | 0 | 599 | 25 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 30 | 0 | 0 | 0 | 0 | 0 | 253 | 536 | 0 | 0 | 651 | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 49 | 0 | | 0 | 2 | 0 | 283 | 1641 | 0 | 0 | 1258 | |
| Arrive On Green | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.86 | 0.00 | 0.00 | 0.66 | 0.00 |
| Sat Flow, veh/h | 1810 | 30 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Grp Volume(v), veh/h | 30 | 57.3 | | 0 | 0 | 0 | 253 | 536 | 0 | 0 | 651 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | E | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Q Serve(g_s), s | 1.8 | | | 0.0 | 0.0 | 0.0 | 15.1 | 5.9 | 0.0 | 0.0 | 19.4 | 0.0 |
| Cycle Q Clear(g_c), s | 1.8 | | | 0.0 | 0.0 | 0.0 | 15.1 | 5.9 | 0.0 | 0.0 | 19.4 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 49 | | | 0 | 2 | 0 | 283 | 1641 | 0 | 0 | 1258 | |
| V/C Ratio(X) | 0.61 | | | 0.00 | 0.00 | 0.00 | 0.89 | 0.33 | 0.00 | 0.00 | 0.52 | |
| Avail Cap(c_a), veh/h | 313 | | | 0 | 328 | 0 | 329 | 1641 | 0 | 0 | 1258 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 52.9 | | | 0.0 | 0.0 | 0.0 | 45.5 | 1.4 | 0.0 | 0.0 | 9.6 | 0.0 |
| Incr Delay (d2), s/veh | 4.4 | | | 0.0 | 0.0 | 0.0 | 21.5 | 0.5 | 0.0 | 0.0 | 1.5 | 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 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | | | 0.0 | 0.0 | 0.0 | 8.2 | 0.5 | 0.0 | 0.0 | 7.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 57.3 | | | 0.0 | 0.0 | 0.0 | 67.0 | 2.0 | 0.0 | 0.0 | 11.1 | 0.0 |
| LnGrp LOS | E | | | A | A | A | E | A | A | A | B | |
| Approach Vol, veh/h | | | | | 0 | | | 789 | | | 651 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 22.8 | | | 11.1 | |
| Approach LOS | | | | | | | | C | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | | 6 | 7 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 22.2 | 78.8 | 9.0 | 0.0 | | 101.0 | 9.0 | | | | | |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | | 6.0 | 4.0 | | | | | |
| Max Green Setting (Gmax), s | 20.0 | 29.0 | 19.0 | 19.0 | | 54.0 | 46.0 | | | | | |
| Max Q Clear Time (g_c+I1), s | 17.1 | 21.4 | 3.8 | 0.0 | | 7.9 | 0.0 | | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.5 | 0.0 | 0.0 | | 1.9 | 0.0 | | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 18.3 |
| HCM 6th LOS | B |

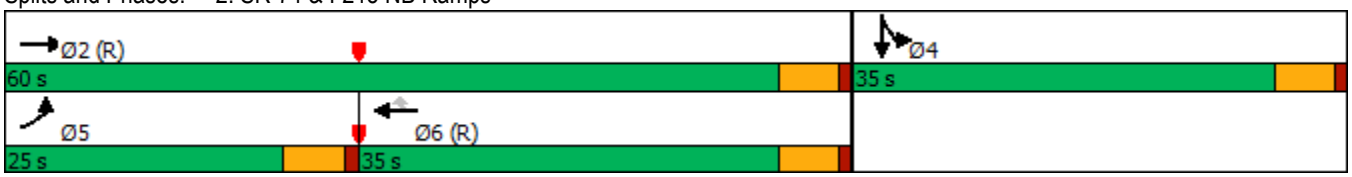
**Notes**

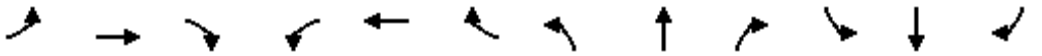
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 14 | 744 | 710 | 784 | 0 |
| Future Volume (vph) | 14 | 744 | 710 | 784 | 0 |
| Turn Type | Prot | NA | NA | Perm | NA |
| Protected Phases | 5 | 2 | 6 | | 4 |
| Permitted Phases | | | | 6 | |
| Detector Phase | 5 | 2 | 6 | 6 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 50.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.3 | 55.3 | 10.3 | 10.3 | 10.3 |
| Total Split (s) | 25.0 | 60.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 26.3% | 63.2% | 36.8% | 36.8% | 36.8% |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| Lead/Lag | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | Yes | |
| Recall Mode | None | C-Min | C-Min | C-Min | None |
| Act Effct Green (s) | 5.6 | 73.7 | 69.0 | 69.0 | 10.7 |
| Actuated g/C Ratio | 0.06 | 0.78 | 0.73 | 0.73 | 0.11 |
| v/c Ratio | 0.14 | 0.28 | 0.29 | 0.60 | 0.71 |
| Control Delay | 45.1 | 3.8 | 6.2 | 2.7 | 35.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| Total Delay | 45.1 | 3.8 | 6.2 | 2.8 | 35.8 |
| LOS | D | A | A | A | D |
| Approach Delay | | 4.5 | 4.5 | | 35.8 |
| Approach LOS | | A | A | | D |

| Intersection Summary | |
|---|---|
| Cycle Length: 95 | |
| Actuated Cycle Length: 95 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 70 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.71 | |
| Intersection Signal Delay: 6.9 | Intersection LOS: A |
| Intersection Capacity Utilization 61.5% | ICU Level of Service B |
| Analysis Period (min) 15 | |

Splits and Phases: 2: SR-74 & I-215 NB Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 14 | 744 | 0 | 0 | 710 | 784 | 0 | 0 | 0 | 170 | 0 | 16 |
| Future Volume (veh/h) | 14 | 744 | 0 | 0 | 710 | 784 | 0 | 0 | 0 | 170 | 0 | 16 |
| 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 | 1900 | 1900 | 0 | 0 | 1900 | 1900 | | | | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 15 | 791 | 0 | 0 | 755 | 0 | | | | 181 | 0 | 17 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | | | | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| Cap, veh/h | 31 | 2724 | 0 | 0 | 2461 | | | | | 219 | 0 | 21 |
| Arrive On Green | 0.02 | 0.75 | 0.00 | 0.00 | 0.68 | 0.00 | | | | 0.13 | 0.00 | 0.13 |
| Sat Flow, veh/h | 1810 | 3705 | 0 | 0 | 3705 | 1610 | | | | 1637 | 0 | 154 |
| Grp Volume(v), veh/h | 15 | 791 | 0 | 0 | 755 | 0 | | | | 198 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 0 | 0 | 1805 | 1610 | | | | 1790 | 0 | 0 |
| Q Serve(g_s), s | 0.8 | 6.5 | 0.0 | 0.0 | 8.0 | 0.0 | | | | 10.2 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.8 | 6.5 | 0.0 | 0.0 | 8.0 | 0.0 | | | | 10.2 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | | | | 0.91 | | 0.09 |
| Lane Grp Cap(c), veh/h | 31 | 2724 | 0 | 0 | 2461 | | | | | 240 | 0 | 0 |
| V/C Ratio(X) | 0.48 | 0.29 | 0.00 | 0.00 | 0.31 | | | | | 0.83 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 375 | 2724 | 0 | 0 | 2461 | | | | | 560 | 0 | 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 | 1.00 | 0.00 | 0.00 | 0.69 | 0.00 | | | | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 46.3 | 3.7 | 0.0 | 0.0 | 6.1 | 0.0 | | | | 40.1 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 4.2 | 0.3 | 0.0 | 0.0 | 0.2 | 0.0 | | | | 2.8 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 1.5 | 0.0 | 0.0 | 2.8 | 0.0 | | | | 4.5 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 50.5 | 3.9 | 0.0 | 0.0 | 6.3 | 0.0 | | | | 42.8 | 0.0 | 0.0 |
| LnGrp LOS | D | A | A | A | A | | | | | D | A | A |
| Approach Vol, veh/h | | 806 | | | 755 | | | | | | 198 | |
| Approach Delay, s/veh | | 4.8 | | | 6.3 | | | | | | 42.8 | |
| Approach LOS | | A | | | A | | | | | | D | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 77.0 | | 18.0 | 6.9 | 70.1 | | | | | | |
| Change Period (Y+Rc), s | | 5.3 | | 5.3 | 5.3 | 5.3 | | | | | | |
| Max Green Setting (Gmax), s | | 54.7 | | 29.7 | 19.7 | 29.7 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 8.5 | | 12.2 | 2.8 | 10.0 | | | | | | |
| Green Ext Time (p_c), s | | 3.3 | | 0.6 | 0.0 | 3.8 | | | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | 9.7 | |
| HCM 6th LOS | A | |

**Notes**

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

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 18 | 55 | 214 | 17 | 3 | 55 | 31 | 79 | 1 | 48 | 2 |
| Future Vol, veh/h | 3 | 18 | 55 | 214 | 17 | 3 | 55 | 31 | 79 | 1 | 48 | 2 |
| 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 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 19 | 59 | 230 | 18 | 3 | 59 | 33 | 85 | 1 | 52 | 2 |
| Number of Lanes | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 3 | 2 | 3 | 3 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 3 | 3 | 2 | 3 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 3 | 3 | 3 | 2 |
| HCM Control Delay | 8.4 | 9.7 | 8.8 | 8.8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 25% | 0% | 100% | 100% | 0% | 100% | 0% | 0% |
| Vol Thru, % | 0% | 100% | 12% | 75% | 14% | 0% | 0% | 85% | 0% | 100% | 89% |
| Vol Right, % | 0% | 0% | 88% | 0% | 86% | 0% | 0% | 15% | 0% | 0% | 11% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 55 | 21 | 89 | 12 | 64 | 107 | 107 | 20 | 1 | 32 | 18 |
| LT Vol | 55 | 0 | 0 | 3 | 0 | 107 | 107 | 0 | 1 | 0 | 0 |
| Through Vol | 0 | 21 | 10 | 9 | 9 | 0 | 0 | 17 | 0 | 32 | 16 |
| RT Vol | 0 | 0 | 79 | 0 | 55 | 0 | 0 | 3 | 0 | 0 | 2 |
| Lane Flow Rate | 59 | 22 | 96 | 13 | 69 | 115 | 115 | 22 | 1 | 34 | 19 |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Degree of Util (X) | 0.1 | 0.034 | 0.132 | 0.021 | 0.096 | 0.185 | 0.185 | 0.031 | 0.002 | 0.055 | 0.031 |
| Departure Headway (Hd) | 6.067 | 5.565 | 4.943 | 5.775 | 5.048 | 5.783 | 5.783 | 5.178 | 6.301 | 5.799 | 5.721 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 588 | 640 | 720 | 616 | 704 | 618 | 618 | 687 | 564 | 613 | 621 |
| Service Time | 3.831 | 3.328 | 2.707 | 3.548 | 2.822 | 3.546 | 3.546 | 2.942 | 4.083 | 3.58 | 3.502 |
| HCM Lane V/C Ratio | 0.1 | 0.034 | 0.133 | 0.021 | 0.098 | 0.186 | 0.186 | 0.032 | 0.002 | 0.055 | 0.031 |
| HCM Control Delay | 9.5 | 8.5 | 8.5 | 8.7 | 8.4 | 9.9 | 9.9 | 8.1 | 9.1 | 8.9 | 8.7 |
| HCM Lane LOS | A | A | A | A | A | A | A | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 0.1 | 0.5 | 0.1 | 0.3 | 0.7 | 0.7 | 0.1 | 0 | 0.2 | 0.1 |

| 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 | 0 | 0 | 1 | 54 | 1 | 1 | 5 | 164 | 9 | 0 | 315 | 2 |
| Future Vol, veh/h | 0 | 0 | 1 | 54 | 1 | 1 | 5 | 164 | 9 | 0 | 315 | 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 | - | - | - | - | - | - | 100 | - | - | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 1 | 59 | 1 | 1 | 5 | 180 | 10 | 0 | 346 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 448 | 547 | 174 | 368 | 543 | 95 | 348 | 0 | 0 | 190 | 0 | 0 |
| Stage 1 | 347 | 347 | - | 195 | 195 | - | - | - | - | - | - | - |
| Stage 2 | 101 | 200 | - | 173 | 348 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 499 | 447 | 846 | 568 | 450 | 949 | 1222 | - | - | 1396 | - | - |
| Stage 1 | 648 | 638 | - | 794 | 743 | - | - | - | - | - | - | - |
| Stage 2 | 900 | 739 | - | 818 | 638 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 496 | 445 | 846 | 566 | 448 | 949 | 1222 | - | - | 1396 | - | - |
| Mov Cap-2 Maneuver | 496 | 445 | - | 566 | 448 | - | - | - | - | - | - | - |
| Stage 1 | 645 | 638 | - | 791 | 740 | - | - | - | - | - | - | - |
| Stage 2 | 894 | 736 | - | 817 | 638 | - | - | - | - | - | - | - |

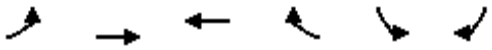
| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 9.3 | 12.1 | 0.2 | 0 |
| HCM LOS | A | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1222 | - | - | 846 | 567 | 1396 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.001 | 0.109 | - | - | - |
| HCM Control Delay (s) | 8 | - | - | 9.3 | 12.1 | 0 | - | - |
| HCM Lane LOS | A | - | - | A | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.4 | 0 | - | - |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 177 | 737 | 1037 | 43 | 457 |
| Future Volume (vph) | 177 | 737 | 1037 | 43 | 457 |
| Turn Type | Prot | NA | NA | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | 4 | |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 30.5 |
| Total Split (s) | 20.0 | 55.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 22.2% | 61.1% | 38.9% | 38.9% | 38.9% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.5 |
| Lead/Lag | Lead | | Lag | | |
| Lead-Lag Optimize? | Yes | | Yes | | |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 13.7 | 66.5 | 48.8 | 13.0 | 13.0 |
| Actuated g/C Ratio | 0.15 | 0.74 | 0.54 | 0.14 | 0.14 |
| v/c Ratio | 0.69 | 0.30 | 0.59 | 0.18 | 0.86 |
| Control Delay | 48.8 | 5.3 | 18.6 | 31.3 | 23.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 48.8 | 5.3 | 18.6 | 31.3 | 23.4 |
| LOS | D | A | B | C | C |
| Approach Delay | | 13.7 | 18.6 | 24.1 | |
| Approach LOS | | B | B | C | |

| Intersection Summary | |
|---|---|
| Cycle Length: 90 | |
| Actuated Cycle Length: 90 | |
| Offset: 32.5 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 75 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.86 | |
| Intersection Signal Delay: 17.9 | Intersection LOS: B |
| Intersection Capacity Utilization 66.7% | ICU Level of Service C |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 177 | 737 | 1037 | 30 | 43 | 457 |
| Future Volume (veh/h) | 177 | 737 | 1037 | 30 | 43 | 457 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 190 | 792 | 1115 | 32 | 46 | 491 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 226 | 2026 | 1404 | 40 | 583 | 519 |
| Arrive On Green | 0.12 | 0.56 | 0.39 | 0.39 | 0.32 | 0.32 |
| Sat Flow, veh/h | 1810 | 3705 | 3679 | 103 | 1810 | 1610 |
| Grp Volume(v), veh/h | 190 | 792 | 562 | 585 | 46 | 491 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1881 | 1810 | 1610 |
| Q Serve(g_s), s | 9.2 | 11.1 | 24.7 | 24.7 | 1.6 | 26.8 |
| Cycle Q Clear(g_c), s | 9.2 | 11.1 | 24.7 | 24.7 | 1.6 | 26.8 |
| Prop In Lane | 1.00 | | | 0.05 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 226 | 2026 | 707 | 737 | 583 | 519 |
| V/C Ratio(X) | 0.84 | 0.39 | 0.79 | 0.79 | 0.08 | 0.95 |
| Avail Cap(c_a), veh/h | 322 | 2026 | 707 | 737 | 613 | 546 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.97 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 38.5 | 11.1 | 24.2 | 24.2 | 21.2 | 29.7 |
| Incr Delay (d2), s/veh | 8.9 | 0.6 | 9.0 | 8.6 | 0.0 | 24.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 4.4 | 3.8 | 11.1 | 11.5 | 0.6 | 24.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 47.4 | 11.7 | 33.1 | 32.8 | 21.2 | 54.4 |
| LnGrp LOS | D | B | C | C | C | D |
| Approach Vol, veh/h | | 982 | 1147 | | 537 | |
| Approach Delay, s/veh | | 18.6 | 33.0 | | 51.6 | |
| Approach LOS | | B | C | | D | |

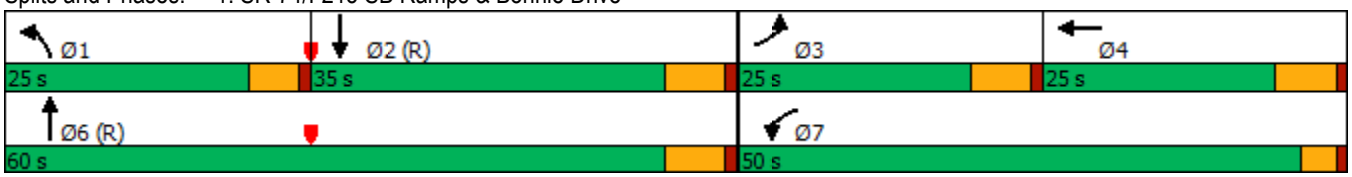
| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 56.5 | | 33.5 | 15.2 | 41.3 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 49.0 | | 30.5 | 16.0 | 29.0 |
| Max Q Clear Time (g_c+I1), s | | 13.1 | | 28.8 | 11.2 | 26.7 |
| Green Ext Time (p_c), s | | 5.4 | | 0.2 | 0.1 | 1.4 |

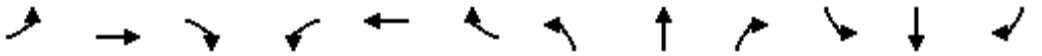
| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 31.4 |
| HCM 6th LOS | C |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 32 | 269 | 250 | 297 | 774 | 23 | | |
| Future Volume (vph) | 32 | 269 | 250 | 297 | 774 | 23 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 25.0 | | 25.0 | 60.0 | 35.0 | | 25.0 | 50.0 |
| Total Split (%) | 22.7% | | 22.7% | 54.5% | 31.8% | | 23% | 45% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 6.8 | 110.0 | 22.0 | 98.1 | 68.7 | 110.0 | | |
| Actuated g/C Ratio | 0.06 | 1.00 | 0.20 | 0.89 | 0.62 | 1.00 | | |
| v/c Ratio | 0.32 | 0.19 | 0.77 | 0.19 | 0.73 | 0.02 | | |
| Control Delay | 56.4 | 0.3 | 55.8 | 1.9 | 21.9 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 56.4 | 0.3 | 55.8 | 1.9 | 21.9 | 0.0 | | |
| LOS | E | A | E | A | C | A | | |
| Approach Delay | | | | 26.5 | 21.3 | | | |
| Approach LOS | | | | C | C | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 23 (21%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.77 | |
| Intersection Signal Delay: 20.3 | Intersection LOS: C |
| Intersection Capacity Utilization 70.4% | ICU Level of Service C |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 32 | 0 | 269 | 0 | 0 | 0 | 250 | 297 | 0 | 0 | 774 | 23 |
| Future Volume (veh/h) | 32 | 0 | 269 | 0 | 0 | 0 | 250 | 297 | 0 | 0 | 774 | 23 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 36 | 0 | 0 | 0 | 0 | 0 | 278 | 330 | 0 | 0 | 860 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 55 | 0 | | 0 | 2 | 0 | 307 | 1635 | 0 | 0 | 1227 | |
| Arrive On Green | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.86 | 0.00 | 0.00 | 0.65 | 0.00 |
| Sat Flow, veh/h | 1810 | 36 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Grp Volume(v), veh/h | 36 | 57.6 | | 0 | 0 | 0 | 278 | 330 | 0 | 0 | 860 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | E | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Q Serve(g_s), s | 2.2 | | | 0.0 | 0.0 | 0.0 | 16.6 | 3.2 | 0.0 | 0.0 | 32.2 | 0.0 |
| Cycle Q Clear(g_c), s | 2.2 | | | 0.0 | 0.0 | 0.0 | 16.6 | 3.2 | 0.0 | 0.0 | 32.2 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 55 | | | 0 | 2 | 0 | 307 | 1635 | 0 | 0 | 1227 | |
| V/C Ratio(X) | 0.66 | | | 0.00 | 0.00 | 0.00 | 0.91 | 0.20 | 0.00 | 0.00 | 0.70 | |
| Avail Cap(c_a), veh/h | 313 | | | 0 | 328 | 0 | 329 | 1635 | 0 | 0 | 1227 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 52.8 | | | 0.0 | 0.0 | 0.0 | 44.8 | 1.3 | 0.0 | 0.0 | 12.6 | 0.0 |
| Incr Delay (d2), s/veh | 4.9 | | | 0.0 | 0.0 | 0.0 | 25.4 | 0.3 | 0.0 | 0.0 | 3.4 | 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 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | | | 0.0 | 0.0 | 0.0 | 9.3 | 0.3 | 0.0 | 0.0 | 12.2 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 57.6 | | | 0.0 | 0.0 | 0.0 | 70.2 | 1.6 | 0.0 | 0.0 | 16.0 | 0.0 |
| LnGrp LOS | E | | | A | A | A | E | A | A | A | B | |
| Approach Vol, veh/h | | | | | 0 | | | 608 | | | 860 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 32.9 | | | 16.0 | |
| Approach LOS | | | | | | | | C | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 6 | 7 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.6 | 77.0 | 9.3 | 0.0 | 100.7 | 9.3 |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 |
| Max Green Setting (Gmax), s | 20.0 | 29.0 | 19.0 | 19.0 | 54.0 | 46.0 |
| Max Q Clear Time (g_c+I1), s | 18.6 | 34.2 | 4.2 | 0.0 | 5.2 | 0.0 |
| Green Ext Time (p_c), s | 0.1 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 23.8 |
| HCM 6th LOS | C |

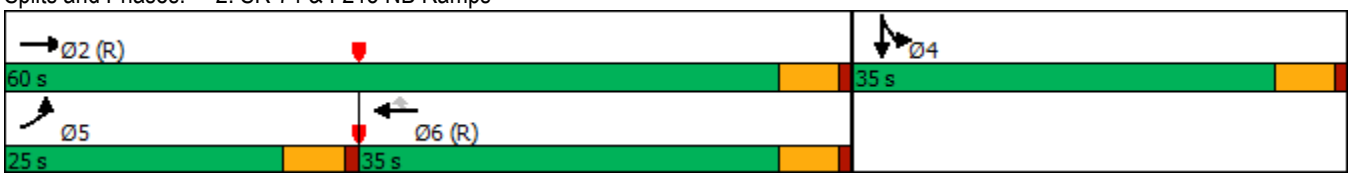
**Notes**

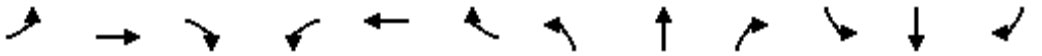
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 14 | 1029 | 508 | 713 | 0 |
| Future Volume (vph) | 14 | 1029 | 508 | 713 | 0 |
| Turn Type | Prot | NA | NA | Perm | NA |
| Protected Phases | 5 | 2 | 6 | | 4 |
| Permitted Phases | | | | 6 | |
| Detector Phase | 5 | 2 | 6 | 6 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 50.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.3 | 55.3 | 10.3 | 10.3 | 10.3 |
| Total Split (s) | 25.0 | 60.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 26.3% | 63.2% | 36.8% | 36.8% | 36.8% |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| Lead/Lag | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | Yes | |
| Recall Mode | None | C-Min | C-Min | C-Min | None |
| Act Effct Green (s) | 5.6 | 68.6 | 63.9 | 63.9 | 15.8 |
| Actuated g/C Ratio | 0.06 | 0.72 | 0.67 | 0.67 | 0.17 |
| v/c Ratio | 0.14 | 0.42 | 0.22 | 0.57 | 0.79 |
| Control Delay | 45.1 | 6.6 | 8.0 | 2.9 | 40.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Total Delay | 45.1 | 6.6 | 8.0 | 3.0 | 40.8 |
| LOS | D | A | A | A | D |
| Approach Delay | | 7.1 | 5.1 | | 40.8 |
| Approach LOS | | A | A | | D |

| Intersection Summary | |
|---|---|
| Cycle Length: 95 | |
| Actuated Cycle Length: 95 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 70 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.79 | |
| Intersection Signal Delay: 9.7 | Intersection LOS: A |
| Intersection Capacity Utilization 65.7% | ICU Level of Service C |
| Analysis Period (min) 15 | |

Splits and Phases: 2: SR-74 & I-215 NB Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 14 | 1029 | 0 | 0 | 508 | 713 | 0 | 0 | 0 | 231 | 0 | 39 |
| Future Volume (veh/h) | 14 | 1029 | 0 | 0 | 508 | 713 | 0 | 0 | 0 | 231 | 0 | 39 |
| 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 | 1900 | 1900 | 0 | 0 | 1900 | 1900 | | | | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 15 | 1106 | 0 | 0 | 546 | 0 | | | | 248 | 0 | 42 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | | | | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| Cap, veh/h | 31 | 2530 | 0 | 0 | 2267 | | | | | 285 | 0 | 48 |
| Arrive On Green | 0.02 | 0.70 | 0.00 | 0.00 | 0.63 | 0.00 | | | | 0.19 | 0.00 | 0.19 |
| Sat Flow, veh/h | 1810 | 3705 | 0 | 0 | 3705 | 1610 | | | | 1520 | 0 | 257 |
| Grp Volume(v), veh/h | 15 | 1106 | 0 | 0 | 546 | 0 | | | | 290 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 0 | 0 | 1805 | 1610 | | | | 1778 | 0 | 0 |
| Q Serve(g_s), s | 0.8 | 12.6 | 0.0 | 0.0 | 6.3 | 0.0 | | | | 15.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.8 | 12.6 | 0.0 | 0.0 | 6.3 | 0.0 | | | | 15.0 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | | | | 0.86 | | 0.14 |
| Lane Grp Cap(c), veh/h | 31 | 2530 | 0 | 0 | 2267 | | | | | 333 | 0 | 0 |
| V/C Ratio(X) | 0.48 | 0.44 | 0.00 | 0.00 | 0.24 | | | | | 0.87 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 375 | 2530 | 0 | 0 | 2267 | | | | | 556 | 0 | 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 | 1.00 | 0.00 | 0.00 | 0.76 | 0.00 | | | | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 46.3 | 6.1 | 0.0 | 0.0 | 7.8 | 0.0 | | | | 37.5 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 4.2 | 0.6 | 0.0 | 0.0 | 0.2 | 0.0 | | | | 4.1 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 3.5 | 0.0 | 0.0 | 2.4 | 0.0 | | | | 6.6 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 50.5 | 6.7 | 0.0 | 0.0 | 7.9 | 0.0 | | | | 41.5 | 0.0 | 0.0 |
| LnGrp LOS | D | A | A | A | A | | | | | D | A | A |
| Approach Vol, veh/h | | 1121 | | | 546 | | | | | | 290 | |
| Approach Delay, s/veh | | 7.3 | | | 7.9 | | | | | | 41.5 | |
| Approach LOS | | A | | | A | | | | | | D | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 71.9 | | 23.1 | 6.9 | 64.9 | | | | | | |
| Change Period (Y+Rc), s | | 5.3 | | 5.3 | 5.3 | 5.3 | | | | | | |
| Max Green Setting (Gmax), s | | 54.7 | | 29.7 | 19.7 | 29.7 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 14.6 | | 17.0 | 2.8 | 8.3 | | | | | | |
| Green Ext Time (p_c), s | | 5.1 | | 0.8 | 0.0 | 2.6 | | | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 12.5 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

**Notes**

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

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 10.6 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 1 | 5 | 131 | 1 | 28 | 1 | 117 | 219 | 27 | 132 | 0 |
| Future Vol, veh/h | 2 | 1 | 5 | 131 | 1 | 28 | 1 | 117 | 219 | 27 | 132 | 0 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 1 | 6 | 170 | 1 | 36 | 1 | 152 | 284 | 35 | 171 | 0 |
| Number of Lanes | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 3 | 2 | 3 | 3 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 3 | 3 | 2 | 3 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 3 | 3 | 3 | 2 |
| HCM Control Delay | 9.1 | 10.3 | 11.6 | 9 |
| HCM LOS | A | B | B | A |

| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 80% | 0% | 100% | 100% | 0% | 100% | 0% | 0% |
| Vol Thru, % | 0% | 100% | 15% | 20% | 9% | 0% | 0% | 3% | 0% | 100% | 100% |
| Vol Right, % | 0% | 0% | 85% | 0% | 91% | 0% | 0% | 97% | 0% | 0% | 0% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 1 | 78 | 258 | 3 | 6 | 66 | 66 | 29 | 27 | 66 | 66 |
| LT Vol | 1 | 0 | 0 | 2 | 0 | 66 | 66 | 0 | 27 | 0 | 0 |
| Through Vol | 0 | 78 | 39 | 1 | 1 | 0 | 0 | 1 | 0 | 66 | 66 |
| RT Vol | 0 | 0 | 219 | 0 | 5 | 0 | 0 | 28 | 0 | 0 | 0 |
| Lane Flow Rate | 1 | 101 | 335 | 3 | 7 | 85 | 85 | 38 | 35 | 86 | 86 |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Degree of Util (X) | 0.002 | 0.161 | 0.475 | 0.006 | 0.012 | 0.158 | 0.158 | 0.058 | 0.064 | 0.146 | 0.105 |
| Departure Headway (Hd) | 6.207 | 5.705 | 5.108 | 7.046 | 6.01 | 6.684 | 6.684 | 5.509 | 6.618 | 6.115 | 4.407 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 580 | 632 | 710 | 508 | 595 | 538 | 538 | 650 | 542 | 587 | 813 |
| Service Time | 3.907 | 3.405 | 2.808 | 4.789 | 3.752 | 4.417 | 4.417 | 3.242 | 4.35 | 3.848 | 2.139 |
| HCM Lane V/C Ratio | 0.002 | 0.16 | 0.472 | 0.006 | 0.012 | 0.158 | 0.158 | 0.058 | 0.065 | 0.147 | 0.106 |
| HCM Control Delay | 8.9 | 9.5 | 12.3 | 9.8 | 8.8 | 10.7 | 10.7 | 8.6 | 9.8 | 9.9 | 7.7 |
| HCM Lane LOS | A | A | B | A | A | B | B | A | A | A | A |
| HCM 95th-tile Q | 0 | 0.6 | 2.6 | 0 | 0 | 0.6 | 0.6 | 0.2 | 0.2 | 0.5 | 0.4 |

| 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 | 0 | 0 | 5 | 28 | 0 | 1 | 2 | 336 | 1 | 1 | 267 | 0 |
| Future Vol, veh/h | 0 | 0 | 5 | 28 | 0 | 1 | 2 | 336 | 1 | 1 | 267 | 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 | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 6 | 35 | 0 | 1 | 3 | 425 | 1 | 1 | 338 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 559 | 772 | 169 | 603 | 772 | 213 | 338 | 0 | 0 | 426 | 0 | 0 |
| Stage 1 | 340 | 340 | - | 432 | 432 | - | - | - | - | - | - | - |
| Stage 2 | 219 | 432 | - | 171 | 340 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 416 | 333 | 852 | 387 | 333 | 798 | 1232 | - | - | 1144 | - | - |
| Stage 1 | 654 | 643 | - | 577 | 586 | - | - | - | - | - | - | - |
| Stage 2 | 769 | 586 | - | 820 | 643 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 414 | 332 | 852 | 383 | 332 | 798 | 1232 | - | - | 1144 | - | - |
| Mov Cap-2 Maneuver | 414 | 332 | - | 383 | 332 | - | - | - | - | - | - | - |
| Stage 1 | 653 | 642 | - | 576 | 585 | - | - | - | - | - | - | - |
| Stage 2 | 766 | 585 | - | 813 | 642 | - | - | - | - | - | - | - |

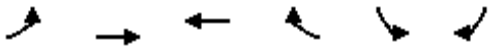
| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 9.3 | 15.2 | 0 | 0 |
| HCM LOS | A | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1232 | - | - | 852 | 390 | 1144 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.007 | 0.094 | 0.001 | - | - |
| HCM Control Delay (s) | 7.9 | - | - | 9.3 | 15.2 | 8.2 | - | - |
| HCM Lane LOS | A | - | - | A | C | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.3 | 0 | - | - |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 304 | 956 | 839 | 50 | 382 |
| Future Volume (vph) | 304 | 956 | 839 | 50 | 382 |
| Turn Type | Prot | NA | NA | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | 4 | |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 30.5 |
| Total Split (s) | 20.0 | 55.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 22.2% | 61.1% | 38.9% | 38.9% | 38.9% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.5 |
| Lead/Lag | Lead | | Lag | | |
| Lead-Lag Optimize? | Yes | | Yes | | |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 23.4 | 70.6 | 43.3 | 8.9 | 8.9 |
| Actuated g/C Ratio | 0.26 | 0.78 | 0.48 | 0.10 | 0.10 |
| v/c Ratio | 0.69 | 0.36 | 0.53 | 0.30 | 0.78 |
| Control Delay | 38.3 | 3.8 | 18.9 | 40.0 | 14.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 38.3 | 3.8 | 18.9 | 40.0 | 14.9 |
| LOS | D | A | B | D | B |
| Approach Delay | | 12.1 | 18.9 | 17.8 | |
| Approach LOS | | B | B | B | |

| Intersection Summary | |
|---|---|
| Cycle Length: 90 | |
| Actuated Cycle Length: 90 | |
| Offset: 32.5 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 80 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.78 | |
| Intersection Signal Delay: 15.4 | Intersection LOS: B |
| Intersection Capacity Utilization 57.0% | ICU Level of Service B |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 304 | 956 | 839 | 22 | 50 | 382 |
| Future Volume (veh/h) | 304 | 956 | 839 | 22 | 50 | 382 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 323 | 1017 | 893 | 23 | 53 | 406 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 322 | 2204 | 1396 | 36 | 494 | 439 |
| Arrive On Green | 0.18 | 0.61 | 0.39 | 0.39 | 0.27 | 0.27 |
| Sat Flow, veh/h | 1810 | 3705 | 3691 | 93 | 1810 | 1610 |
| Grp Volume(v), veh/h | 323 | 1017 | 448 | 468 | 53 | 406 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1883 | 1810 | 1610 |
| Q Serve(g_s), s | 16.0 | 13.8 | 18.2 | 18.2 | 2.0 | 22.1 |
| Cycle Q Clear(g_c), s | 16.0 | 13.8 | 18.2 | 18.2 | 2.0 | 22.1 |
| Prop In Lane | 1.00 | | | 0.05 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 322 | 2204 | 701 | 731 | 494 | 439 |
| V/C Ratio(X) | 1.00 | 0.46 | 0.64 | 0.64 | 0.11 | 0.92 |
| Avail Cap(c_a), veh/h | 322 | 2204 | 701 | 731 | 613 | 546 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.0 | 9.5 | 22.4 | 22.4 | 24.5 | 31.8 |
| Incr Delay (d2), s/veh | 48.9 | 0.6 | 4.4 | 4.3 | 0.0 | 17.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 10.9 | 4.4 | 7.7 | 8.0 | 0.8 | 19.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 85.9 | 10.1 | 26.9 | 26.7 | 24.5 | 49.2 |
| LnGrp LOS | F | B | C | C | C | D |
| Approach Vol, veh/h | | 1340 | 916 | | 459 | |
| Approach Delay, s/veh | | 28.4 | 26.8 | | 46.4 | |
| Approach LOS | | C | C | | D | |

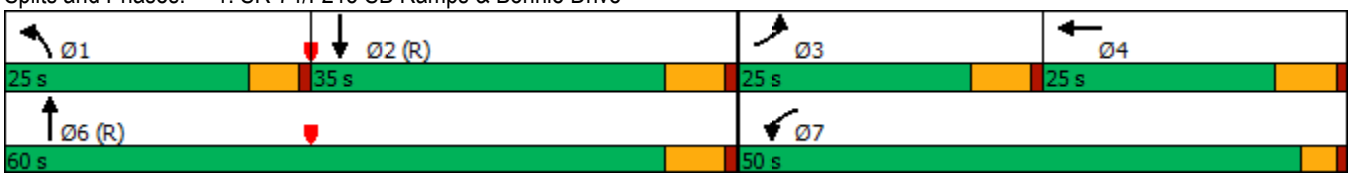
| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.9 | | 29.1 | 20.0 | 40.9 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 49.0 | | 30.5 | 16.0 | 29.0 |
| Max Q Clear Time (g_c+I1), s | | 15.8 | | 24.1 | 18.0 | 20.2 |
| Green Ext Time (p_c), s | | 7.5 | | 0.5 | 0.0 | 3.4 |

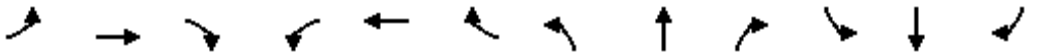
| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 30.9 |
| HCM 6th LOS | C |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 28 | 161 | 234 | 505 | 621 | 25 | | |
| Future Volume (vph) | 28 | 161 | 234 | 505 | 621 | 25 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 25.0 | | 25.0 | 60.0 | 35.0 | | 25.0 | 50.0 |
| Total Split (%) | 22.7% | | 22.7% | 54.5% | 31.8% | | 23% | 45% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 6.5 | 110.0 | 20.1 | 98.4 | 70.9 | 110.0 | | |
| Actuated g/C Ratio | 0.06 | 1.00 | 0.18 | 0.89 | 0.64 | 1.00 | | |
| v/c Ratio | 0.28 | 0.11 | 0.77 | 0.32 | 0.55 | 0.02 | | |
| Control Delay | 55.6 | 0.1 | 58.1 | 2.3 | 15.5 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 55.6 | 0.1 | 58.1 | 2.3 | 15.5 | 0.0 | | |
| LOS | E | A | E | A | B | A | | |
| Approach Delay | | | | 20.0 | 14.9 | | | |
| Approach LOS | | | | B | B | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 23 (21%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 75 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.77 | |
| Intersection Signal Delay: 16.5 | Intersection LOS: B |
| Intersection Capacity Utilization 61.5% | ICU Level of Service B |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 28 | 0 | 161 | 0 | 0 | 0 | 234 | 505 | 0 | 0 | 621 | 25 |
| Future Volume (veh/h) | 28 | 0 | 161 | 0 | 0 | 0 | 234 | 505 | 0 | 0 | 621 | 25 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 30 | 0 | 0 | 0 | 0 | 0 | 254 | 549 | 0 | 0 | 675 | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 49 | 0 | | 0 | 2 | 0 | 284 | 1641 | 0 | 0 | 1257 | |
| Arrive On Green | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.86 | 0.00 | 0.00 | 0.66 | 0.00 |
| Sat Flow, veh/h | 1810 | 30 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Grp Volume(v), veh/h | 30 | 57.3 | | 0 | 0 | 0 | 254 | 549 | 0 | 0 | 675 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | E | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Q Serve(g_s), s | 1.8 | | | 0.0 | 0.0 | 0.0 | 15.1 | 6.1 | 0.0 | 0.0 | 20.5 | 0.0 |
| Cycle Q Clear(g_c), s | 1.8 | | | 0.0 | 0.0 | 0.0 | 15.1 | 6.1 | 0.0 | 0.0 | 20.5 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 49 | | | 0 | 2 | 0 | 284 | 1641 | 0 | 0 | 1257 | |
| V/C Ratio(X) | 0.61 | | | 0.00 | 0.00 | 0.00 | 0.90 | 0.33 | 0.00 | 0.00 | 0.54 | |
| Avail Cap(c_a), veh/h | 313 | | | 0 | 328 | 0 | 329 | 1641 | 0 | 0 | 1257 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 52.9 | | | 0.0 | 0.0 | 0.0 | 45.5 | 1.4 | 0.0 | 0.0 | 9.8 | 0.0 |
| Incr Delay (d2), s/veh | 4.4 | | | 0.0 | 0.0 | 0.0 | 21.6 | 0.6 | 0.0 | 0.0 | 1.6 | 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 |
| %ile BackOfQ(50%),veh/ln | 0.9 | | | 0.0 | 0.0 | 0.0 | 8.2 | 0.6 | 0.0 | 0.0 | 7.4 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 57.3 | | | 0.0 | 0.0 | 0.0 | 67.1 | 2.0 | 0.0 | 0.0 | 11.4 | 0.0 |
| LnGrp LOS | E | | | A | A | A | E | A | A | A | B | |
| Approach Vol, veh/h | | | | | 0 | | | 803 | | | 675 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 22.6 | | | 11.4 | |
| Approach LOS | | | | | | | | C | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | | 6 | 7 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 22.2 | 78.8 | 9.0 | 0.0 | | 101.0 | 9.0 | | | | | |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | | 6.0 | 4.0 | | | | | |
| Max Green Setting (Gmax), s | 20.0 | 29.0 | 19.0 | 19.0 | | 54.0 | 46.0 | | | | | |
| Max Q Clear Time (g_c+I1), s | 17.1 | 22.5 | 3.8 | 0.0 | | 8.1 | 0.0 | | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.5 | 0.0 | 0.0 | | 1.9 | 0.0 | | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 18.3 |
| HCM 6th LOS | B |

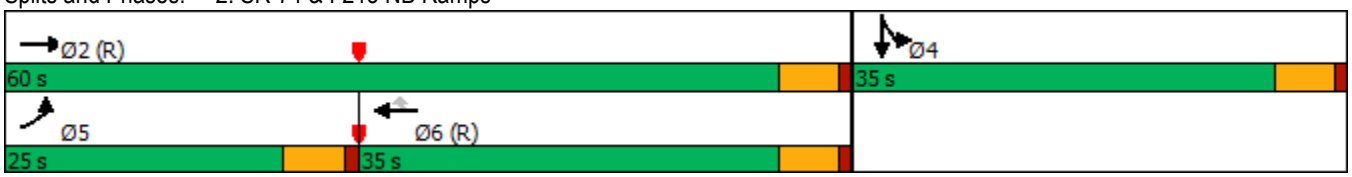
**Notes**

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

| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 14 | 768 | 723 | 796 | 0 |
| Future Volume (vph) | 14 | 768 | 723 | 796 | 0 |
| Turn Type | Prot | NA | NA | Perm | NA |
| Protected Phases | 5 | 2 | 6 | | 4 |
| Permitted Phases | | | | 6 | |
| Detector Phase | 5 | 2 | 6 | 6 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 50.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.3 | 55.3 | 10.3 | 10.3 | 10.3 |
| Total Split (s) | 25.0 | 60.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 26.3% | 63.2% | 36.8% | 36.8% | 36.8% |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| Lead/Lag | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | Yes | |
| Recall Mode | None | C-Min | C-Min | C-Min | None |
| Act Effct Green (s) | 5.6 | 72.4 | 67.7 | 67.7 | 12.0 |
| Actuated g/C Ratio | 0.06 | 0.76 | 0.71 | 0.71 | 0.13 |
| v/c Ratio | 0.14 | 0.30 | 0.30 | 0.61 | 0.74 |
| Control Delay | 45.1 | 4.3 | 6.9 | 2.8 | 38.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| Total Delay | 45.1 | 4.3 | 6.9 | 3.0 | 38.0 |
| LOS | D | A | A | A | D |
| Approach Delay | | 5.0 | 4.9 | | 38.0 |
| Approach LOS | | A | A | | D |

| Intersection Summary | |
|---|---|
| Cycle Length: 95 | |
| Actuated Cycle Length: 95 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 70 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.74 | |
| Intersection Signal Delay: 7.7 | Intersection LOS: A |
| Intersection Capacity Utilization 62.3% | ICU Level of Service B |
| Analysis Period (min) 15 | |

Splits and Phases: 2: SR-74 & I-215 NB Ramps



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 14 | 768 | 0 | 0 | 723 | 796 | 0 | 0 | 0 | 194 | 0 | 16 |
| Future Volume (veh/h) | 14 | 768 | 0 | 0 | 723 | 796 | 0 | 0 | 0 | 194 | 0 | 16 |
| 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 | 1900 | 1900 | 0 | 0 | 1900 | 1900 | | | | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 15 | 817 | 0 | 0 | 769 | 0 | | | | 206 | 0 | 17 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | | | | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| Cap, veh/h | 31 | 2672 | 0 | 0 | 2409 | | | | | 245 | 0 | 20 |
| Arrive On Green | 0.02 | 0.74 | 0.00 | 0.00 | 0.67 | 0.00 | | | | 0.15 | 0.00 | 0.15 |
| Sat Flow, veh/h | 1810 | 3705 | 0 | 0 | 3705 | 1610 | | | | 1656 | 0 | 137 |
| Grp Volume(v), veh/h | 15 | 817 | 0 | 0 | 769 | 0 | | | | 223 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 0 | 0 | 1805 | 1610 | | | | 1793 | 0 | 0 |
| Q Serve(g_s), s | 0.8 | 7.2 | 0.0 | 0.0 | 8.6 | 0.0 | | | | 11.5 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.8 | 7.2 | 0.0 | 0.0 | 8.6 | 0.0 | | | | 11.5 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | | | | 0.92 | | 0.08 |
| Lane Grp Cap(c), veh/h | 31 | 2672 | 0 | 0 | 2409 | | | | | 266 | 0 | 0 |
| V/C Ratio(X) | 0.48 | 0.31 | 0.00 | 0.00 | 0.32 | | | | | 0.84 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 375 | 2672 | 0 | 0 | 2409 | | | | | 560 | 0 | 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 | 1.00 | 0.00 | 0.00 | 0.63 | 0.00 | | | | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 46.3 | 4.1 | 0.0 | 0.0 | 6.7 | 0.0 | | | | 39.4 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 4.2 | 0.3 | 0.0 | 0.0 | 0.2 | 0.0 | | | | 2.7 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 1.7 | 0.0 | 0.0 | 3.1 | 0.0 | | | | 5.0 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 50.5 | 4.4 | 0.0 | 0.0 | 6.9 | 0.0 | | | | 42.1 | 0.0 | 0.0 |
| LnGrp LOS | D | A | A | A | A | | | | | D | A | A |
| Approach Vol, veh/h | | 832 | | | 769 | | | | | | 223 | |
| Approach Delay, s/veh | | 5.3 | | | 6.9 | | | | | | 42.1 | |
| Approach LOS | | A | | | A | | | | | | D | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 75.6 | | 19.4 | 6.9 | 68.7 | | | | | | |
| Change Period (Y+Rc), s | | 5.3 | | 5.3 | 5.3 | 5.3 | | | | | | |
| Max Green Setting (Gmax), s | | 54.7 | | 29.7 | 19.7 | 29.7 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 9.2 | | 13.5 | 2.8 | 10.6 | | | | | | |
| Green Ext Time (p_c), s | | 3.4 | | 0.6 | 0.0 | 3.8 | | | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 10.5 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

**Notes**

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

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.2 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 19 | 57 | 214 | 19 | 3 | 63 | 31 | 79 | 1 | 48 | 4 |
| Future Vol, veh/h | 3 | 19 | 57 | 214 | 19 | 3 | 63 | 31 | 79 | 1 | 48 | 4 |
| 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 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 20 | 61 | 230 | 20 | 3 | 68 | 33 | 85 | 1 | 52 | 4 |
| Number of Lanes | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 3 | 2 | 3 | 3 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 3 | 3 | 2 | 3 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 3 | 3 | 3 | 2 |
| HCM Control Delay | 8.4 | 9.7 | 8.9 | 8.9 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 24% | 0% | 100% | 100% | 0% | 100% | 0% | 0% |
| Vol Thru, % | 0% | 100% | 12% | 76% | 14% | 0% | 0% | 86% | 0% | 100% | 80% |
| Vol Right, % | 0% | 0% | 88% | 0% | 86% | 0% | 0% | 14% | 0% | 0% | 20% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 63 | 21 | 89 | 13 | 67 | 107 | 107 | 22 | 1 | 32 | 20 |
| LT Vol | 63 | 0 | 0 | 3 | 0 | 107 | 107 | 0 | 1 | 0 | 0 |
| Through Vol | 0 | 21 | 10 | 10 | 10 | 0 | 0 | 19 | 0 | 32 | 16 |
| RT Vol | 0 | 0 | 79 | 0 | 57 | 0 | 0 | 3 | 0 | 0 | 4 |
| Lane Flow Rate | 68 | 22 | 96 | 13 | 72 | 115 | 115 | 24 | 1 | 34 | 22 |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Degree of Util (X) | 0.115 | 0.034 | 0.132 | 0.022 | 0.101 | 0.186 | 0.186 | 0.034 | 0.002 | 0.056 | 0.034 |
| Departure Headway (Hd) | 6.089 | 5.587 | 4.965 | 5.808 | 5.088 | 5.822 | 5.822 | 5.227 | 6.34 | 5.837 | 5.697 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 586 | 637 | 717 | 612 | 699 | 613 | 613 | 680 | 561 | 609 | 623 |
| Service Time | 3.856 | 3.354 | 2.732 | 3.583 | 2.863 | 3.589 | 3.589 | 2.994 | 4.123 | 3.621 | 3.48 |
| HCM Lane V/C Ratio | 0.116 | 0.035 | 0.134 | 0.021 | 0.103 | 0.188 | 0.188 | 0.035 | 0.002 | 0.056 | 0.035 |
| HCM Control Delay | 9.7 | 8.6 | 8.5 | 8.7 | 8.4 | 9.9 | 9.9 | 8.2 | 9.1 | 9 | 8.7 |
| HCM Lane LOS | A | A | A | A | A | A | A | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 0.1 | 0.5 | 0.1 | 0.3 | 0.7 | 0.7 | 0.1 | 0 | 0.2 | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 21 | 54 | 1 | 1 | 30 | 193 | 9 | 0 | 322 | 2 |
| Future Vol, veh/h | 0 | 0 | 21 | 54 | 1 | 1 | 30 | 193 | 9 | 0 | 322 | 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 | - | - | - | - | - | - | 100 | - | - | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 23 | 59 | 1 | 1 | 33 | 212 | 10 | 0 | 354 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 528 | 643 | 178 | 460 | 639 | 111 | 356 | 0 | 0 | 222 | 0 | 0 |
| Stage 1 | 355 | 355 | - | 283 | 283 | - | - | - | - | - | - | - |
| Stage 2 | 173 | 288 | - | 177 | 356 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 438 | 394 | 841 | 489 | 397 | 927 | 1214 | - | - | 1359 | - | - |
| Stage 1 | 641 | 633 | - | 706 | 681 | - | - | - | - | - | - | - |
| Stage 2 | 818 | 677 | - | 813 | 633 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 427 | 383 | 841 | 466 | 386 | 927 | 1214 | - | - | 1359 | - | - |
| Mov Cap-2 Maneuver | 427 | 383 | - | 466 | 386 | - | - | - | - | - | - | - |
| Stage 1 | 624 | 633 | - | 687 | 663 | - | - | - | - | - | - | - |
| Stage 2 | 794 | 659 | - | 791 | 633 | - | - | - | - | - | - | - |

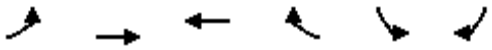
| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 9.4 | 13.9 | 1 | 0 |
| HCM LOS | A | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1214 | - | - | 841 | 468 | 1359 | - | - |
| HCM Lane V/C Ratio | 0.027 | - | - | 0.027 | 0.131 | - | - | - |
| HCM Control Delay (s) | 8 | - | - | 9.4 | 13.9 | 0 | - | - |
| HCM Lane LOS | A | - | - | A | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.1 | 0.5 | 0 | - | - |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 225 | 737 | 1037 | 45 | 482 |
| Future Volume (vph) | 225 | 737 | 1037 | 45 | 482 |
| Turn Type | Prot | NA | NA | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | 4 | |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 30.5 |
| Total Split (s) | 20.0 | 55.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 22.2% | 61.1% | 38.9% | 38.9% | 38.9% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.5 |
| Lead/Lag | Lead | | Lag | | |
| Lead-Lag Optimize? | Yes | | Yes | | |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 16.1 | 64.9 | 44.8 | 14.6 | 14.6 |
| Actuated g/C Ratio | 0.18 | 0.72 | 0.50 | 0.16 | 0.16 |
| v/c Ratio | 0.75 | 0.30 | 0.64 | 0.16 | 0.88 |
| Control Delay | 49.6 | 6.1 | 22.2 | 29.5 | 25.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 49.6 | 6.1 | 22.2 | 29.5 | 25.0 |
| LOS | D | A | C | C | C |
| Approach Delay | | 16.2 | 22.2 | 25.4 | |
| Approach LOS | | B | C | C | |

| Intersection Summary | |
|---|---|
| Cycle Length: 90 | |
| Actuated Cycle Length: 90 | |
| Offset: 32.5 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 80 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.88 | |
| Intersection Signal Delay: 20.6 | Intersection LOS: C |
| Intersection Capacity Utilization 68.4% | ICU Level of Service C |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 225 | 737 | 1037 | 36 | 45 | 482 |
| Future Volume (veh/h) | 225 | 737 | 1037 | 36 | 45 | 482 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 242 | 792 | 1115 | 39 | 48 | 518 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 278 | 1972 | 1240 | 43 | 610 | 543 |
| Arrive On Green | 0.15 | 0.55 | 0.35 | 0.35 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1810 | 3705 | 3653 | 124 | 1810 | 1610 |
| Grp Volume(v), veh/h | 242 | 792 | 566 | 588 | 48 | 518 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1878 | 1810 | 1610 |
| Q Serve(g_s), s | 11.8 | 11.5 | 26.8 | 26.8 | 1.6 | 28.3 |
| Cycle Q Clear(g_c), s | 11.8 | 11.5 | 26.8 | 26.8 | 1.6 | 28.3 |
| Prop In Lane | 1.00 | | | 0.07 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 278 | 1972 | 629 | 654 | 610 | 543 |
| V/C Ratio(X) | 0.87 | 0.40 | 0.90 | 0.90 | 0.08 | 0.95 |
| Avail Cap(c_a), veh/h | 322 | 1972 | 629 | 654 | 613 | 546 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.96 | 0.96 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.2 | 11.9 | 27.8 | 27.8 | 20.3 | 29.2 |
| Incr Delay (d2), s/veh | 17.6 | 0.6 | 18.2 | 17.7 | 0.0 | 27.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 6.2 | 4.0 | 13.5 | 13.9 | 0.6 | 25.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 54.9 | 12.5 | 46.0 | 45.5 | 20.3 | 56.3 |
| LnGrp LOS | D | B | D | D | C | E |
| Approach Vol, veh/h | | 1034 | 1154 | | 566 | |
| Approach Delay, s/veh | | 22.4 | 45.8 | | 53.2 | |
| Approach LOS | | C | D | | D | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 55.2 | | 34.8 | 17.8 | 37.4 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 49.0 | | 30.5 | 16.0 | 29.0 |
| Max Q Clear Time (g_c+I1), s | | 13.5 | | 30.3 | 13.8 | 28.8 |
| Green Ext Time (p_c), s | | 5.4 | | 0.0 | 0.1 | 0.2 |

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

| Intersection | |
|---|---|
| Int Delay, s/veh | 7 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 12 | 0 | 0 | 3 |
| Future Vol, veh/h | 0 | 0 | 12 | 0 | 0 | 3 |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 13 | 0 | 0 | 3 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | - | 1 | 0 | - | 1 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | 0 | 1622 | - | 0 | 1084 |
| Stage 1 | - | 0 | - | - | 0 | - |
| Stage 2 | - | 0 | - | - | 0 | - |
| Platoon blocked, % | - | | | - | | |
| Mov Cap-1 Maneuver | - | - | 1622 | - | - | 1084 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 7.2 | 8.3 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | WBL | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 1084 | - | 1622 | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.008 | - |
| HCM Control Delay (s) | 8.3 | - | 7.2 | 0 |
| HCM Lane LOS | A | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 5 | 21 | 173 | 319 | 0 |
| Future Vol, veh/h | 0 | 5 | 21 | 173 | 319 | 0 |
| 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 | - | 50 | - | - | - |
| 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 | 2 | 2 |
| Mvmt Flow | 0 | 5 | 23 | 188 | 347 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 487 | 174 | 347 | 0 | - | 0 |
| Stage 1 | 347 | - | - | - | - | - |
| Stage 2 | 140 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 510 | 839 | 1209 | - | - | - |
| Stage 1 | 687 | - | - | - | - | - |
| Stage 2 | 872 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 500 | 839 | 1209 | - | - | - |
| Mov Cap-2 Maneuver | 565 | - | - | - | - | - |
| Stage 1 | 674 | - | - | - | - | - |
| Stage 2 | 872 | - | - | - | - | - |

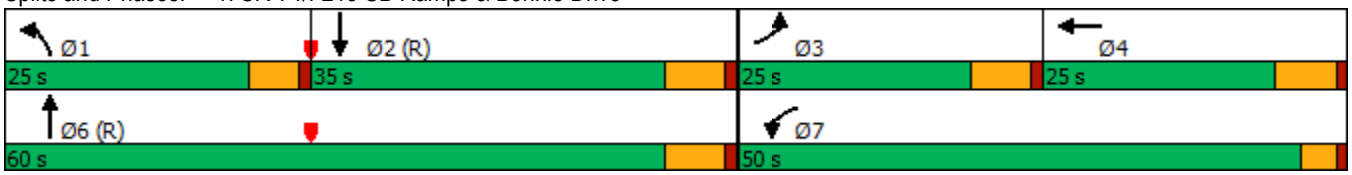
| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.3 | 0.9 | 0 |
| HCM LOS | A | | |

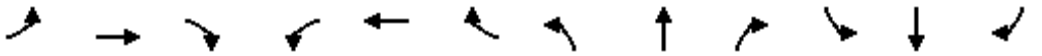
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1209 | - | 839 | - | - |
| HCM Lane V/C Ratio | 0.019 | - | 0.006 | - | - |
| HCM Control Delay (s) | 8 | - | 9.3 | - | - |
| HCM Lane LOS | A | - | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 32 | 270 | 252 | 319 | 790 | 23 | | |
| Future Volume (vph) | 32 | 270 | 252 | 319 | 790 | 23 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 25.0 | | 25.0 | 60.0 | 35.0 | | 25.0 | 50.0 |
| Total Split (%) | 22.7% | | 22.7% | 54.5% | 31.8% | | 23% | 45% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 6.8 | 110.0 | 22.2 | 98.1 | 68.5 | 110.0 | | |
| Actuated g/C Ratio | 0.06 | 1.00 | 0.20 | 0.89 | 0.62 | 1.00 | | |
| v/c Ratio | 0.32 | 0.19 | 0.77 | 0.21 | 0.74 | 0.02 | | |
| Control Delay | 56.4 | 0.3 | 55.5 | 2.0 | 22.7 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 56.4 | 0.3 | 55.5 | 2.0 | 22.7 | 0.0 | | |
| LOS | E | A | E | A | C | A | | |
| Approach Delay | | | | 25.6 | 22.1 | | | |
| Approach LOS | | | | C | C | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 23 (21%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.77 | |
| Intersection Signal Delay: 20.4 | Intersection LOS: C |
| Intersection Capacity Utilization 71.4% | ICU Level of Service C |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 32 | 0 | 270 | 0 | 0 | 0 | 252 | 319 | 0 | 0 | 790 | 23 |
| Future Volume (veh/h) | 32 | 0 | 270 | 0 | 0 | 0 | 252 | 319 | 0 | 0 | 790 | 23 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 36 | 0 | 0 | 0 | 0 | 0 | 280 | 354 | 0 | 0 | 878 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 55 | 0 | | 0 | 2 | 0 | 309 | 1635 | 0 | 0 | 1225 | |
| Arrive On Green | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.86 | 0.00 | 0.00 | 0.64 | 0.00 |
| Sat Flow, veh/h | 1810 | 36 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Grp Volume(v), veh/h | 36 | 57.6 | | 0 | 0 | 0 | 280 | 354 | 0 | 0 | 878 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | E | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Q Serve(g_s), s | 2.2 | | | 0.0 | 0.0 | 0.0 | 16.7 | 3.5 | 0.0 | 0.0 | 33.6 | 0.0 |
| Cycle Q Clear(g_c), s | 2.2 | | | 0.0 | 0.0 | 0.0 | 16.7 | 3.5 | 0.0 | 0.0 | 33.6 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 55 | | | 0 | 2 | 0 | 309 | 1635 | 0 | 0 | 1225 | |
| V/C Ratio(X) | 0.66 | | | 0.00 | 0.00 | 0.00 | 0.91 | 0.22 | 0.00 | 0.00 | 0.72 | |
| Avail Cap(c_a), veh/h | 313 | | | 0 | 328 | 0 | 329 | 1635 | 0 | 0 | 1225 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 52.8 | | | 0.0 | 0.0 | 0.0 | 44.8 | 1.3 | 0.0 | 0.0 | 12.9 | 0.0 |
| Incr Delay (d2), s/veh | 4.9 | | | 0.0 | 0.0 | 0.0 | 25.7 | 0.3 | 0.0 | 0.0 | 3.6 | 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 |
| %ile BackOfQ(50%),veh/ln | 1.0 | | | 0.0 | 0.0 | 0.0 | 9.3 | 0.4 | 0.0 | 0.0 | 12.8 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 57.6 | | | 0.0 | 0.0 | 0.0 | 70.4 | 1.6 | 0.0 | 0.0 | 16.5 | 0.0 |
| LnGrp LOS | E | | | A | A | A | E | A | A | A | B | |
| Approach Vol, veh/h | | | | | 0 | | | 634 | | | 878 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 32.0 | | | 16.5 | |
| Approach LOS | | | | | | | | C | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | | 6 | 7 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 23.8 | 76.9 | 9.3 | 0.0 | | 100.7 | 9.3 | | | | | |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | | 6.0 | 4.0 | | | | | |
| Max Green Setting (Gmax), s | 20.0 | 29.0 | 19.0 | 19.0 | | 54.0 | 46.0 | | | | | |
| Max Q Clear Time (g_c+I1), s | 18.7 | 35.6 | 4.2 | 0.0 | | 5.5 | 0.0 | | | | | |
| Green Ext Time (p_c), s | 0.1 | 0.0 | 0.0 | 0.0 | | 1.1 | 0.0 | | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 23.8 |
| HCM 6th LOS | C |

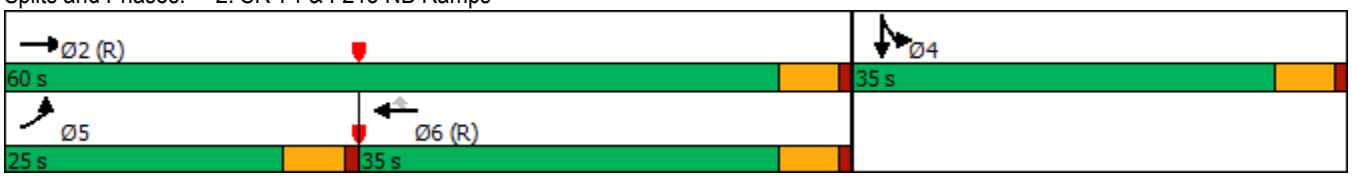
**Notes**

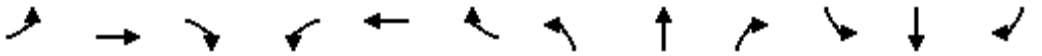
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 14 | 1046 | 532 | 734 | 0 |
| Future Volume (vph) | 14 | 1046 | 532 | 734 | 0 |
| Turn Type | Prot | NA | NA | Perm | NA |
| Protected Phases | 5 | 2 | 6 | | 4 |
| Permitted Phases | | | | 6 | |
| Detector Phase | 5 | 2 | 6 | 6 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 50.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.3 | 55.3 | 10.3 | 10.3 | 10.3 |
| Total Split (s) | 25.0 | 60.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 26.3% | 63.2% | 36.8% | 36.8% | 36.8% |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| Lead/Lag | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | Yes | |
| Recall Mode | None | C-Min | C-Min | C-Min | None |
| Act Effct Green (s) | 5.6 | 67.5 | 62.9 | 62.9 | 16.9 |
| Actuated g/C Ratio | 0.06 | 0.71 | 0.66 | 0.66 | 0.18 |
| v/c Ratio | 0.14 | 0.44 | 0.24 | 0.59 | 0.79 |
| Control Delay | 45.1 | 7.2 | 8.6 | 3.1 | 41.1 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Total Delay | 45.1 | 7.2 | 8.6 | 3.2 | 41.1 |
| LOS | D | A | A | A | D |
| Approach Delay | | 7.7 | 5.5 | | 41.1 |
| Approach LOS | | A | A | | D |

| Intersection Summary | |
|---|---|
| Cycle Length: 95 | |
| Actuated Cycle Length: 95 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 70 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.79 | |
| Intersection Signal Delay: 10.3 | Intersection LOS: B |
| Intersection Capacity Utilization 66.6% | ICU Level of Service C |
| Analysis Period (min) 15 | |

Splits and Phases: 2: SR-74 & I-215 NB Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 14 | 1046 | 0 | 0 | 532 | 734 | 0 | 0 | 0 | 248 | 0 | 39 |
| Future Volume (veh/h) | 14 | 1046 | 0 | 0 | 532 | 734 | 0 | 0 | 0 | 248 | 0 | 39 |
| 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 | 1900 | 1900 | 0 | 0 | 1900 | 1900 | | | | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 15 | 1125 | 0 | 0 | 572 | 0 | | | | 267 | 0 | 42 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | | | | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| Cap, veh/h | 31 | 2492 | 0 | 0 | 2229 | | | | | 305 | 0 | 48 |
| Arrive On Green | 0.02 | 0.69 | 0.00 | 0.00 | 0.62 | 0.00 | | | | 0.20 | 0.00 | 0.20 |
| Sat Flow, veh/h | 1810 | 3705 | 0 | 0 | 3705 | 1610 | | | | 1538 | 0 | 242 |
| Grp Volume(v), veh/h | 15 | 1125 | 0 | 0 | 572 | 0 | | | | 309 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 0 | 0 | 1805 | 1610 | | | | 1780 | 0 | 0 |
| Q Serve(g_s), s | 0.8 | 13.3 | 0.0 | 0.0 | 6.8 | 0.0 | | | | 16.0 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 0.8 | 13.3 | 0.0 | 0.0 | 6.8 | 0.0 | | | | 16.0 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | | | | 0.86 | | 0.14 |
| Lane Grp Cap(c), veh/h | 31 | 2492 | 0 | 0 | 2229 | | | | | 353 | 0 | 0 |
| V/C Ratio(X) | 0.48 | 0.45 | 0.00 | 0.00 | 0.26 | | | | | 0.88 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 375 | 2492 | 0 | 0 | 2229 | | | | | 556 | 0 | 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 | 1.00 | 0.00 | 0.00 | 0.67 | 0.00 | | | | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 46.3 | 6.6 | 0.0 | 0.0 | 8.3 | 0.0 | | | | 37.0 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 4.2 | 0.6 | 0.0 | 0.0 | 0.2 | 0.0 | | | | 6.0 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 3.8 | 0.0 | 0.0 | 2.6 | 0.0 | | | | 7.2 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 50.5 | 7.2 | 0.0 | 0.0 | 8.5 | 0.0 | | | | 42.9 | 0.0 | 0.0 |
| LnGrp LOS | D | A | A | A | A | | | | | D | A | A |
| Approach Vol, veh/h | | 1140 | | | 572 | | | | | | 309 | |
| Approach Delay, s/veh | | 7.8 | | | 8.5 | | | | | | 42.9 | |
| Approach LOS | | A | | | A | | | | | | D | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 70.9 | | 24.1 | 6.9 | 63.9 | | | | | | |
| Change Period (Y+Rc), s | | 5.3 | | 5.3 | 5.3 | 5.3 | | | | | | |
| Max Green Setting (Gmax), s | | 54.7 | | 29.7 | 19.7 | 29.7 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 15.3 | | 18.0 | 2.8 | 8.8 | | | | | | |
| Green Ext Time (p_c), s | | 5.2 | | 0.8 | 0.0 | 2.7 | | | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 13.3 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

**Notes**

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

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 11.1 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 2 | 12 | 131 | 2 | 28 | 5 | 117 | 219 | 27 | 132 | 1 |
| Future Vol, veh/h | 3 | 2 | 12 | 131 | 2 | 28 | 5 | 117 | 219 | 27 | 132 | 1 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 3 | 16 | 170 | 3 | 36 | 6 | 152 | 284 | 35 | 171 | 1 |
| Number of Lanes | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 3 | 2 | 3 | 3 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 3 | 3 | 2 | 3 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 3 | 3 | 3 | 2 |
| HCM Control Delay | 9.2 | 10.5 | 12 | 10.1 |
| HCM LOS | A | B | B | B |

| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 75% | 0% | 100% | 100% | 0% | 100% | 0% | 0% |
| Vol Thru, % | 0% | 100% | 15% | 25% | 8% | 0% | 0% | 7% | 0% | 100% | 98% |
| Vol Right, % | 0% | 0% | 85% | 0% | 92% | 0% | 0% | 93% | 0% | 0% | 2% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 5 | 78 | 258 | 4 | 13 | 66 | 66 | 30 | 27 | 88 | 45 |
| LT Vol | 5 | 0 | 0 | 3 | 0 | 66 | 66 | 0 | 27 | 0 | 0 |
| Through Vol | 0 | 78 | 39 | 1 | 1 | 0 | 0 | 2 | 0 | 88 | 44 |
| RT Vol | 0 | 0 | 219 | 0 | 12 | 0 | 0 | 28 | 0 | 0 | 1 |
| Lane Flow Rate | 6 | 101 | 335 | 5 | 17 | 85 | 85 | 39 | 35 | 114 | 58 |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Degree of Util (X) | 0.011 | 0.163 | 0.484 | 0.01 | 0.029 | 0.161 | 0.161 | 0.061 | 0.065 | 0.197 | 0.1 |
| Departure Headway (Hd) | 6.299 | 5.797 | 5.2 | 7.131 | 6.11 | 6.818 | 6.818 | 5.665 | 6.697 | 6.194 | 6.178 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 569 | 619 | 694 | 502 | 585 | 527 | 527 | 632 | 535 | 579 | 580 |
| Service Time | 4.028 | 3.526 | 2.929 | 4.875 | 3.854 | 4.552 | 4.552 | 3.399 | 4.432 | 3.929 | 3.913 |
| HCM Lane V/C Ratio | 0.011 | 0.163 | 0.483 | 0.01 | 0.029 | 0.161 | 0.161 | 0.062 | 0.065 | 0.197 | 0.1 |
| HCM Control Delay | 9.1 | 9.7 | 12.7 | 9.9 | 9 | 10.9 | 10.9 | 8.8 | 9.9 | 10.5 | 9.6 |
| HCM Lane LOS | A | A | B | A | A | B | B | A | A | B | A |
| HCM 95th-tile Q | 0 | 0.6 | 2.7 | 0 | 0.1 | 0.6 | 0.6 | 0.2 | 0.2 | 0.7 | 0.3 |

| 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 | 0 | 31 | 28 | 0 | 1 | 24 | 351 | 1 | 1 | 292 | 0 |
| Future Vol, veh/h | 0 | 0 | 31 | 28 | 0 | 1 | 24 | 351 | 1 | 1 | 292 | 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 | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 39 | 35 | 0 | 1 | 30 | 444 | 1 | 1 | 370 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 654 | 877 | 185 | 692 | 877 | 223 | 370 | 0 | 0 | 445 | 0 | 0 |
| Stage 1 | 372 | 372 | - | 505 | 505 | - | - | - | - | - | - | - |
| Stage 2 | 282 | 505 | - | 187 | 372 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 356 | 289 | 832 | 334 | 289 | 787 | 1200 | - | - | 1126 | - | - |
| Stage 1 | 626 | 622 | - | 523 | 544 | - | - | - | - | - | - | - |
| Stage 2 | 707 | 544 | - | 803 | 622 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 349 | 281 | 832 | 312 | 281 | 787 | 1200 | - | - | 1126 | - | - |
| Mov Cap-2 Maneuver | 349 | 281 | - | 312 | 281 | - | - | - | - | - | - | - |
| Stage 1 | 610 | 621 | - | 510 | 530 | - | - | - | - | - | - | - |
| Stage 2 | 688 | 530 | - | 764 | 621 | - | - | - | - | - | - | - |

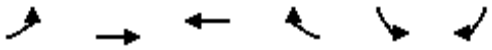
| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 9.5 | 17.7 | 0.5 | 0 |
| HCM LOS | A | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1200 | - | - | 832 | 319 | 1126 | - | - |
| HCM Lane V/C Ratio | 0.025 | - | - | 0.047 | 0.115 | 0.001 | - | - |
| HCM Control Delay (s) | 8.1 | - | - | 9.5 | 17.7 | 8.2 | - | - |
| HCM Lane LOS | A | - | - | A | C | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.1 | 0.4 | 0 | - | - |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 338 | 956 | 839 | 56 | 427 |
| Future Volume (vph) | 338 | 956 | 839 | 56 | 427 |
| Turn Type | Prot | NA | NA | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | 4 | |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 30.5 |
| Total Split (s) | 20.0 | 55.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 22.2% | 61.1% | 38.9% | 38.9% | 38.9% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.5 |
| Lead/Lag | Lead | | Lag | | |
| Lead-Lag Optimize? | Yes | | Yes | | |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 27.0 | 68.7 | 37.8 | 10.8 | 10.8 |
| Actuated g/C Ratio | 0.30 | 0.76 | 0.42 | 0.12 | 0.12 |
| v/c Ratio | 0.67 | 0.37 | 0.61 | 0.28 | 0.83 |
| Control Delay | 35.2 | 4.7 | 23.5 | 36.4 | 19.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 35.2 | 4.7 | 23.5 | 36.4 | 19.4 |
| LOS | D | A | C | D | B |
| Approach Delay | | 12.7 | 23.5 | 21.4 | |
| Approach LOS | | B | C | C | |

| Intersection Summary | |
|---|---|
| Cycle Length: 90 | |
| Actuated Cycle Length: 90 | |
| Offset: 32.5 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.83 | |
| Intersection Signal Delay: 17.8 | Intersection LOS: B |
| Intersection Capacity Utilization 59.2% | ICU Level of Service B |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 338 | 956 | 839 | 25 | 56 | 427 |
| Future Volume (veh/h) | 338 | 956 | 839 | 25 | 56 | 427 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 360 | 1017 | 893 | 27 | 60 | 454 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 322 | 2101 | 1287 | 39 | 545 | 485 |
| Arrive On Green | 0.18 | 0.58 | 0.36 | 0.36 | 0.30 | 0.30 |
| Sat Flow, veh/h | 1810 | 3705 | 3672 | 108 | 1810 | 1610 |
| Grp Volume(v), veh/h | 360 | 1017 | 451 | 469 | 60 | 454 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1881 | 1810 | 1610 |
| Q Serve(g_s), s | 16.0 | 14.8 | 19.2 | 19.2 | 2.2 | 24.7 |
| Cycle Q Clear(g_c), s | 16.0 | 14.8 | 19.2 | 19.2 | 2.2 | 24.7 |
| Prop In Lane | 1.00 | | | 0.06 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 322 | 2101 | 650 | 677 | 545 | 485 |
| V/C Ratio(X) | 1.12 | 0.48 | 0.69 | 0.69 | 0.11 | 0.94 |
| Avail Cap(c_a), veh/h | 322 | 2101 | 650 | 677 | 613 | 546 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.90 | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.0 | 10.9 | 24.6 | 24.6 | 22.7 | 30.6 |
| Incr Delay (d2), s/veh | 83.8 | 0.7 | 6.0 | 5.8 | 0.0 | 21.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 14.1 | 4.9 | 8.4 | 8.7 | 0.9 | 22.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 120.8 | 11.7 | 30.6 | 30.4 | 22.8 | 52.1 |
| LnGrp LOS | F | B | C | C | C | D |
| Approach Vol, veh/h | | 1377 | 920 | | 514 | |
| Approach Delay, s/veh | | 40.2 | 30.5 | | 48.7 | |
| Approach LOS | | D | C | | D | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 58.4 | | 31.6 | 20.0 | 38.4 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 49.0 | | 30.5 | 16.0 | 29.0 |
| Max Q Clear Time (g_c+I1), s | | 16.8 | | 26.7 | 18.0 | 21.2 |
| Green Ext Time (p_c), s | | 7.4 | | 0.4 | 0.0 | 3.1 |

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

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.4 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 6 | 0 | 0 | 9 |
| Future Vol, veh/h | 0 | 0 | 6 | 0 | 0 | 9 |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 7 | 0 | 0 | 10 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | - | 1 | 0 | - | 1 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | 0 | 1622 | - | 0 | 1084 |
| Stage 1 | - | 0 | - | - | 0 | - |
| Stage 2 | - | 0 | - | - | 0 | - |
| Platoon blocked, % | - | | | - | | |
| Mov Cap-1 Maneuver | - | - | 1622 | - | - | 1084 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 7.2 | 8.4 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | WBL | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 1084 | - | 1622 | - |
| HCM Lane V/C Ratio | 0.009 | - | 0.004 | - |
| HCM Control Delay (s) | 8.4 | - | 7.2 | 0 |
| HCM Lane LOS | A | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 18 | 11 | 341 | 275 | 0 |
| Future Vol, veh/h | 0 | 18 | 11 | 341 | 275 | 0 |
| 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 | - | 50 | - | - | - |
| 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 | 2 | 2 |
| Mvmt Flow | 0 | 20 | 12 | 371 | 299 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 509 | 150 | 299 | 0 | - | 0 |
| Stage 1 | 299 | - | - | - | - | - |
| Stage 2 | 210 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 494 | 870 | 1259 | - | - | - |
| Stage 1 | 726 | - | - | - | - | - |
| Stage 2 | 805 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 489 | 870 | 1259 | - | - | - |
| Mov Cap-2 Maneuver | 568 | - | - | - | - | - |
| Stage 1 | 719 | - | - | - | - | - |
| Stage 2 | 805 | - | - | - | - | - |

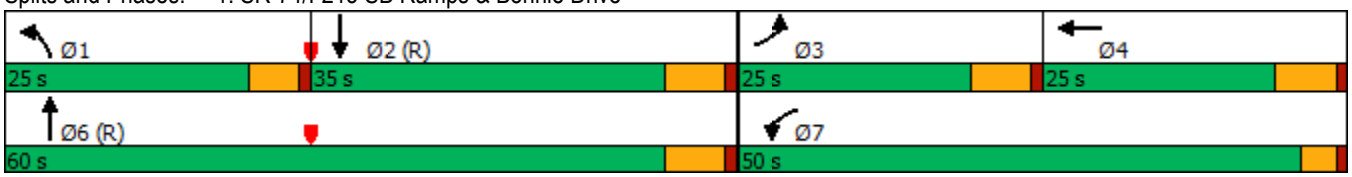
| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.2 | 0.2 | 0 |
| HCM LOS | A | | |

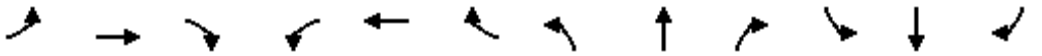
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1259 | - | 870 | - | - |
| HCM Lane V/C Ratio | 0.009 | - | 0.022 | - | - |
| HCM Control Delay (s) | 7.9 | - | 9.2 | - | - |
| HCM Lane LOS | A | - | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 69 | 263 | 336 | 761 | 761 | 65 | | |
| Future Volume (vph) | 69 | 263 | 336 | 761 | 761 | 65 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 25.0 | | 25.0 | 60.0 | 35.0 | | 25.0 | 50.0 |
| Total Split (%) | 22.7% | | 22.7% | 54.5% | 31.8% | | 23% | 45% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 9.0 | 110.0 | 32.4 | 92.5 | 53.9 | 110.0 | | |
| Actuated g/C Ratio | 0.08 | 1.00 | 0.29 | 0.84 | 0.49 | 1.00 | | |
| v/c Ratio | 0.51 | 0.18 | 0.69 | 0.52 | 0.89 | 0.04 | | |
| Control Delay | 59.8 | 0.2 | 42.5 | 4.9 | 40.0 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 59.8 | 0.2 | 42.5 | 4.9 | 40.0 | 0.0 | | |
| LOS | E | A | D | A | D | A | | |
| Approach Delay | | | | 16.4 | 36.8 | | | |
| Approach LOS | | | | B | D | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 23 (21%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.89 | |
| Intersection Signal Delay: 23.3 | Intersection LOS: C |
| Intersection Capacity Utilization 75.0% | ICU Level of Service D |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 69 | 0 | 263 | 0 | 0 | 0 | 336 | 761 | 0 | 0 | 761 | 65 |
| Future Volume (veh/h) | 69 | 0 | 263 | 0 | 0 | 0 | 336 | 761 | 0 | 0 | 761 | 65 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 75 | 0 | 0 | 0 | 0 | 0 | 365 | 827 | 0 | 0 | 827 | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 97 | 0 | | 0 | 2 | 0 | 329 | 1591 | 0 | 0 | 1159 | |
| Arrive On Green | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.84 | 0.00 | 0.00 | 0.61 | 0.00 |
| Sat Flow, veh/h | 1810 | 75 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Grp Volume(v), veh/h | 75 | 56.3 | | 0 | 0 | 0 | 365 | 827 | 0 | 0 | 827 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | E | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Q Serve(g_s), s | 4.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 13.8 | 0.0 | 0.0 | 33.1 | 0.0 |
| Cycle Q Clear(g_c), s | 4.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 13.8 | 0.0 | 0.0 | 33.1 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 97 | | | 0 | 2 | 0 | 329 | 1591 | 0 | 0 | 1159 | |
| V/C Ratio(X) | 0.77 | | | 0.00 | 0.00 | 0.00 | 1.11 | 0.52 | 0.00 | 0.00 | 0.71 | |
| Avail Cap(c_a), veh/h | 313 | | | 0 | 328 | 0 | 329 | 1591 | 0 | 0 | 1159 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 51.4 | | | 0.0 | 0.0 | 0.0 | 45.0 | 2.6 | 0.0 | 0.0 | 14.8 | 0.0 |
| Incr Delay (d2), s/veh | 4.9 | | | 0.0 | 0.0 | 0.0 | 82.4 | 1.2 | 0.0 | 0.0 | 3.8 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.1 | | | 0.0 | 0.0 | 0.0 | 16.1 | 2.3 | 0.0 | 0.0 | 13.1 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 56.3 | | | 0.0 | 0.0 | 0.0 | 127.4 | 3.8 | 0.0 | 0.0 | 18.6 | 0.0 |
| LnGrp LOS | E | | | A | A | A | F | A | A | A | B | |
| Approach Vol, veh/h | | | | | 0 | | | 1192 | | | 827 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 41.6 | | | 18.6 | |
| Approach LOS | | | | | | | | D | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 6 | 7 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 25.0 | 73.1 | 11.9 | 0.0 | 98.1 | 11.9 |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 |
| Max Green Setting (Gmax), s | 20.0 | 29.0 | 19.0 | 19.0 | 54.0 | 46.0 |
| Max Q Clear Time (g_c+I1), s | 22.0 | 35.1 | 6.5 | 0.0 | 15.8 | 0.0 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.1 | 0.0 | 3.4 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 33.0 |
| HCM 6th LOS | C |

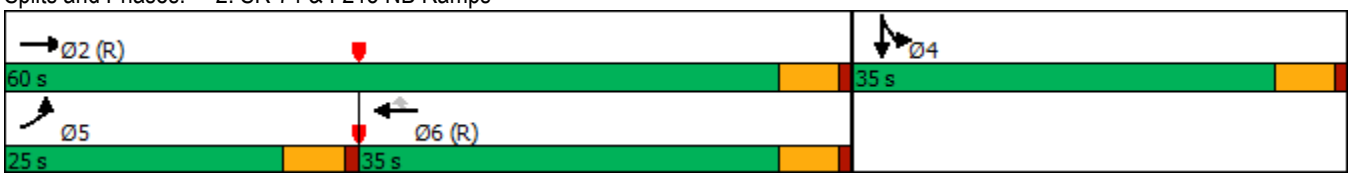
**Notes**

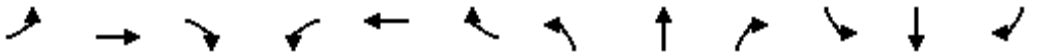
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 39 | 985 | 1036 | 1068 | 0 |
| Future Volume (vph) | 39 | 985 | 1036 | 1068 | 0 |
| Turn Type | Prot | NA | NA | Perm | NA |
| Protected Phases | 5 | 2 | 6 | | 4 |
| Permitted Phases | | | | 6 | |
| Detector Phase | 5 | 2 | 6 | 6 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 50.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.3 | 55.3 | 10.3 | 10.3 | 10.3 |
| Total Split (s) | 25.0 | 60.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 26.3% | 63.2% | 36.8% | 36.8% | 36.8% |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| Lead/Lag | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | Yes | |
| Recall Mode | None | C-Min | C-Min | C-Min | None |
| Act Effct Green (s) | 6.8 | 62.9 | 55.1 | 55.1 | 21.5 |
| Actuated g/C Ratio | 0.07 | 0.66 | 0.58 | 0.58 | 0.23 |
| v/c Ratio | 0.32 | 0.44 | 0.53 | 0.84 | 0.84 |
| Control Delay | 47.8 | 9.2 | 15.9 | 10.5 | 42.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 47.8 | 9.2 | 15.9 | 10.5 | 42.3 |
| LOS | D | A | B | B | D |
| Approach Delay | | 10.7 | 13.2 | | 42.3 |
| Approach LOS | | B | B | | D |

| Intersection Summary | |
|---|---|
| Cycle Length: 95 | |
| Actuated Cycle Length: 95 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 80 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.84 | |
| Intersection Signal Delay: 15.5 | Intersection LOS: B |
| Intersection Capacity Utilization 79.1% | ICU Level of Service D |
| Analysis Period (min) 15 | |

Splits and Phases: 2: SR-74 & I-215 NB Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 39 | 985 | 0 | 0 | 1036 | 1068 | 0 | 0 | 0 | 309 | 0 | 60 |
| Future Volume (veh/h) | 39 | 985 | 0 | 0 | 1036 | 1068 | 0 | 0 | 0 | 309 | 0 | 60 |
| 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 | 1900 | 1900 | 0 | 0 | 1900 | 1900 | | | | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 41 | 1048 | 0 | 0 | 1102 | 0 | | | | 329 | 0 | 64 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | | | | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| Cap, veh/h | 63 | 2323 | 0 | 0 | 1996 | | | | | 364 | 0 | 71 |
| Arrive On Green | 0.03 | 0.64 | 0.00 | 0.00 | 0.55 | 0.00 | | | | 0.25 | 0.00 | 0.25 |
| Sat Flow, veh/h | 1810 | 3705 | 0 | 0 | 3705 | 1610 | | | | 1485 | 0 | 289 |
| Grp Volume(v), veh/h | 41 | 1048 | 0 | 0 | 1102 | 0 | | | | 393 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 0 | 0 | 1805 | 1610 | | | | 1774 | 0 | 0 |
| Q Serve(g_s), s | 2.1 | 13.9 | 0.0 | 0.0 | 18.7 | 0.0 | | | | 20.4 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 2.1 | 13.9 | 0.0 | 0.0 | 18.7 | 0.0 | | | | 20.4 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | | | | 0.84 | | 0.16 |
| Lane Grp Cap(c), veh/h | 63 | 2323 | 0 | 0 | 1996 | | | | | 435 | 0 | 0 |
| V/C Ratio(X) | 0.65 | 0.45 | 0.00 | 0.00 | 0.55 | | | | | 0.90 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 375 | 2323 | 0 | 0 | 1996 | | | | | 555 | 0 | 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 | 1.00 | 0.00 | 0.00 | 0.09 | 0.00 | | | | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 45.3 | 8.5 | 0.0 | 0.0 | 13.7 | 0.0 | | | | 34.8 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 4.2 | 0.6 | 0.0 | 0.0 | 0.1 | 0.0 | | | | 13.8 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 4.4 | 0.0 | 0.0 | 7.3 | 0.0 | | | | 9.9 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 49.5 | 9.1 | 0.0 | 0.0 | 13.8 | 0.0 | | | | 48.5 | 0.0 | 0.0 |
| LnGrp LOS | D | A | A | A | B | | | | | D | A | A |
| Approach Vol, veh/h | | 1089 | | | 1102 | | | | | | 393 | |
| Approach Delay, s/veh | | 10.7 | | | 13.8 | | | | | | 48.5 | |
| Approach LOS | | B | | | B | | | | | | D | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 66.4 | | 28.6 | 8.6 | 57.8 | | | | | | |
| Change Period (Y+Rc), s | | 5.3 | | 5.3 | 5.3 | 5.3 | | | | | | |
| Max Green Setting (Gmax), s | | 54.7 | | 29.7 | 19.7 | 29.7 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 15.9 | | 22.4 | 4.1 | 20.7 | | | | | | |
| Green Ext Time (p_c), s | | 4.7 | | 0.9 | 0.0 | 4.0 | | | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 17.8 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

**Notes**

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

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.9 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 19 | 58 | 427 | 18 | 3 | 58 | 58 | 234 | 1 | 80 | 2 |
| Future Vol, veh/h | 3 | 19 | 58 | 427 | 18 | 3 | 58 | 58 | 234 | 1 | 80 | 2 |
| 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 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 20 | 62 | 459 | 19 | 3 | 62 | 62 | 252 | 1 | 86 | 2 |
| Number of Lanes | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 3 | 2 | 3 | 3 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 3 | 3 | 2 | 3 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 3 | 3 | 3 | 2 |
| HCM Control Delay | 10.1 | 14.1 | 12.5 | 10.7 |
| HCM LOS | B | B | B | B |

| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 24% | 0% | 100% | 100% | 0% | 100% | 0% | 0% |
| Vol Thru, % | 0% | 100% | 8% | 76% | 14% | 0% | 0% | 86% | 0% | 100% | 93% |
| Vol Right, % | 0% | 0% | 92% | 0% | 86% | 0% | 0% | 14% | 0% | 0% | 7% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 58 | 39 | 253 | 13 | 68 | 214 | 214 | 21 | 1 | 53 | 29 |
| LT Vol | 58 | 0 | 0 | 3 | 0 | 214 | 214 | 0 | 1 | 0 | 0 |
| Through Vol | 0 | 39 | 19 | 10 | 10 | 0 | 0 | 18 | 0 | 53 | 27 |
| RT Vol | 0 | 0 | 234 | 0 | 58 | 0 | 0 | 3 | 0 | 0 | 2 |
| Lane Flow Rate | 62 | 42 | 272 | 13 | 73 | 230 | 230 | 23 | 1 | 57 | 31 |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Degree of Util (X) | 0.122 | 0.076 | 0.446 | 0.027 | 0.129 | 0.424 | 0.424 | 0.038 | 0.002 | 0.114 | 0.061 |
| Departure Headway (Hd) | 7.045 | 6.54 | 5.888 | 7.136 | 6.415 | 6.656 | 6.656 | 6.056 | 7.674 | 7.167 | 7.118 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 508 | 546 | 610 | 500 | 557 | 539 | 539 | 590 | 465 | 498 | 501 |
| Service Time | 4.799 | 4.295 | 3.642 | 4.905 | 4.183 | 4.407 | 4.407 | 3.807 | 5.447 | 4.941 | 4.891 |
| HCM Lane V/C Ratio | 0.122 | 0.077 | 0.446 | 0.026 | 0.131 | 0.427 | 0.427 | 0.039 | 0.002 | 0.114 | 0.062 |
| HCM Control Delay | 10.8 | 9.8 | 13.3 | 10.1 | 10.1 | 14.3 | 14.3 | 9 | 10.5 | 10.9 | 10.4 |
| HCM Lane LOS | B | A | B | B | B | B | B | A | B | B | B |
| HCM 95th-tile Q | 0.4 | 0.2 | 2.3 | 0.1 | 0.4 | 2.1 | 2.1 | 0.1 | 0 | 0.4 | 0.2 |

| 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 | 0 | 0 | 1 | 57 | 1 | 1 | 5 | 349 | 10 | 0 | 560 | 2 |
| Future Vol, veh/h | 0 | 0 | 1 | 57 | 1 | 1 | 5 | 349 | 10 | 0 | 560 | 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 | - | - | - | - | - | - | 100 | - | - | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 1 | 63 | 1 | 1 | 5 | 384 | 11 | 0 | 615 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 819 | 1021 | 309 | 708 | 1017 | 198 | 617 | 0 | 0 | 395 | 0 | 0 |
| Stage 1 | 616 | 616 | - | 400 | 400 | - | - | - | - | - | - | - |
| Stage 2 | 203 | 405 | - | 308 | 617 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 271 | 238 | 693 | 326 | 239 | 816 | 973 | - | - | 1175 | - | - |
| Stage 1 | 450 | 485 | - | 603 | 605 | - | - | - | - | - | - | - |
| Stage 2 | 786 | 602 | - | 683 | 484 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 269 | 237 | 693 | 324 | 238 | 816 | 973 | - | - | 1175 | - | - |
| Mov Cap-2 Maneuver | 269 | 237 | - | 324 | 238 | - | - | - | - | - | - | - |
| Stage 1 | 448 | 485 | - | 600 | 602 | - | - | - | - | - | - | - |
| Stage 2 | 779 | 599 | - | 682 | 484 | - | - | - | - | - | - | - |

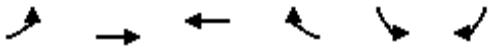
| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.2 | 18.8 | 0.1 | 0 |
| HCM LOS | B | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 973 | - | - | 693 | 325 | 1175 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | - | 0.002 | 0.199 | - | - | - |
| HCM Control Delay (s) | 8.7 | - | - | 10.2 | 18.8 | 0 | - | - |
| HCM Lane LOS | A | - | - | B | C | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.7 | 0 | - | - |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 332 | 967 | 1436 | 157 | 657 |
| Future Volume (vph) | 332 | 967 | 1436 | 157 | 657 |
| Turn Type | Prot | NA | NA | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | 4 | |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 30.5 |
| Total Split (s) | 20.0 | 55.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 22.2% | 61.1% | 38.9% | 38.9% | 38.9% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.5 |
| Lead/Lag | Lead | | Lag | | |
| Lead-Lag Optimize? | Yes | | Yes | | |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 20.1 | 53.6 | 29.6 | 25.9 | 25.9 |
| Actuated g/C Ratio | 0.22 | 0.60 | 0.33 | 0.29 | 0.29 |
| v/c Ratio | 0.89 | 0.48 | 1.44 | 0.33 | 0.95 |
| Control Delay | 62.3 | 12.2 | 232.0 | 25.6 | 37.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 62.3 | 12.2 | 232.0 | 25.6 | 37.6 |
| LOS | E | B | F | C | D |
| Approach Delay | | 25.0 | 232.0 | 35.3 | |
| Approach LOS | | C | F | D | |

| Intersection Summary | |
|---|---|
| Cycle Length: 90 | |
| Actuated Cycle Length: 90 | |
| Offset: 32.5 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 130 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.44 | |
| Intersection Signal Delay: 115.8 | Intersection LOS: F |
| Intersection Capacity Utilization 93.7% | ICU Level of Service F |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 332 | 967 | 1436 | 144 | 157 | 657 |
| Future Volume (veh/h) | 332 | 967 | 1436 | 144 | 157 | 657 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 357 | 1040 | 1544 | 155 | 169 | 706 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 322 | 1965 | 1068 | 106 | 613 | 546 |
| Arrive On Green | 0.18 | 0.54 | 0.32 | 0.32 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1810 | 3705 | 3411 | 330 | 1810 | 1610 |
| Grp Volume(v), veh/h | 357 | 1040 | 834 | 865 | 169 | 706 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1841 | 1810 | 1610 |
| Q Serve(g_s), s | 16.0 | 16.6 | 29.0 | 29.0 | 6.1 | 30.5 |
| Cycle Q Clear(g_c), s | 16.0 | 16.6 | 29.0 | 29.0 | 6.1 | 30.5 |
| Prop In Lane | 1.00 | | | 0.18 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 322 | 1965 | 582 | 593 | 613 | 546 |
| V/C Ratio(X) | 1.11 | 0.53 | 1.43 | 1.46 | 0.28 | 1.29 |
| Avail Cap(c_a), veh/h | 322 | 1965 | 582 | 593 | 613 | 546 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.90 | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.0 | 13.1 | 30.5 | 30.5 | 21.7 | 29.8 |
| Incr Delay (d2), s/veh | 80.6 | 0.9 | 204.8 | 215.7 | 0.1 | 145.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 13.8 | 5.8 | 44.4 | 47.0 | 2.4 | 44.7 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 117.6 | 14.0 | 235.3 | 246.2 | 21.8 | 175.2 |
| LnGrp LOS | F | B | F | F | C | F |
| Approach Vol, veh/h | | 1397 | 1699 | | 875 | |
| Approach Delay, s/veh | | 40.5 | 240.9 | | 145.6 | |
| Approach LOS | | D | F | | F | |

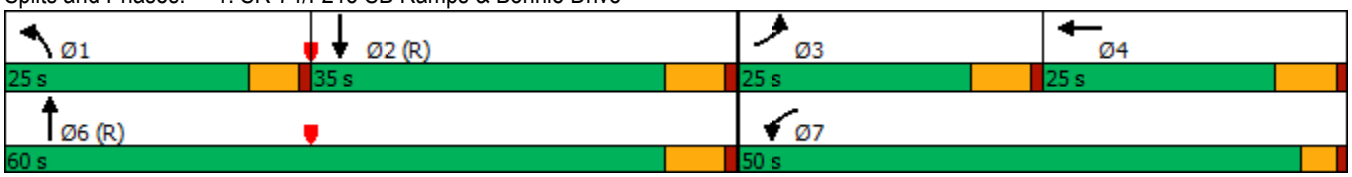
| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 55.0 | | 35.0 | 20.0 | 35.0 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 49.0 | | 30.5 | 16.0 | 29.0 |
| Max Q Clear Time (g_c+I1), s | | 18.6 | | 32.5 | 18.0 | 31.0 |
| Green Ext Time (p_c), s | | 7.6 | | 0.0 | 0.0 | 0.0 |

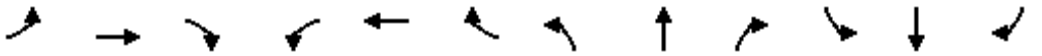
| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 149.4 |
| HCM 6th LOS | F |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 83 | 389 | 389 | 512 | 1095 | 54 | | |
| Future Volume (vph) | 83 | 389 | 389 | 512 | 1095 | 54 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 25.0 | | 25.0 | 60.0 | 35.0 | | 25.0 | 50.0 |
| Total Split (%) | 22.7% | | 22.7% | 54.5% | 31.8% | | 23% | 45% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 10.0 | 110.0 | 40.6 | 91.6 | 44.8 | 110.0 | | |
| Actuated g/C Ratio | 0.09 | 1.00 | 0.37 | 0.83 | 0.41 | 1.00 | | |
| v/c Ratio | 0.56 | 0.27 | 0.65 | 0.36 | 1.58 | 0.04 | | |
| Control Delay | 60.4 | 0.4 | 36.2 | 3.9 | 292.3 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 60.4 | 0.4 | 36.2 | 3.9 | 292.3 | 0.0 | | |
| LOS | E | A | D | A | F | A | | |
| Approach Delay | | | | 17.8 | 278.6 | | | |
| Approach LOS | | | | B | F | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 23 (21%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.58 | |
| Intersection Signal Delay: 135.4 | Intersection LOS: F |
| Intersection Capacity Utilization 96.3% | ICU Level of Service F |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 83 | 0 | 389 | 0 | 0 | 0 | 389 | 512 | 0 | 0 | 1095 | 54 |
| Future Volume (veh/h) | 83 | 0 | 389 | 0 | 0 | 0 | 389 | 512 | 0 | 0 | 1095 | 54 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 92 | 0 | 0 | 0 | 0 | 0 | 432 | 569 | 0 | 0 | 1217 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 117 | 0 | | 0 | 2 | 0 | 329 | 1570 | 0 | 0 | 1138 | |
| Arrive On Green | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.83 | 0.00 | 0.00 | 0.60 | 0.00 |
| Sat Flow, veh/h | 1810 | 92 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Grp Volume(v), veh/h | 92 | 55.0 | | 0 | 0 | 0 | 432 | 569 | 0 | 0 | 1217 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | E | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Q Serve(g_s), s | 5.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 8.2 | 0.0 | 0.0 | 65.9 | 0.0 |
| Cycle Q Clear(g_c), s | 5.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 8.2 | 0.0 | 0.0 | 65.9 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 117 | | | 0 | 2 | 0 | 329 | 1570 | 0 | 0 | 1138 | |
| V/C Ratio(X) | 0.79 | | | 0.00 | 0.00 | 0.00 | 1.31 | 0.36 | 0.00 | 0.00 | 1.07 | |
| Avail Cap(c_a), veh/h | 313 | | | 0 | 328 | 0 | 329 | 1570 | 0 | 0 | 1138 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 50.7 | | | 0.0 | 0.0 | 0.0 | 45.0 | 2.4 | 0.0 | 0.0 | 22.1 | 0.0 |
| Incr Delay (d2), s/veh | 4.3 | | | 0.0 | 0.0 | 0.0 | 161.0 | 0.7 | 0.0 | 0.0 | 47.3 | 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 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.5 | | | 0.0 | 0.0 | 0.0 | 23.2 | 1.5 | 0.0 | 0.0 | 39.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 55.0 | | | 0.0 | 0.0 | 0.0 | 206.0 | 3.0 | 0.0 | 0.0 | 69.4 | 0.0 |
| LnGrp LOS | E | | | A | A | A | F | A | A | A | F | |
| Approach Vol, veh/h | | | | | 0 | | | 1001 | | | 1217 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 90.6 | | | 69.4 | |
| Approach LOS | | | | | | | | F | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 6 | 7 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 25.0 | 71.9 | 13.1 | 0.0 | 96.9 | 13.1 |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 |
| Max Green Setting (Gmax), s | 20.0 | 29.0 | 19.0 | 19.0 | 54.0 | 46.0 |
| Max Q Clear Time (g_c+I1), s | 22.0 | 67.9 | 7.5 | 0.0 | 10.2 | 0.0 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.1 | 0.0 | 2.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 78.0 |
| HCM 6th LOS | E |

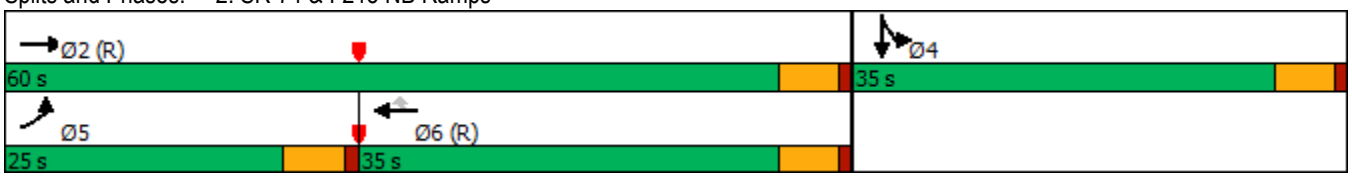
**Notes**

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

| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 54 | 1431 | 813 | 951 | 0 |
| Future Volume (vph) | 54 | 1431 | 813 | 951 | 0 |
| Turn Type | Prot | NA | NA | Perm | NA |
| Protected Phases | 5 | 2 | 6 | | 4 |
| Permitted Phases | | | | 6 | |
| Detector Phase | 5 | 2 | 6 | 6 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 50.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.3 | 55.3 | 10.3 | 10.3 | 10.3 |
| Total Split (s) | 25.0 | 60.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 26.3% | 63.2% | 36.8% | 36.8% | 36.8% |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| Lead/Lag | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | Yes | |
| Recall Mode | None | C-Min | C-Min | C-Min | None |
| Act Effct Green (s) | 7.6 | 53.8 | 42.9 | 42.9 | 30.6 |
| Actuated g/C Ratio | 0.08 | 0.57 | 0.45 | 0.45 | 0.32 |
| v/c Ratio | 0.40 | 0.75 | 0.54 | 0.82 | 1.03 |
| Control Delay | 49.0 | 18.4 | 21.1 | 8.8 | 73.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 49.0 | 18.4 | 21.1 | 8.8 | 73.7 |
| LOS | D | B | C | A | E |
| Approach Delay | | 19.5 | 14.5 | | 73.7 |
| Approach LOS | | B | B | | E |

| Intersection Summary | |
|---|---|
| Cycle Length: 95 | |
| Actuated Cycle Length: 95 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.03 | |
| Intersection Signal Delay: 25.8 | Intersection LOS: C |
| Intersection Capacity Utilization 84.7% | ICU Level of Service E |
| Analysis Period (min) 15 | |

Splits and Phases: 2: SR-74 & I-215 NB Ramps



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 54 | 1431 | 0 | 0 | 813 | 951 | 0 | 0 | 0 | 522 | 0 | 87 |
| Future Volume (veh/h) | 54 | 1431 | 0 | 0 | 813 | 951 | 0 | 0 | 0 | 522 | 0 | 87 |
| 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 | 1900 | 1900 | 0 | 0 | 1900 | 1900 | | | | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 58 | 1539 | 0 | 0 | 874 | 0 | | | | 561 | 0 | 94 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | | | | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| Cap, veh/h | 75 | 2079 | 0 | 0 | 1727 | | | | | 476 | 0 | 80 |
| Arrive On Green | 0.04 | 0.58 | 0.00 | 0.00 | 0.48 | 0.00 | | | | 0.31 | 0.00 | 0.31 |
| Sat Flow, veh/h | 1810 | 3705 | 0 | 0 | 3705 | 1610 | | | | 1523 | 0 | 255 |
| Grp Volume(v), veh/h | 58 | 1539 | 0 | 0 | 874 | 0 | | | | 655 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 0 | 0 | 1805 | 1610 | | | | 1778 | 0 | 0 |
| Q Serve(g_s), s | 3.0 | 29.9 | 0.0 | 0.0 | 15.8 | 0.0 | | | | 29.7 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 3.0 | 29.9 | 0.0 | 0.0 | 15.8 | 0.0 | | | | 29.7 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | | | | 0.86 | | 0.14 |
| Lane Grp Cap(c), veh/h | 75 | 2079 | 0 | 0 | 1727 | | | | | 556 | 0 | 0 |
| V/C Ratio(X) | 0.77 | 0.74 | 0.00 | 0.00 | 0.51 | | | | | 1.18 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 375 | 2079 | 0 | 0 | 1727 | | | | | 556 | 0 | 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 | 1.00 | 0.00 | 0.00 | 0.09 | 0.00 | | | | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 45.1 | 14.9 | 0.0 | 0.0 | 17.1 | 0.0 | | | | 32.7 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 6.0 | 2.4 | 0.0 | 0.0 | 0.1 | 0.0 | | | | 97.8 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.4 | 10.6 | 0.0 | 0.0 | 6.4 | 0.0 | | | | 26.9 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 51.1 | 17.3 | 0.0 | 0.0 | 17.2 | 0.0 | | | | 130.5 | 0.0 | 0.0 |
| LnGrp LOS | D | B | A | A | B | | | | | F | A | A |
| Approach Vol, veh/h | | 1597 | | | 874 | | | | | | 655 | |
| Approach Delay, s/veh | | 18.5 | | | 17.2 | | | | | | 130.5 | |
| Approach LOS | | B | | | B | | | | | | F | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.0 | | 35.0 | 9.3 | 50.7 | | | | | | |
| Change Period (Y+Rc), s | | 5.3 | | 5.3 | 5.3 | 5.3 | | | | | | |
| Max Green Setting (Gmax), s | | 54.7 | | 29.7 | 19.7 | 29.7 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 31.9 | | 31.7 | 5.0 | 17.8 | | | | | | |
| Green Ext Time (p_c), s | | 7.5 | | 0.0 | 0.0 | 3.6 | | | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 41.6 |
| HCM 6th LOS | | D |

**Notes**

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

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 55.5 |
| Intersection LOS | F |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 1 | 5 | 334 | 1 | 30 | 1 | 155 | 455 | 29 | 170 | 0 |
| Future Vol, veh/h | 2 | 1 | 5 | 334 | 1 | 30 | 1 | 155 | 455 | 29 | 170 | 0 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 1 | 6 | 434 | 1 | 39 | 1 | 201 | 591 | 38 | 221 | 0 |
| Number of Lanes | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 3 | 2 | 3 | 3 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 3 | 3 | 2 | 3 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 3 | 3 | 3 | 2 |
| HCM Control Delay | 11.4 | 17.3 | 93.1 | 12 |
| HCM LOS | B | C | F | B |

| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 80% | 0% | 100% | 100% | 0% | 100% | 0% | 0% |
| Vol Thru, % | 0% | 100% | 10% | 20% | 9% | 0% | 0% | 3% | 0% | 100% | 100% |
| Vol Right, % | 0% | 0% | 90% | 0% | 91% | 0% | 0% | 97% | 0% | 0% | 0% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 1 | 103 | 507 | 3 | 6 | 167 | 167 | 31 | 29 | 85 | 85 |
| LT Vol | 1 | 0 | 0 | 2 | 0 | 167 | 167 | 0 | 29 | 0 | 0 |
| Through Vol | 0 | 103 | 52 | 1 | 1 | 0 | 0 | 1 | 0 | 85 | 85 |
| RT Vol | 0 | 0 | 455 | 0 | 5 | 0 | 0 | 30 | 0 | 0 | 0 |
| Lane Flow Rate | 1 | 134 | 658 | 3 | 7 | 217 | 217 | 40 | 38 | 110 | 110 |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Degree of Util (X) | 0.003 | 0.258 | 1.151 | 0.008 | 0.016 | 0.475 | 0.475 | 0.075 | 0.087 | 0.241 | 0.189 |
| Departure Headway (Hd) | 7.435 | 6.93 | 6.295 | 9.304 | 8.268 | 8.166 | 8.166 | 6.985 | 8.666 | 8.157 | 6.429 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 479 | 517 | 572 | 387 | 435 | 445 | 445 | 516 | 416 | 443 | 562 |
| Service Time | 5.209 | 4.703 | 4.068 | 7.004 | 5.968 | 5.866 | 5.866 | 4.685 | 6.366 | 5.857 | 4.129 |
| HCM Lane V/C Ratio | 0.002 | 0.259 | 1.15 | 0.008 | 0.016 | 0.488 | 0.488 | 0.078 | 0.091 | 0.248 | 0.196 |
| HCM Control Delay | 10.2 | 12.1 | 109.8 | 12.1 | 11.1 | 18 | 18 | 10.3 | 12.2 | 13.4 | 10.6 |
| HCM Lane LOS | B | B | F | B | B | C | C | B | B | B | B |
| HCM 95th-tile Q | 0 | 1 | 21.8 | 0 | 0 | 2.5 | 2.5 | 0.2 | 0.3 | 0.9 | 0.7 |

| 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 | 0 | 0 | 5 | 30 | 0 | 1 | 2 | 610 | 1 | 1 | 510 | 0 |
| Future Vol, veh/h | 0 | 0 | 5 | 30 | 0 | 1 | 2 | 610 | 1 | 1 | 510 | 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 | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 6 | 38 | 0 | 1 | 3 | 772 | 1 | 1 | 646 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1040 | 1427 | 323 | 1104 | 1427 | 387 | 646 | 0 | 0 | 773 | 0 | 0 |
| Stage 1 | 648 | 648 | - | 779 | 779 | - | - | - | - | - | - | - |
| Stage 2 | 392 | 779 | - | 325 | 648 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 187 | 136 | 679 | 168 | 136 | 617 | 949 | - | - | 851 | - | - |
| Stage 1 | 430 | 469 | - | 359 | 409 | - | - | - | - | - | - | - |
| Stage 2 | 610 | 409 | - | 667 | 469 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 186 | 135 | 679 | 166 | 135 | 617 | 949 | - | - | 851 | - | - |
| Mov Cap-2 Maneuver | 186 | 135 | - | 166 | 135 | - | - | - | - | - | - | - |
| Stage 1 | 429 | 469 | - | 358 | 408 | - | - | - | - | - | - | - |
| Stage 2 | 607 | 408 | - | 660 | 469 | - | - | - | - | - | - | - |

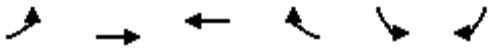
| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.4 | 32.4 | 0 | 0 |
| HCM LOS | B | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 949 | - | - | 679 | 170 | 851 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.009 | 0.231 | 0.001 | - | - |
| HCM Control Delay (s) | 8.8 | - | - | 10.4 | 32.4 | 9.2 | - | - |
| HCM Lane LOS | A | - | - | B | D | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.9 | 0 | - | - |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 521 | 1422 | 1189 | 172 | 579 |
| Future Volume (vph) | 521 | 1422 | 1189 | 172 | 579 |
| Turn Type | Prot | NA | NA | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | 4 | |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 30.5 |
| Total Split (s) | 20.0 | 55.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 22.2% | 61.1% | 38.9% | 38.9% | 38.9% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.5 |
| Lead/Lag | Lead | | Lag | | |
| Lead-Lag Optimize? | Yes | | Yes | | |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 26.1 | 59.1 | 29.0 | 20.4 | 20.4 |
| Actuated g/C Ratio | 0.29 | 0.66 | 0.32 | 0.23 | 0.23 |
| v/c Ratio | 1.06 | 0.64 | 1.23 | 0.45 | 0.92 |
| Control Delay | 91.9 | 12.5 | 142.0 | 31.3 | 31.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 91.9 | 12.5 | 142.0 | 31.3 | 31.6 |
| LOS | F | B | F | C | C |
| Approach Delay | | 33.8 | 142.0 | 31.5 | |
| Approach LOS | | C | F | C | |

| Intersection Summary | |
|---|---|
| Cycle Length: 90 | |
| Actuated Cycle Length: 90 | |
| Offset: 32.5 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 140 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.23 | |
| Intersection Signal Delay: 69.3 | Intersection LOS: E |
| Intersection Capacity Utilization 88.1% | ICU Level of Service E |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 521 | 1422 | 1189 | 149 | 172 | 579 |
| Future Volume (veh/h) | 521 | 1422 | 1189 | 149 | 172 | 579 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 554 | 1513 | 1265 | 159 | 183 | 616 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 322 | 1965 | 1040 | 130 | 613 | 546 |
| Arrive On Green | 0.18 | 0.54 | 0.32 | 0.32 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1810 | 3705 | 3323 | 404 | 1810 | 1610 |
| Grp Volume(v), veh/h | 554 | 1513 | 705 | 719 | 183 | 616 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1827 | 1810 | 1610 |
| Q Serve(g_s), s | 16.0 | 29.6 | 29.0 | 29.0 | 6.7 | 30.5 |
| Cycle Q Clear(g_c), s | 16.0 | 29.6 | 29.0 | 29.0 | 6.7 | 30.5 |
| Prop In Lane | 1.00 | | | 0.22 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 322 | 1965 | 582 | 589 | 613 | 546 |
| V/C Ratio(X) | 1.72 | 0.77 | 1.21 | 1.22 | 0.30 | 1.13 |
| Avail Cap(c_a), veh/h | 322 | 1965 | 582 | 589 | 613 | 546 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.57 | 0.57 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.0 | 16.1 | 30.5 | 30.5 | 21.9 | 29.8 |
| Incr Delay (d2), s/veh | 332.4 | 1.7 | 110.5 | 114.4 | 0.1 | 79.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 36.3 | 10.4 | 29.1 | 30.1 | 2.7 | 34.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 369.4 | 17.8 | 141.0 | 144.9 | 22.0 | 108.9 |
| LnGrp LOS | F | B | F | F | C | F |
| Approach Vol, veh/h | | 2067 | 1424 | | 799 | |
| Approach Delay, s/veh | | 112.0 | 143.0 | | 89.0 | |
| Approach LOS | | F | F | | F | |

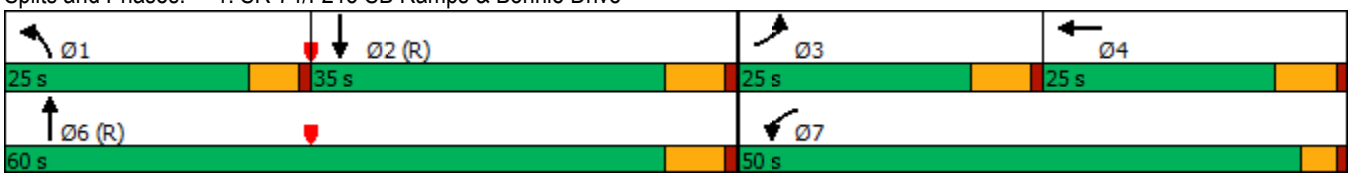
| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 55.0 | | 35.0 | 20.0 | 35.0 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 49.0 | | 30.5 | 16.0 | 29.0 |
| Max Q Clear Time (g_c+I1), s | | 31.6 | | 32.5 | 18.0 | 31.0 |
| Green Ext Time (p_c), s | | 9.6 | | 0.0 | 0.0 | 0.0 |

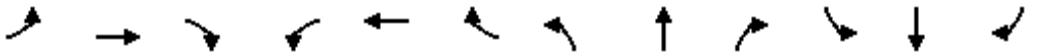
| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 118.0 |
| HCM 6th LOS | F |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 69 | 265 | 337 | 773 | 783 | 65 | | |
| Future Volume (vph) | 69 | 265 | 337 | 773 | 783 | 65 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 25.0 | | 25.0 | 60.0 | 35.0 | | 25.0 | 50.0 |
| Total Split (%) | 22.7% | | 22.7% | 54.5% | 31.8% | | 23% | 45% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 9.0 | 110.0 | 32.5 | 92.5 | 53.8 | 110.0 | | |
| Actuated g/C Ratio | 0.08 | 1.00 | 0.30 | 0.84 | 0.49 | 1.00 | | |
| v/c Ratio | 0.51 | 0.18 | 0.69 | 0.53 | 0.92 | 0.04 | | |
| Control Delay | 59.8 | 0.2 | 42.4 | 5.0 | 43.4 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 59.8 | 0.2 | 42.4 | 5.0 | 43.4 | 0.0 | | |
| LOS | E | A | D | A | D | A | | |
| Approach Delay | | | | 16.4 | 40.0 | | | |
| Approach LOS | | | | B | D | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 23 (21%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.92 | |
| Intersection Signal Delay: 24.6 | Intersection LOS: C |
| Intersection Capacity Utilization 76.2% | ICU Level of Service D |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 69 | 0 | 265 | 0 | 0 | 0 | 337 | 773 | 0 | 0 | 783 | 65 |
| Future Volume (veh/h) | 69 | 0 | 265 | 0 | 0 | 0 | 337 | 773 | 0 | 0 | 783 | 65 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 75 | 0 | 0 | 0 | 0 | 0 | 366 | 840 | 0 | 0 | 851 | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 97 | 0 | | 0 | 2 | 0 | 329 | 1591 | 0 | 0 | 1159 | |
| Arrive On Green | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.84 | 0.00 | 0.00 | 0.61 | 0.00 |
| Sat Flow, veh/h | 1810 | 75 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Grp Volume(v), veh/h | 75 | 56.3 | | 0 | 0 | 0 | 366 | 840 | 0 | 0 | 851 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | E | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Q Serve(g_s), s | 4.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 14.2 | 0.0 | 0.0 | 34.8 | 0.0 |
| Cycle Q Clear(g_c), s | 4.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 14.2 | 0.0 | 0.0 | 34.8 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 97 | | | 0 | 2 | 0 | 329 | 1591 | 0 | 0 | 1159 | |
| V/C Ratio(X) | 0.77 | | | 0.00 | 0.00 | 0.00 | 1.11 | 0.53 | 0.00 | 0.00 | 0.73 | |
| Avail Cap(c_a), veh/h | 313 | | | 0 | 328 | 0 | 329 | 1591 | 0 | 0 | 1159 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 51.4 | | | 0.0 | 0.0 | 0.0 | 45.0 | 2.6 | 0.0 | 0.0 | 15.1 | 0.0 |
| Incr Delay (d2), s/veh | 4.9 | | | 0.0 | 0.0 | 0.0 | 83.4 | 1.3 | 0.0 | 0.0 | 4.1 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.1 | | | 0.0 | 0.0 | 0.0 | 16.2 | 2.3 | 0.0 | 0.0 | 13.9 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 56.3 | | | 0.0 | 0.0 | 0.0 | 128.4 | 3.9 | 0.0 | 0.0 | 19.3 | 0.0 |
| LnGrp LOS | E | | | A | A | A | F | A | A | A | B | |
| Approach Vol, veh/h | | | | | 0 | | | 1206 | | | 851 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 41.7 | | | 19.3 | |
| Approach LOS | | | | | | | | D | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 6 | 7 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 25.0 | 73.1 | 11.9 | 0.0 | 98.1 | 11.9 |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 |
| Max Green Setting (Gmax), s | 20.0 | 29.0 | 19.0 | 19.0 | 54.0 | 46.0 |
| Max Q Clear Time (g_c+I1), s | 22.0 | 36.8 | 6.5 | 0.0 | 16.2 | 0.0 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.1 | 0.0 | 3.5 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 33.2 |
| HCM 6th LOS | C |

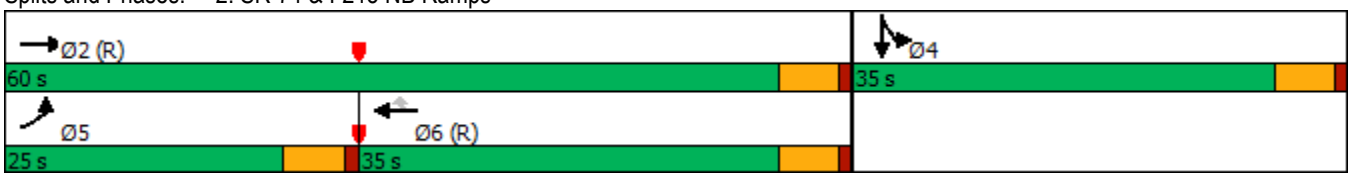
**Notes**

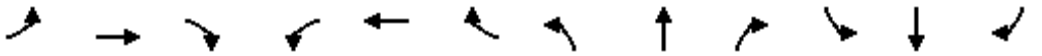
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 39 | 1009 | 1049 | 1080 | 0 |
| Future Volume (vph) | 39 | 1009 | 1049 | 1080 | 0 |
| Turn Type | Prot | NA | NA | Perm | NA |
| Protected Phases | 5 | 2 | 6 | | 4 |
| Permitted Phases | | | | 6 | |
| Detector Phase | 5 | 2 | 6 | 6 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 50.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.3 | 55.3 | 10.3 | 10.3 | 10.3 |
| Total Split (s) | 25.0 | 60.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 26.3% | 63.2% | 36.8% | 36.8% | 36.8% |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| Lead/Lag | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | Yes | |
| Recall Mode | None | C-Min | C-Min | C-Min | None |
| Act Effct Green (s) | 6.8 | 61.9 | 54.0 | 54.0 | 22.5 |
| Actuated g/C Ratio | 0.07 | 0.65 | 0.57 | 0.57 | 0.24 |
| v/c Ratio | 0.32 | 0.46 | 0.54 | 0.85 | 0.86 |
| Control Delay | 47.8 | 9.8 | 16.7 | 11.4 | 43.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 47.8 | 9.8 | 16.7 | 11.4 | 43.9 |
| LOS | D | A | B | B | D |
| Approach Delay | | 11.2 | 14.0 | | 43.9 |
| Approach LOS | | B | B | | D |

| Intersection Summary | |
|---|---|
| Cycle Length: 95 | |
| Actuated Cycle Length: 95 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 80 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.86 | |
| Intersection Signal Delay: 16.5 | Intersection LOS: B |
| Intersection Capacity Utilization 79.9% | ICU Level of Service D |
| Analysis Period (min) 15 | |

Splits and Phases: 2: SR-74 & I-215 NB Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 39 | 1009 | 0 | 0 | 1049 | 1080 | 0 | 0 | 0 | 333 | 0 | 60 |
| Future Volume (veh/h) | 39 | 1009 | 0 | 0 | 1049 | 1080 | 0 | 0 | 0 | 333 | 0 | 60 |
| 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 | 1900 | 1900 | 0 | 0 | 1900 | 1900 | | | | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 41 | 1073 | 0 | 0 | 1116 | 0 | | | | 354 | 0 | 64 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | | | | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| Cap, veh/h | 63 | 2275 | 0 | 0 | 1948 | | | | | 388 | 0 | 70 |
| Arrive On Green | 0.03 | 0.63 | 0.00 | 0.00 | 0.54 | 0.00 | | | | 0.26 | 0.00 | 0.26 |
| Sat Flow, veh/h | 1810 | 3705 | 0 | 0 | 3705 | 1610 | | | | 1504 | 0 | 272 |
| Grp Volume(v), veh/h | 41 | 1073 | 0 | 0 | 1116 | 0 | | | | 418 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 0 | 0 | 1805 | 1610 | | | | 1776 | 0 | 0 |
| Q Serve(g_s), s | 2.1 | 14.9 | 0.0 | 0.0 | 19.6 | 0.0 | | | | 21.7 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 2.1 | 14.9 | 0.0 | 0.0 | 19.6 | 0.0 | | | | 21.7 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | | | | 0.85 | | 0.15 |
| Lane Grp Cap(c), veh/h | 63 | 2275 | 0 | 0 | 1948 | | | | | 458 | 0 | 0 |
| V/C Ratio(X) | 0.65 | 0.47 | 0.00 | 0.00 | 0.57 | | | | | 0.91 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 375 | 2275 | 0 | 0 | 1948 | | | | | 555 | 0 | 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 | 1.00 | 0.00 | 0.00 | 0.09 | 0.00 | | | | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 45.3 | 9.2 | 0.0 | 0.0 | 14.6 | 0.0 | | | | 34.2 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 4.2 | 0.7 | 0.0 | 0.0 | 0.1 | 0.0 | | | | 15.8 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 4.8 | 0.0 | 0.0 | 7.7 | 0.0 | | | | 10.8 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 49.5 | 9.9 | 0.0 | 0.0 | 14.7 | 0.0 | | | | 50.0 | 0.0 | 0.0 |
| LnGrp LOS | D | A | A | A | B | | | | | D | A | A |
| Approach Vol, veh/h | | 1114 | | | 1116 | | | | | | 418 | |
| Approach Delay, s/veh | | 11.4 | | | 14.7 | | | | | | 50.0 | |
| Approach LOS | | B | | | B | | | | | | D | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 65.2 | | 29.8 | 8.6 | 56.6 | | | | | | |
| Change Period (Y+Rc), s | | 5.3 | | 5.3 | 5.3 | 5.3 | | | | | | |
| Max Green Setting (Gmax), s | | 54.7 | | 29.7 | 19.7 | 29.7 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 16.9 | | 23.7 | 4.1 | 21.6 | | | | | | |
| Green Ext Time (p_c), s | | 4.9 | | 0.8 | 0.0 | 3.8 | | | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 18.9 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

**Notes**

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

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.9 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 20 | 60 | 427 | 20 | 3 | 66 | 58 | 234 | 1 | 80 | 4 |
| Future Vol, veh/h | 3 | 20 | 60 | 427 | 20 | 3 | 66 | 58 | 234 | 1 | 80 | 4 |
| 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 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 22 | 65 | 459 | 22 | 3 | 71 | 62 | 252 | 1 | 86 | 4 |
| Number of Lanes | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 3 | 2 | 3 | 3 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 3 | 3 | 2 | 3 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 3 | 3 | 3 | 2 |
| HCM Control Delay | 10.2 | 14.1 | 12.6 | 10.7 |
| HCM LOS | B | B | B | B |

| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 23% | 0% | 100% | 100% | 0% | 100% | 0% | 0% |
| Vol Thru, % | 0% | 100% | 8% | 77% | 14% | 0% | 0% | 87% | 0% | 100% | 87% |
| Vol Right, % | 0% | 0% | 92% | 0% | 86% | 0% | 0% | 13% | 0% | 0% | 13% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 66 | 39 | 253 | 13 | 70 | 214 | 214 | 23 | 1 | 53 | 31 |
| LT Vol | 66 | 0 | 0 | 3 | 0 | 214 | 214 | 0 | 1 | 0 | 0 |
| Through Vol | 0 | 39 | 19 | 10 | 10 | 0 | 0 | 20 | 0 | 53 | 27 |
| RT Vol | 0 | 0 | 234 | 0 | 60 | 0 | 0 | 3 | 0 | 0 | 4 |
| Lane Flow Rate | 71 | 42 | 272 | 14 | 75 | 230 | 230 | 25 | 1 | 57 | 33 |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Degree of Util (X) | 0.139 | 0.076 | 0.448 | 0.028 | 0.135 | 0.427 | 0.427 | 0.042 | 0.002 | 0.115 | 0.065 |
| Departure Headway (Hd) | 7.074 | 6.57 | 5.917 | 7.174 | 6.458 | 6.7 | 6.7 | 6.109 | 7.72 | 7.213 | 7.121 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 506 | 544 | 607 | 497 | 552 | 537 | 537 | 585 | 462 | 495 | 501 |
| Service Time | 4.831 | 4.327 | 3.674 | 4.944 | 4.229 | 4.451 | 4.451 | 3.86 | 5.496 | 4.989 | 4.897 |
| HCM Lane V/C Ratio | 0.14 | 0.077 | 0.448 | 0.028 | 0.136 | 0.428 | 0.428 | 0.043 | 0.002 | 0.115 | 0.066 |
| HCM Control Delay | 11 | 9.9 | 13.4 | 10.2 | 10.2 | 14.4 | 14.4 | 9.1 | 10.5 | 10.9 | 10.4 |
| HCM Lane LOS | B | A | B | B | B | B | B | A | B | B | B |
| HCM 95th-tile Q | 0.5 | 0.2 | 2.3 | 0.1 | 0.5 | 2.1 | 2.1 | 0.1 | 0 | 0.4 | 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 | 0 | 0 | 21 | 57 | 1 | 1 | 30 | 378 | 10 | 0 | 567 | 2 |
| Future Vol, veh/h | 0 | 0 | 21 | 57 | 1 | 1 | 30 | 378 | 10 | 0 | 567 | 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 | - | - | - | - | - | - | 100 | - | - | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 23 | 63 | 1 | 1 | 33 | 415 | 11 | 0 | 623 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 898 | 1116 | 313 | 799 | 1112 | 213 | 625 | 0 | 0 | 426 | 0 | 0 |
| Stage 1 | 624 | 624 | - | 487 | 487 | - | - | - | - | - | - | - |
| Stage 2 | 274 | 492 | - | 312 | 625 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 237 | 209 | 689 | 280 | 211 | 798 | 966 | - | - | 1144 | - | - |
| Stage 1 | 445 | 481 | - | 536 | 554 | - | - | - | - | - | - | - |
| Stage 2 | 714 | 551 | - | 679 | 480 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 230 | 202 | 689 | 263 | 204 | 798 | 966 | - | - | 1144 | - | - |
| Mov Cap-2 Maneuver | 230 | 202 | - | 263 | 204 | - | - | - | - | - | - | - |
| Stage 1 | 430 | 481 | - | 518 | 535 | - | - | - | - | - | - | - |
| Stage 2 | 687 | 532 | - | 656 | 480 | - | - | - | - | - | - | - |

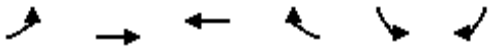
| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.4 | 22.9 | 0.6 | 0 |
| HCM LOS | B | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 966 | - | - | 689 | 265 | 1144 | - | - |
| HCM Lane V/C Ratio | 0.034 | - | - | 0.033 | 0.245 | - | - | - |
| HCM Control Delay (s) | 8.9 | - | - | 10.4 | 22.9 | 0 | - | - |
| HCM Lane LOS | A | - | - | B | C | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.1 | 0.9 | 0 | - | - |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 380 | 967 | 1436 | 159 | 682 |
| Future Volume (vph) | 380 | 967 | 1436 | 159 | 682 |
| Turn Type | Prot | NA | NA | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | 4 | |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 30.5 |
| Total Split (s) | 20.0 | 55.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 22.2% | 61.1% | 38.9% | 38.9% | 38.9% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.5 |
| Lead/Lag | Lead | | Lag | | |
| Lead-Lag Optimize? | Yes | | Yes | | |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 19.3 | 52.3 | 29.0 | 27.2 | 27.2 |
| Actuated g/C Ratio | 0.21 | 0.58 | 0.32 | 0.30 | 0.30 |
| v/c Ratio | 1.06 | 0.50 | 1.48 | 0.31 | 0.96 |
| Control Delay | 101.0 | 12.9 | 245.9 | 24.8 | 40.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 101.0 | 12.9 | 245.9 | 24.8 | 40.2 |
| LOS | F | B | F | C | D |
| Approach Delay | | 37.7 | 245.9 | 37.3 | |
| Approach LOS | | D | F | D | |

| Intersection Summary | |
|---|---|
| Cycle Length: 90 | |
| Actuated Cycle Length: 90 | |
| Offset: 32.5 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 140 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.48 | |
| Intersection Signal Delay: 125.1 | Intersection LOS: F |
| Intersection Capacity Utilization 95.5% | ICU Level of Service F |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 380 | 967 | 1436 | 150 | 159 | 682 |
| Future Volume (veh/h) | 380 | 967 | 1436 | 150 | 159 | 682 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 409 | 1040 | 1544 | 161 | 171 | 733 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 322 | 1965 | 1064 | 110 | 613 | 546 |
| Arrive On Green | 0.18 | 0.54 | 0.32 | 0.32 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1810 | 3705 | 3398 | 341 | 1810 | 1610 |
| Grp Volume(v), veh/h | 409 | 1040 | 837 | 868 | 171 | 733 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1839 | 1810 | 1610 |
| Q Serve(g_s), s | 16.0 | 16.6 | 29.0 | 29.0 | 6.2 | 30.5 |
| Cycle Q Clear(g_c), s | 16.0 | 16.6 | 29.0 | 29.0 | 6.2 | 30.5 |
| Prop In Lane | 1.00 | | | 0.19 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 322 | 1965 | 582 | 592 | 613 | 546 |
| V/C Ratio(X) | 1.27 | 0.53 | 1.44 | 1.47 | 0.28 | 1.34 |
| Avail Cap(c_a), veh/h | 322 | 1965 | 582 | 592 | 613 | 546 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.0 | 13.1 | 30.5 | 30.5 | 21.7 | 29.8 |
| Incr Delay (d2), s/veh | 142.2 | 0.9 | 207.1 | 218.6 | 0.1 | 166.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 19.3 | 5.8 | 44.8 | 47.5 | 2.5 | 47.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 179.2 | 14.0 | 237.6 | 249.1 | 21.8 | 196.2 |
| LnGrp LOS | F | B | F | F | C | F |
| Approach Vol, veh/h | | 1449 | 1705 | | 904 | |
| Approach Delay, s/veh | | 60.6 | 243.5 | | 163.2 | |
| Approach LOS | | E | F | | F | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 55.0 | | 35.0 | 20.0 | 35.0 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 49.0 | | 30.5 | 16.0 | 29.0 |
| Max Q Clear Time (g_c+I1), s | | 18.6 | | 32.5 | 18.0 | 31.0 |
| Green Ext Time (p_c), s | | 7.6 | | 0.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 160.3 |
| HCM 6th LOS | F |

| Intersection | |
|---|---|
| Int Delay, s/veh | 7 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 12 | 0 | 0 | 3 |
| Future Vol, veh/h | 0 | 0 | 12 | 0 | 0 | 3 |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 13 | 0 | 0 | 3 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | - | 1 | 0 | - | 1 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | 0 | 1622 | - | 0 | 1084 |
| Stage 1 | - | 0 | - | - | 0 | - |
| Stage 2 | - | 0 | - | - | 0 | - |
| Platoon blocked, % | - | | | - | | |
| Mov Cap-1 Maneuver | - | - | 1622 | - | - | 1084 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 7.2 | 8.3 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | WBL | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 1084 | - | 1622 | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.008 | - |
| HCM Control Delay (s) | 8.3 | - | 7.2 | 0 |
| HCM Lane LOS | A | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 5 | 21 | 358 | 564 | 0 |
| Future Vol, veh/h | 0 | 5 | 21 | 358 | 564 | 0 |
| 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 | - | 50 | - | - | - |
| 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 | 2 | 2 |
| Mvmt Flow | 0 | 5 | 23 | 389 | 613 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 854 | 307 | 613 | 0 | - | 0 |
| Stage 1 | 613 | - | - | - | - | - |
| Stage 2 | 241 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 298 | 689 | 962 | - | - | - |
| Stage 1 | 503 | - | - | - | - | - |
| Stage 2 | 776 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 291 | 689 | 962 | - | - | - |
| Mov Cap-2 Maneuver | 395 | - | - | - | - | - |
| Stage 1 | 491 | - | - | - | - | - |
| Stage 2 | 776 | - | - | - | - | - |

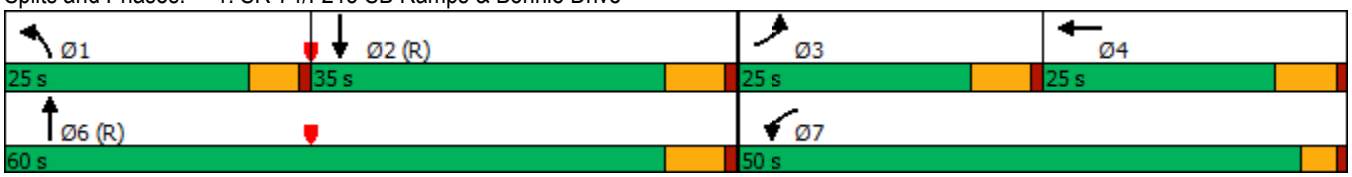
| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.3 | 0.5 | 0 |
| HCM LOS | B | | |

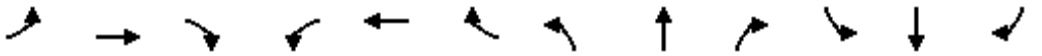
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 962 | - | 689 | - | - |
| HCM Lane V/C Ratio | 0.024 | - | 0.008 | - | - |
| HCM Control Delay (s) | 8.8 | - | 10.3 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 83 | 390 | 391 | 534 | 1111 | 54 | | |
| Future Volume (vph) | 83 | 390 | 391 | 534 | 1111 | 54 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 25.0 | | 25.0 | 60.0 | 35.0 | | 25.0 | 50.0 |
| Total Split (%) | 22.7% | | 22.7% | 54.5% | 31.8% | | 23% | 45% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 10.0 | 110.0 | 40.9 | 91.6 | 44.5 | 110.0 | | |
| Actuated g/C Ratio | 0.09 | 1.00 | 0.37 | 0.83 | 0.40 | 1.00 | | |
| v/c Ratio | 0.56 | 0.27 | 0.65 | 0.37 | 1.61 | 0.04 | | |
| Control Delay | 60.4 | 0.4 | 36.0 | 4.0 | 305.7 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 60.4 | 0.4 | 36.0 | 4.0 | 305.7 | 0.0 | | |
| LOS | E | A | D | A | F | A | | |
| Approach Delay | | | | 17.5 | 291.5 | | | |
| Approach LOS | | | | B | F | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 23 (21%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.61 | |
| Intersection Signal Delay: 140.9 | Intersection LOS: F |
| Intersection Capacity Utilization 97.2% | ICU Level of Service F |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 83 | 0 | 390 | 0 | 0 | 0 | 391 | 534 | 0 | 0 | 1111 | 54 |
| Future Volume (veh/h) | 83 | 0 | 390 | 0 | 0 | 0 | 391 | 534 | 0 | 0 | 1111 | 54 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 92 | 0 | 0 | 0 | 0 | 0 | 434 | 593 | 0 | 0 | 1234 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 117 | 0 | | 0 | 2 | 0 | 329 | 1570 | 0 | 0 | 1138 | |
| Arrive On Green | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.83 | 0.00 | 0.00 | 0.60 | 0.00 |
| Sat Flow, veh/h | 1810 | 92 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Grp Volume(v), veh/h | 92 | 55.0 | | 0 | 0 | 0 | 434 | 593 | 0 | 0 | 1234 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | E | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1900 | 1610 |
| Q Serve(g_s), s | 5.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 8.7 | 0.0 | 0.0 | 65.9 | 0.0 |
| Cycle Q Clear(g_c), s | 5.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 8.7 | 0.0 | 0.0 | 65.9 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 117 | | | 0 | 2 | 0 | 329 | 1570 | 0 | 0 | 1138 | |
| V/C Ratio(X) | 0.79 | | | 0.00 | 0.00 | 0.00 | 1.32 | 0.38 | 0.00 | 0.00 | 1.08 | |
| Avail Cap(c_a), veh/h | 313 | | | 0 | 328 | 0 | 329 | 1570 | 0 | 0 | 1138 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 50.7 | | | 0.0 | 0.0 | 0.0 | 45.0 | 2.4 | 0.0 | 0.0 | 22.1 | 0.0 |
| Incr Delay (d2), s/veh | 4.3 | | | 0.0 | 0.0 | 0.0 | 163.5 | 0.7 | 0.0 | 0.0 | 52.7 | 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 |
| %ile BackOfQ(50%),veh/ln | 2.5 | | | 0.0 | 0.0 | 0.0 | 23.5 | 1.6 | 0.0 | 0.0 | 40.7 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 55.0 | | | 0.0 | 0.0 | 0.0 | 208.5 | 3.1 | 0.0 | 0.0 | 74.7 | 0.0 |
| LnGrp LOS | E | | | A | A | A | F | A | A | A | F | |
| Approach Vol, veh/h | | | | | 0 | | | 1027 | | | 1234 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 89.9 | | | 74.7 | |
| Approach LOS | | | | | | | | F | | | E | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 6 | 7 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 25.0 | 71.9 | 13.1 | 0.0 | 96.9 | 13.1 |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 |
| Max Green Setting (Gmax), s | 20.0 | 29.0 | 19.0 | 19.0 | 54.0 | 46.0 |
| Max Q Clear Time (g_c+I1), s | 22.0 | 67.9 | 7.5 | 0.0 | 10.7 | 0.0 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.1 | 0.0 | 2.1 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 80.6 |
| HCM 6th LOS | F |

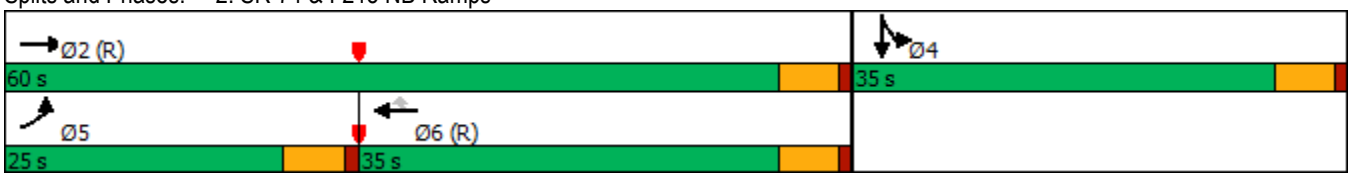
**Notes**

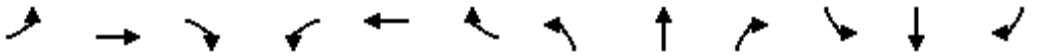
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 54 | 1448 | 837 | 972 | 0 |
| Future Volume (vph) | 54 | 1448 | 837 | 972 | 0 |
| Turn Type | Prot | NA | NA | Perm | NA |
| Protected Phases | 5 | 2 | 6 | | 4 |
| Permitted Phases | | | | 6 | |
| Detector Phase | 5 | 2 | 6 | 6 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 50.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.3 | 55.3 | 10.3 | 10.3 | 10.3 |
| Total Split (s) | 25.0 | 60.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 26.3% | 63.2% | 36.8% | 36.8% | 36.8% |
| Yellow Time (s) | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |
| Lead/Lag | Lead | | Lag | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | Yes | |
| Recall Mode | None | C-Min | C-Min | C-Min | None |
| Act Effct Green (s) | 7.6 | 53.8 | 42.9 | 42.9 | 30.6 |
| Actuated g/C Ratio | 0.08 | 0.57 | 0.45 | 0.45 | 0.32 |
| v/c Ratio | 0.40 | 0.76 | 0.55 | 0.83 | 1.06 |
| Control Delay | 49.0 | 18.7 | 21.4 | 9.9 | 82.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 49.0 | 18.7 | 21.4 | 9.9 | 82.6 |
| LOS | D | B | C | A | F |
| Approach Delay | | 19.8 | 15.2 | | 82.6 |
| Approach LOS | | B | B | | F |

| Intersection Summary | |
|---|---|
| Cycle Length: 95 | |
| Actuated Cycle Length: 95 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.06 | |
| Intersection Signal Delay: 27.7 | Intersection LOS: C |
| Intersection Capacity Utilization 85.7% | ICU Level of Service E |
| Analysis Period (min) 15 | |

Splits and Phases: 2: SR-74 & I-215 NB Ramps





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 54 | 1448 | 0 | 0 | 837 | 972 | 0 | 0 | 0 | 539 | 0 | 87 |
| Future Volume (veh/h) | 54 | 1448 | 0 | 0 | 837 | 972 | 0 | 0 | 0 | 539 | 0 | 87 |
| 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 | 1900 | 1900 | 0 | 0 | 1900 | 1900 | | | | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 58 | 1557 | 0 | 0 | 900 | 0 | | | | 580 | 0 | 94 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | | | | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| Cap, veh/h | 75 | 2079 | 0 | 0 | 1727 | | | | | 479 | 0 | 78 |
| Arrive On Green | 0.04 | 0.58 | 0.00 | 0.00 | 0.48 | 0.00 | | | | 0.31 | 0.00 | 0.31 |
| Sat Flow, veh/h | 1810 | 3705 | 0 | 0 | 3705 | 1610 | | | | 1531 | 0 | 248 |
| Grp Volume(v), veh/h | 58 | 1557 | 0 | 0 | 900 | 0 | | | | 674 | 0 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 0 | 0 | 1805 | 1610 | | | | 1779 | 0 | 0 |
| Q Serve(g_s), s | 3.0 | 30.6 | 0.0 | 0.0 | 16.5 | 0.0 | | | | 29.7 | 0.0 | 0.0 |
| Cycle Q Clear(g_c), s | 3.0 | 30.6 | 0.0 | 0.0 | 16.5 | 0.0 | | | | 29.7 | 0.0 | 0.0 |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | | | | 0.86 | | 0.14 |
| Lane Grp Cap(c), veh/h | 75 | 2079 | 0 | 0 | 1727 | | | | | 556 | 0 | 0 |
| V/C Ratio(X) | 0.77 | 0.75 | 0.00 | 0.00 | 0.52 | | | | | 1.21 | 0.00 | 0.00 |
| Avail Cap(c_a), veh/h | 375 | 2079 | 0 | 0 | 1727 | | | | | 556 | 0 | 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 | 1.00 | 0.00 | 0.00 | 0.09 | 0.00 | | | | 1.00 | 0.00 | 0.00 |
| Uniform Delay (d), s/veh | 45.1 | 15.0 | 0.0 | 0.0 | 17.2 | 0.0 | | | | 32.7 | 0.0 | 0.0 |
| Incr Delay (d2), s/veh | 6.0 | 2.5 | 0.0 | 0.0 | 0.1 | 0.0 | | | | 111.3 | 0.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.4 | 10.9 | 0.0 | 0.0 | 6.7 | 0.0 | | | | 29.0 | 0.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 51.1 | 17.6 | 0.0 | 0.0 | 17.3 | 0.0 | | | | 143.9 | 0.0 | 0.0 |
| LnGrp LOS | D | B | A | A | B | | | | | F | A | A |
| Approach Vol, veh/h | | 1615 | | | 900 | | | | | | 674 | |
| Approach Delay, s/veh | | 18.8 | | | 17.3 | | | | | | 143.9 | |
| Approach LOS | | B | | | B | | | | | | F | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 60.0 | | 35.0 | 9.3 | 50.7 | | | | | | |
| Change Period (Y+Rc), s | | 5.3 | | 5.3 | 5.3 | 5.3 | | | | | | |
| Max Green Setting (Gmax), s | | 54.7 | | 29.7 | 19.7 | 29.7 | | | | | | |
| Max Q Clear Time (g_c+I1), s | | 32.6 | | 31.7 | 5.0 | 18.5 | | | | | | |
| Green Ext Time (p_c), s | | 7.6 | | 0.0 | 0.0 | 3.6 | | | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 44.8 | | | | | | | | | |
| HCM 6th LOS | | | D | | | | | | | | | |

**Notes**

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

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 60 |
| Intersection LOS | F |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 2 | 12 | 334 | 2 | 30 | 5 | 155 | 455 | 29 | 170 | 1 |
| Future Vol, veh/h | 3 | 2 | 12 | 334 | 2 | 30 | 5 | 155 | 455 | 29 | 170 | 1 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 3 | 16 | 434 | 3 | 39 | 6 | 201 | 591 | 38 | 221 | 1 |
| Number of Lanes | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 3 | 2 | 3 | 3 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 3 | 3 | 2 | 3 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 3 | 3 | 3 | 2 |
| HCM Control Delay | 11.7 | 17.9 | 101.4 | 13.9 |
| HCM LOS | B | C | F | B |

| Lane | NBLn1 | NBLn2 | NBLn3 | EBLn1 | EBLn2 | WBLn1 | WBLn2 | WBLn3 | SBLn1 | SBLn2 | SBLn3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vol Left, % | 100% | 0% | 0% | 75% | 0% | 100% | 100% | 0% | 100% | 0% | 0% |
| Vol Thru, % | 0% | 100% | 10% | 25% | 8% | 0% | 0% | 6% | 0% | 100% | 98% |
| Vol Right, % | 0% | 0% | 90% | 0% | 92% | 0% | 0% | 94% | 0% | 0% | 2% |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 5 | 103 | 507 | 4 | 13 | 167 | 167 | 32 | 29 | 113 | 58 |
| LT Vol | 5 | 0 | 0 | 3 | 0 | 167 | 167 | 0 | 29 | 0 | 0 |
| Through Vol | 0 | 103 | 52 | 1 | 1 | 0 | 0 | 2 | 0 | 113 | 57 |
| RT Vol | 0 | 0 | 455 | 0 | 12 | 0 | 0 | 30 | 0 | 0 | 1 |
| Lane Flow Rate | 6 | 134 | 658 | 5 | 17 | 217 | 217 | 42 | 38 | 147 | 75 |
| Geometry Grp | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Degree of Util (X) | 0.014 | 0.264 | 1.178 | 0.013 | 0.038 | 0.483 | 0.483 | 0.079 | 0.088 | 0.325 | 0.165 |
| Departure Headway (Hd) | 7.588 | 7.083 | 6.447 | 9.441 | 8.42 | 8.344 | 8.344 | 7.183 | 8.799 | 8.29 | 8.278 |
| Convergence, Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Cap | 470 | 505 | 559 | 381 | 428 | 434 | 434 | 502 | 410 | 437 | 436 |
| Service Time | 5.366 | 4.86 | 4.224 | 7.141 | 6.12 | 6.044 | 6.044 | 4.883 | 6.499 | 5.99 | 5.978 |
| HCM Lane V/C Ratio | 0.013 | 0.265 | 1.177 | 0.013 | 0.04 | 0.5 | 0.5 | 0.084 | 0.093 | 0.336 | 0.172 |
| HCM Control Delay | 10.5 | 12.4 | 120.4 | 12.3 | 11.5 | 18.6 | 18.6 | 10.5 | 12.3 | 14.9 | 12.6 |
| HCM Lane LOS | B | B | F | B | B | C | C | B | B | B | B |
| HCM 95th-tile Q | 0 | 1.1 | 22.9 | 0 | 0.1 | 2.6 | 2.6 | 0.3 | 0.3 | 1.4 | 0.6 |

| 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 | 0 | 31 | 30 | 0 | 1 | 24 | 625 | 1 | 1 | 535 | 0 |
| Future Vol, veh/h | 0 | 0 | 31 | 30 | 0 | 1 | 24 | 625 | 1 | 1 | 535 | 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 | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 39 | 38 | 0 | 1 | 30 | 791 | 1 | 1 | 677 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1135 | 1531 | 339 | 1193 | 1531 | 396 | 677 | 0 | 0 | 792 | 0 | 0 |
| Stage 1 | 679 | 679 | - | 852 | 852 | - | - | - | - | - | - | - |
| Stage 2 | 456 | 852 | - | 341 | 679 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 160 | 118 | 663 | 145 | 118 | 609 | 924 | - | - | 838 | - | - |
| Stage 1 | 412 | 454 | - | 325 | 379 | - | - | - | - | - | - | - |
| Stage 2 | 559 | 379 | - | 653 | 454 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 156 | 114 | 663 | 133 | 114 | 609 | 924 | - | - | 838 | - | - |
| Mov Cap-2 Maneuver | 156 | 114 | - | 133 | 114 | - | - | - | - | - | - | - |
| Stage 1 | 399 | 454 | - | 315 | 367 | - | - | - | - | - | - | - |
| Stage 2 | 540 | 367 | - | 614 | 454 | - | - | - | - | - | - | - |

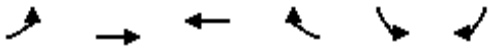
| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.8 | 41.9 | 0.3 | 0 |
| HCM LOS | B | E | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 924 | - | - | 663 | 136 | 838 | - | - |
| HCM Lane V/C Ratio | 0.033 | - | - | 0.059 | 0.289 | 0.002 | - | - |
| HCM Control Delay (s) | 9 | - | - | 10.8 | 41.9 | 9.3 | - | - |
| HCM Lane LOS | A | - | - | B | E | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.2 | 1.1 | 0 | - | - |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 555 | 1422 | 1189 | 178 | 624 |
| Future Volume (vph) | 555 | 1422 | 1189 | 178 | 624 |
| Turn Type | Prot | NA | NA | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | 4 | |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 4 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 30.5 |
| Total Split (s) | 20.0 | 55.0 | 35.0 | 35.0 | 35.0 |
| Total Split (%) | 22.2% | 61.1% | 38.9% | 38.9% | 38.9% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.5 |
| Lead/Lag | Lead | | Lag | | |
| Lead-Lag Optimize? | Yes | | Yes | | |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 23.2 | 56.2 | 29.0 | 23.3 | 23.3 |
| Actuated g/C Ratio | 0.26 | 0.62 | 0.32 | 0.26 | 0.26 |
| v/c Ratio | 1.27 | 0.67 | 1.24 | 0.40 | 0.94 |
| Control Delay | 170.6 | 14.5 | 143.1 | 28.4 | 34.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 170.6 | 14.5 | 143.1 | 28.4 | 34.6 |
| LOS | F | B | F | C | C |
| Approach Delay | | 58.3 | 143.1 | 33.2 | |
| Approach LOS | | E | F | C | |

| Intersection Summary | |
|---|---|
| Cycle Length: 90 | |
| Actuated Cycle Length: 90 | |
| Offset: 32.5 (36%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 150 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.27 | |
| Intersection Signal Delay: 81.0 | Intersection LOS: F |
| Intersection Capacity Utilization 90.4% | ICU Level of Service E |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road



| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 555 | 1422 | 1189 | 152 | 178 | 624 |
| Future Volume (veh/h) | 555 | 1422 | 1189 | 152 | 178 | 624 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 590 | 1513 | 1265 | 162 | 189 | 664 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 322 | 1965 | 1038 | 132 | 613 | 546 |
| Arrive On Green | 0.18 | 0.54 | 0.32 | 0.32 | 0.34 | 0.34 |
| Sat Flow, veh/h | 1810 | 3705 | 3316 | 410 | 1810 | 1610 |
| Grp Volume(v), veh/h | 590 | 1513 | 706 | 721 | 189 | 664 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1826 | 1810 | 1610 |
| Q Serve(g_s), s | 16.0 | 29.6 | 29.0 | 29.0 | 6.9 | 30.5 |
| Cycle Q Clear(g_c), s | 16.0 | 29.6 | 29.0 | 29.0 | 6.9 | 30.5 |
| Prop In Lane | 1.00 | | | 0.22 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 322 | 1965 | 582 | 588 | 613 | 546 |
| V/C Ratio(X) | 1.83 | 0.77 | 1.21 | 1.22 | 0.31 | 1.22 |
| Avail Cap(c_a), veh/h | 322 | 1965 | 582 | 588 | 613 | 546 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.56 | 0.56 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 37.0 | 16.1 | 30.5 | 30.5 | 22.0 | 29.8 |
| Incr Delay (d2), s/veh | 382.1 | 1.7 | 111.6 | 115.7 | 0.1 | 113.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 40.7 | 10.4 | 29.3 | 30.3 | 2.7 | 39.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 419.1 | 17.8 | 142.1 | 146.2 | 22.1 | 143.2 |
| LnGrp LOS | F | B | F | F | C | F |
| Approach Vol, veh/h | | 2103 | 1427 | | 853 | |
| Approach Delay, s/veh | | 130.4 | 144.2 | | 116.4 | |
| Approach LOS | | F | F | | F | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 55.0 | | 35.0 | 20.0 | 35.0 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 49.0 | | 30.5 | 16.0 | 29.0 |
| Max Q Clear Time (g_c+I1), s | | 31.6 | | 32.5 | 18.0 | 31.0 |
| Green Ext Time (p_c), s | | 9.6 | | 0.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 132.1 |
| HCM 6th LOS | F |

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.4 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 6 | 0 | 0 | 9 |
| Future Vol, veh/h | 0 | 0 | 6 | 0 | 0 | 9 |
| 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, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 7 | 0 | 0 | 10 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | - | 1 | 0 | - | 1 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | - | 4.12 | - | - | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 2.218 | - | - | 3.318 |
| Pot Cap-1 Maneuver | - | 0 | 1622 | - | 0 | 1084 |
| Stage 1 | - | 0 | - | - | 0 | - |
| Stage 2 | - | 0 | - | - | 0 | - |
| Platoon blocked, % | - | | | - | | |
| Mov Cap-1 Maneuver | - | - | 1622 | - | - | 1084 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 7.2 | 8.4 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | WBL | WBT |
|---|---|---|---|---|
| Capacity (veh/h) | 1084 | - | 1622 | - |
| HCM Lane V/C Ratio | 0.009 | - | 0.004 | - |
| HCM Control Delay (s) | 8.4 | - | 7.2 | 0 |
| HCM Lane LOS | A | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 18 | 11 | 615 | 518 | 0 |
| Future Vol, veh/h | 0 | 18 | 11 | 615 | 518 | 0 |
| 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 | - | 50 | - | - | - |
| 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 | 2 | 2 |
| Mvmt Flow | 0 | 20 | 12 | 668 | 563 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 921 | 282 | 563 | 0 | - | 0 |
| Stage 1 | 563 | - | - | - | - | - |
| Stage 2 | 358 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | 4.14 | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | 2.22 | - | - | - |
| Pot Cap-1 Maneuver | 270 | 715 | 1005 | - | - | - |
| Stage 1 | 534 | - | - | - | - | - |
| Stage 2 | 678 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 267 | 715 | 1005 | - | - | - |
| Mov Cap-2 Maneuver | 389 | - | - | - | - | - |
| Stage 1 | 528 | - | - | - | - | - |
| Stage 2 | 678 | - | - | - | - | - |

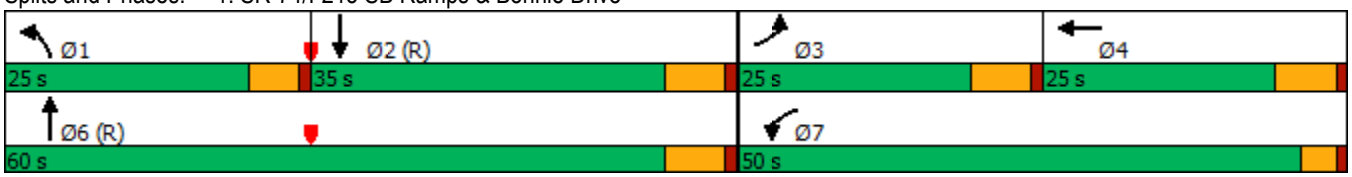
| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.2 | 0.2 | 0 |
| HCM LOS | B | | |

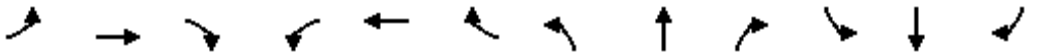
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1005 | - | 715 | - | - |
| HCM Lane V/C Ratio | 0.012 | - | 0.027 | - | - |
| HCM Control Delay (s) | 8.6 | - | 10.2 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 69 | 265 | 337 | 773 | 783 | 65 | | |
| Future Volume (vph) | 69 | 265 | 337 | 773 | 783 | 65 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 25.0 | | 25.0 | 60.0 | 35.0 | | 25.0 | 50.0 |
| Total Split (%) | 22.7% | | 22.7% | 54.5% | 31.8% | | 23% | 45% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 9.0 | 110.0 | 32.5 | 92.5 | 53.8 | 110.0 | | |
| Actuated g/C Ratio | 0.08 | 1.00 | 0.30 | 0.84 | 0.49 | 1.00 | | |
| v/c Ratio | 0.51 | 0.18 | 0.69 | 0.53 | 0.48 | 0.04 | | |
| Control Delay | 59.8 | 0.2 | 42.4 | 5.0 | 20.8 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 59.8 | 0.2 | 42.4 | 5.0 | 20.8 | 0.0 | | |
| LOS | E | A | D | A | C | A | | |
| Approach Delay | | | | 16.4 | 19.2 | | | |
| Approach LOS | | | | B | B | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 23 (21%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 65 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.69 | |
| Intersection Signal Delay: 16.9 | Intersection LOS: B |
| Intersection Capacity Utilization 56.6% | ICU Level of Service B |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 69 | 0 | 265 | 0 | 0 | 0 | 337 | 773 | 0 | 0 | 783 | 65 |
| Future Volume (veh/h) | 69 | 0 | 265 | 0 | 0 | 0 | 337 | 773 | 0 | 0 | 783 | 65 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 75 | 0 | 0 | 0 | 0 | 0 | 366 | 840 | 0 | 0 | 851 | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 97 | 0 | | 0 | 2 | 0 | 329 | 1591 | 0 | 0 | 2202 | |
| Arrive On Green | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.84 | 0.00 | 0.00 | 0.61 | 0.00 |
| Sat Flow, veh/h | 1810 | 75 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 3705 | 1610 |
| Grp Volume(v), veh/h | 75 | 56.3 | | 0 | 0 | 0 | 366 | 840 | 0 | 0 | 851 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | E | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1805 | 1610 |
| Q Serve(g_s), s | 4.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 14.2 | 0.0 | 0.0 | 13.2 | 0.0 |
| Cycle Q Clear(g_c), s | 4.5 | | | 0.0 | 0.0 | 0.0 | 20.0 | 14.2 | 0.0 | 0.0 | 13.2 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 97 | | | 0 | 2 | 0 | 329 | 1591 | 0 | 0 | 2202 | |
| V/C Ratio(X) | 0.77 | | | 0.00 | 0.00 | 0.00 | 1.11 | 0.53 | 0.00 | 0.00 | 0.39 | |
| Avail Cap(c_a), veh/h | 313 | | | 0 | 328 | 0 | 329 | 1591 | 0 | 0 | 2202 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 51.4 | | | 0.0 | 0.0 | 0.0 | 45.0 | 2.6 | 0.0 | 0.0 | 10.9 | 0.0 |
| Incr Delay (d2), s/veh | 4.9 | | | 0.0 | 0.0 | 0.0 | 83.4 | 1.3 | 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 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.1 | | | 0.0 | 0.0 | 0.0 | 16.2 | 2.3 | 0.0 | 0.0 | 4.7 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 56.3 | | | 0.0 | 0.0 | 0.0 | 128.4 | 3.9 | 0.0 | 0.0 | 11.5 | 0.0 |
| LnGrp LOS | E | | | A | A | A | F | A | A | A | B | |
| Approach Vol, veh/h | | | | | 0 | | | 1206 | | | 851 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 41.7 | | | 11.5 | |
| Approach LOS | | | | | | | | D | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 6 | 7 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 25.0 | 73.1 | 11.9 | 0.0 | 98.1 | 11.9 |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 |
| Max Green Setting (Gmax), s | 20.0 | 29.0 | 19.0 | 19.0 | 54.0 | 46.0 |
| Max Q Clear Time (g_c+I1), s | 22.0 | 15.2 | 6.5 | 0.0 | 16.2 | 0.0 |
| Green Ext Time (p_c), s | 0.0 | 3.0 | 0.1 | 0.0 | 3.5 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 30.1 |
| HCM 6th LOS | C |

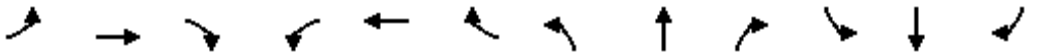
**Notes**

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

| Lane Group | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 20 | 427 | 20 | 66 | 58 | 1 | 80 |
| Future Volume (vph) | 20 | 427 | 20 | 66 | 58 | 1 | 80 |
| Turn Type | NA | Split | NA | Perm | NA | Perm | NA |
| Protected Phases | 4 | 8 | 8 | | 2 | | 6 |
| Permitted Phases | | | | 2 | | 6 | |
| Detector Phase | 4 | 8 | 8 | 2 | 2 | 6 | 6 |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 22.5 | 23.0 | 23.0 | 24.5 | 24.5 | 24.5 | 24.5 |
| Total Split (%) | 32.1% | 32.9% | 32.9% | 35.0% | 35.0% | 35.0% | 35.0% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Recall Mode | None | None | None | C-Max | C-Max | C-Max | C-Max |
| Act Effct Green (s) | 6.3 | 14.6 | 14.6 | 37.6 | 37.6 | 37.6 | 37.6 |
| Actuated g/C Ratio | 0.09 | 0.21 | 0.21 | 0.54 | 0.54 | 0.54 | 0.54 |
| v/c Ratio | 0.26 | 0.63 | 0.06 | 0.10 | 0.17 | 0.00 | 0.05 |
| Control Delay | 14.5 | 28.8 | 19.0 | 11.1 | 3.2 | 11.0 | 9.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 14.5 | 28.8 | 19.0 | 11.1 | 3.2 | 11.0 | 9.8 |
| LOS | B | C | B | B | A | B | A |
| Approach Delay | 14.5 | | 28.3 | | 4.6 | | 9.8 |
| Approach LOS | B | | C | | A | | A |

| Intersection Summary | |
|---|---|
| Cycle Length: 70 | |
| Actuated Cycle Length: 70 | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | |
| Natural Cycle: 70 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.63 | |
| Intersection Signal Delay: 16.8 | Intersection LOS: B |
| Intersection Capacity Utilization 36.7% | ICU Level of Service A |
| Analysis Period (min) 15 | |

Splits and Phases: 3: Trumble Road & Mapes Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 3 | 20 | 60 | 427 | 20 | 3 | 66 | 58 | 234 | 1 | 80 | 4 |
| Future Volume (veh/h) | 3 | 20 | 60 | 427 | 20 | 3 | 66 | 58 | 234 | 1 | 80 | 4 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 3 | 22 | 65 | 459 | 22 | 3 | 71 | 62 | 252 | 1 | 86 | 4 |
| 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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 13 | 99 | 96 | 594 | 277 | 38 | 857 | 1044 | 931 | 644 | 2032 | 94 |
| Arrive On Green | 0.06 | 0.06 | 0.06 | 0.17 | 0.17 | 0.17 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 |
| Sat Flow, veh/h | 227 | 1662 | 1610 | 3510 | 1637 | 223 | 1327 | 1805 | 1610 | 1082 | 3513 | 162 |
| Grp Volume(v), veh/h | 25 | 0 | 65 | 459 | 0 | 25 | 71 | 62 | 252 | 1 | 44 | 46 |
| Grp Sat Flow(s),veh/h/ln | 1889 | 0 | 1610 | 1755 | 0 | 1860 | 1327 | 1805 | 1610 | 1082 | 1805 | 1871 |
| Q Serve(g_s), s | 0.9 | 0.0 | 2.8 | 8.7 | 0.0 | 0.8 | 1.7 | 1.0 | 5.5 | 0.0 | 0.7 | 0.7 |
| Cycle Q Clear(g_c), s | 0.9 | 0.0 | 2.8 | 8.7 | 0.0 | 0.8 | 2.5 | 1.0 | 5.5 | 5.5 | 0.7 | 0.7 |
| Prop In Lane | 0.12 | | 1.00 | 1.00 | | 0.12 | 1.00 | | 1.00 | 1.00 | | 0.09 |
| Lane Grp Cap(c), veh/h | 112 | 0 | 96 | 594 | 0 | 315 | 857 | 1044 | 931 | 644 | 1044 | 1082 |
| V/C Ratio(X) | 0.22 | 0.00 | 0.68 | 0.77 | 0.00 | 0.08 | 0.08 | 0.06 | 0.27 | 0.00 | 0.04 | 0.04 |
| Avail Cap(c_a), veh/h | 486 | 0 | 414 | 928 | 0 | 492 | 857 | 1044 | 931 | 644 | 1044 | 1082 |
| 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 | 31.4 | 0.0 | 32.3 | 27.8 | 0.0 | 24.5 | 6.9 | 6.4 | 7.4 | 8.8 | 6.4 | 6.4 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 8.2 | 2.2 | 0.0 | 0.1 | 0.2 | 0.1 | 0.7 | 0.0 | 0.1 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 0.0 | 1.2 | 3.4 | 0.0 | 0.3 | 0.4 | 0.3 | 1.6 | 0.0 | 0.2 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 32.4 | 0.0 | 40.4 | 30.0 | 0.0 | 24.6 | 7.1 | 6.5 | 8.1 | 8.8 | 6.5 | 6.5 |
| LnGrp LOS | C | A | D | C | A | C | A | A | A | A | A | A |
| Approach Vol, veh/h | | 90 | | | 484 | | | 385 | | | 91 | |
| Approach Delay, s/veh | | 38.2 | | | 29.7 | | | 7.7 | | | 6.5 | |
| Approach LOS | | D | | | C | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 45.0 | | 8.7 | | 45.0 | | 16.3 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 20.0 | | 18.0 | | 20.0 | | 18.5 | | | | |
| Max Q Clear Time (g_c+I1), s | | 7.5 | | 4.8 | | 7.5 | | 10.7 | | | | |
| Green Ext Time (p_c), s | | 1.6 | | 0.3 | | 0.2 | | 1.1 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 20.3 | | | | | | | | | |
| HCM 6th LOS | | | C | | | | | | | | | |

| 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 | 0 | 0 | 21 | 57 | 1 | 1 | 30 | 378 | 10 | 0 | 567 | 2 |
| Future Vol, veh/h | 0 | 0 | 21 | 57 | 1 | 1 | 30 | 378 | 10 | 0 | 567 | 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 | - | - | - | - | - | - | 100 | - | - | 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, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 23 | 63 | 1 | 1 | 33 | 415 | 11 | 0 | 623 | 2 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 898 | 1116 | 313 | 799 | 1112 | 213 | 625 | 0 | 0 | 426 | 0 | 0 |
| Stage 1 | 624 | 624 | - | 487 | 487 | - | - | - | - | - | - | - |
| Stage 2 | 274 | 492 | - | 312 | 625 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 237 | 209 | 689 | 280 | 211 | 798 | 966 | - | - | 1144 | - | - |
| Stage 1 | 445 | 481 | - | 536 | 554 | - | - | - | - | - | - | - |
| Stage 2 | 714 | 551 | - | 679 | 480 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 230 | 202 | 689 | 263 | 204 | 798 | 966 | - | - | 1144 | - | - |
| Mov Cap-2 Maneuver | 230 | 202 | - | 263 | 204 | - | - | - | - | - | - | - |
| Stage 1 | 430 | 481 | - | 518 | 535 | - | - | - | - | - | - | - |
| Stage 2 | 687 | 532 | - | 656 | 480 | - | - | - | - | - | - | - |

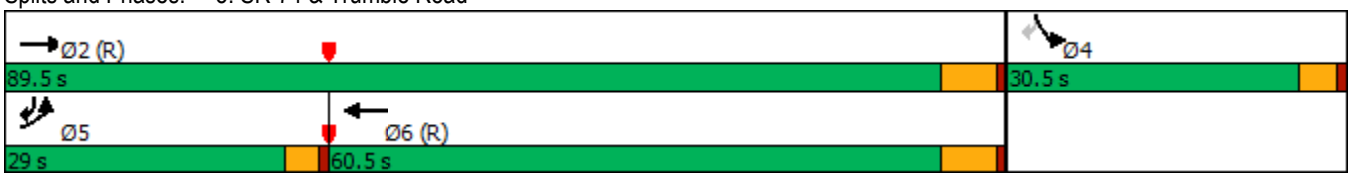
| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.4 | 22.9 | 0.6 | 0 |
| HCM LOS | B | C | | |

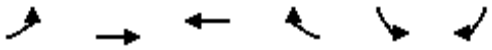
| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 966 | - | - | 689 | 265 | 1144 | - | - |
| HCM Lane V/C Ratio | 0.034 | - | - | 0.033 | 0.245 | - | - | - |
| HCM Control Delay (s) | 8.9 | - | - | 10.4 | 22.9 | 0 | - | - |
| HCM Lane LOS | A | - | - | B | C | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.1 | 0.9 | 0 | - | - |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 380 | 967 | 1436 | 159 | 682 |
| Future Volume (vph) | 380 | 967 | 1436 | 159 | 682 |
| Turn Type | Prot | NA | NA | Prot | pm+ov |
| Protected Phases | 5 | 2 | 6 | 4 | 5 |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 5 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 9.0 |
| Total Split (s) | 29.0 | 89.5 | 60.5 | 30.5 | 29.0 |
| Total Split (%) | 24.2% | 74.6% | 50.4% | 25.4% | 24.2% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.0 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.0 |
| Lead/Lag | Lead | | Lag | | Lead |
| Lead-Lag Optimize? | | | | | |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 34.8 | 93.8 | 55.0 | 15.7 | 55.0 |
| Actuated g/C Ratio | 0.29 | 0.78 | 0.46 | 0.13 | 0.46 |
| v/c Ratio | 0.78 | 0.37 | 1.04 | 0.72 | 0.56 |
| Control Delay | 51.9 | 4.8 | 66.3 | 66.8 | 24.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 51.9 | 4.8 | 66.3 | 66.8 | 24.9 |
| LOS | D | A | E | E | C |
| Approach Delay | | 18.1 | 66.3 | 32.8 | |
| Approach LOS | | B | E | C | |

| Intersection Summary | |
|---|---|
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 130 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.04 | |
| Intersection Signal Delay: 41.6 | Intersection LOS: D |
| Intersection Capacity Utilization 86.4% | ICU Level of Service E |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road





| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 380 | 967 | 1436 | 150 | 159 | 682 |
| Future Volume (veh/h) | 380 | 967 | 1436 | 150 | 159 | 682 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 409 | 1040 | 1544 | 161 | 171 | 733 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 377 | 2512 | 1500 | 155 | 392 | 1204 |
| Arrive On Green | 0.21 | 0.70 | 0.45 | 0.45 | 0.22 | 0.22 |
| Sat Flow, veh/h | 1810 | 3705 | 3398 | 341 | 1810 | 2834 |
| Grp Volume(v), veh/h | 409 | 1040 | 837 | 868 | 171 | 733 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1839 | 1810 | 1417 |
| Q Serve(g_s), s | 25.0 | 14.8 | 54.5 | 54.5 | 9.8 | 24.1 |
| Cycle Q Clear(g_c), s | 25.0 | 14.8 | 54.5 | 54.5 | 9.8 | 24.1 |
| Prop In Lane | 1.00 | | | 0.19 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 377 | 2512 | 820 | 835 | 392 | 1204 |
| V/C Ratio(X) | 1.08 | 0.41 | 1.02 | 1.04 | 0.44 | 0.61 |
| Avail Cap(c_a), veh/h | 377 | 2512 | 820 | 835 | 392 | 1204 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.89 | 0.89 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 47.5 | 7.8 | 32.8 | 32.8 | 40.7 | 26.8 |
| Incr Delay (d2), s/veh | 68.5 | 0.4 | 36.8 | 41.9 | 0.3 | 0.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 17.9 | 4.8 | 30.0 | 31.7 | 4.3 | 19.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 116.0 | 8.2 | 69.5 | 74.7 | 40.9 | 27.4 |
| LnGrp LOS | F | A | F | F | D | C |
| Approach Vol, veh/h | | 1449 | 1705 | | 904 | |
| Approach Delay, s/veh | | 38.7 | 72.1 | | 30.0 | |
| Approach LOS | | D | E | | C | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 89.5 | | 30.5 | 29.0 | 60.5 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 83.5 | | 26.0 | 25.0 | 54.5 |
| Max Q Clear Time (g_c+I1), s | | 16.8 | | 26.1 | 27.0 | 56.5 |
| Green Ext Time (p_c), s | | 8.3 | | 0.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 50.8 |
| HCM 6th LOS | D |

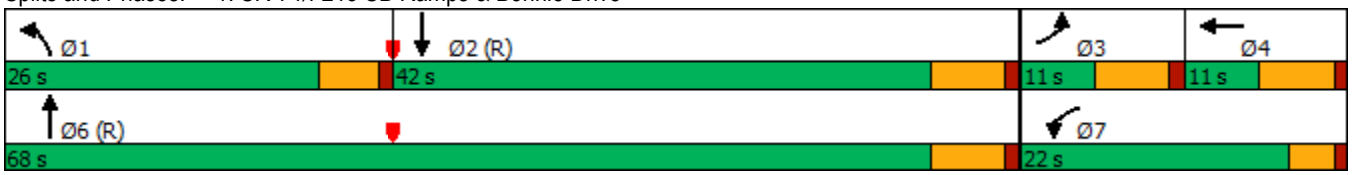
**Notes**

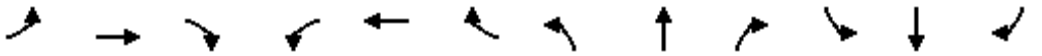
User approved pedestrian interval to be less than phase max green.

| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR | Ø4 | Ø7 |
|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | |
| Traffic Volume (vph) | 83 | 390 | 391 | 534 | 1111 | 54 | | |
| Future Volume (vph) | 83 | 390 | 391 | 534 | 1111 | 54 | | |
| Turn Type | Prot | Free | Prot | NA | NA | Free | | |
| Protected Phases | 3 | | 1 | 6 | 2 | | 4 | 7 |
| Permitted Phases | | Free | | | | Free | | |
| Detector Phase | 3 | | 1 | 6 | 2 | | | |
| Switch Phase | | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | | 10.0 | 11.0 | 11.0 | | 11.0 | 9.0 |
| Total Split (s) | 11.0 | | 26.0 | 68.0 | 42.0 | | 11.0 | 22.0 |
| Total Split (%) | 12.2% | | 28.9% | 75.6% | 46.7% | | 12% | 24% |
| Yellow Time (s) | 5.0 | | 4.0 | 5.0 | 5.0 | | 5.0 | 3.0 |
| All-Red Time (s) | 1.0 | | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | 0.0 | 0.0 | | | |
| Total Lost Time (s) | 6.0 | | 5.0 | 6.0 | 6.0 | | | |
| Lead/Lag | Lead | | Lead | | Lag | | Lag | |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes | |
| Recall Mode | None | | None | C-Min | C-Min | | None | None |
| Act Effct Green (s) | 5.9 | 90.0 | 29.8 | 72.1 | 37.2 | 90.0 | | |
| Actuated g/C Ratio | 0.07 | 1.00 | 0.33 | 0.80 | 0.41 | 1.00 | | |
| v/c Ratio | 0.77 | 0.27 | 0.73 | 0.39 | 0.83 | 0.04 | | |
| Control Delay | 83.3 | 0.4 | 34.3 | 3.4 | 29.6 | 0.0 | | |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Delay | 83.3 | 0.4 | 34.3 | 3.4 | 29.6 | 0.0 | | |
| LOS | F | A | C | A | C | A | | |
| Approach Delay | | | | 16.4 | 28.2 | | | |
| Approach LOS | | | | B | C | | | |

| Intersection Summary | |
|---|---|
| Cycle Length: 90 | |
| Actuated Cycle Length: 90 | |
| Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.83 | |
| Intersection Signal Delay: 21.5 | Intersection LOS: C |
| Intersection Capacity Utilization 69.5% | ICU Level of Service C |
| Analysis Period (min) 15 | |

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Drive





| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 83 | 0 | 390 | 0 | 0 | 0 | 391 | 534 | 0 | 0 | 1111 | 54 |
| Future Volume (veh/h) | 83 | 0 | 390 | 0 | 0 | 0 | 391 | 534 | 0 | 0 | 1111 | 54 |
| 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 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 | 1900 | 0 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 92 | 0 | 0 | 0 | 0 | 0 | 434 | 593 | 0 | 0 | 1234 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 101 | 0 | | 0 | 2 | 0 | 422 | 1541 | 0 | 0 | 1885 | |
| Arrive On Green | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 | 0.81 | 0.00 | 0.00 | 0.52 | 0.00 |
| Sat Flow, veh/h | 1810 | 92 | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 3705 | 1610 |
| Grp Volume(v), veh/h | 92 | 104.4 | | 0 | 0 | 0 | 434 | 593 | 0 | 0 | 1234 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | F | | 0 | 1900 | 0 | 1810 | 1900 | 0 | 0 | 1805 | 1610 |
| Q Serve(g_s), s | 4.6 | | | 0.0 | 0.0 | 0.0 | 21.0 | 7.7 | 0.0 | 0.0 | 22.3 | 0.0 |
| Cycle Q Clear(g_c), s | 4.6 | | | 0.0 | 0.0 | 0.0 | 21.0 | 7.7 | 0.0 | 0.0 | 22.3 | 0.0 |
| Prop In Lane | 1.00 | | | 0.00 | | 0.00 | 1.00 | | 0.00 | 0.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 101 | | | 0 | 2 | 0 | 422 | 1541 | 0 | 0 | 1885 | |
| V/C Ratio(X) | 0.92 | | | 0.00 | 0.00 | 0.00 | 1.03 | 0.38 | 0.00 | 0.00 | 0.65 | |
| Avail Cap(c_a), veh/h | 101 | | | 0 | 106 | 0 | 422 | 1541 | 0 | 0 | 1885 | |
| HCM Platoon Ratio | 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 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 42.3 | | | 0.0 | 0.0 | 0.0 | 34.5 | 2.3 | 0.0 | 0.0 | 15.6 | 0.0 |
| Incr Delay (d2), s/veh | 62.1 | | | 0.0 | 0.0 | 0.0 | 51.1 | 0.7 | 0.0 | 0.0 | 1.8 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 3.7 | | | 0.0 | 0.0 | 0.0 | 14.5 | 1.1 | 0.0 | 0.0 | 8.1 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 104.4 | | | 0.0 | 0.0 | 0.0 | 85.6 | 3.1 | 0.0 | 0.0 | 17.4 | 0.0 |
| LnGrp LOS | F | | | A | A | A | F | A | A | A | B | |
| Approach Vol, veh/h | | | | | 0 | | | 1027 | | | 1234 | |
| Approach Delay, s/veh | | | | | 0.0 | | | 38.0 | | | 17.4 | |
| Approach LOS | | | | | | | | D | | | B | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | | 6 | 7 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 26.0 | 53.0 | 11.0 | 0.0 | | 79.0 | 11.0 | | | | | |
| Change Period (Y+Rc), s | 5.0 | 6.0 | 6.0 | 6.0 | | 6.0 | 4.0 | | | | | |
| Max Green Setting (Gmax), s | 21.0 | 36.0 | 5.0 | 5.0 | | 62.0 | 18.0 | | | | | |
| Max Q Clear Time (g_c+I1), s | 23.0 | 24.3 | 6.6 | 0.0 | | 9.7 | 0.0 | | | | | |
| Green Ext Time (p_c), s | 0.0 | 4.3 | 0.0 | 0.0 | | 2.1 | 0.0 | | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 29.8 | | | | | | | | | |
| HCM 6th LOS | | | C | | | | | | | | | |

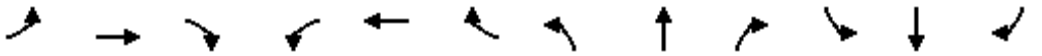
**Notes**

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

| Lane Group | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 2 | 334 | 2 | 5 | 155 | 29 | 170 |
| Future Volume (vph) | 2 | 334 | 2 | 5 | 155 | 29 | 170 |
| Turn Type | NA | Split | NA | Perm | NA | Perm | NA |
| Protected Phases | 4 | 8 | 8 | | 2 | | 6 |
| Permitted Phases | | | | 2 | | 6 | |
| Detector Phase | 4 | 8 | 8 | 2 | 2 | 6 | 6 |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 22.5 | 22.6 | 22.6 | 24.9 | 24.9 | 24.9 | 24.9 |
| Total Split (%) | 32.1% | 32.3% | 32.3% | 35.6% | 35.6% | 35.6% | 35.6% |
| Yellow Time (s) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Lead/Lag | | | | | | | |
| Lead-Lag Optimize? | | | | | | | |
| Recall Mode | None | None | None | C-Max | C-Max | C-Max | C-Max |
| Act Effct Green (s) | 5.8 | 14.1 | 14.1 | 42.6 | 42.6 | 42.6 | 42.6 |
| Actuated g/C Ratio | 0.08 | 0.20 | 0.20 | 0.61 | 0.61 | 0.61 | 0.61 |
| v/c Ratio | 0.08 | 0.61 | 0.12 | 0.01 | 0.36 | 0.11 | 0.10 |
| Control Delay | 18.5 | 28.9 | 8.9 | 9.4 | 3.0 | 10.1 | 7.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 18.5 | 28.9 | 8.9 | 9.4 | 3.0 | 10.1 | 7.8 |
| LOS | B | C | A | A | A | B | A |
| Approach Delay | 18.5 | | 27.2 | | 3.1 | | 8.1 |
| Approach LOS | B | | C | | A | | A |

| Intersection Summary | |
|---|---|
| Cycle Length: 70 | |
| Actuated Cycle Length: 70 | |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | |
| Natural Cycle: 70 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.61 | |
| Intersection Signal Delay: 11.5 | Intersection LOS: B |
| Intersection Capacity Utilization 47.8% | ICU Level of Service A |
| Analysis Period (min) 15 | |

Splits and Phases: 3: Trumble Road & Mapes Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 3 | 2 | 12 | 334 | 2 | 30 | 5 | 155 | 455 | 29 | 170 | 1 |
| Future Volume (veh/h) | 3 | 2 | 12 | 334 | 2 | 30 | 5 | 155 | 455 | 29 | 170 | 1 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 4 | 3 | 16 | 434 | 3 | 39 | 6 | 201 | 591 | 38 | 221 | 1 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 27 | 20 | 41 | 571 | 19 | 246 | 803 | 1117 | 996 | 380 | 2281 | 10 |
| Arrive On Green | 0.03 | 0.03 | 0.03 | 0.16 | 0.16 | 0.16 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 | 0.62 |
| Sat Flow, veh/h | 1056 | 792 | 1610 | 3510 | 116 | 1512 | 1177 | 1805 | 1610 | 696 | 3685 | 17 |
| Grp Volume(v), veh/h | 7 | 0 | 16 | 434 | 0 | 42 | 6 | 201 | 591 | 38 | 108 | 114 |
| Grp Sat Flow(s),veh/h/ln | 1847 | 0 | 1610 | 1755 | 0 | 1628 | 1177 | 1805 | 1610 | 696 | 1805 | 1897 |
| Q Serve(g_s), s | 0.3 | 0.0 | 0.7 | 8.3 | 0.0 | 1.6 | 0.1 | 3.3 | 15.5 | 2.4 | 1.7 | 1.7 |
| Cycle Q Clear(g_c), s | 0.3 | 0.0 | 0.7 | 8.3 | 0.0 | 1.6 | 1.8 | 3.3 | 15.5 | 17.9 | 1.7 | 1.7 |
| Prop In Lane | 0.57 | | 1.00 | 1.00 | | 0.93 | 1.00 | | 1.00 | 1.00 | | 0.01 |
| Lane Grp Cap(c), veh/h | 48 | 0 | 41 | 571 | 0 | 265 | 803 | 1117 | 996 | 380 | 1117 | 1174 |
| V/C Ratio(X) | 0.15 | 0.00 | 0.39 | 0.76 | 0.00 | 0.16 | 0.01 | 0.18 | 0.59 | 0.10 | 0.10 | 0.10 |
| Avail Cap(c_a), veh/h | 475 | 0 | 414 | 908 | 0 | 421 | 803 | 1117 | 996 | 380 | 1117 | 1174 |
| 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 | 33.3 | 0.0 | 33.6 | 28.0 | 0.0 | 25.2 | 5.8 | 5.7 | 8.0 | 13.4 | 5.4 | 5.4 |
| Incr Delay (d2), s/veh | 1.4 | 0.0 | 5.8 | 2.1 | 0.0 | 0.3 | 0.0 | 0.4 | 2.6 | 0.5 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.0 | 0.3 | 3.3 | 0.0 | 0.6 | 0.0 | 1.0 | 4.3 | 0.4 | 0.5 | 0.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 34.8 | 0.0 | 39.3 | 30.1 | 0.0 | 25.5 | 5.8 | 6.1 | 10.6 | 14.0 | 5.6 | 5.6 |
| LnGrp LOS | C | A | D | C | A | C | A | A | B | B | A | A |
| Approach Vol, veh/h | | 23 | | | 476 | | | 798 | | | 260 | |
| Approach Delay, s/veh | | 37.9 | | | 29.7 | | | 9.4 | | | 6.8 | |
| Approach LOS | | D | | | C | | | A | | | A | |

| Timer - Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 47.8 | | 6.3 | | 47.8 | | 15.9 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 20.4 | | 18.0 | | 20.4 | | 18.1 | | | | |
| Max Q Clear Time (g_c+I1), s | | 17.5 | | 2.7 | | 19.9 | | 10.3 | | | | |
| Green Ext Time (p_c), s | | 1.4 | | 0.0 | | 0.1 | | 1.1 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 15.6 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 31 | 30 | 0 | 1 | 24 | 625 | 1 | 1 | 535 | 0 |
| Future Vol, veh/h | 0 | 0 | 31 | 30 | 0 | 1 | 24 | 625 | 1 | 1 | 535 | 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 | - | - | - | - | - | - | 100 | - | - | 100 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 0 | 39 | 38 | 0 | 1 | 30 | 791 | 1 | 1 | 677 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1135 | 1531 | 339 | 1193 | 1531 | 396 | 677 | 0 | 0 | 792 | 0 | 0 |
| Stage 1 | 679 | 679 | - | 852 | 852 | - | - | - | - | - | - | - |
| Stage 2 | 456 | 852 | - | 341 | 679 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.1 | - | - |
| 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 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 251 | 149 | *904 | *223 | 149 | 609 | 1147 | - | - | 838 | - | 0 |
| Stage 1 | 651 | 611 | - | *325 | 379 | - | - | - | - | - | - | 0 |
| Stage 2 | 559 | 379 | - | *853 | 611 | - | - | - | - | - | - | 0 |
| Platoon blocked, % | 1 | 1 | 1 | 1 | 1 | | 1 | - | - | | - | |
| Mov Cap-1 Maneuver | 245 | 145 | *904 | *209 | 145 | 609 | 1147 | - | - | 838 | - | - |
| Mov Cap-2 Maneuver | 245 | 145 | - | *209 | 145 | - | - | - | - | - | - | - |
| Stage 1 | 634 | 611 | - | *317 | 369 | - | - | - | - | - | - | - |
| Stage 2 | 543 | 369 | - | *815 | 611 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 9.2 | 25.6 | 0.3 | 0 |
| HCM LOS | A | D | | |

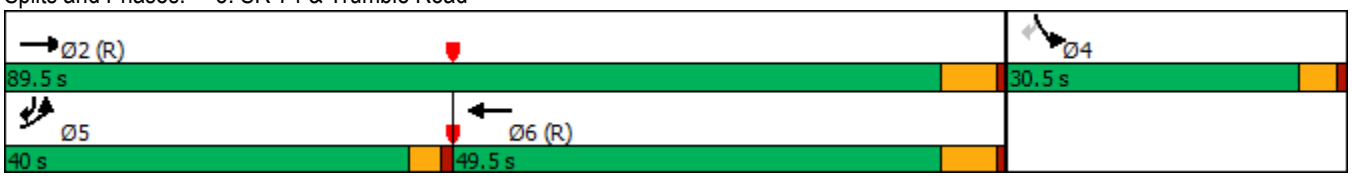
| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1147 | - | - | 904 | 214 | 838 | - |
| HCM Lane V/C Ratio | 0.026 | - | - | 0.043 | 0.183 | 0.002 | - |
| HCM Control Delay (s) | 8.2 | - | - | 9.2 | 25.6 | 9.3 | - |
| HCM Lane LOS | A | - | - | A | D | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.1 | 0.7 | 0 | - |

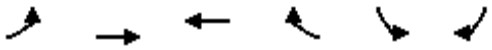
| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

| Lane Group | EBL | EBT | WBT | SBL | SBR |
|---|---|---|---|---|---|
| Lane Configurations | | | | | |
| Traffic Volume (vph) | 555 | 1422 | 1189 | 178 | 624 |
| Future Volume (vph) | 555 | 1422 | 1189 | 178 | 624 |
| Turn Type | Prot | NA | NA | Prot | pm+ov |
| Protected Phases | 5 | 2 | 6 | 4 | 5 |
| Permitted Phases | | | | | 4 |
| Detector Phase | 5 | 2 | 6 | 4 | 5 |
| Switch Phase | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 9.0 | 11.0 | 35.0 | 30.5 | 9.0 |
| Total Split (s) | 40.0 | 89.5 | 49.5 | 30.5 | 40.0 |
| Total Split (%) | 33.3% | 74.6% | 41.3% | 25.4% | 33.3% |
| Yellow Time (s) | 3.0 | 5.0 | 5.0 | 3.5 | 3.0 |
| All-Red Time (s) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 4.0 | 6.0 | 6.0 | 4.5 | 4.0 |
| Lead/Lag | Lead | | Lag | | Lead |
| Lead-Lag Optimize? | Yes | | Yes | | Yes |
| Recall Mode | None | C-Min | C-Min | None | None |
| Act Effct Green (s) | 45.1 | 92.6 | 43.5 | 16.9 | 66.5 |
| Actuated g/C Ratio | 0.38 | 0.77 | 0.36 | 0.14 | 0.55 |
| v/c Ratio | 0.87 | 0.54 | 1.10 | 0.74 | 0.42 |
| Control Delay | 50.8 | 6.8 | 94.4 | 66.5 | 16.1 |
| Queue Delay | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 |
| Total Delay | 50.8 | 7.2 | 94.4 | 66.5 | 16.1 |
| LOS | D | A | F | E | B |
| Approach Delay | | 19.4 | 94.4 | 27.3 | |
| Approach LOS | | B | F | C | |

| Intersection Summary | |
|---|---|
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 140 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.10 | |
| Intersection Signal Delay: 45.4 | Intersection LOS: D |
| Intersection Capacity Utilization 90.4% | ICU Level of Service E |
| Analysis Period (min) 15 | |

Splits and Phases: 5: SR-74 & Trumble Road





| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 555 | 1422 | 1189 | 152 | 178 | 624 |
| Future Volume (veh/h) | 555 | 1422 | 1189 | 152 | 178 | 624 |
| 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 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Adj Flow Rate, veh/h | 590 | 1513 | 1265 | 162 | 189 | 664 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Cap, veh/h | 543 | 2632 | 1275 | 162 | 332 | 1370 |
| Arrive On Green | 0.30 | 0.73 | 0.40 | 0.40 | 0.18 | 0.18 |
| Sat Flow, veh/h | 1810 | 3705 | 3316 | 410 | 1810 | 2834 |
| Grp Volume(v), veh/h | 590 | 1513 | 706 | 721 | 189 | 664 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1805 | 1826 | 1810 | 1417 |
| Q Serve(g_s), s | 36.0 | 23.5 | 46.6 | 47.3 | 11.4 | 19.0 |
| Cycle Q Clear(g_c), s | 36.0 | 23.5 | 46.6 | 47.3 | 11.4 | 19.0 |
| Prop In Lane | 1.00 | | | 0.22 | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 543 | 2632 | 714 | 723 | 332 | 1370 |
| V/C Ratio(X) | 1.09 | 0.57 | 0.99 | 1.00 | 0.57 | 0.48 |
| Avail Cap(c_a), veh/h | 543 | 2632 | 714 | 723 | 392 | 1464 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.56 | 0.56 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 42.0 | 7.6 | 36.0 | 36.2 | 44.7 | 20.9 |
| Incr Delay (d2), s/veh | 55.5 | 0.5 | 31.0 | 32.8 | 0.6 | 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 | 23.5 | 7.0 | 25.2 | 26.1 | 5.0 | 16.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 97.5 | 8.1 | 67.0 | 69.0 | 45.3 | 21.0 |
| LnGrp LOS | F | A | E | E | D | C |
| Approach Vol, veh/h | | 2103 | 1427 | | 853 | |
| Approach Delay, s/veh | | 33.2 | 68.0 | | 26.4 | |
| Approach LOS | | C | E | | C | |

| Timer - Assigned Phs | | 2 | | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 93.5 | | 26.5 | 40.0 | 53.5 |
| Change Period (Y+Rc), s | | 6.0 | | 4.5 | 4.0 | 6.0 |
| Max Green Setting (Gmax), s | | 83.5 | | 26.0 | 36.0 | 43.5 |
| Max Q Clear Time (g_c+I1), s | | 25.5 | | 21.0 | 38.0 | 49.3 |
| Green Ext Time (p_c), s | | 15.5 | | 1.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 43.2 |
| HCM 6th LOS | D |

# APPENDIX E:

# VMT ANALYSIS WORKSHEET

LSA

# Appendix E
# VMT Calculation Worksheet
# Mapes and Trumble Warehouse - VMT Analysis

| 2018 | Mapes and Trumble (Project) * | City of Perris (City) ** |
|---|---|---|
| Total Population | - | 72,886 |
| Total Employment | 485 | 17,465 |
| Total service population | 485 | 90,351 |
| | | |
| Total OD VMT | 12,719 | 2,931,359 |
| | | |
| Total OD VMT per service population | 26.2 | 32.4 |

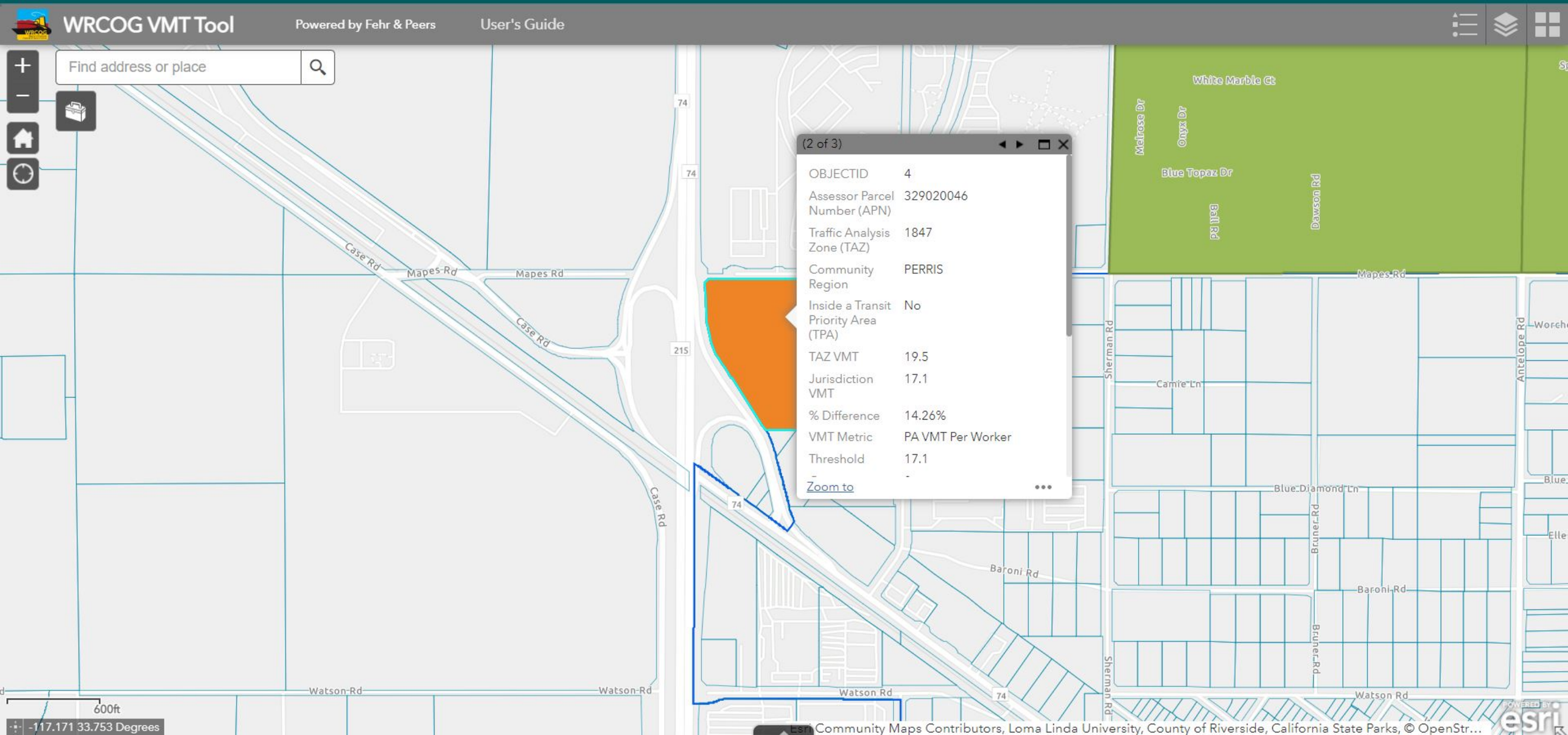
**: Estimated using RIVCOM V3 model runs*

***: Estimage using LSA No Project RIVCOM V3 model runs*

| 2045 | Mapes and Trumble (Project) * | City of Perris (City) ** |
|---|---|---|
| Total Population | - | 130,959 |
| Total Employment | 485 | 34,275 |
| Total service population | 485 | 165,234 |
| | | |
| Total OD VMT | 11,374 | 5,228,215 |
| | | |
| Total OD VMT per service population | 23.5 | 31.6 |

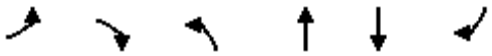
**: Estimated using RIVCOM V3 model runs*

***: Estimage using LSA No Project RIVCOM V3 model runs*


WRCOG VMT Tool
Powered by Fehr & Peers
User's Guide
Find address or place
(2 of 3)
OBJECTID 4
Assessor Parcel Number (APN) 329020046
Traffic Analysis Zone (TAZ) 1847
Community Region PERRIS
Inside a Transit Priority Area (TPA) No
TAZ VMT 19.5
Jurisdiction VMT 17.1
% Difference 14.26%
VMT Metric PA VMT Per Worker
Threshold 17.1
Zoom to
Case Rd
Mapes Rd
Watson Rd
Baroni Rd
Blue Diamond Ln
Sherman Rd
Bruner Rd
Antelope Rd
Camie Ln
White Marble Ct
Melrose Dr
Onyx Dr
Blue Topaz Dr
Ball Rd
Dawson Rd
74
215
600ft
-117.171 33.753 Degrees
Community Maps Contributors, Loma Linda University, County of Riverside, California State Parks, © OpenStr...
esri

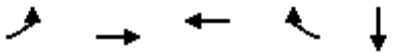
# APPENDIX F:

# QUEUING ANALYSIS WORKSHEETS



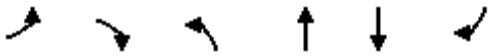
| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 30 | 173 | 253 | 536 | 651 | 27 |
| v/c Ratio | 0.28 | 0.11 | 0.77 | 0.32 | 0.53 | 0.02 |
| Control Delay | 55.6 | 0.1 | 58.2 | 2.3 | 15.0 | 0.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 55.6 | 0.1 | 58.2 | 2.3 | 15.0 | 0.0 |
| Queue Length 50th (ft) | 21 | 0 | 171 | 64 | 258 | 0 |
| Queue Length 95th (ft) | 51 | 0 | 245 | 108 | 443 | 0 |
| Internal Link Dist (ft) | | | | 949 | 251 | |
| Turn Bay Length (ft) | | 100 | 110 | | | 120 |
| Base Capacity (vph) | 311 | 1615 | 359 | 1699 | 1225 | 1615 |
| 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 | 0.10 | 0.11 | 0.70 | 0.32 | 0.53 | 0.02 |

Intersection Summary



| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Group Flow (vph) | 15 | 791 | 755 | 834 | 198 |
| v/c Ratio | 0.14 | 0.28 | 0.29 | 0.60 | 0.71 |
| Control Delay | 45.1 | 3.8 | 6.2 | 2.7 | 35.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| Total Delay | 45.1 | 3.8 | 6.2 | 2.8 | 35.8 |
| Queue Length 50th (ft) | 9 | 56 | 53 | 0 | 64 |
| Queue Length 95th (ft) | 29 | 103 | 153 | 47 | 128 |
| Internal Link Dist (ft) | | 414 | 649 | | 228 |
| Turn Bay Length (ft) | 240 | | | 355 | |
| Base Capacity (vph) | 374 | 2799 | 2622 | 1401 | 620 |
| Starvation Cap Reductn | 0 | 0 | 0 | 98 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.04 | 0.28 | 0.29 | 0.64 | 0.32 |

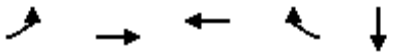
Intersection Summary



| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 36 | 299 | 278 | 330 | 860 | 26 |
| v/c Ratio | 0.32 | 0.19 | 0.77 | 0.19 | 0.73 | 0.02 |
| Control Delay | 56.4 | 0.3 | 55.8 | 1.9 | 21.9 | 0.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 56.4 | 0.3 | 55.8 | 1.9 | 21.9 | 0.0 |
| Queue Length 50th (ft) | 25 | 0 | 186 | 35 | 438 | 0 |
| Queue Length 95th (ft) | 57 | 0 | 266 | 63 | #793 | 0 |
| Internal Link Dist (ft) | | | | 949 | 251 | |
| Turn Bay Length (ft) | | 100 | 110 | | | 120 |
| Base Capacity (vph) | 311 | 1615 | 377 | 1694 | 1186 | 1615 |
| 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 | 0.12 | 0.19 | 0.74 | 0.19 | 0.73 | 0.02 |

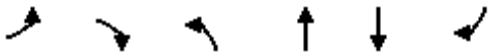
Intersection Summary

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



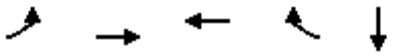
| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Group Flow (vph) | 15 | 1106 | 546 | 767 | 290 |
| v/c Ratio | 0.14 | 0.42 | 0.22 | 0.57 | 0.79 |
| Control Delay | 45.1 | 6.6 | 8.0 | 2.9 | 40.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Total Delay | 45.1 | 6.6 | 8.0 | 3.0 | 40.8 |
| Queue Length 50th (ft) | 9 | 118 | 47 | 0 | 119 |
| Queue Length 95th (ft) | 29 | 207 | 128 | 55 | 191 |
| Internal Link Dist (ft) | | 414 | 649 | | 228 |
| Turn Bay Length (ft) | 240 | | | 355 | |
| Base Capacity (vph) | 374 | 2606 | 2429 | 1337 | 618 |
| Starvation Cap Reductn | 0 | 0 | 0 | 76 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.04 | 0.42 | 0.22 | 0.61 | 0.47 |

Intersection Summary



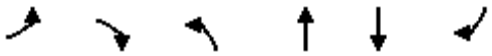
| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 30 | 175 | 254 | 549 | 675 | 27 |
| v/c Ratio | 0.28 | 0.11 | 0.77 | 0.32 | 0.55 | 0.02 |
| Control Delay | 55.6 | 0.1 | 58.1 | 2.3 | 15.5 | 0.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 55.6 | 0.1 | 58.1 | 2.3 | 15.5 | 0.0 |
| Queue Length 50th (ft) | 21 | 0 | 172 | 66 | 274 | 0 |
| Queue Length 95th (ft) | 51 | 0 | 246 | 111 | 467 | 0 |
| Internal Link Dist (ft) | | | | 949 | 251 | |
| Turn Bay Length (ft) | | 100 | 110 | | | 120 |
| Base Capacity (vph) | 311 | 1615 | 359 | 1699 | 1224 | 1615 |
| 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 | 0.10 | 0.11 | 0.71 | 0.32 | 0.55 | 0.02 |

Intersection Summary



| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Group Flow (vph) | 15 | 817 | 769 | 847 | 223 |
| v/c Ratio | 0.14 | 0.30 | 0.30 | 0.61 | 0.74 |
| Control Delay | 45.1 | 4.3 | 6.9 | 2.8 | 38.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| Total Delay | 45.1 | 4.3 | 6.9 | 3.0 | 38.0 |
| Queue Length 50th (ft) | 9 | 64 | 59 | 0 | 79 |
| Queue Length 95th (ft) | 29 | 116 | 165 | 50 | 146 |
| Internal Link Dist (ft) | | 414 | 649 | | 228 |
| Turn Bay Length (ft) | 240 | | | 355 | |
| Base Capacity (vph) | 374 | 2751 | 2574 | 1394 | 621 |
| Starvation Cap Reductn | 0 | 0 | 0 | 90 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.04 | 0.30 | 0.30 | 0.65 | 0.36 |

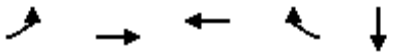
Intersection Summary



| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 36 | 300 | 280 | 354 | 878 | 26 |
| v/c Ratio | 0.32 | 0.19 | 0.77 | 0.21 | 0.74 | 0.02 |
| Control Delay | 56.4 | 0.3 | 55.5 | 2.0 | 22.7 | 0.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 56.4 | 0.3 | 55.5 | 2.0 | 22.7 | 0.0 |
| Queue Length 50th (ft) | 25 | 0 | 187 | 38 | 457 | 0 |
| Queue Length 95th (ft) | 57 | 0 | 265 | 68 | #824 | 0 |
| Internal Link Dist (ft) | | | | 949 | 251 | |
| Turn Bay Length (ft) | | 100 | 110 | | | 120 |
| Base Capacity (vph) | 311 | 1615 | 379 | 1694 | 1182 | 1615 |
| 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 | 0.12 | 0.19 | 0.74 | 0.21 | 0.74 | 0.02 |

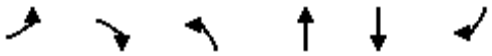
Intersection Summary

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



| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Group Flow (vph) | 15 | 1125 | 572 | 789 | 309 |
| v/c Ratio | 0.14 | 0.44 | 0.24 | 0.59 | 0.79 |
| Control Delay | 45.1 | 7.2 | 8.6 | 3.1 | 41.1 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Total Delay | 45.1 | 7.2 | 8.6 | 3.2 | 41.1 |
| Queue Length 50th (ft) | 9 | 128 | 53 | 0 | 130 |
| Queue Length 95th (ft) | 29 | 222 | 138 | 57 | 203 |
| Internal Link Dist (ft) | | 414 | 649 | | 228 |
| Turn Bay Length (ft) | 240 | | | 355 | |
| Base Capacity (vph) | 374 | 2566 | 2389 | 1335 | 619 |
| Starvation Cap Reductn | 0 | 0 | 0 | 68 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.04 | 0.44 | 0.24 | 0.62 | 0.50 |

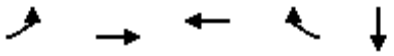
Intersection Summary



| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 75 | 286 | 365 | 827 | 827 | 71 |
| v/c Ratio | 0.51 | 0.18 | 0.69 | 0.52 | 0.89 | 0.04 |
| Control Delay | 59.8 | 0.2 | 42.5 | 4.9 | 40.0 | 0.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 59.8 | 0.2 | 42.5 | 4.9 | 40.0 | 0.0 |
| Queue Length 50th (ft) | 52 | 0 | 232 | 153 | 519 | 0 |
| Queue Length 95th (ft) | 96 | 0 | 335 | 269 | #848 | 0 |
| Internal Link Dist (ft) | | | | 949 | 251 | |
| Turn Bay Length (ft) | | 100 | 110 | | | 120 |
| Base Capacity (vph) | 311 | 1615 | 530 | 1597 | 931 | 1615 |
| 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 | 0.18 | 0.69 | 0.52 | 0.89 | 0.04 |

Intersection Summary

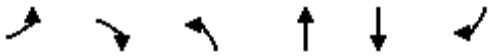
# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Group Flow (vph) | 41 | 1048 | 1102 | 1136 | 393 |
| v/c Ratio | 0.32 | 0.44 | 0.53 | 0.84 | 0.84 |
| Control Delay | 47.8 | 9.2 | 15.9 | 10.5 | 42.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 47.8 | 9.2 | 15.9 | 10.5 | 42.3 |
| Queue Length 50th (ft) | 24 | 141 | 221 | 41 | 179 |
| Queue Length 95th (ft) | 56 | 236 | 360 | #510 | 259 |
| Internal Link Dist (ft) | | 414 | 649 | | 228 |
| Turn Bay Length (ft) | 240 | | | 355 | |
| Base Capacity (vph) | 374 | 2391 | 2092 | 1353 | 617 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.11 | 0.44 | 0.53 | 0.84 | 0.64 |

Intersection Summary

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

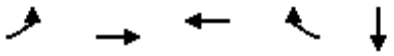


| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 92 | 432 | 432 | 569 | 1217 | 60 |
| v/c Ratio | 0.56 | 0.27 | 0.65 | 0.36 | 1.58 | 0.04 |
| Control Delay | 60.4 | 0.4 | 36.2 | 3.9 | 292.3 | 0.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 60.4 | 0.4 | 36.2 | 3.9 | 292.3 | 0.0 |
| Queue Length 50th (ft) | 63 | 0 | 264 | 90 | ~1207 | 0 |
| Queue Length 95th (ft) | 112 | 0 | 394 | 160 | #1492 | 0 |
| Internal Link Dist (ft) | | | | 949 | 251 | |
| Turn Bay Length (ft) | | 100 | 110 | | | 120 |
| Base Capacity (vph) | 311 | 1615 | 666 | 1582 | 772 | 1615 |
| 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 | 0.27 | 0.65 | 0.36 | 1.58 | 0.04 |

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

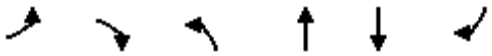


| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Group Flow (vph) | 58 | 1539 | 874 | 1023 | 655 |
| v/c Ratio | 0.40 | 0.75 | 0.54 | 0.82 | 1.03 |
| Control Delay | 49.0 | 18.4 | 21.1 | 8.8 | 73.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 49.0 | 18.4 | 21.1 | 8.8 | 73.7 |
| Queue Length 50th (ft) | 34 | 336 | 198 | 21 | ~399 |
| Queue Length 95th (ft) | 71 | 422 | 274 | 194 | #616 |
| Internal Link Dist (ft) | | 414 | 649 | | 228 |
| Turn Bay Length (ft) | 240 | | | 355 | |
| Base Capacity (vph) | 374 | 2078 | 1630 | 1255 | 635 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.16 | 0.74 | 0.54 | 0.82 | 1.03 |

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

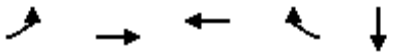
# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 75 | 288 | 366 | 840 | 851 | 71 |
| v/c Ratio | 0.51 | 0.18 | 0.69 | 0.53 | 0.92 | 0.04 |
| Control Delay | 59.8 | 0.2 | 42.4 | 5.0 | 43.4 | 0.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 59.8 | 0.2 | 42.4 | 5.0 | 43.4 | 0.0 |
| Queue Length 50th (ft) | 52 | 0 | 232 | 157 | 548 | 0 |
| Queue Length 95th (ft) | 96 | 0 | 335 | 277 | #885 | 0 |
| Internal Link Dist (ft) | | | | 949 | 251 | |
| Turn Bay Length (ft) | | 100 | 110 | | | 120 |
| Base Capacity (vph) | 311 | 1615 | 532 | 1597 | 929 | 1615 |
| 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 | 0.18 | 0.69 | 0.53 | 0.92 | 0.04 |

Intersection Summary

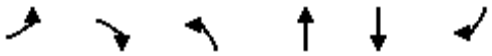
# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Group Flow (vph) | 41 | 1073 | 1116 | 1149 | 418 |
| v/c Ratio | 0.32 | 0.46 | 0.54 | 0.85 | 0.86 |
| Control Delay | 47.8 | 9.8 | 16.7 | 11.4 | 43.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 47.8 | 9.8 | 16.7 | 11.4 | 43.9 |
| Queue Length 50th (ft) | 24 | 154 | 233 | 47 | 194 |
| Queue Length 95th (ft) | 56 | 244 | 366 | #528 | 281 |
| Internal Link Dist (ft) | | 414 | 649 | | 228 |
| Turn Bay Length (ft) | 240 | | | 355 | |
| Base Capacity (vph) | 374 | 2352 | 2052 | 1347 | 617 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.11 | 0.46 | 0.54 | 0.85 | 0.68 |

Intersection Summary

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

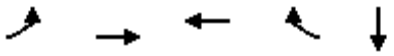


| Lane Group | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 92 | 433 | 434 | 593 | 1234 | 60 |
| v/c Ratio | 0.56 | 0.27 | 0.65 | 0.37 | 1.61 | 0.04 |
| Control Delay | 60.4 | 0.4 | 36.0 | 4.0 | 305.7 | 0.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 60.4 | 0.4 | 36.0 | 4.0 | 305.7 | 0.0 |
| Queue Length 50th (ft) | 63 | 0 | 265 | 96 | ~1235 | 0 |
| Queue Length 95th (ft) | 112 | 0 | 396 | 170 | #1520 | 0 |
| Internal Link Dist (ft) | | | | 949 | 251 | |
| Turn Bay Length (ft) | | 100 | 110 | | | 120 |
| Base Capacity (vph) | 311 | 1615 | 670 | 1582 | 768 | 1615 |
| 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 | 0.27 | 0.65 | 0.37 | 1.61 | 0.04 |

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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



| Lane Group | EBL | EBT | WBT | WBR | SBT |
|---|---|---|---|---|---|
| Lane Group Flow (vph) | 58 | 1557 | 900 | 1045 | 674 |
| v/c Ratio | 0.40 | 0.76 | 0.55 | 0.83 | 1.06 |
| Control Delay | 49.0 | 18.7 | 21.4 | 9.9 | 82.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 49.0 | 18.7 | 21.4 | 9.9 | 82.6 |
| Queue Length 50th (ft) | 34 | 343 | 206 | 29 | ~423 |
| Queue Length 95th (ft) | 71 | 431 | 284 | #260 | #642 |
| Internal Link Dist (ft) | | 414 | 649 | | 228 |
| Turn Bay Length (ft) | 240 | | | 355 | |
| Base Capacity (vph) | 374 | 2078 | 1630 | 1255 | 635 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.16 | 0.75 | 0.55 | 0.83 | 1.06 |

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

| Lane Group | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 90 | 459 | 25 | 71 | 314 | 1 | 90 |
| v/c Ratio | 0.26 | 0.63 | 0.06 | 0.10 | 0.17 | 0.00 | 0.05 |
| Control Delay | 14.5 | 28.8 | 19.0 | 11.1 | 3.2 | 11.0 | 9.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 14.5 | 28.8 | 19.0 | 11.1 | 3.2 | 11.0 | 9.8 |
| Queue Length 50th (ft) | 5 | 94 | 8 | 15 | 6 | 0 | 8 |
| Queue Length 95th (ft) | 24 | 126 | 24 | 41 | 29 | 3 | 23 |
| Internal Link Dist (ft) | 947 | | 219 | | 270 | | 348 |
| Turn Bay Length (ft) | | 125 | | 135 | | 125 | |
| Base Capacity (vph) | 874 | 928 | 497 | 709 | 1821 | 572 | 1925 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.10 | 0.49 | 0.05 | 0.10 | 0.17 | 0.00 | 0.05 |

Intersection Summary

## Intersection: 4: Trumble Road & Exceed Road/Sturgeon Electric Driveway

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LTR | LTR | L |
| Maximum Queue (ft) | 31 | 75 | 26 |
| Average Queue (ft) | 13 | 38 | 6 |
| 95th Queue (ft) | 38 | 70 | 24 |
| Link Distance (ft) | 535 | 314 | |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | 100 |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

| Lane Group | EBT | WBL | WBT | NBL | NBT | SBL | SBT |
|---|---|---|---|---|---|---|---|
| Lane Group Flow (vph) | 23 | 434 | 42 | 6 | 792 | 38 | 222 |
| v/c Ratio | 0.08 | 0.61 | 0.12 | 0.01 | 0.36 | 0.11 | 0.10 |
| Control Delay | 18.5 | 28.9 | 8.9 | 9.4 | 3.0 | 10.1 | 7.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 18.5 | 28.9 | 8.9 | 9.4 | 3.0 | 10.1 | 7.8 |
| Queue Length 50th (ft) | 1 | 89 | 1 | 1 | 13 | 5 | 14 |
| Queue Length 95th (ft) | 10 | 101 | 17 | 6 | 35 | 22 | 38 |
| Internal Link Dist (ft) | 947 | | 219 | | 270 | | 348 |
| Turn Bay Length (ft) | | 125 | | 135 | | 125 | |
| Base Capacity (vph) | 836 | 906 | 452 | 708 | 2180 | 360 | 2192 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.03 | 0.48 | 0.09 | 0.01 | 0.36 | 0.11 | 0.10 |

Intersection Summary

## Intersection: 4: Trumble Road & Exceed Road/Sturgeon Electric Driveway

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LTR | LTR | L |
| Maximum Queue (ft) | 76 | 70 | 26 |
| Average Queue (ft) | 32 | 25 | 8 |
| 95th Queue (ft) | 60 | 60 | 27 |
| Link Distance (ft) | 535 | 314 | |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | 100 |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |