

**Appendix H:
Traffic Supporting Information**



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H.1 - Traffic Analysis



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MAPES & SHERMAN COMMERCE CENTER (DEV2022-003)

TRAFFIC ANALYSIS

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TABLE OF CONTENTS

Table of Contents	ii
Appendices.....	iv
List of Exhibits.....	v
List of Tables	vi
List of Abbreviated Terms	vii
1 Introduction.....	1
1.1 Summary of Findings	1
1.2 Project Overview	3
1.3 Analysis Scenarios	3
1.4 Study Area	5
1.5 Deficiencies	7
1.6 Recommendations.....	8
1.7 Truck Access	11
2 Methodologies	15
2.1 Level of Service.....	15
2.2 Intersection Capacity Analysis.....	15
2.3 Traffic Signal Warrant Analysis Methodology	17
2.4 Queuing Analysis	18
2.5 Minimum Acceptable Levels of Service (LOS).....	19
2.6 Deficiency Criteria	20
3 Area Conditions	21
3.1 Existing Circulation Network	21
3.2 City of Menifee General Plan Circulation Element	21
3.3 City of Perris General Plan Circulation Elements	21
3.4 Bicycle, Equestrian, & Pedestrian Facilities	27
3.5 Transit Service.....	27
3.6 Truck Routes.....	27
3.7 Existing (2022) Traffic Counts	34
3.8 Intersection Operations Analysis.....	36
3.9 Existing (2022) Traffic Signal Warrants Analysis	36
3.10 Existing (2022) Off-ramp Queuing Analysis.....	36
4 Projected Future Traffic.....	39
4.1 Project Trip Generation	39
4.2 Project Trip Distribution	41
4.3 Modal Split.....	41
4.4 Project Trip Assignment.....	41
4.5 Background Traffic.....	41
4.6 Cumulative Development Traffic.....	45
4.7 Near-Term Traffic Conditions.....	45
5 E+P Traffic Conditions.....	51

- 5.1 Roadway Improvements 51
- 5.2 Existing plus Project Traffic Volume Forecasts 51
- 5.3 Intersection Operations Analysis 51
- 5.4 Traffic Signal Warrants Analysis 53
- 5.5 Off-ramp Queuing Capacity Analysis 53
- 5.6 Project Deficiencies and Recommended Improvements 53
- 6 Opening Year Cumulative (2024) Traffic Conditions 55
 - 6.1 Roadway Improvements 55
 - 6.2 Without Project Traffic Volume Forecasts 55
 - 6.3 With Project Traffic Volume Forecasts 55
 - 6.4 Intersection Operations Analysis 58
 - 6.5 Traffic Signal Warrants Analysis 59
 - 6.6 Off-ramp Queuing Analysis 59
 - 6.7 Deficiencies and Improvements 59
- 7 Local and Regional Funding Mechanisms 61
 - 7.1 Transportation Uniform Mitigation Fee (TUMF) Program 61
 - 7.2 City of Menifee Development Impact Fee (DIF) Program 61
 - 7.3 Measure A 61
 - 7.4 Fair Share Contribution 62
- 8 References 63

APPENDICES

Appendix 1.1: Traffic Study Scoping Agreement

Appendix 1.2: Site Adjacent Queues

Appendix 3.1: Existing Traffic Counts

Appendix 3.2: Existing (2022) Conditions Intersection Operations Analysis Worksheets

Appendix 3.3: Existing (2022) Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 3.4: Existing (2022) Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 4.1: Cumulative Development Project Volume Worksheets

Appendix 5.1: E+P Conditions Intersection Operations Analysis Worksheets

Appendix 5.2: E+P Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 5.3: E+P Conditions Off-ramp Queuing Analysis Worksheets

Appendix 6.1: Opening Year Cumulative (2024) Without Project Conditions Intersection Operations Analysis Worksheets

Appendix 6.2: Opening Year Cumulative (2024) With Project Conditions Intersection Operations Analysis Worksheets

Appendix 6.3: Opening Year Cumulative (2024) Without Project Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 6.4: Opening Year Cumulative (2024) With Project Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 6.5: Opening Year Cumulative (2024) Without Project Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 6.6: Opening Year Cumulative (2024) With Project Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 6.7: Opening Year Cumulative (2024) With Project Conditions Intersection Operations Analysis Worksheets With Improvements

LIST OF EXHIBITS

Exhibit 1-1: Location Map.....	2
Exhibit 1-2: Preliminary Site Plan	4
Exhibit 1-3: Study Area.....	6
Exhibit 1-4: Site Access Recommendations	9
Exhibit 1-5: Truck Access	13
Exhibit 3-1: Existing Number of Through Lanes and Intersection Controls	22
Exhibit 3-2: City of Menifee General Plan Circulation Element	23
Exhibit 3-3: City of Menifee General Plan Roadway Cross-Sections	24
Exhibit 3-4: City of Perris General Plan Circulation Element	25
Exhibit 3-5: City of Perris General Plan Roadway Cross-Sections	26
Exhibit 3-6: Existing Pedestrian Facilities	28
Exhibit 3-7: City of Menifee Bikeway and Community Pedestrian Network.....	29
Exhibit 3-8: City of Perris Recommended Bikeway Network.....	30
Exhibit 3-9: Existing Transit.....	31
Exhibit 3-10: City of menifee Truck Routes	32
Exhibit 3-11: City of perris Truck Routes	33
Exhibit 3-12: Existing (2022) Traffic Volumes.....	35
Exhibit 4-1: Project (Truck) Trip Distribution.....	42
Exhibit 4-2: Project (Passenger Car) Trip Distribution	43
Exhibit 4-3: Project Only Traffic volumes	44
Exhibit 4-4: Cumulative Development Location Map	48
Exhibit 4-5: Cumulative Only Traffic Volumes	49
Exhibit 5-1: E+P Traffic Volumes.....	52
Exhibit 6-1: Opening Year Cumulative (2024) Without Project Traffic Volumes	56
Exhibit 6-2: Opening Year Cumulative (2024) With Project Traffic Volumes	57

LIST OF TABLES

Table 1-1: Intersection Analysis Locations	5
Table 1-2: Summary of LOS.....	7
Table 1-3: Summary of Improvements by Analysis Scenario	12
Table 2-1: Signalized Intersection LOS Thresholds.....	16
Table 2-2: Unsignalized Intersection LOS Thresholds	17
Table 2-3: Traffic Signal Warrant Analysis Locations	18
Table 3-1: Intersection Analysis for Existing (2022) Conditions	36
Table 3-2: Peak Hour Off-Ramp Queuing for Existing (2022) Conditions	37
Table 4-1: Trip Generation Rates.....	40
Table 4-2: project Trip Generation Summary	40
Table 4-3: Cumulative Development land use Summary.....	46
Table 5-1: Intersection Analysis for E+P Conditions	51
Table 5-2: Peak Hour Off-Ramp Queuing Summary for E+P Conditions	53
Table 6-1: Intersection Analysis for Opening year Cumulative (2024) Conditions	58
Table 6-2: Peak Hour Off-Ramp Queuing Analysis for Opening Year Cumulative (2024) Conditions...	59
Table 6-3: Intersection Analysis for Opening Year Cumulative (2024) Conditions with Improvements	60
Table 7-1: Project Fair Share	62

LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
DIF	Development Impact Fee
E+P	Existing Plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
NP	No (Without) Project
OPR	Office of Planning and Research
PHF	Peak Hour Factor
Project	Mapes & Sherman Commerce Center
RTA	Riverside Transit Authority
SHS	State Highway System
TA	Traffic Analysis
TSF	Thousand Square Feet
v/c	Volume to Capacity
VMT	Vehicle Miles Traveled
vphgpl	Vehicles per Hour Green per Lane
WP	With Project
WRCOG	Western Riverside Council of Governments

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1 INTRODUCTION

This report presents the results of the Traffic Analysis (TA) for Mapes & Sherman Commerce Center (“Project”), which is located on the southwest corner of Sherman Road and Mapes Road, in the City of Menifee, as shown on Exhibit 1-1. The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, and where necessary recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. This traffic study has been prepared in accordance with the City’s Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (updated January 2022), City’s LOS Traffic Study Guidelines (revised October 2020), and consultation with City staff during the traffic study scoping process. (1) (2) The approved Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TA.

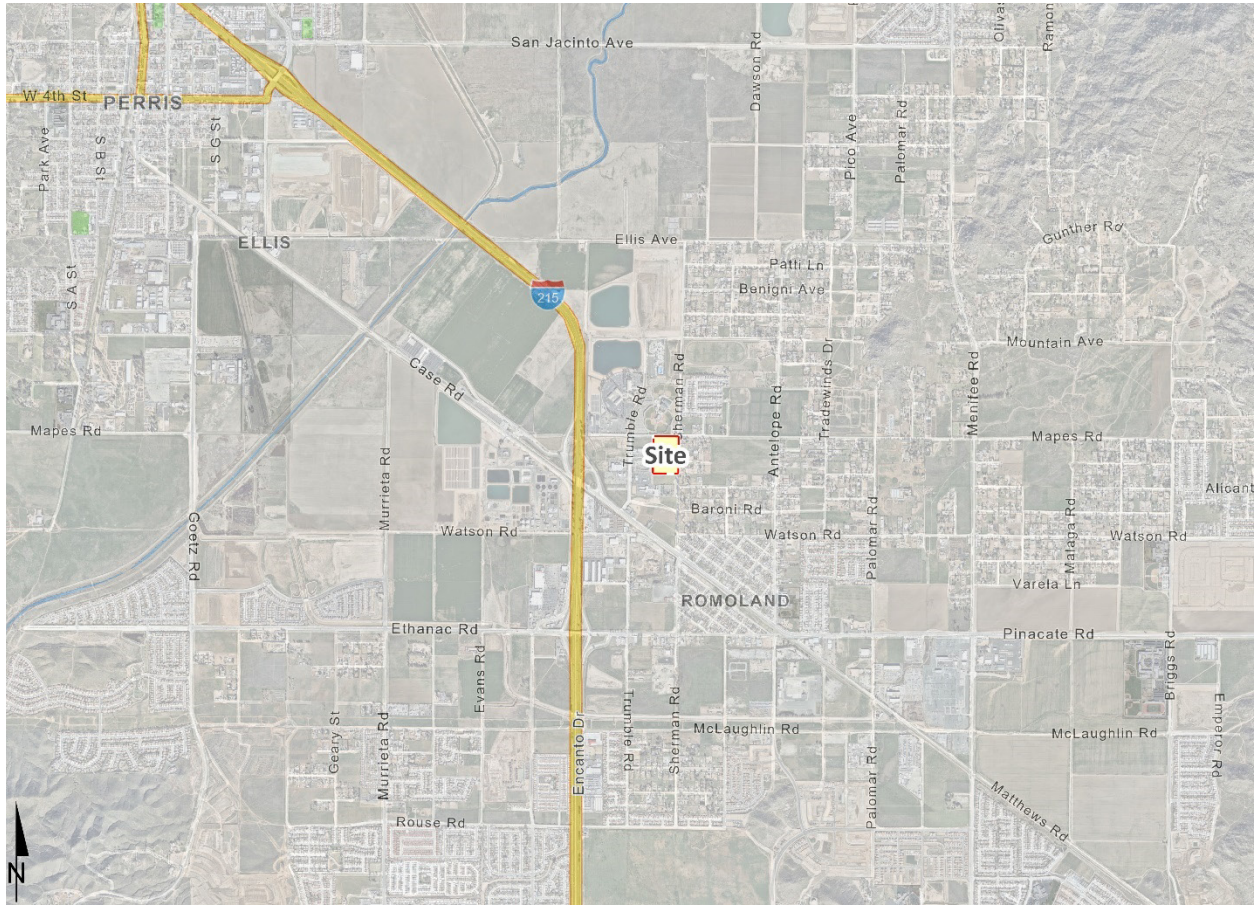
1.1 SUMMARY OF FINDINGS

The Project is to construct the following improvements as design features in conjunction with development of the site:

- The proposed driveways on Mapes Road and Sherman Road will be stop controlled for exiting (egress) traffic and will allow for full access. All driveways should accommodate a minimum of 50-foot left turn storage within the painted median with the exception of Driveway 1 on Mapes Road which should accommodate a minimum of 100-feet of storage.
- Project to construct Mapes Road at its ultimate half-section-width as a Major Highway (118-foot right-of-way) from the Project’s western boundary to Sherman Road consistent with the City’s standards. The roadway improvements should include the construction of a raised median consistent with City Standard No. 110 (although a break in the median will allow for full access at Driveway 1). Through lanes along the Project’s frontage will be striped in the interim to transition down to the existing lanes west of the Project, until such time in the future when Mapes Road is widened to its ultimate cross-section to the west.
- Project to construct Sherman Road at its ultimate half-section width as an Industrial Collector (78-foot right-of-way, 56-foot curb-to-curb) from Mapes Road to the Project’s southern boundary consistent with the City’s standards. The roadway will be striped along the Project’s frontage to provide the appropriate lanes and transitions between the existing lanes to the south of the Project.
- The eastbound approach at the intersection of Sherman Road and Mapes Road should be improved to accommodate an eastbound left turn lane with a minimum of 100-feet of storage, an eastbound through lane, and an eastbound right turn lane (trap lane with no specified storage length).

Additional details and intersection lane geometrics are provided in Section 1.6 *Recommendations* of this report. The proposed Project is not anticipated to require the construction of any off-site improvements. However, the Project would contribute to improvement needs identified at off-site intersections for future near-term cumulative traffic study scenarios. The Project Applicant’s responsibility (proportional share) towards deficient off-site intersections is fulfilled through a combination of construction, payment of fair share, and/or payment into pre-existing fee programs (if applicable) that would be assigned to the future construction of the identified recommended improvements. The Project Applicant would be required to pay requisite fees and/or fair share contributions consistent with the City’s requirements (see Section 7 *Local and Regional Funding Mechanisms*).

EXHIBIT 1-1: LOCATION MAP



1.2 PROJECT OVERVIEW

A preliminary site plan for the proposed Project is shown on Exhibit 1-2. The Project is proposed to consist of the development of 277,578 square feet of high-cube fulfillment center warehouse use within a single building. As indicated on Exhibit 1-2, vehicular access will be accommodated via Mapes Road and Sherman Road for both passenger cars and trucks (with primary truck access on Mapes Road and secondary truck access on Sherman Road). Driveway 2 on Mapes Road will be restricted to right-in/right-out access only (controlled by the raised median) and all other driveways will allow for full access. Regional access to the Project site is accommodated from the I-215 Freeway via SR-74. The Project is anticipated to have an Opening Year of 2024. Trip-generation statistics published in the in the High Cube Warehouse Trip Generation Study (WSP, January 2019) and the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) have been used to develop the traffic characteristics of the proposed Project. (3) (4) The Project is anticipated to generate a net total of 592 two-way trips per day with 35 AM peak hour trips and 46 PM peak hour trips (actual vehicles). The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

1.3 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2022) Conditions
- Existing plus Project (E+P) Conditions
- Opening Year Cumulative (2024) Without Project Conditions
- Opening Year Cumulative (2024) With Project Conditions

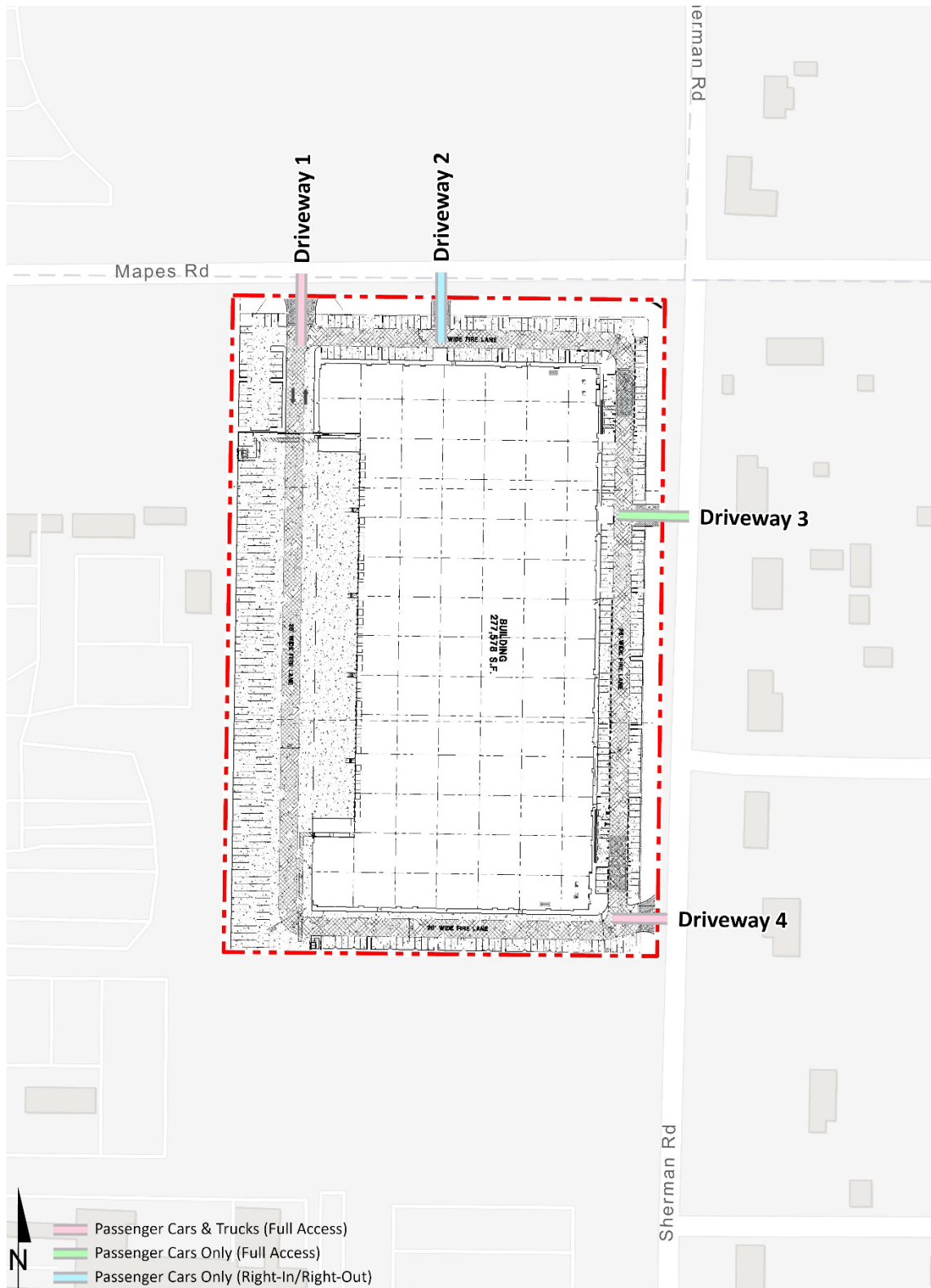
1.3.1 EXISTING (2022) CONDITIONS

Information for Existing (2022) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared. Local schools were in session with in-person instruction at the time of the traffic counts. Traffic counts were conducted in October 2021 and a 2% growth adjustment factor has been applied to reflect 2022 traffic conditions.

1.3.2 EXISTING PLUS PROJECT CONDITIONS

The Existing plus Project (E+P) conditions analysis determines the potential circulation system deficiencies based on a comparison of the E+P traffic conditions to Existing conditions. The roadway network is similar to Existing conditions except for new connections to be constructed by the Project. Cumulative development projects and ambient growth are not included for E+P traffic conditions.

EXHIBIT 1-2: PRELIMINARY SITE PLAN



1.3.3 OPENING YEAR CUMULATIVE (2024) CONDITIONS

The Opening Year Cumulative (2024) traffic conditions analysis determines the potential near-term cumulative circulation system deficiencies. To account for growth in traffic between Existing (2022) traffic conditions and the Project Opening Year Cumulative (2024), a growth rate of 4.04 percent was assumed (2.0 percent per year, compounded annually over 2 years). The roadway network is similar to Existing conditions except for new connections to be constructed by the Project. Conservatively, this TA adds traffic generated by other known or probable related projects to the existing baseline condition, although it may not be feasible that these projects would be completed by Year 2024. The resulting traffic growth utilized in the TA (traffic generated by related projects) will therefore tend to overstate rather than understate background cumulative traffic deficiencies under 2024 traffic conditions.

1.4 STUDY AREA

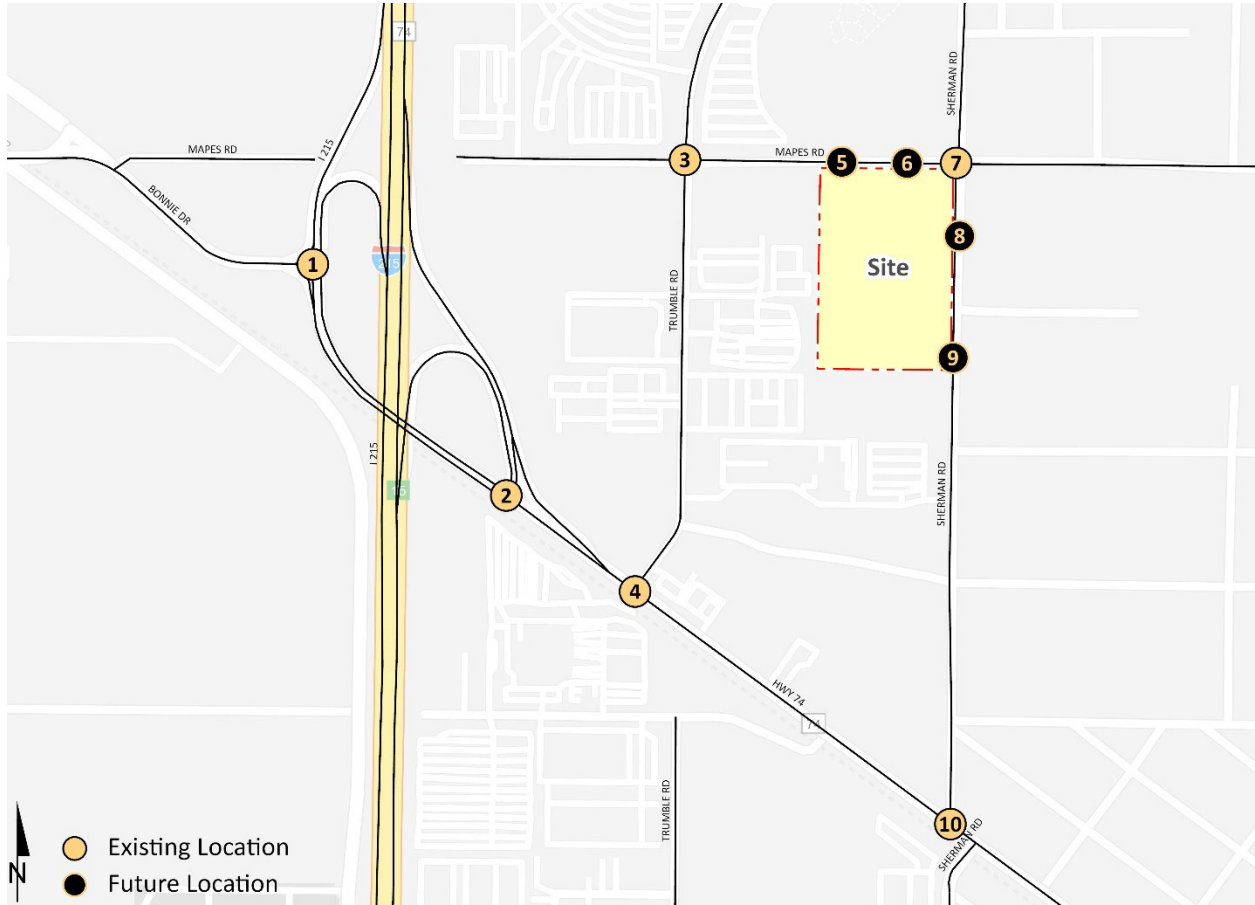
To ensure that this TA satisfies the City of Menifee’s traffic study requirements, Urban Crossroads, Inc. prepared a Project traffic study scoping package for review by City of Menifee staff prior to the preparation of this report. This agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The scoping agreement is included in Appendix 1.1 of this TA.

The 10 study area intersections shown on Exhibit 1-3 and listed in Table 1-1 were selected for evaluation in this TA. At a minimum, the study area includes intersections where the Project is anticipated to contribute 50 or more peak hour trips per the City’s traffic study guidelines. (2) The “50 peak hour trip” criterion represents a minimum number of trips at which a typical intersection would have the potential to be affected by a given development proposal. The 50 peak hour trip criterion is a traffic engineering rule of thumb that is accepted and widely used within the City for estimating a potential area of influence (i.e., study area).

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection	Jursidiction	CMP?
1	I-215 SB Ramps/SR-74 & Bonnie Dr.	Caltrans/Perris	Yes
2	I-215 NB Ramps & SR-74	Caltrans/Perris	Yes
3	Trumble Rd. & Mapes Rd.	Menifee/Perris	No
4	Trumble Rd. & SR-74	Menifee/Caltrans	No
5	Dwy 1 & Mapes Rd.	Menifee/Perris	No
6	Dwy 2 & Mapes Rd.	Menifee/Perris	No
7	Sherman Rd. & Mapes Rd.	Menifee/Perris	No
8	Sherman Rd. & Dwy 3	Menifee	No
9	Sherman Rd. & Dwy 4	Menifee	No
10	Sherman Rd. & SR-74	Menifee/Caltrans	No

EXHIBIT 1-3: STUDY AREA



The intent of a CMP is to more link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and most recently updated in 2019 as part of the Riverside County Long Range Transportation Study. The Riverside County Transportation Commission (RCTC) adopted the 2019 CMP for the County of Riverside in December 2019. (5) The two I-215 Freeway ramps on SR-74 are identified as Riverside County CMP intersections.

1.5 DEFICIENCIES

This section provides a summary of deficiencies by analysis scenario. Section 2 *Methodologies* provides information on the methodologies used in the analysis and Section 5 *E+P Traffic Conditions* and Section 6 *Opening Year Cumulative (2024) Traffic Conditions* includes the detailed analysis. A summary of level of service (LOS) results for all analysis scenarios is presented on Table 1-2.

TABLE 1-2: SUMMARY OF LOS

# Intersection	Existing		E+P		2024 Without Project		2024 With Project	
	AM	PM	AM	PM	AM	PM	AM	PM
1 I-215 SB Ramps/SR-74 & Bonnie Dr.	●	●	●	●	●	●	●	●
2 I-215 NB Ramps & SR-74	●	●	●	●	●	●	●	●
3 Trumble Rd. & Mapes Rd.	●	●	●	●	●	●	●	●
4 Trumble Rd. & SR-74	●	●	●	●	●	●	●	●
5 Dwy 1 & Mapes Rd.	N/A	N/A	●	●	N/A	N/A	●	●
6 Dwy 2 & Mapes Rd.	N/A	N/A	●	●	N/A	N/A	●	●
7 Sherman Rd. & Mapes Rd.	●	●	●	●	●	●	●	●
8 Sherman Rd. & Dwy 3	N/A	N/A	●	●	N/A	N/A	●	●
9 Sherman Rd. & Dwy 4	N/A	N/A	●	●	N/A	N/A	●	●
10 Sherman Rd. & SR-74	●	●	●	●	●	●	●	●

● = A - D ● = E ● = F

1.5.1 EXISTING (2022) CONDITIONS

Intersections

The study area intersections are currently operating at an acceptable LOS during the peak hours.

Freeway Off-Ramp Queues

There are no movements that are currently experiencing queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows.

1.5.2 E+P CONDITIONS

Intersections

The study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours with the addition of Project traffic under E+P traffic conditions.

Freeway Off-Ramp Queues

There are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows with the addition of Project traffic for E+P traffic conditions.

1.5.3 OPENING YEAR CUMULATIVE (2024) CONDITIONS

Intersections

The following study area intersections are anticipated to operate at an unacceptable LOS under Opening Year Cumulative (2024) Without Project traffic conditions:

- I-215 Southbound Ramps/SR-74 & Bonnie Dr. (#1) – LOS E PM peak hour only
- Trumble Road & Mapes Road (#3) – LOS F PM peak hour only
- Sherman Road & SR-74 (#4) – LOS F AM and PM peak hour

There are no additional intersections anticipated to operate at a deficient LOS with the addition of Project traffic.

Freeway Off-Ramp Queues

There are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for Opening Year Cumulative (2024) Without and With Project traffic conditions.

1.6 RECOMMENDATIONS

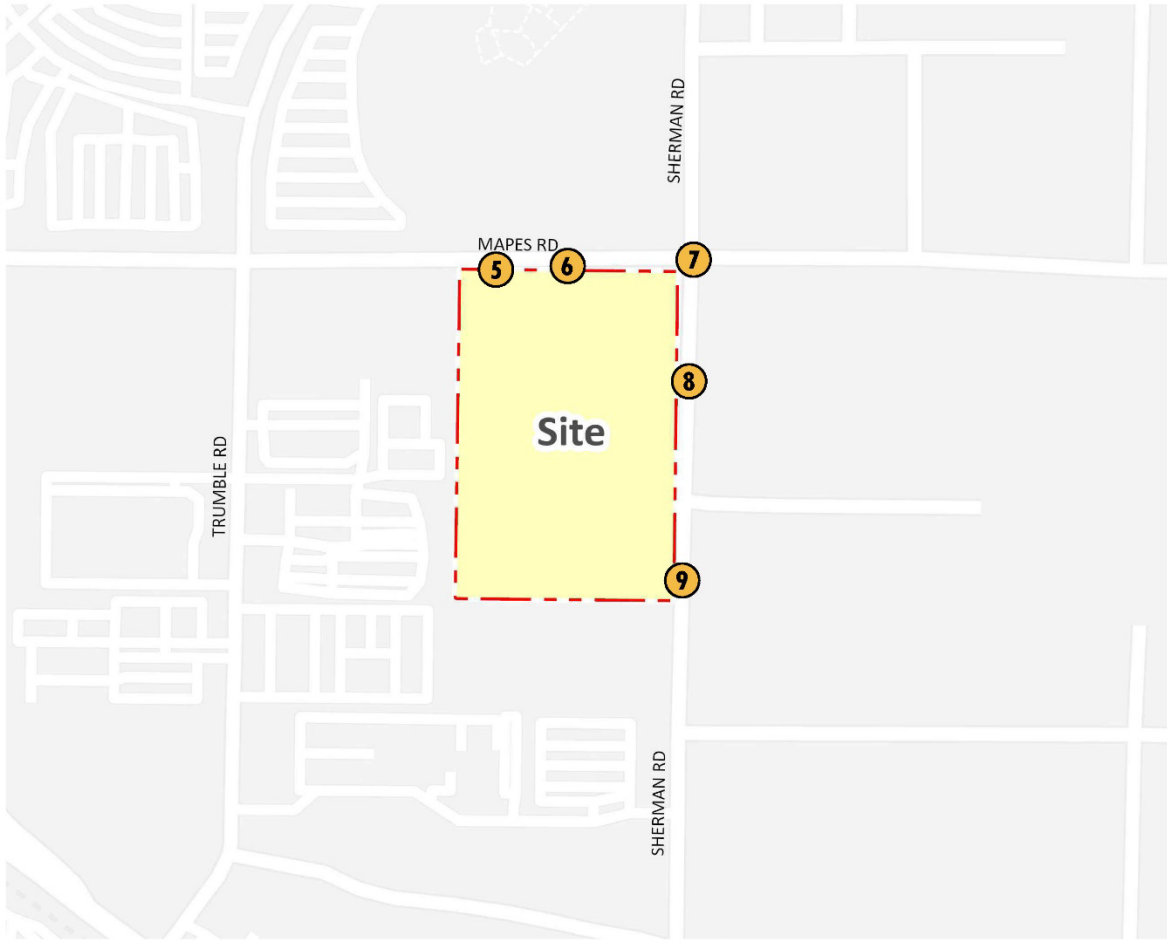
1.6.1 SITE ADJACENT AND SITE ACCESS RECOMMENDATIONS

The following recommendations are based on the minimum improvements needed to accommodate site access and maintain acceptable peak hour operations for the proposed Project. The site adjacent recommendations are shown on Exhibits 1-4.

Recommendation 1 – Driveway 1 & Mapes Road (#5) – The following improvements are necessary to accommodate site access:

- Project will install a stop control on the northbound approach.
- Improvement will include accommodating a minimum 100-foot westbound left turn lane.
- Project will install truck turn restriction signage to restrict trucks from making right turns out of Driveway 1.

EXHIBIT 1-4: SITE ACCESS RECOMMENDATIONS



5	Dwy. 1 & Mapes Rd.	6	Dwy. 2 & Mapes Rd.	7	Sherman Rd. & Mapes Rd.	8	Sherman Rd. & Dwy. 3	9	Sherman Rd. & Dwy. 4
See Note A									

- = Stop Sign Improvement
- = Existing Lane
- = Lane Improvement
- 100'** = Recommended Turn Pocket Length
- DEF** = Defacto Right Turn

Note A: The Project will install truck turn restriction signage to restrict trucks from making right turns out of the driveway.

Recommendation 2 – Driveway 2 & Mapes Road (#6) – The following improvements are necessary to accommodate site access:

- Project will install a stop control on the northbound approach. This driveway will be restricted to right-in/right-out access only via the raised median.
- Half-section roadway improvement will accommodate a 2nd eastbound shared through-right turn lane.

Recommendation 3 – Sherman Road & Mapes Road (#7) – The following improvements are recommended to accommodate 95th percentile queues and site adjacent roadway improvements:

- Project will improve the intersection to accommodate a 100-foot eastbound left turn pocket and the half-section roadway improvement on Mapes Road will accommodate a dedicated eastbound right turn pocket (trap lane with no pocket length).

Recommendation 4 – Sherman Road & Driveway 3 (#8) – The following improvements are necessary to accommodate site access:

- Project will install a stop control on the eastbound approach.
- Improvement will include accommodating a minimum 50-foot northbound left turn lane.

Recommendation 5 – Sherman Road & Driveway 4 (#9) – The following improvement is necessary to accommodate site access:

- Project will install a stop control on the eastbound approach.
- Improvement will include accommodating a minimum 50-foot northbound left turn lane.
- Project will install truck turn restriction signage to restrict trucks from making right turns out of Driveway 4.

Recommendation 6 – Mapes Road – Mapes Road is an east-west roadway located along the Project's northern boundary. Project to construct Mapes Road at its ultimate half-section-width as a Major Highway (118-foot right-of-way) from the Project's western boundary to Sherman Road consistent with the City's standards. The roadway improvements should include the construction of a raised median consistent with City Standard No. 110 (although a break in the median will allow for full access at Driveway 1 only). Through lanes along the Project's frontage will be striped in the interim to transition down to the existing lanes west of the Project, until such time in the future when Mapes Road is widened to its ultimate cross-section to the west.

Recommendation 7 – Sherman Road – Sherman Road is a north-south roadway located along the Project's eastern boundary. Project to construct Sherman Road at its ultimate half-section width as an Industrial Collector (78-foot right-of-way, 56-foot curb-to-curb) from Mapes Road to the Project's southern boundary consistent with the City's standards. The roadway will be striped along the Project's frontage to provide the appropriate lanes and transitions between the existing lanes to the south of the Project.

On-site traffic signing and striping will be implemented agreeable with the provisions of the California Manual on Uniform Traffic Control Devices (CA MUTCD) and in conjunction with detailed construction plans for the Project site.

Sight distance at each project access point will be reviewed with respect to standard Caltrans and City of Menifee sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.

1.6.2 QUEUING ANALYSIS AT THE PROJECT DRIVEWAYS

A queuing analysis was conducted at the study area intersections for Opening Year Cumulative (2024) With Project traffic conditions to determine the turn pocket lengths necessary to accommodate 95th percentile queues. The analysis was conducted for the weekday AM and weekday PM peak hours. The results have been provided in Appendix 1.2.

SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and fine-tuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. The 95th percentile queue is derived from the average queue plus 1.65 standard deviations. A vehicle is considered queued whenever it is traveling at less than 10 feet/second. The random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each turn movement. A SimTraffic simulation has been recorded five (5) times, during the weekday AM and weekday PM peak hours, and has been seeded for 15-minute periods with 60-minute recording intervals.

1.6.3 OFF-SITE RECOMMENDATIONS

The recommended improvements needed to address the cumulative deficiencies identified under E+P and Opening Year Cumulative (2024) traffic conditions are shown in Table 1-3. Improvements that appear under E+P traffic conditions would be the Project's responsibility to construct to maintain acceptable LOS. As shown, there are no improvements identified for E+P traffic conditions. For those improvements listed in Table 1-3 and not constructed as part of the Project, the Project Applicant's responsibility for the Project's contributions towards deficient intersections is fulfilled through a combination of participation in pre-existing fee programs such as the City's Development Impact Fees (DIF) program or payment of fair share that would be assigned to construction of the identified recommended improvements. The Project Applicant would be required to pay fair share fees consistent with the City's requirements (see Section 7 *Local and Regional Funding Mechanisms*). As an exception, if a project contributes fewer than 50 peak hour trips to a pre-project deficient intersection, then fair share contribution by the project is not applicable.

1.7 TRUCK ACCESS

Due to the typical wide turning radius of large trucks, a truck turning template has been overlaid on the site plan at each applicable Project driveway anticipated to be utilized by heavy trucks in order to determine appropriate curb radii and to verify that trucks will have sufficient space to execute turning maneuvers (see Exhibit 1-5). A WB-67 truck (53-foot trailer) has been utilized for the purposes of this analysis. As shown on Exhibit 1-5, the Project as designed is anticipated to accommodate the ingress and egress of heavy trucks. Furthermore, the curb radius proposed for the southeast corner of Driveway 1 on Mapes Road, and the southwest corner of Driveway 4 on Sherman Road are purposely reduced in order to physically prohibit trucks from making a right turn from the driveways. The trucks for the proposed Project would circulate to and from the I-215 Freeway via Trumble Road (no trucks south on Sherman Road towards SR-74).

TABLE 1-3: SUMMARY OF IMPROVEMENTS BY ANALYSIS SCENARIO

#	Intersection Location	Jurisdiction	Analysis Scenario 2024 With Project	Improvements in DIF, TUMF, etc. ¹	Project Responsibility ²	Project Fair Share ³
1	I-215 SB Ramps/SR-74 & Bonnie Dr.	Perris/Caltrans	- Add 2nd NB left turn lane	No	Not Applicable ⁴	--
3	Trumble Rd. & Mapes Rd.	Menifee/Perris	- Install a Traffic Signal	No	Fair Share ⁵	6.3%
4	Trumble Rd. & SR-74	Menifee/Caltrans	- Add 2nd EB left turn lane	No	Not Applicable ⁴	--
7	Sherman Rd. & Mapes Rd.	Menifee/Perris	- Install a Traffic Signal	No	Fair Share ⁵	1.7%

¹ Improvements included in WRCOG TUMF Nexus have been identified as such. Traffic signals included in the City's DIF should be verified to determine any applicable credit.

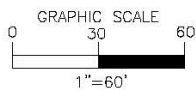
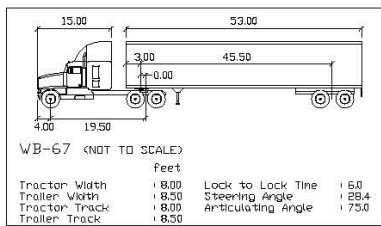
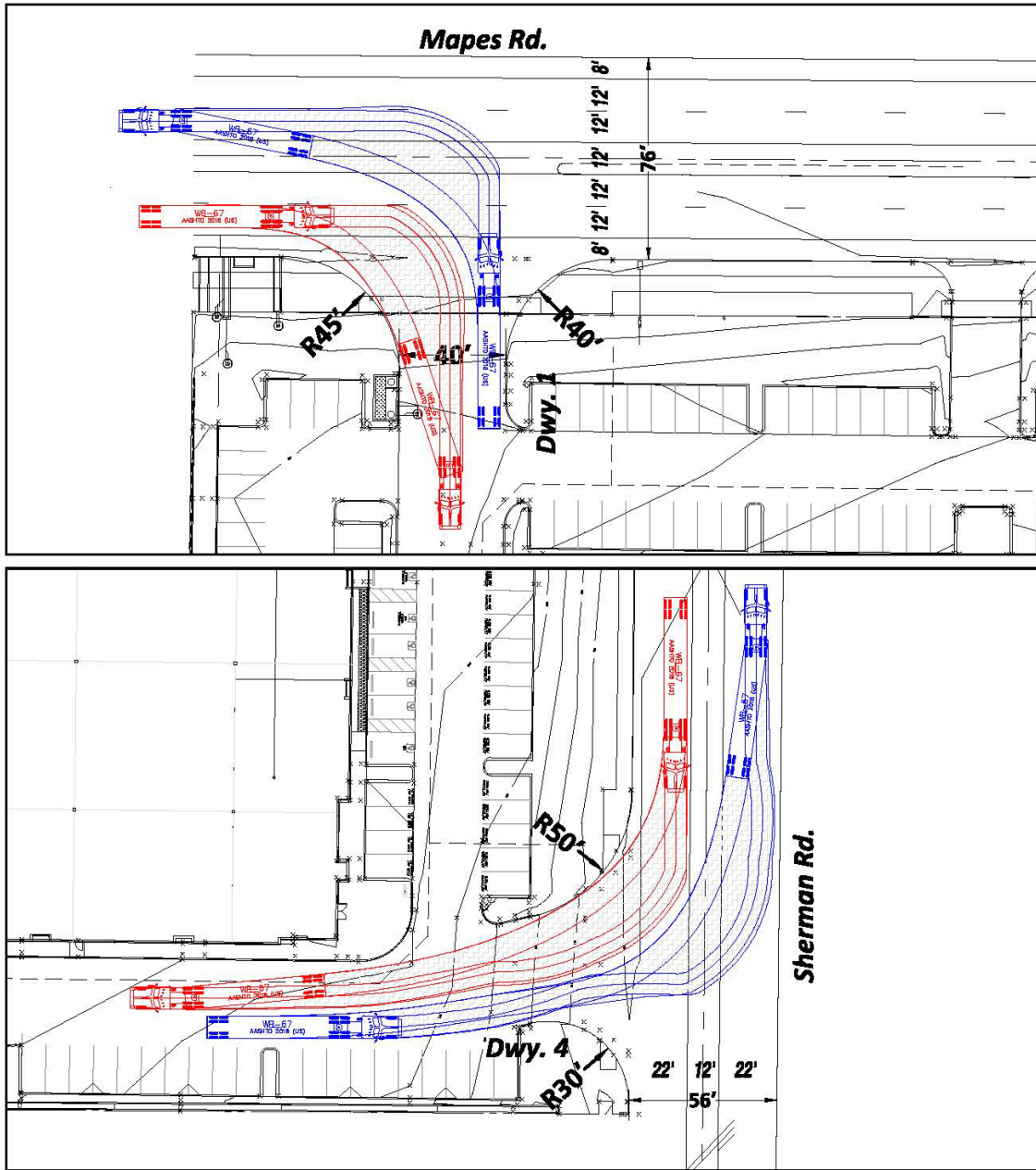
² Program improvements constructed by Project may be eligible for fee credit. In lieu fee payment is at discretion of City.

³ As shown, total project fair share is applicable to the improvements which are not already included in the City DIF/TUMF.

⁴ Project fair share is not applicable pursuant to discussions with City staff (Project contributes no more than 50 peak hour trips to the deficient intersection).

⁵ Intersection is included in the City's Traffic Signal Project List (Table 5.4 of the Nexus Study), however, only covers up to \$350,000.

EXHIBIT 1-5: TRUCK ACCESS



NOTE: THE PROJECT WILL INSTALL TRUCK TURN RESTRICTION SIGNAGE TO RESTRICT TRUCKS FROM MAKING RIGHT TURNS OUT OF DRIVEWAY 1 ON MAPES ROAD AND DRIVEWAY 4 ON SHERMAN ROAD.



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2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with City of Menifee's Traffic Study Guidelines. (2)

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 6th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (6) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Menifee, City of Perris, and the California Department of Transportation (Caltrans) require signalized intersection operations analysis based on the methodology described in the HCM. (6) Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described on Table 2-1.

The traffic modeling and signal timing optimization software package Synchro (Version 11) is utilized to analyze signalized intersections within the study area. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0 ¹
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

Source: HCM, 6th Edition

¹ If V/C is greater than 1.0 then LOS is F per HCM.

The traffic modeling and signal timing optimization software package Synchro (Version 11) has been utilized to analyze signalized intersections. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., $PHF = \frac{[Hourly Volume]}{[4 \times Peak\ 15\text{-minute\ Flow\ Rate}]}$). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour.

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Menifee, City of Perris, and Caltrans require the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (6) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (average delay).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), $V/C \leq 1.0$	Level of Service, $V/C \leq 1.0$ ¹
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

Source: HCM, 6th Edition

¹ If V/C is greater than 1.0 then LOS is F per HCM.

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by the Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD) for all study area intersections. (7)

The signal warrant criteria for Existing conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The Caltrans CA MUTCD indicates that the installation of a traffic signal will be considered if one or more of the signal warrants are met. (7) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing study area intersections for all analysis scenarios. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics (e.g., located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. Traffic signal warrant analyses were performed for the following study area intersection shown in Table 2-3.

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

ID	Intersection	Jursidiction
3	Trumble Rd. & Mapes Rd.	Meniffee/Perris
5	Dwy 1 & Mapes Rd.	Meniffee/Perris
6	Dwy 2 & Mapes Rd.	Meniffee/Perris
7	Sherman Rd. & Mapes Rd.	Meniffee/Perris
8	Sherman Rd. & Dwy 3	Meniffee
9	Sherman Rd. & Dwy 4	Meniffee

Traffic signal warrant analyses were performed for all of the full access unsignalized study area intersections, as such, traffic signal warrants have not been performed at the intersection of Sherman Road and SR-74 (which has limited access) or any of the signalized intersections. The traffic signal warrant analysis for Existing (2022) conditions are presented in Section 3 *Existing (2022) Traffic Analysis*. The traffic signal warrant analyses for future conditions are presented in Section 5 *E+P Traffic Analysis*, and Section 6 *Opening Year Cumulative (2024) Traffic Analysis* of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 QUEUING ANALYSIS

Consistent with Caltrans requirements, the 95th percentile queuing of vehicles has been assessed at the off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at the I-215 Freeway at the SR-74 interchange. Specifically, the off-ramp queuing analysis is utilized to identify any potential queuing and “spill back” onto the I-215 Freeway mainline from the off-ramps. The 95th percentile queue has also been utilized to assess the queues at SR-74 to identify any potential queuing.

The traffic progression analysis tool and HCM intersection analysis program, Synchro, has been used to assess the potential deficiencies/needs of the intersections with traffic added from the proposed Project. Storage (turn-pocket) length recommendations at the ramps have been based upon the 95th percentile queue resulting from the Synchro progression analysis. The footnote from the Synchro output sheets indicates if the 95th percentile cycle exceeds capacity. Traffic is simulated for two complete cycles of the 95th percentile traffic in Synchro in order to account for the effects of spillover between cycles. In practice, the 95th percentile queue shown will rarely be exceeded and the queues shown with the footnote are acceptable for the design of storage bays. The 95th percentile queue is derived from the average queue plus 1.65 standard deviations. The 95th percentile queue is not necessarily ever observed it is simply based on statistical calculations.

2.5 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

2.5.1 CITY OF MENIFEE

Per Policy C-1.2 of the City of Menifee General Plan, the following LOS will be utilized for study area intersections located within the City:

The City of Menifee has identified LOS D as the threshold for acceptable operating conditions for intersections except at constrained intersections and roadway segments in close proximity to I-215, where LOS E is accepted during peak hours.

Therefore, any intersection operating at LOS E or F will be considered deficient for the purposes of this analysis. (8)

2.5.2 CITY OF PERRIS

Required LOS for roadway segments and intersections within the City of Perris is LOS D. 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. For the purposes of this traffic impact analysis, LOS D has also been considered the acceptable threshold for all intersections within the study area.

2.5.3 CALTRANS

Senate Bill 743 (SB 743), approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of vehicle miles traveled (VMT) as the replacement for automobile delay-based LOS. Caltrans acknowledges automobile delay will no longer be considered a CEQA impact for development projects and will use VMT as the metric for determining impacts on the State Highway System (SHS). However, LOS D has been utilized as the target LOS for Caltrans facilities, consistent with the City of Menifee.

2.6 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. The LOS-based traffic study will be utilized for conditions of approval and to demonstrate consistency with the General Plan goals/policies. To determine whether the addition of project-related traffic at a study intersection would result in a deficiency, the following thresholds will be utilized:

- If the pre-Project condition at an intersection or roadway segment is at or better than the minimum acceptable LOS (LOS D, or LOS E at constrained locations near I-215) and the addition of project trips results in unacceptable LOS (LOS E or LOS F), a project-related traffic deficiency is forecast to occur. This type of deficiency would be considered project-specific in which the project would be fully responsible for.
- If the pre-Project condition is LOS E or F and the Project adds 50 or more peak hour trips to the intersection or roadway segment, then a cumulative traffic deficiency is forecast to occur. This type of deficiency would be considered a “cumulative” deficiency in which the project would be required to contribute a fair share payment toward mitigating the impact. The 50 peak hour trip threshold is a general City guideline and determination of fair share contribution is at the discretion of City staff.

3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Menifee General Plan Circulation Network, and a review of existing peak hour intersection operations, traffic signal warrant, and off-ramp queuing analyses.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the scoping agreement with City of Menifee staff (Appendix 1.1), the study area includes a total of 10 existing and future intersections as shown previously on Exhibit 1-2. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF MENIFEE GENERAL PLAN CIRCULATION ELEMENT

As noted previously, the Project site is located within the City of Menifee. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on City of Menifee General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Menifee General Plan Circulation Element and Exhibit 3-3 illustrates the City of Menifee General Plan roadway cross-sections.

Major Roadways are four-lane roadways and may include a painted median. The Major cross-section has been modified from the County cross-section to provide more flexibility for parkway widths. Shoulders may accommodate exclusive bike lanes or shared neighborhood electric vehicles/bike lanes. Sidewalks may be curb adjacent or separated from the roadway by a landscaped parkway. These roadways typically have a 100-to-118-foot right-of-way and a 76-foot curb-to-curb measurement. These roadways typically direct traffic through major development areas. The following study area roadways within the City of Menifee are classified as a Major Roadway:

- SR-74
- Mapes Road
- Trumble Road

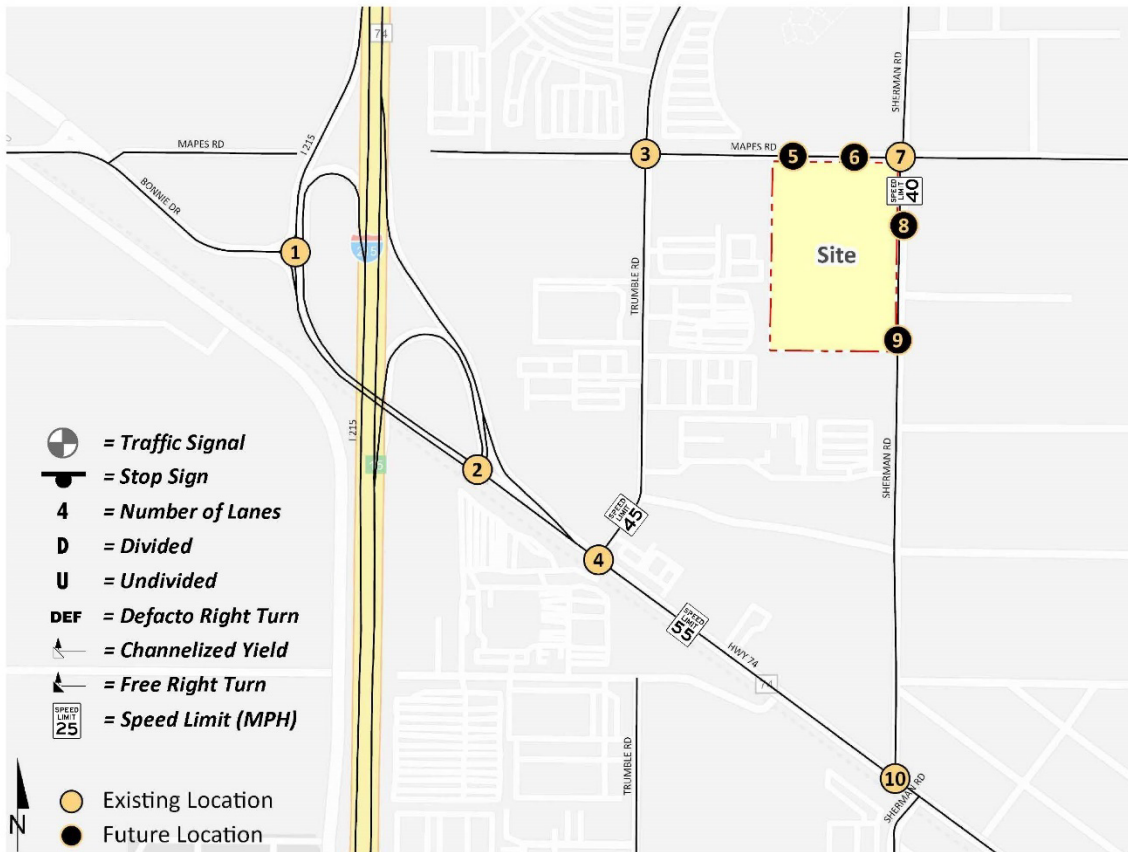
Collector Roadways are two-lane, low-to-moderate speed roadways. They provide an alternative to traveling on higher capacity/speed roadways to navigate through the City. These roadways typically have a 74-foot right-of-way and a 44-foot curb-to-curb measurement. These roadways typically direct traffic through major development areas. The following study area roadway within the City of Menifee is classified as a Major Roadway:

- Sherman Road

3.3 CITY OF PERRIS GENERAL PLAN CIRCULATION ELEMENTS

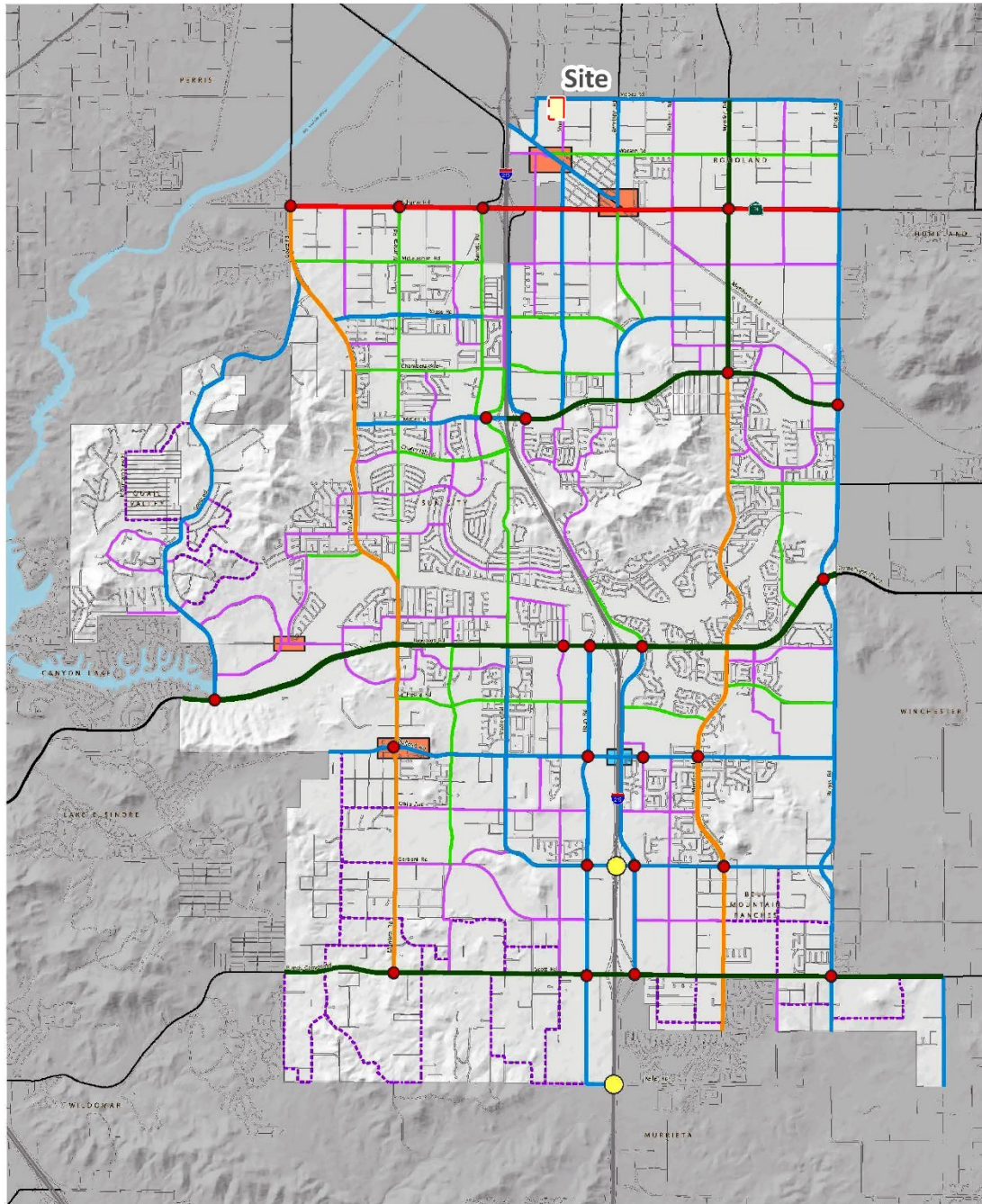
Portions of the study area also lie within the City of Perris. Exhibits 3-4 and 3-5 show the City of Perris General Plan Circulation Element and roadway cross-sections, respectively.

EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



1	2	3	4	5
I-215 SB Ramps / SR-74 & Bonnie Dr.	I-215 NB Ramps & SR-74	Trumble Rd. & Mapes Rd.	Trumble Rd. & SR-74	Dwy. 1 & Mapes Rd.
				Future Intersection
Dwy. 2 & Mapes Rd.	Sherman Rd. & Mapes Rd.	Sherman Rd. & Dwy. 3	Sherman Rd. & Dwy. 4	Sherman Rd. & SR-74
Future Intersection		Future Intersection	Future Intersection	

EXHIBIT 3-2: CITY OF MENIFEE GENERAL PLAN CIRCULATION ELEMENT



- Expressway (6 to 8 Lanes, Divided)
- Urban Arterial (6 Lanes, Divided)
- Arterial (4 Lanes, Divided)
- Major (4 Lanes, Divided)
- Mountain Arterial (4 Lanes, Undivided)
- Secondary (4 Lanes, Undivided)
- Collector / Interconnected Local (2 Lanes)
- Rural Collector / Interconnected Local (2 Lanes)
- Future Freeway Interchange
- Future Freeway Overcrossing
- Site Boundary
- Connectivity Analysis Zone - Roadway alignments, intersection geometrics and traffic control features subject to additional assessment
- Enhanced Intersection - Additional lanes / Right-of-Way required within 600 feet of the intersection

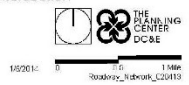
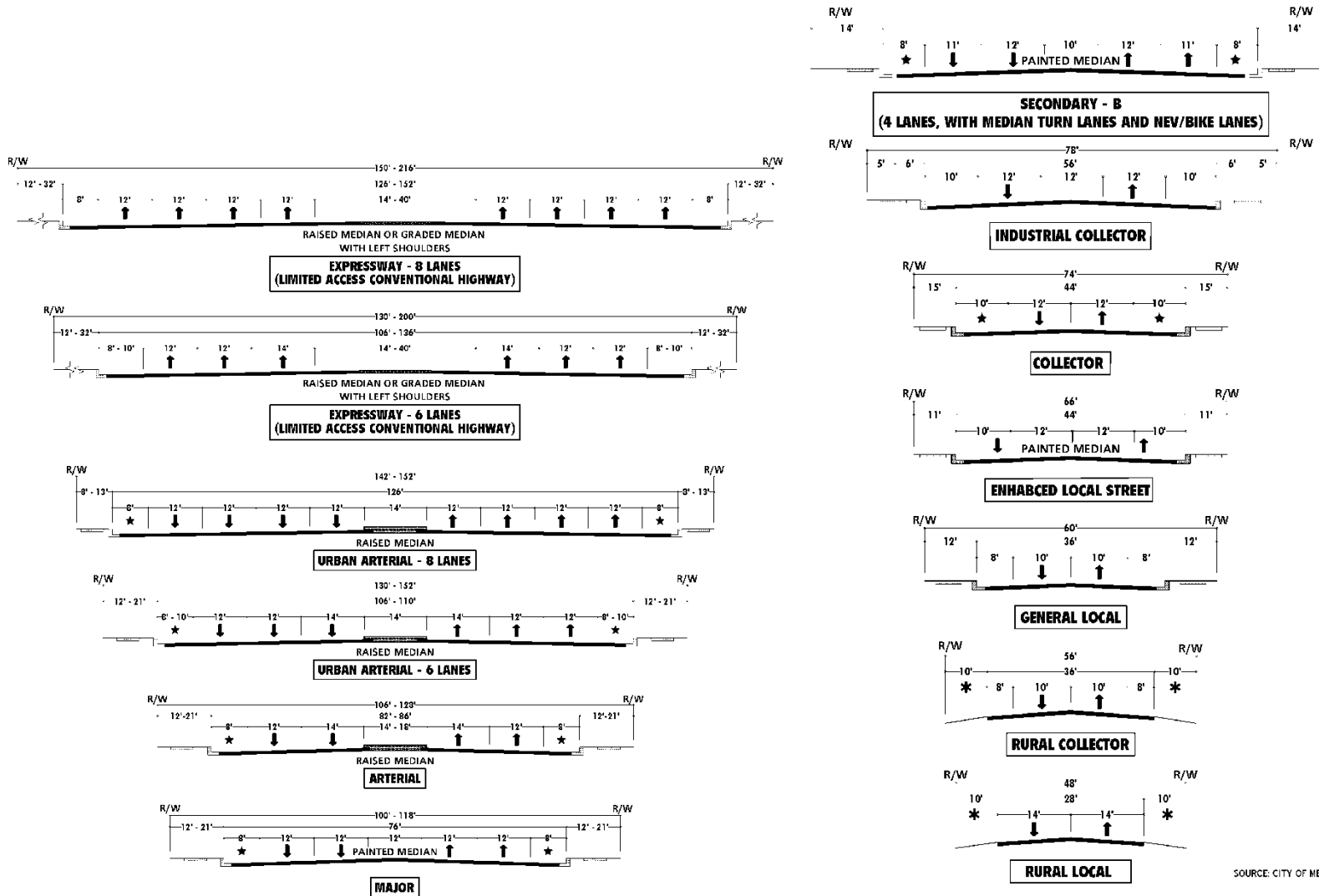


EXHIBIT 3-3: CITY OF MENIFEE GENERAL PLAN ROADWAY CROSS-SECTIONS



SOURCE: CITY OF MENIFEE GENERAL PLAN

EXHIBIT 3-4: CITY OF PERRIS GENERAL PLAN CIRCULATION ELEMENT

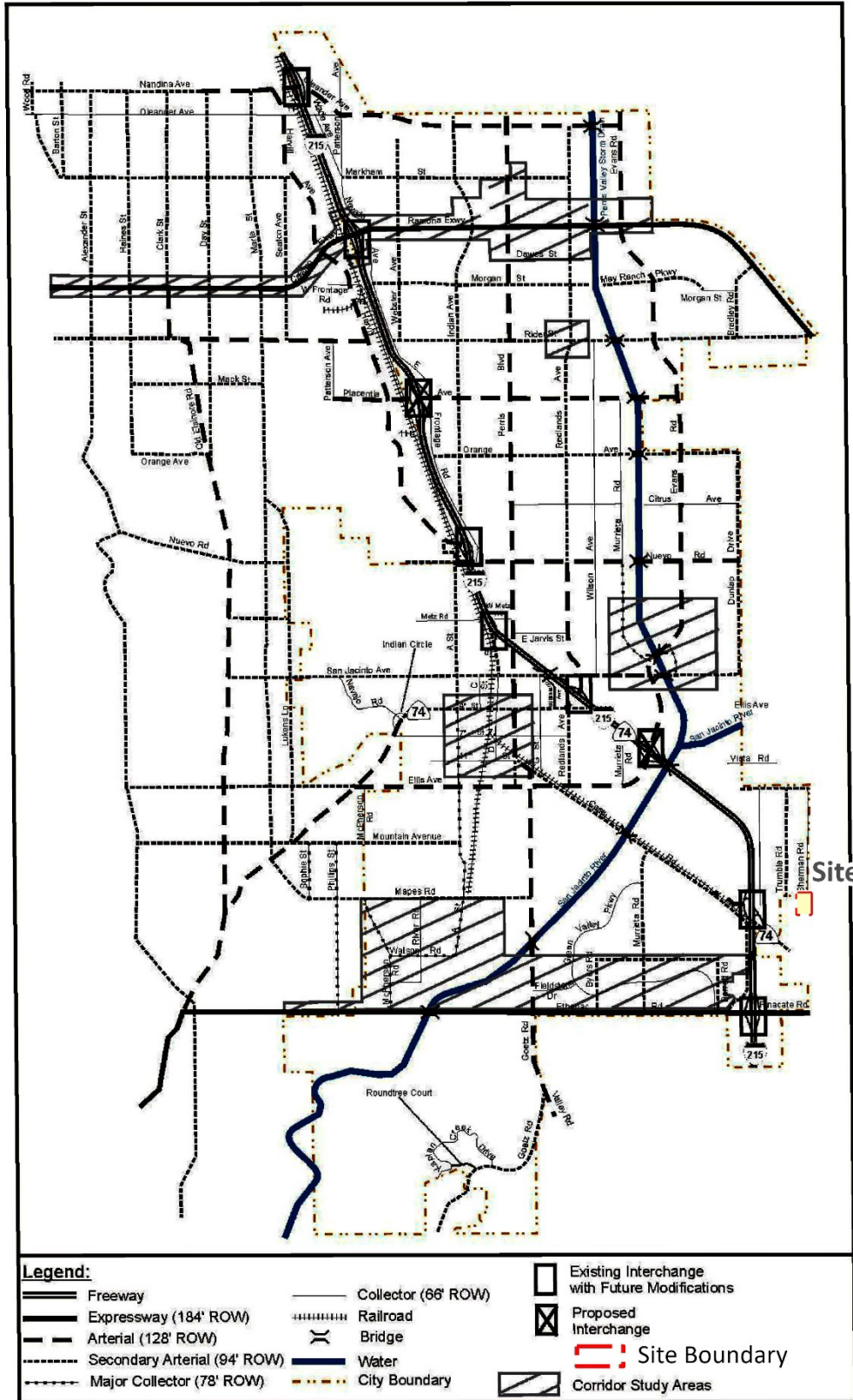
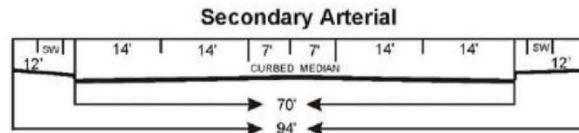
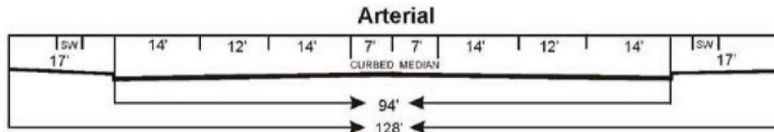
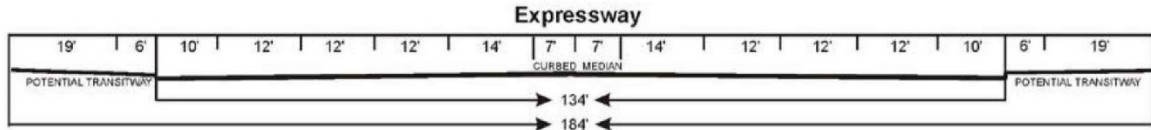
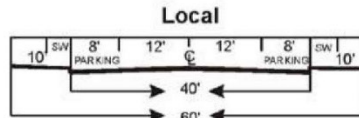
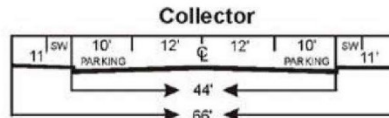
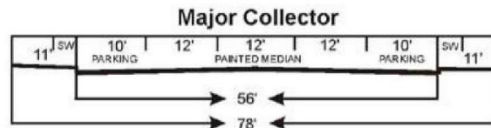
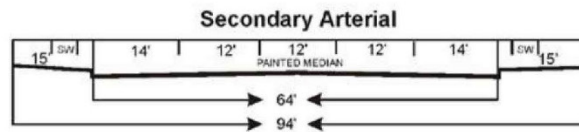


EXHIBIT 3-5: CITY OF PERRIS GENERAL PLAN ROADWAY CROSS-SECTIONS



or



Specific details for each cross-section follow in Figures 4.1 A - 4.1 F

Legend

- SW Sidewalk or Trail (at least 4 feet)
- PARKING Parking or Bike Lane
- PAINTED MEDIAN Center Median and/or Continuous Left Turning Lane
- CURBED MEDIAN Landscaped Center Median

Source: City of Perris
General Plan
1-11-2022

3.4 BICYCLE, EQUESTRIAN, & PEDESTRIAN FACILITIES

Field observations indicate nominal pedestrian and bicycle activity within the study area. As shown on Exhibit 3-6, pedestrian facilities are built out along the north side of Mapes Road but lack these improvements in the areas adjacent to undeveloped land (including the Project's frontage). The City of Menifee bike networks are shown on Exhibit 3-7. As shown on Exhibit 3-7, there are Class II bike lanes (on-street, striped and signed) proposed on Mapes Road and Trumble Road and Sherman Road is classified as a Class III bike route (shared on-street, signed, but not striped). The Project will implement Class II bike lanes along their frontage of Mapes Road consistent with the City standards. The City of Perris' recommended bicycle network is illustrated on Exhibit 3-8.

3.5 TRANSIT SERVICE

The City is currently served by Riverside Transit Agency (RTA). The transit services within the City are illustrated on Exhibit 3-9. As shown on Exhibit 3-9, RTA Route 28 is the closest existing route that currently runs along SR-74 and the I-215 Freeway. Transit service is reviewed and updated by RTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.6 TRUCK ROUTES

The City of Menifee and City of Perris' truck routes are shown on Exhibit 3-10 and Exhibit 3-11, respectively. Although the truck routes do not identify the site adjacent roadways or SR-74 as a truck route, Sherman Road (between Mapes and the southern Project boundary only), Mapes Road, Trumble Road, and SR-74 would be utilized to and from the Project in order to gain local access to the I-215 Freeway consistent with State law.

EXHIBIT 3-6: EXISTING PEDESTRIAN FACILITIES

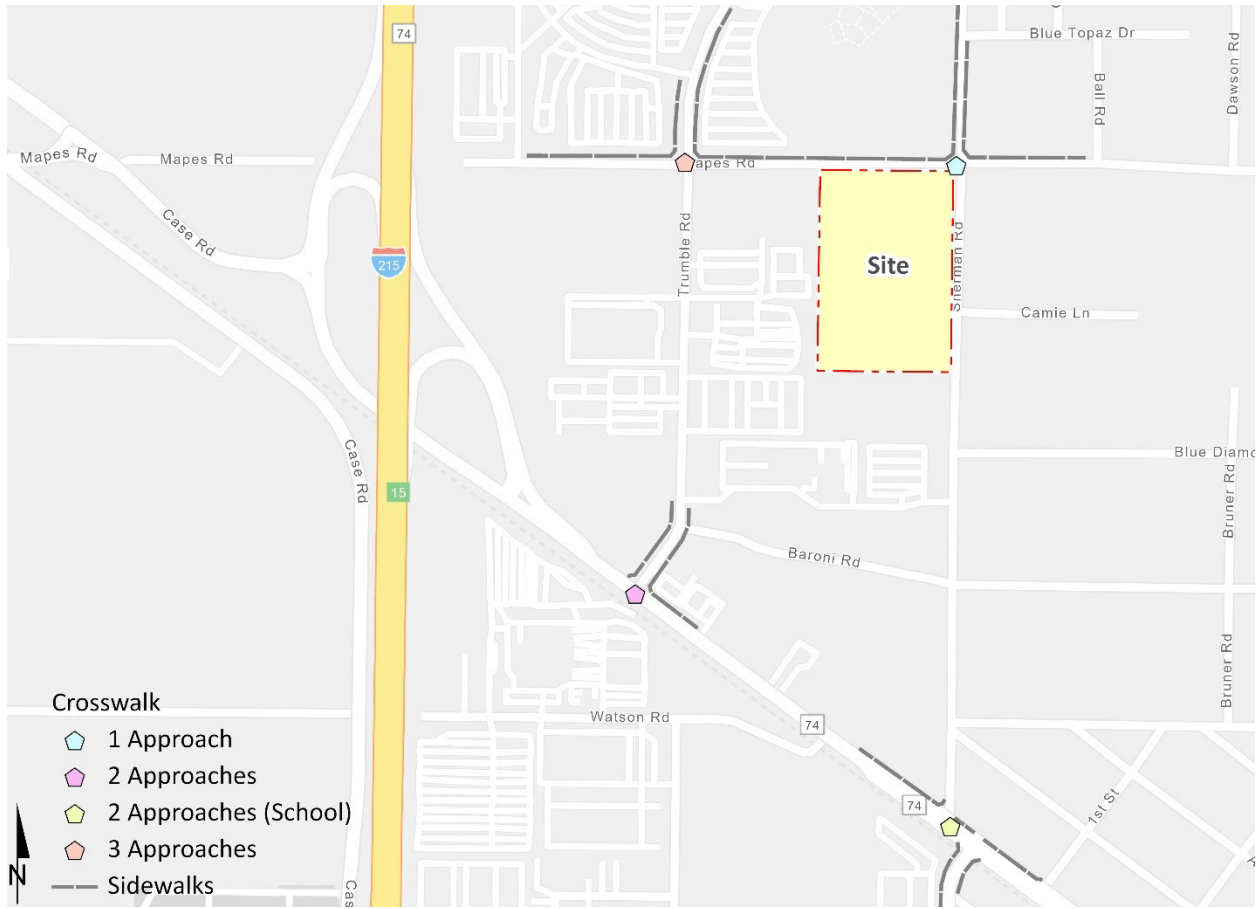
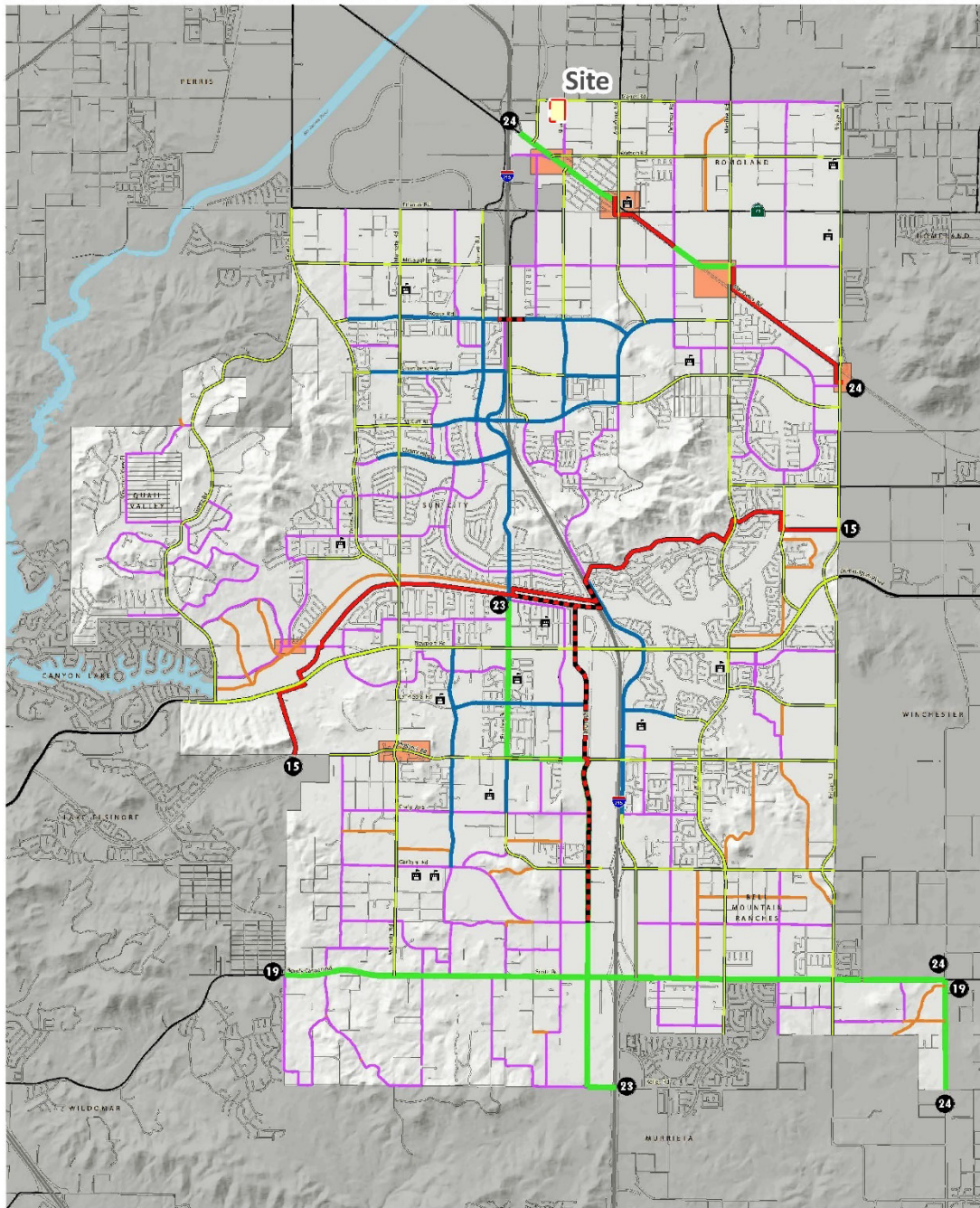


EXHIBIT 3-7: CITY OF MENIFEE BIKEWAY AND COMMUNITY PEDESTRIAN NETWORK



Source: Urban Crossroads, 2012

- Subregional Route - Off-Road Bike Trail (Class I)
- Subregional Route - On-Street Bike Lanes (Class II)
- - - Community Off-Road Bike Trail (Class I)
- Community On-Street NEV/Bike Lanes (Class II)
- Community On-Street Bike Lanes (Class II)
- Community Hiking / Biking Trail Opportunity
- Class III Bike Routes
- Connectivity Analysis Zone - Trail alignments and traffic control features subject to additional assessment
- Existing Schools
- Site Boundary
- 24 Subregional Route Number (WRCOG Non-Motorized Transportation Plan)

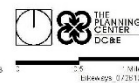
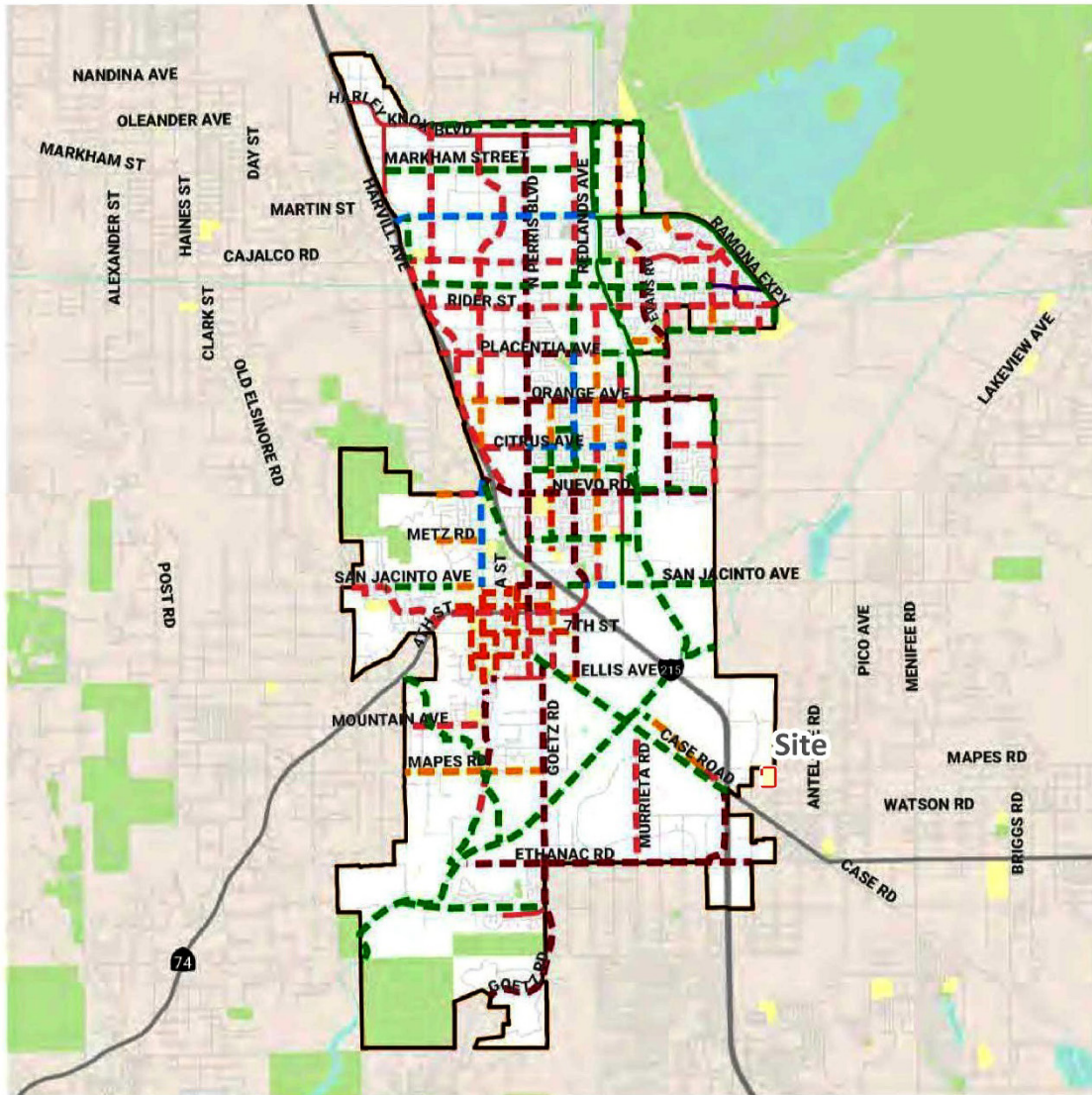


EXHIBIT 3-8: CITY OF PERRIS RECOMMENDED BIKEWAY NETWORK

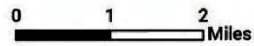


Existing / Recommended Bikeways

- — — 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
- Site Boundary



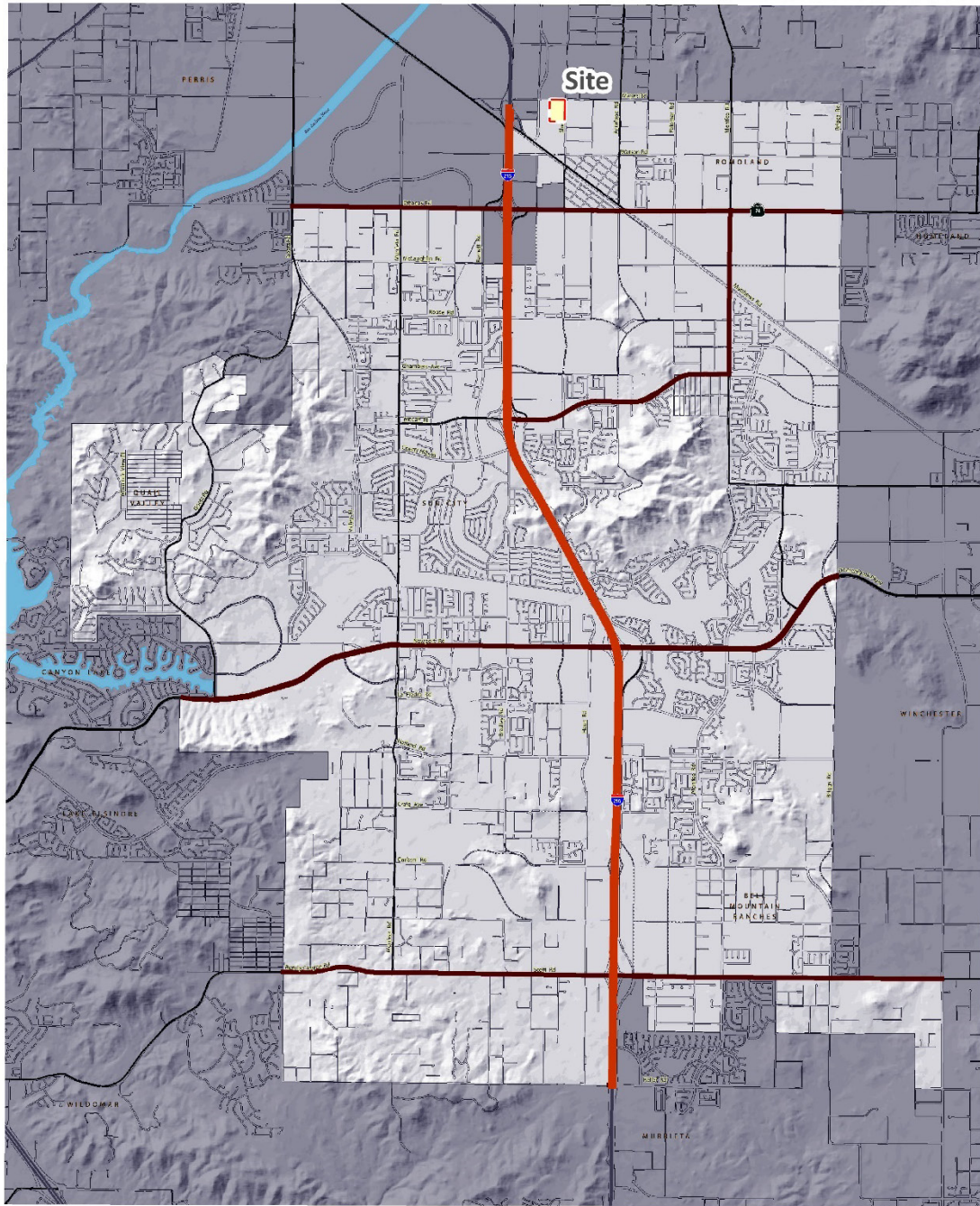
Sources:
 SCAG
 UC Berkeley TIMS
 OSM
 Caltrans



EXHIBIT 3-9: EXISTING TRANSIT



EXHIBIT 3-10: CITY OF MENIFEE TRUCK ROUTES



- Truck Route
- I-215 Freeway Corridor
- - - Site Boundary

The designated truck routes within the City have been selected because of their accessibility to the freeway and key industrial/commercial areas. The designation of truck routes does not prevent trucks from using other roads or streets to make deliveries to individual addresses, or for other reasons as defined in the State of California *Motor Vehicle Code*.

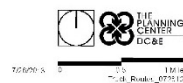
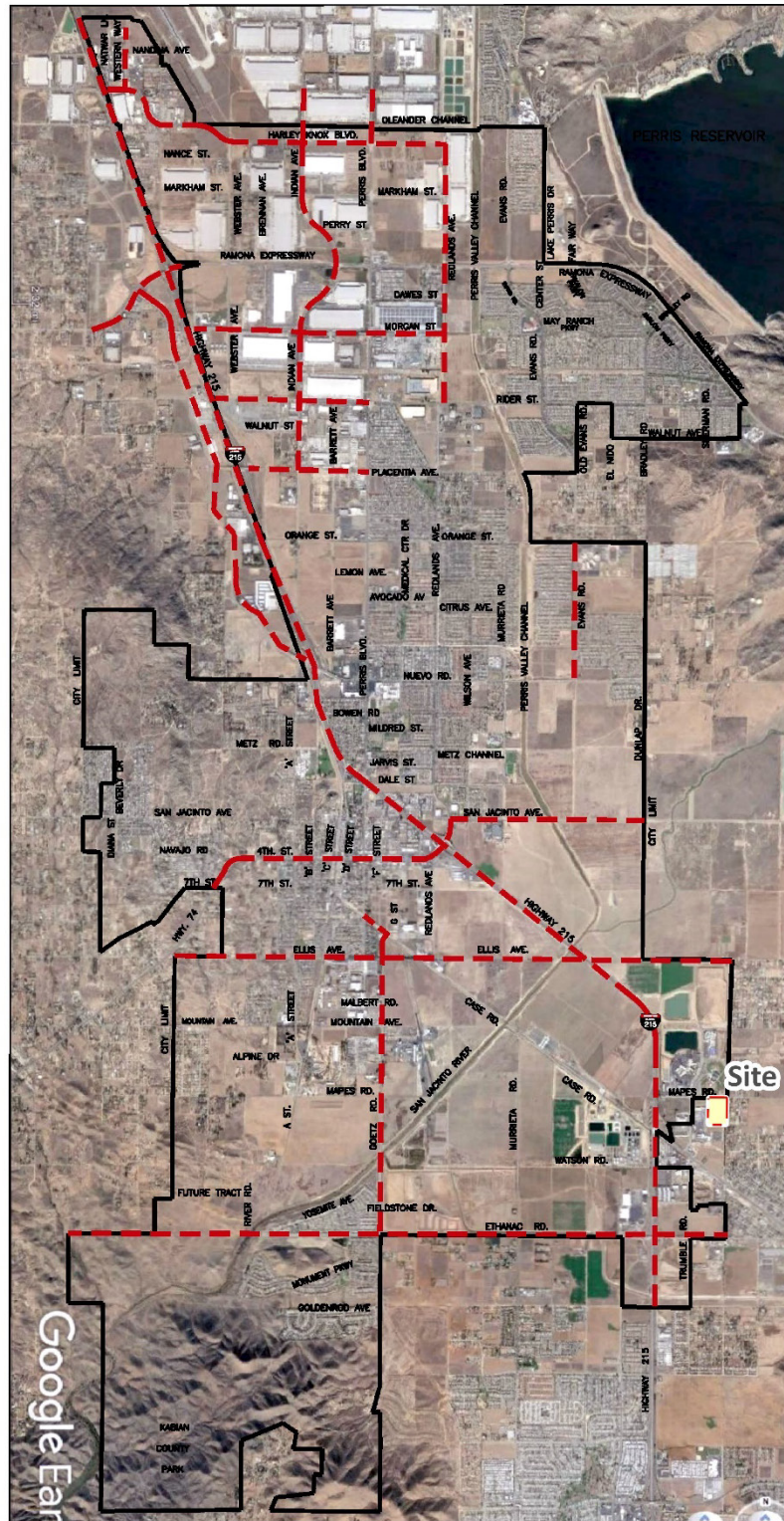


EXHIBIT 3-11: CITY OF PERRIS TRUCK ROUTES



- LEGEND:**
- TRUCK ROUTES
 - PERRIS CITY LIMITS
 - Site Boundary



3.7 EXISTING (2022) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in October 2021. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

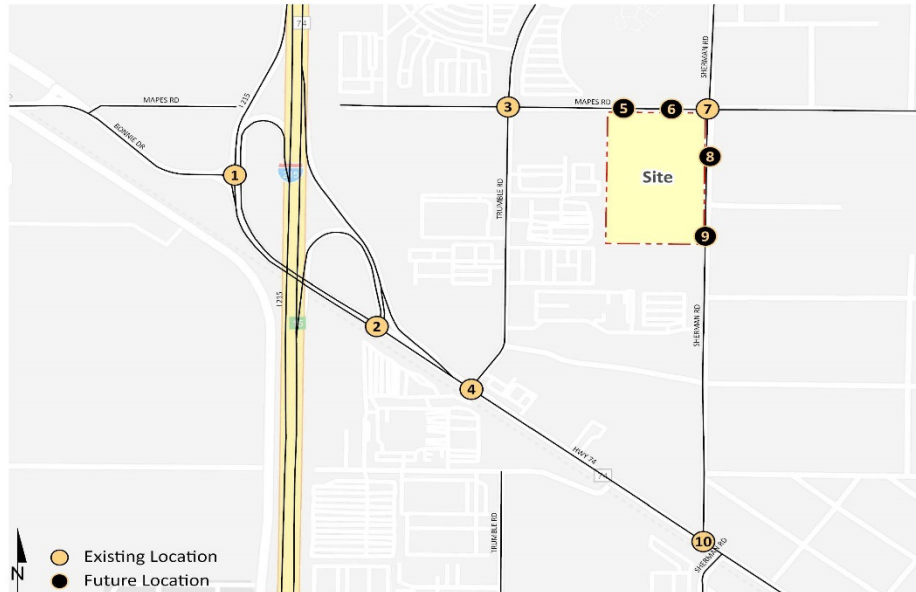
Local schools are back in session with in-person instruction. However, since counts were collected in October 2021, a growth adjustment factor of 2% has been applied to the counts in order to establish the existing (2022) baseline. In addition, manual volume adjustments have also been made for volume balancing between closely spaced intersections where there should be no unexplained loss of vehicles. The 2021 weekday AM, and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

Existing weekday ADT volumes are shown on Exhibit 3-12. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

$$\text{Weekday PM Peak Hour (Approach Volume + Exit Volume)} \times 12.76 = \text{Leg Volume}$$

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 7.8 percent. As such, the above equation utilizing a factor of 12.76 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of 7.8 percent (i.e., $1/0.078 = 12.76$) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. For example, the segment of Trumble Road north of SR-74 does not have ADT data collected, as such, ADT was estimated by taking the sum of the weekday PM southbound left, southbound right, eastbound right and westbound left volumes then multiplying it by the factor of 12.76 (resulting in an estimated daily volume of 8,901). Existing weekday AM and weekday PM peak hour intersection volumes are also shown on Exhibit 3-12. Average daily traffic volumes shown on Exhibit 3-12 are expressed in actual vehicles, however, the peak hour turning movement volumes are shown in passenger car equivalents (PCE) as these are the volumes used for the purposes of the operations analysis. PCEs allow the typical “real-world” mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the City’s Guidelines (factors are 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks).

EXHIBIT 3-12: EXISTING (2022) TRAFFIC VOLUMES



1	I-215 SB Ramps/SR-74 & Bonnie Dr.	2	I-215 NB Ramps & SR-74	3	Trumble Rd. & Mapes Rd.	4	Trumble Rd. & SR-74	5	Dwy 1 & Mapes Rd.
13,350		9,850	26,650	4,200	5,500	8,900	18,750		5,200
37(47) 477(726)		12(37) 178(205)	659(565) 640(475)	2(2) 121(187) 3(51)	6(9) 12(11) 260(165)	531(370) 36(38)	26(41) 768(670)		278(175)
22(19) 232(168)	269(224) 383(288)	28(13) 681(881)		1(0) 22(6) 56(6)	62(10) 132(81) 133(214)	298(292) 560(793)		158(270)	
5,550	17,200	17,200		300	8,250	26,650		5,200	
6	Dwy 2 & Mapes Rd.	7	Sherman Rd. & Mapes Rd.	8	Sherman Rd. & Dwy 3	9	Sherman Rd. & Dwy 4	10	Sherman Rd. & SR-74
	5,200	900	4,900	850		850		1,150	17,150
	278(175)	24(27) 2(7) 5(2)	2(4) 251(141) 12(11)	51(40)		51(40)		103(74)	10(16) 640(564)
158(270)		15(26) 106(222) 37(22)	3(7) 14(6) 16(20)		33(33)		33(33)	553(823)	
5,200		5,200		850		850		850	17,950

###(##) AM(PM) Peak Hour Intersection Volumes
 ## Actual Average Daily Trips
 ## Calculated Average Daily Trips

3.8 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized on Table 3-1, which indicates that all of the study area intersections are currently operating at an unacceptable LOS during the peak hours. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2022) CONDITIONS

#	Intersection	Traffic Control ¹	Delay ² (secs.)		Level of Service	
			AM	PM	AM	PM
1	I-215 SB Ramps/SR-74 & Bonnie Dr.	TS	10.2	12.3	B	B
2	I-215 NB Ramps & SR-74	TS	8.0	8.3	A	A
3	Trumble Rd. & Mapes Rd.	AWS	10.9	11.0	B	B
4	Trumble Rd. & SR-74	TS	17.7	12.0	B	B
5	Dwy 1 & Mapes Rd.		Future Intersection			
6	Dwy 2 & Mapes Rd.		Future Intersection			
7	Sherman Rd. & Mapes Rd.	CSS	10.7	11.0	B	B
8	Sherman Rd. & Dwy 3		Future Intersection			
9	Sherman Rd. & Dwy 4		Future Intersection			
10	Sherman Rd. & SR-74	CSS	11.6	10.9	B	B

¹ TS = Traffic Signal; CSS = Cross-Street Stop; AWS = All-Way Stop

² Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

3.9 EXISTING (2022) TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. There are no unsignalized study area intersections that currently meet a peak hour volume-based traffic signal warrant for Existing (2022) traffic conditions (see Appendix 3.3).

3.10 EXISTING (2022) OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-215 Freeway at SR-74 interchange. Queuing analysis findings are presented in Table 3-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 3-2, there are no movements that are currently experiencing queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows. Worksheets for Existing (2022) traffic conditions off-ramp queuing analysis are provided in Appendix 3.4.

TABLE 3-2: PEAK HOUR OFF-RAMP QUEUING FOR EXISTING (2022) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet)		Acceptable? ¹	
			AM Peak Hour	PM Peak Hour	AM	PM
I-215 SB Ramps/SR-74 & Bonnie Dr. (#1)	SBT	1,450	286	449	Yes	Yes
	SBR	50	21	22	Yes	Yes
I-215 NB Ramps & SR-74 (#2)	SBL/R	1,440	109	123	Yes	Yes

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

² 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

³ Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-215 Freeway mainline.

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4 PROJECTED FUTURE TRAFFIC

The Project is proposed to consist of the development of 277,578 square feet of high-cube fulfillment center warehouse use within a single building. The Project is anticipated to have an Opening Year of 2024. Vehicular access will be accommodated via Mapes Road and Sherman Road for both passenger cars and trucks (with primary truck access on Mapes Road and secondary truck access on Sherman Road). Regional access to the Project site is accommodated from the I-215 Freeway via SR-74.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the High Cube Warehouse Trip Generation Study (WSP, January 2019) for high-cube fulfillment center use. (3) The following trip generation rates and vehicle mix were utilized for calculating the trip generation for the proposed Project:

- High-Cube Fulfillment Center Warehouse has been used to derive site specific trip generation estimates for up to 277,578 square feet. The Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) has trip generation rates for high-cube fulfillment center use for both non-sort and sort facilities (ITE land use code 155). While there is sufficient data to support use of the trip generation rates for non-sort facilities, the sort facility rate appears to be unreliable because they are based on limited data (i.e., one to two surveyed sites). The proposed Project is speculative and whether a non-sort or sort facility end-user would occupy the buildings is not known at this time. Lastly, the ITE Trip Generation Handbook recommends the use of local data sources where available. As such, the best available source for high-cube fulfillment center use would be the trip-generation statistics published in the High-Cube Warehouse Trip Generation Study (WSP, January 29, 2019) which was commissioned by the Western Riverside Council of Governments (WRCOG) in support of the Transportation Uniform Mitigation Fee (TUMF) update in the County of Riverside. (3) The WSP trip generation rates were published in January 2019 and are based on data collected at 11 local high-cube fulfillment center sites located throughout Southern California (specifically Riverside County and San Bernardino County). However, the WSP study does not include a split for inbound and outbound vehicles, as such, the inbound and outbound splits per the ITE Trip Generation Manual (11th Edition, 2021) for Land Use Code 154 have been utilized. (4)

PCE factors were applied to the trip generation rates for heavy trucks (large 2-4-axles and 5+-axles). In an effort to be conservative, a PCE factor of 2.0 has been utilized for 2-4 axle trucks and a factor of 3.0 for 5+-axle trucks (this is also consistent with the approved scoping agreement included in Appendix 1.1). These factors were selected based on the County's recommended use of 1.5 for 2-axles, 2.0 for 3-axles, and 3.0 for 4+-axle trucks. The WSP study does not provide a vehicle split between the 2-4-axles. Trip generation rates are summarized on Table 4-1 for actual vehicles and PCE. Per the City's Guidelines, all peak hour intersection operations analyses are to utilize the PCE trip generation. The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project in actual vehicles and PCE are shown on Table 4-2. The proposed Project is anticipated to generate 592 two-way trip-ends per day with 35 AM peak hour trips and 46 PM peak hour trips in actual vehicles (see Table 4-2). PCE based trip generation for the Project, which will be utilized for the peak hour intersection operations analysis, is also summarized on Table 4-2.

TABLE 4-1: TRIP GENERATION RATES

Land Use	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center Warehouse ¹	TSF	--	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks			0.006	0.002	0.008	0.003	0.008	0.011	0.162
5+-Axle Trucks			0.008	0.003	0.011	0.003	0.007	0.010	0.217
Passenger Car Equivalent (PCE) Trip Generation									
High-Cube Fulfillment Center Warehouse ¹	TSF	--	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks (PCE = 2.0)			0.012	0.004	0.016	0.006	0.016	0.022	0.324
5+-Axle Trucks (PCE = 3.0)			0.025	0.008	0.033	0.008	0.022	0.030	0.651

¹ Vehicle Mix Source: [High Cube Warehouse Trip Generation Study](#), WSP, January 29, 2019.

Inbound and outbound split source: ITE [Trip Generation Manual](#), Eleventh Edition (2021) for ITE Land Use Code 154.

² TSF = thousand square feet

TABLE 4-2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Actual Vehicles:								
High-Cube Fulfillment	277.578 TSF							
Passenger Cars:		22	7	29	11	29	40	486
2-4axle Trucks:		2	1	3	1	2	3	46
5+-axle Trucks:		2	1	3	1	2	3	60
Total Truck Trips (Actual Vehicles):		4	2	6	2	4	6	106
Total Trips (Actual Vehicles)²		26	9	35	13	33	46	592
Passenger Car Equivalent (PCE):								
High-Cube Fulfillment	277.578 TSF							
Passenger Cars:		22	7	29	11	29	40	486
2-4axle Trucks:		3	1	4	2	4	6	90
5+-axle Trucks:		7	2	9	2	6	8	182
Total Truck Trips (PCE):		10	3	13	4	10	14	272
Total Trips (PCE)²		32	10	42	15	39	54	758

¹ TSF = thousand square feet

² Total Trips = Passenger Cars + Truck Trips.

4.2 PROJECT TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered to identify the route where Project traffic would distribute. In addition, truck routes for neighboring agencies have been taken into consideration in the development of the trip distribution patterns for heavy trucks. Exhibits 4-1 and 4-2 show the Project truck and passenger car trip distribution patterns, respectively. Trip distribution patterns for the Project were reviewed as part of the TA scoping process (see Appendix 1.1). The Project trucks will be prohibited from utilizing Sherman Road to access the site other than from Mapes Road to the Project driveways.

4.3 MODAL SPLIT

The potential for Project trips to be reduced by the use of public transit, walking or bicycling have not been included as part of the Project's estimated trip generation. Essentially, the Project's traffic projections are "conservative" in that these alternative travel modes would reduce the forecasted traffic volumes.

4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project weekday ADT and weekday peak hour intersection turning movement volumes are shown on Exhibit 4-3.

4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon background (ambient) growth at 2% per year for 2024 traffic conditions. The total ambient growth is 4.04% for 2024 traffic conditions (compounded growth of 2 percent per year over 2 years or 1.02^2 years). The ambient growth factor is intended to approximate regional traffic growth. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. Opening Year Cumulative (2024) traffic volumes are provided in Section 6 of this TA. The traffic generated by the proposed Project was then manually added to the base volume to determine Opening Year Cumulative "With Project" forecasts.

EXHIBIT 4-1: PROJECT (TRUCK) TRIP DISTRIBUTION

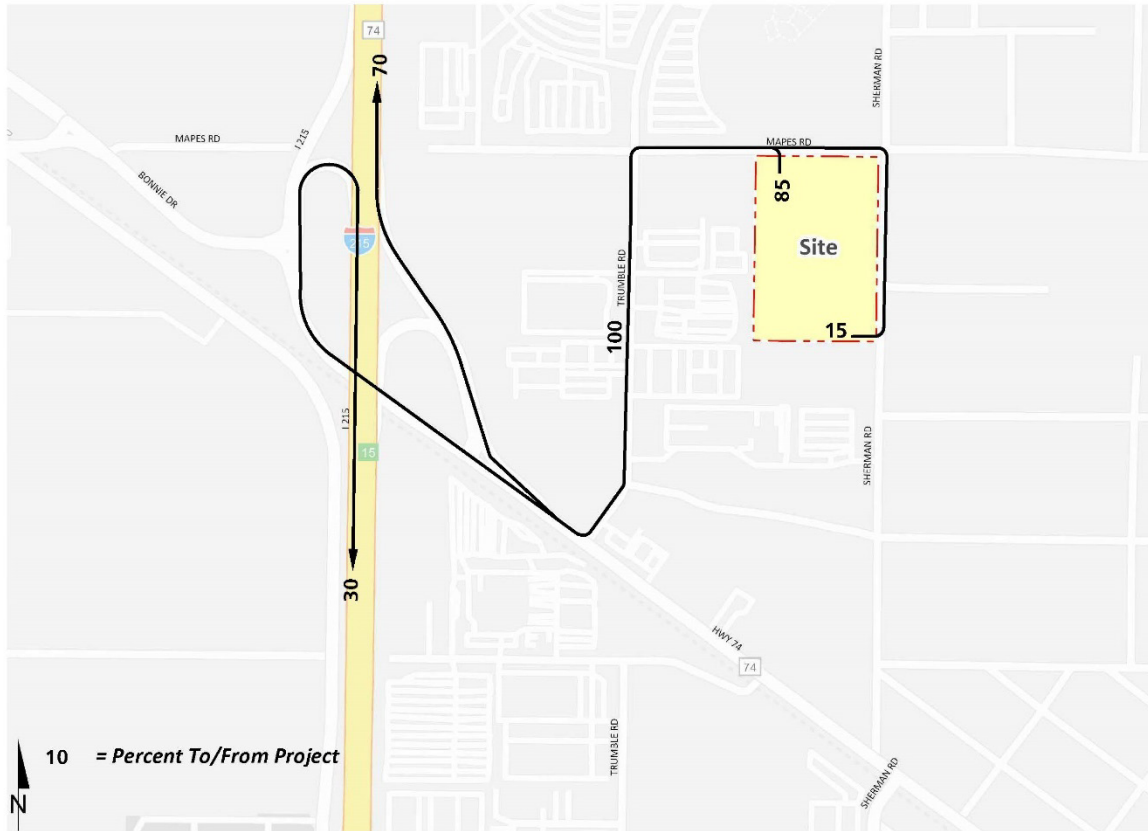


EXHIBIT 4-2: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION

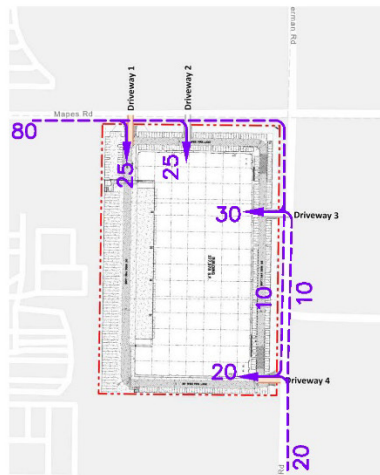
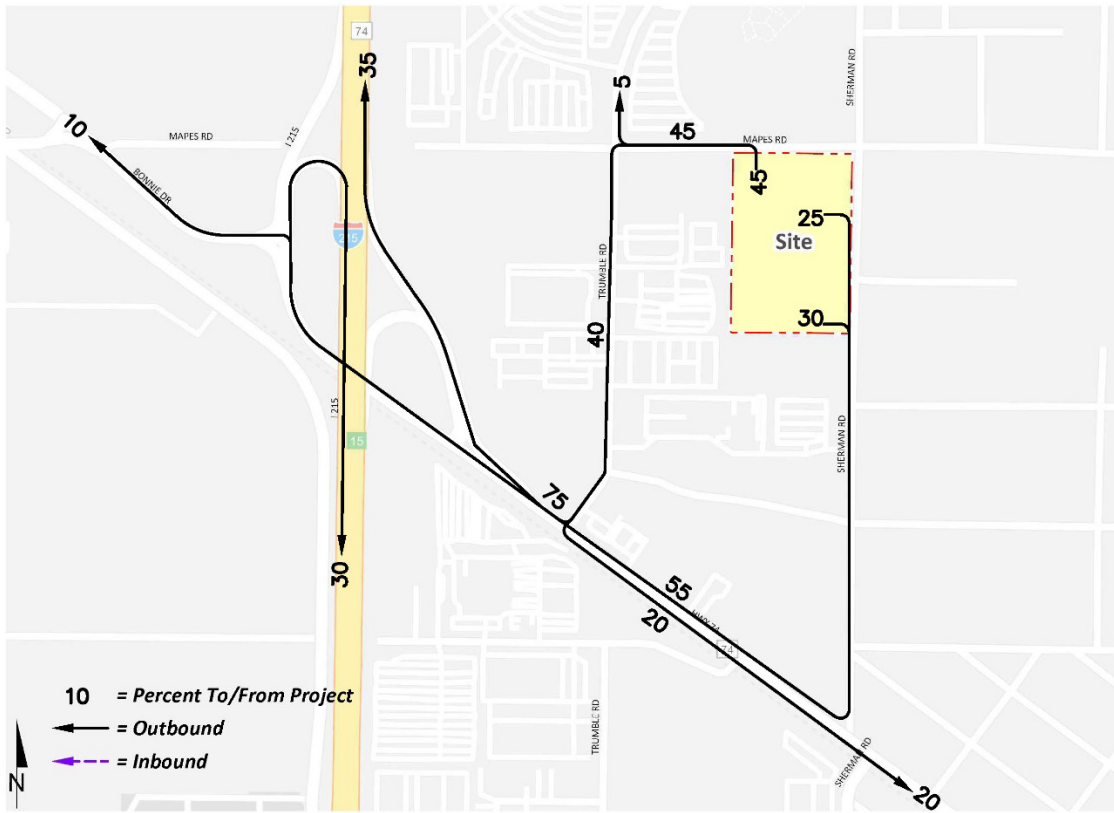
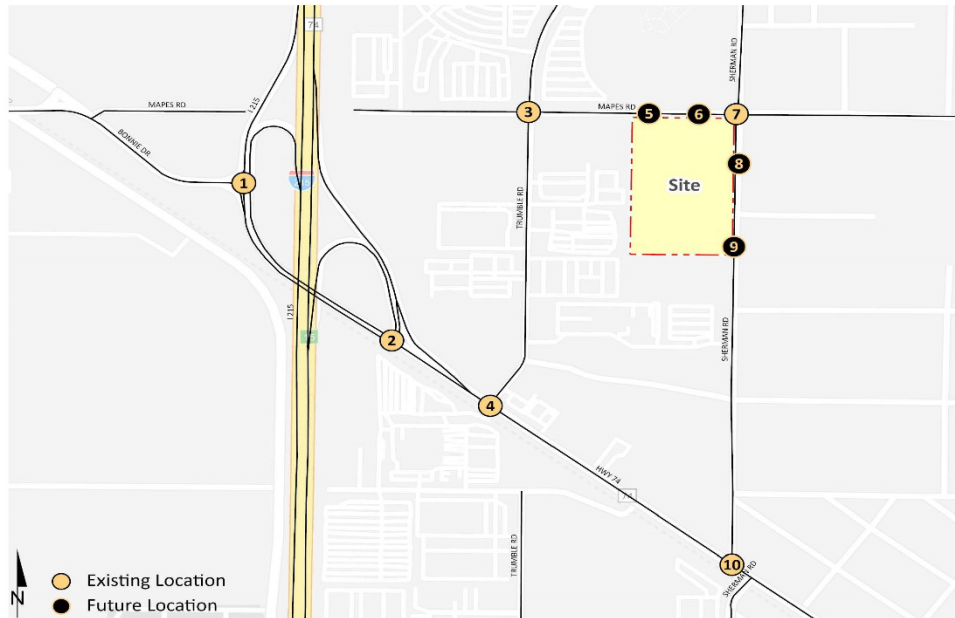


EXHIBIT 4-3: PROJECT ONLY TRAFFIC VOLUMES



1	I-215 SB Ramps/SR-74 & Bonnie Dr.	2	I-215 NB Ramps & SR-74	3	Trumble Rd. & Mapes Rd.	4	Trumble Rd. & SR-74	5	Dwy 1 & Mapes Rd.
200	← 15(7) 2(1) → 1(3) ↗ 3(12) ↘	200	450 10(5) ↑ 5(17) ← 4(15) 17(8) →	400	400 1(1) ↑ 0(1) 6(22) 27(12) ↗	400	200 4(16) 1(6) ← 4(16) 27(12) ↗	400	150 ← 0(2) 14(7) → 14(6) ↘ 6(21) ↗
Nominal		250		400	450	400	400	250	
6	Dwy 2 & Mapes Rd.	7	Sherman Rd. & Mapes Rd.	8	Sherman Rd. & Dwy 3	9	Sherman Rd. & Dwy 4	10	Sherman Rd. & SR-74
150	← 0(2) 8(4) → 5(3) ↘	100	100 8(4) → 0(2) ↗	100	100 2(1) 6(3) 2(7) ↘ 2(1) ↗ 0(2) ↑	150	150 6(3) 2(7) 0(2) ↗ 2(9) ↘ 2(1) ↗ 2(1) ↑	200	100 4(16) 1(6) → ↑ 4(2)
150	Nominal	100	100	100	150	150	200	200	

##(###) AM(PM) Peak Hour Intersection Volumes
 ## Average Daily Trips

4.6 CUMULATIVE DEVELOPMENT TRAFFIC

A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of Menifee. The cumulative project list includes known and foreseeable projects that are anticipated to contribute traffic to the study area intersections. Where applicable, cumulative projects anticipated to contribute measurable traffic (i.e., 50 or more peak hour trips) to study area intersections have been manually added to the study area network to generate Opening Year Cumulative (2024) forecasts. In other words, this list of cumulative development projects has been reviewed to determine which projects would likely contribute measurable traffic through the study area intersections (e.g., those cumulative projects in close proximity to the proposed Project). For the purposes of this analysis, the cumulative projects that were determined to affect one or more of the study area intersections are shown on Exhibit 4-4, listed in Table 4-3, and have been considered for inclusion. Allocation of the cumulative development trip generation is based on volumes developed on past studies but adding only new projects that were not previously considered. Although it is unlikely that all of these cumulative projects would be fully built and occupied by Year 2024, they have been included in an effort to conduct a conservative analysis and overstate as opposed to understate potential traffic deficiencies. Any other cumulative projects located beyond the cumulative study area that are not expected to contribute measurable traffic to study area intersections have not been included since the traffic would dissipate due to the distance from the Project site and study area intersections. Any additional traffic generated by other projects not on the cumulative projects list is likely accounted for through background ambient growth factors that have been applied to the peak hour volumes at study area intersections as discussed in Section 4.5 *Background Traffic*. Cumulative Only ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-5. Volume development spreadsheets showing detailed calculations are provided in Appendix 4.1.

4.7 NEAR-TERM TRAFFIC CONDITIONS

The “buildup” approach combines existing traffic counts with a background ambient growth factor to forecast the near-term 2024 traffic conditions. An ambient growth factor of 2.0% per year, compounded annually, accounts for background (area-wide) traffic increases that occur over time up to the years 2024 from the year 2022. Traffic volumes generated by cumulative development projects are then added to assess the Opening Year Cumulative (2024) traffic conditions. Lastly, Project traffic is added to assess “With Project” traffic conditions. The 2024 roadway network is similar to the existing conditions roadway network with the exception of intersections proposed to be developed by the Project. The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- Opening Year Cumulative (2024) Without Project
 - Existing 2022 counts
 - Ambient growth traffic (4.04%)
 - Cumulative Development Project traffic
- Opening Year Cumulative (2024) With Project
 - Existing 2022 counts
 - Ambient growth traffic (4.04%)
 - Cumulative Development Project traffic
 - Project traffic

TABLE 4-3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

No.	Project Name / Case Number	Jurisdiction	Land Use	Quantity Units ¹
M1	SP260A2	Menifee	SP Proposal for APN329-110-003/026/028/014/019 (med and med-high density residential with commercial retails, light industrial and business park)	2,025 DU
M2	United Carports Warehouse (DEV2022-009)	Menifee	Warehouse	58.643 TSF
M3	Trumble Retail (CUP2016-290)	Menifee	Hotel	108 RM
			Quality Restaurant	5.500 TSF
			Fast-Food w/ Drive-Thru	3.000 TSF
			Gas Station	12 VFP
M4	Paragon Framing (CUP2018-126)	Menifee	Office/Storage	10.454 TSF
M5	Trumble/Watson Warehouse (DEV2022-019)	Menifee	Warehouse	327.631 TSF
M6	TR 38132 & 38133 (SPA DEV2021-005)	Menifee	Single Family Residential	322 DU
M7	MR-27 LLC Rancon (TTM 34118)	Menifee	Multifamily (Low-Rise)	85 DU
M8	Motte Country Plaza (PP2018-300)	Menifee	Gas Station	12 VFP
M9	Forterra Pipe (PP2018-199)	Menifee	Storage Yard Expansion	20.700 TSF
M10	Menifee Commerce Center (PP2019-005)	Menifee	Warehouse	1,461.650 TSF
	Menifee Commerce Center II (DEV2022-014)	Menifee	Warehouse	1,139.478 TSF
	Nova Battery Storage (DEV2022-015)	Menifee	Redevelopment of IEEC Plant	
	McLaughlin Warehouses (DEV2022-016)	Menifee	Warehouse	491.467 TSF
M11	Goetz/Ethanac Commercial (PP PLN21-0319)	Menifee	Gas Station + Retail	14.290 TSF
	Corsica Business Park (DEV2022-010)	Menifee	Business Park	276.682 TSF
	Capstone Industrial (PLN21-0370)	Menifee	Warehouse	700.037 TSF
	DEV2022-017	Menifee	Warehouse	551.685 TSF
	Northern Gateway Commerce Center II (PP PLN21-0281)	Menifee	High-Cube Warehouse	1,312.601 TSF
	Ethanac/Evans Warehouse (DEV2022-018)	Menifee	Warehouse	137.896 TSF
	Ethanac Square (MJMOD PLN21-0104)	Menifee	Gas Station	3.800 TSF
	Ethanac/Barnett Warehouse (PP PLN21-0290)	Menifee	Warehouse	250.000 TSF
P1	Perris Plaza - Build-out	Perris	Commercial	173.000 TSF
P2	Arco Expansion	Perris	Commercial	3.869 TSF
P3	Pacific Heritage I	Perris	Single Family Residential	82 DU
P4	Sunwest Enterprises	Perris	Single Family Residential	61 DU
P5	Sunwest Enterprises	Perris	Single Family Residential	57 DU
P6	Rastogi Family LTD / John Ford	Perris	Single Family Residential	75 DU
P7	Sterling Villa Senior Housing	Perris	Senior Adult Housing - Attached	429 DU
P8	Prairie View Apartments	Perris	Apartments	287 DU
P9	Perris Valley Town Center (East Side)	Perris	Shopping Center	644.866 TSF
			Fast-Food w/ Drive-Thru	10.500 TSF
			High Turnover Restaurant	15.120 TSF
			Gas Station	16 VFP
P10	Perris Valley Town Center (West Side)	Perris	Retail	28.000 TSF
			Fast-Food w/ Drive-Thru	2.200 TSF
P11	Malbert Cultivation	Perris	Cultivation	33.000 TSF
P12	Marijuana Manufacturing	Perris	Manufacturing	61.050 TSF
P13	Perez Indus	Perris	Warehousing	2.500 TSF
P14	South Perris Industrial Project	Perris	High-Cube Warehouse	7,394.048 TSF

No.	Project Name / Case Number	Jurisdiction	Land Use	Quantity	Units ¹
P15	Perris Airport Center	Perris	High-Cube Warehouse	704.480	TSF
			Truck Trailer Yard		371 Spaces
P16	GVSP - Track 37262	Perris	Single Family Housing	191	DU
P17	GVSP - Track 37716	Perris	Multifamily Housing	97	DU
P18	GVSP - Track 37722	Perris	Single Family Housing	116	DU
P19	GVSP - Track 37817	Perris	Multifamily Housing	227	DU
P20	GVSP - Track 37818	Perris	Single Family Housing	138	DU
P21	GVSP - Track 37818	Perris	Multifamily Housing	236	DU
P22	GVSP - Track 37223	Perris	Single Family Housing	235	DU
RC1	Stoneridge	County	High-Cube Cold Storage	1,695.355	TSF
			High-Cube Fulfillment	2,966.872	TSF
			High-Cube Warehouse	2,966.872	TSF
			Manufacturing	847.678	TSF
			Warehousing	427.759	TSF
			Industrial Park	641.639	TSF
			Free-Standing Discount Store	100.000	TSF
	Commercial Retail	21.968	TSF		
RC2	TTM/TR37358	County	Residential lots	154	DU
RC3	TR36712	County	Single Family Lots	74	DU
RC4	TTM37728	County	228 Lot Schedule a Tentative Map	228	DU
RC5	SP00344/TR35045	County	Residential with Park/Open Space/ School/Basin	796	DU
R6	Ellis/Sherman Warehouses	County	High-Cube Fulfillment	1,374.688	TSF
			High-Cube Cold Storage	242.592	TSF
RC7	TR31687	County	Single Family Residential	65	DU
RC8	TR36635	County	Residential, 6.0 Acres Park/ Basin	283	DU
RC9	TR36665	County	Residential lots with 14 Open	587	DU
			Space lots		
RC10	TR37134	County	Single Family Residential	73	DU

¹ DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

EXHIBIT 4-4: CUMULATIVE DEVELOPMENT LOCATION MAP

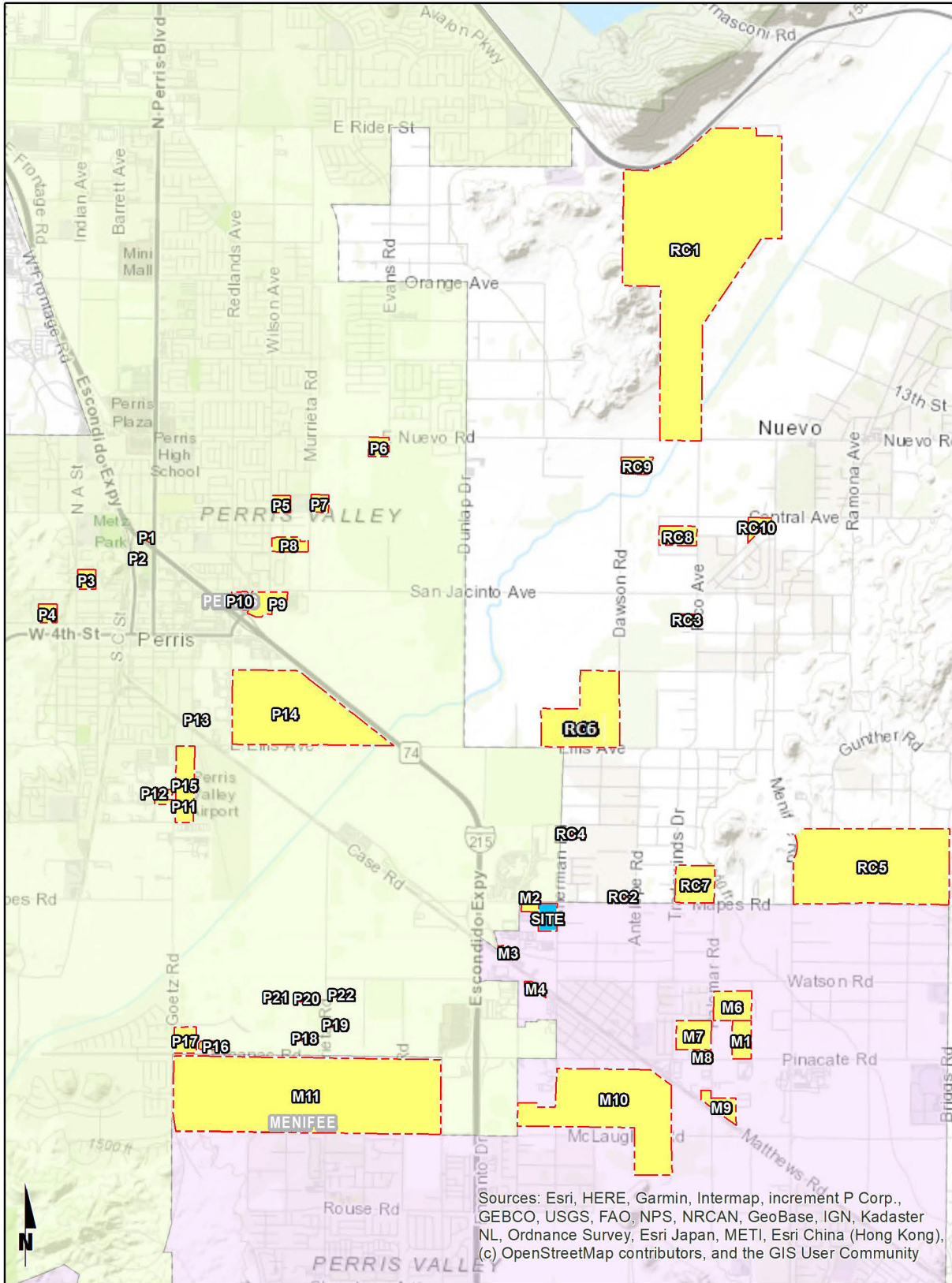
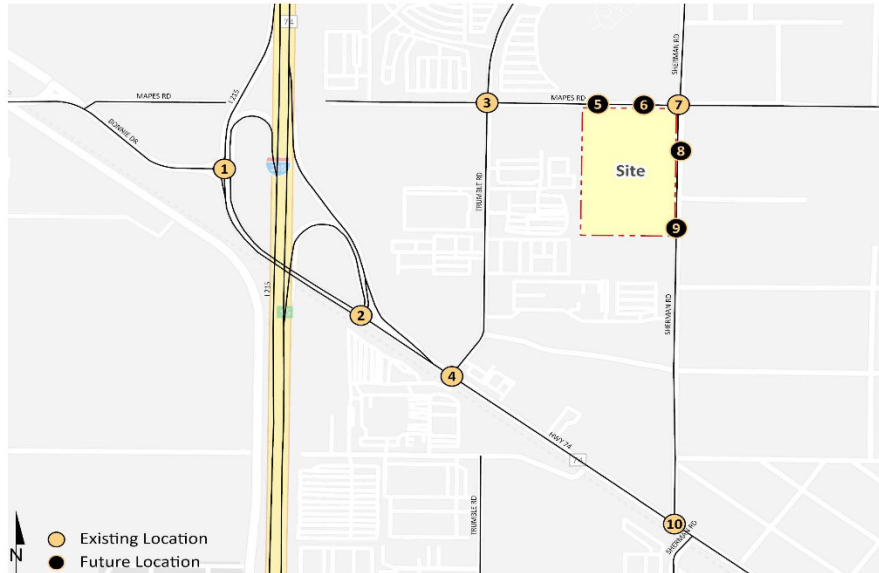


EXHIBIT 4-5: CUMULATIVE ONLY TRAFFIC VOLUMES



1	2	3	4	5
I-215 SB Ramps/SR-74 & Bonnie Dr. 5,450 45(31) 102(236) 47(113) → 115(237) → 313(251) ← 206(181) ← 5,250	I-215 NB Ramps & SR-74 5,150 107(84) 120(242) 28(37) ← 189(437) → 8,600	Trumble Rd. & Mapes Rd. 850 22(35) ← 285(212) ↑ 35(33) ↑ 117(328) ↑ 6,350	Trumble Rd. & SR-74 11,100 378(809) 71(81) ↑ 75(78) ↑ 236(198) ← 221(441) ↓ 89(237) → 12,250	Dwy 1 & Mapes Rd. 5,500 285(212) ← 117(328) → 5,500
6	7	8	9	10
Dwy 2 & Mapes Rd. 5,500 285(212) ← 117(328) → 5,500	Sherman Rd. & Mapes Rd. 2,350 89(79) ↓ 24(16) ↓ 48(104) ↓ 69(225) → 5,500	Sherman Rd. & Dwy 3 450 24(16) ← 8(27) → 450	Sherman Rd. & Dwy 4 450 24(16) ← 8(27) → 450	Sherman Rd. & SR-74 450 24(16) ← 8(27) ↑ 311(275) ↑ 159(317) → 4,850

##(##) AM(PM) Peak Hour Intersection Volumes
 ## Average Daily Trips

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5 E+P TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Existing plus Project (E+P) conditions and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for E+P conditions only (e.g., intersection and roadway improvements at the Project’s frontage and driveways).

5.2 EXISTING PLUS PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus Project traffic. The weekday ADT and weekday/weekend peak hour intersection turning movement volumes which can be expected for E+P traffic conditions are shown on Exhibit 5-1.

5.3 INTERSECTION OPERATIONS ANALYSIS

E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized on Table 5-1 for E+P traffic conditions, which indicate that all of the study area intersections are anticipated to continue to operate at an acceptable LOS under E+P traffic conditions, consistent with Existing traffic conditions.

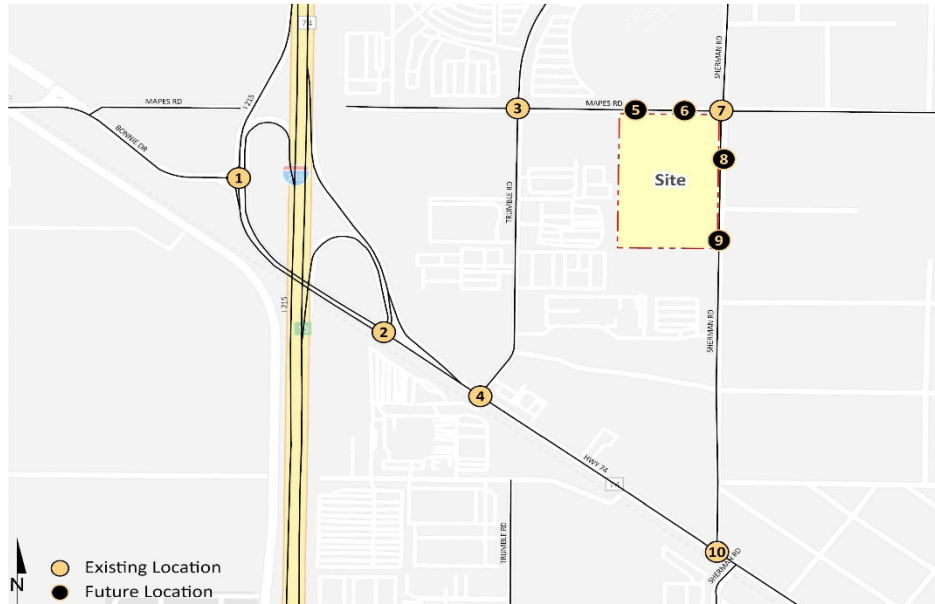
TABLE 5-1: INTERSECTION ANALYSIS FOR E+P CONDITIONS

#	Intersection	Traffic Control ¹	Existing (2022)				E+P			
			Delay ² (secs.)		Level of Service		Delay ² (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	I-215 SB Ramps/SR-74 & Bonnie Dr.	TS	10.2	12.3	B	B	10.3	12.4	B	B
2	I-215 NB Ramps & SR-74	TS	8.0	8.3	A	A	8.2	8.4	A	A
3	Trumble Rd. & Mapes Rd.	AWS	10.9	11.0	B	B	11.2	11.4	B	B
4	Trumble Rd. & SR-74	TS	17.7	12.0	B	B	18.8	12.8	B	B
5	Dwy 1 & Mapes Rd.	<u>CSS</u>	Future Intersection				10.4	11.0	B	B
6	Dwy 2 & Mapes Rd.	<u>CSS</u>	Future Intersection				0.0	0.0	A	A
7	Sherman Rd. & Mapes Rd.	CSS	10.7	11.0	B	B	10.7	11.1	B	B
8	Sherman Rd. & Dwy 3	<u>CSS</u>	Future Intersection				8.6	8.5	A	A
9	Sherman Rd. & Dwy 4	<u>CSS</u>	Future Intersection				8.7	8.7	A	A
10	Sherman Rd. & SR-74	CSS	11.6	10.9	B	B	11.7	11.0	B	B

¹ TS = Traffic Signal; CSS = Cross-Street Stop; CSS = Improvement

² Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

EXHIBIT 5-1: E+P TRAFFIC VOLUMES



1	I-215 SB Ramps/SR-74 & Bonnie Dr.	2	I-215 NB Ramps & SR-74	3	Trumble Rd. & Mapes Rd.	4	Trumble Rd. & SR-74	5	Dwy 1 & Mapes Rd.
13,550	37(47) 492(733)	10,100	27,150	4,200	5,900	9,300	18,900		5,350
22(19) → 234(169) ↘	12(37) 188(210)	2(2) 121(187)	664(582) 644(490)	2(2) 4(52)	6(10) 12(1)	535(386) 37(44)	26(41) 772(686)		278(177) ←
270(227) ↗ 386(300) →	28(13) 698(889)	1(0) 22(6) 56(6)		62(10) 132(81) 160(226)	325(304) 560(793)			172(277) → 14(6) ↓	6(21) ↗
5,600	17,500	300	8,600	27,150	5,650			250	
6	Dwy 2 & Mapes Rd.	7	Sherman Rd. & Mapes Rd.	8	Sherman Rd. & Dwy 3	9	Sherman Rd. & Dwy 4	10	Sherman Rd. & SR-74
	5,300	900	4,900	950		1,000		1,300	17,250
	← 278(177)	24(27) 2(7) 5(2)	2(4) 251(141) 12(11)	2(1) 57(43)		6(3) 53(47)		107(90)	14(18) 640(564)
166(274) → 5(3) ↘		15(26) 106(222) 45(26)	3(9) 14(6) 16(20)	2(7) ↓	2(1) ↗ 33(35) →	0(2) ↗ 2(9) ↓	2(1) ↗ 35(34) →	554(829) →	
5,350	Normal	5,300	950	100	1,000	150	1,050	18,100	

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed for E+P traffic conditions based on peak hour intersection turning movements volumes. There are no study area intersections anticipated to meet peak hour volume-based traffic signal warrant under E+P traffic conditions (see Appendices 5.2).

5.5 OFF-RAMP QUEUING CAPACITY ANALYSIS

Queuing analysis findings for E+P are presented on Table 5-2. As shown on Table 5-2, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows with the addition of Project traffic. Worksheets for E+P traffic conditions queuing analysis are provided in Appendix 5.3.

TABLE 5-2: PEAK HOUR OFF-RAMP QUEUING SUMMARY FOR E+P CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2022)				E+P			
			95th Percentile Queue (Feet)		Acceptable? ¹		95th Percentile Queue (Feet)		Acceptable? ¹	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-215 SB Ramps/SR-74 & Bonnie Dr. (#1)	SBT	1,450	286	449	Yes	Yes	296	456	Yes	Yes
	SBR	50	21	22	Yes	Yes	21	22	Yes	Yes
I-215 NB Ramps & SR-74 (#2)	SBL/R	1,440	109	123	Yes	Yes	116	127	Yes	Yes

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

² 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

³ Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-215 Freeway mainline.

5.6 PROJECT DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

As shown on Table 5-1 and Table 5-2, the addition of Project traffic is not anticipated to result in any peak hour intersection or roadway segment deficiencies. As such, no improvements have been recommended. However, the Project should contribute its fair share towards future traffic signals at the intersections of Trumble Road at Mapes Road and Sherman Road at Mapes Road (see Section 7.3).

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6 OPENING YEAR CUMULATIVE (2024) TRAFFIC CONDITIONS

This section discusses the methods used to develop Opening Year Cumulative (2024) Without and With Project traffic forecasts, and the resulting intersection operations, traffic signal warrant, and off-ramp analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year Cumulative (2024) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Opening Year Cumulative conditions only (e.g., intersection and roadway improvements along the Project's frontage and driveways).
- If applicable, driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for Opening Year Cumulative conditions only.

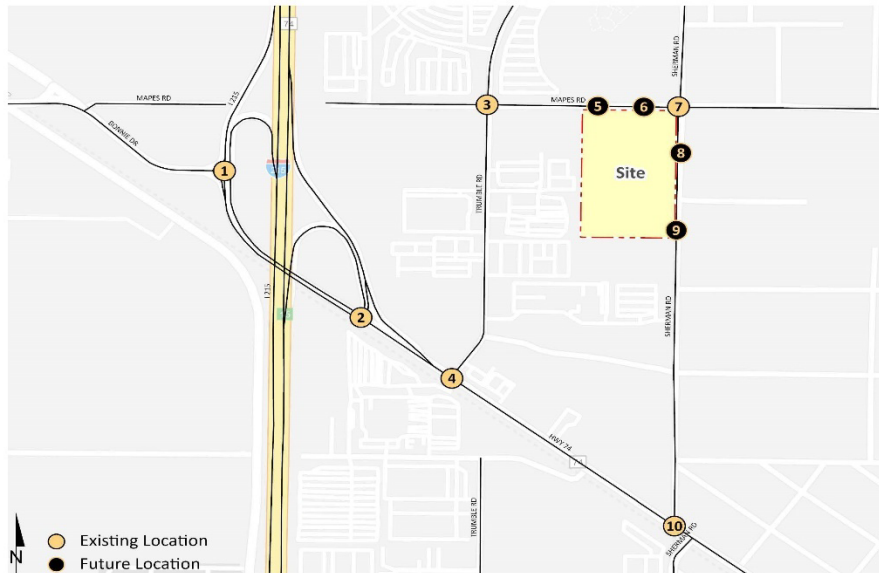
6.2 WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes, ambient background growth of 4.04%, plus traffic from pending and approved but not yet constructed known development projects in the area. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2024) Without Project traffic conditions are shown on Exhibit 6-1.

6.3 WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Opening Year Cumulative (2024) Without Project traffic in conjunction with the addition of Project traffic. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2024) With Project traffic conditions are shown on Exhibit 6-2.

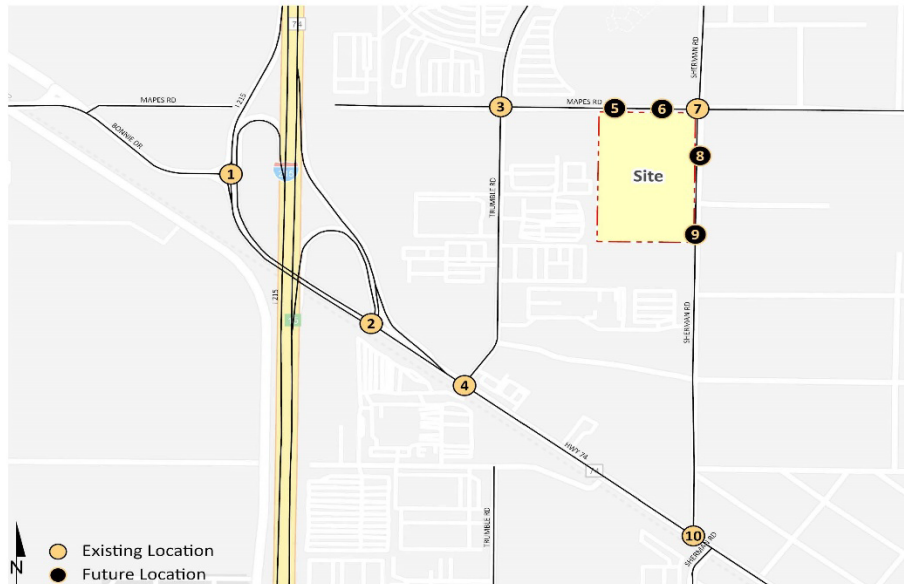
EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2024) WITHOUT PROJECT TRAFFIC VOLUMES



1	2	3	4	5
I-215 SB Ramps/SR-74 & Bonnie Dr.	I-215 NB Ramps & SR-74	Trumble Rd. & Mapes Rd.	Trumble Rd. & SR-74	Dwy 1 & Mapes Rd.
19,600 84(81) ↓ 608(1006) ↓ 71(134) → 361(416) ↓ 598(489) ← 612(487) → 26,850	15,600 120(124) ↓ 309(459) ↓ 58(51) ↓ 912(1372) → 26,850	5,300 2(2) ↓ 150(233) ↓ 3(54) ↓ 1(0) ↓ 23(6) → 59(6) ↓ 66(11) ↑ 175(119) ↑ 258(555) ↑ 11,350	20,550 942(701) ↓ 109(121) ↓ 538(751) ↓ 684(1079) → 25,900	11,050 581(398) ← 285(615) → 11,050
6	7	8	9	10
Dwy 2 & Mapes Rd.	Sherman Rd. & Mapes Rd.	Sherman Rd. & Dwy 3	Sherman Rd. & Dwy 4	Sherman Rd. & SR-74
11,050 581(398) ← 285(615) → 11,050	3,300 114(107) ↓ 26(24) ↓ 5(2) ↓ 2(4) ↑ 464(282) ↑ 13(11) ↑ 64(131) ↓ 182(461) ↓ 39(24) ↓ 3(8) → 23(83) → 17(21) → 8,800	1,350 78(59) ↓ 43(62) → 1,350	1,350 78(59) ↓ 43(62) → 1,350	1,650 109(79) ↓ 24(16) ↓ 18(44) ↑ 990(874) ↑ 746(1191) → 23,900

##(##) AM(PM) Peak Hour Intersection Volumes
 ## Average Daily Trips

EXHIBIT 6-2: OPENING YEAR CUMULATIVE (2024) WITH PROJECT TRAFFIC VOLUMES



1	I-215 SB Ramps/SR-74 & Bonnie Dr.	2	I-215 NB Ramps & SR-74	3	Trumble Rd. & Mapes Rd.	4	Trumble Rd. & SR-74	5	Dwy 1 & Mapes Rd.
19,850	84(81) ↓ 623(1013) ↑	15,850	120(124) ↓ 319(464) ↑	5,350	2(2) ↓ 150(233) ↑	11,750	946(717) ↓ 110(127) ↑	26,100	11,150
71(134) →	599(492) →	58(51) ↓	907(775) ↑	110(0) ↓	567(409) ↑	565(763) ↓	103(121) ↑	581(400) ↓	
363(417) ↓	615(499) →	929(1380) →	1095(866) ↑	23(6) ↓	66(11) ↓	684(1079) →	1055(925) ↑	299(622) ↓	
11,150	27,100	27,100	41,000	300	15,500	41,000	11,450	250	
6	Dwy 2 & Mapes Rd.	7	Sherman Rd. & Mapes Rd.	8	Sherman Rd. & Dwy 3	9	Sherman Rd. & Dwy 4	10	Sherman Rd. & SR-74
	11,100	3,300	8,800	1,450	1,500	1,500	1,800	23,600	
	↑ 581(400)	114(107) ↓	2(4) ↑	2(1) ↓	6(3) ↓	0(2) ↓	113(95) ↓	22(46) ↑	
293(619) →		26(24) ↓	464(282) ↑	84(62) ↓	80(66) ↓	2(1) ↓	24(16) ↓	990(874) ↑	
5(3) ↓	Nominal	13(11) ↑	13(11) ↑	2(7) ↓	2(9) ↓	45(63) →	747(1197) →		
11,150	11,150	11,150	8,800	1,450	1,500	1,550	24,100		

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

6.4 INTERSECTION OPERATIONS ANALYSIS

6.4.1 OPENING YEAR CUMULATIVE (2024) WITHOUT PROJECT TRAFFIC CONDITIONS

Opening Year Cumulative (2024) Without Project peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized on Table 5-1 for Opening Year Cumulative (2024) traffic conditions, which indicate that the following study area intersection is anticipated to operate at an unacceptable LOS under Opening Year Cumulative (2024) Without Project traffic conditions:

- I-215 Southbound Ramps/SR-74 & Bonnie Dr. (#1) – LOS E PM peak hour only
- Trumble Road & Mapes Road (#3) – LOS F PM peak hour only
- Sherman Road & SR-74 (#4) – LOS F AM and PM peak hour

The intersection operations analysis worksheets for Opening Year Cumulative (2024) Without Project traffic conditions are included in Appendix 6.1 of this TA.

6.4.2 OPENING YEAR CUMULATIVE (2024) WITH PROJECT TRAFFIC CONDITIONS

As shown on Table 6-1, the addition of Project traffic is not anticipated to result in any additional deficiencies. The intersection operations analysis worksheets for Opening Year Cumulative (2024) With Project traffic conditions are included in Appendix 6.2 of this TA

TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2024) CONDITIONS

# Intersection	Traffic Control ¹	2024 Without Project				2024 With Project			
		Delay ² (secs.)		Level of Service		Delay ² (secs.)		Level of Service	
		AM	PM	AM	PM	AM	PM	AM	PM
1 I-215 SB Ramps/SR-74 & Bonnie Dr.	TS	34.0	123.2	C	F	35.9	124.9	D	F
2 I-215 NB Ramps & SR-74	TS	16.3	25.1	B	C	16.8	25.9	B	C
3 Trumble Rd. & Mapes Rd.	AWS	21.2	89.3	C	F	23.0	97.7	C	F
4 Trumble Rd. & SR-74	TS	123.5	105.2	F	F	128.9	112.0	F	F
5 Dwy 1 & Mapes Rd.	<u>CSS</u>	Future Intersection				12.2	15.0	B	C
6 Dwy 2 & Mapes Rd.	<u>CSS</u>	Future Intersection				0.0	0.0	A	A
7 Sherman Rd. & Mapes Rd.	CSS	15.4	22.7	C	C	15.5	23.3	C	C
8 Sherman Rd. & Dwy 3	<u>CSS</u>	Future Intersection				8.7	8.6	A	A
9 Sherman Rd. & Dwy 4	<u>CSS</u>	Future Intersection				8.7	8.8	A	A
10 Sherman Rd. & SR-74	CSS	14.5	13.1	B	B	14.6	13.4	B	B

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

¹ TS = Traffic Signal; CSS = Cross-Street Stop; CSS = Improvement

² Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed for Opening Year Cumulative (2024) traffic conditions based on peak hour intersection turning movements volumes. The intersections of Trumble Road at Mapes Road and Sherman Road at Mapes Road are anticipated to meet peak hour volume-based traffic signal warrants under Opening Year Cumulative (2024) Without Project traffic conditions (see Appendix 6.3). There is no additional unsignalized study area intersections anticipated to meet traffic signal warrants under Opening Year Cumulative (2024) With Project traffic conditions in addition to the locations previously warranted under Opening Year Cumulative (2024) Without Project traffic conditions (see Appendix 6.4).

6.6 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for Opening Year Cumulative (2024) Without Project traffic conditions are presented on Table 6-2. As shown on Table 6-2, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows with the addition of Project traffic. Worksheets for Opening Year Cumulative (2024) Without and With Project traffic conditions queuing analysis are provided in Appendix 6.5 and Appendix 6.6, respectively.

TABLE 6-2: PEAK HOUR OFF-RAMP QUEUING ANALYSIS FOR OPENING YEAR CUMULATIVE (2024) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	2024 Without Project				2024 With Project			
			95th Percentile Queue (Feet)		Acceptable? ¹		95th Percentile Queue (Feet)		Acceptable? ¹	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
I-215 SB Ramps/SR-74 & Bonnie Dr. (#1)	SBT	1,450	467 ²	990 ²	Yes	Yes	486 ²	998 ²	Yes	Yes
	SBR	50	41	42	Yes	Yes	41	42	Yes	Yes
I-215 NB Ramps & SR-74 (#2)	SBL/R	1,440	413	602 ²	Yes	Yes	428 ²	609 ²	Yes	Yes

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

² 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

³ Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-215 Freeway mainline.

6.7 DEFICIENCIES AND IMPROVEMENTS

This section provides a summary of Project deficiencies and recommended improvements. Based on the City of Menifee deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, roadway segments were found to be deficient. Improvements necessary to improve project-related traffic deficiencies are also discussed below.

6.6.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Table 6-3 indicates the improvements needed to address LOS deficiencies at each of the study area intersections under Opening Year Cumulative (2024) With Project traffic conditions. The improvements have been identified to improve the Opening Year Cumulative (2024) With Project deficiencies back to acceptable levels. Intersection analysis worksheets for Opening Year Cumulative (2024) With Project traffic conditions, with improvements, are provided in Appendix 6.7.

The recommended northbound left turn lane at the intersection of I-215 Southbound Ramps/SR-74 and Bonnie Drive is anticipated due to the high volume from ambient growth and future cumulative development projects. Additional intersection improvements may be needed to accommodate the recommended northbound left turn lane such as the following (but not limited to):

- Reconstruction of the intersection will be required to accommodate a 2nd northbound left turn lane on SR-74. Modifications may also be required to the westbound free-right turn lane.
- Widening of Bonnie Drive to accommodate a 2nd receiving lane. Modifications will be required to the existing southbound right turn lane pork-chop island.

TABLE 6-3: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2024) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
1	I-215 SB Ramps/SR-74 & Bonnie Dr.																	
	- Without Improvements	TS	1	1	0	0	1	1	1	0	1>>	0	0	0	35.9	124.9	D	F
	- With Improvements	TS	2	1	0	0	1	1	1	0	1>>	0	0	0	13.6	24.1	B	C
3	Trumble Rd. & Mapes Rd.																	
	- Without Improvements	CSS	1	2	0	1	2	0	0	2	0	2	1	0	23.0	97.7	C	F
	- With Improvements	TS	1	2	0	1	2	0	0	2	0	2	1	0	10.7	8.6	B	A
4	Trumble Rd. & SR-74																	
	- Without Improvements	TS	0	0	0	1	0	1	1	2	0	0	2	1	128.9	112.0	F	F
	- With Improvements	TS	0	0	0	1	0	1	2	2	0	0	2	1	36.8	19.5	D	B

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; >> = Free Right Turn Lane; **1** = Improvement

² Per the Highway Capacity Manual 6th Edition, overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ CSS = Cross-Street Stop; TS = Traffic Signal

6.6.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

As shown previously in Table 6-2, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for Opening Year Cumulative (2024) With Project traffic conditions. As such, no improvements have been identified.

7 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Menifee are funded through a combination of improvements constructed by the Project, development impact fee programs or fair share contributions. Fee programs applicable to the Project are described below.

7.1 TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) PROGRAM

The Western Riverside Council of Governments (WRCOG) is responsible for establishing and updating TUMF rates. The County may grant to developers a credit against the specific components of fees for the dedication of land, or the construction of facilities identified in the list of improvements funded by each of these fee programs. Fees are based upon projected land uses and a related transportation need to address growth based upon a 2016 Nexus study.

TUMF is an ambitious regional program created to address cumulative impacts of growth throughout western Riverside County. Program guidelines are being overseen on an iterative basis. Exemptions, credits, reimbursements, and local administration are being deferred to primary agencies. The County of Riverside serves this function for the proposed Project. Fees submitted to the County are passed on to the WRCOG as the ultimate program administrator.

TUMF guidelines empower a local zone committee to prioritize and arbitrate certain projects. The Project is located in the Central Zone. The zone has developed a 5-year capital improvement program to prioritize public construction of certain roads. TUMF is focused on improvements necessitated by regional growth.

7.2 CITY OF MENIFEE DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The Project will also be subject to City of Menifee's DIF program which includes a component for roads and signals. The City's DIF program has been updated in July 2021 and discusses the local (as opposed to regional) streets and signal improvements planned for the City through build-out of the existing City limits.

7.3 MEASURE A

Measure A, Riverside County's half-cent sales tax for transportation, was adopted by voters in 1988 and extended in 2002. It will continue to fund transportation improvements through 2039. Measure A funds a wide variety of transportation projects and services throughout the County. RCTC is responsible for administering the program. Measure A dollars are spent in accordance with a voter-approved expenditure plan that was adopted as part of the 1988 election.

7.4 FAIR SHARE CONTRIBUTION

Project improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City's discretion). When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Pursuant to discussions with City staff, the Project will contribute its fair share towards future traffic signals planned at the intersections of Trumble Road at Mapes Road and Sherman Road at Mapes Road.

TABLE 7-1: PROJECT FAIR SHARE

#	Intersection	Existing	Project Only	2024 With Project	Net New Traffic	Project % of New Traffic	
4	Trumble Rd. & Mapes Rd.	AM:	810	34	1,353	543	6.3%
		PM:	731	36	1,420	689	5.2%
7	Sherman Rd. & Mapes Rd.	AM:	488	8	960	472	1.7%
		PM:	495	6	1,115	620	1.0%

BOLD = Denotes highest fair share percentage.

As an exception, if a project contributes no more than 50 peak hour trips (general guideline) to a pre-project deficient intersection, then fair share contribution by the project is not applicable. Since the proposed Project would contribute 50 or fewer peak hour trips to the deficient intersections of the I-215 Southbound Ramps/SR-74 at Bonnie Drive and Trumble Road at SR-74, fair share percentages have not been calculated for these intersections.

8 REFERENCES

1. **City of Menifee.** *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled.* City of Menifee : s.n., Adopted June 3, 2020, Updated January 2022.
2. **City of Menifee Engineering Department.** *LOS Traffic Study Guidelines.* Menifee : s.n., Revised October 2020.
3. **WSP.** *TUMF High-Cube Warehouse Trip Generation Study.* County of Riverside : s.n., January 29, 2019.
4. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
5. **VRPA Technologies, Inc. for Riverside County Transportation Commission.** *Riverside County Long Range Transportation Study.* County of Riverside : VRPA Technologies, Inc., December 2019.
6. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 6th Edition. s.l. : National Academy of Sciences, 2016.
7. **Caltrans.** California Manual on Uniform Traffic Control Devices (MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CAMUTCD).* 2017.
8. **Circulation Element C-1: Roadway System.** The City of Menifee, California. **[Online] [Cited: 2014 йил 30-Май.] <https://www.cityofmenifee.us/215/C-1-Roadway-System>.**

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APPENDIX 1.1: TRAFFIC STUDY SCOPING AGREEMENT

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CITY OF MENIFEE

MEMORANDUM

PUBLIC WORKS/ENGINEERING DEPARTMENT

DATE: July 20, 2022
TO: Chet Robinson, Senior Engineer
FROM: Stephen Manganiello, Contract Traffic Engineer
CC: Rob Blough, City Traffic Engineer
SUBJECT: DEV 2022-003 Mapes and Sherman Warehouse – Scoping Agreement
Review 2

Traffic Engineering has completed the review of DEV 2022-003 Mapes and Sherman Warehouse Scoping Agreement Memo, dated June 16, 2022 and have no further comments.

If you have any questions on these comments please contact Stephen Manganiello, Contract Traffic Engineer, at stephen.manganiello@stctrffic.com

Attachment A: Project Scoping Form

This scoping form shall be completed and submitted to the City of Meniffee to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Mapes and Sherman Commerce Center
Project Address:	southwest corner of Sherman Road and Mapes Road
Project Opening Year:	2024
Project Description:	277,578 square feet of high-cube fulfillment center use

	Consultant:	Developer:
Name:	Urban Crossroads - Charlene So	CIVF VI-CA4BO2, LLC - Michael Gregg
Address:	1133 Camelback St, #8329 Newport Beach, CA 92658	1 Beacon Street, Suite 2800 Boston, MA 02108
Telephone:	949-861-0177	805-215-6453
Fax/Email:	cso@urbanroads.com	

Trip Generation Information:

Trip Generation Data Source: WPS, High Cube Warehouse

Current General Plan Land Use:
EDC-NG Industrial

Proposed General Plan Land Use:
EDC-NG Industrial

Current Zoning:
EDC-NG Industrial

Proposed Zoning:
EDC-NG Industrial

New. Better. Best.

	Existing Trip Generation			Proposed Trip Generation (PCE)		
	In	Out	Total	In	Out	Total
AM Trips				32	10	42
PM Trips				15	39	54

Trip Internalization: Yes No (_____ % Trip Discount)

Pass-By Allowance: Yes No (_____ % Trip Discount)

Potential Screening Checks

Is your project screened from specific analyses (see Page 5 of the guidelines related to LOS assessment).

Is the project screened from VMT assessment? Yes No

VMT screening justification (see Pages 10-12 of the guidelines): _____
 The Project is located in TAZ 1098 in the RIVCOM model. TAZ has a VMT per SP of 32.1. Where
 the Riverside County Buildout VMT per SP is 33.6. The Project is in a Low VMT Area.

VMT Analysis Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used N/A
- Attach WRCOG Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

Signatures

TIA Preparer: _____ City (Approved by): _____

Mapes Rd & Sherman Rd, Menifee

Show search results for Mapes Rd & ...

Complete #1-4, Then Click "Run"

VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

OD VMT Per Service Population

#3. Select the Baseline Year. The year available for analysis are from 2018 to 2045.*

2022

#4. Select the Threshold (% reduction from baseline year). Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

Below County Future Buildout (0%)

[Help](#) **Run**

Layer List

- Layers**
- Output_Parcels
 - Selected Project Area
 - Low VMT Generating TAZs
 - TAZ Boundaries (Zoom in to view)
 - Parcels (Zoom in to view)
 - Transit Priority Area
 - WRCOG Cities
 - WRCOG Boundary

(1 of 3)

OBJECTID	4
Assessor Parcel Number (APN)	329030049
Traffic Analysis Zone (TAZ)	1098
Community Region	MENIFEE
Inside a Transit Priority Area (TPA)	No
TAZ VMT	32.1
Jurisdiction VMT	33.6
% Difference	-4.48%
VMT Metric	OD VMT Per Service Population
Threshold	33.6

[Zoom to](#)

June 16, 2022

Mr. Rob Blough
City of Menifee
29714 Haun Road
Menifee, CA 92586

MAPES AND SHERMAN COMMERCE CENTER TRAFFIC ANALYSIS SCOPING AGREEMENT

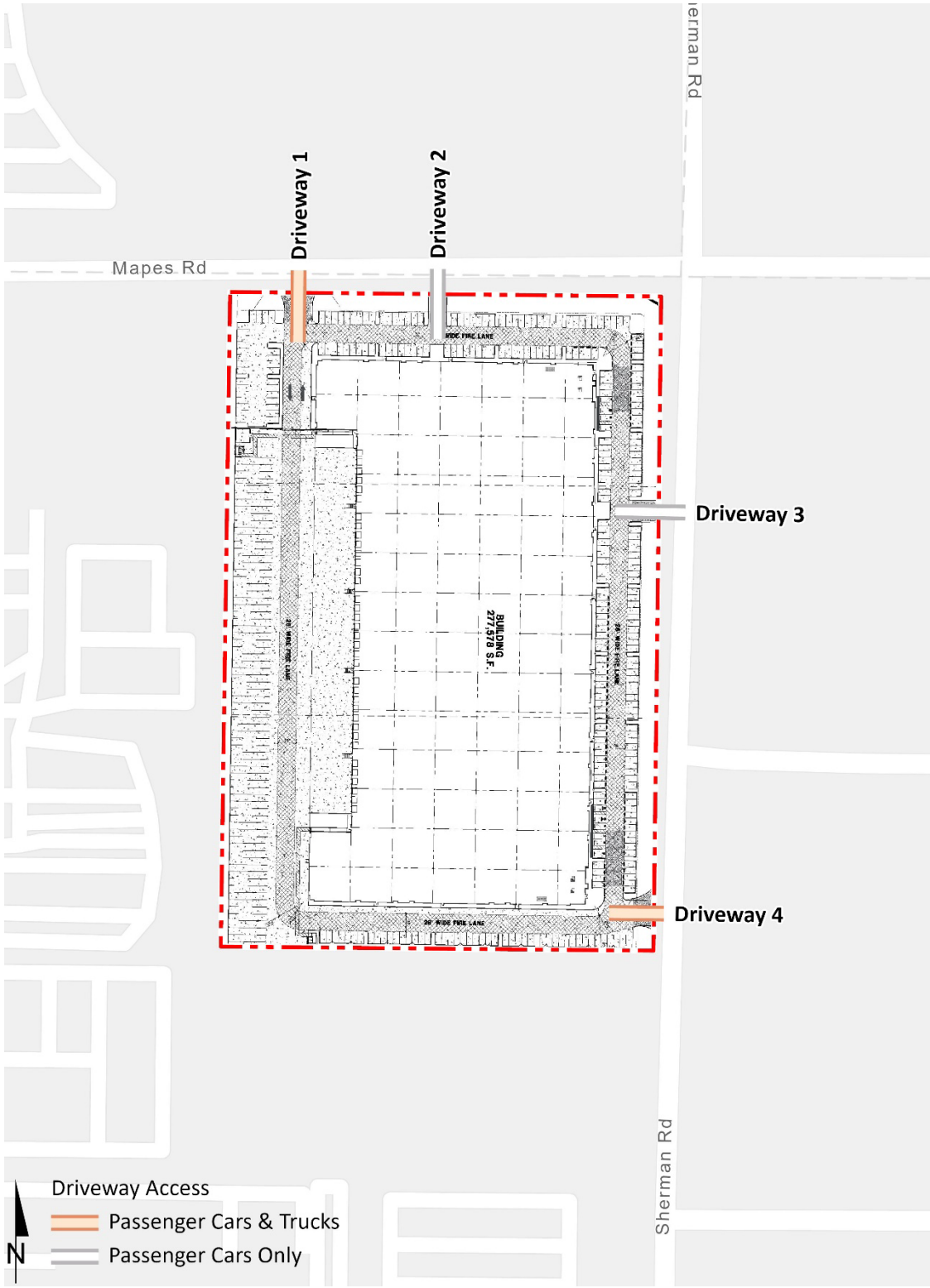
Mr. Rob Blough,

The firm of Urban Crossroads, Inc. is pleased to submit this scoping letter regarding the traffic analysis for Mapes and Sherman Commerce Center development (**Project**), which is located on the southwest corner of Sherman Road and Mapes Road in the City of Menifee. This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations. The following scope of work is based on the City's Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (updated January 2022) (**City Guidelines**).

PROPOSED PROJECST

The Project is proposed to consist of a 277,578 square foot high-cube fulfillment center warehouse building (see Exhibit 1). The proposed Project is anticipated to be a non-sort facility. As currently designed, the proposed site cannot accommodate the parking needed to support a sort facility. The proposed Project is anticipated to have an opening year of 2024. Access is proposed along both Mapes Road and Sherman Road for both passenger cars and trucks (with primary truck access on Mapes Road and secondary truck access on Sherman Road).

EXHIBIT 1: PRELIMINARY SITE PLAN



TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. In order to develop the traffic characteristics of the proposed project, trip generation was calculated based on estimates provided in the High Cube Warehouse Trip Generation Study (WSP, January 2019):

- High-Cube Fulfillment Center Warehouse has been used to derive site specific trip generation estimates for up to 277,578 square feet of the proposed Project (75% of the building square footage). The Institute of Transportation Engineers (ITE) Trip Generation Manual has trip generation rates for high-cube fulfillment center use for both non-sort and sort facilities (ITE land use code 155). While there is sufficient data to support use of the trip generation rates for non-sort facilities, the sort facility rate appears to be unreliable because they are based on limited data (i.e., one to two surveyed sites). The proposed Project is speculative and whether a non-sort or sort facility end-user would occupy the buildings is not known at this time. Lastly, the ITE Trip Generation Manual recommends the use of local data sources where available. As such, the best available source for high-cube fulfillment center use would be the trip-generation statistics published in the High-Cube Warehouse Trip Generation Study (WSP, January 29, 2019) which was commissioned by the Western Riverside Council of Governments (WRCOG) in support of the Transportation Uniform Mitigation Fee (TUMF) update in the County of Riverside. The WSP trip generation rates were published in January 2019 and are based on data collected at 11 local high-cube fulfillment center sites located throughout Southern California (specifically Riverside County and San Bernardino County). However, the WSP study does not include a split for inbound and outbound vehicles, as such, the inbound and outbound splits per the ITE Trip Generation Manual for Land Use Code 154 have been utilized. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.

The trip generation rates are provided on Table 1. The Project trip generation summary is shown on Table 2 for actual vehicles. The proposed Project is anticipated to generate a total of 592 two-way trips per day with 35 AM peak hour trips and 46 PM peak hour trips (actual vehicles). Project trip generation is also provided in passenger car equivalent (PCE) as the peak hour intersection operations analyses would utilize PCE volumes. The PCE volumes will be used for the peak hour operations analysis. As shown on Table 2, the Project is anticipated to generate a total of 758 two-way PCE trips per day with 42 AM PCE peak hour trips and 54 PM PCE peak hour trips.

TABLE 1: TRIP GENERATION RATES

Land Use	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center Warehouse ¹	TSF	--	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks			0.006	0.002	0.008	0.003	0.008	0.011	0.162
5+-Axle Trucks			0.008	0.003	0.011	0.003	0.007	0.010	0.217
Passenger Car Equivalent (PCE) Trip Generation									
High-Cube Fulfillment Center Warehouse ¹	TSF	--	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks (PCE = 2.0)			0.012	0.004	0.016	0.006	0.016	0.022	0.324
5+-Axle Trucks (PCE = 3.0)			0.025	0.008	0.033	0.008	0.022	0.030	0.651

¹ Vehicle Mix Source: [High Cube Warehouse Trip Generation Study](#), WSP, January 29, 2019.

Inbound and outbound split source: ITE [Trip Generation Manual](#), Eleventh Edition (2021) for ITE Land Use Code 154.

² TSF = thousand square feet

TABLE 2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Actual Vehicles:								
High-Cube Fulfillment	277.578 TSF							
Passenger Cars:		22	7	29	11	29	40	486
2-4axle Trucks:		2	1	3	1	2	3	46
5+-axle Trucks:		2	1	3	1	2	3	60
Total Truck Trips (Actual Vehicles):		4	2	6	2	4	6	106
Total Trips (Actual Vehicles)²		26	9	35	13	33	46	592
Passenger Car Equivalent (PCE):								
High-Cube Fulfillment	277.578 TSF							
Passenger Cars:		22	7	29	11	29	40	486
2-4axle Trucks:		3	1	4	2	4	6	90
5+-axle Trucks:		7	2	9	2	6	8	182
Total Truck Trips (PCE):		10	3	13	4	10	14	272
Total Trips (PCE)²		32	10	42	15	39	54	758

¹ TSF = thousand square feet

² Total Trips = Passenger Cars + Truck Trips.

TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution pattern of passenger cars is heavily influenced by the geographical location of the site, the location of surrounding land uses, and the proximity to the regional freeway system.

The trip distribution pattern for truck traffic is also influenced by the local truck routes. Given these differences, separate trip distributions were generated for both passenger cars and truck trips. The Project truck and passenger car trip distribution patterns are graphically depicted on Exhibits 2 and 3, respectively.

EXHIBIT 2: PROJECT (TRUCK) TRIP DISTRIBUTION

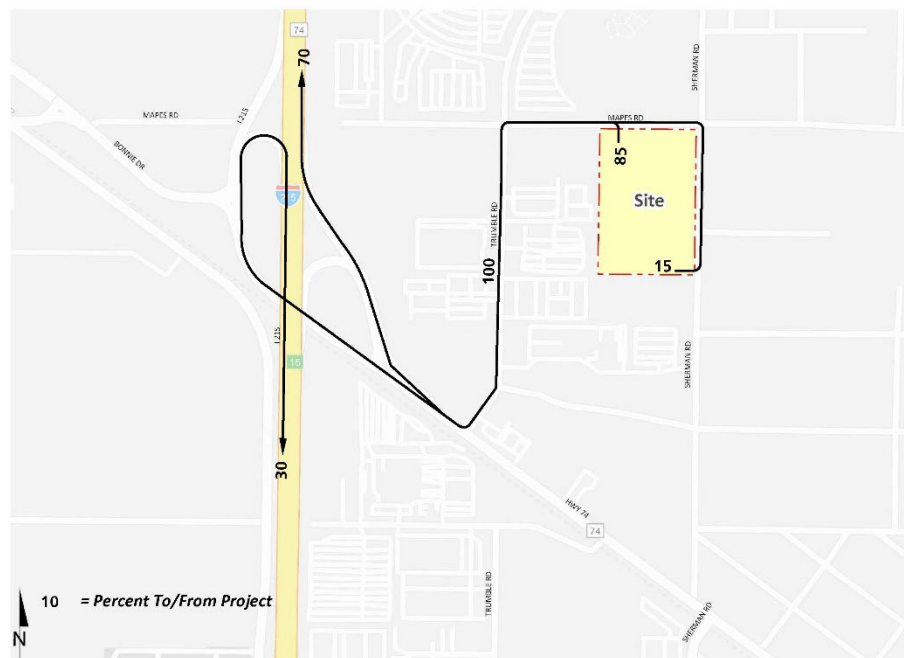
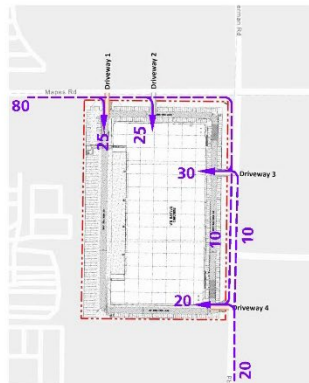
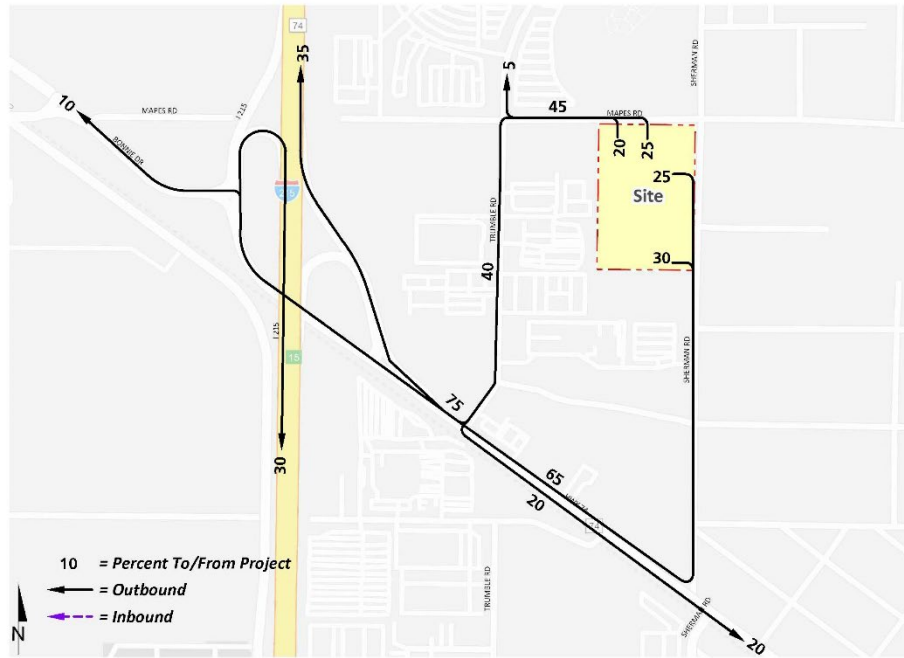


EXHIBIT 3: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION



ANALYSIS SCENARIOS

Consistent with the City's TIA Guidelines, intersection analysis will be provided for the following scenarios:

- Existing (2022) Conditions
- Existing plus Project
- Opening Year Cumulative (2024) Without Project
- Opening Year Cumulative (2024) With Project

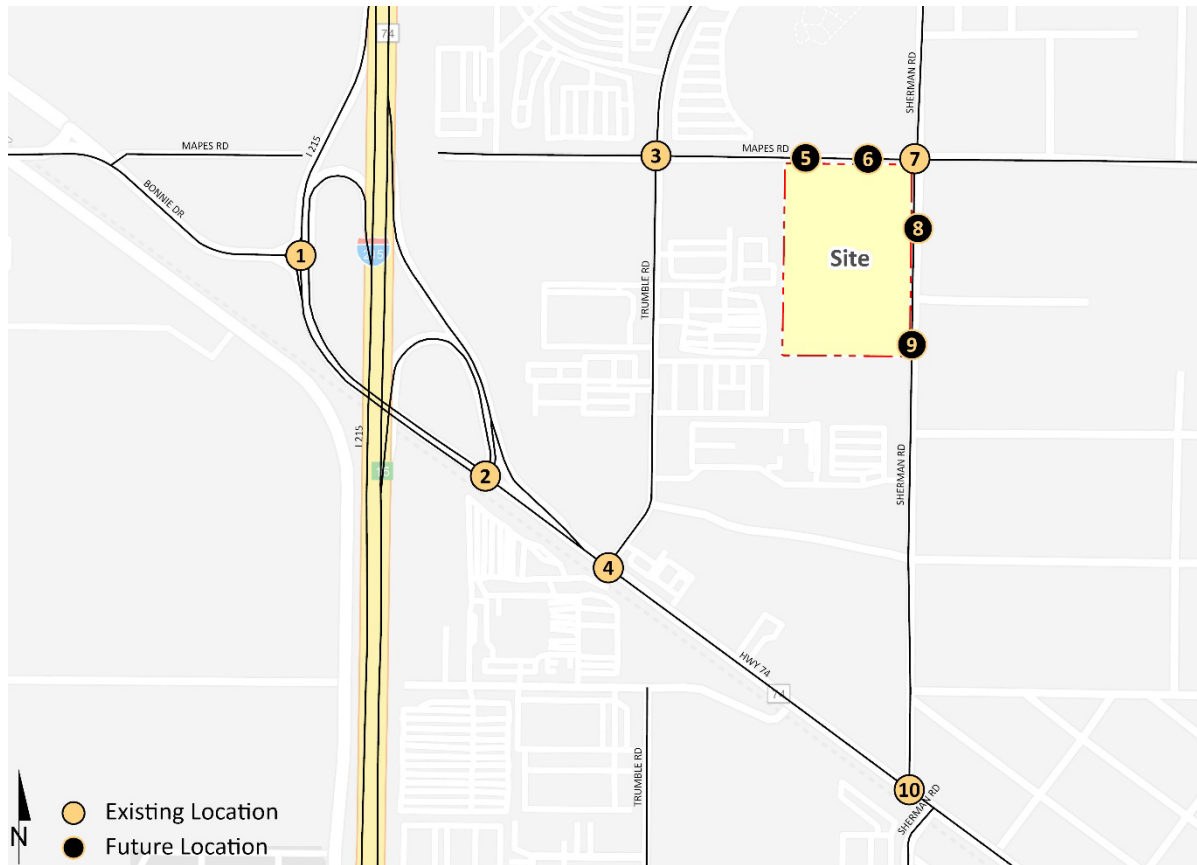
All study area intersections will be evaluated using the Highway Capacity Manual (HCM) 6th Edition analysis methodology.

STUDY AREA INTERSECTIONS

Based on the Project's anticipated travel patterns and trip generation characteristics, the following study area intersection locations shown on Exhibit 4 and listed below were selected for analysis:

#	Intersections
1	I-215 SB Ramps & Bonnie Dr.
2	I-215 NB Ramps & SR-74
3	Trumble Rd. & Mapes Rd.
4	Trumble Rd. & SR-74
5	Dwy 1 & Mapes Rd.
6	Dwy 2 & Mapes Rd.
7	Sherman Rd. & Mapes Rd.
8	Sherman Rd. & Dwy 3
9	Sherman Rd. & Dwy 4
10	Sherman Rd. & SR-74

EXHIBIT 4: STUDY AREA



EXISTING COUNT DATA

Traffic counts conducted in October 2021 (when local schools were in session and operating on normal bell schedules) will be used for the purposes of this analysis. An ambient growth of 2% will be applied to the October 2021 counts to reflect a baseline 2022 conditions. No additional adjustments are proposed for the purposes of establishing the existing baseline conditions.

LEVEL OF SERVICE (LOS) CRITERIA

Per Policy C-1.2 of the City of Menifee General Plan, the following LOS will be utilized for study area intersections located within the City: Require development to mitigate its traffic impacts and achieve a peak hour Level of Service (LOS) D or better at intersections, except at constrained intersections at close proximity to the I-215 where LOS E may be permitted.

GENERAL PLAN CONSISTENCY REQUIREMENTS

Project related impacts shall be clearly identified as direct or cumulative in the TIA report. Only feasible improvements shall be recommended in the TIA report. Consideration should be made for existing right-of-way, availability of receiving lanes for additional thru or turn lanes, environmental constraints, utility conflicts, and economically feasible improvement costs. Analysis of the recommended improvements shall be provided to demonstrate the proposed improvement will reduce the project impact to LOS to meet LOS standards.

All studies that propose increasing the number of travel lanes on a roadway or intersections to improve LOS conditions, either beyond existing conditions or for General Plan conditions beyond what is planned for that segment shall clearly identify the impacts associated with such a change. Exhibits and preliminary cost estimates must be provided to show the feasibility of the improvement.

The TIA shall identify whether or not the recommended improvements to achieve LOS standards are within the scope of a funding mechanism. The funding mechanism identified shall also include the availability of the funds and anticipated construction dates (if available). A fair share contribution toward the identified funding mechanism shall be calculated in order to reduce identified cumulative project impacts.

LOS improvements may also include connectivity improvements for bicycles and pedestrians. Improvements along the project frontage shall include pedestrian and bicycle facilities in compliance with the goals and policies established in the City's General Plan and mandated through the Complete Streets Act of 2008. The project should clearly identify pedestrian and bicycle facilities within the community that connect the development to existing sidewalk and bicycle facilities.

LOS improvements that are determined to be infeasible should be discussed in the TIA and the factors resulting in the improvement being infeasible should be identified.

AMBIENT GROWTH

Consistent with other studies performed in the area, an ambient growth rate of 2.0% per year is proposed for the study area intersections to approximate background traffic growth not identified by nearby cumulative development projects. The rate will be compounded over a 2-year period (i.e., $1.02^{2\text{years}} = 1.0404$ or 4.04% for 2024).

FAIR SHARE CALCULATION METHODOLOGY

Improvements found to be included in the City of Menifee's Development Impact Fee (DIF) program and Western Riverside Council of Governments Transportation Uniform Mitigation Fee (TUMF), will be identified as such. For improvements that do not appear to be in either of the pre-existing fee programs, a fair share financial contribution based on the Project's fair share impact may be imposed in order to mitigate the Project's share of impacts in lieu of construction. The Project's fair share cost of improvements would be determined based on the following

equation, which is the ratio of Project traffic to new traffic, where new traffic is total future traffic less existing baseline traffic:

$$\text{Project Fair Share \%} = \text{Project Traffic} / (\text{OYC With Project Total Traffic} - \text{Existing Traffic})$$

SIGNAL TIMING

It is requested that the City provide any signal timing that should be considered for signalized study area intersections within the City. Traffic signal timing for the Caltrans facilities have already been obtained.

CUMULATIVE PROJECTS

It is requested that the City provide a list of cumulative development projects for inclusion in the traffic study. We will reach out to other adjacent agencies to obtain current projects in their respective jurisdictions (County of Riverside and City of Perris).

SPECIAL ISSUES

The following special issues will also be addressed:

- Site Access Evaluation: The turn pocket lengths will be determined through peak hour traffic simulations developed using Synchro and SimTraffic software in an effort to identify the required storage capacity for turn lanes at each Project driveway. Specifically, the queuing analysis will be conducted in order to determine the necessary turn pocket storage lengths needed to accommodate peak hour queues at the driveways and intersection of Sherman Road at Mapes Road.
- Traffic Signal Warrant: A traffic signal warrant analysis will be prepared for all analysis scenarios for the unsignalized, full access study area intersections.
- Truck Turns: Truck turn templates will be evaluated at all applicable Project driveways to ensure driveway widths and curb radii can accommodate the tuning radius of heavy trucks. Truck turn templates will be based on the WB-67 truck.
- Vehicle Miles Traveled: VMT will be addressed under separate cover. A VMT memo will be prepared summarizing the screening assessment.
- Approved Scoping Agreement: Approved scoping agreement will be shared with the adjacent jurisdictions, including Caltrans District 8.

If you have any questions or comments, I can be reached at (949) 861-0177.

Respectfully submitted,

URBAN CROSSROADS, INC.

A handwritten signature in black ink that reads "Charlene So". The signature is written in a cursive, flowing style.

Charlene So, PE
Principal

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APPENDIX 1.2: SITE ADJACENT QUEUES

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Intersection: 5: Driveway 1 & Mapes Rd.

Movement	NB
Directions Served	LR
Maximum Queue (ft)	35
Average Queue (ft)	5
95th Queue (ft)	24
Link Distance (ft)	200
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Driveway 2 & Mapes Rd.

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: Sherman Rd. & Mapes Rd.

Movement	EB	WB	NB	SB
Directions Served	LTR	LT	LTR	LTR
Maximum Queue (ft)	47	28	47	79
Average Queue (ft)	18	2	21	36
95th Queue (ft)	44	14	44	58
Link Distance (ft)	315	660	272	585
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Sherman Rd. & Driveway 3

Movement	EB
Directions Served	LR
Maximum Queue (ft)	22
Average Queue (ft)	1
95th Queue (ft)	12
Link Distance (ft)	51
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: Sherman Rd. & Driveway 4

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	29	7
Average Queue (ft)	3	0
95th Queue (ft)	16	4
Link Distance (ft)	56	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Queuing and Blocking Report

Opening Year Cumulative (2024) With Project - PM Peak Hour WITH IMPROVEMENTS 04/21/2023

Intersection: 5: Driveway 1 & Mapes Rd.

Movement	NB
Directions Served	LR
Maximum Queue (ft)	51
Average Queue (ft)	16
95th Queue (ft)	43
Link Distance (ft)	200
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Driveway 2 & Mapes Rd.

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Sherman Rd. & Mapes Rd.

Movement	EB	WB	NB	SB
Directions Served	LTR	LT	LTR	LTR
Maximum Queue (ft)	127	110	58	70
Average Queue (ft)	30	7	29	36
95th Queue (ft)	77	52	52	59
Link Distance (ft)	315	660	272	585
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Opening Year Cumulative (2024) With Project - PM Peak Hour WITH IMPROVEMENTS 04/21/2023

Intersection: 8: Sherman Rd. & Driveway 3

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	30	7
Average Queue (ft)	5	0
95th Queue (ft)	24	4
Link Distance (ft)	51	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Sherman Rd. & Driveway 4

Movement	EB
Directions Served	LR
Maximum Queue (ft)	36
Average Queue (ft)	8
95th Queue (ft)	30
Link Distance (ft)	56
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

APPENDIX 3.1: EXISTING TRAFFIC COUNTS

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**Volume Development
AM Peak Hour**

1: I-215 Southbound Ramps & Case Rd.

	PHF: 0.967		7:15		Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	198	359	0	0	436	27	22	0	160	0	0	0	1,202
2-Axle:	5	15	0	0	19	0	0	0	13	0	0	0	53
3-Axle:	1	6	0	0	7	0	0	0	2	0	0	0	16
4+-Axle:	34	5	0	0	12	5	0	0	32	0	0	0	88
2022 PCE:	269	383	0	0	477	37	22	0	232	0	0	0	1,420

2: I-215 Northbound Ramps & SR-74

	PHF: 0.941		7:15		Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	165	0	9	13	582	0	0	548	605	1,923
2-Axle:	0	0	0	13	0	0	1	32	0	0	20	32	98
3-Axle:	0	0	0	2	0	1	0	9	0	0	6	4	22
4+-Axle:	0	0	0	2	0	1	7	37	0	0	38	17	102
2022 PCE:	0	0	0	178	0	12	28	681	0	0	640	659	2,198

3: Trumble Rd. & Mapes Rd.

	PHF: 0.886		7:00		Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	61	66	124	3	68	2	1	17	49	254	12	6	665
2-Axle:	2	1	5	0	3	0	0	9	11	6	0	0	38
3-Axle:	0	0	0	0	0	0	0	0	1	1	0	0	2
4+-Axle:	0	33	3	0	26	0	0	0	0	1	0	0	62
2022 PCE:	62	132	133	3	121	2	1	22	56	260	12	6	810

4: Trumble Rd. & SR-74

	PHF: 0.970		7:15		Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	31	0	427	233	515	0	0	725	23	1,954
2-Axle:	0	0	0	11	0	35	13	32	0	0	17	1	109
3-Axle:	0	0	0	0	0	5	0	11	0	0	5	0	21
4+-Axle:	0	0	0	0	0	41	30	9	0	0	14	1	95
2022 PCE:	0	0	0	36	0	531	298	560	0	0	768	26	2,220

5: Driveway 1 & Mapes Rd.

	PHF: 0.920				Count Date:								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	0	0	0	0	145	0	0	272	0	417
2-Axle:	0	0	0	0	0	0	0	14	0	0	6	0	20
3-Axle:	0	0	0	0	0	0	0	0	0	0	1	0	1
4+-Axle:	0	0	0	0	0	0	0	3	0	0	1	0	4
2022 PCE:	0	0	0	0	0	0	0	158	0	0	278	0	437

6: Driveway 2 & Mapes Rd.

	PHF: 0.920				Count Date:								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	0	0	0	0	145	0	0	272	0	417
2-Axle:	0	0	0	0	0	0	0	14	0	0	6	0	20
3-Axle:	0	0	0	0	0	0	0	0	0	0	1	0	1
4+-Axle:	0	0	0	0	0	0	0	3	0	0	1	0	4
2022 PCE:	0	0	0	0	0	0	0	158	0	0	278	0	437

**Volume Development
AM Peak Hour**

7: Sherman Rd. & Mapes Rd.

	PHF: 0.920				Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	3	13	13	4	2	23	15	93	37	10	246	2	462
2-Axle:	0	2	5	1	0	1	0	14	0	0	5	0	29
3-Axle:	0	0	0	0	0	0	0	0	0	0	1	0	1
4+-Axle:	0	0	0	0	0	0	0	3	0	1	1	0	5
2022 PCE:	3	14	16	5	2	24	15	106	37	12	251	2	488

8: Sherman Rd. & Driveway 3

	PHF: 0.920				Count Date:								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	30	0	0	49	0	0	0	0	0	0	0	79
2-Axle:	0	7	0	0	0	0	0	0	0	0	0	0	7
3-Axle:	0	0	0	0	0	0	0	0	0	0	0	0	0
4+-Axle:	0	0	0	0	1	0	0	0	0	0	0	0	1
2022 PCE:	0	33	0	0	51	0	0	0	0	0	0	0	84

9: Sherman Rd. & Driveway 4

	PHF: 0.920				Count Date:								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	30	0	0	49	0	0	0	0	0	0	0	79
2-Axle:	0	7	0	0	0	0	0	0	0	0	0	0	7
3-Axle:	0	0	0	0	0	0	0	0	0	0	0	0	0
4+-Axle:	0	0	0	0	1	0	0	0	0	0	0	0	1
2022 PCE:	0	33	0	0	51	0	0	0	0	0	0	0	84

10: Sherman Rd. & Driveway 5

	PHF: 0.920				Count Date:								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	30	0	0	49	0	0	0	0	0	0	0	79
2-Axle:	0	7	0	0	0	0	0	0	0	0	0	0	7
3-Axle:	0	0	0	0	0	0	0	0	0	0	0	0	0
4+-Axle:	0	0	0	0	1	0	0	0	0	0	0	0	1
2022 PCE:	0	33	0	0	51	0	0	0	0	0	0	0	84

11. Sherman Rd. & SR-74

	PHF: 0.936				Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	0	0	97	0	508	0	0	601	7	1,213
2-Axle:	0	0	0	0	0	3	0	35	0	0	18	1	57
3-Axle:	0	0	0	0	0	0	0	9	0	0	5	0	14
4+-Axle:	0	0	0	0	0	2	0	9	0	0	12	1	24
2022 PCE:	0	0	0	0	0	103	0	553	0	0	640	10	1,305

Volume Development

1: I-215 Southbound Ramps & Case Rd.

	PHF: 0.928		4:30		Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	207	286	0	0	695	46	19	0	162	0	0	0	1,415
2-Axle:	7	1	0	0	23	2	0	0	4	0	0	0	38
3-Axle:	13	0	0	0	7	0	0	0	2	0	0	0	22
4+-Axle:	0	1	0	0	6	0	0	0	1	0	0	0	8
2022 PCE:	224	288	0	0	726	47	19	0	168	0	0	0	1,472

2: I-215 Northbound Ramps & SR-74

	PHF: 0.909		4:30		Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	183	0	35	10	847	0	0	458	546	2,078
2-Axle:	0	0	0	19	0	1	0	28	0	0	7	14	69
3-Axle:	0	0	0	0	0	2	1	8	0	0	11	4	27
4+-Axle:	0	0	0	6	0	0	1	6	0	0	1	4	18
2022 PCE:	0	0	0	205	0	37	13	881	0	0	475	565	2,176

3: Trumble Rd. & Mapes Rd.

	PHF: 0.832		4:30		Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	8	80	204	51	187	2	0	5	6	161	1	9	714
2-Axle:	2	2	7	0	0	0	0	1	0	1	0	0	13
3-Axle:	1	0	2	0	0	0	0	0	0	3	0	0	6
4+-Axle:	0	0	2	0	0	0	0	0	0	0	0	0	2
2022 PCE:	10	81	214	51	187	2	0	6	6	165	1	9	731

4: Trumble Rd. & SR-74

	PHF: 0.927		4:30		Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	37	0	364	267	762	0	0	640	30	2,099
2-Axle:	0	0	0	0	0	1	26	21	0	0	20	4	72
3-Axle:	0	0	0	1	0	3	0	8	0	0	12	1	26
4+-Axle:	0	0	0	0	0	1	6	6	0	0	4	4	21
2022 PCE:	0	0	0	38	0	370	292	793	0	0	670	41	2,204

5: Driveway 1 & Mapes Rd.

	PHF: 0.920				Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	0	0	0	0	260	0	0	171	0	431
2-Axle:	0	0	0	0	0	0	0	8	0	0	1	0	9
3-Axle:	0	0	0	0	0	0	0	2	0	0	3	0	5
4+-Axle:	0	0	0	0	0	0	0	2	0	0	0	0	2
2022 PCE:	0	0	0	0	0	0	0	270	0	0	175	0	445

6: Driveway 2 & Mapes Rd.

	PHF: 0.920				Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	0	0	0	0	260	0	0	171	0	431
2-Axle:	0	0	0	0	0	0	0	8	0	0	1	0	9
3-Axle:	0	0	0	0	0	0	0	2	0	0	3	0	5
4+-Axle:	0	0	0	0	0	0	0	2	0	0	0	0	2
2022 PCE:	0	0	0	0	0	0	0	270	0	0	175	0	445

Volume Development

7: Sherman Rd. & Mapes Rd.

	PHF: 0.862 4:15				Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	7	6	19	2	7	27	26	214	20	8	138	4	478
2-Axle:	0	0	1	0	0	0	0	8	0	1	1	0	11
3-Axle:	0	0	0	0	0	0	0	2	0	0	3	0	5
4+-Axle:	0	0	0	0	0	0	0	1	1	1	0	0	3
2022 PCE:	7	6	20	2	7	27	26	222	22	11	141	4	495

8: Sherman Rd. & Driveway 3

	PHF: 0.920				Count Date:								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	33	0	0	36	0	0	0	0	0	0	0	68
2-Axle:	0	1	0	0	1	0	0	0	0	0	0	0	2
3-Axle:	0	0	0	0	0	0	0	0	0	0	0	0	0
4+-Axle:	0	0	0	0	2	0	0	0	0	0	0	0	2
2022 PCE:	0	33	0	0	40	0	0	0	0	0	0	0	73

9: Sherman Rd. & Driveway 4

	PHF: 0.920				Count Date:								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	33	0	0	36	0	0	0	0	0	0	0	68
2-Axle:	0	1	0	0	1	0	0	0	0	0	0	0	2
3-Axle:	0	0	0	0	0	0	0	0	0	0	0	0	0
4+-Axle:	0	0	0	0	2	0	0	0	0	0	0	0	2
2022 PCE:	0	33	0	0	40	0	0	0	0	0	0	0	73

10: Sherman Rd. & Driveway 5

	PHF: 0.920				Count Date:								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	33	0	0	36	0	0	0	0	0	0	0	68
2-Axle:	0	1	0	0	1	0	0	0	0	0	0	0	2
3-Axle:	0	0	0	0	0	0	0	0	0	0	0	0	0
4+-Axle:	0	0	0	0	2	0	0	0	0	0	0	0	2
2022 PCE:	0	33	0	0	40	0	0	0	0	0	0	0	73

11: Sherman Rd. & SR-74

	PHF: 0.951 4:30				Count Date: 10/5/2021								
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing 2022:	0	0	0	0	0	74	0	797	0	0	534	14	1,420
2-Axle:	0	0	0	0	0	0	0	18	0	0	20	3	42
3-Axle:	0	0	0	0	0	0	0	7	0	0	13	0	20
4+-Axle:	0	0	0	0	0	0	0	5	0	0	3	0	8
2022 PCE:	0	0	0	0	0	74	0	823	0	0	564	16	1,477

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

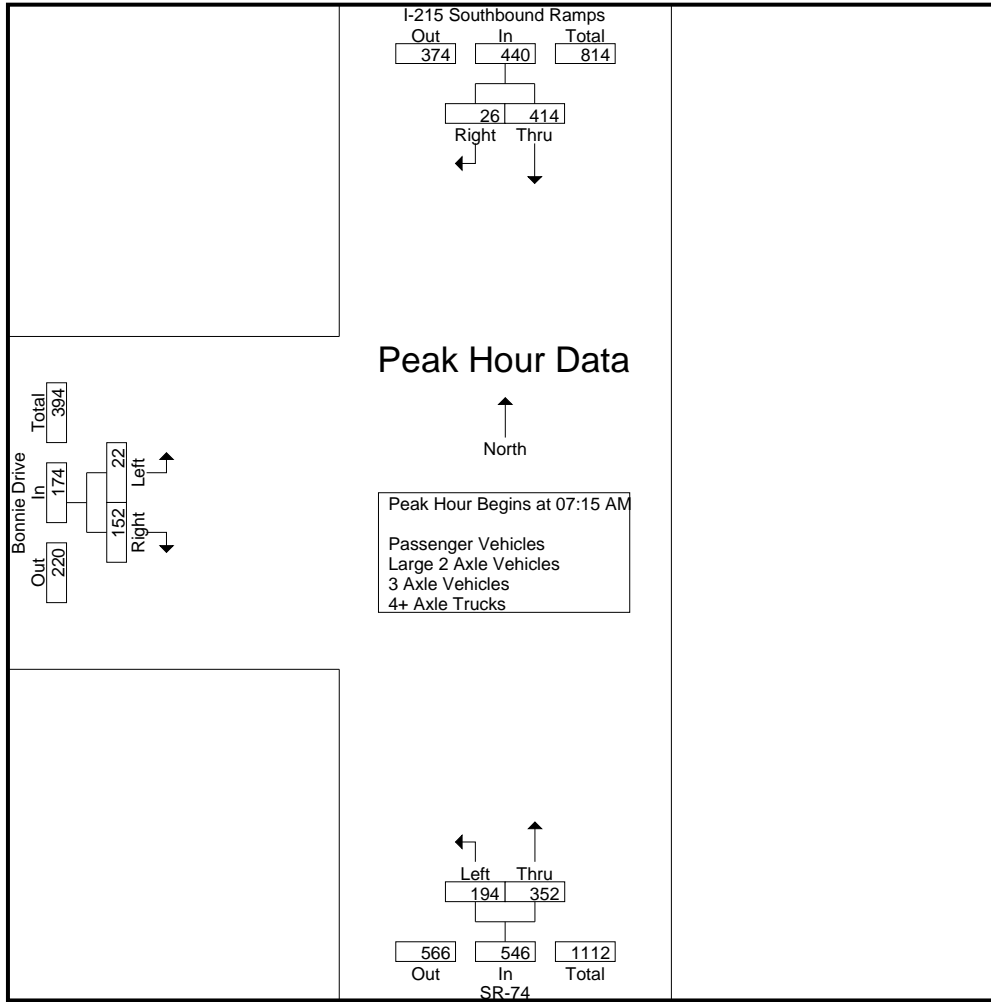
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	100	4	104	36	77	113	5	21	26	243
07:15 AM	121	6	127	43	87	130	6	32	38	295
07:30 AM	95	4	99	50	98	148	8	45	53	300
07:45 AM	97	7	104	47	84	131	4	41	45	280
Total	413	21	434	176	346	522	23	139	162	1118
08:00 AM	101	9	110	54	83	137	4	34	38	285
08:15 AM	119	6	125	39	69	108	9	34	43	276
08:30 AM	99	3	102	53	56	109	5	36	41	252
08:45 AM	94	9	103	35	38	73	6	26	32	208
Total	413	27	440	181	246	427	24	130	154	1021
Grand Total	826	48	874	357	592	949	47	269	316	2139
Apprch %	94.5	5.5		37.6	62.4		14.9	85.1		
Total %	38.6	2.2	40.9	16.7	27.7	44.4	2.2	12.6	14.8	
Passenger Vehicles	734	43	777	285	543	828	47	191	238	1843
% Passenger Vehicles	88.9	89.6	88.9	79.8	91.7	87.2	100	71	75.3	86.2
Large 2 Axle Vehicles	39	1	40	10	28	38	0	25	25	103
% Large 2 Axle Vehicles	4.7	2.1	4.6	2.8	4.7	4	0	9.3	7.9	4.8
3 Axle Vehicles	16	0	16	2	12	14	0	5	5	35
% 3 Axle Vehicles	1.9	0	1.8	0.6	2	1.5	0	1.9	1.6	1.6
4+ Axle Trucks	37	4	41	60	9	69	0	48	48	158
% 4+ Axle Trucks	4.5	8.3	4.7	16.8	1.5	7.3	0	17.8	15.2	7.4

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. 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	121	6	127	43	87	130	6	32	38	295
07:30 AM	95	4	99	50	98	148	8	45	53	300
07:45 AM	97	7	104	47	84	131	4	41	45	280
08:00 AM	101	9	110	54	83	137	4	34	38	285
Total Volume	414	26	440	194	352	546	22	152	174	1160
% App. Total	94.1	5.9		35.5	64.5		12.6	87.4		
PHF	.855	.722	.866	.898	.898	.922	.688	.844	.821	.967

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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:

	07:45 AM			07:15 AM			07:30 AM		
+0 mins.	97	7	104	43	87	130	8	45	53
+15 mins.	101	9	110	50	98	148	4	41	45
+30 mins.	119	6	125	47	84	131	4	34	38
+45 mins.	99	3	102	54	83	137	9	34	43
Total Volume	416	25	441	194	352	546	25	154	179
% App. Total	94.3	5.7		35.5	64.5		14	86	
PHF	.874	.694	.882	.898	.898	.922	.694	.856	.844

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Passenger Vehicles

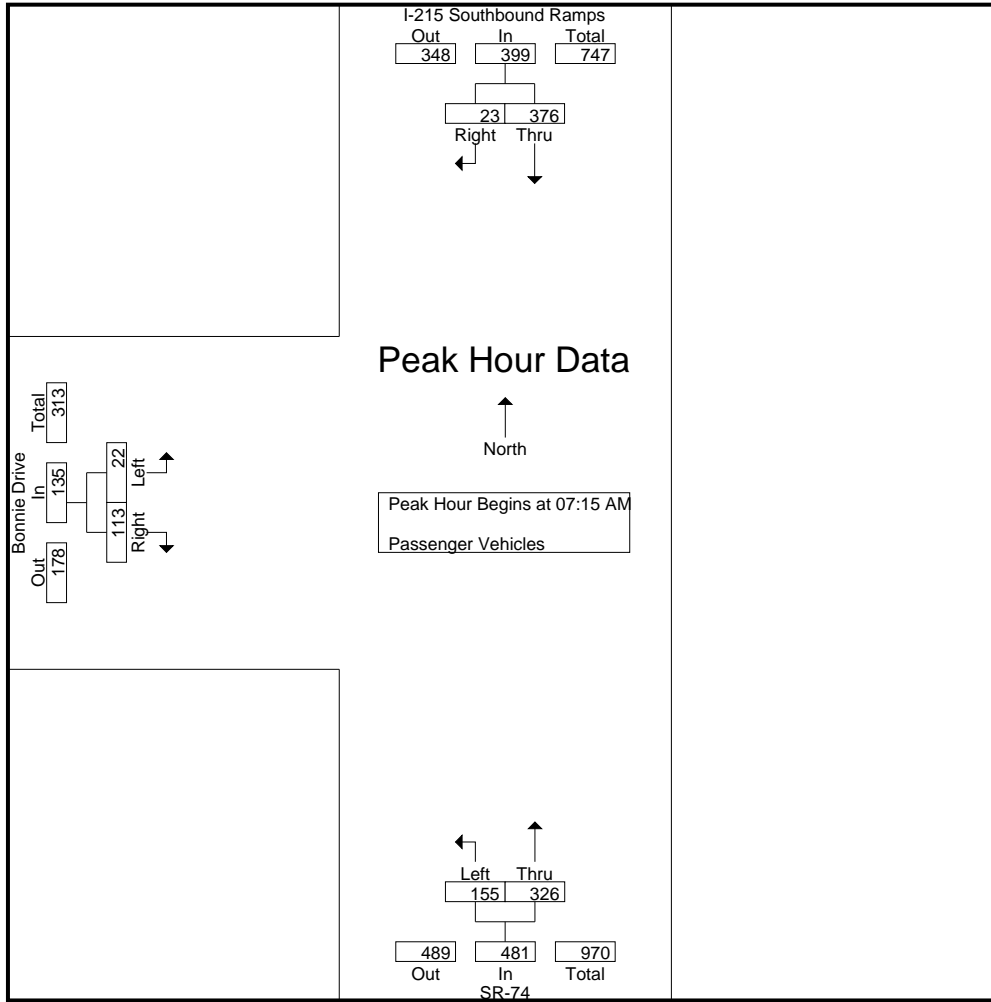
Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	86	2	88	33	61	94	5	18	23	205
07:15 AM	112	5	117	34	76	110	6	29	35	262
07:30 AM	86	4	90	39	94	133	8	36	44	267
07:45 AM	87	5	92	37	80	117	4	28	32	241
Total	371	16	387	143	311	454	23	111	134	975
08:00 AM	91	9	100	45	76	121	4	20	24	245
08:15 AM	104	6	110	29	66	95	9	23	32	237
08:30 AM	83	3	86	42	54	96	5	19	24	206
08:45 AM	85	9	94	26	36	62	6	18	24	180
Total	363	27	390	142	232	374	24	80	104	868
Grand Total	734	43	777	285	543	828	47	191	238	1843
Apprch %	94.5	5.5		34.4	65.6		19.7	80.3		
Total %	39.8	2.3	42.2	15.5	29.5	44.9	2.6	10.4	12.9	

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:15 AM	112	5	117	34	76	110	6	29	35	262
07:30 AM	86	4	90	39	94	133	8	36	44	267
07:45 AM	87	5	92	37	80	117	4	28	32	241
08:00 AM	91	9	100	45	76	121	4	20	24	245
Total Volume	376	23	399	155	326	481	22	113	135	1015
% App. Total	94.2	5.8		32.2	67.8		16.3	83.7		
PHF	.839	.639	.853	.861	.867	.904	.688	.785	.767	.950

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

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	112	5	117	34	76	110	6	29	35
+15 mins.	86	4	90	39	94	133	8	36	44
+30 mins.	87	5	92	37	80	117	4	28	32
+45 mins.	91	9	100	45	76	121	4	20	24
Total Volume	376	23	399	155	326	481	22	113	135
% App. Total	94.2	5.8		32.2	67.8		16.3	83.7	
PHF	.839	.639	.853	.861	.867	.904	.688	.785	.767

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	8	1	9	2	9	11	0	1	1	21
07:15 AM	3	0	3	1	8	9	0	3	3	15
07:30 AM	5	0	5	2	3	5	0	1	1	11
07:45 AM	5	0	5	1	3	4	0	4	4	13
Total	21	1	22	6	23	29	0	9	9	60
08:00 AM	6	0	6	1	1	2	0	5	5	13
08:15 AM	4	0	4	0	2	2	0	4	4	10
08:30 AM	4	0	4	2	0	2	0	4	4	10
08:45 AM	4	0	4	1	2	3	0	3	3	10
Total	18	0	18	4	5	9	0	16	16	43
Grand Total	39	1	40	10	28	38	0	25	25	103
Apprch %	97.5	2.5		26.3	73.7		0	100		
Total %	37.9	1	38.8	9.7	27.2	36.9	0	24.3	24.3	

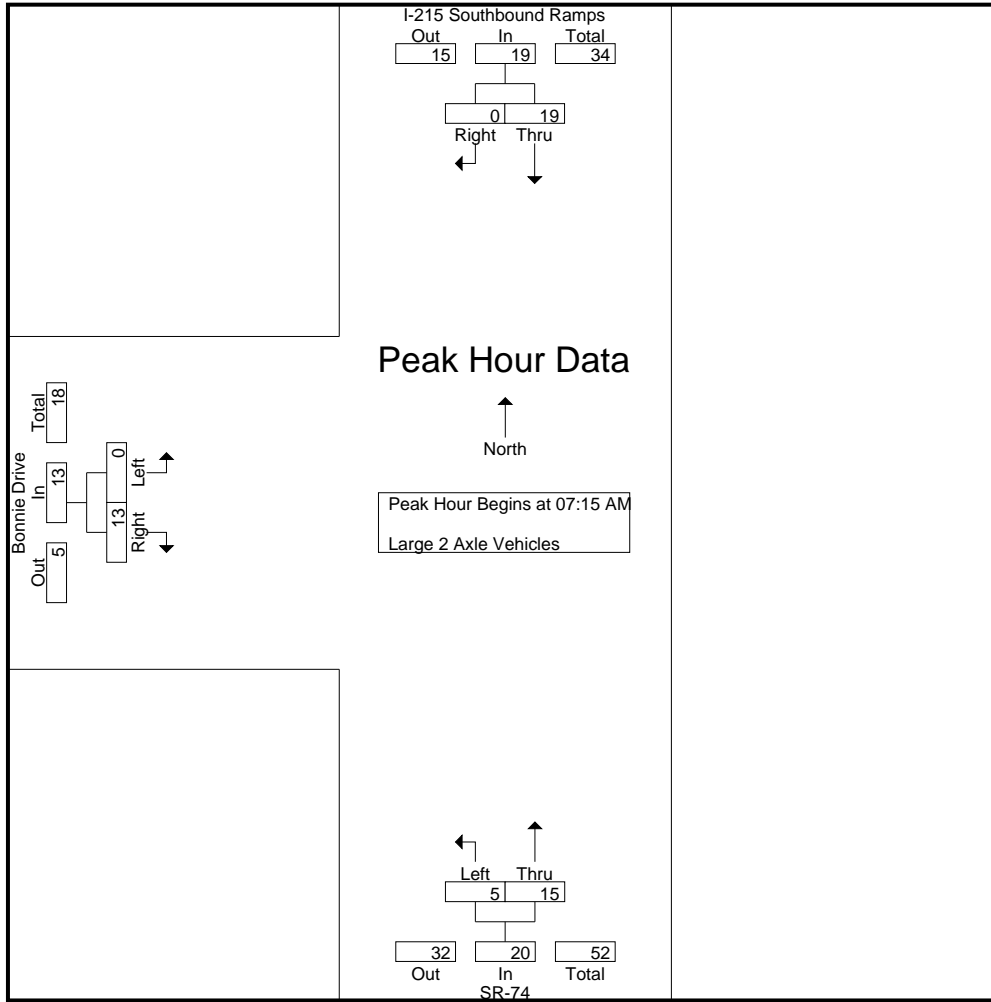
Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:15 AM	3	0	3	1	8	9	0	3	3	15
07:30 AM	5	0	5	2	3	5	0	1	1	11
07:45 AM	5	0	5	1	3	4	0	4	4	13
08:00 AM	6	0	6	1	1	2	0	5	5	13
Total Volume	19	0	19	5	15	20	0	13	13	52
% App. Total	100	0		25	75		0	100		
PHF	.792	.000	.792	.625	.469	.556	.000	.650	.650	.867

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

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	3	0	3	1	8	9	0	3	3
+15 mins.	5	0	5	2	3	5	0	1	1
+30 mins.	5	0	5	1	3	4	0	4	4
+45 mins.	6	0	6	1	1	2	0	5	5
Total Volume	19	0	19	5	15	20	0	13	13
% App. Total	100	0		25	75		0	100	
PHF	.792	.000	.792	.625	.469	.556	.000	.650	.650

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	2	0	2	1	6	7	0	2	2	11
07:15 AM	3	0	3	0	3	3	0	0	0	6
07:30 AM	0	0	0	1	1	2	0	1	1	3
07:45 AM	1	0	1	0	0	0	0	1	1	2
Total	6	0	6	2	10	12	0	4	4	22
08:00 AM	3	0	3	0	2	2	0	0	0	5
08:15 AM	4	0	4	0	0	0	0	0	0	4
08:30 AM	2	0	2	0	0	0	0	1	1	3
08:45 AM	1	0	1	0	0	0	0	0	0	1
Total	10	0	10	0	2	2	0	1	1	13
Grand Total	16	0	16	2	12	14	0	5	5	35
Apprch %	100	0		14.3	85.7		0	100		
Total %	45.7	0	45.7	5.7	34.3	40	0	14.3	14.3	

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	

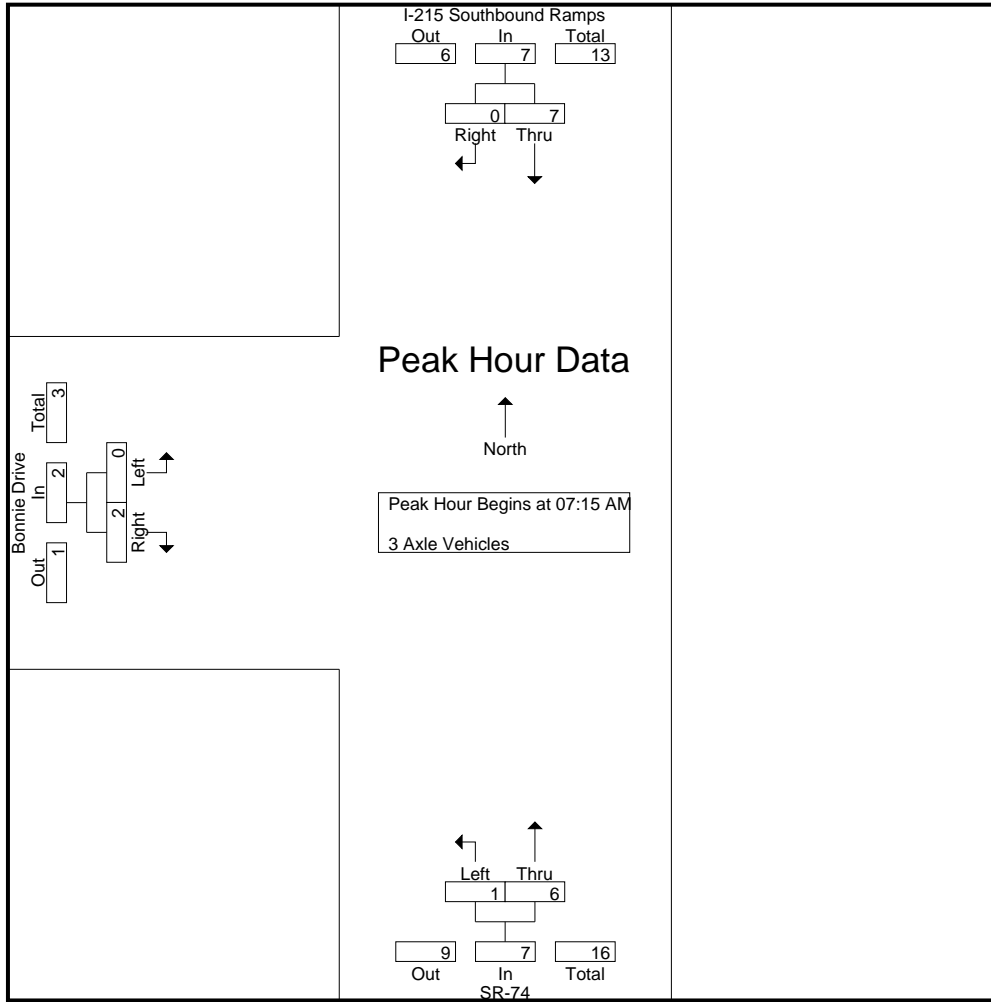
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

07:15 AM	3	0	3	0	3	3	0	0	0	6
07:30 AM	0	0	0	1	1	2	0	1	1	3
07:45 AM	1	0	1	0	0	0	0	1	1	2
08:00 AM	3	0	3	0	2	2	0	0	0	5
Total Volume	7	0	7	1	6	7	0	2	2	16
% App. Total	100	0		14.3	85.7		0	100		
PHF	.583	.000	.583	.250	.500	.583	.000	.500	.500	.667

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	3	0	3	0	3	3	0	0	0
+15 mins.	0	0	0	1	1	2	0	1	1
+30 mins.	1	0	1	0	0	0	0	1	1
+45 mins.	3	0	3	0	2	2	0	0	0
Total Volume	7	0	7	1	6	7	0	2	2
% App. Total	100	0		14.3	85.7		0	100	
PHF	.583	.000	.583	.250	.500	.583	.000	.500	.500

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	4	1	5	0	1	1	0	0	0	6
07:15 AM	3	1	4	8	0	8	0	0	0	12
07:30 AM	4	0	4	8	0	8	0	7	7	19
07:45 AM	4	2	6	9	1	10	0	8	8	24
Total	15	4	19	25	2	27	0	15	15	61
08:00 AM	1	0	1	8	4	12	0	9	9	22
08:15 AM	7	0	7	10	1	11	0	7	7	25
08:30 AM	10	0	10	9	2	11	0	12	12	33
08:45 AM	4	0	4	8	0	8	0	5	5	17
Total	22	0	22	35	7	42	0	33	33	97
Grand Total	37	4	41	60	9	69	0	48	48	158
Apprch %	90.2	9.8		87	13		0	100		
Total %	23.4	2.5	25.9	38	5.7	43.7	0	30.4	30.4	

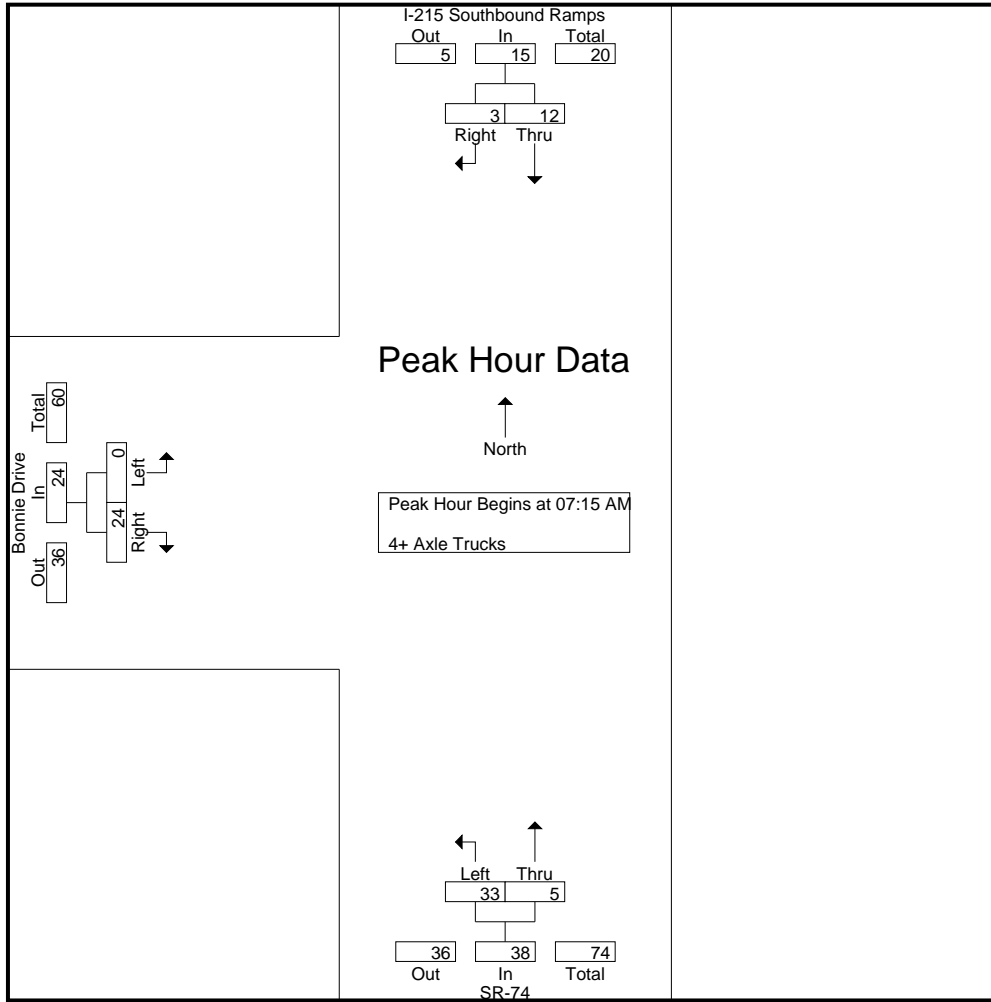
Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:15 AM	3	1	4	8	0	8	0	0	0	12
07:30 AM	4	0	4	8	0	8	0	7	7	19
07:45 AM	4	2	6	9	1	10	0	8	8	24
08:00 AM	1	0	1	8	4	12	0	9	9	22
Total Volume	12	3	15	33	5	38	0	24	24	77
% App. Total	80	20		86.8	13.2		0	100		
PHF	.750	.375	.625	.917	.313	.792	.000	.667	.667	.802

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

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

File Name : 01_MEN_215S_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	3	1	4	8	0	8	0	0	0
+15 mins.	4	0	4	8	0	8	0	7	7
+30 mins.	4	2	6	9	1	10	0	8	8
+45 mins.	1	0	1	8	4	12	0	9	9
Total Volume	12	3	15	33	5	38	0	24	24
% App. Total	80	20		86.8	13.2		0	100	
PHF	.750	.375	.625	.917	.313	.792	.000	.667	.667

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

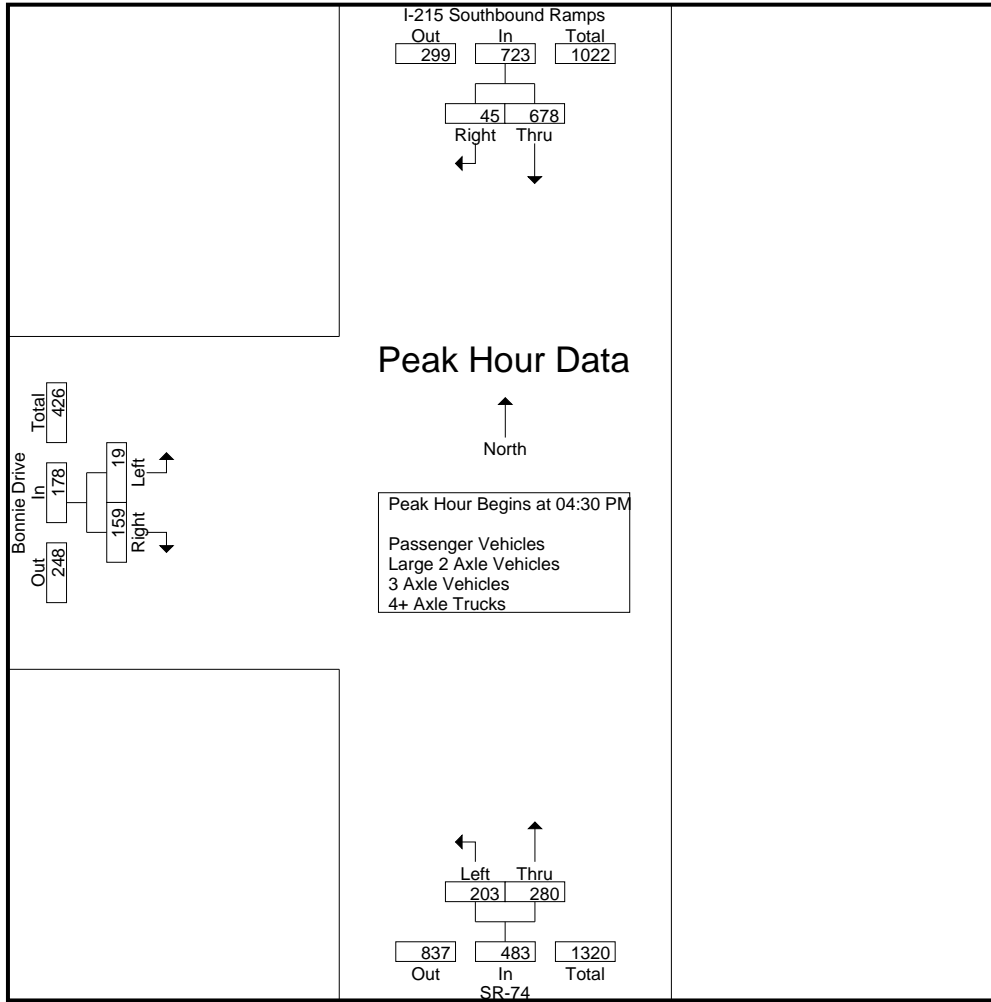
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	135	16	151	57	61	118	7	35	42	311
04:15 PM	159	9	168	45	58	103	10	51	61	332
04:30 PM	152	9	161	59	92	151	7	47	54	366
04:45 PM	166	12	178	35	54	89	4	47	51	318
Total	612	46	658	196	265	461	28	180	208	1327
05:00 PM	157	9	166	53	72	125	4	32	36	327
05:15 PM	203	15	218	56	62	118	4	33	37	373
05:30 PM	160	7	167	48	50	98	6	43	49	314
05:45 PM	135	9	144	46	51	97	14	57	71	312
Total	655	40	695	203	235	438	28	165	193	1326
Grand Total	1267	86	1353	399	500	899	56	345	401	2653
Apprch %	93.6	6.4		44.4	55.6		14	86		
Total %	47.8	3.2	51	15	18.8	33.9	2.1	13	15.1	
Passenger Vehicles	1215	83	1298	366	493	859	56	336	392	2549
% Passenger Vehicles	95.9	96.5	95.9	91.7	98.6	95.6	100	97.4	97.8	96.1
Large 2 Axle Vehicles	36	3	39	14	6	20	0	6	6	65
% Large 2 Axle Vehicles	2.8	3.5	2.9	3.5	1.2	2.2	0	1.7	1.5	2.5
3 Axle Vehicles	9	0	9	19	0	19	0	2	2	30
% 3 Axle Vehicles	0.7	0	0.7	4.8	0	2.1	0	0.6	0.5	1.1
4+ Axle Trucks	7	0	7	0	1	1	0	1	1	9
% 4+ Axle Trucks	0.6	0	0.5	0	0.2	0.1	0	0.3	0.2	0.3

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	152	9	161	59	92	151	7	47	54	366
04:45 PM	166	12	178	35	54	89	4	47	51	318
05:00 PM	157	9	166	53	72	125	4	32	36	327
05:15 PM	203	15	218	56	62	118	4	33	37	373
Total Volume	678	45	723	203	280	483	19	159	178	1384
% App. Total	93.8	6.2		42	58		10.7	89.3		
PHF	.835	.750	.829	.860	.761	.800	.679	.846	.824	.928

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 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:

	04:45 PM			04:30 PM			04:00 PM		
+0 mins.	166	12	178	59	92	151	7	35	42
+15 mins.	157	9	166	35	54	89	10	51	61
+30 mins.	203	15	218	53	72	125	7	47	54
+45 mins.	160	7	167	56	62	118	4	47	51
Total Volume	686	43	729	203	280	483	28	180	208
% App. Total	94.1	5.9		42	58		13.5	86.5	
PHF	.845	.717	.836	.860	.761	.800	.700	.882	.852

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Passenger Vehicles

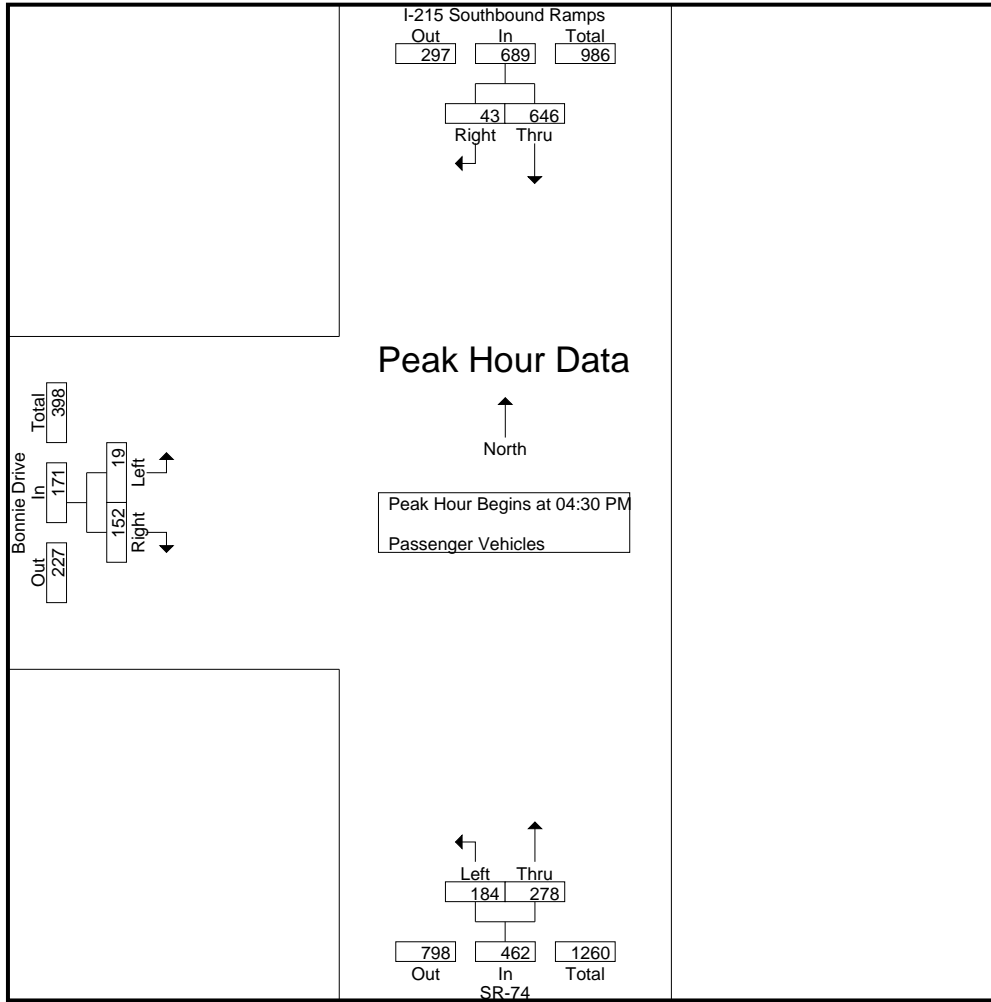
Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	131	15	146	48	60	108	7	35	42	296
04:15 PM	149	9	158	42	58	100	10	51	61	319
04:30 PM	145	8	153	56	92	148	7	45	52	353
04:45 PM	159	12	171	28	54	82	4	45	49	302
Total	584	44	628	174	264	438	28	176	204	1270
05:00 PM	152	9	161	49	70	119	4	30	34	314
05:15 PM	190	14	204	51	62	113	4	32	36	353
05:30 PM	159	7	166	46	48	94	6	43	49	309
05:45 PM	130	9	139	46	49	95	14	55	69	303
Total	631	39	670	192	229	421	28	160	188	1279
Grand Total	1215	83	1298	366	493	859	56	336	392	2549
Apprch %	93.6	6.4		42.6	57.4		14.3	85.7		
Total %	47.7	3.3	50.9	14.4	19.3	33.7	2.2	13.2	15.4	

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:30 PM	145	8	153	56	92	148	7	45	52	353
04:45 PM	159	12	171	28	54	82	4	45	49	302
05:00 PM	152	9	161	49	70	119	4	30	34	314
05:15 PM	190	14	204	51	62	113	4	32	36	353
Total Volume	646	43	689	184	278	462	19	152	171	1322
% App. Total	93.8	6.2		39.8	60.2		11.1	88.9		
PHF	.850	.768	.844	.821	.755	.780	.679	.844	.822	.936

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

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	145	8	153	56	92	148	7	45	52
+15 mins.	159	12	171	28	54	82	4	45	49
+30 mins.	152	9	161	49	70	119	4	30	34
+45 mins.	190	14	204	51	62	113	4	32	36
Total Volume	646	43	689	184	278	462	19	152	171
% App. Total	93.8	6.2		39.8	60.2		11.1	88.9	
PHF	.850	.768	.844	.821	.755	.780	.679	.844	.822

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	4	1	5	8	1	9	0	0	0	14
04:15 PM	9	0	9	0	0	0	0	0	0	9
04:30 PM	4	1	5	2	0	2	0	0	0	7
04:45 PM	4	0	4	3	0	3	0	2	2	9
Total	21	2	23	13	1	14	0	2	2	39
05:00 PM	2	0	2	1	1	2	0	1	1	5
05:15 PM	9	1	10	0	0	0	0	1	1	11
05:30 PM	0	0	0	0	2	2	0	0	0	2
05:45 PM	4	0	4	0	2	2	0	2	2	8
Total	15	1	16	1	5	6	0	4	4	26
Grand Total	36	3	39	14	6	20	0	6	6	65
Apprch %	92.3	7.7		70	30		0	100		
Total %	55.4	4.6	60	21.5	9.2	30.8	0	9.2	9.2	

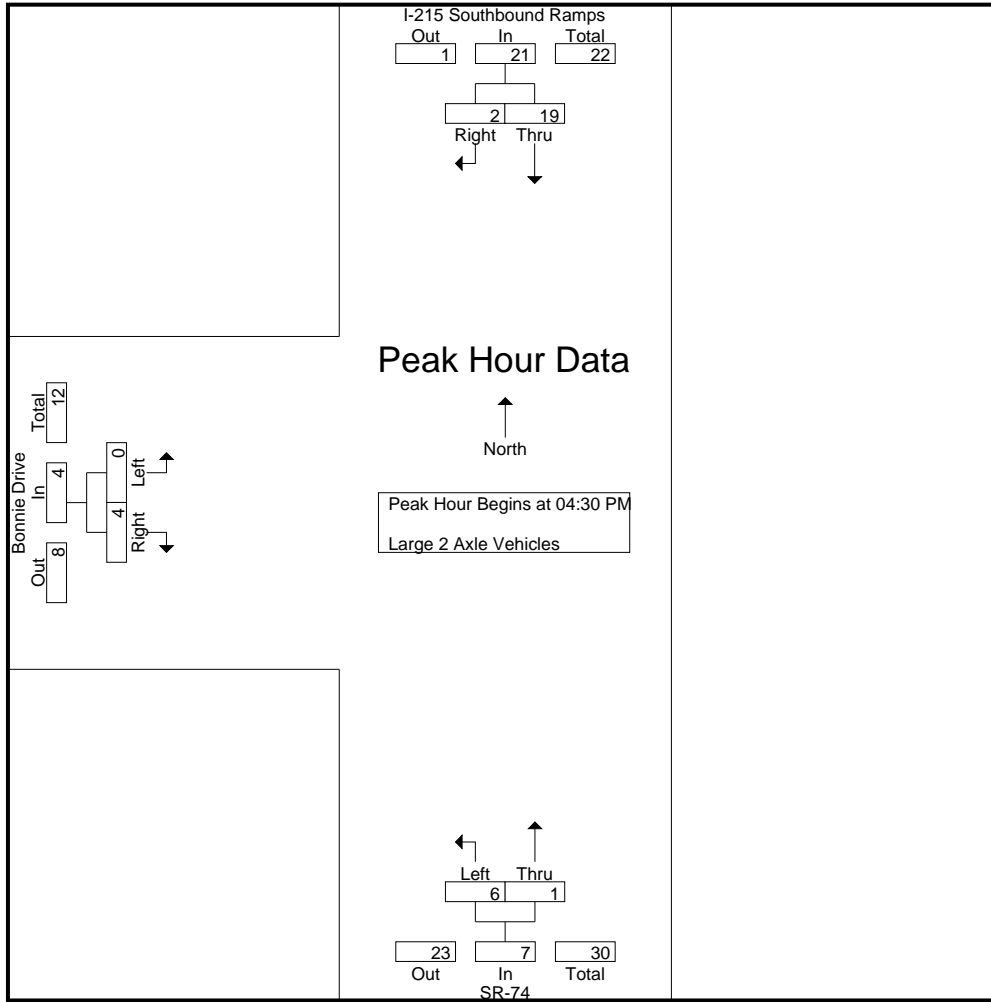
Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:30 PM	4	1	5	2	0	2	0	0	0	7
04:45 PM	4	0	4	3	0	3	0	2	2	9
05:00 PM	2	0	2	1	1	2	0	1	1	5
05:15 PM	9	1	10	0	0	0	0	1	1	11
Total Volume	19	2	21	6	1	7	0	4	4	32
% App. Total	90.5	9.5		85.7	14.3		0	100		
PHF	.528	.500	.525	.500	.250	.583	.000	.500	.500	.727

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	4	1	5	2	0	2	0	0	0
+15 mins.	4	0	4	3	0	3	0	2	2
+30 mins.	2	0	2	1	1	2	0	1	1
+45 mins.	9	1	10	0	0	0	0	1	1
Total Volume	19	2	21	6	1	7	0	4	4
% App. Total	90.5	9.5		85.7	14.3		0	100	
PHF	.528	.500	.525	.500	.250	.583	.000	.500	.500

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

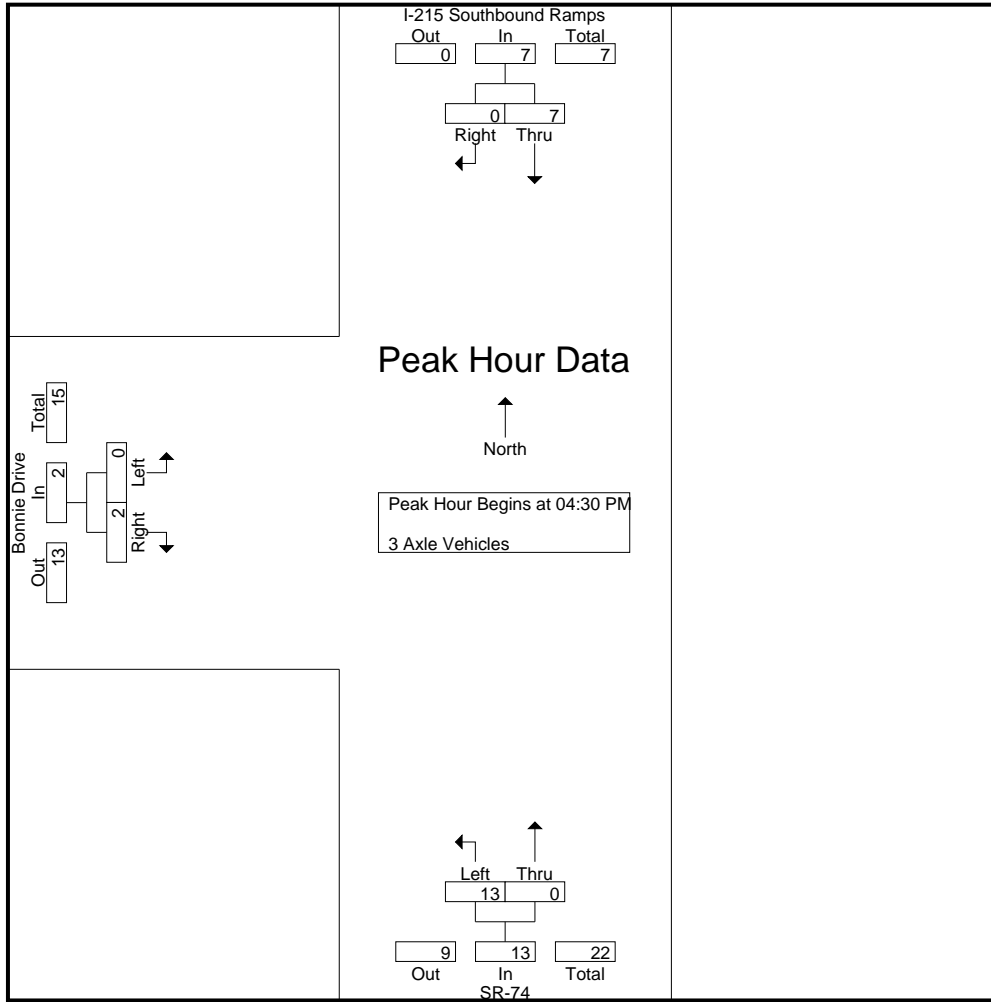
Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	1	0	1	3	0	3	0	0	0	4
04:30 PM	1	0	1	1	0	1	0	1	1	3
04:45 PM	1	0	1	4	0	4	0	0	0	5
Total	3	0	3	9	0	9	0	1	1	13
05:00 PM	2	0	2	3	0	3	0	1	1	6
05:15 PM	3	0	3	5	0	5	0	0	0	8
05:30 PM	1	0	1	2	0	2	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	6	0	6	10	0	10	0	1	1	17
Grand Total	9	0	9	19	0	19	0	2	2	30
Apprch %	100	0		100	0		0	100		
Total %	30	0	30	63.3	0	63.3	0	6.7	6.7	

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:30 PM	1	0	1	1	0	1	0	1	1	3
04:45 PM	1	0	1	4	0	4	0	0	0	5
05:00 PM	2	0	2	3	0	3	0	1	1	6
05:15 PM	3	0	3	5	0	5	0	0	0	8
Total Volume	7	0	7	13	0	13	0	2	2	22
% App. Total	100	0		100	0		0	100		
PHF	.583	.000	.583	.650	.000	.650	.000	.500	.500	.688

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

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	1	0	1	1	0	1	0	1	1
+15 mins.	1	0	1	4	0	4	0	0	0
+30 mins.	2	0	2	3	0	3	0	1	1
+45 mins.	3	0	3	5	0	5	0	0	0
Total Volume	7	0	7	13	0	13	0	2	2
% App. Total	100	0		100	0		0	100	
PHF	.583	.000	.583	.650	.000	.650	.000	.500	.500

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	2	0	2	0	0	0	0	1	1	3
04:45 PM	2	0	2	0	0	0	0	0	0	2
Total	4	0	4	0	0	0	0	1	1	5
05:00 PM	1	0	1	0	1	1	0	0	0	2
05:15 PM	1	0	1	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	1	0	1	0	0	0	0	0	0	1
Total	3	0	3	0	1	1	0	0	0	4
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	

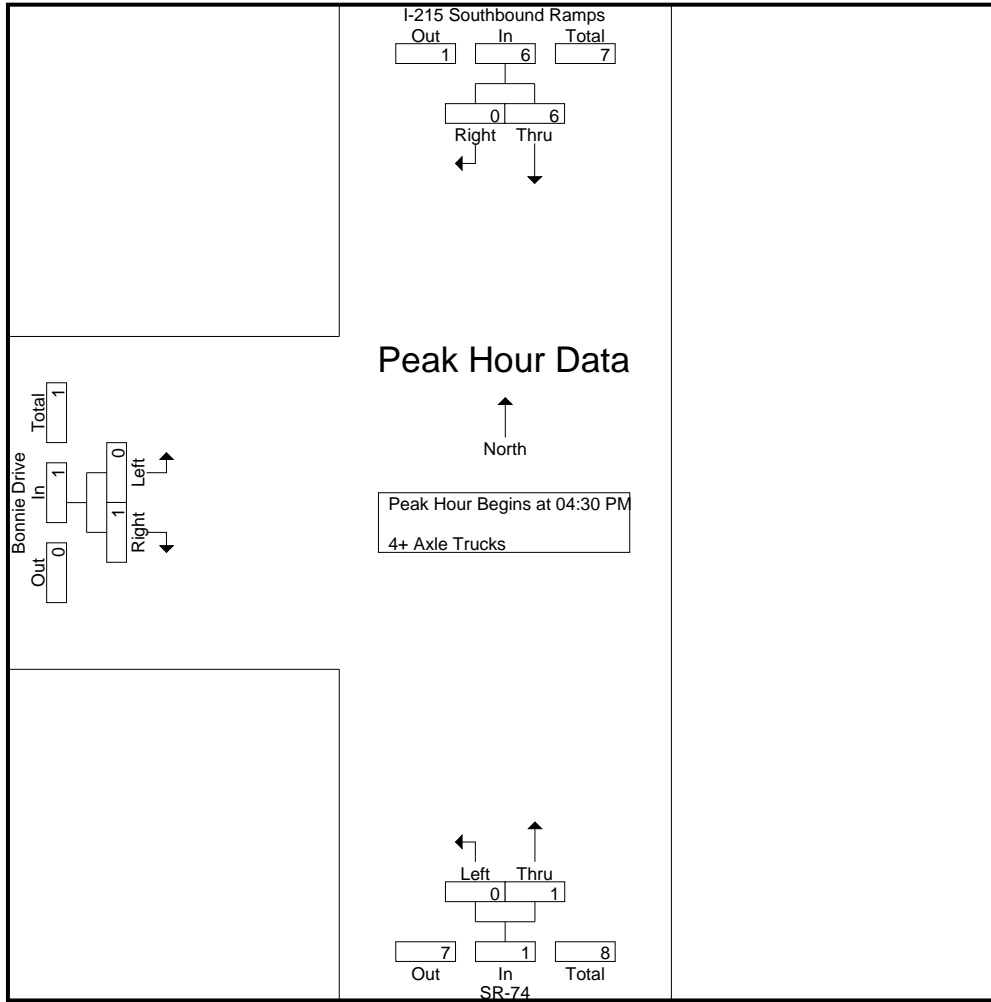
Start Time	I-215 Southbound Ramps Southbound			SR-74 Northbound			Bonnie Drive Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:30 PM	2	0	2	0	0	0	0	1	1	3
04:45 PM	2	0	2	0	0	0	0	0	0	2
05:00 PM	1	0	1	0	1	1	0	0	0	2
05:15 PM	1	0	1	0	0	0	0	0	0	1
Total Volume	6	0	6	0	1	1	0	1	1	8
% App. Total	100	0		0	100		0	100		
PHF	.750	.000	.750	.000	.250	.250	.000	.250	.250	.667

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

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

File Name : 01_MEN_215S_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	2	0	2	0	0	0	0	1	1
+15 mins.	2	0	2	0	0	0	0	0	0
+30 mins.	1	0	1	0	1	1	0	0	0
+45 mins.	1	0	1	0	0	0	0	0	0
Total Volume	6	0	6	0	1	1	0	1	1
% App. Total	100	0		0	100		0	100	
PHF	.750	.000	.750	.000	.250	.250	.000	.250	.250

Location: Menifee
 N/S: SR-215 SB Ramps/SR-74
 E/W: Bonnie Drive



Date: 10/5/2021
 Day: Tuesday

PEDESTRIANS

	North Leg SR-215 SB Ramps	East Leg Dead End	South Leg SR-74	West Leg Bonnie Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg SR-215 SB Ramps	East Leg Dead End	South Leg SR-74	West Leg Bonnie Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Menifee
 N/S: SR-215 SB Ramps/SR-74
 E/W: Bonnie Drive



Date: 10/5/2021
 Day: Tuesday

BICYCLES

	Southbound SR-215 SB Ramps			Westbound Dead End			Northbound SR-74			Eastbound Bonnie Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	1	0	0	0	0	0	1

	Southbound SR-215 SB Ramps			Westbound Dead End			Northbound SR-74			Eastbound Bonnie Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

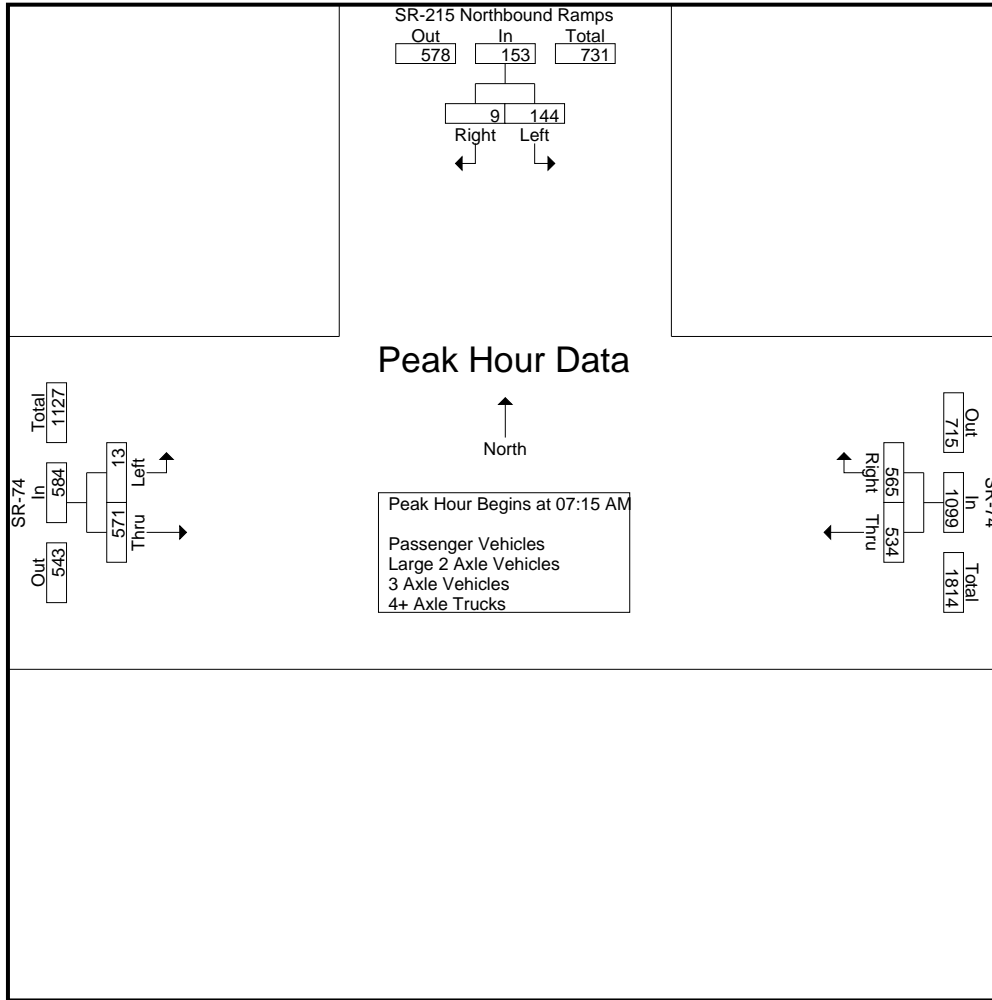
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	21	2	1	23	112	145	0	257	2	122	0	124	1	404	405
07:15 AM	55	3	2	58	122	145	0	267	2	161	0	163	2	488	490
07:30 AM	30	3	2	33	151	149	0	300	7	136	0	143	2	476	478
07:45 AM	27	2	1	29	124	141	0	265	3	129	0	132	1	426	427
Total	133	10	6	143	509	580	0	1089	14	548	0	562	6	1794	1800
08:00 AM	32	1	1	33	137	130	0	267	1	145	0	146	1	446	447
08:15 AM	24	3	0	27	101	109	0	210	3	141	0	144	0	381	381
08:30 AM	24	1	1	25	98	97	0	195	4	120	0	124	1	344	345
08:45 AM	18	4	3	22	81	115	0	196	6	137	0	143	3	361	364
Total	98	9	5	107	417	451	0	868	14	543	0	557	5	1532	1537
Grand Total	231	19	11	250	926	1031	0	1957	28	1091	0	1119	11	3326	3337
Apprch %	92.4	7.6			47.3	52.7			2.5	97.5					
Total %	6.9	0.6		7.5	27.8	31		58.8	0.8	32.8		33.6	0.3	99.7	
Passenger Vehicles	209	16		235	804	936		1740	25	918		943	0	0	2918
% Passenger Vehicles	90.5	84.2	90.9	90	86.8	90.8	0	88.9	89.3	84.1	0	84.3	0	0	87.4
Large 2 Axle Vehicles	15	1		16	39	61		100	2	63		65	0	0	181
% Large 2 Axle Vehicles	6.5	5.3	0	6.1	4.2	5.9	0	5.1	7.1	5.8	0	5.8	0	0	5.4
3 Axle Vehicles	2	1		4	12	11		23	0	20		20	0	0	47
% 3 Axle Vehicles	0.9	5.3	9.1	1.5	1.3	1.1	0	1.2	0	1.8	0	1.8	0	0	1.4
4+ Axle Trucks	5	1		6	71	23		94	1	90		91	0	0	191
% 4+ Axle Trucks	2.2	5.3	0	2.3	7.7	2.2	0	4.8	3.6	8.2	0	8.1	0	0	5.7

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. 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	55	3	58	122	145	267	2	161	163	488
07:30 AM	30	3	33	151	149	300	7	136	143	476
07:45 AM	27	2	29	124	141	265	3	129	132	426
08:00 AM	32	1	33	137	130	267	1	145	146	446
Total Volume	144	9	153	534	565	1099	13	571	584	1836
% App. Total	94.1	5.9		48.6	51.4		2.2	97.8		
PHF	.655	.750	.659	.884	.948	.916	.464	.887	.896	.941

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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			07:15 AM			07:15 AM		
+0 mins.	55	3	58	122	145	267	2	161	163
+15 mins.	30	3	33	151	149	300	7	136	143
+30 mins.	27	2	29	124	141	265	3	129	132
+45 mins.	32	1	33	137	130	267	1	145	146
Total Volume	144	9	153	534	565	1099	13	571	584
% App. Total	94.1	5.9		48.6	51.4		2.2	97.8	
PHF	.655	.750	.659	.884	.948	.916	.464	.887	.896

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Passenger Vehicles

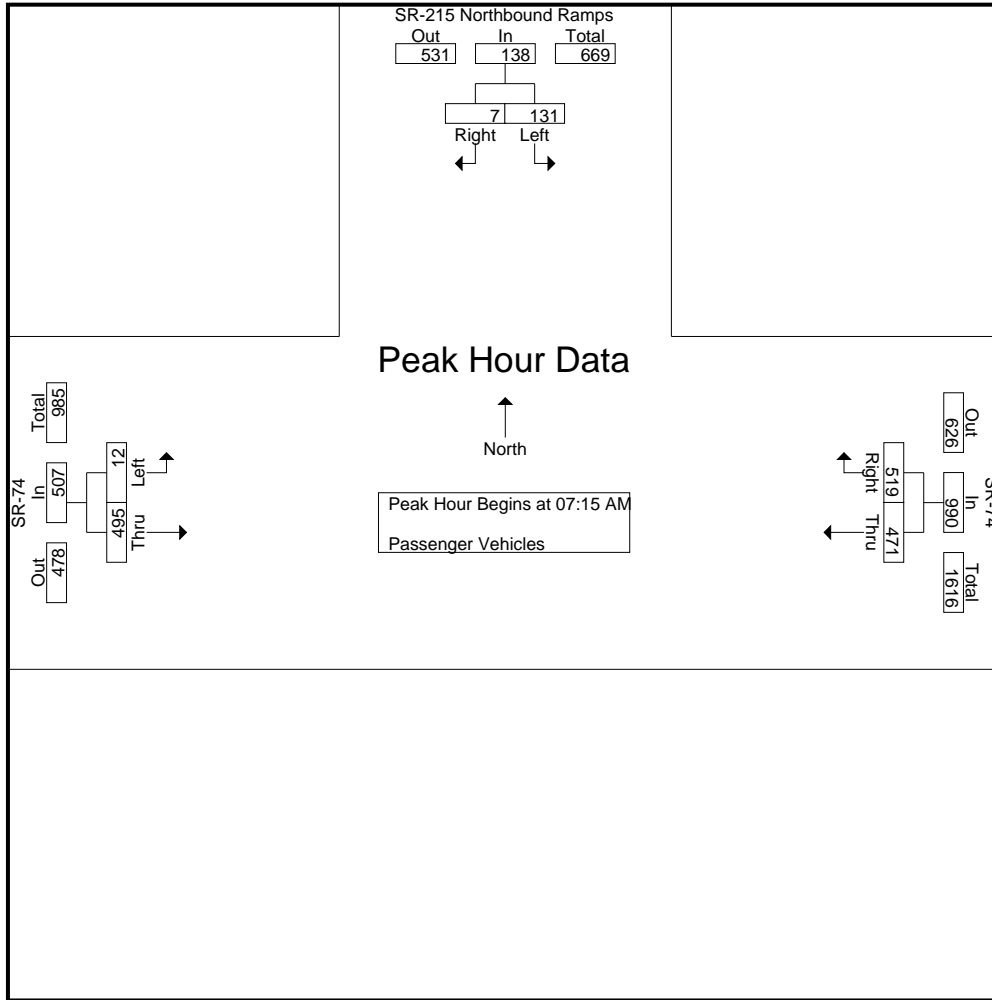
Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	17	2	1	19	93	126	0	219	2	103	0	105	1	343	344
07:15 AM	49	3	2	52	103	131	0	234	2	150	0	152	2	438	440
07:30 AM	28	1	1	29	135	140	0	275	6	118	0	124	1	428	429
07:45 AM	26	2	1	28	113	131	0	244	3	108	0	111	1	383	384
Total	120	8	5	128	444	528	0	972	13	479	0	492	5	1592	1597
08:00 AM	28	1	1	29	120	117	0	237	1	119	0	120	1	386	387
08:15 AM	21	3	0	24	86	101	0	187	2	117	0	119	0	330	330
08:30 AM	23	1	1	24	86	87	0	173	3	89	0	92	1	289	290
08:45 AM	17	3	3	20	68	103	0	171	6	114	0	120	3	311	314
Total	89	8	5	97	360	408	0	768	12	439	0	451	5	1316	1321
Grand Total	209	16	10	225	804	936	0	1740	25	918	0	943	10	2908	2918
Apprch %	92.9	7.1			46.2	53.8			2.7	97.3					
Total %	7.2	0.6		7.7	27.6	32.2		59.8	0.9	31.6		32.4	0.3	99.7	

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	49	3	52	103	131	234	2	150	152	438
07:30 AM	28	1	29	135	140	275	6	118	124	428
07:45 AM	26	2	28	113	131	244	3	108	111	383
08:00 AM	28	1	29	120	117	237	1	119	120	386
Total Volume	131	7	138	471	519	990	12	495	507	1635
% App. Total	94.9	5.1		47.6	52.4		2.4	97.6		
PHF	.668	.583	.663	.872	.927	.900	.500	.825	.834	.933

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

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	49	3	52	103	131	234	2	150	152
+15 mins.	28	1	29	135	140	275	6	118	124
+30 mins.	26	2	28	113	131	244	3	108	111
+45 mins.	28	1	29	120	117	237	1	119	120
Total Volume	131	7	138	471	519	990	12	495	507
% App. Total	94.9	5.1		47.6	52.4		2.4	97.6	
PHF	.668	.583	.663	.872	.927	.900	.500	.825	.834

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

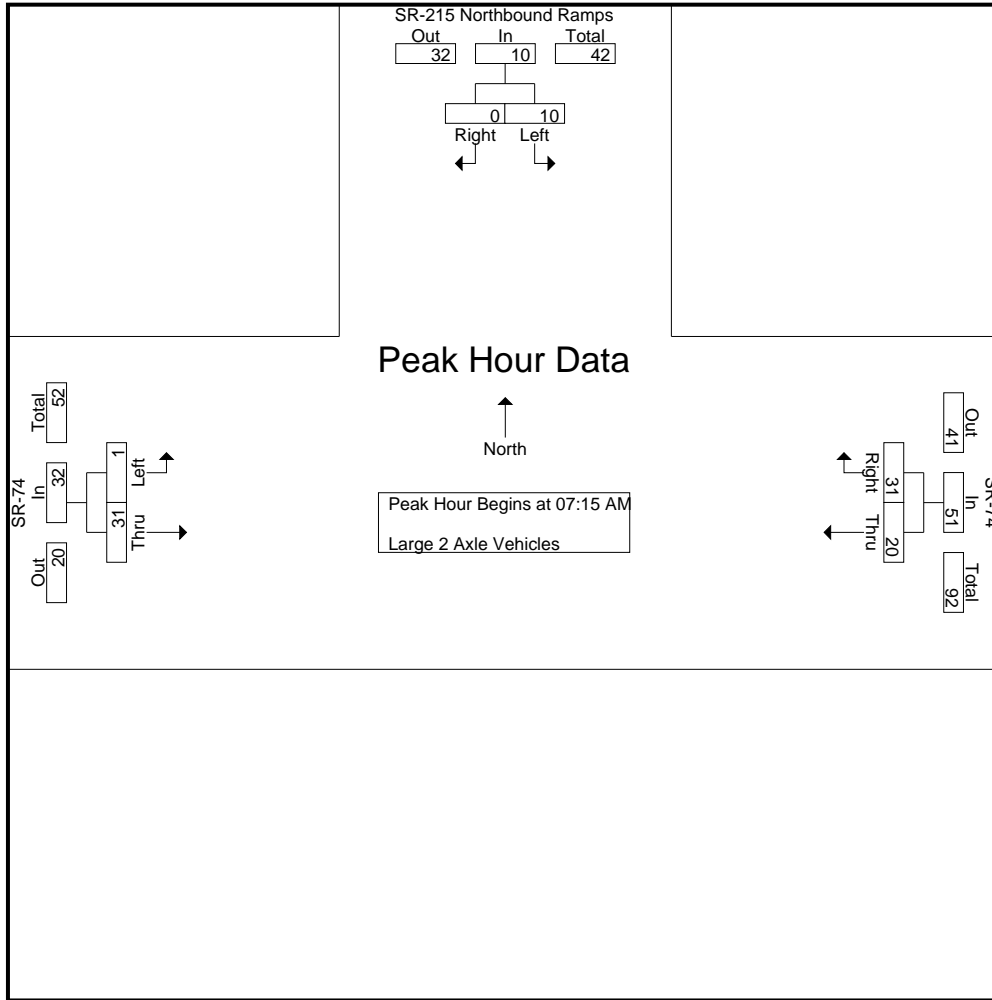
Groups Printed- Large 2 Axle Vehicles

Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	3	0	0	3	11	13	0	24	0	9	0	9	0	36	36
07:15 AM	4	0	0	4	9	8	0	17	0	5	0	5	0	26	26
07:30 AM	1	0	0	1	6	6	0	12	1	6	0	7	0	20	20
07:45 AM	1	0	0	1	3	8	0	11	0	8	0	8	0	20	20
Total	9	0	0	9	29	35	0	64	1	28	0	29	0	102	102
08:00 AM	4	0	0	4	2	9	0	11	0	12	0	12	0	27	27
08:15 AM	2	0	0	2	4	4	0	8	1	6	0	7	0	17	17
08:30 AM	0	0	0	0	2	6	0	8	0	7	0	7	0	15	15
08:45 AM	0	1	0	1	2	7	0	9	0	10	0	10	0	20	20
Total	6	1	0	7	10	26	0	36	1	35	0	36	0	79	79
Grand Total	15	1	0	16	39	61	0	100	2	63	0	65	0	181	181
Apprch %	93.8	6.2			39	61			3.1	96.9					
Total %	8.3	0.6		8.8	21.5	33.7		55.2	1.1	34.8		35.9		0	100

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	4	0	4	9	8	17	0	5	5	26
07:30 AM	1	0	1	6	6	12	1	6	7	20
07:45 AM	1	0	1	3	8	11	0	8	8	20
08:00 AM	4	0	4	2	9	11	0	12	12	27
Total Volume	10	0	10	20	31	51	1	31	32	93
% App. Total	100	0	0	39.2	60.8	0	3.1	96.9	0	0
PHF	.625	.000	.625	.556	.861	.750	.250	.646	.667	.861

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	4	0	4	9	8	17	0	5	5
+15 mins.	1	0	1	6	6	12	1	6	7
+30 mins.	1	0	1	3	8	11	0	8	8
+45 mins.	4	0	4	2	9	11	0	12	12
Total Volume	10	0	10	20	31	51	1	31	32
% App. Total	100	0		39.2	60.8		3.1	96.9	
PHF	.625	.000	.625	.556	.861	.750	.250	.646	.667

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

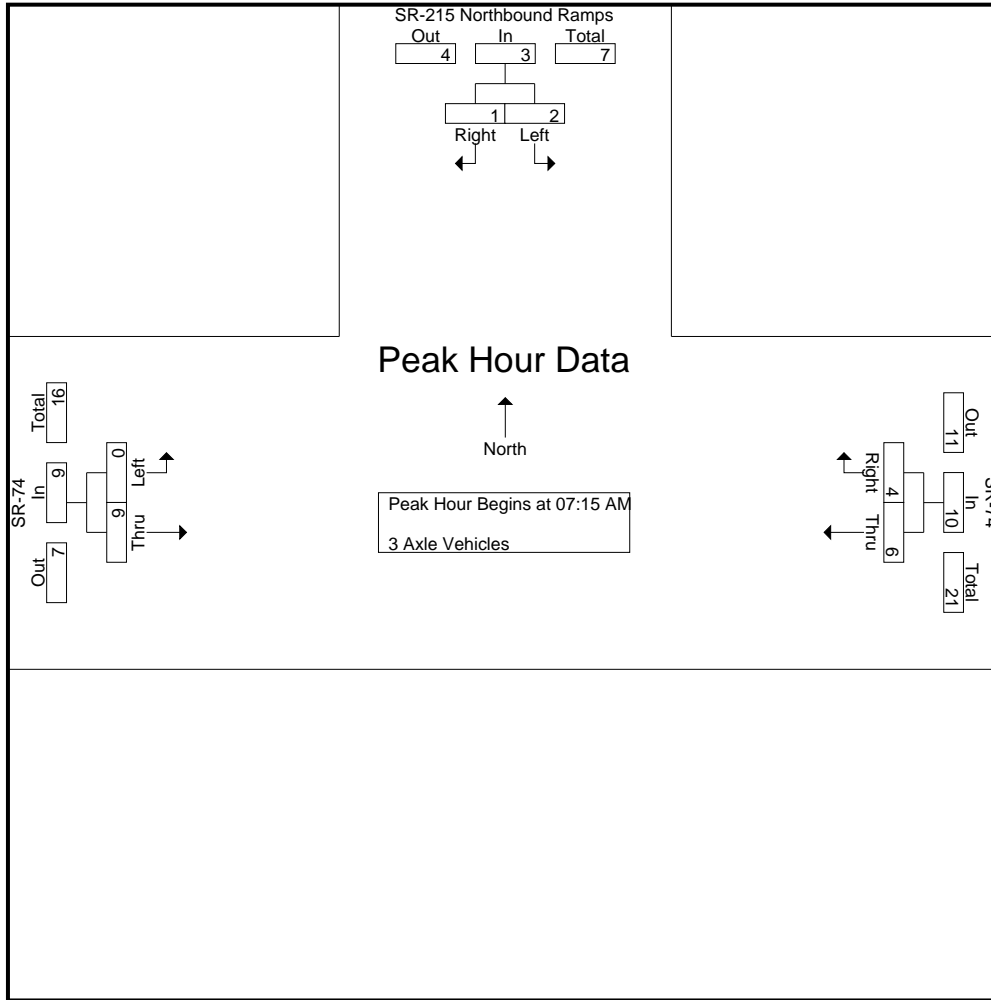
Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	0	0	0	0	6	3	0	9	0	3	0	3	0	12	12
07:15 AM	1	0	0	1	3	1	0	4	0	3	0	3	0	8	8
07:30 AM	1	1	1	2	1	0	0	1	0	1	0	1	1	4	5
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2
Total	2	1	1	3	10	4	0	14	0	9	0	9	1	26	27
08:00 AM	0	0	0	0	2	3	0	5	0	3	0	3	0	8	8
08:15 AM	0	0	0	0	0	2	0	2	0	4	0	4	0	6	6
08:30 AM	0	0	0	0	0	2	0	2	0	2	0	2	0	4	4
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2
Total	0	0	0	0	2	7	0	9	0	11	0	11	0	20	20
Grand Total	2	1	1	3	12	11	0	23	0	20	0	20	1	46	47
Apprch %	66.7	33.3			52.2	47.8			0	100					
Total %	4.3	2.2		6.5	26.1	23.9		50	0	43.5		43.5	2.1	97.9	

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	1	0	1	3	1	4	0	3	3	8
07:30 AM	1	1	2	1	0	1	0	1	1	4
07:45 AM	0	0	0	0	0	0	0	2	2	2
08:00 AM	0	0	0	2	3	5	0	3	3	8
Total Volume	2	1	3	6	4	10	0	9	9	22
% App. Total	66.7	33.3		60	40		0	100		
PHF	.500	.250	.375	.500	.333	.500	.000	.750	.750	.688

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

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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	0	1	3	1	4	0	3	3
+15 mins.	1	1	2	1	0	1	0	1	1
+30 mins.	0	0	0	0	0	0	0	2	2
+45 mins.	0	0	0	2	3	5	0	3	3
Total Volume	2	1	3	6	4	10	0	9	9
% App. Total	66.7	33.3		60	40		0	100	
PHF	.500	.250	.375	.500	.333	.500	.000	.750	.750

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

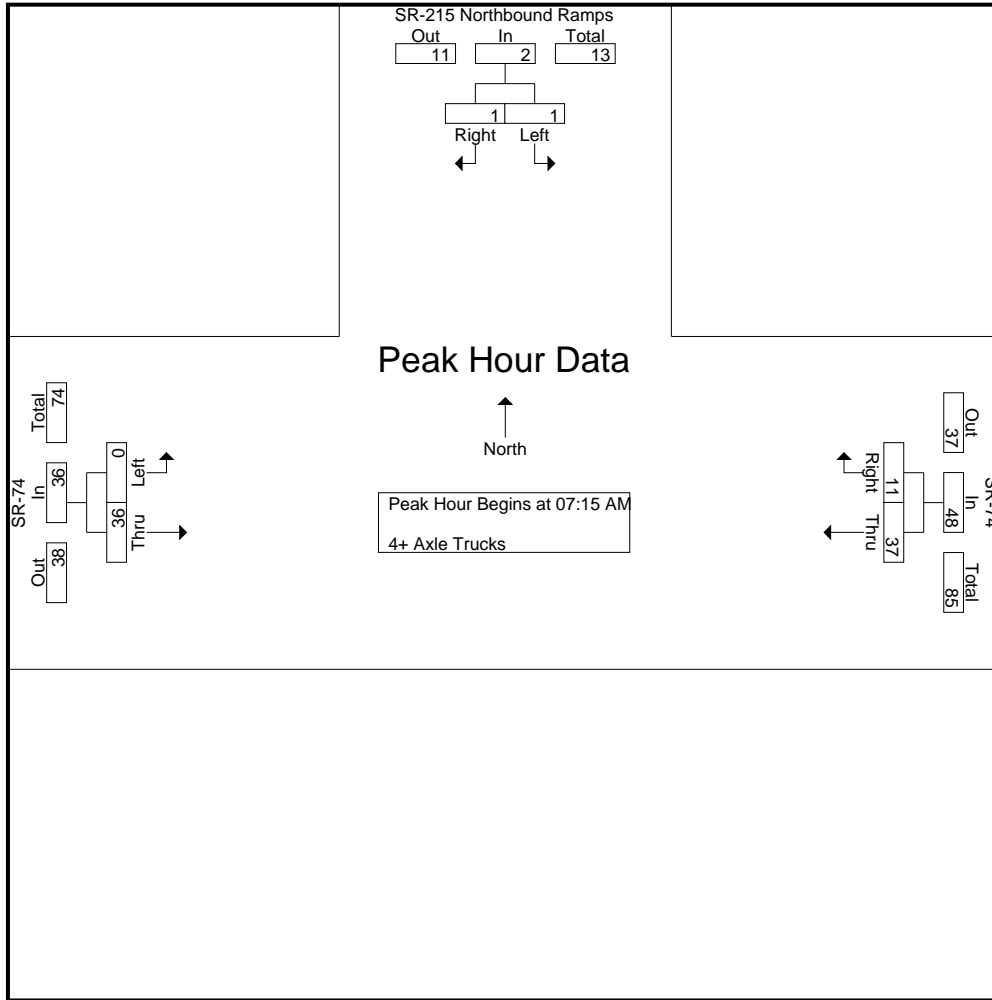
Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	1	0	0	1	2	3	0	5	0	7	0	7	0	13	13
07:15 AM	1	0	0	1	7	5	0	12	0	3	0	3	0	16	16
07:30 AM	0	1	0	1	9	3	0	12	0	11	0	11	0	24	24
07:45 AM	0	0	0	0	8	2	0	10	0	11	0	11	0	21	21
Total	2	1	0	3	26	13	0	39	0	32	0	32	0	74	74
08:00 AM	0	0	0	0	13	1	0	14	0	11	0	11	0	25	25
08:15 AM	1	0	0	1	11	2	0	13	0	14	0	14	0	28	28
08:30 AM	1	0	0	1	10	2	0	12	1	22	0	23	0	36	36
08:45 AM	1	0	0	1	11	5	0	16	0	11	0	11	0	28	28
Total	3	0	0	3	45	10	0	55	1	58	0	59	0	117	117
Grand Total	5	1	0	6	71	23	0	94	1	90	0	91	0	191	191
Apprch %	83.3	16.7			75.5	24.5			1.1	98.9					
Total %	2.6	0.5		3.1	37.2	12		49.2	0.5	47.1		47.6		0	100

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	1	0	1	7	5	12	0	3	3	16
07:30 AM	0	1	1	9	3	12	0	11	11	24
07:45 AM	0	0	0	8	2	10	0	11	11	21
08:00 AM	0	0	0	13	1	14	0	11	11	25
Total Volume	1	1	2	37	11	48	0	36	36	86
% App. Total	50	50		77.1	22.9		0	100		
PHF	.250	.250	.500	.712	.550	.857	.000	.818	.818	.860

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

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

File Name : 02_MEN_215N_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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	0	1	7	5	12	0	3	3
+15 mins.	0	1	1	9	3	12	0	11	11
+30 mins.	0	0	0	8	2	10	0	11	11
+45 mins.	0	0	0	13	1	14	0	11	11
Total Volume	1	1	2	37	11	48	0	36	36
% App. Total	50	50		77.1	22.9		0	100	
PHF	.250	.250	.500	.712	.550	.857	.000	.818	.818

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

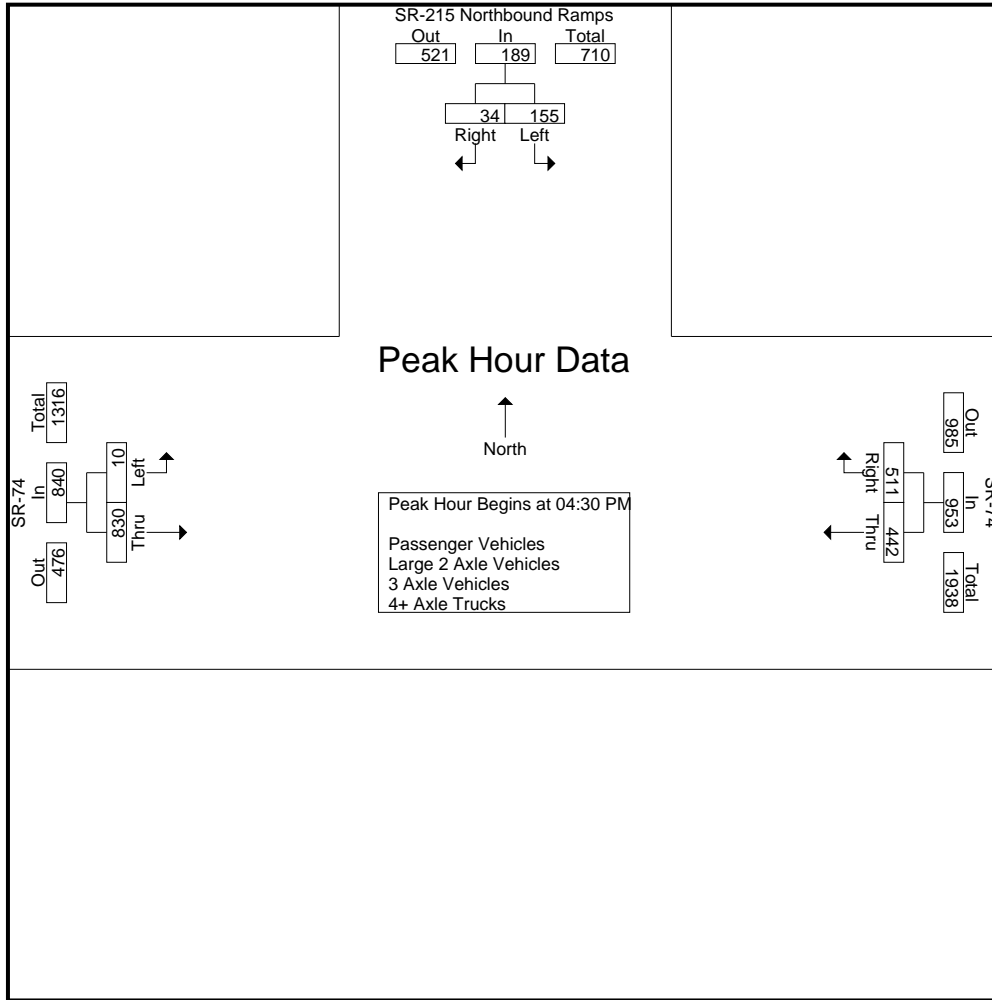
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
04:00 PM	48	9	4	57	110	142	0	252	1	177	0	178	4	487	491
04:15 PM	39	6	4	45	88	111	0	199	3	213	0	216	4	460	464
04:30 PM	40	10	2	50	151	146	0	297	3	195	0	198	2	545	547
04:45 PM	44	5	2	49	83	120	0	203	1	200	0	201	2	453	455
Total	171	30	12	201	432	519	0	951	8	785	0	793	12	1945	1957
05:00 PM	34	7	5	41	111	130	0	241	1	203	0	204	5	486	491
05:15 PM	37	12	3	49	97	115	0	212	5	232	0	237	3	498	501
05:30 PM	49	10	4	59	103	123	0	226	2	203	0	205	4	490	494
05:45 PM	52	13	4	65	75	103	0	178	4	195	0	199	4	442	446
Total	172	42	16	214	386	471	0	857	12	833	0	845	16	1916	1932
Grand Total	343	72	28	415	818	990	0	1808	20	1618	0	1638	28	3861	3889
Apprch %	82.7	17.3			45.2	54.8			1.2	98.8					
Total %	8.9	1.9		10.7	21.2	25.6		46.8	0.5	41.9		42.4	0.7	99.3	
Passenger Vehicles	300	66		393	782	950		1732	18	1554		1572	0	0	3697
% Passenger Vehicles	87.5	91.7	96.4	88.7	95.6	96	0	95.8	90	96	0	96	0	0	95.1
Large 2 Axle Vehicles	40	4		45	19	28		47	0	48		48	0	0	140
% Large 2 Axle Vehicles	11.7	5.6	3.6	10.2	2.3	2.8	0	2.6	0	3	0	2.9	0	0	3.6
3 Axle Vehicles	0	2		2	16	7		23	1	9		10	0	0	35
% 3 Axle Vehicles	0	2.8	0	0.5	2	0.7	0	1.3	5	0.6	0	0.6	0	0	0.9
4+ Axle Trucks	3	0		3	1	5		6	1	7		8	0	0	17
% 4+ Axle Trucks	0.9	0	0	0.7	0.1	0.5	0	0.3	5	0.4	0	0.5	0	0	0.4

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	40	10	50	151	146	297	3	195	198	545
04:45 PM	44	5	49	83	120	203	1	200	201	453
05:00 PM	34	7	41	111	130	241	1	203	204	486
05:15 PM	37	12	49	97	115	212	5	232	237	498
Total Volume	155	34	189	442	511	953	10	830	840	1982
% App. Total	82	18		46.4	53.6		1.2	98.8		
PHF	.881	.708	.945	.732	.875	.802	.500	.894	.886	.909

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 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			04:30 PM			04:45 PM		
+0 mins.	34	7	41	151	146	297	1	200	201
+15 mins.	37	12	49	83	120	203	1	203	204
+30 mins.	49	10	59	111	130	241	5	232	237
+45 mins.	52	13	65	97	115	212	2	203	205
Total Volume	172	42	214	442	511	953	9	838	847
% App. Total	80.4	19.6		46.4	53.6		1.1	98.9	
PHF	.827	.808	.823	.732	.875	.802	.450	.903	.893

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

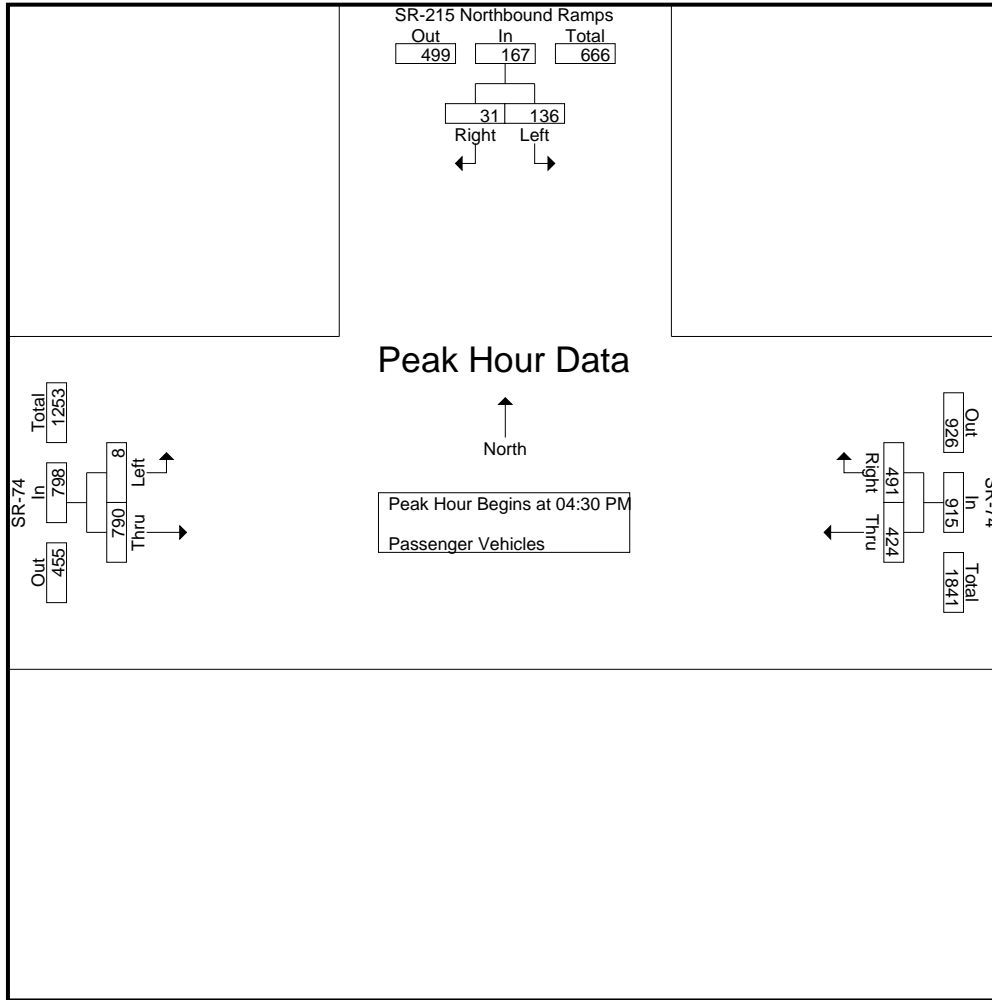
Groups Printed- Passenger Vehicles

Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
04:00 PM	45	7	3	52	102	131	0	233	1	172	0	173	3	458	461
04:15 PM	36	6	4	42	84	108	0	192	3	205	0	208	4	442	446
04:30 PM	34	8	2	42	150	142	0	292	1	188	0	189	2	523	525
04:45 PM	40	5	2	45	76	114	0	190	1	190	0	191	2	426	428
Total	155	26	11	181	412	495	0	907	6	755	0	761	11	1849	1860
05:00 PM	30	6	5	36	104	126	0	230	1	195	0	196	5	462	467
05:15 PM	32	12	3	44	94	109	0	203	5	217	0	222	3	469	472
05:30 PM	40	9	4	49	99	122	0	221	2	200	0	202	4	472	476
05:45 PM	43	13	4	56	73	98	0	171	4	187	0	191	4	418	422
Total	145	40	16	185	370	455	0	825	12	799	0	811	16	1821	1837
Grand Total	300	66	27	366	782	950	0	1732	18	1554	0	1572	27	3670	3697
Apprch %	82	18			45.2	54.8			1.1	98.9					
Total %	8.2	1.8		10	21.3	25.9		47.2	0.5	42.3		42.8	0.7	99.3	

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	34	8	42	150	142	292	1	188	189	523
04:45 PM	40	5	45	76	114	190	1	190	191	426
05:00 PM	30	6	36	104	126	230	1	195	196	462
05:15 PM	32	12	44	94	109	203	5	217	222	469
Total Volume	136	31	167	424	491	915	8	790	798	1880
% App. Total	81.4	18.6		46.3	53.7		1	99		
PHF	.850	.646	.928	.707	.864	.783	.400	.910	.899	.899

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	34	8	42	150	142	292	1	188	189
+15 mins.	40	5	45	76	114	190	1	190	191
+30 mins.	30	6	36	104	126	230	1	195	196
+45 mins.	32	12	44	94	109	203	5	217	222
Total Volume	136	31	167	424	491	915	8	790	798
% App. Total	81.4	18.6		46.3	53.7		1	99	
PHF	.850	.646	.928	.707	.864	.783	.400	.910	.899

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

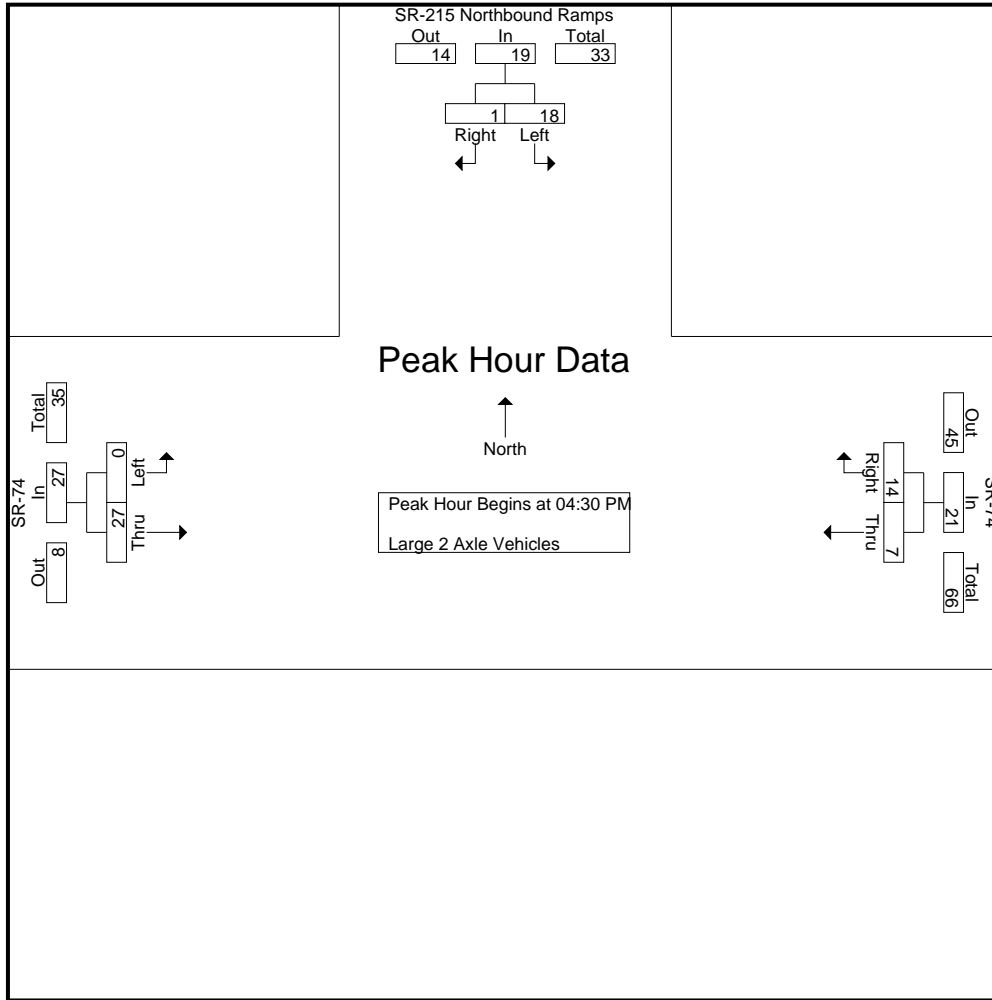
Groups Printed- Large 2 Axle Vehicles

Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
04:00 PM	3	2	1	5	7	7	0	14	0	5	0	5	1	24	25
04:15 PM	2	0	0	2	1	2	0	3	0	7	0	7	0	12	12
04:30 PM	6	1	0	7	1	4	0	5	0	4	0	4	0	16	16
04:45 PM	4	0	0	4	3	4	0	7	0	7	0	7	0	18	18
Total	15	3	1	18	12	17	0	29	0	23	0	23	1	70	71
05:00 PM	4	0	0	4	3	2	0	5	0	4	0	4	0	13	13
05:15 PM	4	0	0	4	0	4	0	4	0	12	0	12	0	20	20
05:30 PM	8	1	0	9	2	1	0	3	0	2	0	2	0	14	14
05:45 PM	9	0	0	9	2	4	0	6	0	7	0	7	0	22	22
Total	25	1	0	26	7	11	0	18	0	25	0	25	0	69	69
Grand Total	40	4	1	44	19	28	0	47	0	48	0	48	1	139	140
Apprch %	90.9	9.1			40.4	59.6			0	100					
Total %	28.8	2.9		31.7	13.7	20.1		33.8	0	34.5		34.5	0.7	99.3	

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	6	1	7	1	4	5	0	4	4	16
04:45 PM	4	0	4	3	4	7	0	7	7	18
05:00 PM	4	0	4	3	2	5	0	4	4	13
05:15 PM	4	0	4	0	4	4	0	12	12	20
Total Volume	18	1	19	7	14	21	0	27	27	67
% App. Total	94.7	5.3		33.3	66.7		0	100		
PHF	.750	.250	.679	.583	.875	.750	.000	.563	.563	.838

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	6	1	7	1	4	5	0	4	4
+15 mins.	4	0	4	3	4	7	0	7	7
+30 mins.	4	0	4	3	2	5	0	4	4
+45 mins.	4	0	4	0	4	4	0	12	12
Total Volume	18	1	19	7	14	21	0	27	27
% App. Total	94.7	5.3		33.3	66.7		0	100	
PHF	.750	.250	.679	.583	.875	.750	.000	.563	.563

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

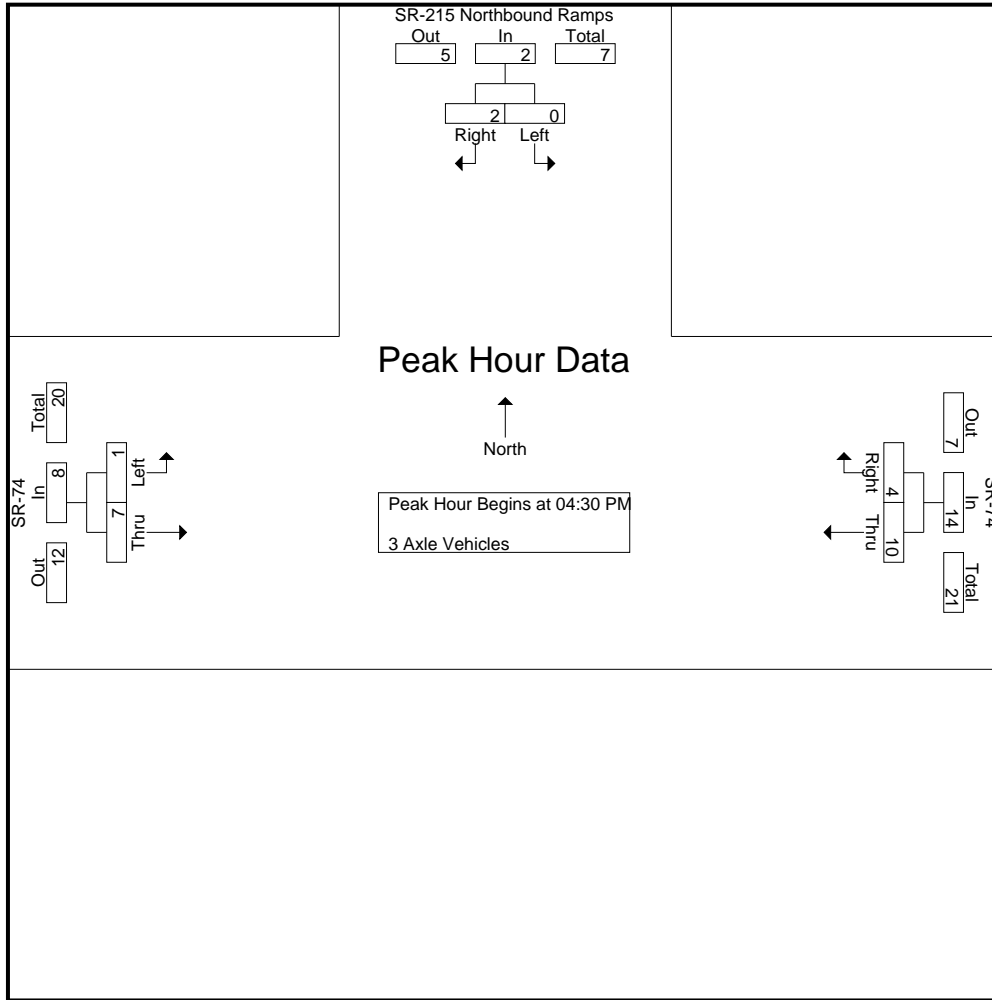
Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
04:00 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	3	3
04:15 PM	0	0	0	0	3	1	0	4	0	1	0	1	0	5	5
04:30 PM	0	1	0	1	0	0	0	0	1	1	0	2	0	3	3
04:45 PM	0	0	0	0	4	1	0	5	0	1	0	1	0	6	6
Total	0	1	0	1	8	4	0	12	1	3	0	4	0	17	17
05:00 PM	0	1	0	1	3	1	0	4	0	3	0	3	0	8	8
05:15 PM	0	0	0	0	3	2	0	5	0	2	0	2	0	7	7
05:30 PM	0	0	0	0	2	0	0	2	0	1	0	1	0	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	8	3	0	11	0	6	0	6	0	18	18
Grand Total	0	2	0	2	16	7	0	23	1	9	0	10	0	35	35
Apprch %	0	100			69.6	30.4			10	90					
Total %	0	5.7		5.7	45.7	20		65.7	2.9	25.7		28.6	0	100	

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	0	1	1	0	0	0	1	1	2	3
04:45 PM	0	0	0	4	1	5	0	1	1	6
05:00 PM	0	1	1	3	1	4	0	3	3	8
05:15 PM	0	0	0	3	2	5	0	2	2	7
Total Volume	0	2	2	10	4	14	1	7	8	24
% App. Total	0	100		71.4	28.6		12.5	87.5		
PHF	.000	.500	.500	.625	.500	.700	.250	.583	.667	.750

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

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	1	1	0	0	0	1	1	2
+15 mins.	0	0	0	4	1	5	0	1	1
+30 mins.	0	1	1	3	1	4	0	3	3
+45 mins.	0	0	0	3	2	5	0	2	2
Total Volume	0	2	2	10	4	14	1	7	8
% App. Total	0	100		71.4	28.6		12.5	87.5	
PHF	.000	.500	.500	.625	.500	.700	.250	.583	.667

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

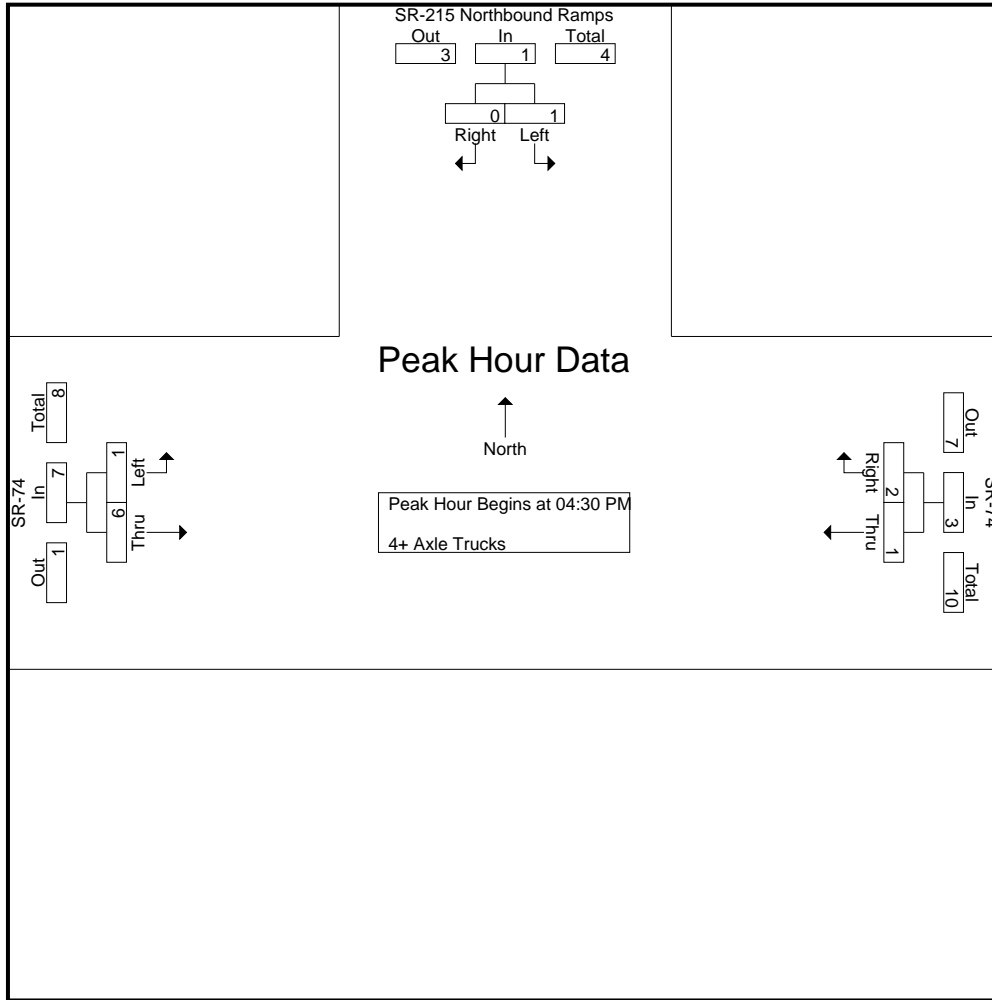
Start Time	SR-215 Northbound Ramps Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total	
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total				
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	2
04:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	1	2	0	3	0	0	3	3
04:45 PM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	3	3
Total	1	0	0	1	0	3	0	3	1	4	0	5	0	0	9	9
05:00 PM	0	0	0	0	1	1	0	2	0	1	0	1	0	0	3	3
05:15 PM	1	0	0	1	0	0	0	0	0	1	0	1	0	0	2	2
05:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	2	2
Total	2	0	0	2	1	2	0	3	0	3	0	3	0	0	8	8
Grand Total	3	0	0	3	1	5	0	6	1	7	0	8	0	0	17	17
Apprch %	100	0			16.7	83.3			12.5	87.5						
Total %	17.6	0		17.6	5.9	29.4		35.3	5.9	41.2		47.1		0	100	

Start Time	SR-215 Northbound Ramps Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	0	0	0	0	0	0	1	2	3	3
04:45 PM	0	0	0	0	1	1	0	2	2	3
05:00 PM	0	0	0	1	1	2	0	1	1	3
05:15 PM	1	0	1	0	0	0	0	1	1	2
Total Volume	1	0	1	1	2	3	1	6	7	11
% App. Total	100	0		33.3	66.7		14.3	85.7		
PHF	.250	.000	.250	.250	.500	.375	.250	.750	.583	.917

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

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

File Name : 02_MEN_215N_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	0	0	0	0	0	1	2	3
+15 mins.	0	0	0	0	1	1	0	2	2
+30 mins.	0	0	0	1	1	2	0	1	1
+45 mins.	1	0	1	0	0	0	0	1	1
Total Volume	1	0	1	1	2	3	1	6	7
% App. Total	100	0		33.3	66.7		14.3	85.7	
PHF	.250	.000	.250	.250	.500	.375	.250	.750	.583

Location: Menifee
 N/S: SR-215 NB Ramps
 E/W: SR-74



Date: 10/5/2021
 Day: Tuesday

PEDESTRIANS

	North Leg SR-215 SB Ramps	East Leg SR-74	South Leg Dead End	West Leg SR-74	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg SR-215 SB Ramps	East Leg SR-74	South Leg Dead End	West Leg SR-74	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Menifee
 N/S: SR-215 NB Ramps
 E/W: SR-74



Date: 10/5/2021
 Day: Tuesday

BICYCLES

	Southbound SR-215 SB Ramps			Westbound SR-74			Northbound Dead End			Eastbound SR-74			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

	Southbound SR-215 SB Ramps			Westbound SR-74			Northbound Dead End			Eastbound SR-74			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

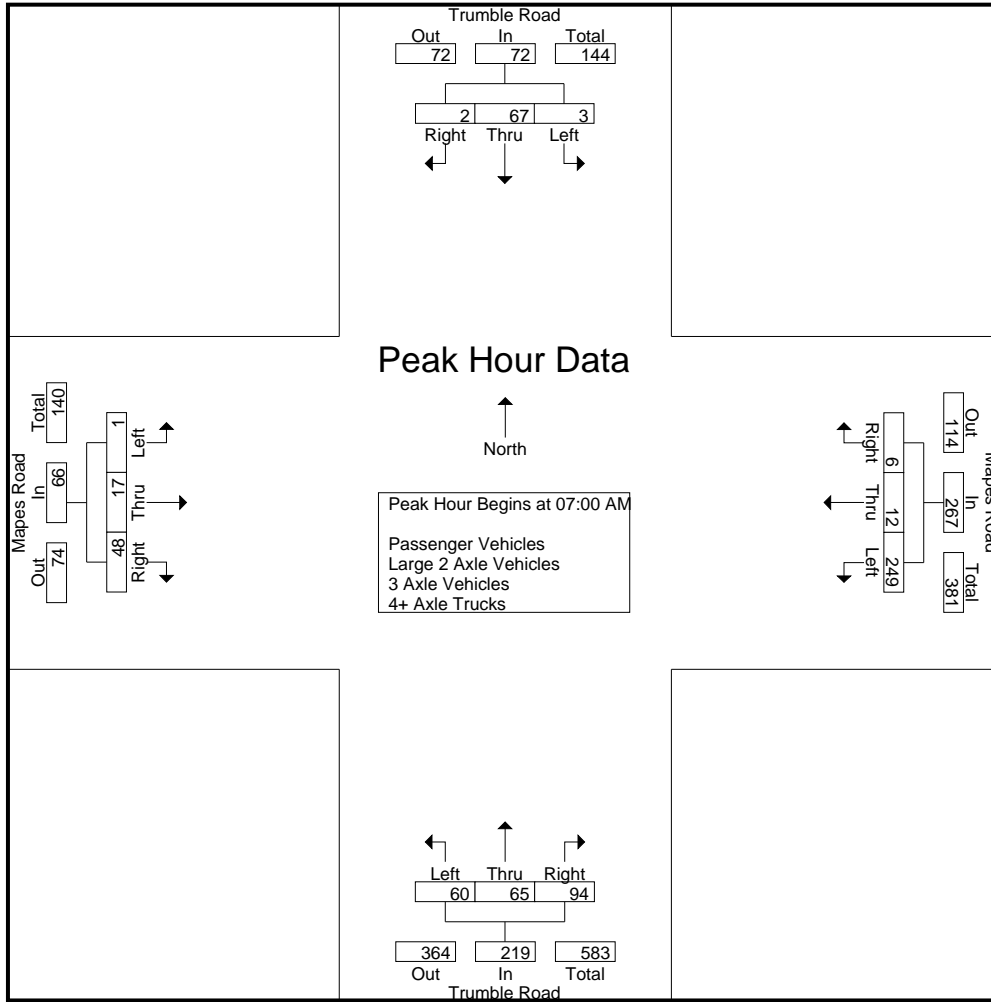
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	8	2	11	55	3	2	60	12	26	17	55	1	4	15	20	146
07:15 AM	0	16	0	16	56	4	0	60	25	8	20	53	0	4	13	17	146
07:30 AM	0	24	0	24	79	4	1	84	14	15	27	56	0	1	11	12	176
07:45 AM	2	19	0	21	59	1	3	63	9	16	30	55	0	8	9	17	156
Total	3	67	2	72	249	12	6	267	60	65	94	219	1	17	48	66	624
08:00 AM	1	20	0	21	36	1	2	39	3	17	25	45	0	0	5	5	110
08:15 AM	1	19	0	20	55	1	2	58	3	11	42	56	0	5	7	12	146
08:30 AM	0	11	0	11	39	1	2	42	2	16	33	51	1	1	9	11	115
08:45 AM	0	15	0	15	33	0	3	36	3	9	29	41	0	2	5	7	99
Total	2	65	0	67	163	3	9	175	11	53	129	193	1	8	26	35	470
Grand Total	5	132	2	139	412	15	15	442	71	118	223	412	2	25	74	101	1094
Apprch %	3.6	95	1.4		93.2	3.4	3.4		17.2	28.6	54.1		2	24.8	73.3		
Total %	0.5	12.1	0.2	12.7	37.7	1.4	1.4	40.4	6.5	10.8	20.4	37.7	0.2	2.3	6.8	9.2	
Passenger Vehicles	5	69	2	76	403	15	15	433	66	50	210	326	2	15	56	73	908
% Passenger Vehicles	100	52.3	100	54.7	97.8	100	100	98	93	42.4	94.2	79.1	100	60	75.7	72.3	83
Large 2 Axle Vehicles	0	3	0	3	6	0	0	6	5	1	9	15	0	10	17	27	51
% Large 2 Axle Vehicles	0	2.3	0	2.2	1.5	0	0	1.4	7	0.8	4	3.6	0	40	23	26.7	4.7
3 Axle Vehicles	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	2
% 3 Axle Vehicles	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0	1.4	1	0.2
4+ Axle Trucks	0	60	0	60	2	0	0	2	0	67	4	71	0	0	0	0	133
% 4+ Axle Trucks	0	45.5	0	43.2	0.5	0	0	0.5	0	56.8	1.8	17.2	0	0	0	0	12.2

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	1	8	2	11	55	3	2	60	12	26	17	55	1	4	15	20	146
07:15 AM	0	16	0	16	56	4	0	60	25	8	20	53	0	4	13	17	146
07:30 AM	0	24	0	24	79	4	1	84	14	15	27	56	0	1	11	12	176
07:45 AM	2	19	0	21	59	1	3	63	9	16	30	55	0	8	9	17	156
Total Volume	3	67	2	72	249	12	6	267	60	65	94	219	1	17	48	66	624
% App. Total	4.2	93.1	2.8		93.3	4.5	2.2		27.4	29.7	42.9		1.5	25.8	72.7		
PHF	.375	.698	.250	.750	.788	.750	.500	.795	.600	.625	.783	.978	.250	.531	.800	.825	.886

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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:

	07:30 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	24	0	24	55	3	2	60	12	26	17	55	1	4	15	20
+15 mins.	2	19	0	21	56	4	0	60	25	8	20	53	0	4	13	17
+30 mins.	1	20	0	21	79	4	1	84	14	15	27	56	0	1	11	12
+45 mins.	1	19	0	20	59	1	3	63	9	16	30	55	0	8	9	17
Total Volume	4	82	0	86	249	12	6	267	60	65	94	219	1	17	48	66
% App. Total	4.7	95.3	0		93.3	4.5	2.2		27.4	29.7	42.9		1.5	25.8	72.7	
PHF	.500	.854	.000	.896	.788	.750	.500	.795	.600	.625	.783	.978	.250	.531	.800	.825

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Passenger Vehicles

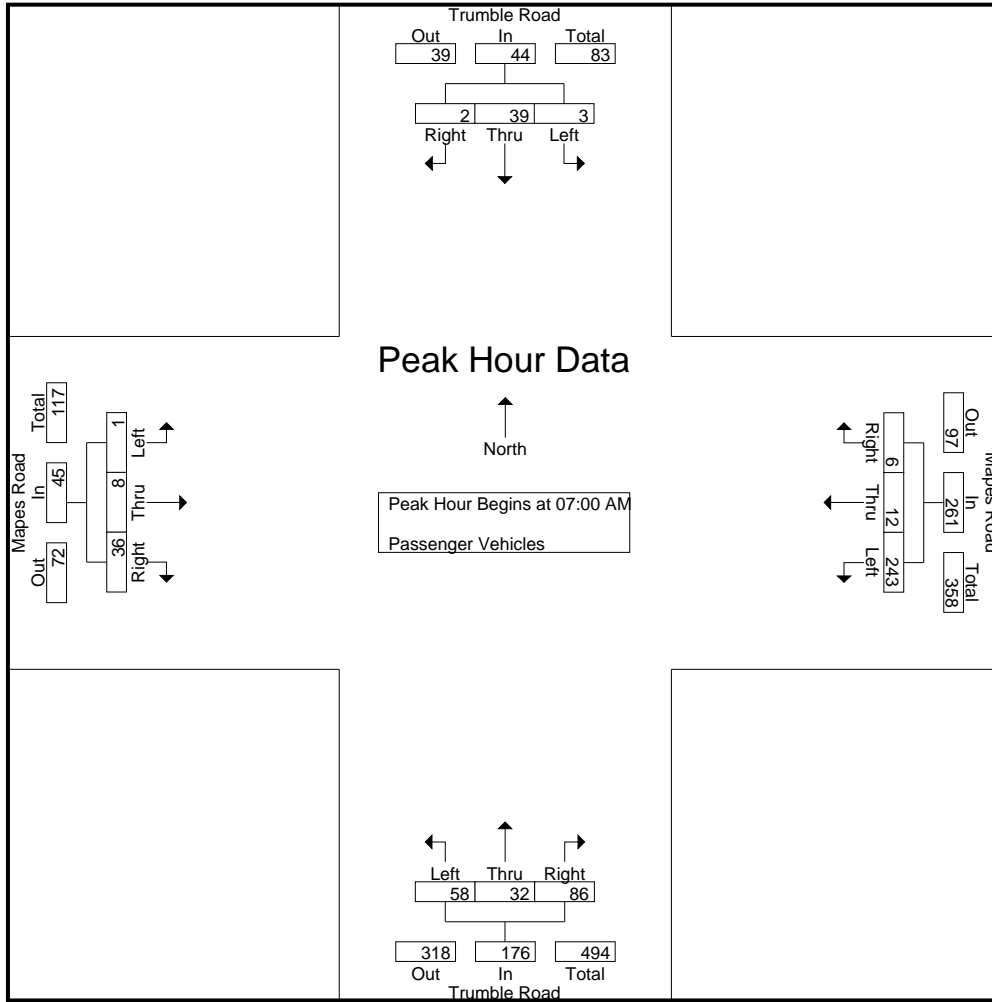
Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	6	2	9	54	3	2	59	12	12	12	36	1	3	13	17	121
07:15 AM	0	6	0	6	55	4	0	59	24	8	19	51	0	1	9	10	126
07:30 AM	0	17	0	17	78	4	1	83	14	6	25	45	0	1	7	8	153
07:45 AM	2	10	0	12	56	1	3	60	8	6	30	44	0	3	7	10	126
Total	3	39	2	44	243	12	6	261	58	32	86	176	1	8	36	45	526
08:00 AM	1	11	0	12	35	1	2	38	3	7	25	35	0	0	2	2	87
08:15 AM	1	9	0	10	54	1	2	57	2	4	40	46	0	5	6	11	124
08:30 AM	0	4	0	4	39	1	2	42	0	6	32	38	1	1	8	10	94
08:45 AM	0	6	0	6	32	0	3	35	3	1	27	31	0	1	4	5	77
Total	2	30	0	32	160	3	9	172	8	18	124	150	1	7	20	28	382
Grand Total	5	69	2	76	403	15	15	433	66	50	210	326	2	15	56	73	908
Apprch %	6.6	90.8	2.6		93.1	3.5	3.5		20.2	15.3	64.4		2.7	20.5	76.7		
Total %	0.6	7.6	0.2	8.4	44.4	1.7	1.7	47.7	7.3	5.5	23.1	35.9	0.2	1.7	6.2	8	

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	6	2	9	54	3	2	59	12	12	12	36	1	3	13	17	121
07:15 AM	0	6	0	6	55	4	0	59	24	8	19	51	0	1	9	10	126
07:30 AM	0	17	0	17	78	4	1	83	14	6	25	45	0	1	7	8	153
07:45 AM	2	10	0	12	56	1	3	60	8	6	30	44	0	3	7	10	126
Total Volume	3	39	2	44	243	12	6	261	58	32	86	176	1	8	36	45	526
% App. Total	6.8	88.6	4.5		93.1	4.6	2.3		33	18.2	48.9		2.2	17.8	80		
PHF	.375	.574	.250	.647	.779	.750	.500	.786	.604	.667	.717	.863	.250	.667	.692	.662	.859

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

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	1	6	2	9	54	3	2	59	12	12	12	36	1	3	13	17
+15 mins.	0	6	0	6	55	4	0	59	24	8	19	51	0	1	9	10
+30 mins.	0	17	0	17	78	4	1	83	14	6	25	45	0	1	7	8
+45 mins.	2	10	0	12	56	1	3	60	8	6	30	44	0	3	7	10
Total Volume	3	39	2	44	243	12	6	261	58	32	86	176	1	8	36	45
% App. Total	6.8	88.6	4.5		93.1	4.6	2.3		33	18.2	48.9		2.2	17.8	80	
PHF	.375	.574	.250	.647	.779	.750	.500	.786	.604	.667	.717	.863	.250	.667	.692	.662

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

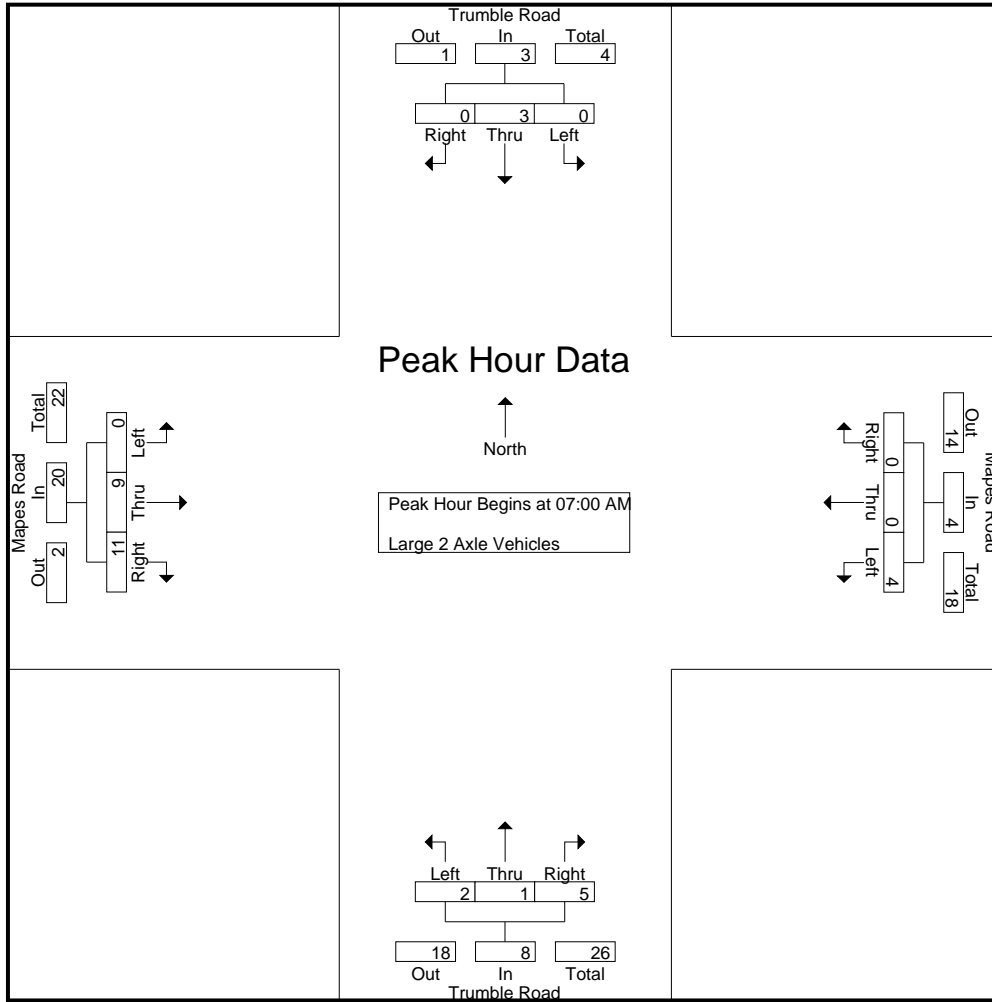
Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	0	1	0	0	0	0	0	0	2	2	0	1	1	2	5
07:15 AM	0	0	0	0	1	0	0	1	1	0	1	2	0	3	4	7	10
07:30 AM	0	1	0	1	1	0	0	1	0	0	2	2	0	0	4	4	8
07:45 AM	0	1	0	1	2	0	0	2	1	1	0	2	0	5	2	7	12
Total	0	3	0	3	4	0	0	4	2	1	5	8	0	9	11	20	35
08:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	3	4
08:15 AM	0	0	0	0	1	0	0	1	1	0	2	3	0	0	1	1	5
08:30 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	1	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	1	1	2	4
Total	0	0	0	0	2	0	0	2	3	0	4	7	0	1	6	7	16
Grand Total	0	3	0	3	6	0	0	6	5	1	9	15	0	10	17	27	51
Apprch %	0	100	0		100	0	0		33.3	6.7	60		0	37	63		
Total %	0	5.9	0	5.9	11.8	0	0	11.8	9.8	2	17.6	29.4	0	19.6	33.3	52.9	

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	0	1	0	0	0	0	0	0	2	2	0	1	1	2	5
07:15 AM	0	0	0	0	1	0	0	1	1	0	1	2	0	3	4	7	10
07:30 AM	0	1	0	1	1	0	0	1	0	0	2	2	0	0	4	4	8
07:45 AM	0	1	0	1	2	0	0	2	1	1	0	2	0	5	2	7	12
Total Volume	0	3	0	3	4	0	0	4	2	1	5	8	0	9	11	20	35
% App. Total	0	100	0		100	0	0		25	12.5	62.5		0	45	55		
PHF	.000	.750	.000	.750	.500	.000	.000	.500	.500	.250	.625	1.00	.000	.450	.688	.714	.729

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

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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	2	2	0	1	1	2
+15 mins.	0	0	0	0	1	0	0	1	1	0	1	2	0	3	4	7
+30 mins.	0	1	0	1	1	0	0	1	0	0	2	2	0	0	4	4
+45 mins.	0	1	0	1	2	0	0	2	1	1	0	2	0	5	2	7
Total Volume	0	3	0	3	4	0	0	4	2	1	5	8	0	9	11	20
% App. Total	0	100	0	0	100	0	0	0	25	12.5	62.5	0	0	45	55	0
PHF	.000	.750	.000	.750	.500	.000	.000	.500	.500	.250	.625	1.000	.000	.450	.688	.714

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

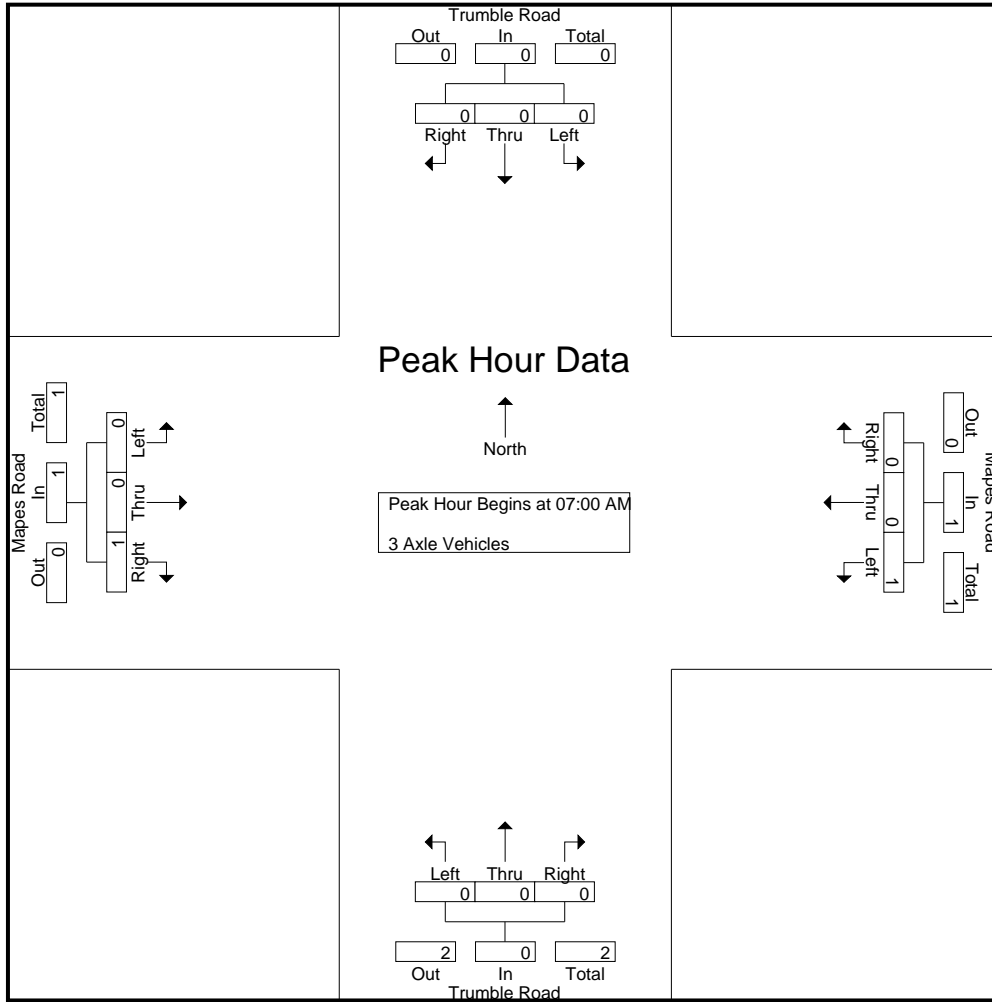
Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	2
Apprch %	0	0	0		100	0	0		0	0	0		0	0	100		
Total %	0	0	0	0	50	0	0	50	0	0	0	0	0	0	50	50	

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	2
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	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	2
% App. Total	0	0	0		100	0	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250	.250

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

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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	1	0	0	1	0	0	0	0	0	0	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
% App. Total	0	0	0	0	100	0	0	0	0	0	0	0	0	0	100	0
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	0	1	0	0	0	0	0	14	3	17	0	0	0	0	18
07:15 AM	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
07:30 AM	0	6	0	6	0	0	0	0	0	9	0	9	0	0	0	0	15
07:45 AM	0	8	0	8	1	0	0	1	0	9	0	9	0	0	0	0	18
Total	0	25	0	25	1	0	0	1	0	32	3	35	0	0	0	0	61
08:00 AM	0	9	0	9	0	0	0	0	0	10	0	10	0	0	0	0	19
08:15 AM	0	10	0	10	0	0	0	0	0	7	0	7	0	0	0	0	17
08:30 AM	0	7	0	7	0	0	0	0	0	10	1	11	0	0	0	0	18
08:45 AM	0	9	0	9	1	0	0	1	0	8	0	8	0	0	0	0	18
Total	0	35	0	35	1	0	0	1	0	35	1	36	0	0	0	0	72
Grand Total	0	60	0	60	2	0	0	2	0	67	4	71	0	0	0	0	133
Apprch %	0	100	0		100	0	0		0	94.4	5.6		0	0	0		
Total %	0	45.1	0	45.1	1.5	0	0	1.5	0	50.4	3	53.4	0	0	0	0	

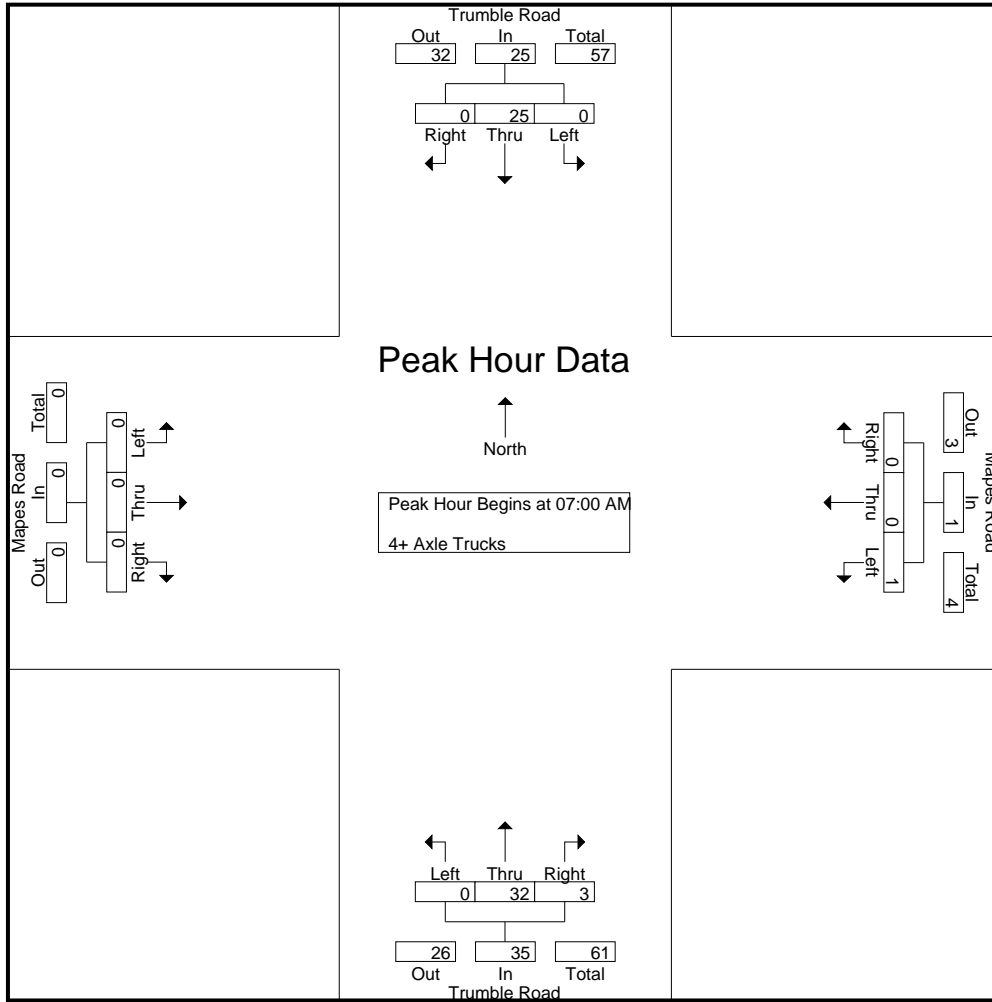
Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	0	1	0	0	0	0	0	14	3	17	0	0	0	0	18
07:15 AM	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
07:30 AM	0	6	0	6	0	0	0	0	0	9	0	9	0	0	0	0	15
07:45 AM	0	8	0	8	1	0	0	1	0	9	0	9	0	0	0	0	18
Total Volume	0	25	0	25	1	0	0	1	0	32	3	35	0	0	0	0	61
% App. Total	0	100	0		100	0	0		0	91.4	8.6		0	0	0		
PHF	.000	.625	.000	.625	.250	.000	.000	.250	.000	.571	.250	.515	.000	.000	.000	.000	.847

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

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

File Name : 03_MEN_Trumble_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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	14	3	17	0	0	0	0
+15 mins.	0	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	6	0	6	0	0	0	0	0	9	0	9	0	0	0	0
+45 mins.	0	8	0	8	1	0	0	1	0	9	0	9	0	0	0	0
Total Volume	0	25	0	25	1	0	0	1	0	32	3	35	0	0	0	0
% App. Total	0	100	0	100	100	0	0	100	0	91.4	8.6	100	0	0	0	0
PHF	.000	.625	.000	.625	.250	.000	.000	.250	.000	.571	.250	.515	.000	.000	.000	.000

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

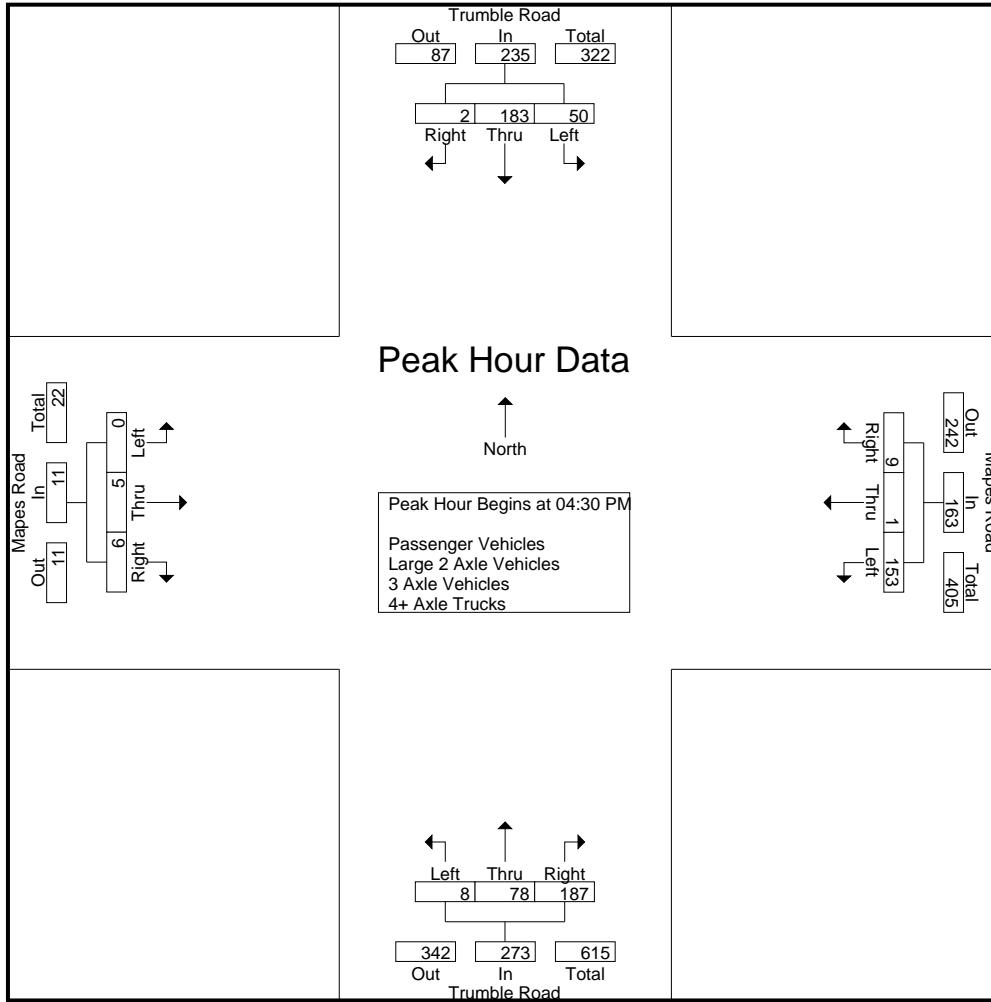
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	18	28	2	48	32	3	0	35	6	18	47	71	1	1	3	5	159
04:15 PM	8	23	0	31	27	2	3	32	3	15	48	66	0	1	2	3	132
04:30 PM	19	59	0	78	45	0	3	48	3	17	54	74	0	2	3	5	205
04:45 PM	6	19	1	26	39	1	1	41	1	26	46	73	0	1	1	2	142
Total	51	129	3	183	143	6	7	156	13	76	195	284	1	5	9	15	638
05:00 PM	20	65	1	86	35	0	2	37	2	15	42	59	0	2	2	4	186
05:15 PM	5	40	0	45	34	0	3	37	2	20	45	67	0	0	0	0	149
05:30 PM	3	33	0	36	35	1	3	39	0	25	44	69	0	2	3	5	149
05:45 PM	0	7	0	7	32	0	6	38	0	31	46	77	0	0	1	1	123
Total	28	145	1	174	136	1	14	151	4	91	177	272	0	4	6	10	607
Grand Total	79	274	4	357	279	7	21	307	17	167	372	556	1	9	15	25	1245
Apprch %	22.1	76.8	1.1		90.9	2.3	6.8		3.1	30	66.9		4	36	60		
Total %	6.3	22	0.3	28.7	22.4	0.6	1.7	24.7	1.4	13.4	29.9	44.7	0.1	0.7	1.2	2	
Passenger Vehicles	79	274	4	357	273	4	21	298	10	164	362	536	1	7	15	23	1214
% Passenger Vehicles	100	100	100	100	97.8	57.1	100	97.1	58.8	98.2	97.3	96.4	100	77.8	100	92	97.5
Large 2 Axle Vehicles	0	0	0	0	3	3	0	6	6	3	5	14	0	2	0	2	22
% Large 2 Axle Vehicles	0	0	0	0	1.1	42.9	0	2	35.3	1.8	1.3	2.5	0	22.2	0	8	1.8
3 Axle Vehicles	0	0	0	0	3	0	0	3	1	0	3	4	0	0	0	0	7
% 3 Axle Vehicles	0	0	0	0	1.1	0	0	1	5.9	0	0.8	0.7	0	0	0	0	0.6
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0.5	0.4	0	0	0	0	0.2

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	19	59	0	78	45	0	3	48	3	17	54	74	0	2	3	5	205
04:45 PM	6	19	1	26	39	1	1	41	1	26	46	73	0	1	1	2	142
05:00 PM	20	65	1	86	35	0	2	37	2	15	42	59	0	2	2	4	186
05:15 PM	5	40	0	45	34	0	3	37	2	20	45	67	0	0	0	0	149
Total Volume	50	183	2	235	153	1	9	163	8	78	187	273	0	5	6	11	682
% App. Total	21.3	77.9	0.9		93.9	0.6	5.5		2.9	28.6	68.5		0	45.5	54.5		
PHF	.625	.704	.500	.683	.850	.250	.750	.849	.667	.750	.866	.922	.000	.625	.500	.550	.832

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 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:

	04:30 PM				04:30 PM				04:00 PM				04:00 PM			
+0 mins.	19	59	0	78	45	0	3	48	6	18	47	71	1	1	3	5
+15 mins.	6	19	1	26	39	1	1	41	3	15	48	66	0	1	2	3
+30 mins.	20	65	1	86	35	0	2	37	3	17	54	74	0	2	3	5
+45 mins.	5	40	0	45	34	0	3	37	1	26	46	73	0	1	1	2
Total Volume	50	183	2	235	153	1	9	163	13	76	195	284	1	5	9	15
% App. Total	21.3	77.9	0.9		93.9	0.6	5.5		4.6	26.8	68.7		6.7	33.3	60	
PHF	.625	.704	.500	.683	.850	.250	.750	.849	.542	.731	.903	.959	.250	.625	.750	.750

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Passenger Vehicles

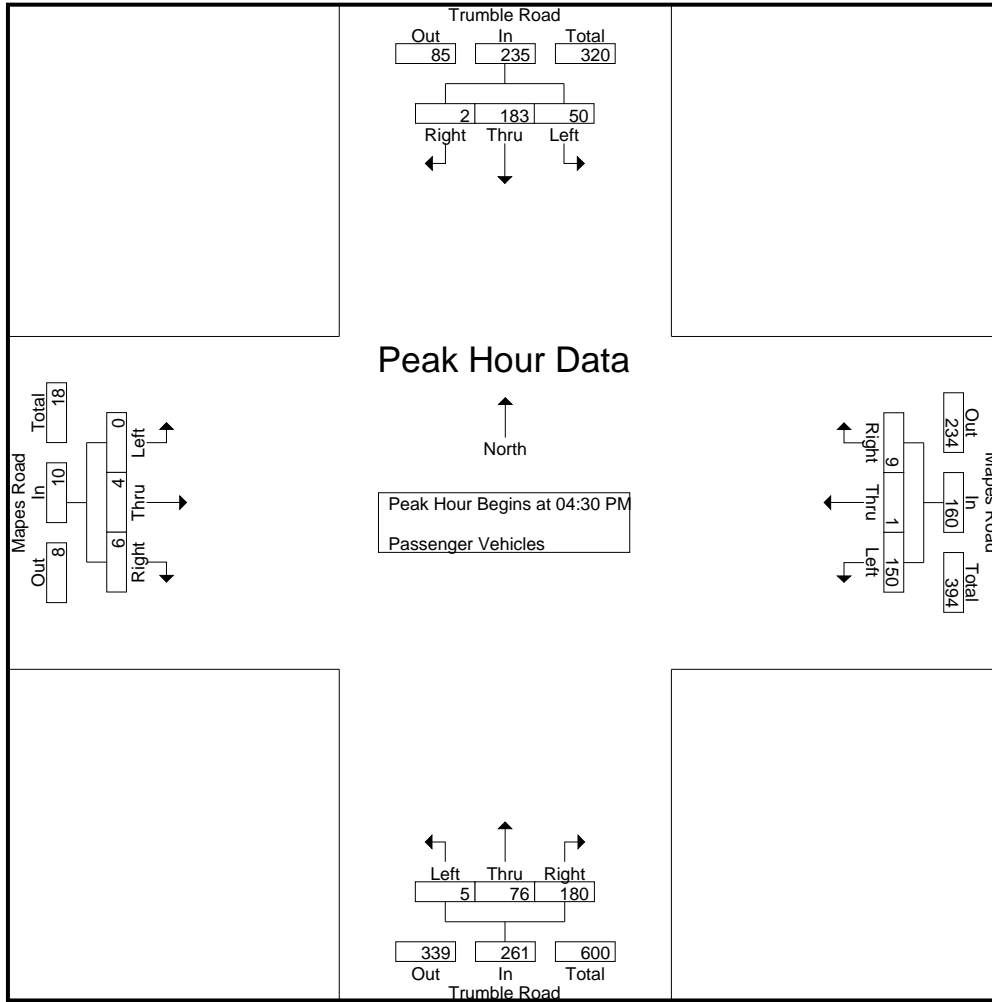
Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	18	28	2	48	32	0	0	32	4	17	47	68	1	1	3	5	153
04:15 PM	8	23	0	31	26	2	3	31	1	15	46	62	0	0	2	2	126
04:30 PM	19	59	0	78	44	0	3	47	2	16	52	70	0	1	3	4	199
04:45 PM	6	19	1	26	39	1	1	41	1	25	45	71	0	1	1	2	140
Total	51	129	3	183	141	3	7	151	8	73	190	271	1	3	9	13	618
05:00 PM	20	65	1	86	34	0	2	36	1	15	41	57	0	2	2	4	183
05:15 PM	5	40	0	45	33	0	3	36	1	20	42	63	0	0	0	0	144
05:30 PM	3	33	0	36	33	1	3	37	0	25	43	68	0	2	3	5	146
05:45 PM	0	7	0	7	32	0	6	38	0	31	46	77	0	0	1	1	123
Total	28	145	1	174	132	1	14	147	2	91	172	265	0	4	6	10	596
Grand Total	79	274	4	357	273	4	21	298	10	164	362	536	1	7	15	23	1214
Apprch %	22.1	76.8	1.1		91.6	1.3	7		1.9	30.6	67.5		4.3	30.4	65.2		
Total %	6.5	22.6	0.3	29.4	22.5	0.3	1.7	24.5	0.8	13.5	29.8	44.2	0.1	0.6	1.2	1.9	

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	19	59	0	78	44	0	3	47	2	16	52	70	0	1	3	4	199
04:45 PM	6	19	1	26	39	1	1	41	1	25	45	71	0	1	1	2	140
05:00 PM	20	65	1	86	34	0	2	36	1	15	41	57	0	2	2	4	183
05:15 PM	5	40	0	45	33	0	3	36	1	20	42	63	0	0	0	0	144
Total Volume	50	183	2	235	150	1	9	160	5	76	180	261	0	4	6	10	666
% App. Total	21.3	77.9	0.9		93.8	0.6	5.6		1.9	29.1	69		0	40	60		
PHF	.625	.704	.500	.683	.852	.250	.750	.851	.625	.760	.865	.919	.000	.500	.500	.625	.837

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

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	19	59	0	78	44	0	3	47	2	16	52	70	0	1	3	4
+15 mins.	6	19	1	26	39	1	1	41	1	25	45	71	0	1	1	2
+30 mins.	20	65	1	86	34	0	2	36	1	15	41	57	0	2	2	4
+45 mins.	5	40	0	45	33	0	3	36	1	20	42	63	0	0	0	0
Total Volume	50	183	2	235	150	1	9	160	5	76	180	261	0	4	6	10
% App. Total	21.3	77.9	0.9		93.8	0.6	5.6		1.9	29.1	69		0	40	60	
PHF	.625	.704	.500	.683	.852	.250	.750	.851	.625	.760	.865	.919	.000	.500	.500	.625

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

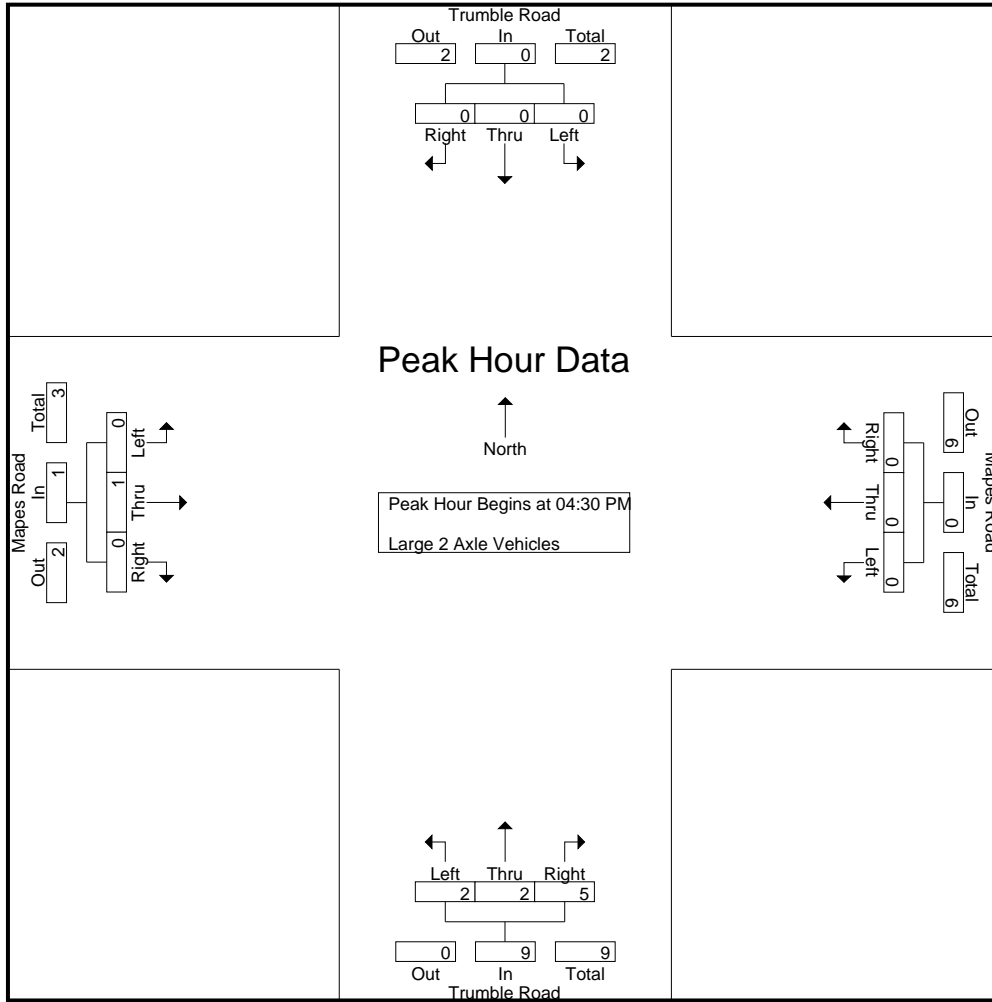
Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	3	0	3	2	1	0	3	0	0	0	0	6
04:15 PM	0	0	0	0	1	0	0	1	2	0	0	2	0	1	0	1	4
04:30 PM	0	0	0	0	0	0	0	0	0	1	2	3	0	1	0	1	4
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	1	3	0	4	4	3	2	9	0	2	0	2	15
05:00 PM	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	1	0	2	3	0	0	0	0	3
05:30 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
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	2	0	0	2	2	0	3	5	0	0	0	0	7
Grand Total	0	0	0	0	3	3	0	6	6	3	5	14	0	2	0	2	22
Apprch %	0	0	0		50	50	0		42.9	21.4	35.7		0	100	0		
Total %	0	0	0		13.6	13.6	0	27.3	27.3	13.6	22.7	63.6	0	9.1	0	9.1	

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	1	2	3	0	1	0	1	4
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	1	0	2	3	0	0	0	0	3
Total Volume	0	0	0	0	0	0	0	0	2	2	5	9	0	1	0	1	10
% App. Total	0	0	0		0	0	0		22.2	22.2	55.6		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.500	.625	.750	.000	.250	.000	.250	.625

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

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	2	3	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	1	0	2	3	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	2	2	5	9	0	1	0	1
% App. Total	0	0	0	0	0	0	0	0	22.2	22.2	55.6		0	100	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.500	.625	.750	.000	.250	.000	.250

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

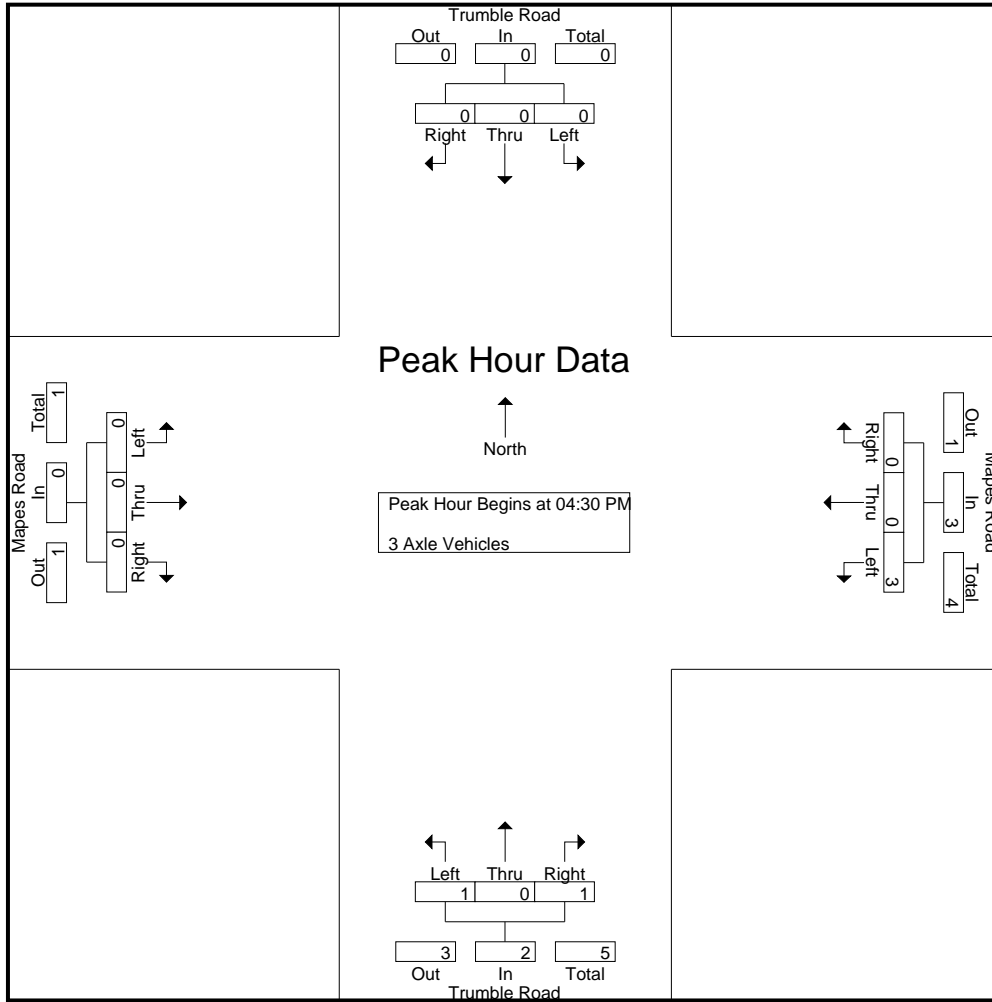
Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
04:30 PM	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	0	0	0	1	0	0	1	1	0	2	3	0	0	0	0	4
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
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	2	0	0	2	0	0	1	1	0	0	0	0	3
Grand Total	0	0	0	0	3	0	0	3	1	0	3	4	0	0	0	0	7
Apprch %	0	0	0		100	0	0		25	0	75		0	0	0		
Total %	0	0	0	0	42.9	0	0	42.9	14.3	0	42.9	57.1	0	0	0	0	

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	3	0	0	3	1	0	1	2	0	0	0	0	5
% App. Total	0	0	0		100	0	0		50	0	50		0	0	0		
PHF	.000	.000	.000	.000	.750	.000	.000	.750	.250	.000	.250	.500	.000	.000	.000	.000	.625

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

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	1	0	0	1	1	0	0	1	1	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
+30 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	3	0	0	3	1	0	1	2	0	0	0	0
% App. Total	0	0	0	0	100	0	0	0	50	0	50	0	0	0	0	0
PHF	.000	.000	.000	.000	.750	.000	.000	.750	.250	.000	.250	.500	.000	.000	.000	.000

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

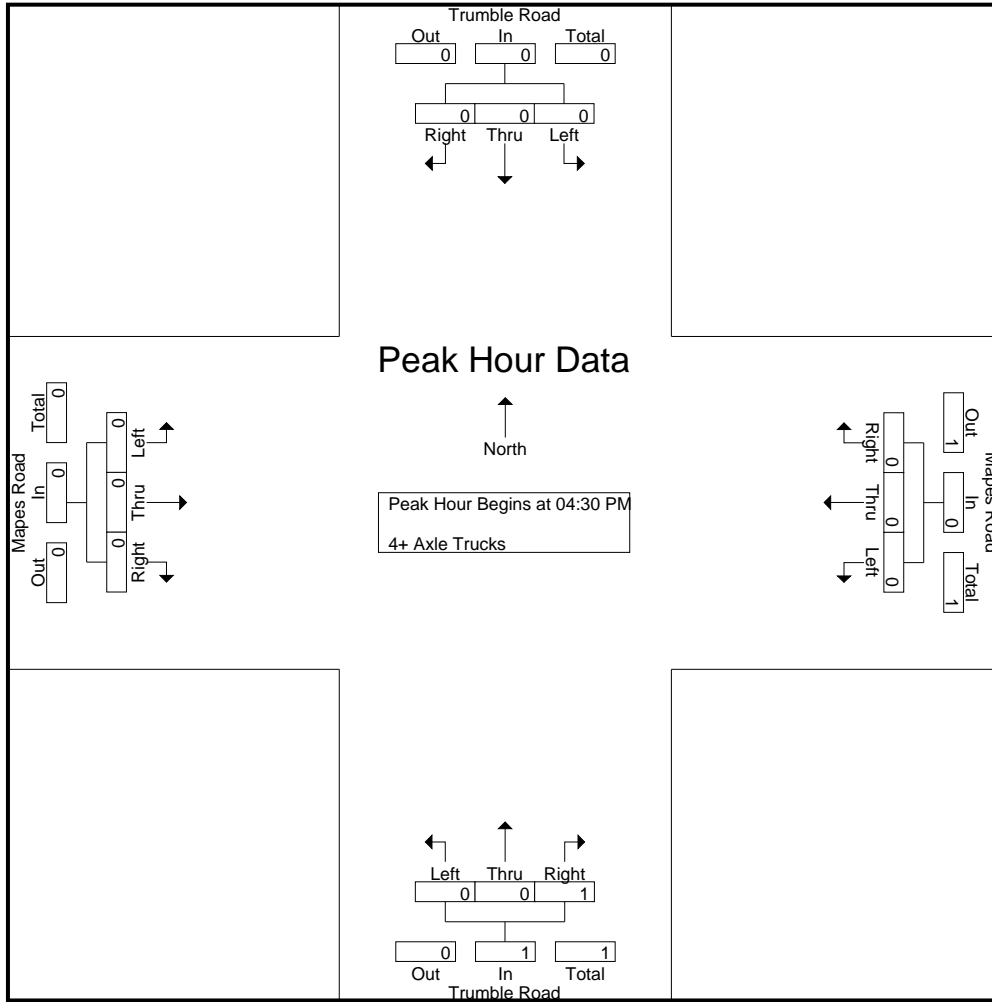
Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	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
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	1	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
Apprch %	0	0	0		0	0	0		0	0	100		0	0	0		
Total %	0	0	0		0	0	0		0	0	100	100	0	0	0		

Start Time	Trumble Road Southbound				Mapes Road Westbound				Trumble Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
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	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
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

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

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

File Name : 03_MEN_Trumble_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	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	1	1	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	0	0	100	100	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000

Location: Menifee
 N/S: Trumble Road
 E/W: Mapes Road



Date: 10/5/2021
 Day: Tuesday

PEDESTRIANS

	North Leg Trumble Road	East Leg Mapes Road	South Leg Trumble Road	West Leg Mapes Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	5	0	0	5
7:30 AM	0	1	0	0	1
7:45 AM	0	1	1	0	2
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	2	0	0	0	2
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	2	7	1	0	10

	North Leg Trumble Road	East Leg Mapes Road	South Leg Trumble Road	West Leg Mapes Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	2	0	0	2
4:45 PM	0	0	0	0	0
5:00 PM	0	2	0	0	2
5:15 PM	0	1	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	5	0	0	5

Location: Menifee
 N/S: Trumble Road
 E/W: Mapes Road



Date: 10/5/2021
 Day: Tuesday

BICYCLES

	Southbound Trumble Road			Westbound Mapes Road			Northbound Trumble Road			Eastbound Mapes Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Trumble Road			Westbound Mapes Road			Northbound Trumble Road			Eastbound Mapes Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

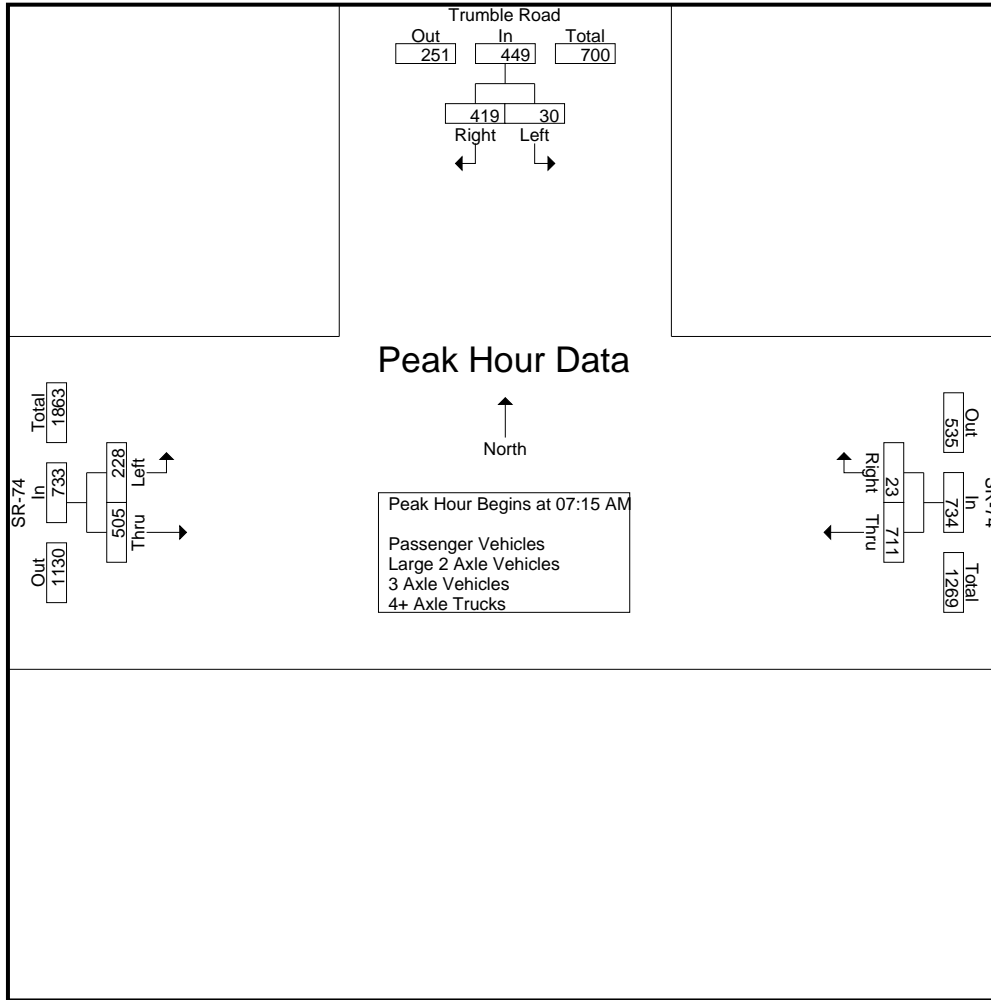
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	10	97	46	107	156	9	1	165	40	101	0	141	47	413	460
07:15 AM	10	105	42	115	167	5	0	172	66	141	0	207	42	494	536
07:30 AM	6	117	61	123	183	6	1	189	60	119	0	179	62	491	553
07:45 AM	7	101	44	108	178	8	1	186	51	115	0	166	45	460	505
Total	33	420	193	453	684	28	3	712	217	476	0	693	196	1858	2054
08:00 AM	7	96	38	103	183	4	1	187	51	130	0	181	39	471	510
08:15 AM	6	81	47	87	138	5	3	143	56	113	0	169	50	399	449
08:30 AM	7	68	47	75	131	7	1	138	52	93	0	145	48	358	406
08:45 AM	1	57	32	58	142	5	1	147	53	120	0	173	33	378	411
Total	21	302	164	323	594	21	6	615	212	456	0	668	170	1606	1776
Grand Total	54	722	357	776	1278	49	9	1327	429	932	0	1361	366	3464	3830
Apprch %	7	93			96.3	3.7			31.5	68.5					
Total %	1.6	20.8		22.4	36.9	1.4		38.3	12.4	26.9		39.3	9.6	90.4	
Passenger Vehicles	35	588		914	1199	41		1247	338	816		1154	0	0	3315
% Passenger Vehicles	64.8	81.4	81.5	80.7	93.8	83.7	77.8	93.3	78.8	87.6	0	84.8	0	0	86.6
Large 2 Axle Vehicles	17	54		101	38	5		44	26	62		88	0	0	233
% Large 2 Axle Vehicles	31.5	7.5	8.4	8.9	3	10.2	11.1	3.3	6.1	6.7	0	6.5	0	0	6.1
3 Axle Vehicles	0	6		9	14	1		15	1	19		20	0	0	44
% 3 Axle Vehicles	0	0.8	0.8	0.8	1.1	2	0	1.1	0.2	2	0	1.5	0	0	1.1
4+ Axle Trucks	2	74		109	27	2		30	64	35		99	0	0	238
% 4+ Axle Trucks	3.7	10.2	9.2	9.6	2.1	4.1	11.1	2.2	14.9	3.8	0	7.3	0	0	6.2

Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. 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	10	105	115	167	5	172	66	141	207	494
07:30 AM	6	117	123	183	6	189	60	119	179	491
07:45 AM	7	101	108	178	8	186	51	115	166	460
08:00 AM	7	96	103	183	4	187	51	130	181	471
Total Volume	30	419	449	711	23	734	228	505	733	1916
% App. Total	6.7	93.3		96.9	3.1		31.1	68.9		
PHF	.750	.895	.913	.971	.719	.971	.864	.895	.885	.970

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	10	97	107	167	5	172	66	141	207
+15 mins.	10	105	115	183	6	189	60	119	179
+30 mins.	6	117	123	178	8	186	51	115	166
+45 mins.	7	101	108	183	4	187	51	130	181
Total Volume	33	420	453	711	23	734	228	505	733
% App. Total	7.3	92.7		96.9	3.1		31.1	68.9	
PHF	.825	.897	.921	.971	.719	.971	.864	.895	.885

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Passenger Vehicles

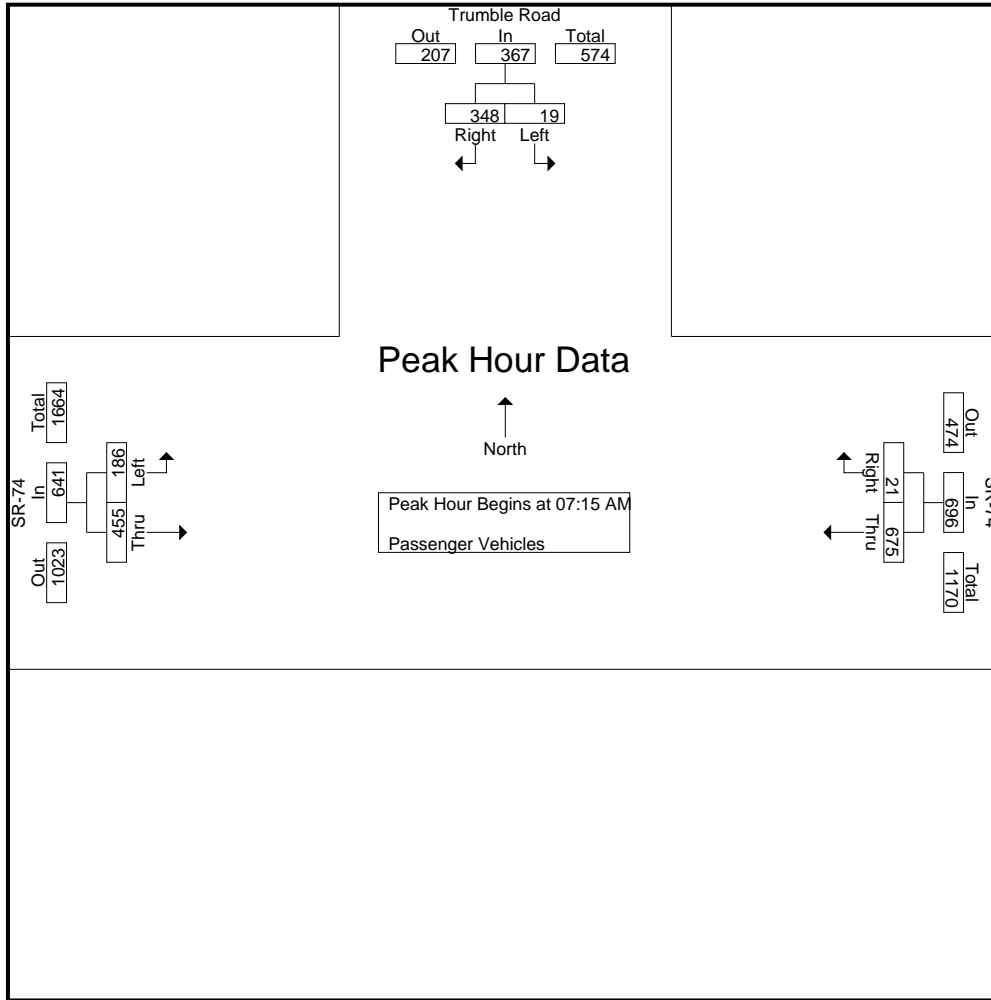
Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	5	74	33	79	146	8	1	154	33	84	0	117	34	350	384
07:15 AM	6	82	32	88	158	5	0	163	61	130	0	191	32	442	474
07:30 AM	4	103	53	107	175	4	1	179	50	108	0	158	54	444	498
07:45 AM	6	84	36	90	174	8	1	182	39	104	0	143	37	415	452
Total	21	343	154	364	653	25	3	678	183	426	0	609	157	1651	1808
08:00 AM	3	79	29	82	168	4	1	172	36	113	0	149	30	403	433
08:15 AM	5	66	40	71	127	4	2	131	44	97	0	141	42	343	385
08:30 AM	5	57	40	62	119	4	0	123	36	76	0	112	40	297	337
08:45 AM	1	43	28	44	132	4	1	136	39	104	0	143	29	323	352
Total	14	245	137	259	546	16	4	562	155	390	0	545	141	1366	1507
Grand Total	35	588	291	623	1199	41	7	1240	338	816	0	1154	298	3017	3315
Apprch %	5.6	94.4			96.7	3.3			29.3	70.7					
Total %	1.2	19.5		20.6	39.7	1.4		41.1	11.2	27		38.2	9	91	

Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	6	82	88	158	5	163	61	130	191	442
07:30 AM	4	103	107	175	4	179	50	108	158	444
07:45 AM	6	84	90	174	8	182	39	104	143	415
08:00 AM	3	79	82	168	4	172	36	113	149	403
Total Volume	19	348	367	675	21	696	186	455	641	1704
% App. Total	5.2	94.8		97	3		29	71		
PHF	.792	.845	.857	.964	.656	.956	.762	.875	.839	.959

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

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	6	82	88	158	5	163	61	130	191
+15 mins.	4	103	107	175	4	179	50	108	158
+30 mins.	6	84	90	174	8	182	39	104	143
+45 mins.	3	79	82	168	4	172	36	113	149
Total Volume	19	348	367	675	21	696	186	455	641
% App. Total	5.2	94.8		97	3		29	71	
PHF	.792	.845	.857	.964	.656	.956	.762	.875	.839

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	3	16	11	19	4	0	0	4	3	9	0	12	11	35	46
07:15 AM	4	10	4	14	4	0	0	4	5	3	0	8	4	26	30
07:30 AM	2	5	2	7	6	1	0	7	1	7	0	8	2	22	24
07:45 AM	1	8	5	9	0	0	0	0	2	8	0	10	5	19	24
Total	10	39	22	49	14	1	0	15	11	27	0	38	22	102	124
08:00 AM	4	5	2	9	7	0	0	7	5	13	0	18	2	34	36
08:15 AM	1	6	4	7	5	0	0	5	3	5	0	8	4	20	24
08:30 AM	2	2	1	4	5	3	1	8	3	7	0	10	2	22	24
08:45 AM	0	2	1	2	7	1	0	8	4	10	0	14	1	24	25
Total	7	15	8	22	24	4	1	28	15	35	0	50	9	100	109
Grand Total	17	54	30	71	38	5	1	43	26	62	0	88	31	202	233
Apprch %	23.9	76.1			88.4	11.6			29.5	70.5					
Total %	8.4	26.7		35.1	18.8	2.5		21.3	12.9	30.7		43.6	13.3	86.7	

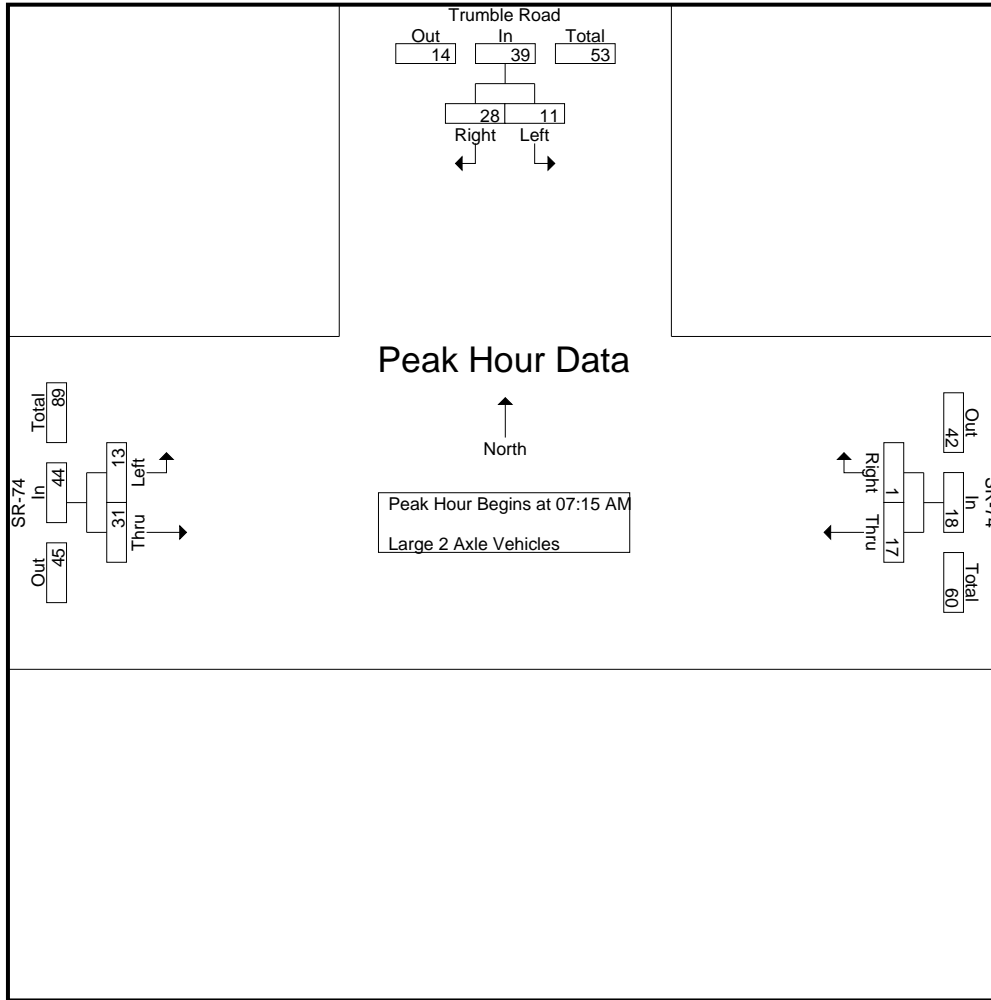
Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	4	10	14	4	0	4	5	3	8	26
07:30 AM	2	5	7	6	1	7	1	7	8	22
07:45 AM	1	8	9	0	0	0	2	8	10	19
08:00 AM	4	5	9	7	0	7	5	13	18	34
Total Volume	11	28	39	17	1	18	13	31	44	101
% App. Total	28.2	71.8		94.4	5.6		29.5	70.5		
PHF	.688	.700	.696	.607	.250	.643	.650	.596	.611	.743

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

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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.	4	10	14	4	0	4	5	3	8
+15 mins.	2	5	7	6	1	7	1	7	8
+30 mins.	1	8	9	0	0	0	2	8	10
+45 mins.	4	5	9	7	0	7	5	13	18
Total Volume	11	28	39	17	1	18	13	31	44
% App. Total	28.2	71.8		94.4	5.6		29.5	70.5	
PHF	.688	.700	.696	.607	.250	.643	.650	.596	.611

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

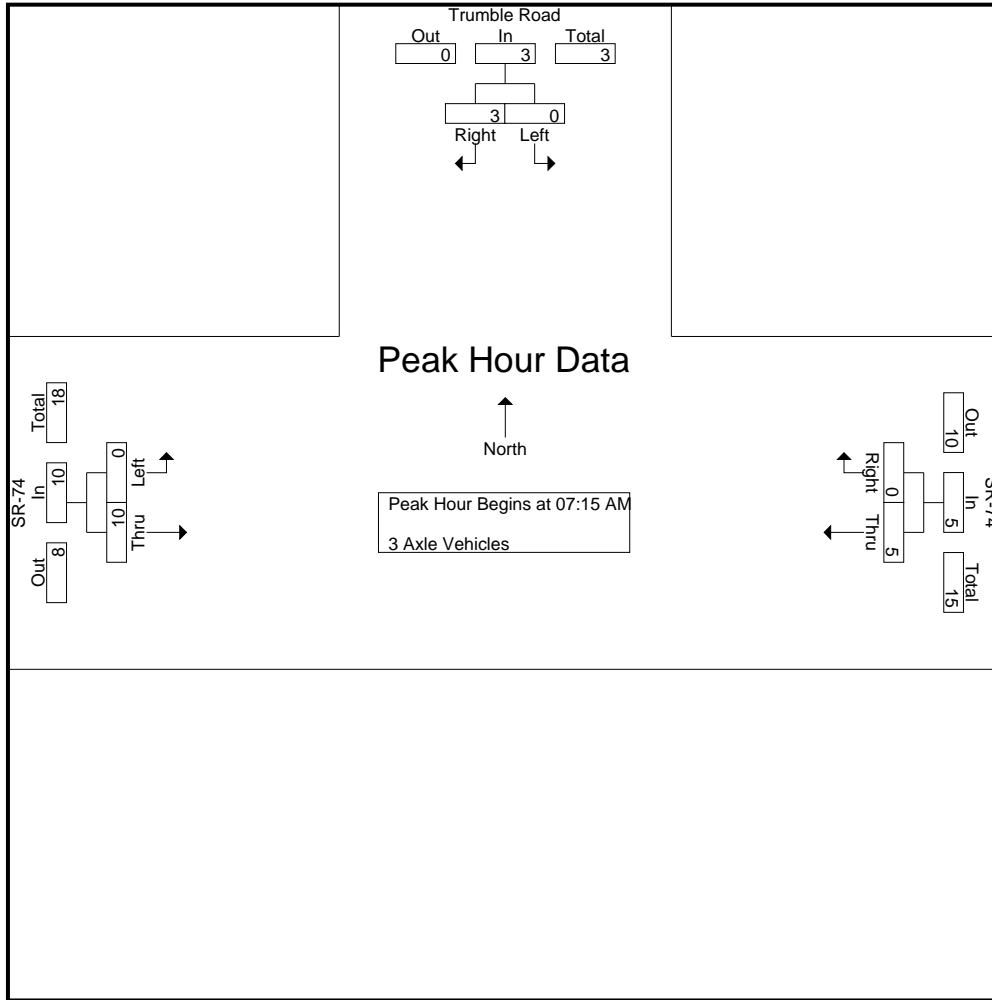
Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	0	3	1	3	4	1	0	5	0	3	0	3	1	11	12
07:15 AM	0	1	0	1	2	0	0	2	0	4	0	4	0	7	7
07:30 AM	0	1	1	1	0	0	0	0	0	2	0	2	1	3	4
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2
Total	0	5	2	5	6	1	0	7	0	11	0	11	2	23	25
08:00 AM	0	1	1	1	3	0	0	3	0	2	0	2	1	6	7
08:15 AM	0	0	0	0	2	0	0	2	1	3	0	4	0	6	6
08:30 AM	0	0	0	0	3	0	0	3	0	2	0	2	0	5	5
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
Total	0	1	1	1	8	0	0	8	1	8	0	9	1	18	19
Grand Total	0	6	3	6	14	1	0	15	1	19	0	20	3	41	44
Apprch %	0	100			93.3	6.7			5	95					
Total %	0	14.6		14.6	34.1	2.4		36.6	2.4	46.3		48.8	6.8	93.2	

Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	0	1	1	2	0	2	0	4	4	7
07:30 AM	0	1	1	0	0	0	0	2	2	3
07:45 AM	0	0	0	0	0	0	0	2	2	2
08:00 AM	0	1	1	3	0	3	0	2	2	6
Total Volume	0	3	3	5	0	5	0	10	10	18
% App. Total	0	100		100	0		0	100		
PHF	.000	.750	.750	.417	.000	.417	.000	.625	.625	.643

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

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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	4	4
+15 mins.	0	1	1	0	0	0	0	2	2
+30 mins.	0	0	0	0	0	0	0	2	2
+45 mins.	0	1	1	3	0	3	0	2	2
Total Volume	0	3	3	5	0	5	0	10	10
% App. Total	0	100		100	0		0	100	
PHF	.000	.750	.750	.417	.000	.417	.000	.625	.625

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
07:00 AM	2	4	1	6	2	0	0	2	4	5	0	9	1	17	18
07:15 AM	0	12	6	12	3	0	0	3	0	4	0	4	6	19	25
07:30 AM	0	8	5	8	2	1	0	3	9	2	0	11	5	22	27
07:45 AM	0	9	3	9	4	0	0	4	10	1	0	11	3	24	27
Total	2	33	15	35	11	1	0	12	23	12	0	35	15	82	97
08:00 AM	0	11	6	11	5	0	0	5	10	2	0	12	6	28	34
08:15 AM	0	9	3	9	4	1	1	5	8	8	0	16	4	30	34
08:30 AM	0	9	6	9	4	0	0	4	13	8	0	21	6	34	40
08:45 AM	0	12	3	12	3	0	0	3	10	5	0	15	3	30	33
Total	0	41	18	41	16	1	1	17	41	23	0	64	19	122	141
Grand Total	2	74	33	76	27	2	1	29	64	35	0	99	34	204	238
Apprch %	2.6	97.4			93.1	6.9			64.6	35.4					
Total %	1	36.3		37.3	13.2	1		14.2	31.4	17.2		48.5	14.3	85.7	

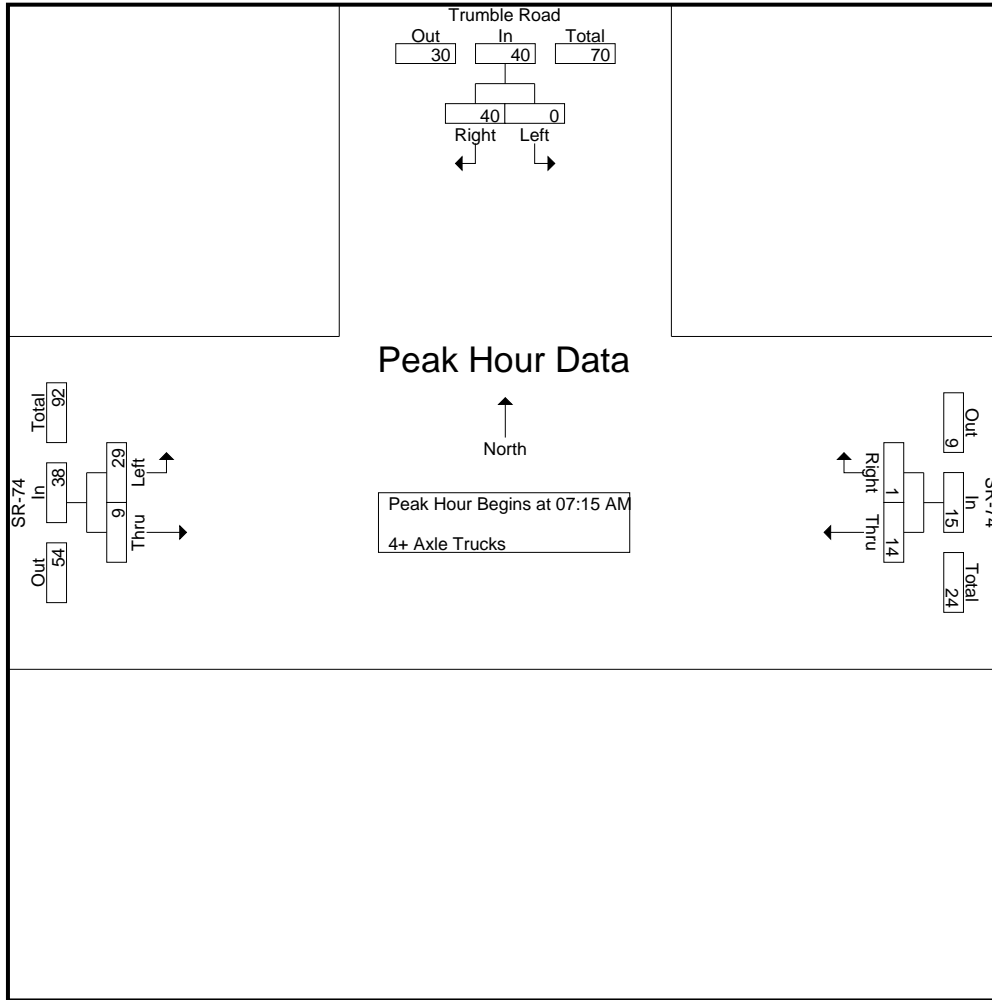
Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	0	12	12	3	0	3	0	4	4	19
07:30 AM	0	8	8	2	1	3	9	2	11	22
07:45 AM	0	9	9	4	0	4	10	1	11	24
08:00 AM	0	11	11	5	0	5	10	2	12	28
Total Volume	0	40	40	14	1	15	29	9	38	93
% App. Total	0	100		93.3	6.7		76.3	23.7		
PHF	.000	.833	.833	.700	.250	.750	.725	.563	.792	.830

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

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

File Name : 04_MEN_Trumble_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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	12	12	3	0	3	0	4	4
+15 mins.	0	8	8	2	1	3	9	2	11
+30 mins.	0	9	9	4	0	4	10	1	11
+45 mins.	0	11	11	5	0	5	10	2	12
Total Volume	0	40	40	14	1	15	29	9	38
% App. Total	0	100		93.3	6.7		76.3	23.7	
PHF	.000	.833	.833	.700	.250	.750	.725	.563	.792

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

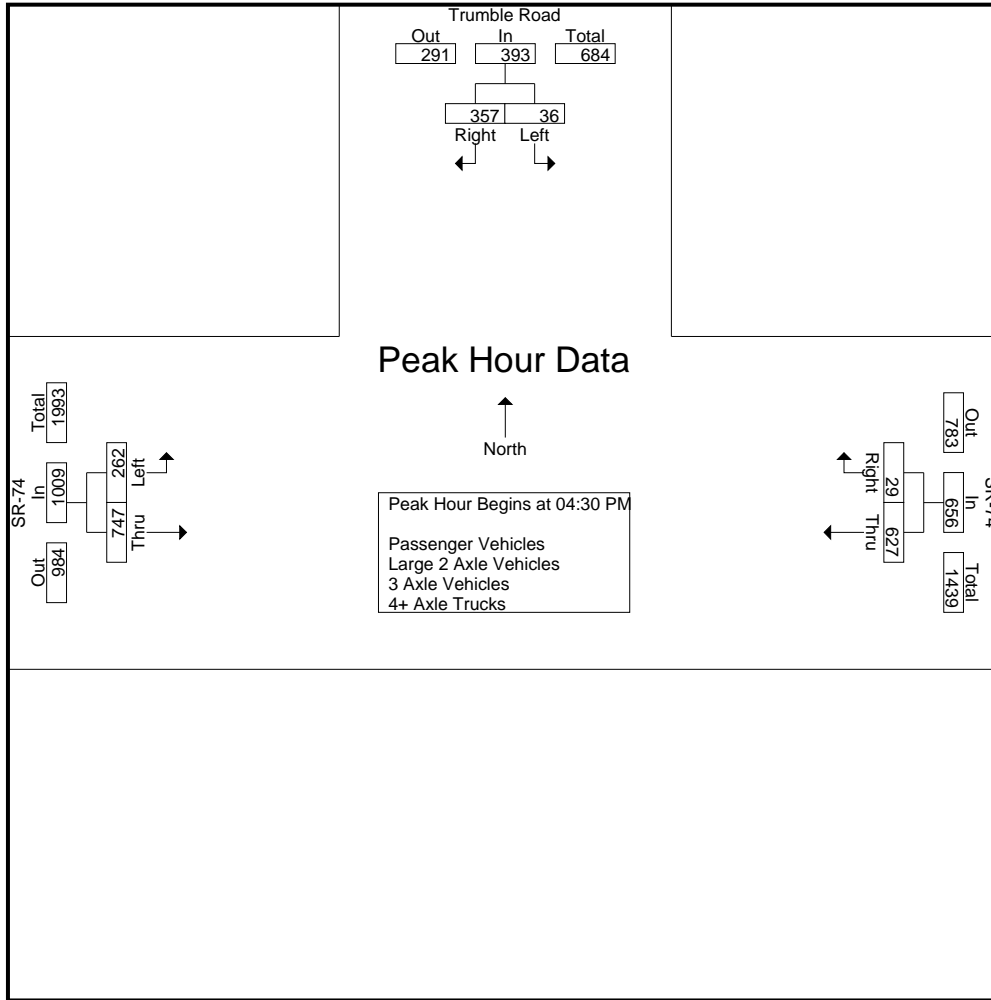
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
04:00 PM	13	75	36	88	180	9	4	189	62	159	0	221	40	498	538
04:15 PM	8	65	35	73	132	7	2	139	79	180	0	259	37	471	508
04:30 PM	10	122	59	132	179	9	3	188	72	163	0	235	62	555	617
04:45 PM	7	66	37	73	145	6	0	151	69	184	0	253	37	477	514
Total	38	328	167	366	636	31	9	667	282	686	0	968	176	2001	2177
05:00 PM	14	101	42	115	152	8	3	160	55	181	0	236	45	511	556
05:15 PM	5	68	39	73	151	6	0	157	66	219	0	285	39	515	554
05:30 PM	7	78	29	85	163	5	1	168	80	182	0	262	30	515	545
05:45 PM	2	48	32	50	144	10	0	154	89	149	0	238	32	442	474
Total	28	295	142	323	610	29	4	639	290	731	0	1021	146	1983	2129
Grand Total	66	623	309	689	1246	60	13	1306	572	1417	0	1989	322	3984	4306
Apprch %	9.6	90.4			95.4	4.6			28.8	71.2					
Total %	1.7	15.6		17.3	31.3	1.5		32.8	14.4	35.6		49.9	7.5	92.5	
Passenger Vehicles	64	611		980	1186	41		1237	505	1362		1867	0	0	4084
% Passenger Vehicles	97	98.1	98.7	98.2	95.2	68.3	76.9	93.8	88.3	96.1	0	93.9	0	0	94.8
Large 2 Axle Vehicles	0	8		10	33	10		45	55	38		93	0	0	148
% Large 2 Axle Vehicles	0	1.3	0.6	1	2.6	16.7	15.4	3.4	9.6	2.7	0	4.7	0	0	3.4
3 Axle Vehicles	2	3		7	19	2		21	1	8		9	0	0	37
% 3 Axle Vehicles	3	0.5	0.6	0.7	1.5	3.3	0	1.6	0.2	0.6	0	0.5	0	0	0.9
4+ Axle Trucks	0	1		1	8	7		16	11	9		20	0	0	37
% 4+ Axle Trucks	0	0.2	0	0.1	0.6	11.7	7.7	1.2	1.9	0.6	0	1	0	0	0.9

Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	10	122	132	179	9	188	72	163	235	555
04:45 PM	7	66	73	145	6	151	69	184	253	477
05:00 PM	14	101	115	152	8	160	55	181	236	511
05:15 PM	5	68	73	151	6	157	66	219	285	515
Total Volume	36	357	393	627	29	656	262	747	1009	2058
% App. Total	9.2	90.8		95.6	4.4		26	74		
PHF	.643	.732	.744	.876	.806	.872	.910	.853	.885	.927

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 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			04:45 PM		
+0 mins.	8	65	73	180	9	189	69	184	253
+15 mins.	10	122	132	132	7	139	55	181	236
+30 mins.	7	66	73	179	9	188	66	219	285
+45 mins.	14	101	115	145	6	151	80	182	262
Total Volume	39	354	393	636	31	667	270	766	1036
% App. Total	9.9	90.1		95.4	4.6		26.1	73.9	
PHF	.696	.725	.744	.883	.861	.882	.844	.874	.909

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

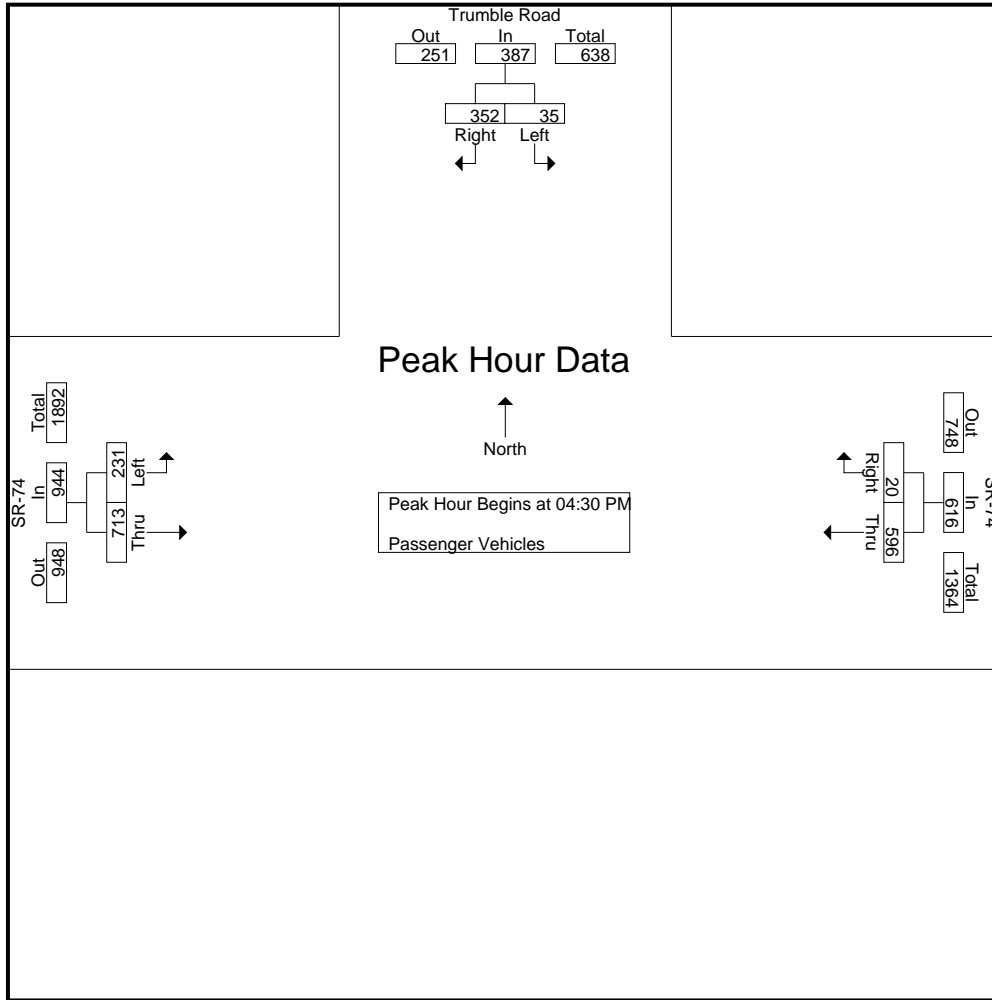
Groups Printed- Passenger Vehicles

Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
04:00 PM	12	71	34	83	165	6	3	171	57	153	0	210	37	464	501
04:15 PM	8	65	35	73	129	5	1	134	70	176	0	246	36	453	489
04:30 PM	9	121	59	130	176	7	3	183	64	158	0	222	62	535	597
04:45 PM	7	65	36	72	135	5	0	140	64	176	0	240	36	452	488
Total	36	322	164	358	605	23	7	628	255	663	0	918	171	1904	2075
05:00 PM	14	99	42	113	142	6	2	148	46	174	0	220	44	481	525
05:15 PM	5	67	38	72	143	2	0	145	57	205	0	262	38	479	517
05:30 PM	7	76	29	83	158	4	1	162	69	178	0	247	30	492	522
05:45 PM	2	47	32	49	138	6	0	144	78	142	0	220	32	413	445
Total	28	289	141	317	581	18	3	599	250	699	0	949	144	1865	2009
Grand Total	64	611	305	675	1186	41	10	1227	505	1362	0	1867	315	3769	4084
Apprch %	9.5	90.5			96.7	3.3			27	73					
Total %	1.7	16.2		17.9	31.5	1.1		32.6	13.4	36.1		49.5	7.7	92.3	

Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	9	121	130	176	7	183	64	158	222	535
04:45 PM	7	65	72	135	5	140	64	176	240	452
05:00 PM	14	99	113	142	6	148	46	174	220	481
05:15 PM	5	67	72	143	2	145	57	205	262	479
Total Volume	35	352	387	596	20	616	231	713	944	1947
% App. Total	9	91		96.8	3.2		24.5	75.5		
PHF	.625	.727	.744	.847	.714	.842	.902	.870	.901	.910

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	9	121	130	176	7	183	64	158	222
+15 mins.	7	65	72	135	5	140	64	176	240
+30 mins.	14	99	113	142	6	148	46	174	220
+45 mins.	5	67	72	143	2	145	57	205	262
Total Volume	35	352	387	596	20	616	231	713	944
% App. Total	9	91		96.8	3.2		24.5	75.5	
PHF	.625	.727	.744	.847	.714	.842	.902	.870	.901

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

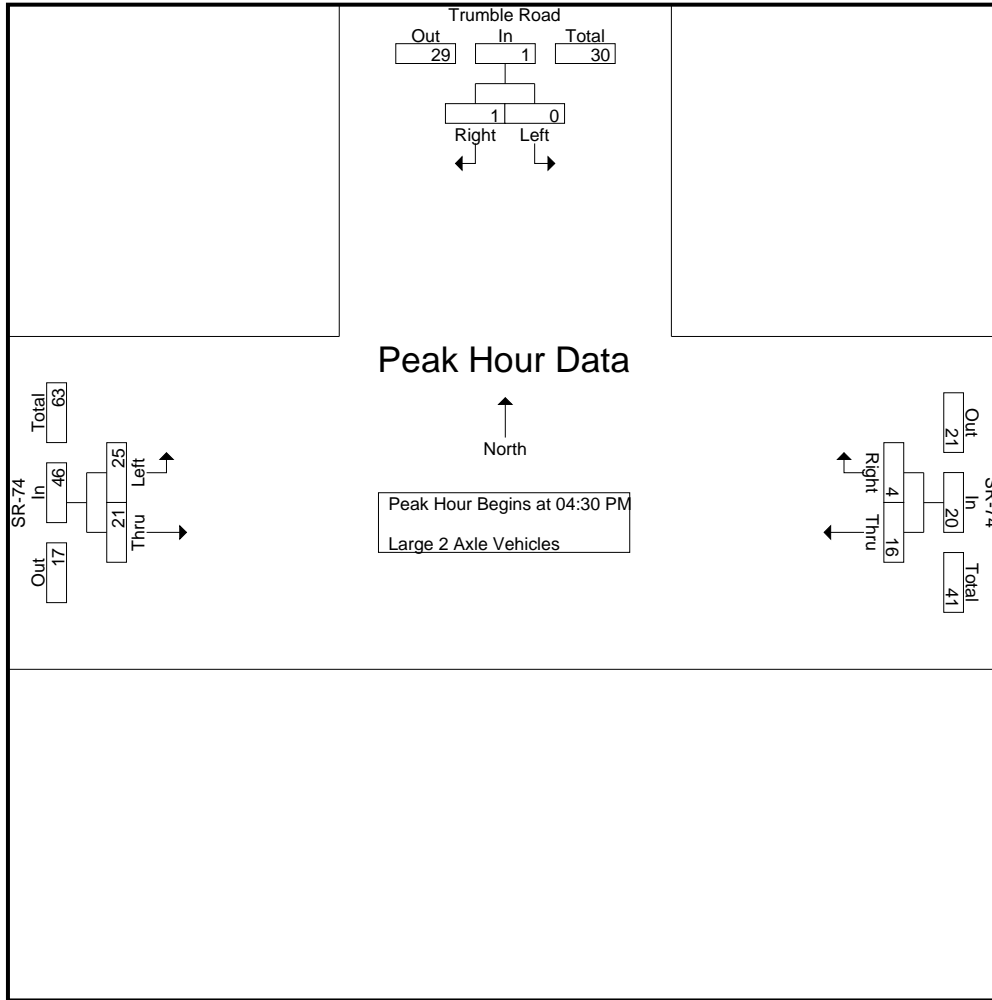
Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
04:00 PM	0	4	2	4	9	2	1	11	5	6	0	11	3	26	29
04:15 PM	0	0	0	0	0	0	0	0	7	3	0	10	0	10	10
04:30 PM	0	1	0	1	3	1	0	4	6	3	0	9	0	14	14
04:45 PM	0	0	0	0	4	0	0	4	5	5	0	10	0	14	14
Total	0	5	2	5	16	3	1	19	23	17	0	40	3	64	67
05:00 PM	0	0	0	0	5	1	1	6	7	3	0	10	1	16	17
05:15 PM	0	0	0	0	4	2	0	6	7	10	0	17	0	23	23
05:30 PM	0	2	0	2	3	1	0	4	7	2	0	9	0	15	15
05:45 PM	0	1	0	1	5	3	0	8	11	6	0	17	0	26	26
Total	0	3	0	3	17	7	1	24	32	21	0	53	1	80	81
Grand Total	0	8	2	8	33	10	2	43	55	38	0	93	4	144	148
Apprch %	0	100			76.7	23.3			59.1	40.9					
Total %	0	5.6		5.6	22.9	6.9		29.9	38.2	26.4		64.6	2.7	97.3	

Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	0	1	1	3	1	4	6	3	9	14
04:45 PM	0	0	0	4	0	4	5	5	10	14
05:00 PM	0	0	0	5	1	6	7	3	10	16
05:15 PM	0	0	0	4	2	6	7	10	17	23
Total Volume	0	1	1	16	4	20	25	21	46	67
% App. Total	0	100		80	20		54.3	45.7		
PHF	.000	.250	.250	.800	.500	.833	.893	.525	.676	.728

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

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	1	1	3	1	4	6	3	9
+15 mins.	0	0	0	4	0	4	5	5	10
+30 mins.	0	0	0	5	1	6	7	3	10
+45 mins.	0	0	0	4	2	6	7	10	17
Total Volume	0	1	1	16	4	20	25	21	46
% App. Total	0	100		80	20		54.3	45.7	
PHF	.000	.250	.250	.800	.500	.833	.893	.525	.676

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

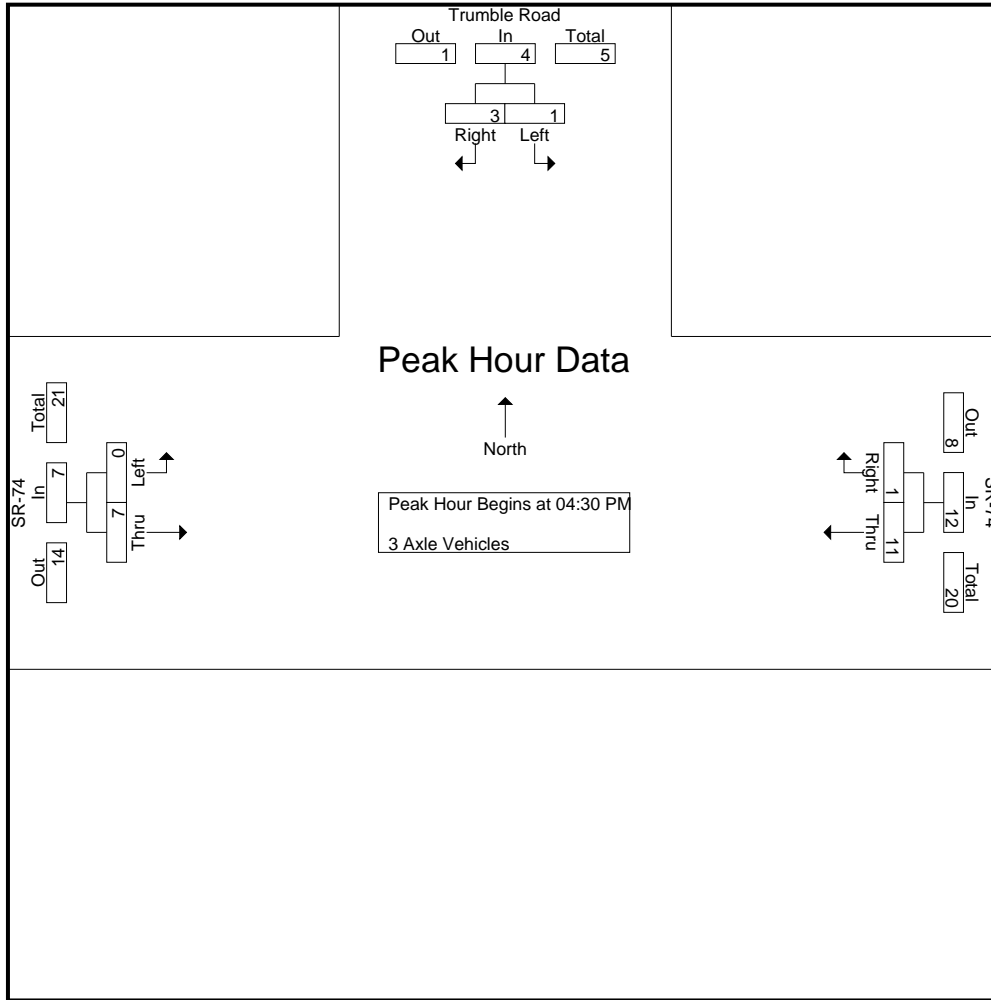
Groups Printed- 3 Axle Vehicles

Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
04:00 PM	1	0	0	1	3	0	0	3	0	0	0	0	0	4	4
04:15 PM	0	0	0	0	3	0	0	3	1	0	0	1	0	4	4
04:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	1	1	1	4	1	0	5	0	1	0	1	1	7	8
Total	2	1	1	3	10	1	0	11	1	1	0	2	1	16	17
05:00 PM	0	1	0	1	4	0	0	4	0	3	0	3	0	8	8
05:15 PM	0	1	1	1	3	0	0	3	0	3	0	3	1	7	8
05:30 PM	0	0	0	0	2	0	0	2	0	1	0	1	0	3	3
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1
Total	0	2	1	2	9	1	0	10	0	7	0	7	1	19	20
Grand Total	2	3	2	5	19	2	0	21	1	8	0	9	2	35	37
Apprch %	40	60			90.5	9.5			11.1	88.9					
Total %	5.7	8.6		14.3	54.3	5.7		60	2.9	22.9		25.7	5.4	94.6	

Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	0	1	1	4	1	5	0	1	1	7
05:00 PM	0	1	1	4	0	4	0	3	3	8
05:15 PM	0	1	1	3	0	3	0	3	3	7
Total Volume	1	3	4	11	1	12	0	7	7	23
% App. Total	25	75		91.7	8.3		0	100		
PHF	.250	.750	1.00	.688	.250	.600	.000	.583	.583	.719

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	1	0	1	0	0	0	0	0	0
+15 mins.	0	1	1	4	1	5	0	1	1
+30 mins.	0	1	1	4	0	4	0	3	3
+45 mins.	0	1	1	3	0	3	0	3	3
Total Volume	1	3	4	11	1	12	0	7	7
% App. Total	25	75		91.7	8.3		0	100	
PHF	.250	.750	1.000	.688	.250	.600	.000	.583	.583

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

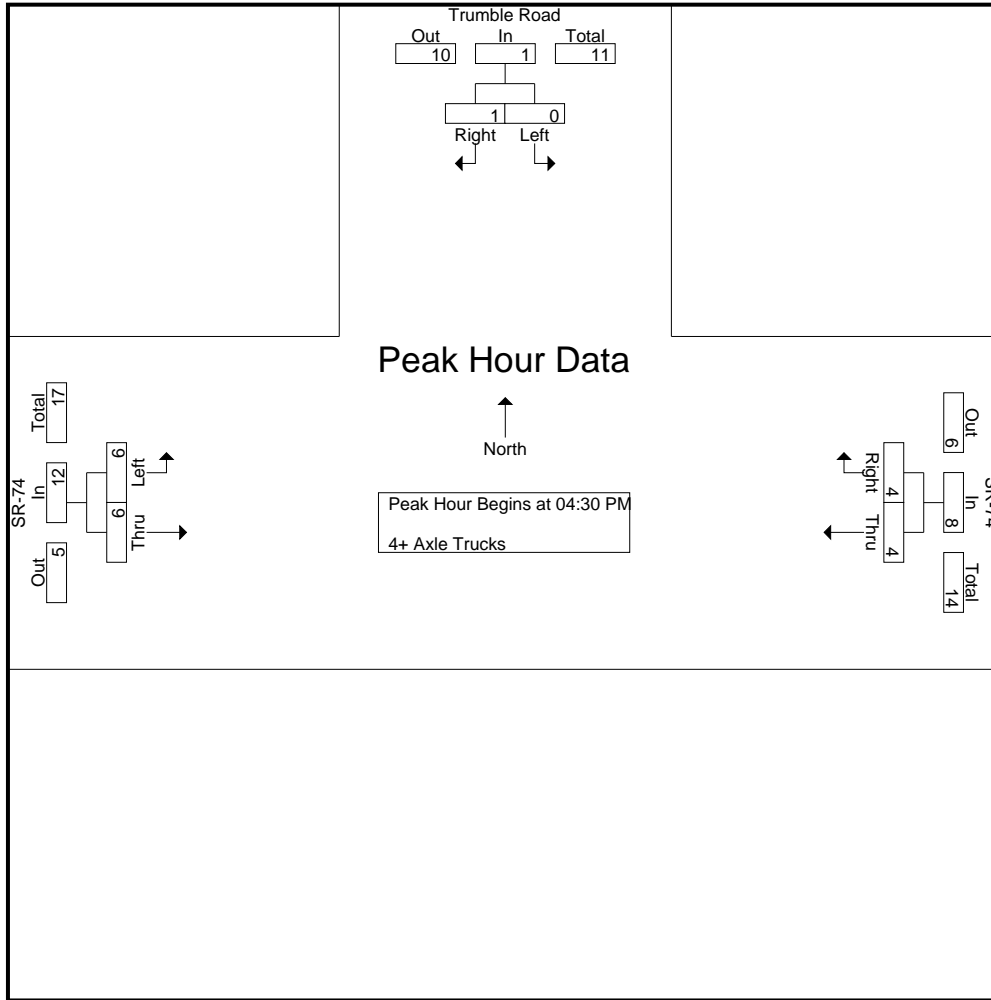
Start Time	Trumble Road Southbound				SR-74 Westbound				SR-74 Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total			
04:00 PM	0	0	0	0	3	1	0	4	0	0	0	0	0	4	4
04:15 PM	0	0	0	0	0	2	1	2	1	1	0	2	1	4	5
04:30 PM	0	0	0	0	0	1	0	1	2	2	0	4	0	5	5
04:45 PM	0	0	0	0	2	0	0	2	0	2	0	2	0	4	4
Total	0	0	0	0	5	4	1	9	3	5	0	8	1	17	18
05:00 PM	0	1	0	1	1	1	0	2	2	1	0	3	0	6	6
05:15 PM	0	0	0	0	1	2	0	3	2	1	0	3	0	6	6
05:30 PM	0	0	0	0	0	0	0	0	4	1	0	5	0	5	5
05:45 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	2	2
Total	0	1	0	1	3	3	0	6	8	4	0	12	0	19	19
Grand Total	0	1	0	1	8	7	1	15	11	9	0	20	1	36	37
Apprch %	0	100			53.3	46.7			55	45					
Total %	0	2.8		2.8	22.2	19.4		41.7	30.6	25		55.6	2.7	97.3	

Start Time	Trumble Road Southbound			SR-74 Westbound			SR-74 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:30 PM	0	0	0	0	1	1	2	2	4	5
04:45 PM	0	0	0	2	0	2	0	2	2	4
05:00 PM	0	1	1	1	1	2	2	1	3	6
05:15 PM	0	0	0	1	2	3	2	1	3	6
Total Volume	0	1	1	4	4	8	6	6	12	21
% App. Total	0	100		50	50		50	50		
PHF	.000	.250	.250	.500	.500	.667	.750	.750	.750	.875

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

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

File Name : 04_MEN_Trumble_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:30 PM			04:30 PM			04:30 PM		
+0 mins.	0	0	0	0	1	1	2	2	4
+15 mins.	0	0	0	2	0	2	0	2	2
+30 mins.	0	1	1	1	1	2	2	1	3
+45 mins.	0	0	0	1	2	3	2	1	3
Total Volume	0	1	1	4	4	8	6	6	12
% App. Total	0	100		50	50		50	50	
PHF	.000	.250	.250	.500	.500	.667	.750	.750	.750

Location: Menifee
 N/S: Trumble Road
 E/W: SR-74



Date: 10/5/2021
 Day: Tuesday

PEDESTRIANS

	North Leg Trumble Road	East Leg SR-74	South Leg Dead End	West Leg SR-74	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	1	1
7:15 AM	0	0	0	0	0
7:30 AM	2	0	0	0	2
7:45 AM	0	0	0	1	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	2	0	0	2	4

	North Leg Trumble Road	East Leg SR-74	South Leg Dead End	West Leg SR-74	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Menifee
 N/S: Trumble Road
 E/W: SR-74



Date: 10/5/2021
 Day: Tuesday

BICYCLES

	Southbound Trumble Road			Westbound SR-74			Northbound Dead End			Eastbound SR-74			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

	Southbound Trumble Road			Westbound SR-74			Northbound Dead End			Eastbound SR-74			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

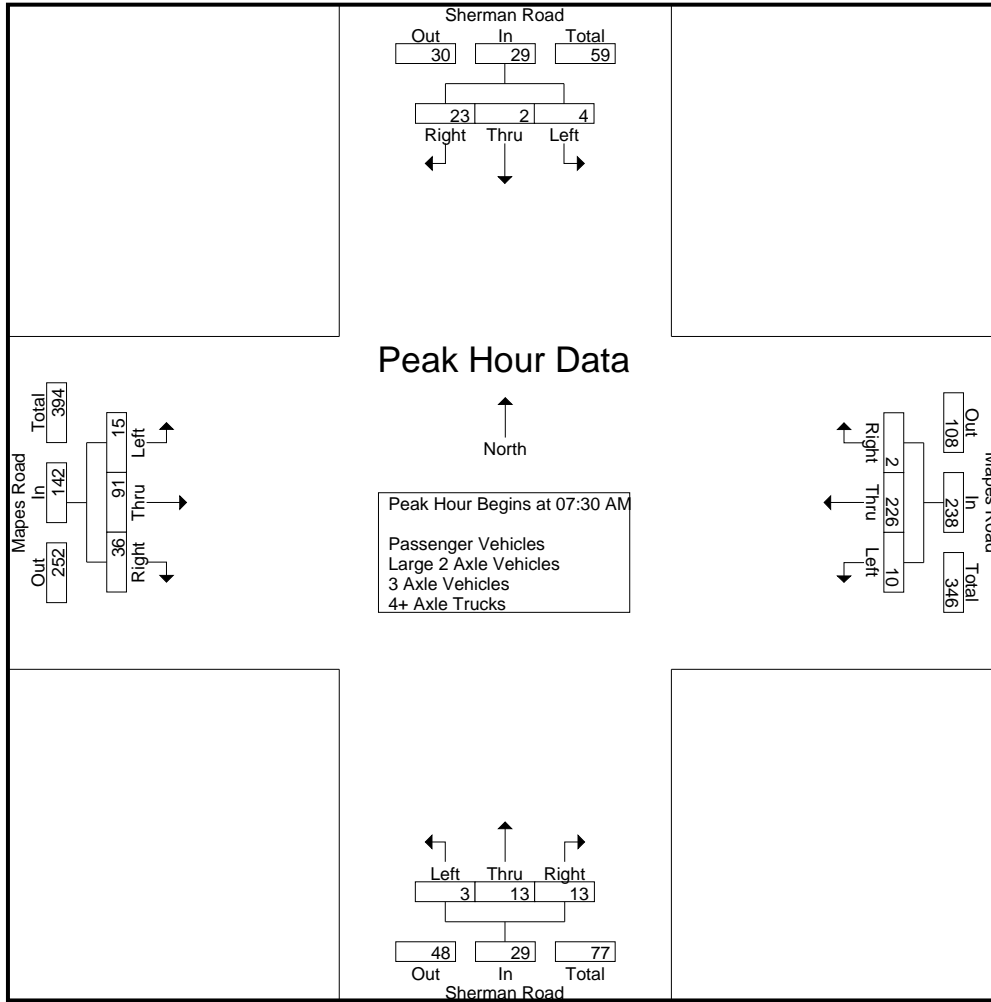
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	2	8	10	2	54	0	56	0	0	2	2	5	18	1	24	92
07:15 AM	0	1	9	10	0	48	1	49	2	3	6	11	2	20	0	22	92
07:30 AM	1	0	4	5	1	76	1	78	0	6	2	8	4	22	2	28	119
07:45 AM	1	2	4	7	4	63	0	67	2	1	1	4	4	30	4	38	116
Total	2	5	25	32	7	241	2	250	4	10	11	25	15	90	7	112	419
08:00 AM	1	0	3	4	1	39	1	41	1	4	5	10	2	17	11	30	85
08:15 AM	1	0	12	13	4	48	0	52	0	2	5	7	5	22	19	46	118
08:30 AM	0	0	3	3	3	40	0	43	1	0	0	1	2	19	15	36	83
08:45 AM	0	0	6	6	6	27	0	33	2	1	4	7	7	13	13	33	79
Total	2	0	24	26	14	154	1	169	4	7	14	25	16	71	58	145	365
Grand Total	4	5	49	58	21	395	3	419	8	17	25	50	31	161	65	257	784
Apprch %	6.9	8.6	84.5		5	94.3	0.7		16	34	50		12.1	62.6	25.3		
Total %	0.5	0.6	6.2	7.4	2.7	50.4	0.4	53.4	1	2.2	3.2	6.4	4	20.5	8.3	32.8	
Passenger Vehicles	3	5	48	56	19	384	3	406	8	15	18	41	29	137	65	231	734
% Passenger Vehicles	75	100	98	96.6	90.5	97.2	100	96.9	100	88.2	72	82	93.5	85.1	100	89.9	93.6
Large 2 Axle Vehicles	1	0	1	2	0	8	0	8	0	2	7	9	1	21	0	22	41
% Large 2 Axle Vehicles	25	0	2	3.4	0	2	0	1.9	0	11.8	28	18	3.2	13	0	8.6	5.2
3 Axle Vehicles	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% 3 Axle Vehicles	0	0	0	0	0	0.3	0	0.2	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	0	0	0	2	2	0	4	0	0	0	0	1	3	0	4	8
% 4+ Axle Trucks	0	0	0	0	9.5	0.5	0	1	0	0	0	0	3.2	1.9	0	1.6	1

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	0	4	5	1	76	1	78	0	6	2	8	4	22	2	28	119
07:45 AM	1	2	4	7	4	63	0	67	2	1	1	4	4	30	4	38	116
08:00 AM	1	0	3	4	1	39	1	41	1	4	5	10	2	17	11	30	85
08:15 AM	1	0	12	13	4	48	0	52	0	2	5	7	5	22	19	46	118
Total Volume	4	2	23	29	10	226	2	238	3	13	13	29	15	91	36	142	438
% App. Total	13.8	6.9	79.3		4.2	95	0.8		10.3	44.8	44.8		10.6	64.1	25.4		
PHF	1.00	.250	.479	.558	.625	.743	.500	.763	.375	.542	.650	.725	.750	.758	.474	.772	.920

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 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				07:15 AM				07:45 AM			
+0 mins.	0	2	8	10	2	54	0	56	2	3	6	11	4	30	4	38
+15 mins.	0	1	9	10	0	48	1	49	0	6	2	8	2	17	11	30
+30 mins.	1	0	4	5	1	76	1	78	2	1	1	4	5	22	19	46
+45 mins.	1	2	4	7	4	63	0	67	1	4	5	10	2	19	15	36
Total Volume	2	5	25	32	7	241	2	250	5	14	14	33	13	88	49	150
% App. Total	6.2	15.6	78.1		2.8	96.4	0.8		15.2	42.4	42.4		8.7	58.7	32.7	
PHF	.500	.625	.694	.800	.438	.793	.500	.801	.625	.583	.583	.750	.650	.733	.645	.815

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Passenger Vehicles

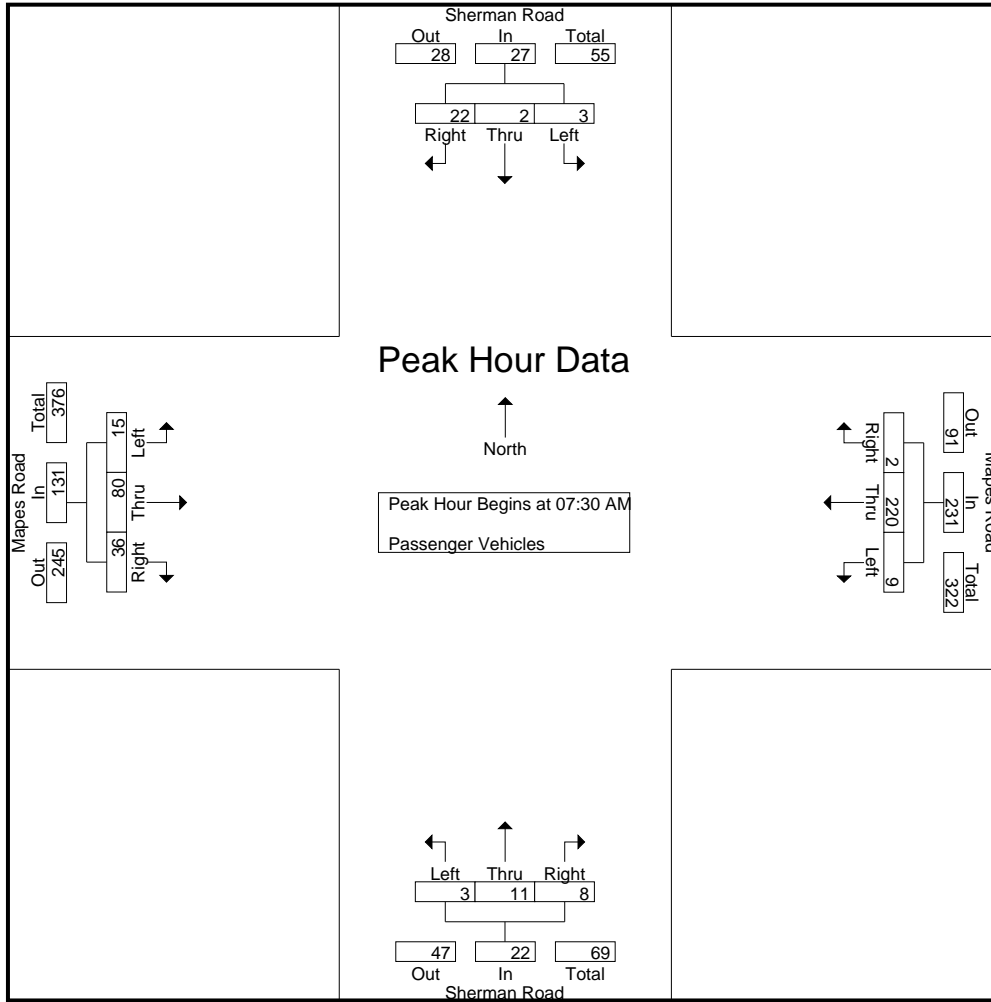
Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	2	8	10	1	52	0	53	0	0	2	2	4	13	1	18	83
07:15 AM	0	1	9	10	0	47	1	48	2	3	4	9	2	16	0	18	85
07:30 AM	1	0	4	5	1	75	1	77	0	5	1	6	4	19	2	25	113
07:45 AM	0	2	4	6	3	60	0	63	2	1	1	4	4	25	4	33	106
Total	1	5	25	31	5	234	2	241	4	9	8	21	14	73	7	94	387
08:00 AM	1	0	3	4	1	38	1	40	1	4	1	6	2	16	11	29	79
08:15 AM	1	0	11	12	4	47	0	51	0	1	5	6	5	20	19	44	113
08:30 AM	0	0	3	3	3	39	0	42	1	0	0	1	2	18	15	35	81
08:45 AM	0	0	6	6	6	26	0	32	2	1	4	7	6	10	13	29	74
Total	2	0	23	25	14	150	1	165	4	6	10	20	15	64	58	137	347
Grand Total	3	5	48	56	19	384	3	406	8	15	18	41	29	137	65	231	734
Apprch %	5.4	8.9	85.7		4.7	94.6	0.7		19.5	36.6	43.9		12.6	59.3	28.1		
Total %	0.4	0.7	6.5	7.6	2.6	52.3	0.4	55.3	1.1	2	2.5	5.6	4	18.7	8.9	31.5	

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	1	0	4	5	1	75	1	77	0	5	1	6	4	19	2	25	113
07:45 AM	0	2	4	6	3	60	0	63	2	1	1	4	4	25	4	33	106
08:00 AM	1	0	3	4	1	38	1	40	1	4	1	6	2	16	11	29	79
08:15 AM	1	0	11	12	4	47	0	51	0	1	5	6	5	20	19	44	113
Total Volume	3	2	22	27	9	220	2	231	3	11	8	22	15	80	36	131	411
% App. Total	11.1	7.4	81.5		3.9	95.2	0.9		13.6	50	36.4		11.5	61.1	27.5		
PHF	.750	.250	.500	.563	.563	.733	.500	.750	.375	.550	.400	.917	.750	.800	.474	.744	.909

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	1	0	4	5	1	75	1	77	0	5	1	6	4	19	2	25
+15 mins.	0	2	4	6	3	60	0	63	2	1	1	4	4	25	4	33
+30 mins.	1	0	3	4	1	38	1	40	1	4	1	6	2	16	11	29
+45 mins.	1	0	11	12	4	47	0	51	0	1	5	6	5	20	19	44
Total Volume	3	2	22	27	9	220	2	231	3	11	8	22	15	80	36	131
% App. Total	11.1	7.4	81.5		3.9	95.2	0.9		13.6	50	36.4		11.5	61.1	27.5	
PHF	.750	.250	.500	.563	.563	.733	.500	.750	.375	.550	.400	.917	.750	.800	.474	.744

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

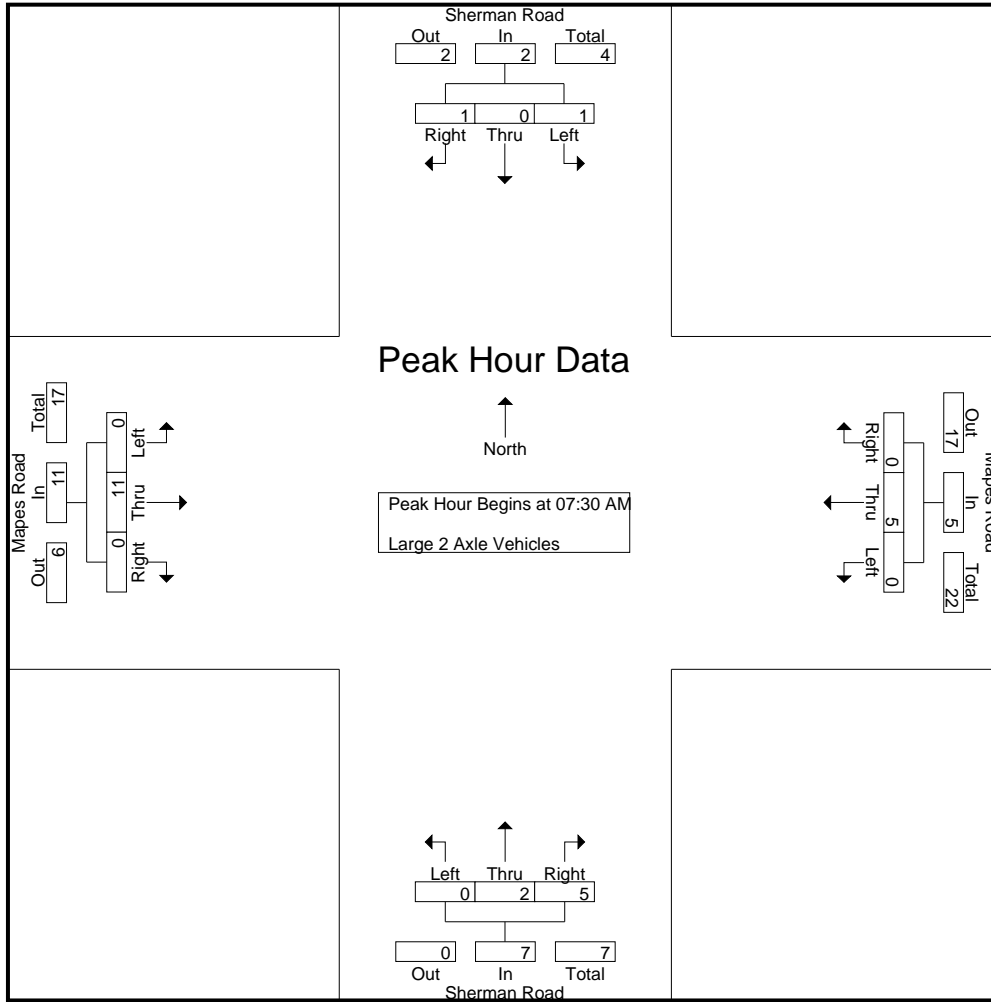
Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
07:15 AM	0	0	0	0	0	1	0	1	0	0	2	2	0	4	0	4	7
07:30 AM	0	0	0	0	0	1	0	1	0	1	1	2	0	3	0	3	6
07:45 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	5	0	5	8
Total	1	0	0	1	0	5	0	5	0	1	3	4	0	15	0	15	25
08:00 AM	0	0	0	0	0	1	0	1	0	0	4	4	0	1	0	1	6
08:15 AM	0	0	1	1	0	1	0	1	0	1	0	1	0	2	0	2	5
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	4
Total	0	0	1	1	0	3	0	3	0	1	4	5	1	6	0	7	16
Grand Total	1	0	1	2	0	8	0	8	0	2	7	9	1	21	0	22	41
Apprch %	50	0	50		0	100	0		0	22.2	77.8		4.5	95.5	0		
Total %	2.4	0	2.4	4.9	0	19.5	0	19.5	0	4.9	17.1	22	2.4	51.2	0	53.7	

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	0	0	0	0	0	1	0	1	0	1	1	2	0	3	0	3	6
07:45 AM	1	0	0	1	0	2	0	2	0	0	0	0	0	5	0	5	8
08:00 AM	0	0	0	0	0	1	0	1	0	0	4	4	0	1	0	1	6
08:15 AM	0	0	1	1	0	1	0	1	0	1	0	1	0	2	0	2	5
Total Volume	1	0	1	2	0	5	0	5	0	2	5	7	0	11	0	11	25
% App. Total	50	0	50		0	100	0		0	28.6	71.4		0	100	0		
PHF	.250	.000	.250	.500	.000	.625	.000	.625	.000	.500	.313	.438	.000	.550	.000	.550	.781

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	1	1	2	0	3	0	3
+15 mins.	1	0	0	1	0	2	0	2	0	0	0	0	0	5	0	5
+30 mins.	0	0	0	0	0	1	0	1	0	0	4	4	0	1	0	1
+45 mins.	0	0	1	1	0	1	0	1	0	1	0	1	0	2	0	2
Total Volume	1	0	1	2	0	5	0	5	0	2	5	7	0	11	0	11
% App. Total	50	0	50		0	100	0		0	28.6	71.4		0	100	0	
PHF	.250	.000	.250	.500	.000	.625	.000	.625	.000	.500	.313	.438	.000	.550	.000	.550

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

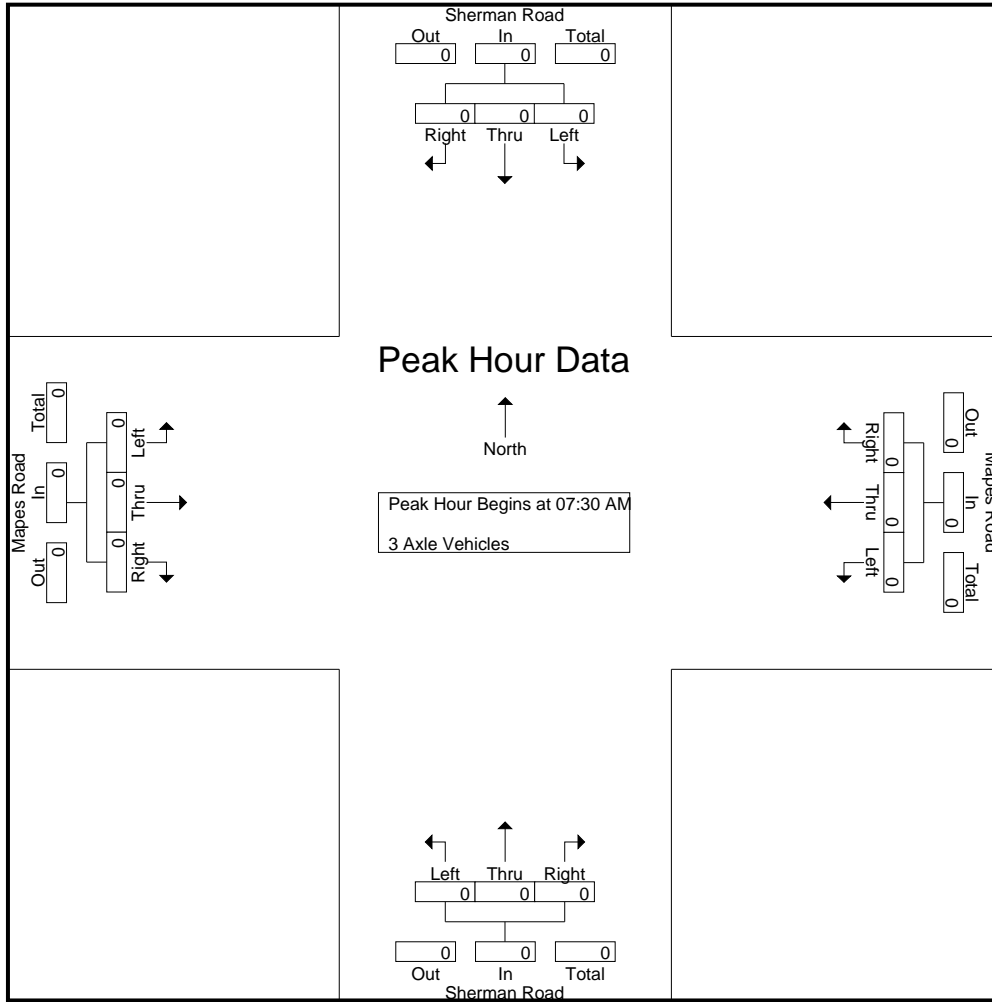
Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0		0	100	0	100	0	0	0		0	0	0		

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
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
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

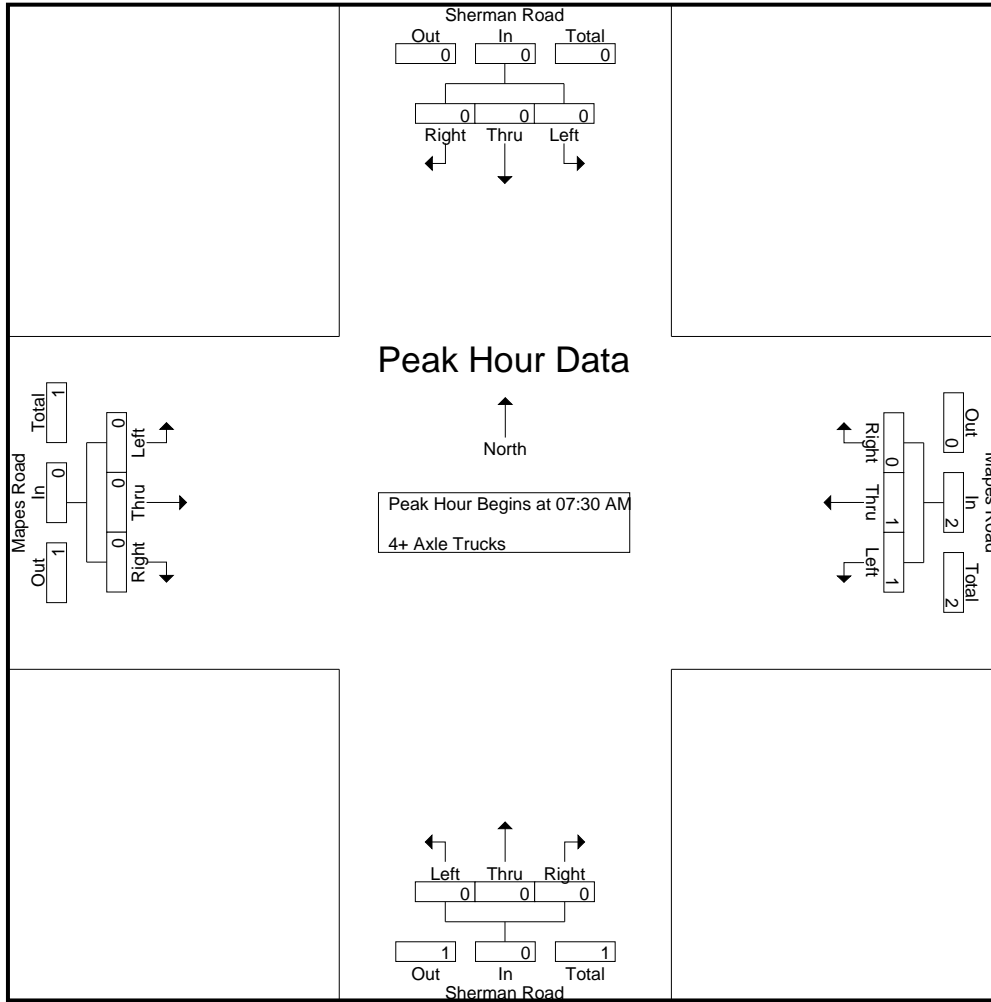
Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	1	2	0	3	4
07:15 AM	0	0	0	0	0	0	0	0	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	1	1	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	2	1	0	3	0	0	0	0	1	2	0	3	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	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	1	0	1	1
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Grand Total	0	0	0	0	2	2	0	4	0	0	0	0	1	3	0	4	8
Apprch %	0	0	0		50	50	0		0	0	0		25	75	0		
Total %	0	0	0		25	25	0	50	0	0	0		12.5	37.5	0	50	

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
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	1	1	0	2	0	0	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
% App. Total	0	0	0		50	50	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:30 AM

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	50	50	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.250	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

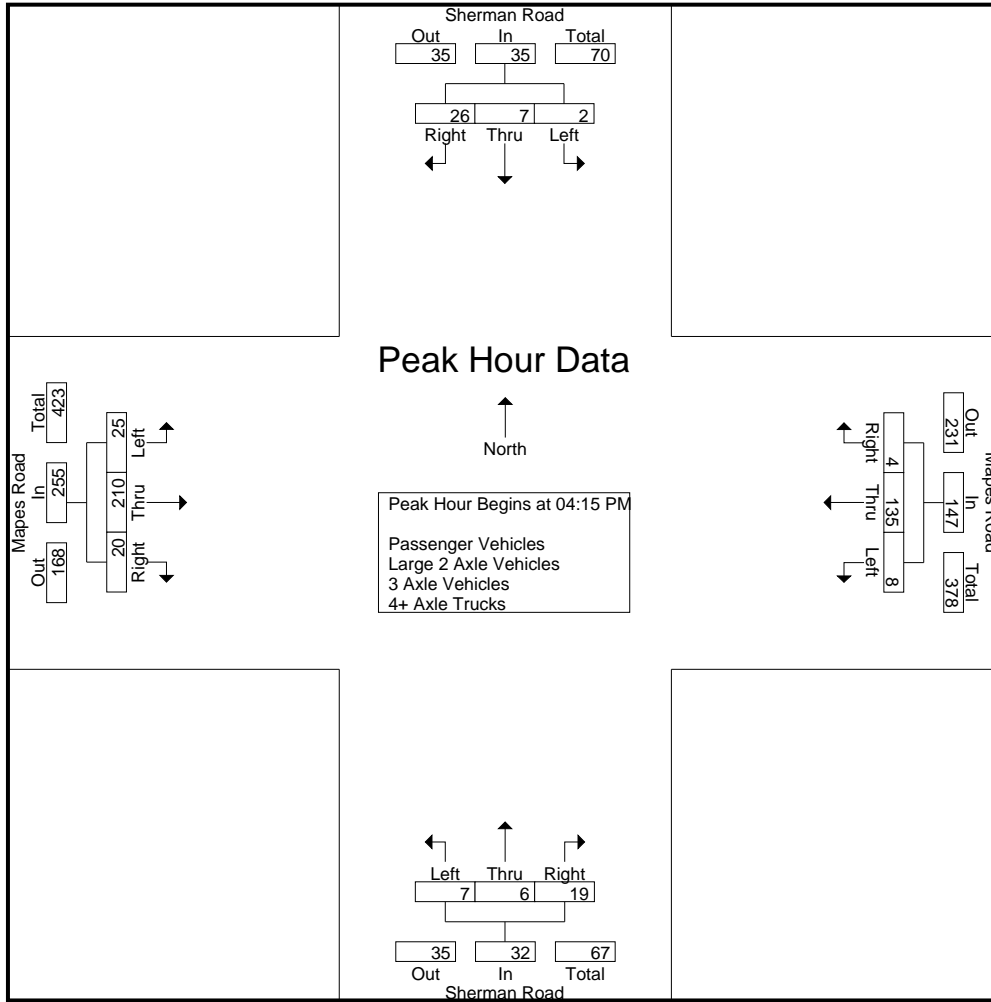
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	2	3	6	2	27	0	29	1	2	3	6	8	55	2	65	106
04:15 PM	0	3	6	9	1	29	0	30	1	3	7	11	7	52	2	61	111
04:30 PM	2	2	6	10	4	39	1	44	4	0	3	7	8	62	5	75	136
04:45 PM	0	2	9	11	3	32	0	35	2	2	3	7	7	42	7	56	109
Total	3	9	24	36	10	127	1	138	8	7	16	31	30	211	16	257	462
05:00 PM	0	0	5	5	0	35	3	38	0	1	6	7	3	54	6	63	113
05:15 PM	0	2	4	6	2	35	0	37	0	0	3	3	8	34	5	47	93
05:30 PM	3	2	9	14	3	25	0	28	4	0	2	6	11	29	4	44	92
05:45 PM	0	2	9	11	2	30	0	32	0	2	5	7	6	40	5	51	101
Total	3	6	27	36	7	125	3	135	4	3	16	23	28	157	20	205	399
Grand Total	6	15	51	72	17	252	4	273	12	10	32	54	58	368	36	462	861
Apprch %	8.3	20.8	70.8		6.2	92.3	1.5		22.2	18.5	59.3		12.6	79.7	7.8		
Total %	0.7	1.7	5.9	8.4	2	29.3	0.5	31.7	1.4	1.2	3.7	6.3	6.7	42.7	4.2	53.7	
Passenger Vehicles	6	15	51	72	14	243	4	261	12	10	31	53	57	352	35	444	830
% Passenger Vehicles	100	100	100	100	82.4	96.4	100	95.6	100	100	96.9	98.1	98.3	95.7	97.2	96.1	96.4
Large 2 Axle Vehicles	0	0	0	0	2	5	0	7	0	0	1	1	1	11	0	12	20
% Large 2 Axle Vehicles	0	0	0	0	11.8	2	0	2.6	0	0	3.1	1.9	1.7	3	0	2.6	2.3
3 Axle Vehicles	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
% 3 Axle Vehicles	0	0	0	0	0	1.6	0	1.5	0	0	0	0	0	0.8	0	0.6	0.8
4+ Axle Trucks	0	0	0	0	1	0	0	1	0	0	0	0	0	2	1	3	4
% 4+ Axle Trucks	0	0	0	0	5.9	0	0	0.4	0	0	0	0	0	0.5	2.8	0.6	0.5

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	3	6	9	1	29	0	30	1	3	7	11	7	52	2	61	111
04:30 PM	2	2	6	10	4	39	1	44	4	0	3	7	8	62	5	75	136
04:45 PM	0	2	9	11	3	32	0	35	2	2	3	7	7	42	7	56	109
05:00 PM	0	0	5	5	0	35	3	38	0	1	6	7	3	54	6	63	113
Total Volume	2	7	26	35	8	135	4	147	7	6	19	32	25	210	20	255	469
% App. Total	5.7	20	74.3		5.4	91.8	2.7		21.9	18.8	59.4		9.8	82.4	7.8		
PHF	.250	.583	.722	.795	.500	.865	.333	.835	.438	.500	.679	.727	.781	.847	.714	.850	.862

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 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:

	04:00 PM				04:30 PM				04:15 PM				04:00 PM			
+0 mins.	1	2	3	6	4	39	1	44	1	3	7	11	8	55	2	65
+15 mins.	0	3	6	9	3	32	0	35	4	0	3	7	7	52	2	61
+30 mins.	2	2	6	10	0	35	3	38	2	2	3	7	8	62	5	75
+45 mins.	0	2	9	11	2	35	0	37	0	1	6	7	7	42	7	56
Total Volume	3	9	24	36	9	141	4	154	7	6	19	32	30	211	16	257
% App. Total	8.3	25	66.7		5.8	91.6	2.6		21.9	18.8	59.4		11.7	82.1	6.2	
PHF	.375	.750	.667	.818	.563	.904	.333	.875	.438	.500	.679	.727	.938	.851	.571	.857

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Passenger Vehicles

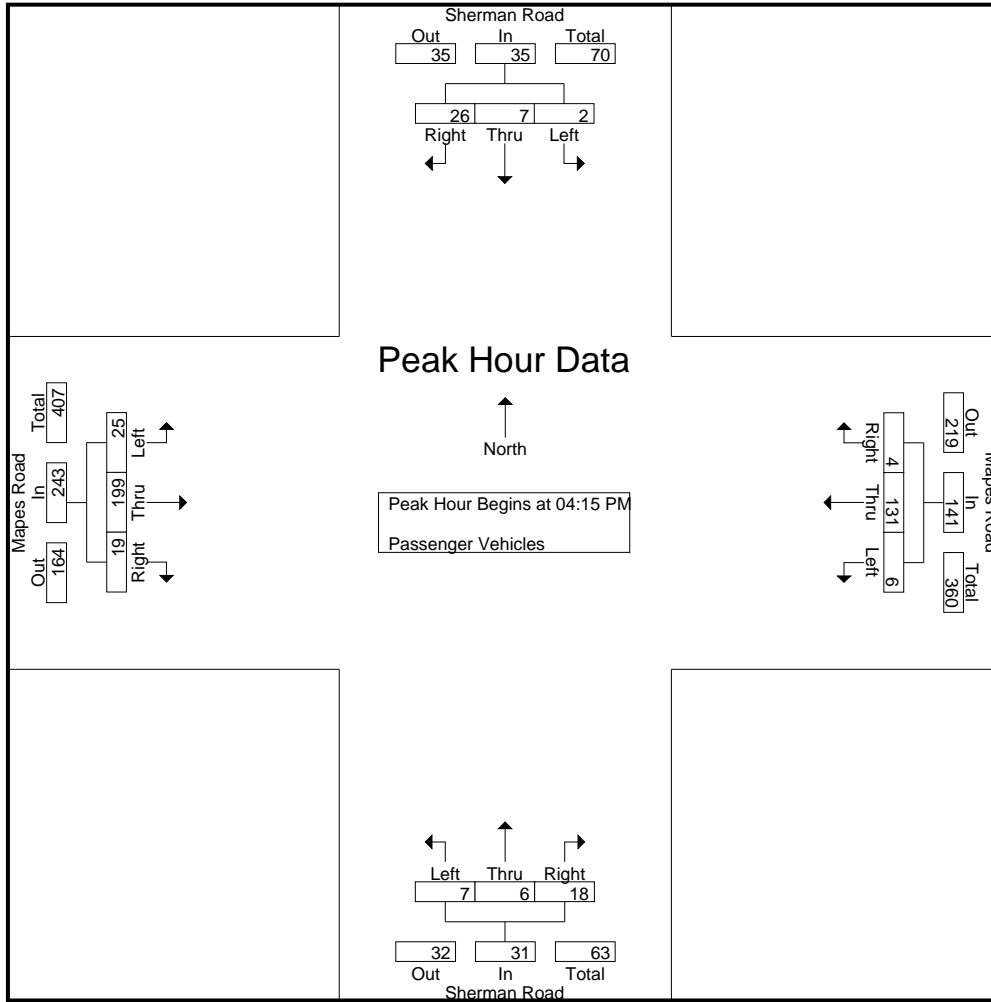
Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	2	3	6	2	24	0	26	1	2	3	6	7	55	2	64	102
04:15 PM	0	3	6	9	0	28	0	28	1	3	7	11	7	49	2	58	106
04:30 PM	2	2	6	10	3	38	1	42	4	0	3	7	8	58	5	71	130
04:45 PM	0	2	9	11	3	31	0	34	2	2	2	6	7	40	7	54	105
Total	3	9	24	36	8	121	1	130	8	7	15	30	29	202	16	247	443
05:00 PM	0	0	5	5	0	34	3	37	0	1	6	7	3	52	5	60	109
05:15 PM	0	2	4	6	2	34	0	36	0	0	3	3	8	31	5	44	89
05:30 PM	3	2	9	14	2	24	0	26	4	0	2	6	11	28	4	43	89
05:45 PM	0	2	9	11	2	30	0	32	0	2	5	7	6	39	5	50	100
Total	3	6	27	36	6	122	3	131	4	3	16	23	28	150	19	197	387
Grand Total	6	15	51	72	14	243	4	261	12	10	31	53	57	352	35	444	830
Apprch %	8.3	20.8	70.8		5.4	93.1	1.5		22.6	18.9	58.5		12.8	79.3	7.9		
Total %	0.7	1.8	6.1	8.7	1.7	29.3	0.5	31.4	1.4	1.2	3.7	6.4	6.9	42.4	4.2	53.5	

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	3	6	9	0	28	0	28	1	3	7	11	7	49	2	58	106
04:30 PM	2	2	6	10	3	38	1	42	4	0	3	7	8	58	5	71	130
04:45 PM	0	2	9	11	3	31	0	34	2	2	2	6	7	40	7	54	105
05:00 PM	0	0	5	5	0	34	3	37	0	1	6	7	3	52	5	60	109
Total Volume	2	7	26	35	6	131	4	141	7	6	18	31	25	199	19	243	450
% App. Total	5.7	20	74.3		4.3	92.9	2.8		22.6	19.4	58.1		10.3	81.9	7.8		
PHF	.250	.583	.722	.795	.500	.862	.333	.839	.438	.500	.643	.705	.781	.858	.679	.856	.865

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

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	3	6	9	0	28	0	28	1	3	7	11	7	49	2	58
+15 mins.	2	2	6	10	3	38	1	42	4	0	3	7	8	58	5	71
+30 mins.	0	2	9	11	3	31	0	34	2	2	2	6	7	40	7	54
+45 mins.	0	0	5	5	0	34	3	37	0	1	6	7	3	52	5	60
Total Volume	2	7	26	35	6	131	4	141	7	6	18	31	25	199	19	243
% App. Total	5.7	20	74.3		4.3	92.9	2.8		22.6	19.4	58.1		10.3	81.9	7.8	
PHF	.250	.583	.722	.795	.500	.862	.333	.839	.438	.500	.643	.705	.781	.858	.679	.856

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

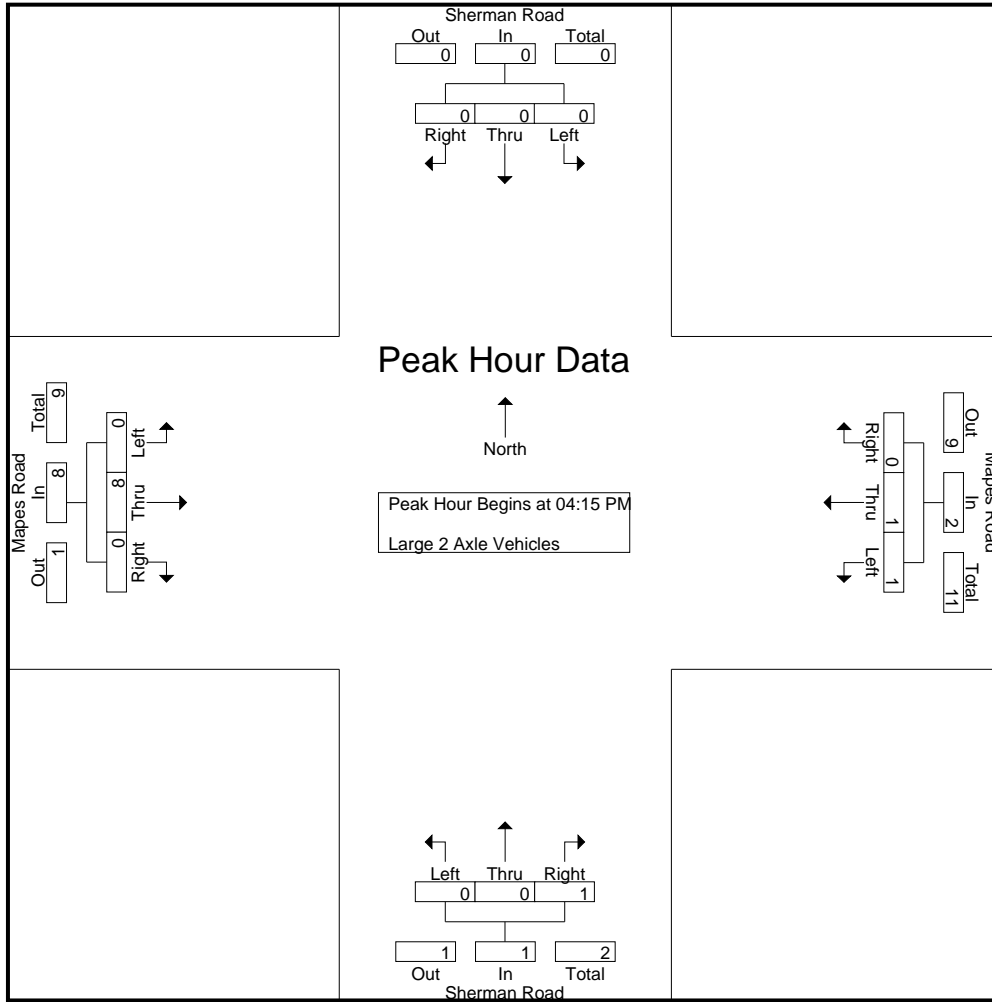
Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	1	0	0	1	4
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	4	0	4	5
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
Total	0	0	0	0	1	4	0	5	0	0	1	1	1	6	0	7	13
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	1	1	0	2	0	0	0	0	0	5	0	5	7
Grand Total	0	0	0	0	2	5	0	7	0	0	1	1	1	11	0	12	20
Apprch %	0	0	0		28.6	71.4	0		0	0	100		8.3	91.7	0		
Total %	0	0	0	0	10	25	0	35	0	0	5	5	5	55	0	60	

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	4	0	4	5
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	1	1	0	2	0	0	1	1	0	8	0	8	11
% App. Total	0	0	0		50	50	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250	.000	.500	.000	.500	.550

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

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	4	0	4
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	1	1	0	2	0	0	1	1	0	8	0	8
% App. Total	0	0	0	0	50	50	0	100	0	0	100	100	0	100	0	100
PHF	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250	.000	.500	.000	.500

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

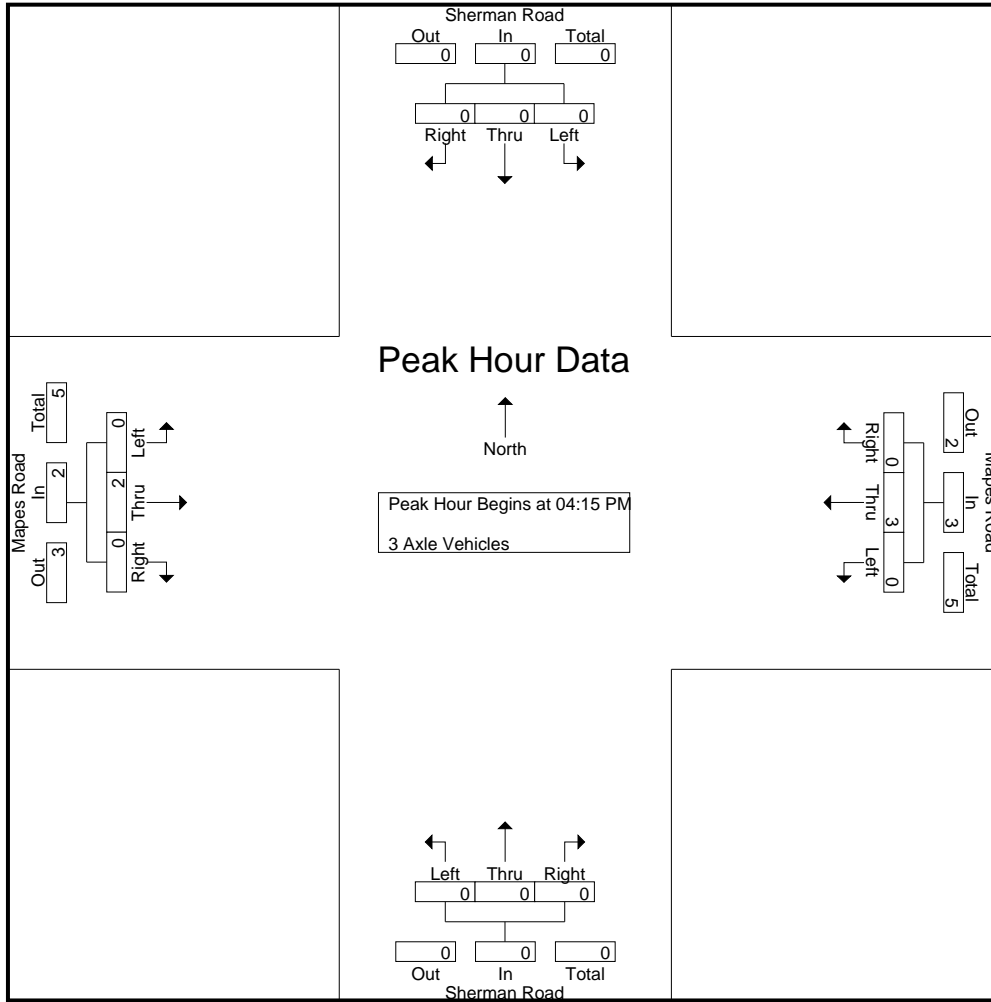
Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	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	2	0	2	0	0	0	0	0	1	0	1	3
Grand Total	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0		0	57.1	0	57.1	0	0	0		0	42.9	0	42.9	

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.000	.500	.625

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

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.000	.500

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

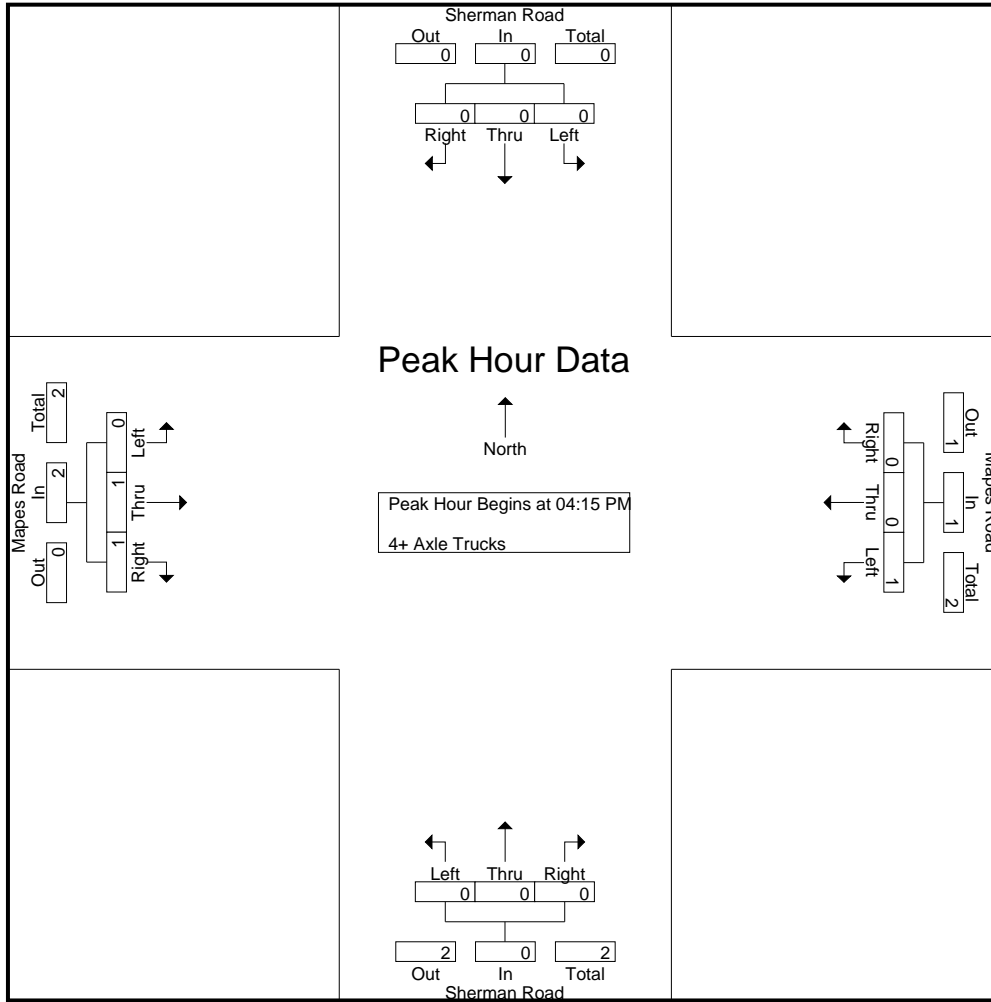
Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	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	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Grand Total	0	0	0	0	1	0	0	1	0	0	0	0	0	2	1	3	4
Apprch %	0	0	0		100	0	0		0	0	0		0	66.7	33.3		
Total %	0	0	0	0	25	0	0	25	0	0	0	0	0	50	25	75	

Start Time	Sherman Road Southbound				Mapes Road Westbound				Sherman Road Northbound				Mapes Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	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	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	2	3
% App. Total	0	0	0		100	0	0		0	0	0		0	50	50		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.250	.250	.500	.375

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

City of Menifee
 N/S: Sherman Road
 E/W: Mapes Road
 Weather: Clear

File Name : 05_MEN_Sherman_Mapes PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



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

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

Location: Menifee
 N/S: Sherman Road
 E/W: Mapes Road



Date: 10/5/2021
 Day: Tuesday

PEDESTRIANS

	North Leg Sherman Road	East Leg Mapes Road	South Leg Sherman Road	West Leg Mapes Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	2	0	2	4
7:15 AM	2	1	1	0	4
7:30 AM	0	1	1	0	2
7:45 AM	0	0	0	0	0
8:00 AM	2	1	1	1	5
8:15 AM	2	0	0	0	2
8:30 AM	1	0	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	7	5	3	3	18

	North Leg Sherman Road	East Leg Mapes Road	South Leg Sherman Road	West Leg Mapes Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
4:30 PM	0	1	0	0	1
4:45 PM	0	2	0	0	2
5:00 PM	0	0	0	0	0
5:15 PM	0	0	2	2	4
5:30 PM	0	0	0	0	0
5:45 PM	1	0	0	0	1
TOTAL VOLUMES:	1	4	2	2	9

Location: Menifee
 N/S: Sherman Road
 E/W: Mapes Road



Date: 10/5/2021
 Day: Tuesday

BICYCLES

	Southbound Sherman Road			Westbound Mapes Road			Northbound Sherman Road			Eastbound Mapes Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	3	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	3	0	0	0	0	0	0	0	0	0	3

	Southbound Sherman Road			Westbound Mapes Road			Northbound Sherman Road			Eastbound Mapes Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

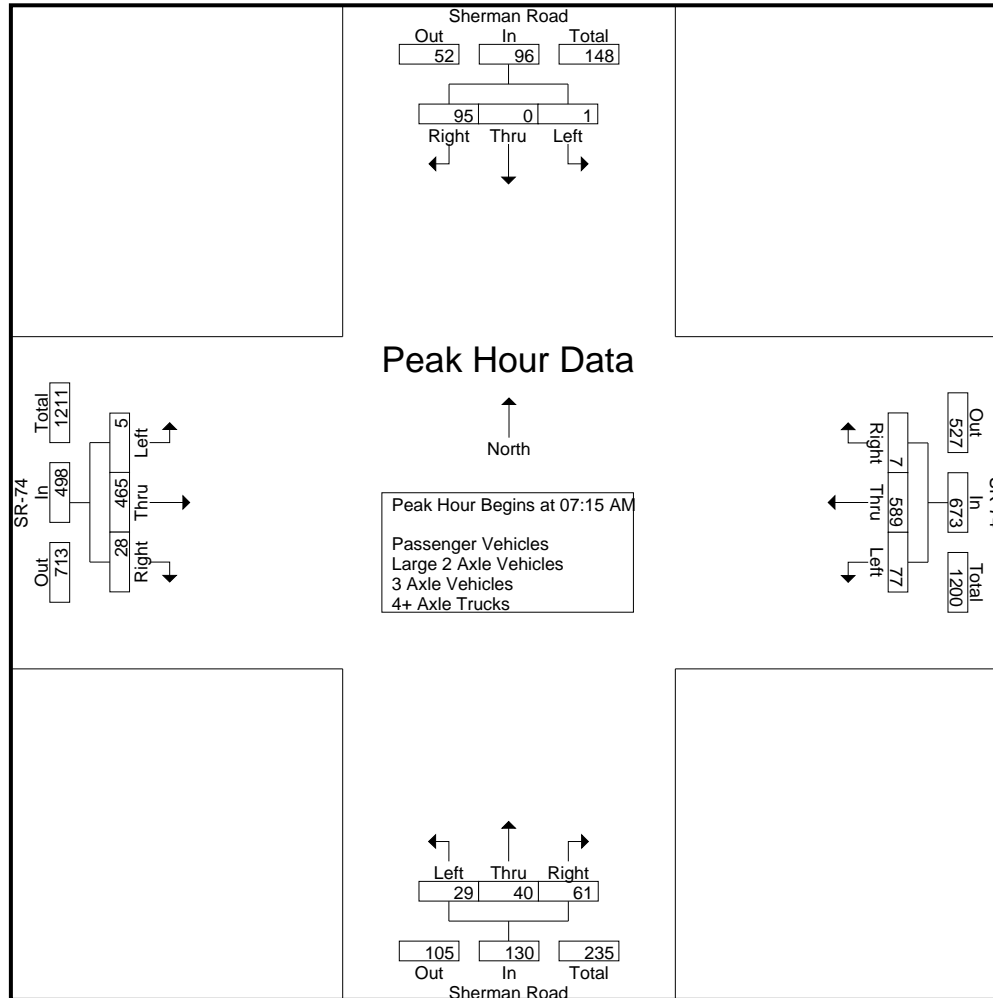
City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

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

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	31	0	31	15	137	0	0	152	7	7	23	13	37	0	94	5	1	99	14	319	333
07:15 AM	1	0	19	0	20	13	138	0	0	151	9	7	18	13	34	0	134	8	1	142	14	347	361
07:30 AM	0	0	29	0	29	24	157	2	0	183	10	10	18	9	38	0	118	5	1	123	10	373	383
07:45 AM	0	0	27	0	27	26	149	1	0	176	4	7	16	7	27	4	103	6	0	113	7	343	350
Total	1	0	106	0	107	78	581	3	0	662	30	31	75	42	136	4	449	24	3	477	45	1382	1427
08:00 AM	0	0	20	0	20	14	145	4	0	163	6	16	9	5	31	1	110	9	0	120	5	334	339
08:15 AM	0	0	27	0	27	10	127	3	0	140	6	12	11	5	29	6	111	4	0	121	5	317	322
08:30 AM	0	0	17	1	17	11	101	4	0	116	8	9	8	6	25	3	90	4	3	97	10	255	265
08:45 AM	0	0	20	0	20	12	124	4	0	140	1	13	10	3	24	1	103	3	0	107	3	291	294
Total	0	0	84	1	84	47	497	15	0	559	21	50	38	19	109	11	414	20	3	445	23	1197	1220
Grand Total	1	0	190	1	191	125	1078	18	0	1221	51	81	113	61	245	15	863	44	6	922	68	2579	2647
Apprch %	0.5	0	99.5			10.2	88.3	1.5			20.8	33.1	46.1			1.6	93.6	4.8					
Total %	0	0	7.4		7.4	4.8	41.8	0.7		47.3	2	3.1	4.4		9.5	0.6	33.5	1.7		35.8	2.6	97.4	
Passenger Vehicles	1	0	179		181	123	1007	16		1146	47	69	111		286	13	765	36		820	0	0	2433
% Passenger Vehicles	100	0	94.2	100	94.3	98.4	93.4	88.9	0	93.9	92.2	85.2	98.2	96.7	93.5	86.7	88.6	81.8	100	88.4	0	0	91.9
Large 2 Axle Vehicles	0	0	5		5	1	42	1		44	3	12	2		19	2	55	5		62	0	0	130
% Large 2 Axle Vehicles	0	0	2.6	0	2.6	0.8	3.9	5.6	0	3.6	5.9	14.8	1.8	3.3	6.2	13.3	6.4	11.4	0	6.7	0	0	4.9
3 Axle Vehicles	0	0	3		3	1	7	0		8	1	0	0		1	0	17	0		17	0	0	29
% 3 Axle Vehicles	0	0	1.6	0	1.6	0.8	0.6	0	0	0.7	2	0	0	0	0.3	0	2	0	0	1.8	0	0	1.1
4+ Axle Trucks	0	0	3		3	0	22	1		23	0	0	0		0	0	26	3		29	0	0	55
% 4+ Axle Trucks	0	0	1.6	0	1.6	0	2	5.6	0	1.9	0	0	0	0	0	0	3	6.8	0	3.1	0	0	2.1

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	1	0	19	20	13	138	0	151	9	7	18	34	0	134	8	142	347
07:30 AM	0	0	29	29	24	157	2	183	10	10	18	38	0	118	5	123	373
07:45 AM	0	0	27	27	26	149	1	176	4	7	16	27	4	103	6	113	343
08:00 AM	0	0	20	20	14	145	4	163	6	16	9	31	1	110	9	120	334
Total Volume	1	0	95	96	77	589	7	673	29	40	61	130	5	465	28	498	1397
% App. Total	1	0	99		11.4	87.5	1		22.3	30.8	46.9		1	93.4	5.6		
PHF	.250	.000	.819	.828	.740	.938	.438	.919	.725	.625	.847	.855	.313	.868	.778	.877	.936



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
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				07:15 AM				
+0 mins.	0	0	31	31	13	138	0	151	7	7	23	37	0	134	8	142	
+15 mins.	1	0	19	20	24	157	2	183	9	7	18	34	0	118	5	123	
+30 mins.	0	0	29	29	26	149	1	176	10	10	18	38	4	103	6	113	
+45 mins.	0	0	27	27	14	145	4	163	4	7	16	27	1	110	9	120	
Total Volume	1	0	106	107	77	589	7	673	30	31	75	136	5	465	28	498	
% App. Total	0.9	0	99.1		11.4	87.5	1		22.1	22.8	55.1		1	93.4	5.6		
PHF	.250	.000	.855	.863	.740	.938	.438	.919	.750	.775	.815	.895	.313	.868	.778	.877	

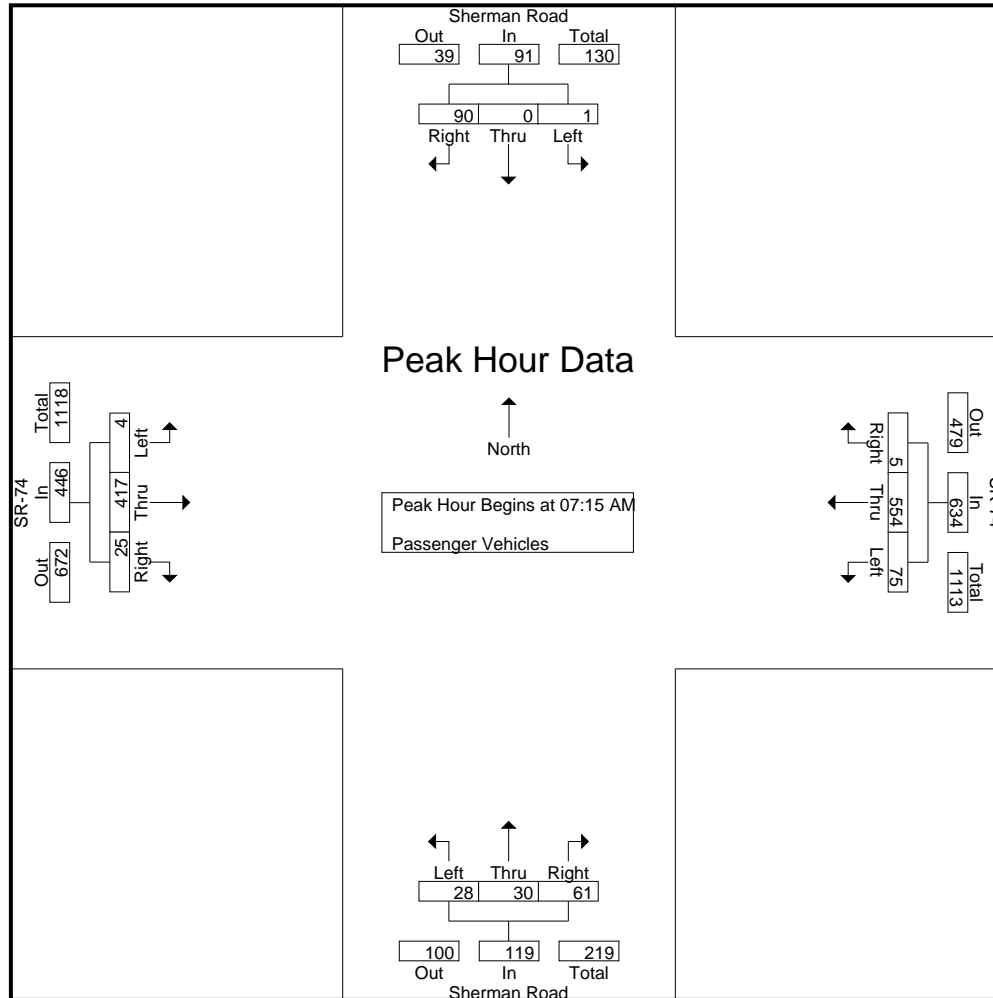
City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	27	0	27	15	133	0	0	148	5	7	22	12	34	0	76	4	1	80	13	289	302
07:15 AM	1	0	18	0	19	12	129	0	0	141	9	4	18	13	31	0	121	7	1	128	14	319	333
07:30 AM	0	0	28	0	28	23	151	2	0	176	10	8	18	9	36	0	104	5	1	109	10	349	359
07:45 AM	0	0	25	0	25	26	140	1	0	167	3	5	16	7	24	3	96	6	0	105	7	321	328
Total	1	0	98	0	99	76	553	3	0	632	27	24	74	41	125	3	397	22	3	422	44	1278	1322
08:00 AM	0	0	19	0	19	14	134	2	0	150	6	13	9	5	28	1	96	7	0	104	5	301	306
08:15 AM	0	0	27	0	27	10	116	3	0	129	6	12	11	5	29	6	97	3	0	106	5	291	296
08:30 AM	0	0	16	1	16	11	91	4	0	106	7	7	7	5	21	2	83	3	3	88	9	231	240
08:45 AM	0	0	19	0	19	12	113	4	0	129	1	13	10	3	24	1	92	1	0	94	3	266	269
Total	0	0	81	1	81	47	454	13	0	514	20	45	37	18	102	10	368	14	3	392	22	1089	1111
Grand Total	1	0	179	1	180	123	1007	16	0	1146	47	69	111	59	227	13	765	36	6	814	66	2367	2433
Apprch %	0.6	0	99.4			10.7	87.9	1.4			20.7	30.4	48.9			1.6	94	4.4					
Total %	0	0	7.6		7.6	5.2	42.5	0.7		48.4	2	2.9	4.7		9.6	0.5	32.3	1.5		34.4	2.7	97.3	

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	0	18	19	12	129	0	141	9	4	18	31	0	121	7	128	319
07:30 AM	0	0	28	28	23	151	2	176	10	8	18	36	0	104	5	109	349
07:45 AM	0	0	25	25	26	140	1	167	3	5	16	24	3	96	6	105	321
08:00 AM	0	0	19	19	14	134	2	150	6	13	9	28	1	96	7	104	301
Total Volume	1	0	90	91	75	554	5	634	28	30	61	119	4	417	25	446	1290
% App. Total	1.1	0	98.9		11.8	87.4	0.8		23.5	25.2	51.3		0.9	93.5	5.6		
PHF	.250	.000	.804	.813	.721	.917	.625	.901	.700	.577	.847	.826	.333	.862	.893	.871	.924



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
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				07:15 AM				
+0 mins.	1	0	18	19	12	129	0	141	9	4	18	31	0	121	7	128	
+15 mins.	0	0	28	28	23	151	2	176	10	8	18	36	0	104	5	109	
+30 mins.	0	0	25	25	26	140	1	167	3	5	16	24	3	96	6	105	
+45 mins.	0	0	19	19	14	134	2	150	6	13	9	28	1	96	7	104	
Total Volume	1	0	90	91	75	554	5	634	28	30	61	119	4	417	25	446	
% App. Total	1.1	0	98.9		11.8	87.4	0.8		23.5	25.2	51.3		0.9	93.5	5.6		
PHF	.250	.000	.804	.813	.721	.917	.625	.901	.700	.577	.847	.826	.333	.862	.893	.871	

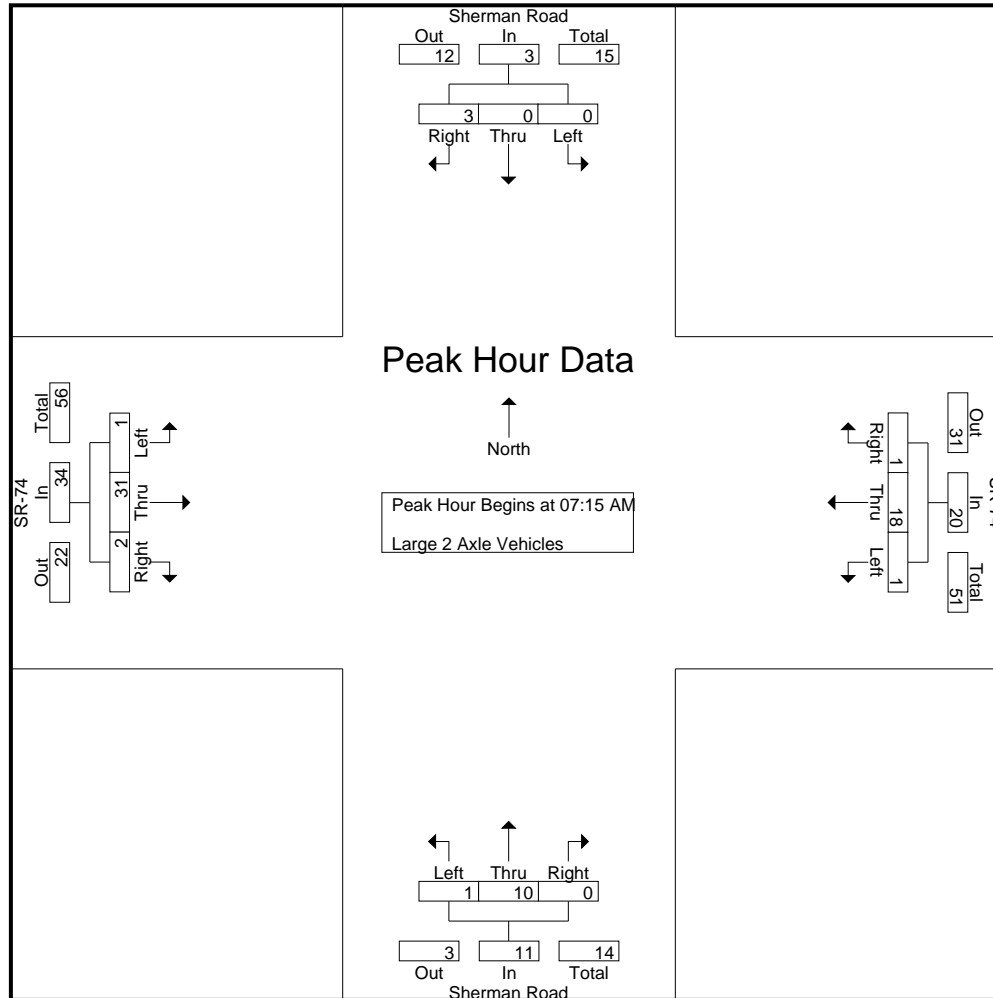
City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	1	0	1	0	3	0	0	3	1	0	1	1	2	0	12	1	0	13	1	19	20
07:15 AM	0	0	0	0	0	1	4	0	0	5	0	3	0	0	3	0	6	1	0	7	0	15	15
07:30 AM	0	0	1	0	1	0	5	0	0	5	0	2	0	0	2	0	8	0	0	8	0	16	16
07:45 AM	0	0	1	0	1	0	5	0	0	5	1	2	0	0	3	1	4	0	0	5	0	14	14
Total	0	0	3	0	3	1	17	0	0	18	2	7	1	1	10	1	30	2	0	33	1	64	65
08:00 AM	0	0	1	0	1	0	4	1	0	5	0	3	0	0	3	0	13	1	0	14	0	23	23
08:15 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	4	0	0	4	0	10	10
08:30 AM	0	0	0	0	0	0	7	0	0	7	1	2	1	1	4	1	3	0	0	4	1	15	16
08:45 AM	0	0	1	0	1	0	8	0	0	8	0	0	0	0	0	0	5	2	0	7	0	16	16
Total	0	0	2	0	2	0	25	1	0	26	1	5	1	1	7	1	25	3	0	29	1	64	65
Grand Total	0	0	5	0	5	1	42	1	0	44	3	12	2	2	17	2	55	5	0	62	2	128	130
Apprch %	0	0	100			2.3	95.5	2.3			17.6	70.6	11.8			3.2	88.7	8.1					
Total %	0	0	3.9		3.9	0.8	32.8	0.8		34.4	2.3	9.4	1.6		13.3	1.6	43	3.9		48.4	1.5	98.5	

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	0	0	0	1	4	0	5	0	3	0	3	0	6	1	7	15
07:30 AM	0	0	1	1	0	5	0	5	0	2	0	2	0	8	0	8	16
07:45 AM	0	0	1	1	0	5	0	5	1	2	0	3	1	4	0	5	14
08:00 AM	0	0	1	1	0	4	1	5	0	3	0	3	0	13	1	14	23
Total Volume	0	0	3	3	1	18	1	20	1	10	0	11	1	31	2	34	68
% App. Total	0	0	100		5	90	5		9.1	90.9	0		2.9	91.2	5.9		
PHF	.000	.000	.750	.750	.250	.900	.250	1.00	.250	.833	.000	.917	.250	.596	.500	.607	.739



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
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				07:15 AM				
+0 mins.	0	0	0	0	1	4	0	5	0	3	0	3	0	6	1	7	
+15 mins.	0	0	1	1	0	5	0	5	0	2	0	2	0	8	0	8	
+30 mins.	0	0	1	1	0	5	0	5	1	2	0	3	1	4	0	5	
+45 mins.	0	0	1	1	0	4	1	5	0	3	0	3	0	13	1	14	
Total Volume	0	0	3	3	1	18	1	20	1	10	0	11	1	31	2	34	
% App. Total	0	0	100		5	90	5		9.1	90.9	0		2.9	91.2	5.9		
PHF	.000	.000	.750	.750	.250	.900	.250	1.000	.250	.833	.000	.917	.250	.596	.500	.607	

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

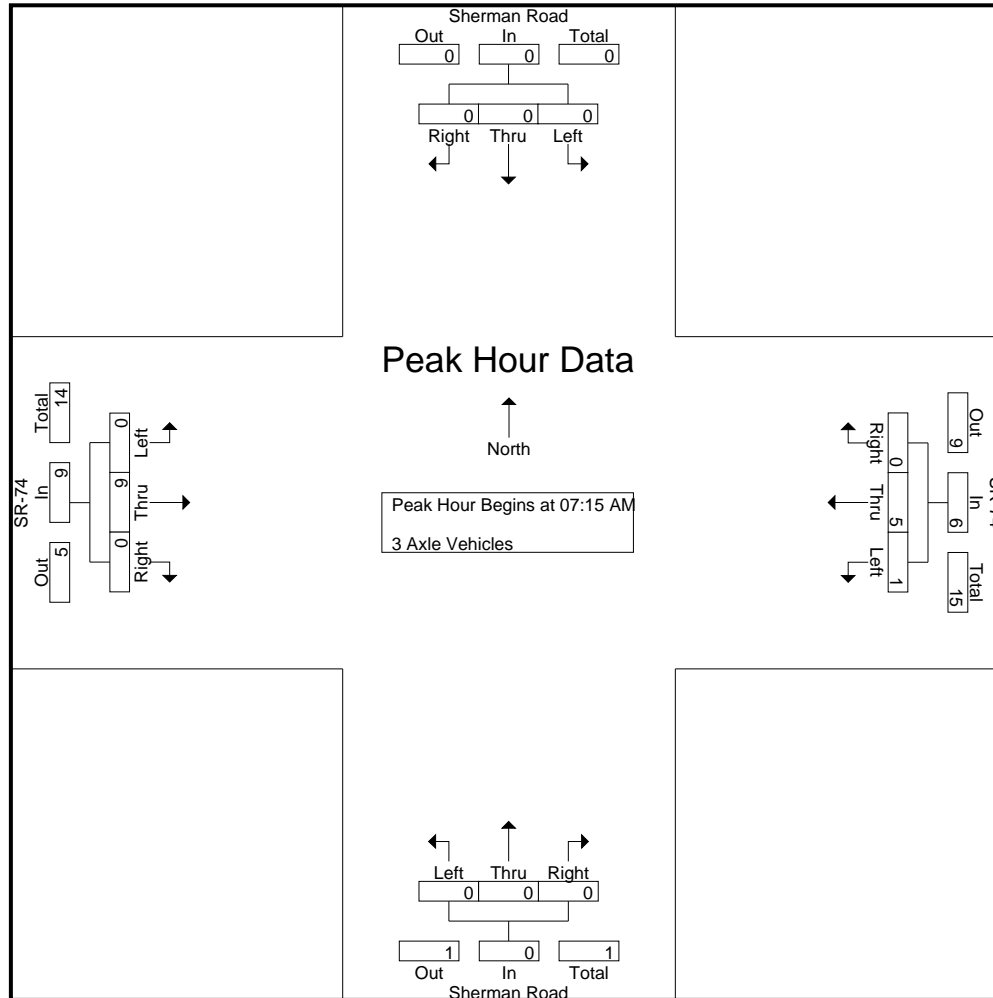
Groups Printed- 3 Axle Vehicles

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	3	0	3	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	7	7
07:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	5	5
07:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
Total	0	0	3	0	3	1	1	0	0	2	1	0	0	0	1	0	11	0	0	11	0	17	17
08:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	5	5
08:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	5	5
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
Total	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	12	12
Grand Total	0	0	3	0	3	1	7	0	0	8	1	0	0	0	1	0	17	0	0	17	0	29	29
Apprch %	0	0	100			12.5	87.5	0			100	0	0			0	100	0			0		
Total %	0	0	10.3		10.3	3.4	24.1	0		27.6	3.4	0	0		3.4	0	58.6	0		58.6	0	100	

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
07:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
Total Volume	0	0	0	0	1	5	0	6	0	0	0	0	0	9	0	9	15
% App. Total	0	0	0		16.7	83.3	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.313	.000	.375	.000	.000	.000	.000	.000	.563	.000	.563	.750

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
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				07:15 AM				
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	
+15 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
+45 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	
Total Volume	0	0	0	0	1	5	0	6	0	0	0	0	0	9	0	9	
% App. Total	0	0	0	0	16.7	83.3	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.313	.000	.375	.000	.000	.000	.000	.000	.563	.000	.563	

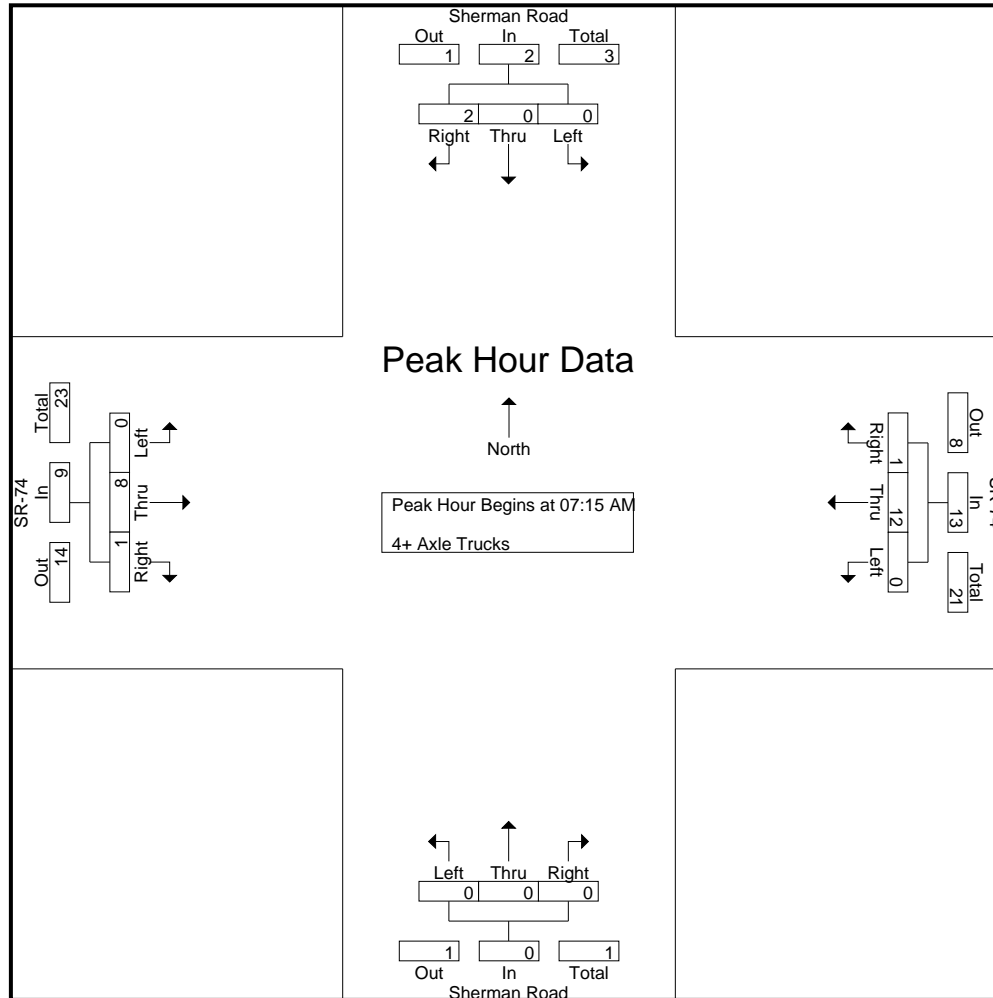
City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	4	4
07:15 AM	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	8	8
07:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	5	5
07:45 AM	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	6	6
Total	0	0	2	0	2	0	10	0	0	10	0	0	0	0	0	0	11	0	0	11	0	0	23	23
08:00 AM	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	0	1	0	1	0	0	5	5
08:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	7	1	0	8	0	0	11	11
08:30 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	3	1	0	4	0	0	8	8
08:45 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	8	8
Total	0	0	1	0	1	0	12	1	0	13	0	0	0	0	0	0	15	3	0	18	0	0	32	32
Grand Total	0	0	3	0	3	0	22	1	0	23	0	0	0	0	0	0	26	3	0	29	0	0	55	55
Apprch %	0	0	100			0	95.7	4.3			0	0	0			0	89.7	10.3			0	0		
Total %	0	0	5.5		5.5	0	40	1.8		41.8	0	0	0		0	0	47.3	5.5		52.7	0	0	100	

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. 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	0	1	1	0	4	0	4	0	0	0	0	0	3	0	3	8
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
07:45 AM	0	0	1	1	0	4	0	4	0	0	0	0	0	1	0	1	6
08:00 AM	0	0	0	0	0	3	1	4	0	0	0	0	0	0	1	1	5
Total Volume	0	0	2	2	0	12	1	13	0	0	0	0	0	8	1	9	24
% App. Total	0	0	100		0	92.3	7.7		0	0	0		0	88.9	11.1		
PHF	.000	.000	.500	.500	.000	.750	.250	.813	.000	.000	.000	.000	.000	.500	.250	.563	.750



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 AM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
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				07:15 AM				
+0 mins.	0	0	1	1	0	4	0	4	0	0	0	0	0	3	0	3	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	
+30 mins.	0	0	1	1	0	4	0	4	0	0	0	0	0	1	0	1	
+45 mins.	0	0	0	0	0	3	1	4	0	0	0	0	0	0	1	1	
Total Volume	0	0	2	2	0	12	1	13	0	0	0	0	0	8	1	9	
% App. Total	0	0	100		0	92.3	7.7		0	0	0		0	88.9	11.1		
PHF	.000	.000	.500	.500	.000	.750	.250	.813	.000	.000	.000	.000	.000	.500	.250	.563	

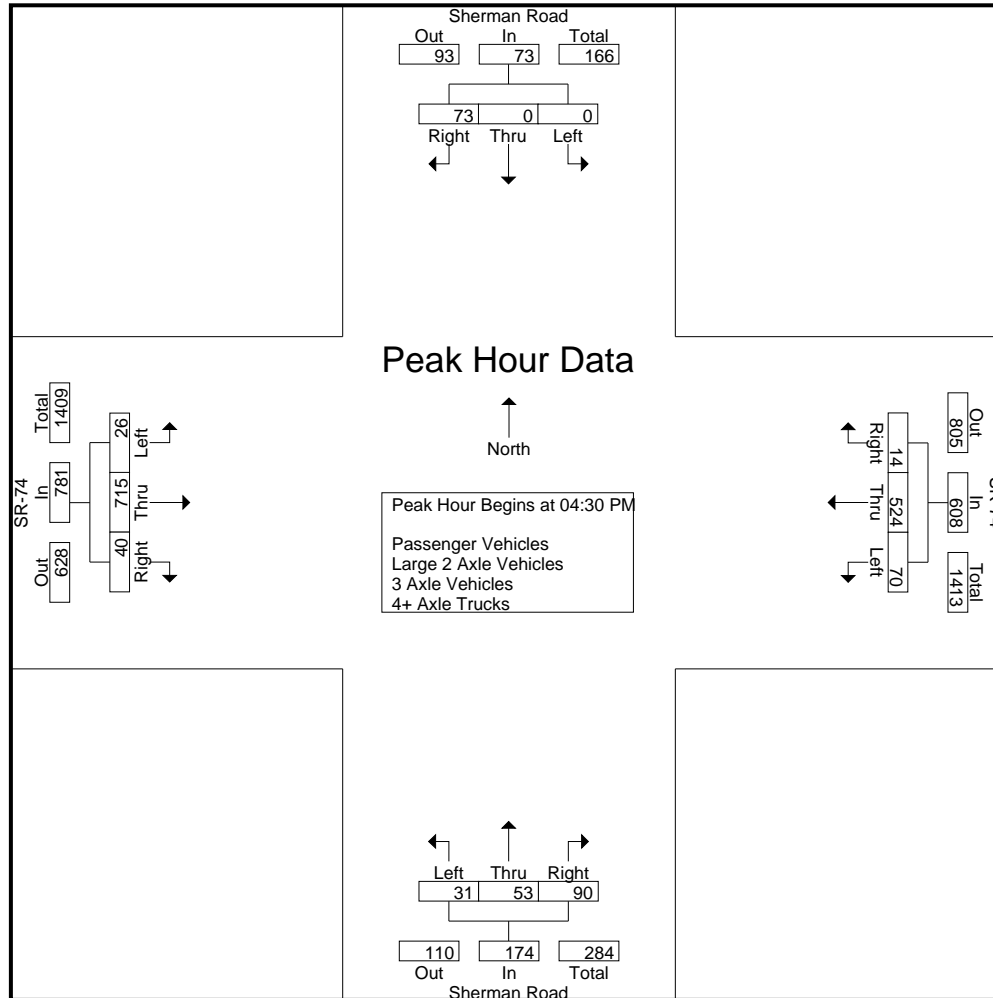
City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

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

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	14	0	14	16	142	1	0	159	9	16	23	14	48	7	150	8	0	165	14	386	400
04:15 PM	0	0	25	0	25	11	121	1	0	133	9	13	24	1	46	2	180	11	3	193	4	397	401
04:30 PM	0	0	25	0	25	21	142	2	0	165	9	18	20	10	47	7	168	9	5	184	15	421	436
04:45 PM	0	0	13	0	13	10	120	3	0	133	5	12	24	7	41	4	162	10	4	176	11	363	374
Total	0	0	77	0	77	58	525	7	0	590	32	59	91	32	182	20	660	38	12	718	44	1567	1611
05:00 PM	0	0	10	0	10	21	140	4	0	165	11	9	18	8	38	3	208	6	1	217	9	430	439
05:15 PM	0	0	25	0	25	18	122	5	0	145	6	14	28	9	48	12	177	15	1	204	10	422	432
05:30 PM	0	0	17	0	17	25	151	4	0	180	6	7	25	12	38	6	163	11	4	180	16	415	431
05:45 PM	1	0	17	0	18	15	120	2	0	137	4	9	21	5	34	0	139	12	1	151	6	340	346
Total	1	0	69	0	70	79	533	15	0	627	27	39	92	34	158	21	687	44	7	752	41	1607	1648
Grand Total	1	0	146	0	147	137	1058	22	0	1217	59	98	183	66	340	41	1347	82	19	1470	85	3174	3259
Apprch %	0.7	0	99.3			11.3	86.9	1.8			17.4	28.8	53.8			2.8	91.6	5.6					
Total %	0	0	4.6		4.6	4.3	33.3	0.7		38.3	1.9	3.1	5.8		10.7	1.3	42.4	2.6		46.3	2.6	97.4	
Passenger Vehicles	1	0	139		140	136	994	16		1146	54	89	179		388	40	1305	76		1439	0	0	3113
% Passenger Vehicles	100	0	95.2	0	95.2	99.3	94	72.7	0	94.2	91.5	90.8	97.8	100	95.6	97.6	96.9	92.7	94.7	96.6	0	0	95.5
Large 2 Axle Vehicles	0	0	5		5	1	39	6		46	3	9	4		16	1	27	3		31	0	0	98
% Large 2 Axle Vehicles	0	0	3.4	0	3.4	0.7	3.7	27.3	0	3.8	5.1	9.2	2.2	0	3.9	2.4	2	3.7	0	2.1	0	0	3
3 Axle Vehicles	0	0	1		1	0	22	0		22	0	0	0		0	0	7	2		10	0	0	33
% 3 Axle Vehicles	0	0	0.7	0	0.7	0	2.1	0	0	1.8	0	0	0	0	0	0	0.5	2.4	5.3	0.7	0	0	1
4+ Axle Trucks	0	0	1		1	0	3	0		3	2	0	0		2	0	8	1		9	0	0	15
% 4+ Axle Trucks	0	0	0.7	0	0.7	0	0.3	0	0	0.2	3.4	0	0	0	0.5	0	0.6	1.2	0	0.6	0	0	0.5

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	25	25	21	142	2	165	9	18	20	47	7	168	9	184	421
04:45 PM	0	0	13	13	10	120	3	133	5	12	24	41	4	162	10	176	363
05:00 PM	0	0	10	10	21	140	4	165	11	9	18	38	3	208	6	217	430
05:15 PM	0	0	25	25	18	122	5	145	6	14	28	48	12	177	15	204	432
Total Volume	0	0	73	73	70	524	14	608	31	53	90	174	26	715	40	781	1636
% App. Total	0	0	100		11.5	86.2	2.3		17.8	30.5	51.7		3.3	91.5	5.1		
PHF	.000	.000	.730	.730	.833	.923	.700	.921	.705	.736	.804	.906	.542	.859	.667	.900	.951



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				05:00 PM				04:00 PM				04:30 PM				
+0 mins.	0	0	14	14	21	140	4	165	9	16	23	48	7	168	9	184	
+15 mins.	0	0	25	25	18	122	5	145	9	13	24	46	4	162	10	176	
+30 mins.	0	0	25	25	25	151	4	180	9	18	20	47	3	208	6	217	
+45 mins.	0	0	13	13	15	120	2	137	5	12	24	41	12	177	15	204	
Total Volume	0	0	77	77	79	533	15	627	32	59	91	182	26	715	40	781	
% App. Total	0	0	100		12.6	85	2.4		17.6	32.4	50		3.3	91.5	5.1		
PHF	.000	.000	.770	.770	.790	.882	.750	.871	.889	.819	.948	.948	.542	.859	.667	.900	

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

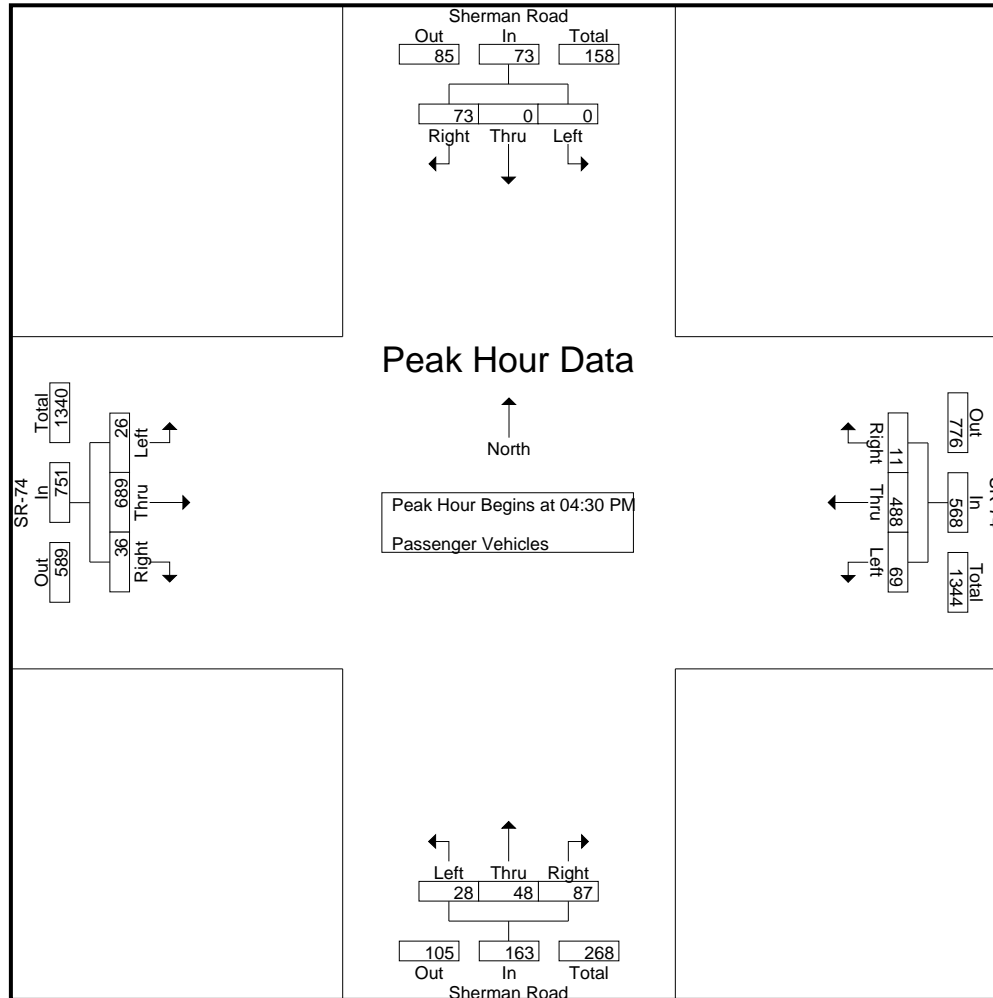
Groups Printed- Passenger Vehicles

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	11	0	11	16	132	1	0	149	8	14	23	14	45	6	144	8	0	158	14	363	377
04:15 PM	0	0	23	0	23	11	117	1	0	129	9	13	23	1	45	2	177	9	3	188	4	385	389
04:30 PM	0	0	25	0	25	20	140	2	0	162	8	18	19	10	45	7	165	9	5	181	15	413	428
04:45 PM	0	0	13	0	13	10	111	3	0	124	5	9	23	7	37	4	157	8	3	169	10	343	353
Total	0	0	72	0	72	57	500	7	0	564	30	54	88	32	172	19	643	34	11	696	43	1504	1547
05:00 PM	0	0	10	0	10	21	127	2	0	150	10	9	17	8	36	3	201	6	1	210	9	406	415
05:15 PM	0	0	25	0	25	18	110	4	0	132	5	12	28	9	45	12	166	13	1	191	10	393	403
05:30 PM	0	0	17	0	17	25	146	3	0	174	5	5	25	12	35	6	161	11	4	178	16	404	420
05:45 PM	1	0	15	0	16	15	111	0	0	126	4	9	21	5	34	0	134	12	1	146	6	322	328
Total	1	0	67	0	68	79	494	9	0	582	24	35	91	34	150	21	662	42	7	725	41	1525	1566
Grand Total	1	0	139	0	140	136	994	16	0	1146	54	89	179	66	322	40	1305	76	18	1421	84	3029	3113
Apprch %	0.7	0	99.3			11.9	86.7	1.4			16.8	27.6	55.6			2.8	91.8	5.3					
Total %	0	0	4.6		4.6	4.5	32.8	0.5		37.8	1.8	2.9	5.9		10.6	1.3	43.1	2.5		46.9	2.7	97.3	

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	25	25	20	140	2	162	8	18	19	45	7	165	9	181	413
04:45 PM	0	0	13	13	10	111	3	124	5	9	23	37	4	157	8	169	343
05:00 PM	0	0	10	10	21	127	2	150	10	9	17	36	3	201	6	210	406
05:15 PM	0	0	25	25	18	110	4	132	5	12	28	45	12	166	13	191	393
Total Volume	0	0	73	73	69	488	11	568	28	48	87	163	26	689	36	751	1555
% App. Total	0	0	100		12.1	85.9	1.9		17.2	29.4	53.4		3.5	91.7	4.8		
PHF	.000	.000	.730	.730	.821	.871	.688	.877	.700	.667	.777	.906	.542	.857	.692	.894	.941

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	25	25	20	140	2	162	8	18	19	45	7	165	9	181	
+15 mins.	0	0	13	13	10	111	3	124	5	9	23	37	4	157	8	169	
+30 mins.	0	0	10	10	21	127	2	150	10	9	17	36	3	201	6	210	
+45 mins.	0	0	25	25	18	110	4	132	5	12	28	45	12	166	13	191	
Total Volume	0	0	73	73	69	488	11	568	28	48	87	163	26	689	36	751	
% App. Total	0	0	100		12.1	85.9	1.9		17.2	29.4	53.4		3.5	91.7	4.8		
PHF	.000	.000	.730	.730	.821	.871	.688	.877	.700	.667	.777	.906	.542	.857	.692	.894	

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

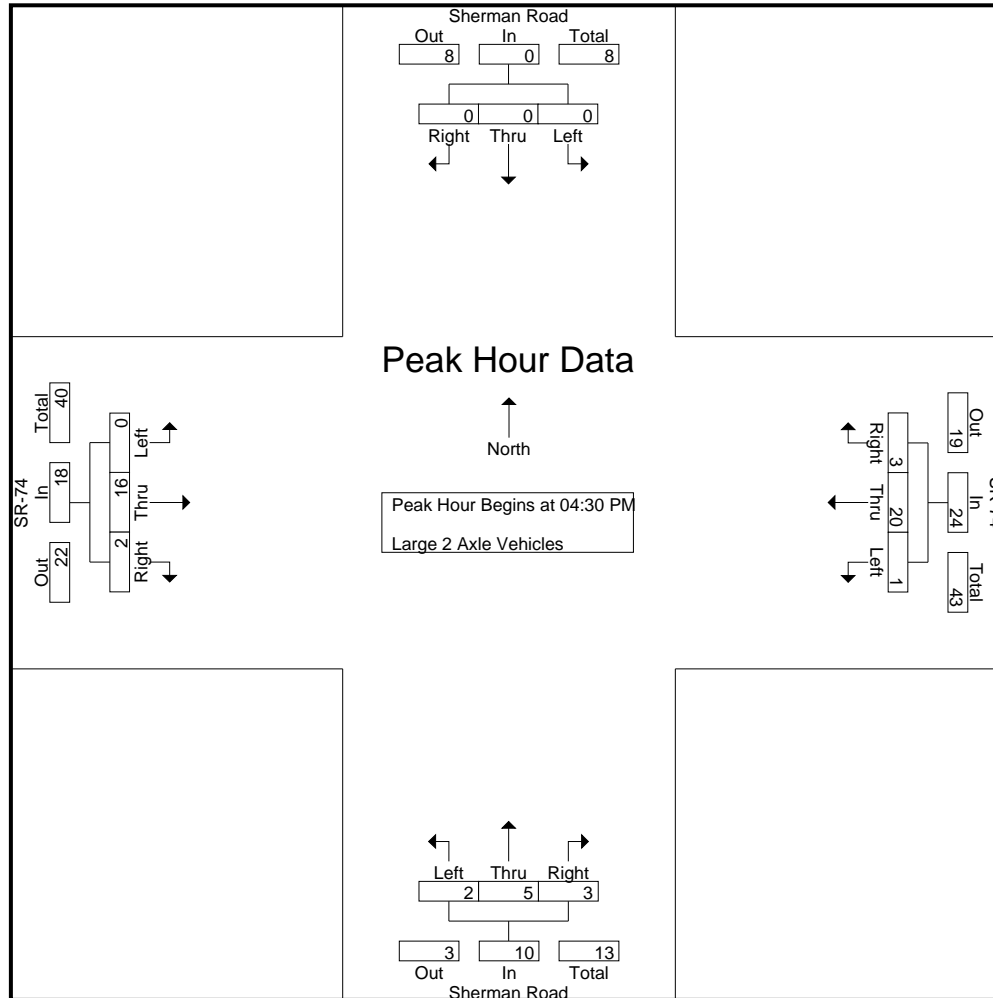
Groups Printed- Large 2 Axle Vehicles

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	3	0	3	0	6	0	0	6	0	2	0	0	2	1	4	0	0	5	0	16	16
04:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	2	1	0	3	0	6	6
04:30 PM	0	0	0	0	0	1	1	0	0	2	1	0	1	0	2	0	1	0	0	1	0	5	5
04:45 PM	0	0	0	0	0	0	4	0	0	4	0	3	1	0	4	0	4	1	0	5	0	13	13
Total	0	0	3	0	3	1	13	0	0	14	1	5	3	0	9	1	11	2	0	14	0	40	40
05:00 PM	0	0	0	0	0	0	6	2	0	8	0	0	1	0	1	0	3	0	0	3	0	12	12
05:15 PM	0	0	0	0	0	0	9	1	0	10	1	2	0	0	3	0	8	1	0	9	0	22	22
05:30 PM	0	0	0	0	0	0	3	1	0	4	1	2	0	0	3	0	2	0	0	2	0	9	9
05:45 PM	0	0	2	0	2	0	8	2	0	10	0	0	0	0	0	0	3	0	0	3	0	15	15
Total	0	0	2	0	2	0	26	6	0	32	2	4	1	0	7	0	16	1	0	17	0	58	58
Grand Total	0	0	5	0	5	1	39	6	0	46	3	9	4	0	16	1	27	3	0	31	0	98	98
Apprch %	0	0	100			2.2	84.8	13			18.8	56.2	25			3.2	87.1	9.7					
Total %	0	0	5.1		5.1	1	39.8	6.1		46.9	3.1	9.2	4.1		16.3	1	27.6	3.1		31.6	0	100	

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	1	1	0	2	1	0	1	2	0	1	0	1	5
04:45 PM	0	0	0	0	0	4	0	4	0	3	1	4	0	4	1	5	13
05:00 PM	0	0	0	0	0	6	2	8	0	0	1	1	0	3	0	3	12
05:15 PM	0	0	0	0	0	9	1	10	1	2	0	3	0	8	1	9	22
Total Volume	0	0	0	0	1	20	3	24	2	5	3	10	0	16	2	18	52
% App. Total	0	0	0	0	4.2	83.3	12.5		20	50	30		0	88.9	11.1		
PHF	.000	.000	.000	.000	.250	.556	.375	.600	.500	.417	.750	.625	.000	.500	.500	.500	.591

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	1	1	0	2	1	0	1	2	0	1	0	1	
+15 mins.	0	0	0	0	0	4	0	4	0	3	1	4	0	4	1	5	
+30 mins.	0	0	0	0	0	6	2	8	0	0	1	1	0	3	0	3	
+45 mins.	0	0	0	0	0	9	1	10	1	2	0	3	0	8	1	9	
Total Volume	0	0	0	0	1	20	3	24	2	5	3	10	0	16	2	18	
% App. Total	0	0	0	0	4.2	83.3	12.5		20	50	30		0	88.9	11.1		
PHF	.000	.000	.000	.000	.250	.556	.375	.600	.500	.417	.750	.625	.000	.500	.500	.500	

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

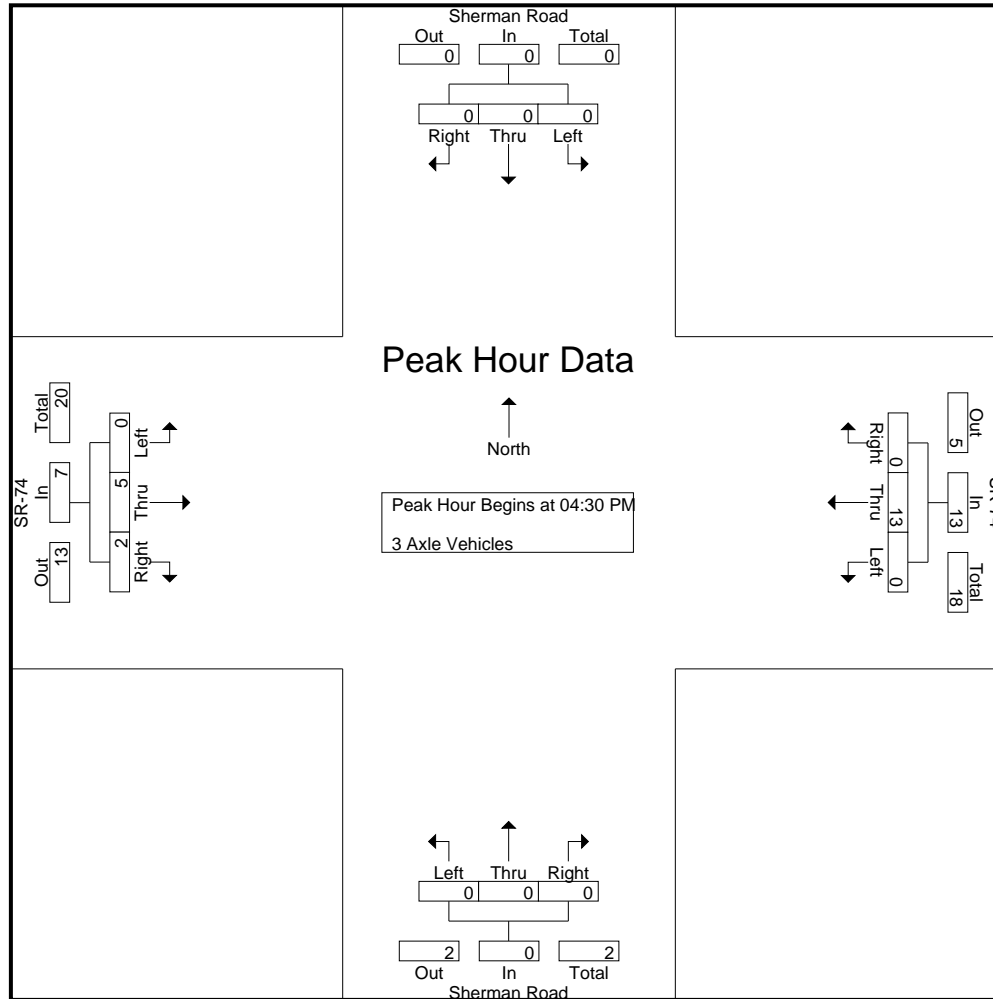
Groups Printed- 3 Axle Vehicles

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	5	5
04:15 PM	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	3
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	1	1	1	1	1	5	6
Total	0	0	1	0	1	0	11	0	0	11	0	0	0	0	0	0	1	1	1	2	1	14	15	
05:00 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	8	8
05:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	0	0	6	6
05:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	2	2
Total	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	6	1	0	7	0	18	18	
Grand Total	0	0	1	0	1	0	22	0	0	22	0	0	0	0	0	0	7	2	1	9	1	32	33	
Apprch %	0	0	100			0	100	0			0	0	0			0	77.8	22.2						
Total %	0	0	3.1		3.1	0	68.8	0		68.8	0	0	0		0	0	21.9	6.2		28.1	3	97		

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	1	1	5
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	1	3	6
Total Volume	0	0	0	0	0	13	0	13	0	0	0	0	0	5	2	7	20
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	71.4	28.6		
PHF	.000	.000	.000	.000	.000	.650	.000	.650	.000	.000	.000	.000	.000	.417	.500	.583	.625

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	0	1	1	1
+30 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	3
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	1	3	3
Total Volume	0	0	0	0	0	13	0	13	0	0	0	0	0	5	2	7	7
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	71.4	28.6	100	100
PHF	.000	.000	.000	.000	.000	.650	.000	.650	.000	.000	.000	.000	.000	.417	.500	.583	.583

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 1

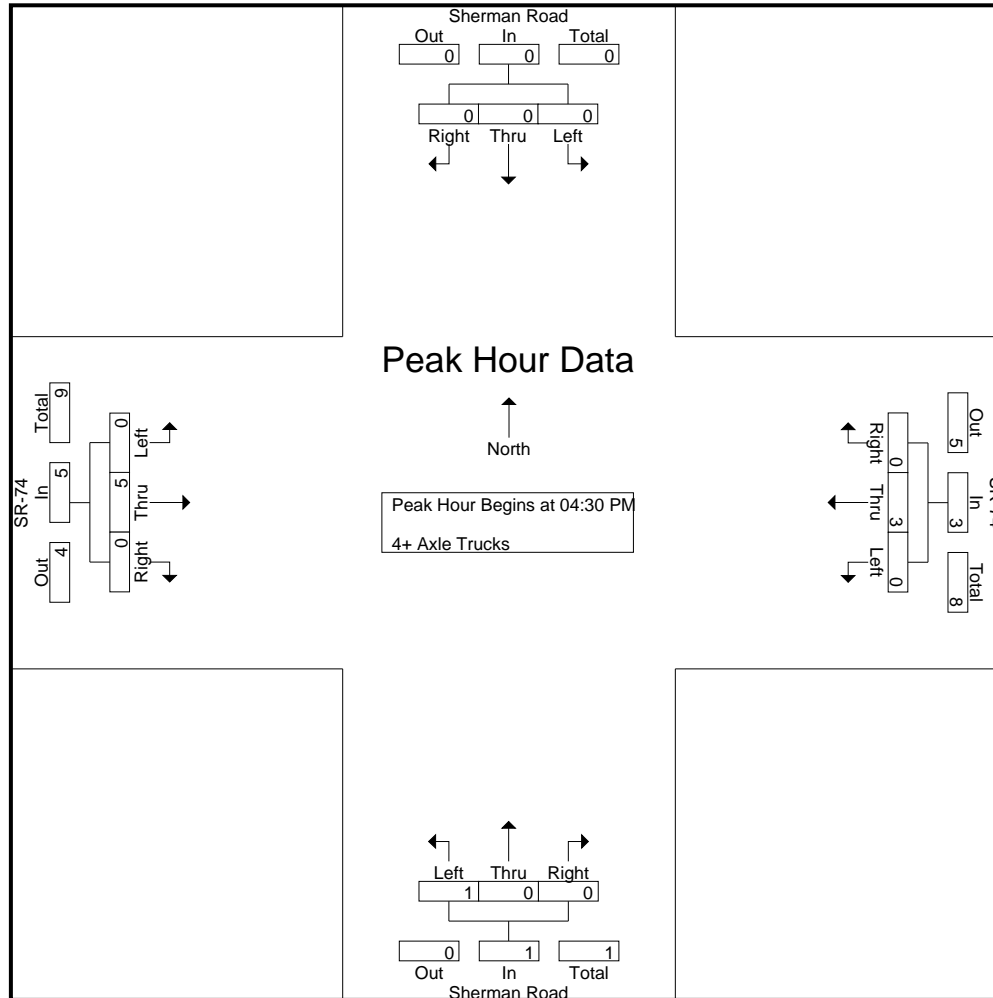
Groups Printed- 4+ Axle Trucks

Start Time	Sherman Road Southbound					SR-74 Westbound					Sherman Road Northbound					SR-74 Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	2	2
04:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	3	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	2	2
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	2	2
Total	0	0	1	0	1	0	1	0	0	1	1	0	0	0	1	0	5	1	0	6	0	0	9	9
05:00 PM	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	1	0	0	1	0	0	4	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	3	0	0	3	0	0	6	6
Grand Total	0	0	1	0	1	0	3	0	0	3	2	0	0	0	2	0	8	1	0	9	0	0	15	15
Apprch %	0	0	100			0	100	0			100	0	0			0	88.9	11.1						
Total %	0	0	6.7		6.7	0	20	0		20	13.3	0	0		13.3	0	53.3	6.7		60	0	0	100	

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	3	0	3	1	0	0	1	0	5	0	5	9
% App. Total	0	0	0		0	100	0		100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.250	.000	.000	.250	.000	.625	.000	.625	.563

City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 2



City of Menifee
 N/S: Sherman Road
 E/W: SR-74
 Weather: Clear

File Name : 06_MEN_Sherman_SR-74 PM
 Site Code : 05121545
 Start Date : 10/5/2021
 Page No : 3

Start Time	Sherman Road Southbound				SR-74 Westbound				Sherman Road Northbound				SR-74 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	
+30 mins.	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Total Volume	0	0	0	0	0	3	0	3	1	0	0	1	0	5	0	5	
% App. Total	0	0	0	0	0	100	0	100	100	0	0	100	0	100	0	100	
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.250	.000	.000	.250	.000	.625	.000	.625	

Location: Menifee
 N/S: Sherman Road
 E/W: SR-74



Date: 10/5/2021
 Day: Tuesday

PEDESTRIANS

	North Leg Sherman Road	East Leg SR-74	South Leg Dead End	West Leg SR-74	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Sherman Road	East Leg SR-74	South Leg Dead End	West Leg SR-74	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

Location: Menifee
 N/S: Sherman Road
 E/W: SR-74



Date: 10/5/2021
 Day: Tuesday

BICYCLES

	Southbound Sherman Road			Westbound SR-74			Northbound Dead End			Eastbound SR-74			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Sherman Road			Westbound SR-74			Northbound Dead End			Eastbound SR-74			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.

City of Menifee
 Mapes Road
 W/ Sherman Road
 24 Hour Directional Classification Count
 Eastbound, Westbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

MENMAWSH
 Site Code: 051-21545

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/05/21	0	26	4	0	2	0	0	0	1	0	0	0	0	33
01:00	0	17	5	0	1	0	0	1	0	0	0	0	0	24
02:00	0	44	5	0	4	0	0	0	1	0	0	0	0	54
03:00	0	43	14	0	7	0	0	0	0	0	1	0	0	65
04:00	0	65	26	1	18	1	0	0	1	0	0	0	0	112
05:00	2	117	53	0	27	1	0	1	1	0	1	0	0	203
06:00	0	166	42	0	28	1	0	5	1	0	0	0	0	243
07:00	3	230	84	1	55	2	0	5	1	0	2	0	0	383
08:00	0	212	71	2	29	0	0	3	2	0	0	0	0	319
09:00	0	159	51	0	26	1	0	5	1	0	0	0	0	243
10:00	1	124	39	1	33	1	0	2	1	0	0	0	0	202
11:00	0	117	59	1	30	2	0	3	3	0	0	0	0	215
12 PM	2	146	53	1	42	3	0	4	4	0	0	0	0	255
13:00	3	185	66	0	34	0	1	1	0	0	1	0	0	291
14:00	1	169	70	3	38	1	1	3	5	0	0	0	0	291
15:00	1	235	95	2	63	2	0	4	0	0	1	0	0	403
16:00	4	268	82	1	48	3	0	2	0	0	1	0	0	409
17:00	4	225	84	0	41	3	0	4	1	0	0	0	0	362
18:00	0	230	63	0	40	2	0	3	0	0	0	0	0	338
19:00	1	162	49	1	24	1	0	4	0	0	0	0	0	242
20:00	0	138	24	1	17	0	0	2	1	0	0	0	0	183
21:00	0	110	19	0	18	0	0	1	0	0	0	0	0	148
22:00	0	59	17	1	2	0	0	0	0	0	0	1	0	80
23:00	1	37	11	0	7	0	0	1	0	0	0	0	0	57
Total	23	3284	1086	16	634	24	2	54	24	0	7	1	0	5155
Percent	0.4%	63.7%	21.1%	0.3%	12.3%	0.5%	0.0%	1.0%	0.5%	0.0%	0.1%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	08:00	07:00	07:00		06:00	11:00		07:00			07:00
Vol.	3	230	84	2	55	2		5	3		2			383
PM Peak	16:00	16:00	15:00	14:00	15:00	12:00	13:00	12:00	14:00		13:00	22:00		16:00
Vol.	4	268	95	3	63	3	1	4	5		1	1		409
Grand Total	23	3284	1086	16	634	24	2	54	24	0	7	1	0	5155
Percent	0.4%	63.7%	21.1%	0.3%	12.3%	0.5%	0.0%	1.0%	0.5%	0.0%	0.1%	0.0%	0.0%	

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City of Menifee
State Route 74
W/ Trumble Road
24 Hour Directional Classification Count
Eastbound, Westbound

MEN74WTR
Site Code: 051-21545

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/05/21	2	140	53	0	19	2	0	2	7	0	1	0	0	226
01:00	0	95	33	2	4	0	0	2	5	1	0	0	0	142
02:00	0	109	56	1	23	4	0	4	7	0	1	0	0	205
03:00	2	198	73	1	41	0	0	6	6	0	1	1	0	329
04:00	3	482	168	9	91	5	0	23	10	1	2	3	0	797
05:00	6	621	300	15	222	10	2	25	11	5	2	0	0	1219
06:00	9	735	337	26	233	20	1	81	23	7	17	2	3	1494
07:00	13	867	416	20	237	20	3	82	12	2	39	4	3	1718
08:00	8	749	354	28	202	13	2	52	18	5	58	4	5	1498
09:00	10	591	315	17	256	19	1	53	21	7	63	5	5	1363
10:00	5	566	291	16	177	7	1	53	21	3	65	4	3	1212
11:00	6	614	276	20	172	10	5	71	20	6	57	4	6	1267
12 PM	11	694	300	18	177	19	1	55	20	8	57	4	5	1369
13:00	14	749	323	27	170	18	2	62	24	6	63	6	2	1466
14:00	4	847	369	26	195	12	0	93	22	9	51	1	2	1631
15:00	14	965	383	25	211	13	2	98	12	11	8	2	3	1747
16:00	14	947	377	10	203	18	3	107	4	19	3	1	3	1709
17:00	13	997	363	14	194	10	3	108	4	9	4	1	0	1720
18:00	8	830	351	13	179	12	4	84	5	6	4	1	0	1497
19:00	3	704	263	17	108	3	0	61	4	4	2	1	1	1171
20:00	8	547	224	10	86	2	2	32	8	0	3	0	0	922
21:00	5	441	112	4	55	1	0	19	1	1	1	0	0	640
22:00	0	339	97	4	26	0	1	10	9	0	3	1	0	490
23:00	1	212	58	4	28	0	0	6	2	0	4	0	0	315
Total	159	14039	5892	327	3309	218	33	1189	276	110	509	45	41	26147
Percent	0.6%	53.7%	22.5%	1.3%	12.7%	0.8%	0.1%	4.5%	1.1%	0.4%	1.9%	0.2%	0.2%	
AM Peak	07:00	07:00	07:00	08:00	09:00	06:00	11:00	07:00	06:00	06:00	10:00	09:00	11:00	07:00
Vol.	13	867	416	28	256	20	5	82	23	7	65	5	6	1718
PM Peak	13:00	17:00	15:00	13:00	15:00	12:00	18:00	17:00	13:00	16:00	13:00	13:00	12:00	15:00
Vol.	14	997	383	27	211	19	4	108	24	19	63	6	5	1747
Grand Total	159	14039	5892	327	3309	218	33	1189	276	110	509	45	41	26147
Percent	0.6%	53.7%	22.5%	1.3%	12.7%	0.8%	0.1%	4.5%	1.1%	0.4%	1.9%	0.2%	0.2%	

APPENDIX 3.2: EXISTING (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Volume Development

1: I-215 Southbound Ramps & Case Rd.

	PHF: 0.967		7:15		Count Date: 10/5/2021									
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
2022 PCE:	269	383	0	0	477	37	22	0	232	0	0	0	1,420	

2: I-215 Northbound Ramps & SR-74

	PHF: 0.941		7:15		Count Date: 10/5/2021									
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
2022 PCE:	0	0	0	178	0	12	28	681	0	0	640	659	2,198	

3: Trumble Rd. & Mapes Rd.

	PHF: 0.886		7:00		Count Date: 10/5/2021									
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
2022 PCE:	62	132	133	3	121	2	1	22	56	260	12	6	810	

4: Trumble Rd. & SR-74

	PHF: 0.970		7:15		Count Date: 10/5/2021									
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
2022 PCE:	0	0	0	36	0	531	298	560	0	0	768	26	2,220	

5: Driveway 1 & Mapes Rd.

	PHF: 0.920		Count Date:										
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2022 PCE:	0	0	0	0	0	0	0	158	0	0	278	0	437

6: Driveway 2 & Mapes Rd.

	PHF: 0.920		Count Date:										
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2022 PCE:	0	0	0	0	0	0	0	158	0	0	278	0	437

7: Sherman Rd. & Mapes Rd.

	PHF: 0.920		7:30		Count Date: 10/5/2021									
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
2022 PCE:	3	14	16	5	2	24	15	106	37	12	251	2	488	

8: Sherman Rd. & Driveway 3

	PHF: 0.920		Count Date:										
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2022 PCE:	0	33	0	0	51	0	0	0	0	0	0	0	84

9: Sherman Rd. & Driveway 4

	PHF: 0.920		Count Date:										
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2022 PCE:	0	33	0	0	51	0	0	0	0	0	0	0	84

10: Sherman Rd. & Driveway 5

	PHF: 0.920		Count Date:										
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2022 PCE:	0	33	0	0	51	0	0	0	0	0	0	0	84

11. Sherman Rd. & SR-74

	PHF: 0.936		7:15		Count Date: 10/5/2021									
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
2022 PCE:	0	0	0	0	0	103	0	553	0	0	640	10	1,305	

Volume Development

1: I-215 Southbound Ramps & Case Rd.

	PHF:	<u>0.928</u>		4:30					Count Date:	<u>10/5/2021</u>				
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	224	288	0	0	726	47	19	0	168	0	0	0	1,472	

2: I-215 Northbound Ramps & SR-74

	PHF:	<u>0.909</u>		4:30					Count Date:	<u>10/5/2021</u>				
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	0	0	0	205	0	37	13	881	0	0	475	565	2,176	

3: Trumble Rd. & Mapes Rd.

	PHF:	<u>0.832</u>		4:30					Count Date:	<u>10/5/2021</u>				
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	10	81	214	51	187	2	0	6	6	165	1	9	731	

4: Trumble Rd. & SR-74

	PHF:	<u>0.927</u>		4:30					Count Date:	<u>10/5/2021</u>				
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	0	0	0	38	0	370	292	793	0	0	670	41	2,204	

5: Driveway 1 & Mapes Rd.

	PHF:	<u>0.920</u>							Count Date:					
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	0	0	0	0	0	0	0	270	0	0	175	0	445	

6: Driveway 2 & Mapes Rd.

	PHF:	<u>0.920</u>							Count Date:					
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	0	0	0	0	0	0	0	270	0	0	175	0	445	

7: Sherman Rd. & Mapes Rd.

	PHF:	<u>0.862</u>		4:15					Count Date:	<u>10/5/2021</u>				
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	7	6	20	2	7	27	26	222	22	11	141	4	495	

8: Sherman Rd. & Driveway 3

	PHF:	<u>0.920</u>							Count Date:					
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	0	33	0	0	40	0	0	0	0	0	0	0	73	

9: Sherman Rd. & Driveway 4

	PHF:	<u>0.920</u>							Count Date:					
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	0	33	0	0	40	0	0	0	0	0	0	0	73	

10: Sherman Rd. & Driveway 5

	PHF:	<u>0.920</u>							Count Date:					
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	0	33	0	0	40	0	0	0	0	0	0	0	73	

11: Sherman Rd. & SR-74

	PHF:	<u>0.951</u>		4:30					Count Date:	<u>10/5/2021</u>				
2022 PCE:	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>	
	0	0	0	0	0	74	0	823	0	0	564	16	1,477	

Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↑	↑	↗
Traffic Volume (vph)	22	232	269	383	477	37
Future Volume (vph)	22	232	269	383	477	37
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		27.0	67.4	40.4	40.4
Total Split (%)	25.1%		30.0%	74.9%	44.9%	44.9%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effct Green (s)	6.3	47.8	13.3	35.2	18.2	18.2
Actuated g/C Ratio	0.13	1.00	0.28	0.74	0.38	0.38
v/c Ratio	0.10	0.15	0.55	0.28	0.68	0.06
Control Delay	28.7	0.2	22.5	3.1	19.5	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	0.2	22.5	3.1	19.5	7.8
LOS	C	A	C	A	B	A
Approach Delay	2.7			11.1	18.6	
Approach LOS	A			B	B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 47.8
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 12.3
 Intersection LOS: B
 Intersection Capacity Utilization 58.3%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)

08/19/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	22	232	269	383	477	37
Future Volume (veh/h)	22	232	269	383	477	37
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	23	0	277	395	492	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	51		353	1247	626	
Arrive On Green	0.03	0.00	0.20	0.66	0.33	0.00
Sat Flow, veh/h	1810	1610	1810	1900	1900	1610
Grp Volume(v), veh/h	23	0	277	395	492	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1900	1900	1610
Q Serve(g_s), s	0.5	0.0	5.5	3.4	8.9	0.0
Cycle Q Clear(g_c), s	0.5	0.0	5.5	3.4	8.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	51		353	1247	626	
V/C Ratio(X)	0.45		0.78	0.32	0.79	
Avail Cap(c_a), veh/h	790		1047	3068	1719	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.2	0.0	14.5	2.8	11.5	0.0
Incr Delay (d2), s/veh	2.3	0.0	1.5	0.1	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.7	0.0	2.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.4	0.0	16.0	2.9	12.4	0.0
LnGrp LOS	C		B	A	B	
Approach Vol, veh/h	23			672	492	
Approach Delay, s/veh	20.4			8.3	12.4	
Approach LOS	C			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.4	18.5			30.9	7.1
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	22.0	34.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	7.5	10.9			5.4	2.5
Green Ext Time (p_c), s	0.3	1.7			1.3	0.0

Intersection Summary

HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Notes

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

Timings
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations	↖	↗↗	↗↗	↖	↖↖
Traffic Volume (vph)	28	681	640	659	178
Future Volume (vph)	28	681	640	659	178
Turn Type	Prot	NA	NA	Free	Prot
Protected Phases	5	2	6		4
Permitted Phases				Free	
Detector Phase	5	2	6		4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.3	22.5	22.5		22.5
Total Split (s)	15.0	59.0	44.0		31.0
Total Split (%)	16.7%	65.6%	48.9%		34.4%
Yellow Time (s)	4.3	4.3	4.3		4.3
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.3	5.3	5.3		5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None		None
Act Effct Green (s)	6.7	18.0	16.6	33.3	10.2
Actuated g/C Ratio	0.20	0.54	0.50	1.00	0.31
v/c Ratio	0.08	0.37	0.38	0.43	0.37
Control Delay	18.4	7.4	9.9	0.9	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	18.4	7.4	9.9	0.9	14.6
LOS	B	A	A	A	B
Approach Delay		7.8	5.3		14.6
Approach LOS		A	A		B

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 33.3
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.43
 Intersection Signal Delay: 6.9
 Intersection LOS: A
 Intersection Capacity Utilization 42.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: SR-74 & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 2: SR-74 & I-215 NB Ramps

Mapes & Sherman (JN 14804)

08/19/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	28	681	640	659	178	12
Future Volume (veh/h)	28	681	640	659	178	12
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	30	724	681	0	189	7
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	66	1862	1118		251	9
Arrive On Green	0.04	0.52	0.31	0.00	0.15	0.15
Sat Flow, veh/h	1810	3705	3705	1610	1729	64
Grp Volume(v), veh/h	30	724	681	0	197	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1802	0
Q Serve(g_s), s	0.5	3.8	5.0	0.0	3.3	0.0
Cycle Q Clear(g_c), s	0.5	3.8	5.0	0.0	3.3	0.0
Prop In Lane	1.00			1.00	0.96	0.04
Lane Grp Cap(c), veh/h	66	1862	1118		262	0
V/C Ratio(X)	0.45	0.39	0.61		0.75	0.00
Avail Cap(c_a), veh/h	561	6196	4465		1480	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	14.8	4.6	9.2	0.0	12.8	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.2	0.0	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	1.0	0.0	1.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.5	4.6	9.4	0.0	14.5	0.0
LnGrp LOS	B	A	A		B	A
Approach Vol, veh/h		754	681		197	
Approach Delay, s/veh		5.1	9.4		14.5	
Approach LOS		A	A		B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		21.4		9.8	6.4	15.0
Change Period (Y+Rc), s		5.3		5.3	5.3	5.3
Max Green Setting (Gmax), s		53.7		25.7	9.7	38.7
Max Q Clear Time (g_c+I1), s		5.8		5.3	2.5	7.0
Green Ext Time (p_c), s		2.9		0.3	0.0	2.7

Intersection Summary

HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection

Intersection Delay, s/veh 10.9

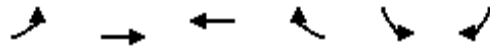
Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔		↔↔	↔		↔	↔↔		↔	↔↔	
Traffic Vol, veh/h	1	22	56	260	12	6	62	132	133	3	121	2
Future Vol, veh/h	1	22	56	260	12	6	62	132	133	3	121	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	25	63	292	13	7	70	148	149	3	136	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	9.8	11.8	10.7	10.4
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	8%	0%	100%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	25%	92%	16%	0%	0%	67%	0%	100%	95%
Vol Right, %	0%	0%	75%	0%	84%	0%	0%	33%	0%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	88	177	12	67	130	130	18	3	81	42
LT Vol	62	0	0	1	0	130	130	0	3	0	0
Through Vol	0	88	44	11	11	0	0	12	0	81	40
RT Vol	0	0	133	0	56	0	0	6	0	0	2
Lane Flow Rate	70	99	199	13	75	146	146	20	3	91	48
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.13	0.17	0.313	0.025	0.129	0.273	0.273	0.034	0.007	0.167	0.087
Departure Headway (Hd)	6.704	6.2	5.67	6.776	6.149	6.722	6.722	5.988	7.155	6.65	6.617
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	534	577	632	527	581	535	535	597	499	538	540
Service Time	4.45	3.947	3.417	4.531	3.905	4.465	4.465	3.731	4.913	4.408	4.374
HCM Lane V/C Ratio	0.131	0.172	0.315	0.025	0.129	0.273	0.273	0.034	0.006	0.169	0.089
HCM Control Delay	10.5	10.2	11	9.7	9.8	12	12	8.9	10	10.7	10
HCM Lane LOS	B	B	B	A	A	B	B	A	A	B	A
HCM 95th-tile Q	0.4	0.6	1.3	0.1	0.4	1.1	1.1	0.1	0	0.6	0.3

Timings
4: SR-74 & Trumble Rd.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↶	↷	↶	↷
Traffic Volume (vph)	298	560	768	26	36	531
Future Volume (vph)	298	560	768	26	36	531
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	35.0	80.0	45.0	45.0	40.0	40.0
Total Split (%)	29.2%	66.7%	37.5%	37.5%	33.3%	33.3%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	17.4	44.5	22.7	22.7	10.2	10.2
Actuated g/C Ratio	0.26	0.67	0.34	0.34	0.15	0.15
v/c Ratio	0.65	0.24	0.64	0.05	0.13	0.81
Control Delay	31.5	5.0	22.7	8.8	28.7	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.5	5.0	22.7	8.8	28.7	15.3
LOS	C	A	C	A	C	B
Approach Delay		14.2	22.3		16.1	
Approach LOS		B	C		B	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 66.3
 Natural Cycle: 85
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 17.6
 Intersection LOS: B
 Intersection Capacity Utilization 63.2%
 ICU Level of Service B
 Analysis Period (min) 15

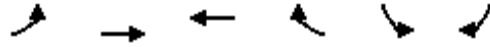
Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)

08/19/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	298	560	768	26	36	531
Future Volume (veh/h)	298	560	768	26	36	531
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	307	577	792	24	37	356
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	363	2083	1126	490	459	409
Arrive On Green	0.20	0.58	0.31	0.31	0.25	0.25
Sat Flow, veh/h	1810	3705	3705	1571	1810	1610
Grp Volume(v), veh/h	307	577	792	24	37	356
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1571	1810	1610
Q Serve(g_s), s	10.1	5.0	12.0	0.7	1.0	13.1
Cycle Q Clear(g_c), s	10.1	5.0	12.0	0.7	1.0	13.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	363	2083	1126	490	459	409
V/C Ratio(X)	0.85	0.28	0.70	0.05	0.08	0.87
Avail Cap(c_a), veh/h	905	4309	2271	988	1036	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	6.6	18.8	14.9	17.6	22.2
Incr Delay (d2), s/veh	2.1	0.1	0.8	0.0	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.2	4.2	0.2	0.4	11.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.0	6.7	19.6	14.9	17.7	24.5
LnGrp LOS	C	A	B	B	B	C
Approach Vol, veh/h		884	816		393	
Approach Delay, s/veh		13.4	19.5		23.8	
Approach LOS		B	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		41.8		20.2	16.4	25.3
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		74.0		35.5	31.0	39.0
Max Q Clear Time (g_c+I1), s		7.0		15.1	12.1	14.0
Green Ext Time (p_c), s		3.8		0.6	0.4	5.2
Intersection Summary						
HCM 6th Ctrl Delay			17.7			
HCM 6th LOS			B			

Intersection													
Int Delay, s/veh 1.8													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		↔		↔	↔	↔		↔			↔	↔	
Traffic Vol, veh/h	15	106	37	12	251	2	3	14	16	5	2	24	
Future Vol, veh/h	15	106	37	12	251	2	3	14	16	5	2	24	
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	2	0	0	1	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0	
Mvmt Flow	16	115	40	13	273	2	3	15	17	5	2	26	
Major/Minor	Major1	Major2	Major2	Minor1	Minor1	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2	
Conflicting Flow All	279	0	0	157	0	0	484	474	139	488	492	278	
Stage 1	-	-	-	-	-	-	169	169	-	303	303	-	
Stage 2	-	-	-	-	-	-	315	305	-	185	189	-	
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3	
Pot Cap-1 Maneuver	1295	-	-	1435	-	-	496	492	915	493	481	766	
Stage 1	-	-	-	-	-	-	838	763	-	711	667	-	
Stage 2	-	-	-	-	-	-	700	666	-	821	748	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1290	-	-	1432	-	-	467	477	912	461	466	762	
Mov Cap-2 Maneuver	-	-	-	-	-	-	537	529	-	542	525	-	
Stage 1	-	-	-	-	-	-	825	751	-	698	657	-	
Stage 2	-	-	-	-	-	-	666	656	-	776	736	-	
Approach	EB	WB	WB	NB	NB	SB	SB	SB	SB	SB	SB	SB	
HCM Control Delay, s	0.7		0.3		10.7		10.4			10.4			
HCM LOS				B			B					B	
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn1	SBLn1	SBLn1	SBLn1	
Capacity (veh/h)	665	1290	-	-	1432	-	-	696					
HCM Lane V/C Ratio	0.054	0.013	-	-	0.009	-	-	0.048					
HCM Control Delay (s)	10.7	7.8	0	-	7.5	0	-	10.4					
HCM Lane LOS	B	A	A	-	A	A	-	B					
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.2					

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	553	640	10	0	103
Future Vol, veh/h	0	553	640	10	0	103
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	588	681	11	0	110

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	656
HCM Lane V/C Ratio	-	-	-	0.167
HCM Control Delay (s)	-	-	-	11.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.6

Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↑	↑	↗
Traffic Volume (vph)	19	168	224	288	726	47
Future Volume (vph)	19	168	224	288	726	47
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		19.0	67.4	48.4	48.4
Total Split (%)	25.1%		21.1%	74.9%	53.8%	53.8%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effct Green (s)	5.9	58.8	13.2	33.0	29.8	29.8
Actuated g/C Ratio	0.10	1.00	0.22	0.56	0.51	0.51
v/c Ratio	0.11	0.11	0.59	0.29	0.81	0.06
Control Delay	33.4	0.1	32.9	6.3	20.9	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	0.1	32.9	6.3	20.9	5.7
LOS	C	A	C	A	C	A
Approach Delay	3.4			17.9	20.0	
Approach LOS	A			B	B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 58.8
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 17.2
 Intersection LOS: B
 Intersection Capacity Utilization 69.0%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)
 08/19/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	168	224	288	726	47
Future Volume (veh/h)	19	168	224	288	726	47
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	20	0	241	310	781	0
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	44		299	1399	896	
Arrive On Green	0.02	0.00	0.17	0.74	0.47	0.00
Sat Flow, veh/h	1810	1610	1810	1900	1900	1610
Grp Volume(v), veh/h	20	0	241	310	781	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1900	1900	1610
Q Serve(g_s), s	0.5	0.0	6.4	2.6	18.5	0.0
Cycle Q Clear(g_c), s	0.5	0.0	6.4	2.6	18.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	44		299	1399	896	
V/C Ratio(X)	0.46		0.81	0.22	0.87	
Avail Cap(c_a), veh/h	599		505	2327	1607	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.1	0.0	20.1	2.1	11.9	0.0
Incr Delay (d2), s/veh	2.7	0.0	2.0	0.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.3	0.0	5.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.9	0.0	22.1	2.1	13.0	0.0
LnGrp LOS	C		C	A	B	
Approach Vol, veh/h	20			551	781	
Approach Delay, s/veh	26.9			10.9	13.0	
Approach LOS	C			B	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.3	29.6			42.9	7.2
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	14.0	42.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	8.4	20.5			4.6	2.5
Green Ext Time (p_c), s	0.2	3.1			1.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

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

Timings
2: SR-74 & I-215 NB Ramps

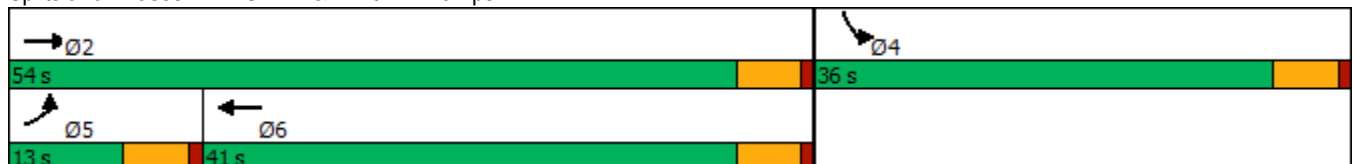


Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations	↖	↗↗	↗↗	↖	↖↖
Traffic Volume (vph)	13	881	475	565	205
Future Volume (vph)	13	881	475	565	205
Turn Type	Prot	NA	NA	Free	Prot
Protected Phases	5	2	6		4
Permitted Phases				Free	
Detector Phase	5	2	6		4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.3	22.5	22.5		22.5
Total Split (s)	13.0	54.0	41.0		36.0
Total Split (%)	14.4%	60.0%	45.6%		40.0%
Yellow Time (s)	4.3	4.3	4.3		4.3
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.3	5.3	5.3		5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None		None
Act Effct Green (s)	5.4	16.7	15.1	38.6	10.7
Actuated g/C Ratio	0.14	0.43	0.39	1.00	0.28
v/c Ratio	0.06	0.62	0.37	0.38	0.53
Control Delay	19.5	10.5	10.7	0.7	16.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	19.5	10.5	10.7	0.7	16.8
LOS	B	B	B	A	B
Approach Delay		10.7	5.3		16.8
Approach LOS		B	A		B

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 38.6
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 8.8
 Intersection Capacity Utilization 46.8%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

Splits and Phases: 2: SR-74 & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
2: SR-74 & I-215 NB Ramps

Mapes & Sherman (JN 14804)

08/19/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑	↗	↑	↙	↘
Traffic Volume (veh/h)	13	881	475	565	205	37
Future Volume (veh/h)	13	881	475	565	205	37
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	14	968	522	0	225	28
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	33	1638	926		298	37
Arrive On Green	0.02	0.45	0.26	0.00	0.19	0.19
Sat Flow, veh/h	1810	3705	3705	1610	1582	197
Grp Volume(v), veh/h	14	968	522	0	254	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1785	0
Q Serve(g_s), s	0.2	5.9	3.7	0.0	4.0	0.0
Cycle Q Clear(g_c), s	0.2	5.9	3.7	0.0	4.0	0.0
Prop In Lane	1.00			1.00	0.89	0.11
Lane Grp Cap(c), veh/h	33	1638	926		336	0
V/C Ratio(X)	0.42	0.59	0.56		0.76	0.00
Avail Cap(c_a), veh/h	471	5938	4353		1851	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	14.4	6.0	9.6	0.0	11.4	0.0
Incr Delay (d2), s/veh	3.1	0.1	0.2	0.0	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.7	0.0	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.5	6.2	9.8	0.0	12.7	0.0
LnGrp LOS	B	A	A		B	A
Approach Vol, veh/h		982	522		254	
Approach Delay, s/veh		6.3	9.8		12.7	
Approach LOS		A	A		B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		18.7		10.9	5.8	12.9
Change Period (Y+Rc), s		5.3		5.3	5.3	5.3
Max Green Setting (Gmax), s		48.7		30.7	7.7	35.7
Max Q Clear Time (g_c+I1), s		7.9		6.0	2.2	5.7
Green Ext Time (p_c), s		4.2		0.4	0.0	2.0

Intersection Summary

HCM 6th Ctrl Delay	8.3
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection

Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	0	6	6	165	1	9	10	81	214	51	187	2
Future Vol, veh/h	0	6	6	165	1	9	10	81	214	51	187	2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	7	7	199	1	11	12	98	258	61	225	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	9.3	11.1	11.5	10.4
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	0%	0%	100%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	11%	100%	25%	0%	0%	10%	0%	100%	97%
Vol Right, %	0%	0%	89%	0%	75%	0%	0%	90%	0%	0%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	54	241	4	8	83	83	10	51	125	64
LT Vol	10	0	0	0	0	83	83	0	51	0	0
Through Vol	0	54	27	4	2	0	0	1	0	125	62
RT Vol	0	0	214	0	6	0	0	9	0	0	2
Lane Flow Rate	12	65	290	5	10	99	99	12	61	150	78
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.022	0.108	0.431	0.009	0.017	0.189	0.189	0.019	0.112	0.253	0.13
Departure Headway (Hd)	6.472	5.969	5.345	6.821	6.296	6.843	6.843	5.713	6.577	6.074	6.053
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	553	601	674	524	568	525	525	626	545	592	592
Service Time	4.206	3.703	3.079	4.569	4.044	4.581	4.581	3.452	4.314	3.812	3.79
HCM Lane V/C Ratio	0.022	0.108	0.43	0.01	0.018	0.189	0.189	0.019	0.112	0.253	0.132
HCM Control Delay	9.4	9.4	12.1	9.6	9.2	11.2	11.2	8.6	10.1	10.9	9.7
HCM Lane LOS	A	A	B	A	A	B	B	A	B	B	A
HCM 95th-tile Q	0.1	0.4	2.2	0	0.1	0.7	0.7	0.1	0.4	1	0.4

Timings
4: SR-74 & Trumble Rd.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷↷	↷↷	↷	↶	↷
Traffic Volume (vph)	292	793	670	41	38	370
Future Volume (vph)	292	793	670	41	38	370
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	39.0	86.0	47.0	47.0	34.0	34.0
Total Split (%)	32.5%	71.7%	39.2%	39.2%	28.3%	28.3%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	16.7	41.3	20.2	20.2	8.9	8.9
Actuated g/C Ratio	0.27	0.67	0.33	0.33	0.14	0.14
v/c Ratio	0.64	0.35	0.61	0.08	0.16	0.69
Control Delay	29.1	5.3	21.6	7.4	27.8	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.1	5.3	21.6	7.4	27.8	10.5
LOS	C	A	C	A	C	B
Approach Delay		11.7	20.8		12.2	
Approach LOS		B	C		B	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 61.9
 Natural Cycle: 85
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 14.7
 Intersection LOS: B
 Intersection Capacity Utilization 50.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)
08/19/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗↗	↗↗	↖	↖	↖
Traffic Volume (veh/h)	292	793	670	41	38	370
Future Volume (veh/h)	292	793	670	41	38	370
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	314	853	720	38	41	208
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	384	2209	1137	507	302	269
Arrive On Green	0.21	0.61	0.32	0.32	0.17	0.17
Sat Flow, veh/h	1810	3705	3705	1610	1810	1610
Grp Volume(v), veh/h	314	853	720	38	41	208
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1810	1610
Q Serve(g_s), s	7.8	5.7	8.1	0.8	0.9	5.9
Cycle Q Clear(g_c), s	7.8	5.7	8.1	0.8	0.9	5.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	384	2209	1137	507	302	269
V/C Ratio(X)	0.82	0.39	0.63	0.07	0.14	0.77
Avail Cap(c_a), veh/h	1335	6089	3121	1392	1125	1001
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	4.7	13.9	11.4	16.8	18.9
Incr Delay (d2), s/veh	1.6	0.1	0.6	0.1	0.1	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.8	2.4	0.2	0.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.4	4.8	14.5	11.5	16.9	20.7
LnGrp LOS	B	A	B	B	B	C
Approach Vol, veh/h		1167	758		249	
Approach Delay, s/veh		8.7	14.3		20.1	
Approach LOS		A	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		35.0		12.4	14.1	20.9
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		80.0		29.5	35.0	41.0
Max Q Clear Time (g_c+1), s		7.7		7.9	9.8	10.1
Green Ext Time (p_c), s		6.2		0.4	0.4	4.9
Intersection Summary						
HCM 6th Ctrl Delay			12.0			
HCM 6th LOS			B			

Intersection													
Int Delay, s/veh													2
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		↔		↔	↔	↔		↔			↔	↔	
Traffic Vol, veh/h	26	222	22	11	141	4	7	6	20	2	7	27	
Future Vol, veh/h	26	222	22	11	141	4	7	6	20	2	7	27	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86	
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0	
Mvmt Flow	30	258	26	13	164	5	8	7	23	2	8	31	
Major/Minor	Major1	Major2	Major2	Major2	Minor1	Minor1	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2	
Conflicting Flow All	169	0	0	284	0	0	543	526	275	540	534	164	
Stage 1	-	-	-	-	-	-	331	331	-	190	190	-	
Stage 2	-	-	-	-	-	-	212	195	-	350	344	-	
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3	
Pot Cap-1 Maneuver	1421	-	-	1290	-	-	454	460	769	456	455	886	
Stage 1	-	-	-	-	-	-	687	649	-	816	747	-	
Stage 2	-	-	-	-	-	-	795	743	-	671	640	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1421	-	-	1290	-	-	421	443	766	424	439	886	
Mov Cap-2 Maneuver	-	-	-	-	-	-	508	505	-	501	501	-	
Stage 1	-	-	-	-	-	-	670	633	-	796	739	-	
Stage 2	-	-	-	-	-	-	750	735	-	625	624	-	
Approach	EB	WB	WB	WB	NB	NB	SB	SB	SB	SB	SB	SB	
HCM Control Delay, s	0.7		0.6		11		10.1						
HCM LOS					B		B						
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn1	SBLn1	SBLn1	SBLn1	
Capacity (veh/h)	637	1421	-	-	1290	-	-	743	-	-	-	-	
HCM Lane V/C Ratio	0.06	0.021	-	-	0.01	-	-	0.056	-	-	-	-	
HCM Control Delay (s)	11	7.6	0	-	7.8	0	-	10.1	-	-	-	-	
HCM Lane LOS	B	A	A	A	A	A	A	B	-	-	-	-	
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2	-	-	-	-	

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	823	564	16	0	74
Future Vol, veh/h	0	823	564	16	0	74
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	876	600	17	0	79

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	309
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	693
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	693
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	693
HCM Lane V/C Ratio	-	-	-	0.114
HCM Control Delay (s)	-	-	-	10.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.4

**APPENDIX 3.3: EXISTING (2022) CONDITIONS TRAFFIC SIGNAL
WARRANT ANALYSIS WORKSHEETS**

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

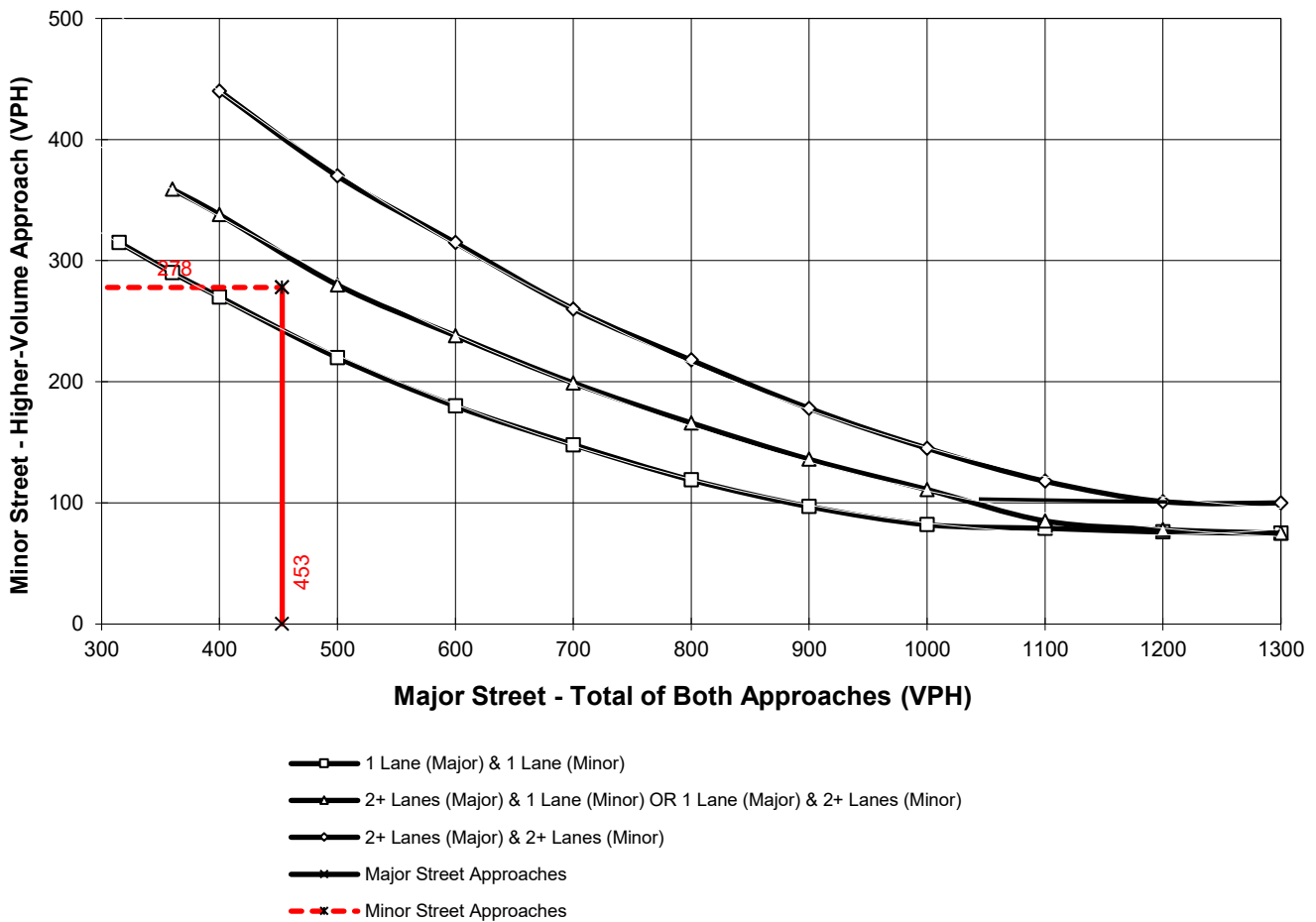
Major Street Name = **Trumble Rd.**

Total of Both Approaches (VPH) = **453**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Mapes Rd.**

High Volume Approach (VPH) = **278**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2022) Conditions - Weekday PM Peak Hour**

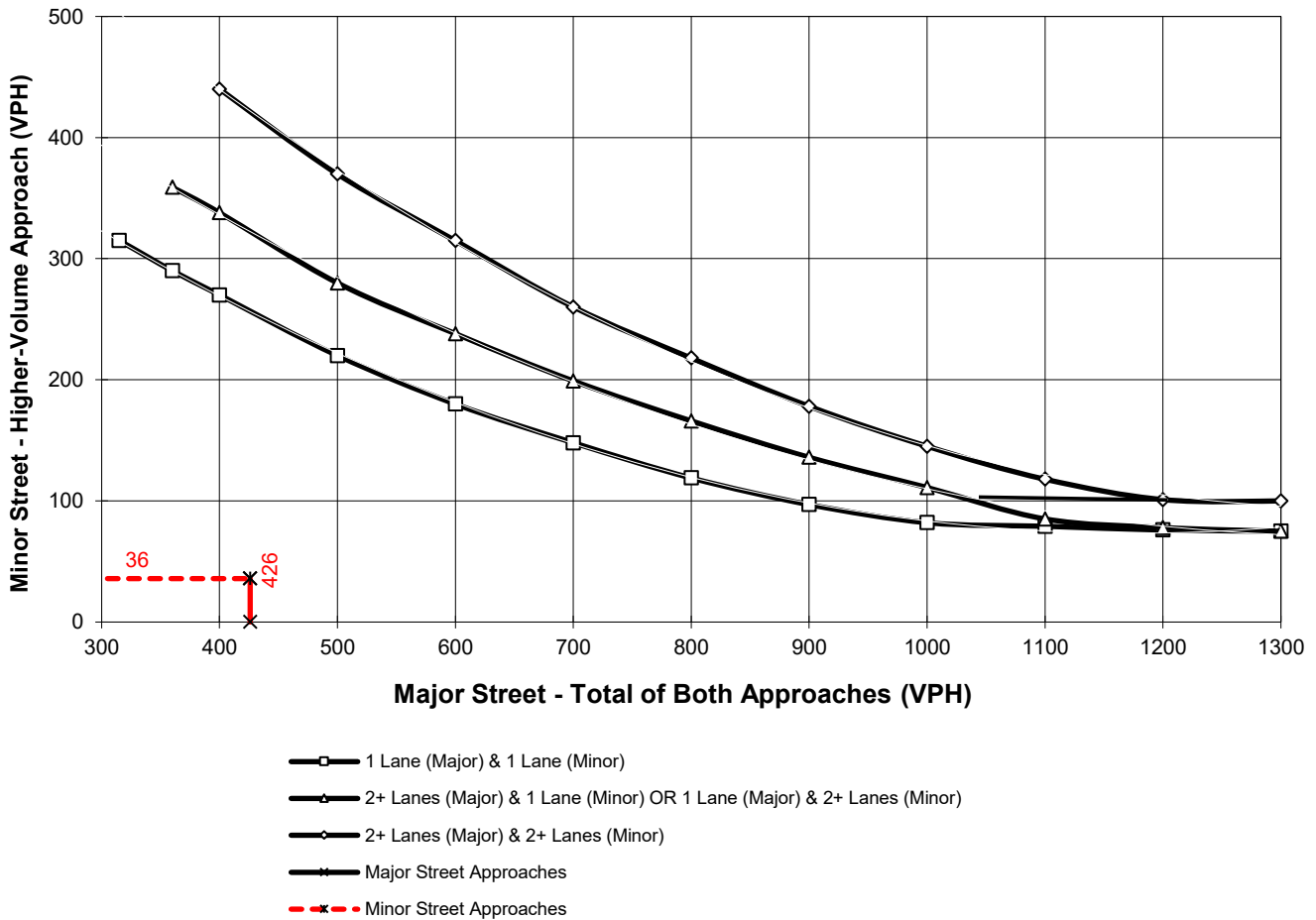
Major Street Name = **Mapes Rd.**

Total of Both Approaches (VPH) = **426**
 Number of Approach Lanes Major Street = **1**

Minor Street Name = **Sherman Rd.**

High Volume Approach (VPH) = **36**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 3.4: EXISTING (2022) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Queues

1: SR-74/I-215 SB Ramps & Bonnie Dr.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	23	239	277	395	492	38
v/c Ratio	0.10	0.15	0.55	0.28	0.68	0.06
Control Delay	28.7	0.2	22.5	3.1	19.5	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	0.2	22.5	3.1	19.5	7.8
Queue Length 50th (ft)	4	0	46	0	76	2
Queue Length 95th (ft)	32	0	189	72	286	21
Internal Link Dist (ft)	1025			1452	226	
Turn Bay Length (ft)		50	120			100
Base Capacity (vph)	734	1615	973	1805	1480	1263
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.15	0.28	0.22	0.33	0.03

Intersection Summary

Queues
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	30	724	681	701	202
v/c Ratio	0.08	0.37	0.38	0.43	0.37
Control Delay	18.4	7.4	9.9	0.9	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	18.4	7.4	9.9	0.9	14.6
Queue Length 50th (ft)	4	42	39	0	24
Queue Length 95th (ft)	30	94	143	0	109
Internal Link Dist (ft)		1452	714		376
Turn Bay Length (ft)	245			150	
Base Capacity (vph)	665	3556	3370	1615	1412
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	0.05	0.20	0.20	0.43	0.14

Intersection Summary

Queues

1: SR-74/I-215 SB Ramps & Bonnie Dr.

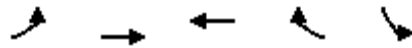


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	20	181	241	310	781	51
v/c Ratio	0.11	0.11	0.59	0.29	0.81	0.06
Control Delay	33.4	0.1	32.9	6.3	20.9	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	0.1	32.9	6.3	20.9	5.7
Queue Length 50th (ft)	6	0	62	0	176	4
Queue Length 95th (ft)	30	0	#227	53	449	22
Internal Link Dist (ft)	1025			1452	226	
Turn Bay Length (ft)		50	120			100
Base Capacity (vph)	558	1615	470	1727	1442	1231
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	0.04	0.11	0.51	0.18	0.54	0.04

Intersection Summary

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

Queues
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	14	968	522	621	266
v/c Ratio	0.06	0.62	0.37	0.38	0.53
Control Delay	19.5	10.5	10.7	0.7	16.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	19.5	10.5	10.7	0.7	16.8
Queue Length 50th (ft)	3	72	33	0	42
Queue Length 95th (ft)	18	146	111	0	123
Internal Link Dist (ft)		1452	714		376
Turn Bay Length (ft)	245			150	
Base Capacity (vph)	380	3538	3231	1615	1453
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	0.04	0.27	0.16	0.38	0.18

Intersection Summary

APPENDIX 4.1: CUMULATIVE DEVELOPMENT PROJECT VOLUME WORKSHEETS

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Total Cumulative Volumes

	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>
1	313	206	0	0	102	45	47	0	115	0	0	0
2	0	0	0	120	0	107	28	189	0	0	412	202
3	0	35	117	0	22	0	0	0	0	285	0	0
4	0	0	0	71	0	378	221	89	0	0	236	75
5	0	0	0	0	0	0	0	117	0	0	285	0
6	0	0	0	0	0	0	0	117	0	0	285	0
7	0	8	0	0	24	89	48	69	0	0	197	0
8	0	8	0	0	24	0	0	0	0	0	0	0
9	0	8	0	0	24	0	0	0	0	0	0	0
10	0	8	0	0	24	0	0	0	0	0	0	0
11	0	0	0	24	0	0	0	159	0	0	311	8

Project Volumes from Trumble Retail TIA:

1	18	25	0	0	26	0	0	0	19	0	0	0
2	0	0	0	26	0	0	0	45	0	0	43	25
3												
4	0	0	0	61	0	81	87	-17	0	0	-12	57
5												
6												
7												
8												
9												
10												
11								43			45	

Cumulative Volumes from Trumble Retail TIA:

1	154	14	0	0	10	0	18	0	24	0	0	0
2	0	0	0	9	0	73	0	34	0	0	95	16
3		35			22							
4	0	0	0	10	0	12	17	27	0	0	99	18
5												
6												
7												
8												
9												
10												
11								37			117	

New Cumulative Projects: Perris Airport Industrial & Ellis/Sherman Warehouse

1	34	6	0	0	0	45	29	0	28	0	0	0
2	0	0	0	19	0	34	28	0	0	0	6	0
3	0	0	19	0	0	0	0	0	0	6	0	0
4	0	0	0	0	0	6	19	0	0	0	0	0
5	0	0	0	0	0	0	0	19	0	0	6	0
6	0	0	0	0	0	0	0	19	0	0	6	0
7	0	0	0	0	0	6	19	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0

New Cumulative Projects: RC2, RC4, RC5, M6, M8

1	107	161	0	0	66	0	0	0	44	0	0	0
2	0	0	0	66	0	0	0	110	0	0	268	161
3	0	0	98	0	0	0	0	0	0	279	0	0
4	0	0	0	0	0	279	98	79	0	0	149	0
5	0	0	0	0	0	0	0	98	0	0	279	0
6	0	0	0	0	0	0	0	98	0	0	279	0
7	0	8	0	0	24	83	29	69	0	0	197	0
8	0	8	0	0	24	0	0	0	0	0	0	0
9	0	8	0	0	24	0	0	0	0	0	0	0
10	0	8	0	0	24	0	0	0	0	0	0	0
11	0	0	0	24	0	0	0	79	0	0	149	8

Source: Volumes developed from either TIA or scoping agreement.

Total Cumulative Volumes

	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>
1	251	181	0	0	236	31	113	0	237	0	0	0
2	0	0	0	242	0	84	37	437	0	0	347	158
3	0	33	328	0	35	0	0	0	0	212	0	0
4	0	0	0	81	0	309	441	237	0	0	198	78
5	0	0	0	0	0	0	0	328	0	0	212	0
6	0	0	0	0	0	0	0	328	0	0	212	0
7	0	27	0	0	16	79	104	225	0	0	132	0
8	0	27	0	0	16	0	0	0	0	0	0	0
9	0	27	0	0	16	0	0	0	0	0	0	0
10	0	27	0	0	16	0	0	0	0	0	0	27
11	0	0	0	16	0	0	0	317	0	0	275	27

Project Volumes from Trumble Retail TIA:

1	19	25	0	0	28	0	0	0	21	0	0	0
2	0	0	0	28	0	0	0	50	0	0	43	25
3												
4	0	0	0	62	0	81	96	-18	0	0	-12	62
5												
6												
7												
8												
9												
10												
11								44			49	

Cumulative Volumes from Trumble Retail TIA:

1	131	14	0	0	21	0	44	0	55	0	0	0
2	0	0	0	18	0	61	0	76	0	0	84	15
3		33			35							
4	0	0	0	19	0	16	17	77	0	0	83	16
5												
6												
7												
8												
9												
10												
11								95			99	

New Cumulative Projects: Perris Airport Industrial & Ellis/Sherman Warehouse

1	23	24	0	0	0	31	69	0	37	0	0	0
2	0	0	0	9	0	23	37	0	0	0	24	0
3	0	0	9	0	0	0	0	0	0	24	0	0
4	0	0	0	0	0	24	9	0	0	0	0	0
5	0	0	0	0	0	0	0	9	0	0	24	0
6	0	0	0	0	0	0	0	9	0	0	24	0
7	0	0	0	0	0	24	9	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0

New Cumulative Projects: RC2, RC4, RC5, M6, M8

1	78	118	0	0	187	0	0	0	124	0	0	0
2	0	0	0	187	0	0	0	311	0	0	196	118
3	0	0	319	0	0	0	0	0	0	188	0	0
4	0	0	0	0	0	188	319	178	0	0	127	0
5	0	0	0	0	0	0	0	319	0	0	188	0
6	0	0	0	0	0	0	0	319	0	0	188	0
7	0	27	0	0	16	55	95	225	0	0	132	0
8	0	27	0	0	16	0	0	0	0	0	0	0
9	0	27	0	0	16	0	0	0	0	0	0	0
10	0	27	0	0	16	0	0	0	0	0	0	27
11	0	0	0	16	0	0	0	178	0	0	127	27

Source: Volumes developed from either TIA or scoping agreement.

Total Cumulative Volumes

	Northbound	Southbound	Eastbound	Westbound
1	8,592	5,463	5,241	0
2	0	5,153	8,593	12,252
3	6,367	869	0	5,498
4	0	11,117	12,251	6,050
5	0	0	5,498	5,498
6	0	0	5,498	5,498
7	430	2,346	5,500	3,584
8	430	430	0	0
9	430	430	0	0
10	430	430	1,180	1,180
11	0	430	4,870	5,300

Project Volumes from Trumble Retail TIA:

1	1,180	674	506	0
2	0	674	1,180	1,854
3				
4	0	4,750	1,854	1,180
5				
6				
7				
8				
9				
10			1,180	1,180
11				

Cumulative Volumes from Trumble Retail TIA:

1	1,524	681	1,461	0
2	0	681	1,523	1,584
3	869	869		
4	0	869	1,583	1,554
5				
6				
7				
8				
9				
10				
11			1,554	1,554

New Cumulative Projects: Perris Airport Industrial & Ellis/Sherman Warehouse

1	642	952	1,184	0
2	0	642	642	410
3	410	0	0	410
4	0	410	410	0
5	0	0	410	410
6	0	0	410	410
7	0	410	410	0
8				
9				
10				
11				

New Cumulative Projects: RC2, RC4, RC5, M6, M8

1	5,246	3,156	2,090	0
2	0	3,156	5,248	8,404
3	5,088	0	0	5,088
4	0	5,088	8,404	3,316
5	0	0	5,088	5,088
6	0	0	5,088	5,088
7	430	1,936	5,090	3,584
8	430	430	0	0
9	430	430	0	0
10	430	430	0	0
11	0	430	3,316	3,746

Source: Volumes developed from either TIA or scoping agreement.

EXHIBIT 4-3: CUMULATIVE DEVELOPMENT LOCATION MAP

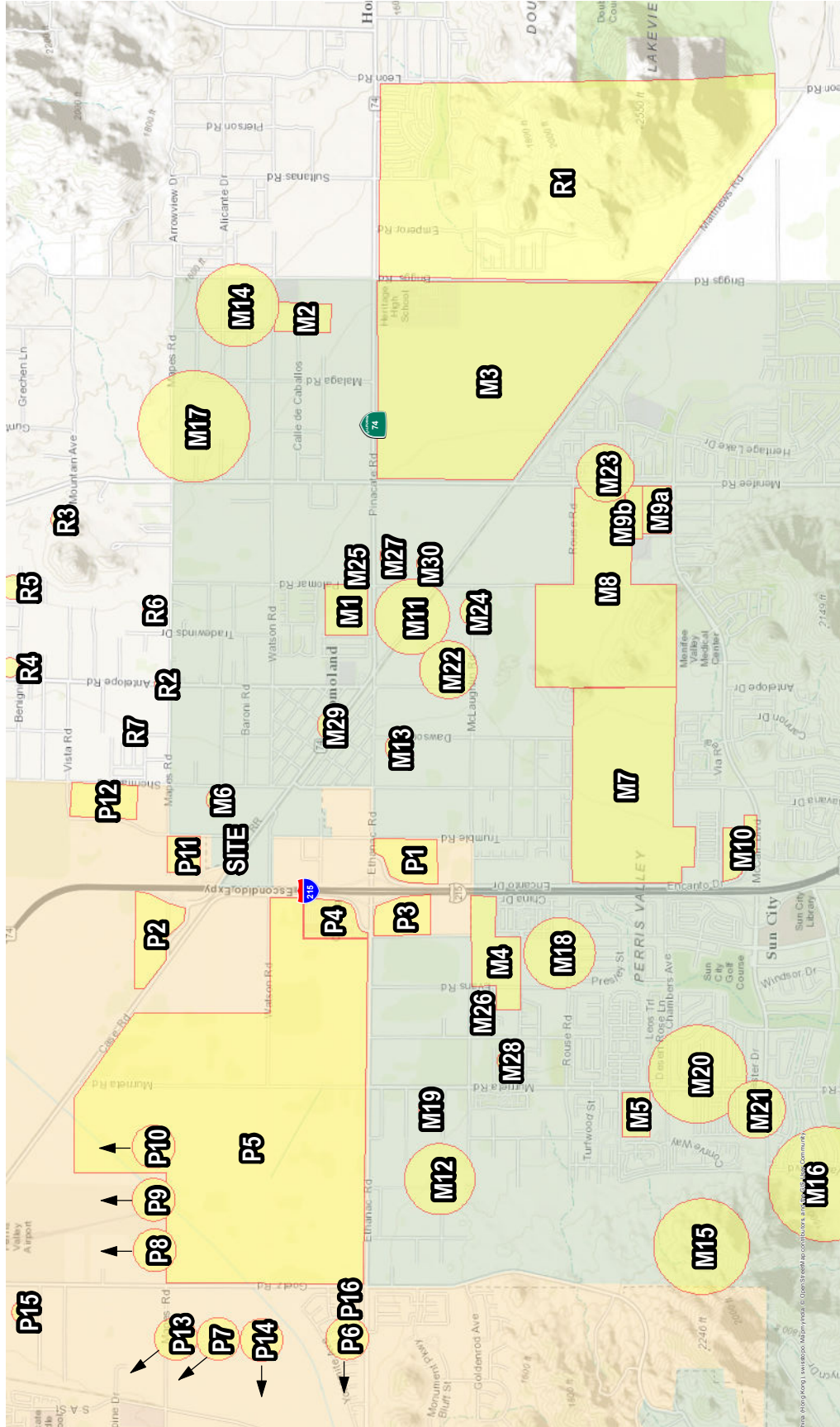


Table 4-2
(Page 1 of 4)

Summary of Cumulative Development Projects

No.	Project Name	Land Use	Quantity ¹	
City of Menifee				
M1	TR 34118	Single Family Residential	169	DU
M2	TR34600	Single Family Residential	153	DU
M3	TR 31811	Single Family Residential	559	DU
	TR 31812	Senior Adult Detached Housing	742	DU
M4	TR 30182	Single Family Residential	84	DU
	TR 33419	Single Family Residential	140	DU
	TR 35143	Single Family Residential	15	DU
M5	TR 32314	Single Family Residential	33	DU
M6	PP 22354	Trailer and Boat Storage	2.39	AC
M7	Fleming Ranch Specific Plan	Single Family Residential	1,169	DU
		Apartments	556	DU
		Active Parks	16.1	AC
		City Parks	11.5	AC
		Elementary School	1,050	STU
		Business Park	163.000	TSF
M8	TR 29835	Single Family Residential	543	DU
	TR 31098	Single Family Residential	264	DU
M9a	CUP 03549	Shopping Center	81.700	TSF
M9b	Village at Junipero	Apartments	240	DU
M10	Menifee North Shopping Center	Free-Standing Discount Store	200.000	TSF
		Bank w/ Drive-Thru	5.500	TSF
		Fast-food w/ Drive-Thru	6.700	TSF
		Fast-food w/o Drive-Thru	5.500	TSF
		Coffee Shop w/ Drive-Thru	2.000	TSF
		Retail	7.500	TSF
M11	Motte Town Center	Industrial	97.564	TSF
M12	TTM 34037	Single Family Residential	128	DU
M13	PP 21748/CUP 03300	Heavy Warehouse	9.70	AC
M14	TTM 33738	Single Family Residential	52	DU
M15	Cimarron Ridge (TTM 36657 / PM 36658)	Single Family Residential	756	DU
M16	Stonegate (TM31456)	Single Family Residential	177	DU
M17	TR31536	Single Family Residential	44	DU
M18	McLaughlin Village (PAR 2015-133)	Townhomes	126	DU
M19	TR 31856	Single Family Residential	79	DU
M20	Thorton Terraces (TTM 2014-225)	Townhomes	19	DU
M21	Valley Blvd. Tract (TR 2015-211)	SFDR	75	DU
M22	Trumble Office and Warehouse (PP 2011-003, EOT 205-2)	Industrial	61.730	TSF
M23	2015-246 PAR	Fast Food	2.400	TSF

Table 4-2
(Page 2 of 4)

Summary of Cumulative Development Projects

No.	Project Name	Land Use	Quantity ¹	
M24	PP 16208	Storage Yard	14.76	AC
M25	PP 17864	Warehouse/Office	32.000	TSF
M26	TR 25530/TR 25530M1	Single Family Residential	76	DU
M27	PP 21050	Industrial	9.350	TSF
M28	TR 25529	Single Family Residential	168	DU
M29	PP 15480	Auto Parts Store	3.000	TSF
M30	PP 23821	Warehouse	29.162	TSF
City of Perris				
P1	Towne Center (DPR 06-0337)	Shopping Center	286.000	TSF
		Free-Standing Discount Store	221.000	TSF
P2	Metrolink Station	Light Rail Transit	680	SP
P3	PDO 07-12-0006	Shopping Center	60.000	TSF
P4	Remaining DPR 04-0621 (Perris Crossing)	Fast-food w/ Drive-Thru	16.300	TSF
		General Office	24.200	TSF
		Specialty Retail	26.825	TSF
		Shopping Center	209.500	TSF
P5	Green Valley Specific Plan	Single Family Residential	976	DU
		Condo/Townhomes	1,472	DU
		Apartments	926	DU
		Community Center	131.769	TSF
		Shopping Center	303.831	TSF
P6	Riverwoods Specific Plan	Single Family Residential	663	DU
		Elementary School	600	STU
		City Park	12	AC
		Community Center	2.500	TSF
P7	DPR 07-0130 (First Industrial)	High-Cube Warehouse	760.000	TSF
	DPR 08-01-0007 (First Industrial)	High-Cube Warehouse	3200.000	TSF
	DPR 08-01-0006 (First Industrial)	High-Cube Warehouse	3400.000	TSF
P8	DPR 08-04-0016 (Redlands Retail)	Shopping Center	643.000	TSF
	DPR 10-01-0008	Shopping Center	43.000	TSF
	DPR 07-07-0032	Shopping Center	83.464	TSF
P9	Parkwest Specific Plan	Single Family Residential	2,027	DU
	TR 34078	Single Family Residential	72	DU
	TR 31678	Single Family Residential	67	DU
	DPR 06-0378	Senior Apartments	429	DU
	DPR 10-03-0001	Senior Apartments	190	DU
	TR 31651	Single Family Residential	57	DU
	TR 31240-1	Single Family Residential	114	DU
	DPR 12-05-0013	Apartments	75	DU

Table 4-2
(Page 3 of 4)

Summary of Cumulative Development Projects

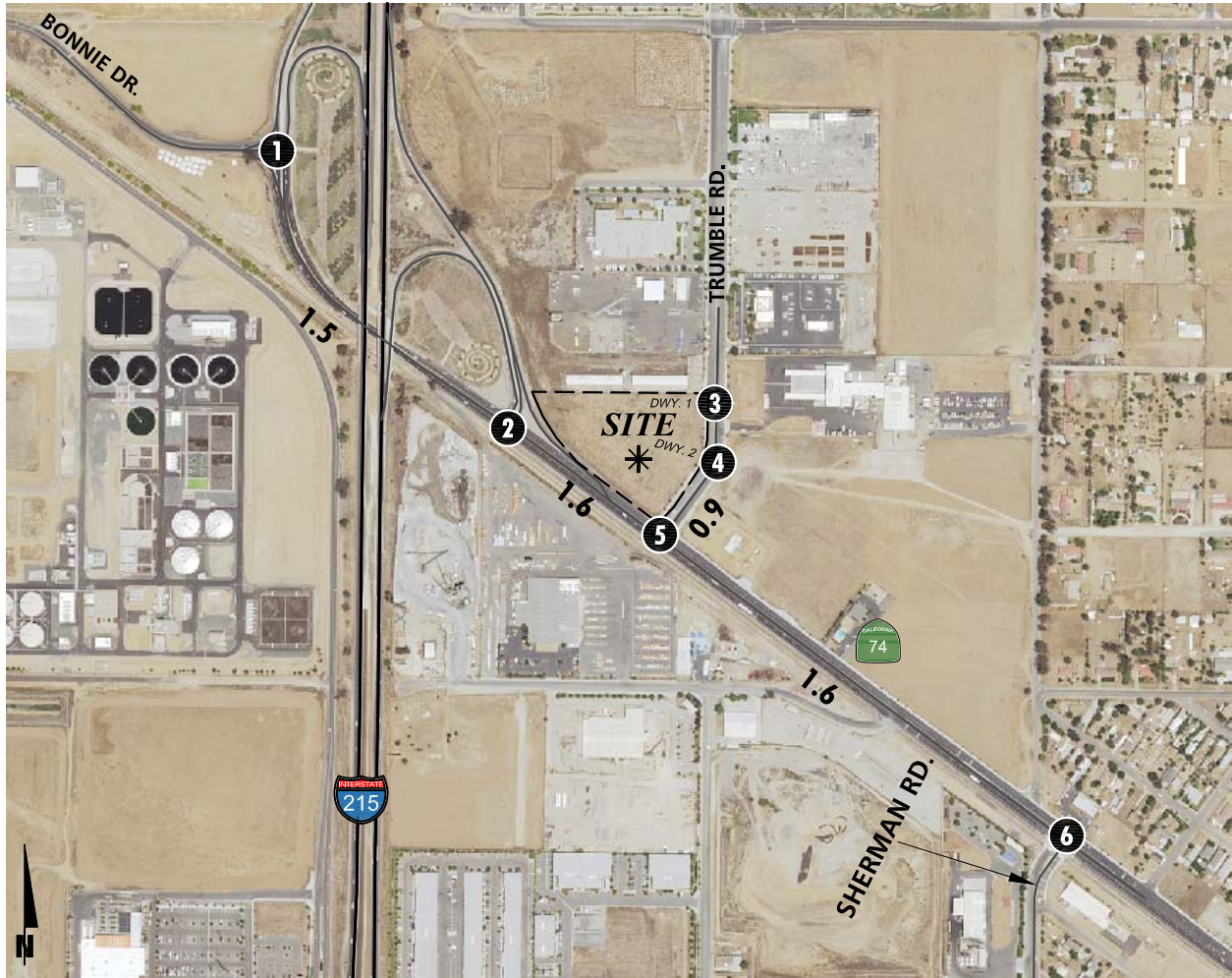
No.	Project Name	Land Use	Quantity ¹	
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		Shopping Center	536.576	TSF
		General Light Industrial (Existing Uses)	-344.485	TSF
	DPR 12-07-0011	Specialty Retail	12.480	TSF
P11	DPR 11-12-0009	Hotel	100	ROOM
P12	Aquatic Center in Perris	Aquatic Center	250	PS
P13	TR 31304	Single Family Residential	123	DU
	TR 31407	Single Family Residential	243	DU
	TR 30973	Single Family Residential	35	DU
	TR 31225	Single Family Residential	57	DU
	TR 31226	Single Family Residential	82	DU
	TR 33050	Single Family Residential	35	DU
	TR 33199	Single Family Residential	26	DU
	TR 33200	Single Family Residential	130	DU
	TR 33274	Single Family Residential	28	DU
	TR 33193	Condo/Townhomes	94	DU
	TR 32032	Single Family Residential	108	DU
	TR 31926	Single Family Residential	337	DU
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	TR 33973	Single Family Residential	384	DU
TR 31925	Single Family Residential	10	DU	
P14	TR 32525	Single Family Residential	162	DU
P15	DPR 14-03-0018	Light Industrial	47.121	TSF
P16	TTM 36343 (10-10-0009)	Single Family Residential	184	DU

Table 4-2
(Page 4 of 4)

Summary of Cumulative Development Projects

No.	Project Name	Land Use	Quantity ¹	
County of Riverside				
R1	TR 31500	Single Family Residential	182	DU
	TR 32514	Condo/Townhomes	86	DU
	TR 28801	Single Family Residential	189	DU
	TR 36430	Single Family Residential	340	DU
	TR 30972	Single Family Residential	91	DU
		City Park	1.50	AC
R2	TR 32748	Single Family Residential	22	DU
R3	TR 33389	Single Family Residential	31	DU
R4	TR 36157	Single Family Residential	8	DU
R5	PM 31122	Single Family Residential	4	DU
R6	TR 31687	Single Family Residential	65	DU
R7	TR 25901	Single Family Residential	124	DU

EXHIBIT 4-4: CUMULATIVE ONLY TRAFFIC VOLUMES



1	SR-74 SB Ramp & Bonnie Dr.	2	I-215 NB Ramp & SR-74	3	Trumble Rd. & Dwy. 1	4	Trumble Rd. & Dwy. 2	5	Trumble Rd. & SR-74	6	Sherman Rd. & SR-74
	<pre> ↓ 0(0) ↓ 10(21) 18(44) → 24(55) → ↑ 154(131) ↑ 14(14) </pre>	<pre> ↓ 73(61) ↓ 9(18) ↑ 16(15) ↓ 95(84) 0(0) → 34(76) → </pre>		Future Intersection		Future Intersection		<pre> ↓ 12(16) ↓ 10(19) ↑ 18(16) ↓ 99(83) 17(17) → 27(77) → </pre>	<pre> ↓ 0(0) ↓ 0(0) ↓ 0(0) ↓ 5(4) 0(0) → 30(82) → 7(13) → ↑ 19(17) ↑ 0(0) ↑ 2(6) </pre>		

LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
 10.0 = VEHICLES PER DAY (1000'S)

Table 4-2
(Page 1 of 4)

Summary of Cumulative Development Projects

No.	Project Name	Land Use	Quantity ¹	
City of Menifee				
M1	TR 34118	Single Family Residential	169	DU
M2	TR34600	Single Family Residential	153	DU
M3	TR 31811	Single Family Residential	559	DU
	TR 31812	Senior Adult Detached Housing	742	DU
M4	TR 30182	Single Family Residential	84	DU
	TR 33419	Single Family Residential	140	DU
	TR 35143	Single Family Residential	15	DU
M5	TR 32314	Single Family Residential	33	DU
M6	PP 22354	Trailer and Boat Storage	2.39	AC
M7	Fleming Ranch Specific Plan	Single Family Residential	1,169	DU
		Apartments	556	DU
		Active Parks	16.1	AC
		City Parks	11.5	AC
		Elementary School	1,050	STU
		Business Park	163.000	TSF
M8	TR 29835	Single Family Residential	543	DU
	TR 31098	Single Family Residential	264	DU
M9a	CUP 03549	Shopping Center	81.700	TSF
M9b	Village at Junipero	Apartments	240	DU
M10	Menifee North Shopping Center	Free-Standing Discount Store	200.000	TSF
		Bank w/ Drive-Thru	5.500	TSF
		Fast-food w/ Drive-Thru	6.700	TSF
		Fast-food w/o Drive-Thru	5.500	TSF
		Coffee Shop w/ Drive-Thru	2.000	TSF
		Retail	7.500	TSF
M11	Motte Town Center	Industrial	97.564	TSF
M12	TTM 34037	Single Family Residential	128	DU
M13	PP 21748/CUP 03300	Heavy Warehouse	9.70	AC
M14	TTM 33738	Single Family Residential	52	DU
M15	Cimarron Ridge (TTM 36657 / PM 36658)	Single Family Residential	756	DU
M16	Stonegate (TM31456)	Single Family Residential	177	DU
M17	TR31536	Single Family Residential	44	DU
M18	McLaughlin Village (PAR 2015-133)	Townhomes	126	DU
M19	TR 31856	Single Family Residential	79	DU
M20	Thorton Terraces (TTM 2014-225)	Townhomes	19	DU
M21	Valley Blvd. Tract (TR 2015-211)	SFDR	75	DU
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R4	TR 36157	Single Family Residential	8	DU
R5	PM 31122	Single Family Residential	4	DU
R6	TR 31687	Single Family Residential	65	DU
R7	TR 25901	Single Family Residential	124	DU

Table 1
Page 1 of 1

Cumulative Development Trip Generation Summary

Project	Quantity	Units ²	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Daily
			In	Out	Total	In	Out	Total	
Project Trip Generation Summary									
TAZ 1									
P11 - DPR11-12-0009	100	RM	31	22	53	31	29	60	817
TAZ 2									
M29 - PP 15480	3,000	TSF	N/A	N/A	N/A	6	8	13	134
TAZ 3									
M1 - TR 34118	169	DU	32	95	127	106	63	169	1,609
TAZ 4									
P2 - Metrolink	680	PARKING SPACES	585	143	728	490	354	843	1,707
Total:			648	259	907	633	453	1,086	4,266

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation, Ninth Edition (2012).

² DU = Dwelling Units; TSF = Thousand Square Feet

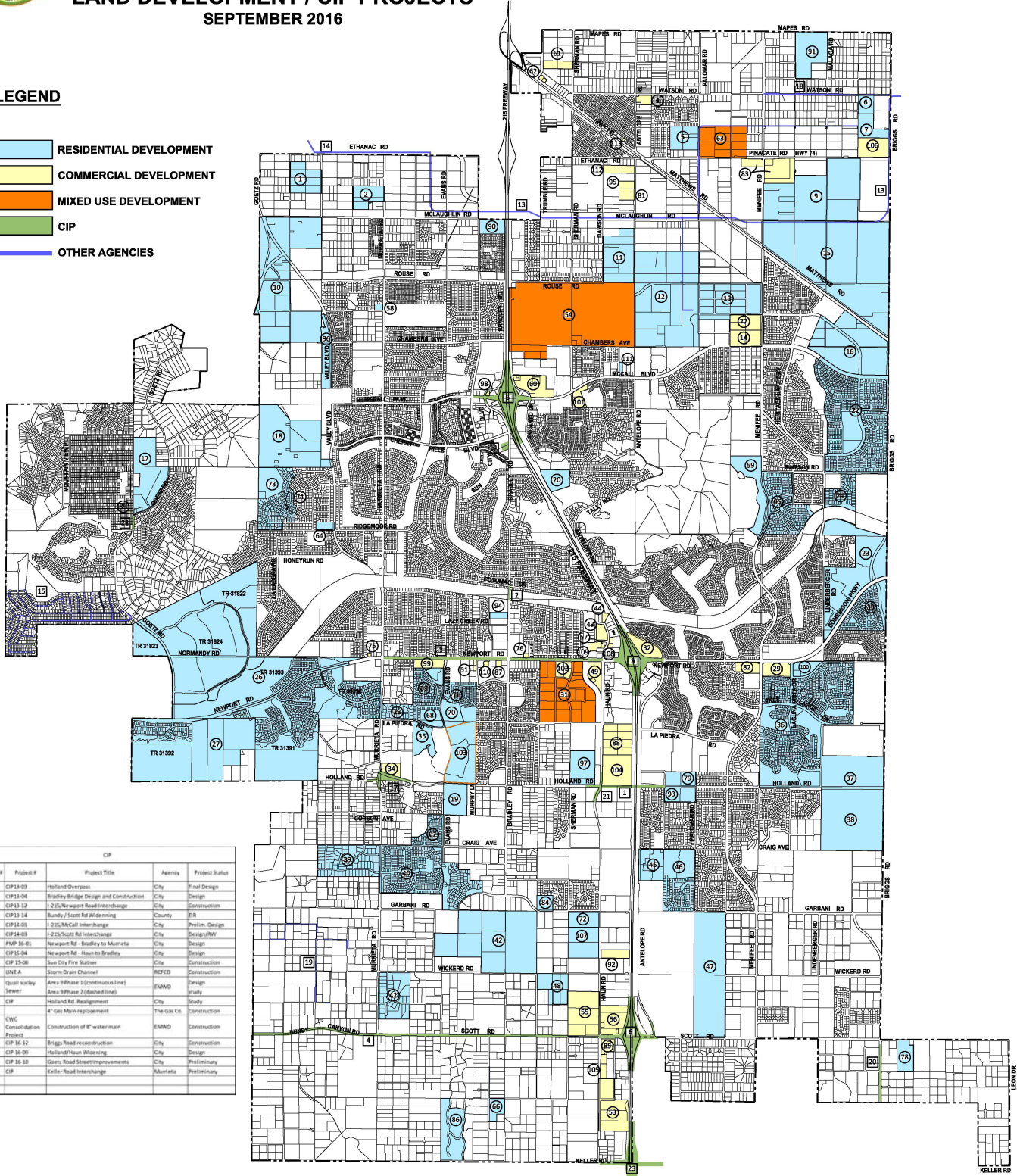


CITY OF MENIFFEE

LAND DEVELOPMENT / CIP PROJECTS SEPTEMBER 2016

LEGEND

- RESIDENTIAL DEVELOPMENT
- COMMERCIAL DEVELOPMENT
- MIXED USE DEVELOPMENT
- CIP
- OTHER AGENCIES



Map ID #	Project #	Project Title	Agency	Project Status
1	CF13-03	Holland Overpass	City	Final Design
2	CF13-04	Bradley Bridge Design and Construction	City	Design
3	CF13-17	I-225/Newsport Road Interchange	City	Construction
4	CF13-18	Bundy / Scott Rd Widening	County	PA
5	CF14-01	I-225/Cal Interchange	City	Final Design
6	CF14-03	I-225/Scott Rd Interchange	City	Design/PA
7	FMP 16-01	Newsport Rd - Bradley to Murieta	City	Design
11	CF15-04	Newsport Rd - Hixon to Bradley	City	Design
12	CF 15-08	San Juan Fire Station	City	Construction
13	LINE A	Storm Drain Channel	RCFCD	Construction
15	Quail Valley Sewer	Area 9 Phase 1 (continuous line)	DMWD	Design
17	CIP	Holland Rd. Realignment	City	Study
18	CIP	4" Gas Main replacement	The Gas Co.	Construction
19	CIP	Construction of 8" water main	EMWD	Construction
20	CF 16-12	Briggs Road reconstruction	City	Construction
21	CF 16-09	Holland/Newsport Widening	City	Design
22	CF 16-10	Glenn Road Street Improvements	City	Final Design
23	CIP	Water Road Interchange	Murieta	Preliminary

Map ID #	Project Reference	Name	Approved By	Status	Map ID #	Project Reference	Name	Approved By	Status	Map ID #	Project Reference	Name	Approved By	Status			
1	TTM 38037	Developer: Capstone	County: C/E	27	TR 3005	Campan Cove (Brookfield)	County	27	TR 28899	Ashton	County: U/S	87	PA# 2015-039	Tract Map - single family homes	In progress	C/E	
2	TTM 38036	Developer: Sunwood	County: U/S	28	TR 3082	Boatler Creek (LCA Homes)	County	74	TR 28899-1	American Tim Depot	County: U/S	88	2016-110-CUP	Fast Food	In progress	C/E	
3	TTM 38035	Heritage Lakes (Standard Pacific)	County: C/E	29	PP 2009-091	Open Breakers	City: U/S	76	CFP 2015-157	Shops at Scott (Meniffee Partners LP)	City: U/S	90	2016-011-PW	CIP Meniffee DPSS	In progress	C/E	
4	TTM 38118	MR 27 LLC (Rancan)	County: U/S	31	SP 3009-069	Town Center (Regency)	City: C/E	77	PP 2014-189	South Support Industrial Park R, LTD	In progress	U/S	309	2016-063-GPA - 062	UHA - 063 TR	In progress	C/E
5	TTM 38038	MR 16 LLC (Rancan)	County: C/E	32	PP 2014-113	Meniffee Lakes Plaza (Meniffee Lakes UP)	County: U/S	78	PA# 2014-188	(Southern CA Properties)	In progress	C/E	355	PP 2014-124	McCall & Sherman Retail Center	In progress	C/E
6	TTM 38040	MR 27 LLC (Rancan)	County: C/E	33	TTM 32105	Developer: JCI	County: U/S	79	PP 2015-164	Market Rate Apartments (Strata Equity)	In progress	U/S	355	PP 2015-138	Inkstation Theater	In progress	C/E
7	TTM 38111	Heritage Lakes (Standard Pacific)	County: U/S	34	PP 2009-097	West Light (SLS) - Engaged	City	81	CFP 2015-053	Marina Town Center	In progress	U/S	355	PP 2015-185	Pacific Communities	County: C/E	
8	TTM 38037/ TR 38668	Garrison Ridge (Van Buren)	City: U/S	35	TR 38786	Pacific Communities	County	82	2015-091	Star Aids/Archibald's Restaurant	City: C/E	356	PA# 2015-185	IPM Corporation Inc.	City: C/E		
9	TTM 29377	Talavera (True Life Companies)	City	36	TR 30422/CUP 0351	The Lakes (Pulte and Lennar)	County/C/E	83	PP 2013-146	SCE Expansion	In progress	U/S	356	2016-078-CUP	Zanders Re. CUP	In progress	C/E
10	TTM 29635	Indersand (CV Communities)	County: C/E	37	TTM 31229	Meniffee Nautical (Cove (Rancan))	City: U/S	84	TR 2014-079	DKC Investments	City	357	2016-078-CUP	Horizon Glen Marketplace	In progress	C/E	
11	TTM 32086	2014 30K LLC (Strata Equity)	County: C/E	38	PP 2009-097	Meniffee Heights (CV Communities)	County: U/S	85	PA#2015-063 / TR 36684	Shops at Scott (Meniffee Partners LP)	In progress	U/S	357	2016-078-CUP	Horizon Glen Marketplace	In progress	C/E
12	CUP 3549	Heritage Square (Rancan)	City: U/S	39	TR 29636	Calder Ranch (Classic Pacific)	County: C/E	86	PP 2015-099	Shops of Newsport (Newsport Road LP)	City: C/E	358	2016-115-PA#	Mill Creek	In progress	C/E	
13	TTM 38112	Developer: Brookfield	County: U/S	40	TR 30342	KB-Hidden Hills (KB Homes)	County: C/E	87	PP 2015-099	Shops of Newsport (Newsport Road LP)	City: C/E	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E	
14	TTM 38406	Heritage Lakes (Standard Pacific)	County: C/E	41	TR 30664	Gateway Station (Pacific Communities)	County: C/E	88	PP 2015-115	Meniffee Village (Shelburne Dev Corp)	In progress	U/S	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E
15	TR 32794	Quail Hill (Regal)	City: U/S	42	TTM 31218	Garden Meadows (Richard Conner)	County	89	TR 32015-130	St. Barnabas Medical	In progress	C/E	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E
16	TTM 33456	Stonings (Gordon Woods)	County: U/S	43	2014-146	Meniffee Unified School District HQ	City: C/E	90	PA# 2015-133	McLaughlin Village	In progress	U/S	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E
17	PA 2014-218	Rowland (Rowland Development)	City: C/E	44	2013-230	Int'l Auto Crafters	City: C/E	91	TR 31336	City	U/S	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E	
18	PP 3940	Kennington Apartments (Bob Lowe)	City: U/S	45	TTM 32628	Christiana Ranch (Benson County)	County: U/S	92	PP 2015-156	All Star Super Storage	In progress	U/S	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E
19	TR 30350/TR 30406	Heritage Lakes (Standard Pacific)	County: U/S	46	TTM 32626	Three Bell Meadows (Richard Conner)	County: C/E	93	TR 2015-163	2015 (Strata Equity)	In progress	U/S	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E
20	TTM 31210/2102	Developer: Rancan	City: U/S	47	TTM 37312	Carnterina (Richard Conner)	County: C/E	94	PA# 2015-195	Winnable Property (MDMG, Inc)	In progress	U/S	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E
21	TTM 31216	Mahogany (Dor Horton)	County: U/S	48	TR 31551	Granite (Granite Investments)	County: C/E	95	2015-093	Thumble Offices and warehouse	In progress	U/S	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E
22	TR 30422/CUP 0351	Adagio Magma Ranch (Brookfield)	County: C/E	49	PP 2014-209	Shopping Center (Rich Dev)	City: C/E	96	2015-211	Valley Blvd. Tract Map	City: C/E	359	2016-154-PA#	Newsport Towne Square Phase II	In progress	C/E	

U/S = Upcoming for Entitlement
 C/E = Currently in-House for Entitlement
 U/P = Upcoming for Final Engineering and/or Project Entitlement Approved
 C/P = Currently in-House for Final Engineering

Cumulative Project List for Green Valley Tract

(entitled – on hold for years) DPR 10-01-0008, TTM 36266 (10-01-0009) & CUP 10-04-0001 - To construct a 48,778 square foot retail shopping center and subdivide a 4.97-acre site into six parcels at the southwest corner of Redlands Avenue and San Jacinto Road. **Applicant:** Lewis Retail Centers

(entitled – on hold for years) Environmental Impact Report, Development Plan Review 08-04-0015, Conditional Use Permit 08-04-0016, Tentative Parcel Map 35700, and Variance 08-09-0005 to construct an approximately 643,000 sq. ft. commercial shopping center on 68 gross acres at the southeasterly corner of San Jacinto Avenue and Redlands Avenue. **Applicant:** Lewis Retail Centers

(entitled – on hold for years) Tentative Tract Map (TTM) 33973 for subdivision of a 153.7 acre property into 384 single family lots, plus a community park and open space, located north of San Jacinto River, west of McPherson Road, south of Ethanac Road, east of Sophie Street. **Applicant:** Portezuelo Partners, Inc.

(ENTITLED – submitted building plans) Conditional Use Permit 13-07-0010, General Plan Amendment 13-07-0008 and Zone Change 13-07-0009 to permit an outdoor lumber and storage facility with a new 915 sq. ft. office building located at Watson Road, North of Ethanac Road, South of Highway 74 (APN #329-250-014). The project includes a General Plan Amendment (GPA) and Zone Change (ZC) to rezone and amend the General Plan Land Use designation of the project site from CC (Community Commercial) to LI (Light Industrial) to facilitate development of this project.

(in construction) Conditional Use Permit 11-12-0010 - Proposal to construct a Metrolink Station (Station “F”) and layover facility within 40.55 acres located at the northwest corner of Case Road and Mapes Road, between the San Jacinto River and I-215. The Metrolink station includes a 510’ long concrete platform with a steel canopy (1,908 sq. ft.), a 200 sq. ft. communication shelter, and a parking lot with 730 parking stalls. The layover facility consists of a second 567 sq. ft. maintenance building, 2,064 sq. ft. crew building, three (3) 234 sq. ft. trash enclosures, a 324 sq. ft. steel equipment canopy, and 37 parking stalls. Other off-site railroad track improvements proposed include fencing along both sides of the track, street improvements and signaling. **Applicant:** Riverside County Transportation Commission.

(in construction) Major Modification 11-12-0002 to Development Plan Review 05-0425 for Phase II of the Downtown Perris Train Station expansion. Phase II includes 250 new parking spaces, a platform expansion, a 567 sq. ft. storage/maintenance building, a communications shelter/tower and an 81 sq. ft. restroom facility. Other railroad track improvements are proposed, including fencing, street improvements and signaling. Project area is located between “C” and “D” Street, from San Jacinto Avenue to 6th Street **Applicant:** Riverside County Transportation Commission.

(in construction) Development Plan Review 13-10-0020 for a new 6,356 square foot retail pharmacy and office building on a vacant .56 acre site in the Community Commercial Zone on the north side of 4th Street, west of Park Avenue (i.e. 540 W. 4th Street). **Applicant:** Dave Madden Architect

(in construction) Conditional Use Permit 15-05069 – Request to operate a paintball and airsoft sports park for a five-year period with temporary improvements consisting of a gravel parking lot, two modular office buildings totaling 2,400 square feet and 160 square feet modular restroom building located on a 48.3 acre site. The site is located on the south side of Ellis Avenue between Case Road and the San Jacinto River Flood Control Channel. **Applicant:** Karen Woodruff; Action Star Games, Inc.

(in process) DPR 14-03-0018 and MA 14-03-0019 to construct a new 47,121 square-foot manufacturing building as an expansion facility for the recycling of plastic materials for mass production use such as plastic ties, water bottles, etc on the westerly side of Goetz Road, approximately 400-feet north of Malbert Street.
. **Applicant:** Mark Orman, Global Plastics

(entitled) Environmental Assessment/Stockpile Permit 15-05023 – A 4-phase stockpile permit plan to import approximately 1.2 million cubic yards of dirt from the Riverside County Flood Control District Line “A” construction site (Romoland Master Drainage Plan) to Tentative Map 24648 of the Green Valley Specific Plan, generally located at the northeast corner of Ethanac Road and Goetz Avenue. **Applicant:** Scott Hildebrandt, Webb and Associates

(entitled) Stockpile Permit 15-05053 – Proposal to move and pile approximately 150,000 cubic yards of excess dirt material generated from the RCFC and WCD Line A flood control project onto approximately 51 undeveloped acres, located north of Line A between I-215 and Trumble Road. (APN# 331-100-001,002,012,013,017,019,023,024, and 027 thru 032). **Applicant:** MTC Consolidated, LLC.

(in construction) General Plan Amendment 10-10-0010, Zone Change 10-10-0011, Text Amendment 11-08-0013, and Tentative Tract Map 36343 (10-10-0009) to facilitate the construction of a 184-lot residential subdivision, a detention basin, a 6-acre City Park, and a park access lot, totaling 187 lots, at the northwesterly corner of Goetz Road and Ethanac Road. Applicant: Chris Mounts, KB Home Coastal, Inc.



(in construction) ADPR 14-03-0008 - Proposal to develop a six-acre City Park in two phases, located at the northwest corner of Goetz Road and the San Jacinto River. The first phase will be developed by KB Home for the City of Perris, while the second phase will be engineered and designed for the City of Perris to build at a later date. **Applicant:** Chris Mounts, KB Home Coastal, Inc.

(in construction) Conditional Use Permit 13-02-0014 with Letter of Public Convenience & Necessity, Request for Exception, and Variance 13-02-0015 for a 3,010 s.f. 7-Eleven convenience store with off-site beer and wine sales and a fueling center at the southeast corner of 4th Street and Wilkerson Avenue. **Applicant:** Tom Bergerson, DMB Architects

(in process) Development Plan Review 14-03-0025 – Proposal to permanently establish an auction facility on 9.8-acres “WCA”, located at 2021 Goetz Road. The business has been in operation since 2008 under a Temporary Use Permit in connection with a previously approved Development Plan Review (DPR 08-04-0012). **Applicant:** Brian Moening, Western Construction Auctions.

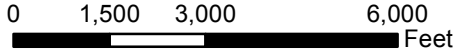
Perris Valley Airport Master Plans (check with ALUC)

Metrolink Project (anticipated to start December 2015)

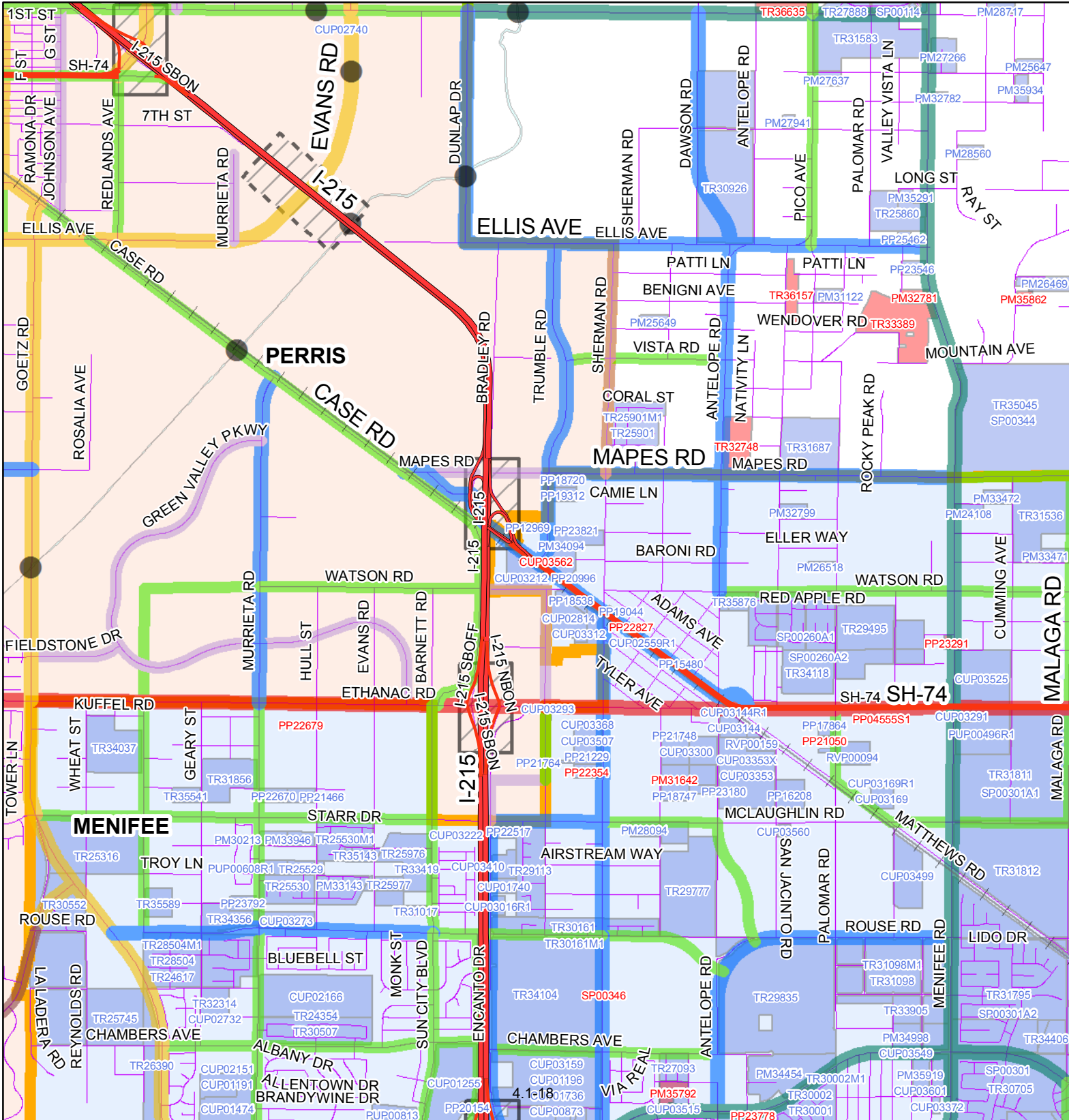
-  Cities (Outline)
-  ACTIVE CASES
-  APPROVED CASES



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Active Cases as of 12/9/2016

<u>CASE NAME</u>	<u>STATUS</u>	<u>APPLIED DATE</u>	<u>APPROVAL DATE</u>	<u>EXPIRED DATE</u>
CUP03562	ANNEXED	20070827	0	0
GAS STATION AND BEER AND WINE SALES				
PM31642	ANNEXED	20030716	0	0
DIVIDE 5 ACRES INTO 2 INDUSTRIAL PARCELS				
PM32781	DRT	20070108	0	20000000
SUBDIVIDE 5 ACRES INTO 4 PARCELS				
PP04555S1	VOID	19960812	0	0
ADDITION OF 2 STORAGE AREAS TO EXISTING BUILDING				
PP21050	DRT	20051104	0	20000000
ONE INDUSTRIAL BLDG 9,350 SF & 2000 SF MEZZANINE				
PP22354	ANNEXED	20061129	0	20000000
TRAILER AND BOAT STORAGE FACILITY				
PP22679	ANNEXED	20070330	0	20000000
PROPOSE A LARGE RENTAL/SALES CONTRACTOR EQUIPMENT.				
PP22827	DRT	20070530	0	20000000
CONSTRUCT A GROCERY STORE				
TR32748	PC	20040930	0	20000000
DIVIDE 20 ACRES INTO 22 SFR (20000 SF) LOTS - SCH B				
TR33389	DRT	20051031	0	20000000
SUBDIVIDE 38.2 AC INTO 31 SFR LOTS AND 1 OS LOTS				
TR36157	DRT	20100811	0	20000000
SUBDVD 9.3 AC INTO 8 SFR LOTS/SCHEDULE B				

Approved Cases as of 12/09/2016

<u>CASE NAME</u>	<u>STATUS</u>	<u>APPLIED DATE</u>	<u>APPROVAL DATE</u>	<u>EXPIRED DATE</u>
CUP01740	APPROVED	01/31/2008	0	NA
PROPOSED AUTO SALES				
CUP02086R1	APPROVED	05/30/2001	20030421	07/01/2006
TEMPORARY CONTRACTORS STORAGE YARD				
CUP02559R1	APPROVED	03/11/2005	20050726	06/22/2015
AUTO SALES AND REPAIR AND SERVICE CENTER				
CUP02814	APPROVED	12/21/2000	0	08/01/2011
PROPOSED CONCRETE BATCH PLANT				
CUP03016R1	APPROVED	04/13/1998	19990202	NA
REV CUP FOR EXPANSION OF EXISTING CONTIG. SELF STO				
CUP03144	APPROVED	07/15/1991	19920714	07/14/1995
ASPHALT BATCH PLANT				
CUP03144R1	APPROVED	11/13/2003	20040615	06/06/2025
CUP03144 REVISE PERMIT TO EXTEND PERMIT LIFE				
CUP03169	APPROVED	11/18/1992	19930629	06/29/1995
WOOD RECYCLING WASTE LUMBER & WOOD PRODUCTS				
CUP03169R1	APPROVED	09/20/2001	20030211	01/30/2018
RELOCATE FLD CHANNEL/EASEMT, EXTEND DATE OF CUP				
CUP03212	APPROVED	01/03/1995	19950314	03/14/1997
SOIL RECYCLING & PROCESSING FACILITY				
CUP03222	EXPIRED	08/04/1995	19970408	04/08/2007
RECREATIONAL VEHICLE PARKING FOR APPROX. 39 VEHICL				
CUP03237	APPROVED	04/30/1997	19970826	08/26/1999
BUILD A MORTUARY/CREMATORIUM & INDUST. WAREHOUSE.				
CUP03293	APPROVED	07/20/1999	20000620	05/18/2004
FAST FOOD RESTAURANT				
CUP03300	APPROVED	12/02/1999	20001128	NA
HEAVY EQUIPMENT STORAGE YARD/WAREHOUSE/OFFICES				
CUP03312	APPROVED	03/20/2000	20000502	NA
4 BLDGS TO MANUF AIR POLL EQUIP				
CUP03353	APPROVED	08/30/2001	20020318	NA
670 MEGEWATT NATURAL GAS FIRED POWER PLANT				
CUP03353X	APPROVED	12/10/2001	20020318	NA
NATURAL GAS COMPRESSER SITE (OFF-SITE FOR CUP03353				
CUP03368	APPROVED	03/25/2002	20021203	NA
GUNITE AND CONCRETE BATCH PLAN				
CUP03410	APPROVED	09/09/2003	20040309	NA
RV DEALERSHIP & SERVICE CENTER PROPANE SALES				
CUP03499	APPROVED	02/24/2006	0	NA
BLD SUN VALLEY ENERGY FOR NATURAL GAS-FIRED				
CUP03507	ANNEXED	04/19/2006	20090722	NA
A concrete batch plant with a 33,984 square foot o				
CUP03560	APPROVED	08/22/2007	20090317	03/17/2011
CONCRETE BATCH FACILITY AND PRECAST MANUFACTURING				

Approved Cases as of 12/09/2016

<u>CASE NAME</u>	<u>STATUS</u>	<u>APPLIED DATE</u>	<u>APPROVAL DATE</u>	<u>EXPIRED DATE</u>
PM25649	APPROVED	02/16/1990	19910108	01/08/2000
DIVIDE 5 ACRES INTO 4 LOTS				
PM26518	APPROVED	09/06/1990	19910521	05/21/1995
SPLIT 3.05 ACRES INTO 3 LOTS				
PM28094	APPROVED	02/06/1995	19950523	05/23/1999
PM TO DIVIDE APPROX 5 ACRES INTO 3 PARCELS				
PM30213	APPROVED	05/18/2001	20020514	NA
DIVIDE 5 ACRES INTO 4 PARCELS				
PM30479	APPROVED	02/04/2002	20030401	NA
SUBDIVIDE 1.16 AC LOT INTO 2 RES LOTS W/WAIVER				
PM31122	APPROVED	11/06/2003	20040914	09/14/2007
TO DIVIDE 4.72 ACRES INTO 4 SFR ONE ACRE LOTS				
PM31163	APPROVED	05/06/2003	20060124	01/24/2009
SUBDIVIDE 4.0 ACRES INTO 2 INDUSTRIAL PARCELS				
PM32799	APPROVED	11/18/2005	20070702	07/02/2013
SCHED H DIVISION OF 4.9 AC TO 4 PARCELS (SEWERED)				
PM33143	APPROVED	01/26/2005	20070827	08/27/2013
SCHED F DIVISION OF 1.22 AC INTO 3 17,714 SF PARCE				
PM33946	APPROVED	09/14/2005	20061016	10/16/2012
SCHED F DIVISION OF 1.43 AC. INTO 3 PARCELS.				
PM34094	APPROVED	10/28/2005	20070109	01/09/2015
SUBDIVIDE 10AC TO 13 PARCELS FOR LEASE OR SALE				
PM35291	APPROVED	04/11/2007	20080414	04/14/2015
DIVIDE LOT INTO 4 PARCELS & STREET DEDICATION				
PM35846	APPROVED	11/19/2007	20090203	02/03/2012
6.7 ACRE INDUSTRIAL CONDOMINIUM SITE WITH 4 BUILDI				
PP12969	APPROVED	09/05/1991	19921130	11/30/1994
154' CELLULAR TELEPHONE MONOPOLE				
PP15480	APPROVED	05/26/1998	19990422	NA
AUTO PARTS STORE 3000 SF				
PP16208	APPROVED	10/12/1999	20010423	NA
CONTRACTOR STORAGE YARD W/CARETAKER UNIT.				
PP17864	APPROVED	04/30/2002	20030623	NA
OFFICE/WAREHOUSE BUILDINGS--POLAR BEER SYSTEMS				
PP18538	APPROVED	03/27/2003	20080324	03/24/2010
LUMBER YARD W/ OFFICE TRAILER ON 3.69 AC				
PP18720	APPROVED	07/03/2003	20060124	01/24/2008
2 20,000 SF LIGHT INDUSTRIAL BUILDINGS IN M-SC				
PP18747	APPROVED	07/16/2003	20090616	06/16/2011
EROSION CONTROL/CONTRACTOR STORAGE & FABRICATION				
PP19044	APPROVED	12/03/2003	20090203	03/03/2011
REVIEW FOR AN EXISTING FOOD MARKET (CV033446)				
PP19312	APPROVED	03/23/2004	20051114	11/14/2007
WIRELESS COMMUNICATION FACILITY (A T & T)				

Approved Cases as of 12/09/2016

<u>CASE NAME</u>	<u>STATUS</u>	<u>APPLIED DATE</u>	<u>APPROVAL DATE</u>	<u>EXPIRED DATE</u>
PP20996	APPROVED	10/28/2005	20070109	01/09/2009
1 MULTIUSE COMMERCIAL & 10 LIGHT INDST/MANFCT BLDG				
PP21229	ANNEXED	12/13/2005	20090722	NA
BATCH PLANT; SAND & GRAVEL CONTRTR/MAINTNCE YARD				
PP21466	ANNEXED	02/27/2006	20090619	NA
CONSTRUCTION YARD/60X40 METAL STORAGE BLDG				
PP21599	APPROVED	04/03/2006	20080226	02/26/2010
STORAGE PARKING OF RV VEHICLES				
PP21748	APPROVED	05/11/2006	20080225	02/25/2010
STRGE YD/HVY EQUIP PRKN/MECH EQUIP/EXST CRTKR TRL				
PP21764	APPROVED	05/18/2006	20070918	09/18/2009
PROPSD MANUFACTURING FOUNTAINS, BIRDBTHS ETC.				
PP22517	APPROVED	02/01/2007	20080908	09/08/2010
1 THREE STORY OFFICE BLDG, 2 SINGLE-STORY RETAIL				
PP22670	ANNEXED	03/28/2007	20090619	NA
MODULAR OFC BLDG AND MODULAR HOME STORAGE FACILITY				
PP22807	ANNEXED	05/21/2007	20090619	NA
(1) 2,599 SQFT JACK-IN-THE-BOX W/ DRIVE THRU				
PP22854	APPROVED	06/12/2007	20090217	02/17/2011
CONTRACTOR STORAGE YARD				
PP23180	APPROVED	11/19/2007	20090203	02/03/2011
6.7 ACRE INDUSTRIAL CONDOMINIUM SITE WITH 4 BUILDI				
PP23546	APPROVED	06/26/2008	20080925	09/25/2010
INST 6 PANEL ANTENNAS 1 MICRO DISH IN FAUX WATR TK				
PP23792	ANNEXED	09/26/2008	20090717	NA
INSTALL NEW CO-LOCATE A 70 FT MONOPINE 6 PANEL ANT				
PP23821	ANNEXED	09/30/2008	20090722	NA
EXPAND WAREHOUSE FACILITY TO 49,024 S.F.(SEE DESC)				
PP25462	APPROVED	10/29/2013	20150420	NA
CLASS II KENNEL 11-25 DOGS (PASSION FOR PAWS)				
PUP00608R1	APPROVED	03/07/2002	20020716	NA
RESIDENTIAL TRAINING AND COUNSELING FACILITY				
RVP00094	APPROVED	07/08/1992	19920824	08/24/1994
RVP TO PP 9865 - MANUFACTURING BUILDING				
RVP00159	APPROVED	03/30/1995	19950606	06/06/1997
RVP TO CUP 3144 - REVISE ASPHALT AND CONCRETE BATC				
SP00260A1	APPROVED	03/28/2002	20070403	04/03/2027
AMD SP260 - REDUCE COMMERCIAL/RESIDENTIAL/PARK				
SP00260A2	APPROVED	08/22/2005	20080508	NA
SP PROPOSAL FOR APN 329-110-003/026/028/014/019/				
SP00301A1	APPROVED	05/25/1999	20021223	NA
AMENDMENT TO SP00301				
SP00301A2	APPROVED	05/31/2005	20060425	NA
AMENDMENT NO 2 TO SP 301				

Approved Cases as of 12/09/2016

<u>CASE NAME</u>	<u>STATUS</u>	<u>APPLIED DATE</u>	<u>APPROVAL DATE</u>	<u>EXPIRED DATE</u>
TR25529	APPROVED	01/11/1990	19910924	09/24/2001
DIVIDE APPROX 41 ACRES INTO 168 LOTS				
TR25530	APPROVED	01/11/1990	19910924	09/24/2001
DIVIDE 25 ACRES INTO 99 LOTS				
TR25530M1	APPROVED	02/13/2001	20020129	09/24/2002
REDUCE LOTS FROM 99 TO 76 AND ADD 3 ACRE PARK				
TR25860	APPROVED	06/22/1990	19910813	08/13/1997
DIVIDE 26.46 ACRES (8 LOTS COMBINED) INTO 49 HALF				
TR25901	APPROVED	05/08/1991	19920728	07/28/2003
SUBDIVIDE 39.5 AC INTO 152 LOTS				
TR25901M1	APPROVED	06/14/2002	20030506	NA
DELETE 28 LOTS TO DEDICATE PARK SPACE/BASIN				
TR25976	APPROVED	06/12/1990	19920915	09/15/1998
DIVIDE APPROX 27 ACRES INTO 106 LOTS				
TR25977	APPROVED	06/12/1990	19920915	09/15/1998
DIVIDE APPROX 9 ACRES INTO 36 LOTS				
TR26482	APPROVED	08/27/1990	19920728	07/28/1998
DIVIDE APPROX 5 ACRES INTO 20 LOTS				
TR29113	APPROVED	01/27/1999	20000801	08/01/2003
SUBDIVIDE 28.68 AC/138 SFR LOTS/1 REMAINDER				
TR29495	APPROVED	03/31/2000	20010725	07/25/2013
DIV 87 AC INTO 321 RES,2 DET BSNS, 1 OS LOTS				
TR29777	APPROVED	03/01/2002	20050517	05/17/2008
DIV 63.48 AC INTO 173 RES,1 OS,1 PARK & 1 WTR BSN				
TR30926	APPROVED	10/14/2003	20071204	12/04/2017
SCH "A" SUBDIVISION-79.90 ACRES INTO 330 R-4 LOTS				
TR31687	APPROVED	11/19/2003	20050525	05/25/2016
SUBDIVIDE 40.17 ACRES INTO 65 SFR LOTS AND 2 OPEN				
TR31856	APPROVED	10/16/2003	20040810	08/10/2009
DIVIDE 24.11 INTO 79 LOTS AND 1.3 AC. PARK				
TR33419	APPROVED	02/02/2005	20070508	05/08/2015
SUBDIVIDE 36.4 ACRES INTO 157 SF RES LOTS AND 1				
TR34118	APPROVED	03/03/2006	20080205	02/05/2017
SUBDIVIDE 27.58 ACRES INTO 172 SFR/OPEN SPACE/PARK				
TR35143	ANNEXED	10/03/2007	20090619	NA
SUBDIVIDE INTO 15 LOTS SCHEDULE 'A'				
TR35876	APPROVED	12/19/2007	20090217	02/17/2012
DIVIDE 5.6AC INTO 17 SFR SCHEDULE A				

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APPENDIX 5.1: E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↑	↑	↗
Traffic Volume (vph)	22	234	270	386	492	37
Future Volume (vph)	22	234	270	386	492	37
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		27.0	67.4	40.4	40.4
Total Split (%)	25.1%		30.0%	74.9%	44.9%	44.9%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effct Green (s)	6.3	48.6	13.4	35.9	18.8	18.8
Actuated g/C Ratio	0.13	1.00	0.28	0.74	0.39	0.39
v/c Ratio	0.10	0.15	0.56	0.28	0.69	0.06
Control Delay	29.2	0.2	23.0	3.1	19.6	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	0.2	23.0	3.1	19.6	7.8
LOS	C	A	C	A	B	A
Approach Delay	2.7			11.3	18.8	
Approach LOS	A			B	B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 48.6
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 12.5
 Intersection LOS: B
 Intersection Capacity Utilization 59.2%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)

10/26/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	22	234	270	386	492	37
Future Volume (veh/h)	22	234	270	386	492	37
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	23	0	278	398	507	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	51		353	1257	640	
Arrive On Green	0.03	0.00	0.20	0.66	0.34	0.00
Sat Flow, veh/h	1810	1610	1810	1900	1900	1610
Grp Volume(v), veh/h	23	0	278	398	507	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1900	1900	1610
Q Serve(g_s), s	0.5	0.0	5.6	3.5	9.3	0.0
Cycle Q Clear(g_c), s	0.5	0.0	5.6	3.5	9.3	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	51		353	1257	640	
V/C Ratio(X)	0.45		0.79	0.32	0.79	
Avail Cap(c_a), veh/h	777		1029	3016	1690	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.5	0.0	14.8	2.8	11.6	0.0
Incr Delay (d2), s/veh	2.3	0.0	1.5	0.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.7	0.0	2.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.8	0.0	16.3	2.9	12.5	0.0
LnGrp LOS	C		B	A	B	
Approach Vol, veh/h	23			676	507	
Approach Delay, s/veh	20.8			8.4	12.5	
Approach LOS	C			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.6	19.0			31.6	7.1
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	22.0	34.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	7.6	11.3			5.5	2.5
Green Ext Time (p_c), s	0.3	1.7			1.3	0.0

Intersection Summary

HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

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

Timings
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations	↖	↑↑	↑↑	↗	↘
Traffic Volume (vph)	28	698	644	664	188
Future Volume (vph)	28	698	644	664	188
Turn Type	Prot	NA	NA	Free	Prot
Protected Phases	5	2	6		4
Permitted Phases				Free	
Detector Phase	5	2	6		4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.3	22.5	22.5		22.5
Total Split (s)	15.0	59.0	44.0		31.0
Total Split (%)	16.7%	65.6%	48.9%		34.4%
Yellow Time (s)	4.3	4.3	4.3		4.3
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.3	5.3	5.3		5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None		None
Act Effct Green (s)	7.0	20.7	17.6	36.3	10.6
Actuated g/C Ratio	0.19	0.57	0.48	1.00	0.29
v/c Ratio	0.09	0.36	0.39	0.44	0.40
Control Delay	20.8	6.9	11.5	0.9	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.8	6.9	11.5	0.9	16.9
LOS	C	A	B	A	B
Approach Delay		7.5	6.1		16.9
Approach LOS		A	A		B

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 36.3
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.44
 Intersection Signal Delay: 7.5
 Intersection Capacity Utilization 43.2%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

Splits and Phases: 2: SR-74 & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 2: SR-74 & I-215 NB Ramps

Mapes & Sherman (JN 14804)

10/26/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑	↗	↑	↙	↘
Traffic Volume (veh/h)	28	698	644	664	188	12
Future Volume (veh/h)	28	698	644	664	188	12
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	30	743	685	0	200	7
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	66	1852	1117		265	9
Arrive On Green	0.04	0.51	0.31	0.00	0.15	0.15
Sat Flow, veh/h	1810	3705	3705	1610	1733	61
Grp Volume(v), veh/h	30	743	685	0	208	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1802	0
Q Serve(g_s), s	0.5	4.0	5.1	0.0	3.5	0.0
Cycle Q Clear(g_c), s	0.5	4.0	5.1	0.0	3.5	0.0
Prop In Lane	1.00			1.00	0.96	0.03
Lane Grp Cap(c), veh/h	66	1852	1117		276	0
V/C Ratio(X)	0.45	0.40	0.61		0.75	0.00
Avail Cap(c_a), veh/h	553	6105	4399		1459	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	15.0	4.7	9.3	0.0	12.9	0.0
Incr Delay (d2), s/veh	1.8	0.1	0.2	0.0	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	1.0	0.0	1.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.8	4.8	9.5	0.0	14.4	0.0
LnGrp LOS	B	A	A		B	A
Approach Vol, veh/h		773	685		208	
Approach Delay, s/veh		5.3	9.5		14.4	
Approach LOS		A	A		B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		21.6		10.2	6.5	15.1
Change Period (Y+Rc), s		5.3		5.3	5.3	5.3
Max Green Setting (Gmax), s		53.7		25.7	9.7	38.7
Max Q Clear Time (g_c+I1), s		6.0		5.5	2.5	7.1
Green Ext Time (p_c), s		3.0		0.3	0.0	2.7

Intersection Summary

HCM 6th Ctrl Delay	8.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection

Intersection Delay, s/veh 11.2

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔		↔↔	↔		↔	↔↔		↔	↔↔	
Traffic Vol, veh/h	1	22	56	266	12	6	62	132	160	4	121	2
Future Vol, veh/h	1	22	56	266	12	6	62	132	160	4	121	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	25	63	299	13	7	70	148	180	4	136	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	12	11.1	10.6
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	8%	0%	100%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	22%	92%	16%	0%	0%	67%	0%	100%	95%
Vol Right, %	0%	0%	78%	0%	84%	0%	0%	33%	0%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	62	88	204	12	67	133	133	18	4	81	42
LT Vol	62	0	0	1	0	133	133	0	4	0	0
Through Vol	0	88	44	11	11	0	0	12	0	81	40
RT Vol	0	0	160	0	56	0	0	6	0	0	2
Lane Flow Rate	70	99	229	13	75	149	149	20	4	91	48
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.131	0.171	0.362	0.026	0.131	0.283	0.283	0.034	0.009	0.17	0.089
Departure Headway (Hd)	6.747	6.243	5.69	6.883	6.257	6.81	6.81	6.076	7.256	6.751	6.717
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	531	573	630	519	571	528	528	588	492	530	532
Service Time	4.498	3.994	3.441	4.644	4.017	4.56	4.56	3.826	5.017	4.512	4.479
HCM Lane V/C Ratio	0.132	0.173	0.363	0.025	0.131	0.282	0.282	0.034	0.008	0.172	0.09
HCM Control Delay	10.5	10.3	11.7	9.8	10	12.2	12.2	9	10.1	10.9	10.1
HCM Lane LOS	B	B	B	A	A	B	B	A	B	B	B
HCM 95th-tile Q	0.4	0.6	1.6	0.1	0.4	1.2	1.2	0.1	0	0.6	0.3

Timings
4: SR-74 & Trumble Rd.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↷	↷	↶	↷
Traffic Volume (vph)	325	560	772	26	37	535
Future Volume (vph)	325	560	772	26	37	535
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	35.0	80.0	45.0	45.0	40.0	40.0
Total Split (%)	29.2%	66.7%	37.5%	37.5%	33.3%	33.3%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	18.6	46.3	23.3	23.3	10.5	10.5
Actuated g/C Ratio	0.27	0.68	0.34	0.34	0.15	0.15
v/c Ratio	0.68	0.24	0.65	0.05	0.14	0.82
Control Delay	32.7	5.0	23.6	8.9	29.6	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.7	5.0	23.6	8.9	29.6	16.2
LOS	C	A	C	A	C	B
Approach Delay		15.2	23.1		17.0	
Approach LOS		B	C		B	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 68.4
 Natural Cycle: 85
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 18.4
 Intersection LOS: B
 Intersection Capacity Utilization 63.5%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)

10/26/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↗	↑↑	↑↑	↗	↗	↗
Traffic Volume (veh/h)	325	560	772	26	37	535
Future Volume (veh/h)	325	560	772	26	37	535
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	335	577	796	24	38	361
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	389	2108	1112	484	462	411
Arrive On Green	0.21	0.58	0.31	0.31	0.26	0.26
Sat Flow, veh/h	1810	3705	3705	1571	1810	1610
Grp Volume(v), veh/h	335	577	796	24	38	361
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1571	1810	1610
Q Serve(g_s), s	11.6	5.2	12.8	0.7	1.0	14.1
Cycle Q Clear(g_c), s	11.6	5.2	12.8	0.7	1.0	14.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	389	2108	1112	484	462	411
V/C Ratio(X)	0.86	0.27	0.72	0.05	0.08	0.88
Avail Cap(c_a), veh/h	859	4092	2156	938	984	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	6.7	20.1	15.9	18.5	23.3
Incr Delay (d2), s/veh	2.2	0.1	0.9	0.0	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	1.3	4.6	0.2	0.4	11.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.9	6.8	20.9	15.9	18.5	25.8
LnGrp LOS	C	A	C	B	B	C
Approach Vol, veh/h		912	820		399	
Approach Delay, s/veh		14.2	20.8		25.1	
Approach LOS		B	C		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		44.1		21.2	18.0	26.1
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		74.0		35.5	31.0	39.0
Max Q Clear Time (g_c+1), s		7.2		16.1	13.6	14.8
Green Ext Time (p_c), s		3.8		0.6	0.4	5.2
Intersection Summary						
HCM 6th Ctrl Delay			18.8			
HCM 6th LOS			B			

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑	↘	
Traffic Vol, veh/h	172	14	0	278	6	0
Future Vol, veh/h	172	14	0	278	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	187	15	0	302	7	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	202	0	346
Stage 1	-	-	-	-	195
Stage 2	-	-	-	-	151
Critical Hdwy	-	-	4.1	-	6.8
Critical Hdwy Stg 1	-	-	-	-	5.8
Critical Hdwy Stg 2	-	-	-	-	5.8
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1382	-	630
Stage 1	-	-	-	-	825
Stage 2	-	-	-	-	867
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1382	-	630
Mov Cap-2 Maneuver	-	-	-	-	673
Stage 1	-	-	-	-	825
Stage 2	-	-	-	-	867

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	673	-	-	1382	-
HCM Lane V/C Ratio	0.01	-	-	-	-
HCM Control Delay (s)	10.4	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Vol, veh/h	166	5	0	278	0	0
Future Vol, veh/h	166	5	0	278	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	180	5	0	302	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	93
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	-	0	952
Stage 1	-	0	-	0	-
Stage 2	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	952
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection													
Int Delay, s/veh 1.8													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Vol, veh/h	15	106	45	12	251	2	3	14	16	5	2	24	
Future Vol, veh/h	15	106	45	12	251	2	3	14	16	5	2	24	
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	2	0	0	1	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0	
Mvmt Flow	16	115	49	13	273	2	3	15	17	5	2	26	
Major/Minor	Major1	Major2	Major2	Minor1	Minor1	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2	
Conflicting Flow All	279	0	0	166	0	0	489	479	144	493	501	278	
Stage 1	-	-	-	-	-	-	174	174	-	303	303	-	
Stage 2	-	-	-	-	-	-	315	305	-	190	198	-	
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3	
Pot Cap-1 Maneuver	1295	-	-	1424	-	-	493	489	909	490	475	766	
Stage 1	-	-	-	-	-	-	833	759	-	711	667	-	
Stage 2	-	-	-	-	-	-	700	666	-	816	741	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1290	-	-	1421	-	-	464	474	906	459	460	762	
Mov Cap-2 Maneuver	-	-	-	-	-	-	535	527	-	540	522	-	
Stage 1	-	-	-	-	-	-	820	747	-	698	657	-	
Stage 2	-	-	-	-	-	-	666	656	-	772	729	-	
Approach	EB	WB	WB	NB	NB	SB	SB	SB	SB	SB	SB	SB	
HCM Control Delay, s	0.7		0.3		10.7		10.4						
HCM LOS				B			B						
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn1	SBLn1	SBLn1	SBLn1	
Capacity (veh/h)	662	1290	-	-	1421	-	-	695					
HCM Lane V/C Ratio	0.054	0.013	-	-	0.009	-	-	0.048					
HCM Control Delay (s)	10.7	7.8	0	-	7.6	0	-	10.4					
HCM Lane LOS	B	A	A	-	A	A	-	B					
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.2					

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	0	2	2	33	57	2
Future Vol, veh/h	0	2	2	33	57	2
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, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2	36	62	2

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	103	63	64	0	0
Stage 1	63	-	-	-	-
Stage 2	40	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	900	1007	1551	-	-
Stage 1	965	-	-	-	-
Stage 2	988	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	899	1007	1551	-	-
Mov Cap-2 Maneuver	855	-	-	-	-
Stage 1	964	-	-	-	-
Stage 2	988	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1551	-	1007	-	-
HCM Lane V/C Ratio	0.001	-	0.002	-	-
HCM Control Delay (s)	7.3	-	8.6	-	-
HCM Lane LOS	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	2	2	35	53	6
Future Vol, veh/h	0	2	2	35	53	6
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, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2	38	58	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	104	62	65	0	-	0
Stage 1	62	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	899	1009	1550	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	898	1009	1550	-	-	-
Mov Cap-2 Maneuver	854	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	986	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1550	-	1009	-	-
HCM Lane V/C Ratio	0.001	-	0.002	-	-
HCM Control Delay (s)	7.3	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	554	640	14	0	107
Future Vol, veh/h	0	554	640	14	0	107
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	589	681	15	0	114

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	348
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	654
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	654
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	654
HCM Lane V/C Ratio	-	-	-	0.174
HCM Control Delay (s)	-	-	-	11.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.6

Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↑	↑	↗
Traffic Volume (vph)	19	169	227	300	733	47
Future Volume (vph)	19	169	227	300	733	47
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		19.0	67.4	48.4	48.4
Total Split (%)	25.1%		21.1%	74.9%	53.8%	53.8%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effct Green (s)	5.9	59.5	13.4	33.4	30.4	30.4
Actuated g/C Ratio	0.10	1.00	0.23	0.56	0.51	0.51
v/c Ratio	0.11	0.11	0.60	0.30	0.81	0.06
Control Delay	33.6	0.1	33.4	6.6	21.0	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.6	0.1	33.4	6.6	21.0	5.8
LOS	C	A	C	A	C	A
Approach Delay	3.5			18.1	20.0	
Approach LOS	A			B	C	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 59.5
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 17.3
 Intersection LOS: B
 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 Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)
 08/19/2022



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	169	227	300	733	47
Future Volume (veh/h)	19	169	227	300	733	47
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	20	0	244	323	788	0
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	44		302	1405	901	
Arrive On Green	0.02	0.00	0.17	0.74	0.47	0.00
Sat Flow, veh/h	1810	1610	1810	1900	1900	1610
Grp Volume(v), veh/h	20	0	244	323	788	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1900	1900	1610
Q Serve(g_s), s	0.6	0.0	6.6	2.7	18.9	0.0
Cycle Q Clear(g_c), s	0.6	0.0	6.6	2.7	18.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	44		302	1405	901	
V/C Ratio(X)	0.46		0.81	0.23	0.87	
Avail Cap(c_a), veh/h	591		499	2297	1586	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.5	0.0	20.4	2.1	12.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	2.0	0.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.4	0.0	5.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.2	0.0	22.3	2.1	13.1	0.0
LnGrp LOS	C		C	A	B	
Approach Vol, veh/h	20			567	788	
Approach Delay, s/veh	27.2			10.8	13.1	
Approach LOS	C			B	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.5	30.1			43.6	7.2
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	14.0	42.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	8.6	20.9			4.7	2.6
Green Ext Time (p_c), s	0.2	3.2			1.0	0.0

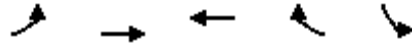
Intersection Summary

HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

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

Timings
2: SR-74 & I-215 NB Ramps

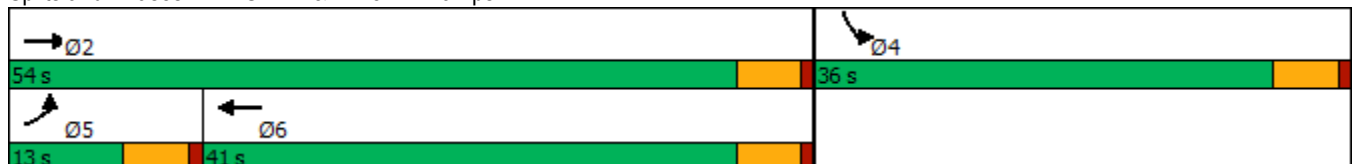


Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations	↖	↑↑	↑↑	↗	↘
Traffic Volume (vph)	13	889	490	582	210
Future Volume (vph)	13	889	490	582	210
Turn Type	Prot	NA	NA	Free	Prot
Protected Phases	5	2	6		4
Permitted Phases				Free	
Detector Phase	5	2	6		4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.3	22.5	22.5		22.5
Total Split (s)	13.0	54.0	41.0		36.0
Total Split (%)	14.4%	60.0%	45.6%		40.0%
Yellow Time (s)	4.3	4.3	4.3		4.3
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.3	5.3	5.3		5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None		None
Act Effct Green (s)	5.5	16.9	15.3	39.0	10.9
Actuated g/C Ratio	0.14	0.43	0.39	1.00	0.28
v/c Ratio	0.06	0.62	0.38	0.40	0.54
Control Delay	19.9	10.6	10.8	0.7	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	10.6	10.8	0.7	17.0
LOS	B	B	B	A	B
Approach Delay		10.8	5.3		17.0
Approach LOS		B	A		B

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 39
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 8.8
 Intersection Capacity Utilization 47.3%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

Splits and Phases: 2: SR-74 & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
2: SR-74 & I-215 NB Ramps

Mapes & Sherman (JN 14804)

08/19/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	889	490	582	210	37
Future Volume (veh/h)	13	889	490	582	210	37
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	14	977	538	0	231	28
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	33	1644	942		305	37
Arrive On Green	0.02	0.46	0.26	0.00	0.19	0.19
Sat Flow, veh/h	1810	3705	3705	1610	1587	192
Grp Volume(v), veh/h	14	977	538	0	260	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1786	0
Q Serve(g_s), s	0.2	6.1	3.9	0.0	4.1	0.0
Cycle Q Clear(g_c), s	0.2	6.1	3.9	0.0	4.1	0.0
Prop In Lane	1.00			1.00	0.89	0.11
Lane Grp Cap(c), veh/h	33	1644	942		343	0
V/C Ratio(X)	0.42	0.59	0.57		0.76	0.00
Avail Cap(c_a), veh/h	463	5845	4285		1823	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	14.6	6.1	9.7	0.0	11.5	0.0
Incr Delay (d2), s/veh	3.1	0.1	0.2	0.0	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.8	0.0	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.7	6.2	9.9	0.0	12.8	0.0
LnGrp LOS	B	A	A		B	A
Approach Vol, veh/h		991	538		260	
Approach Delay, s/veh		6.4	9.9		12.8	
Approach LOS		A	A		B	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		19.0		11.1	5.9	13.1
Change Period (Y+Rc), s		5.3		5.3	5.3	5.3
Max Green Setting (Gmax), s		48.7		30.7	7.7	35.7
Max Q Clear Time (g_c+I1), s		8.1		6.1	2.2	5.9
Green Ext Time (p_c), s		4.3		0.4	0.0	2.0

Intersection Summary

HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection

Intersection Delay, s/veh 11.4

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	0	6	6	187	1	10	10	81	226	52	187	2
Future Vol, veh/h	0	6	6	187	1	10	10	81	226	52	187	2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	7	7	225	1	12	12	98	272	63	225	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	9.5	11.4	12.2	10.6
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	0%	0%	100%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	11%	100%	25%	0%	0%	9%	0%	100%	97%
Vol Right, %	0%	0%	89%	0%	75%	0%	0%	91%	0%	0%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	54	253	4	8	94	94	11	52	125	64
LT Vol	10	0	0	0	0	94	94	0	52	0	0
Through Vol	0	54	27	4	2	0	0	1	0	125	62
RT Vol	0	0	226	0	6	0	0	10	0	0	2
Lane Flow Rate	12	65	305	5	10	113	113	13	63	150	78
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.022	0.11	0.462	0.009	0.017	0.216	0.216	0.021	0.117	0.259	0.133
Departure Headway (Hd)	6.589	6.086	5.457	6.959	6.434	6.913	6.913	5.777	6.721	6.218	6.196
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	544	589	661	513	555	519	519	619	534	578	579
Service Time	4.323	3.82	3.191	4.714	4.189	4.655	4.655	3.519	4.459	3.956	3.934
HCM Lane V/C Ratio	0.022	0.11	0.461	0.01	0.018	0.218	0.218	0.021	0.118	0.26	0.135
HCM Control Delay	9.5	9.6	12.8	9.8	9.3	11.6	11.6	8.6	10.4	11.1	9.9
HCM Lane LOS	A	A	B	A	A	B	B	A	B	B	A
HCM 95th-tile Q	0.1	0.4	2.4	0	0.1	0.8	0.8	0.1	0.4	1	0.5

Timings
4: SR-74 & Trumble Rd.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↷	↷	↶	↷
Traffic Volume (vph)	304	793	686	41	44	386
Future Volume (vph)	304	793	686	41	44	386
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	39.0	86.0	47.0	47.0	34.0	34.0
Total Split (%)	32.5%	71.7%	39.2%	39.2%	28.3%	28.3%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	17.6	43.1	21.1	21.1	9.1	9.1
Actuated g/C Ratio	0.28	0.67	0.33	0.33	0.14	0.14
v/c Ratio	0.66	0.35	0.62	0.08	0.18	0.71
Control Delay	29.9	5.2	22.1	7.4	29.2	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.9	5.2	22.1	7.4	29.2	10.9
LOS	C	A	C	A	C	B
Approach Delay		12.1	21.3		12.7	
Approach LOS		B	C		B	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 63.9
 Natural Cycle: 85
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 15.2
 Intersection Capacity Utilization 52.1%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)

08/19/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↗	↑↑	↑↑	↖	↗	↖
Traffic Volume (veh/h)	304	793	686	41	44	386
Future Volume (veh/h)	304	793	686	41	44	386
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	327	853	738	38	47	225
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	395	2214	1138	508	321	285
Arrive On Green	0.22	0.61	0.32	0.32	0.18	0.18
Sat Flow, veh/h	1810	3705	3705	1610	1810	1610
Grp Volume(v), veh/h	327	853	738	38	47	225
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1810	1610
Q Serve(g_s), s	8.6	6.0	8.8	0.8	1.1	6.7
Cycle Q Clear(g_c), s	8.6	6.0	8.8	0.8	1.1	6.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	395	2214	1138	508	321	285
V/C Ratio(X)	0.83	0.39	0.65	0.07	0.15	0.79
Avail Cap(c_a), veh/h	1264	5762	2953	1317	1065	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	4.9	14.8	12.0	17.4	19.7
Incr Delay (d2), s/veh	1.7	0.1	0.6	0.1	0.1	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.9	2.8	0.2	0.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.4	5.0	15.4	12.1	17.5	21.6
LnGrp LOS	C	A	B	B	B	C
Approach Vol, veh/h		1180	776		272	
Approach Delay, s/veh		9.3	15.2		20.9	
Approach LOS		A	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.7		13.4	14.9	21.8
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		80.0		29.5	35.0	41.0
Max Q Clear Time (g_c+I1), s		8.0		8.7	10.6	10.8
Green Ext Time (p_c), s		6.2		0.4	0.4	5.0
Intersection Summary						
HCM 6th Ctrl Delay			12.8			
HCM 6th LOS			B			

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	277	6	0	177	21	0
Future Vol, veh/h	277	6	0	177	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	301	7	0	192	23	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	308	0	401
Stage 1	-	-	-	-	305
Stage 2	-	-	-	-	96
Critical Hdwy	-	-	4.1	-	6.8
Critical Hdwy Stg 1	-	-	-	-	5.8
Critical Hdwy Stg 2	-	-	-	-	5.8
Follow-up Hdwy	-	-	2.2	-	3.5
Pot Cap-1 Maneuver	-	-	1264	-	582
Stage 1	-	-	-	-	727
Stage 2	-	-	-	-	923
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1264	-	582
Mov Cap-2 Maneuver	-	-	-	-	624
Stage 1	-	-	-	-	727
Stage 2	-	-	-	-	923

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	624	-	-	1264	-
HCM Lane V/C Ratio	0.037	-	-	-	-
HCM Control Delay (s)	11	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Vol, veh/h	274	3	0	177	0	0
Future Vol, veh/h	274	3	0	177	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	298	3	0	192	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	151
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	-	0	875
Stage 1	-	0	-	0	-
Stage 2	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	875
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection													
Int Delay, s/veh 2.1													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		↔		↔	↔	↔		↔			↔	↔	
Traffic Vol, veh/h	26	222	26	11	141	4	9	6	20	2	7	27	
Future Vol, veh/h	26	222	26	11	141	4	9	6	20	2	7	27	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86	
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0	
Mvmt Flow	30	258	30	13	164	5	10	7	23	2	8	31	

Major/Minor	Major1	Major2	Minor1	Minor2	
Conflicting Flow All	169	0	0	288	0
Stage 1	-	-	-	-	545
Stage 2	-	-	-	-	528
Critical Hdwy	4.1	-	-	-	277
Critical Hdwy Stg 1	-	-	-	-	542
Critical Hdwy Stg 2	-	-	-	-	538
Follow-up Hdwy	2.2	-	-	-	190
Pot Cap-1 Maneuver	1421	-	-	-	190
Stage 1	-	-	-	-	333
Stage 2	-	-	-	-	333
Platoon blocked, %	-	-	-	-	190
Mov Cap-1 Maneuver	1421	-	-	-	352
Mov Cap-2 Maneuver	-	-	-	-	348
Stage 1	-	-	-	-	6.2
Stage 2	-	-	-	-	6.2
Approach	EB	WB	NB	SB	
HCM Control Delay, s	0.7	0.6	11.1	10.1	
HCM LOS			B	B	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	627	1421	-	-	1286	-	-	742
HCM Lane V/C Ratio	0.065	0.021	-	-	0.01	-	-	0.056
HCM Control Delay (s)	11.1	7.6	0	-	7.8	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	0	7	1	35	43	1
Future Vol, veh/h	0	7	1	35	43	1
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, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	1	38	47	1

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	88	48	48	0	0
Stage 1	48	-	-	-	-
Stage 2	40	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	918	1027	1572	-	-
Stage 1	980	-	-	-	-
Stage 2	988	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	917	1027	1572	-	-
Mov Cap-2 Maneuver	867	-	-	-	-
Stage 1	979	-	-	-	-
Stage 2	988	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1572	-	1027	-	-
HCM Lane V/C Ratio	0.001	-	0.007	-	-
HCM Control Delay (s)	7.3	-	8.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	2	9	1	34	47	3
Future Vol, veh/h	2	9	1	34	47	3
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, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	10	1	37	51	3

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	92	53	54	0	0
Stage 1	53	-	-	-	-
Stage 2	39	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	913	1020	1564	-	-
Stage 1	975	-	-	-	-
Stage 2	989	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	912	1020	1564	-	-
Mov Cap-2 Maneuver	864	-	-	-	-
Stage 1	974	-	-	-	-
Stage 2	989	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1564	-	988	-	-
HCM Lane V/C Ratio	0.001	-	0.012	-	-
HCM Control Delay (s)	7.3	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	829	564	18	0	90
Future Vol, veh/h	0	829	564	18	0	90
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	882	600	19	0	96

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	- 310
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0 692
Stage 1	0	-	-	-	0 -
Stage 2	0	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	- 692
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	692
HCM Lane V/C Ratio	-	-	-	0.138
HCM Control Delay (s)	-	-	-	11
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.5

APPENDIX 5.2: E+P CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

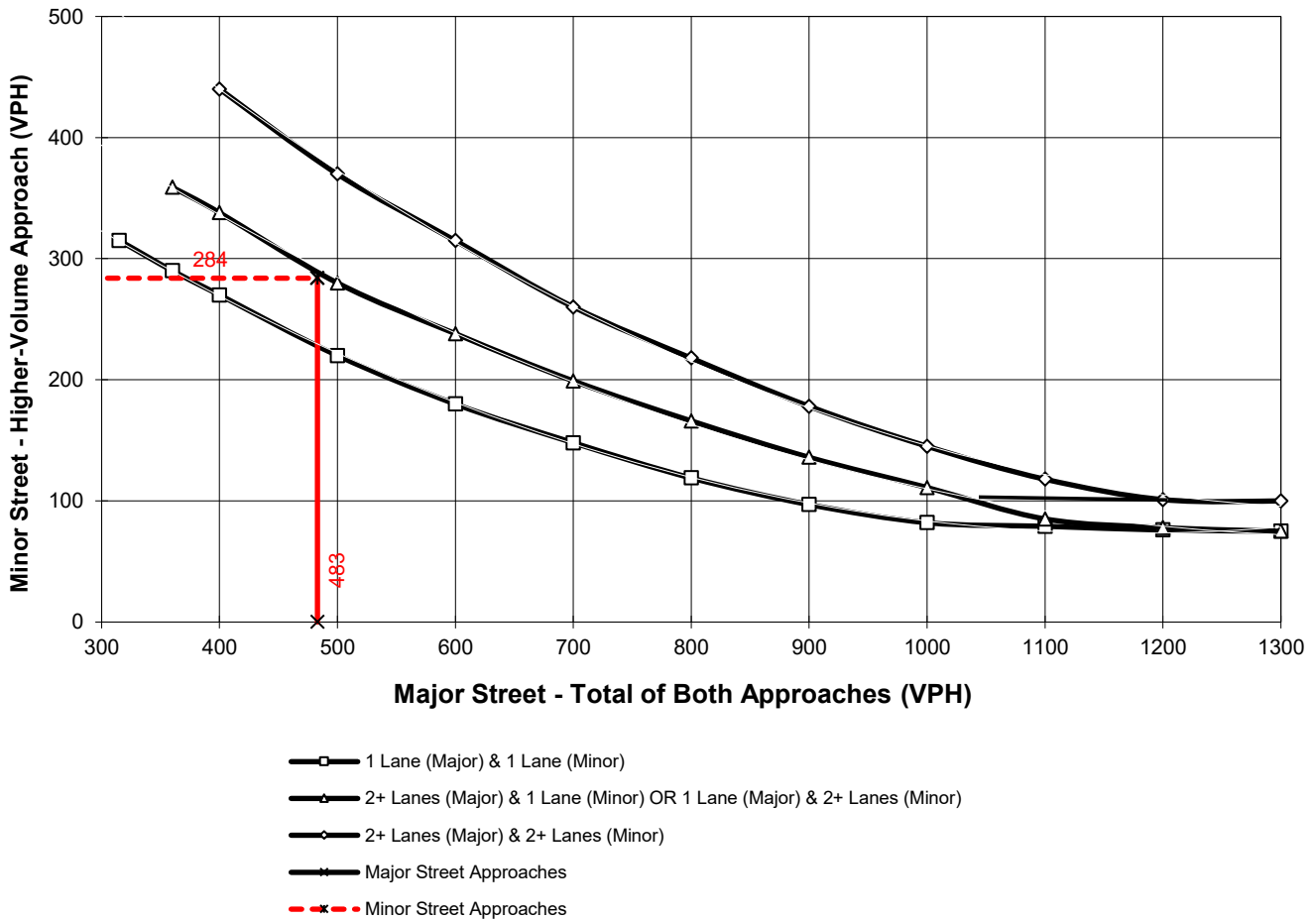
Major Street Name = **Trumble Rd.**

Total of Both Approaches (VPH) = **483**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Mapes Rd.**

High Volume Approach (VPH) = **284**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane



Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	<u>CALC</u>	<u>TRAFFIC CONDITIONS</u>	<u>E+P</u>
Jurisdiction: <u>City of Menifee</u>				<u>CS</u>	<u>CS</u>	<u>DATE 04/21/23</u>
Major Street: <u>Mapes Rd.</u>				<u>CHK CS</u>		<u>DATE 04/21/23</u>
Minor Street: <u>Driveway 1</u>					Critical Approach Speed (Major) <u>45 mph</u>	
					Critical Approach Speed (Minor) <u>25 mph</u>	
Major Street Approach Lanes =			<u>1</u>	lane	Minor Street Approach Lanes =	<u>1</u> lane
Major Street Future ADT =			<u>5,491</u>	vpd	Minor Street Future ADT =	<u>136</u> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);					<input checked="" type="checkbox"/>	
					or	RURAL (R)
In built up area of isolated community of < 10,000 population					<input type="checkbox"/>	

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>				
	XX				
	XX				
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1 5,491	1 136	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>				
	XX				
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1 5,491	1 136	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS 80%		2 CONDITIONS 80%	
<u>Satisfied</u>	<u>Not Satisfied</u>				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more					
	A				
	8%				
	B				
	16%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

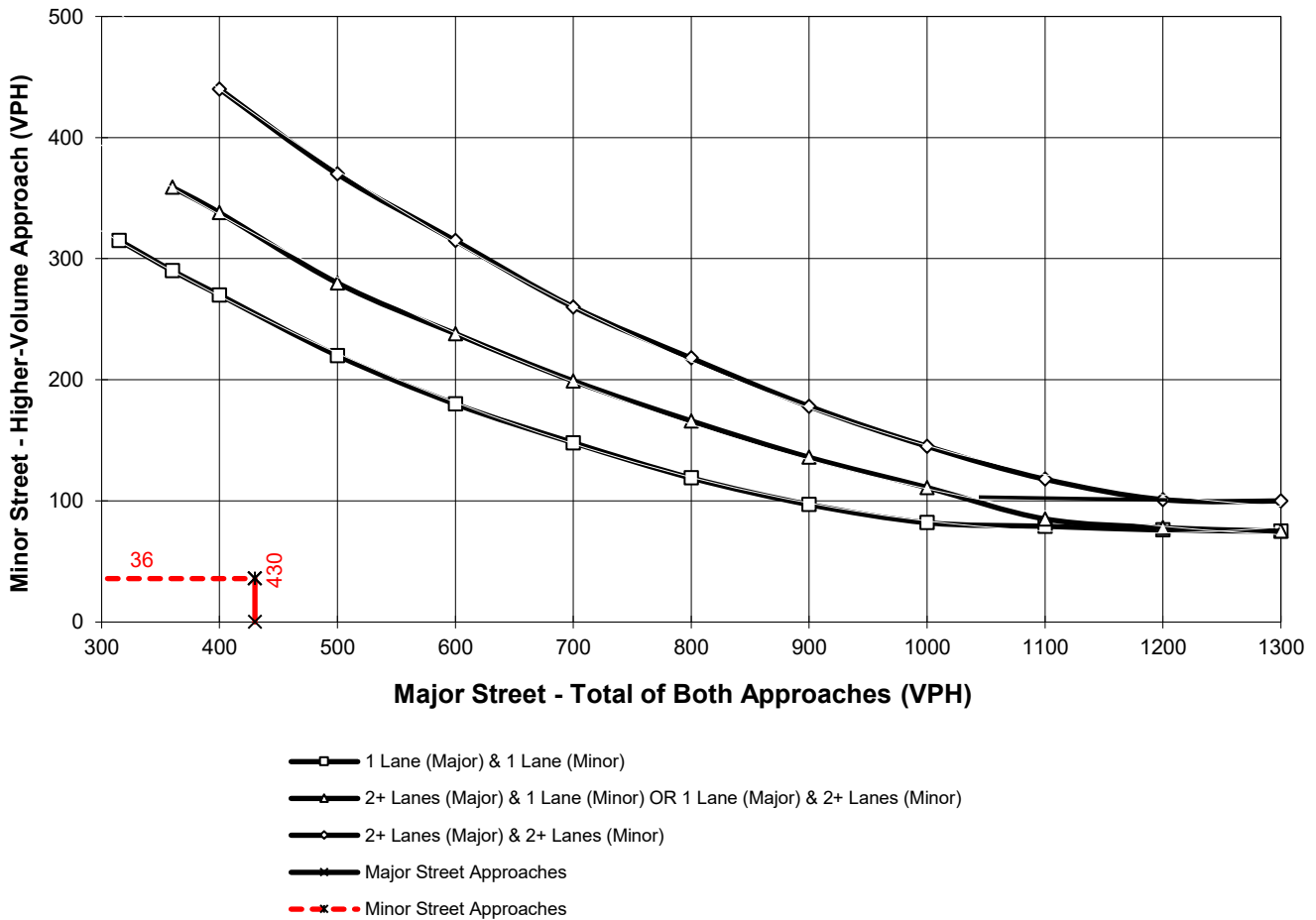
Major Street Name = **Mapes Rd.**

Total of Both Approaches (VPH) = **430**
 Number of Approach Lanes Major Street = **1**

Minor Street Name = **Sherman Rd.**

High Volume Approach (VPH) = **36**
 Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	TRAFFIC CONDITIONS	<u>E+P</u>
Jurisdiction: <u>City of Menifee</u>				CALC <u>CS</u>	DATE <u>08/22/22</u>
Major Street: <u>Sherman Rd.</u>				CHK <u>CS</u>	DATE <u>08/22/22</u>
Minor Street: <u>Driveway 3</u>				Critical Approach Speed (Major) <u>40</u> mph	
				Critical Approach Speed (Minor) <u>25</u> mph	
Major Street Approach Lanes =		<u>1</u>	lane	Minor Street Approach Lanes =	<u>1</u> lane
Major Street Future ADT =		<u>992</u>	vpd	Minor Street Future ADT =	<u>55</u> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);				<input type="checkbox"/>	
				or	RURAL (R)
In built up area of isolated community of < 10,000 population				<input type="checkbox"/>	

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements			
XX		EADT			
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>		(Total of Both Approaches)		(One Direction Only)	
<u>Not Satisfied</u>		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
1 992	1 55	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>		(Total of Both Approaches)		(One Direction Only)	
<u>Not Satisfied</u>		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
XX					
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
1 992	1 55	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>		80%		80%	
<u>Not Satisfied</u>					
XX					
No one condition satisfied, but following conditions fulfilled 80% of more					
	<u>A</u>				
	2%				
	<u>B</u>				
	5%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	<u>CALC</u>	<u>TRAFFIC CONDITIONS</u>	<u>E+P</u>
Jurisdiction: <u>City of Menifee</u>				<u>CS</u>	<u>CS</u>	<u>DATE 08/22/22</u>
Major Street: <u>Sherman Rd.</u>				<u>CHK CS</u>	Critical Approach Speed (Major)	<u>40 mph</u>
Minor Street: <u>Driveway 4</u>					Critical Approach Speed (Minor)	<u>25 mph</u>
Major Street Approach Lanes =			<u>1</u>	lane	Minor Street Approach Lanes =	<u>1</u> lane
Major Street Future ADT =			<u>1,038</u>	vpd	Minor Street Future ADT =	<u>81</u> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);						<input type="checkbox"/>
						or
In built up area of isolated community of < 10,000 population						<input type="checkbox"/>

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements			
XX		EADT			
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>		<u>Not Satisfied</u>		<u>(One Direction Only)</u>	
		XX			
Number of lanes for moving traffic on each approach		<u>(Total of Both Approaches)</u>		<u>(One Direction Only)</u>	
<u>Major Street</u>	<u>Minor Street</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1 1,038	1 81	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>		<u>Not Satisfied</u>		<u>(One Direction Only)</u>	
		XX			
Number of lanes for moving traffic on each approach		<u>(Total of Both Approaches)</u>		<u>(One Direction Only)</u>	
<u>Major Street</u>	<u>Minor Street</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1 1,038	1 81	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>		<u>Not Satisfied</u>		<u>80%</u>	
		XX		<u>80%</u>	
No one condition satisfied, but following conditions fulfilled 80% of more					
	<u>A</u>				
	3%				
	<u>B</u>				
	7%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



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APPENDIX 5.3: E+P CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Queues

1: SR-74/I-215 SB Ramps & Bonnie Dr.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	23	241	278	398	507	38
v/c Ratio	0.10	0.15	0.56	0.28	0.69	0.06
Control Delay	29.2	0.2	23.0	3.1	19.6	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	0.2	23.0	3.1	19.6	7.8
Queue Length 50th (ft)	4	0	47	0	80	2
Queue Length 95th (ft)	33	0	193	72	296	21
Internal Link Dist (ft)	1025			1452	226	
Turn Bay Length (ft)		50	120			100
Base Capacity (vph)	724	1615	959	1794	1467	1253
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.15	0.29	0.22	0.35	0.03

Intersection Summary

Queues
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	30	743	685	706	213
v/c Ratio	0.09	0.36	0.39	0.44	0.40
Control Delay	20.8	6.9	11.5	0.9	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.8	6.9	11.5	0.9	16.9
Queue Length 50th (ft)	4	44	40	0	28
Queue Length 95th (ft)	30	99	146	0	116
Internal Link Dist (ft)		1452	714		376
Turn Bay Length (ft)	245			150	
Base Capacity (vph)	631	3544	3194	1615	1332
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	0.05	0.21	0.21	0.44	0.16

Intersection Summary

Queues

1: SR-74/I-215 SB Ramps & Bonnie Dr.

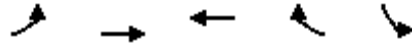


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	20	182	244	323	788	51
v/c Ratio	0.11	0.11	0.60	0.30	0.81	0.06
Control Delay	33.6	0.1	33.4	6.6	21.0	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.6	0.1	33.4	6.6	21.0	5.8
Queue Length 50th (ft)	6	0	64	0	178	4
Queue Length 95th (ft)	30	0	#230	56	456	22
Internal Link Dist (ft)	1025			1452	226	
Turn Bay Length (ft)		50	120			100
Base Capacity (vph)	549	1615	463	1725	1428	1220
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	0.04	0.11	0.53	0.19	0.55	0.04

Intersection Summary

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

Queues
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	14	977	538	640	272
v/c Ratio	0.06	0.62	0.38	0.40	0.54
Control Delay	19.9	10.6	10.8	0.7	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	10.6	10.8	0.7	17.0
Queue Length 50th (ft)	3	73	34	0	44
Queue Length 95th (ft)	18	152	115	0	127
Internal Link Dist (ft)		1452	714		376
Turn Bay Length (ft)	245			150	
Base Capacity (vph)	377	3526	3209	1615	1443
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	0.04	0.28	0.17	0.40	0.19

Intersection Summary

**APPENDIX 6.1: OPENING YEAR CUMULATIVE (2024) WITHOUT
PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS
WORKSHEETS**

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Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.

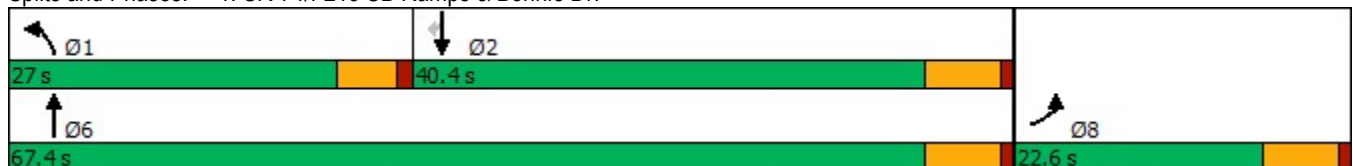


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↑	↑	↗
Traffic Volume (vph)	71	361	598	612	608	84
Future Volume (vph)	71	361	598	612	608	84
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		27.0	67.4	40.4	40.4
Total Split (%)	25.1%		30.0%	74.9%	44.9%	44.9%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effct Green (s)	7.7	73.0	22.8	57.9	28.1	28.1
Actuated g/C Ratio	0.11	1.00	0.31	0.79	0.38	0.38
v/c Ratio	0.39	0.23	1.09	0.42	0.86	0.13
Control Delay	39.8	0.3	95.5	4.7	34.5	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.8	0.3	95.5	4.7	34.5	9.2
LOS	D	A	F	A	C	A
Approach Delay	6.8			49.5	31.4	
Approach LOS	A			D	C	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 73
 Natural Cycle: 100
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.09
 Intersection Signal Delay: 36.2
 Intersection LOS: D
 Intersection Capacity Utilization 83.5%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)
 02/16/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	71	361	598	612	608	84
Future Volume (veh/h)	71	361	598	612	608	84
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	73	0	616	631	627	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	100		588	1458	700	
Arrive On Green	0.06	0.00	0.33	0.77	0.37	0.00
Sat Flow, veh/h	1810	1610	1810	1900	1900	1610
Grp Volume(v), veh/h	73	0	616	631	627	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1900	1900	1610
Q Serve(g_s), s	2.7	0.0	22.0	7.8	21.0	0.0
Cycle Q Clear(g_c), s	2.7	0.0	22.0	7.8	21.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	100		588	1458	700	
V/C Ratio(X)	0.73		1.05	0.43	0.90	
Avail Cap(c_a), veh/h	444		588	1724	966	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.5	0.0	22.8	2.7	20.1	0.0
Incr Delay (d2), s/veh	3.8	0.0	50.0	0.1	6.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	15.9	0.6	9.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.3	0.0	72.8	2.8	27.0	0.0
LnGrp LOS	D		F	A	C	
Approach Vol, veh/h	73	A		1247	627	A
Approach Delay, s/veh	35.3			37.4	27.0	
Approach LOS	D			D	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	27.0	30.9			57.9	9.7
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	22.0	34.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	24.0	23.0			9.8	4.7
Green Ext Time (p_c), s	0.0	1.9			2.3	0.0

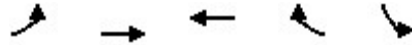
Intersection Summary

HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Notes

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

Timings
2: SR-74 & I-215 NB Ramps

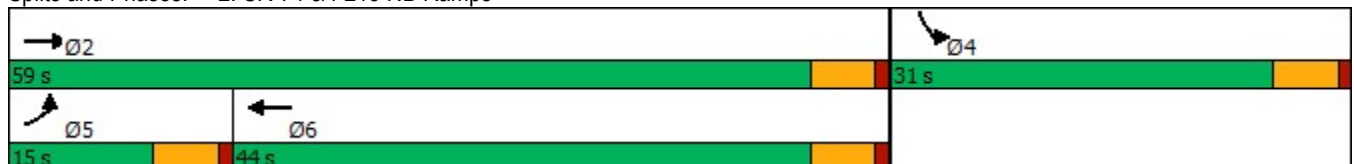


Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	58	912	1091	902	309
Future Volume (vph)	58	912	1091	902	309
Turn Type	Prot	NA	NA	Free	Prot
Protected Phases	5	2	6		4
Permitted Phases				Free	
Detector Phase	5	2	6		4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.3	22.5	22.5		22.5
Total Split (s)	15.0	59.0	44.0		31.0
Total Split (%)	16.7%	65.6%	48.9%		34.4%
Yellow Time (s)	4.3	4.3	4.3		4.3
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.3	5.3	5.3		5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None		None
Act Effct Green (s)	7.4	38.9	29.5	73.1	22.6
Actuated g/C Ratio	0.10	0.53	0.40	1.00	0.31
v/c Ratio	0.34	0.50	0.80	0.59	0.82
Control Delay	41.2	11.4	25.0	1.6	38.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	11.4	25.0	1.6	38.8
LOS	D	B	C	A	D
Approach Delay		13.2	14.4		38.8
Approach LOS		B	B		D

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 73.1
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 17.2
 Intersection Capacity Utilization 72.0%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service C

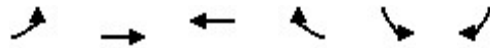
Splits and Phases: 2: SR-74 & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 2: SR-74 & I-215 NB Ramps

Mapes & Sherman (JN 14804)

02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	58	912	1091	902	309	120
Future Volume (veh/h)	58	912	1091	902	309	120
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	62	970	1161	0	329	122
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	96	1940	1435		369	137
Arrive On Green	0.05	0.54	0.40	0.00	0.29	0.29
Sat Flow, veh/h	1810	3705	3705	1610	1275	473
Grp Volume(v), veh/h	62	970	1161	0	452	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1751	0
Q Serve(g_s), s	2.1	10.4	17.5	0.0	15.1	0.0
Cycle Q Clear(g_c), s	2.1	10.4	17.5	0.0	15.1	0.0
Prop In Lane	1.00			1.00	0.73	0.27
Lane Grp Cap(c), veh/h	96	1940	1435		507	0
V/C Ratio(X)	0.64	0.50	0.81		0.89	0.00
Avail Cap(c_a), veh/h	287	3169	2284		736	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	28.4	8.9	16.4	0.0	20.8	0.0
Incr Delay (d2), s/veh	2.7	0.1	0.5	0.0	7.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.7	5.6	0.0	6.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.1	9.0	16.9	0.0	28.2	0.0
LnGrp LOS	C	A	B		C	A
Approach Vol, veh/h		1032	1161	A	452	
Approach Delay, s/veh		10.3	16.9		28.2	
Approach LOS		B	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		38.2		23.0	8.6	29.6
Change Period (Y+Rc), s		5.3		5.3	5.3	5.3
Max Green Setting (Gmax), s		53.7		25.7	9.7	38.7
Max Q Clear Time (g_c+I1), s		12.4		17.1	4.1	19.5
Green Ext Time (p_c), s		4.3		0.6	0.0	4.9

Intersection Summary

HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

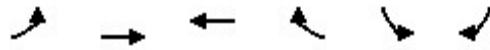
Intersection												
Intersection Delay, s/veh	21.2											
Intersection LOS	C											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	1	23	59	561	13	6	66	175	258	3	150	2
Future Vol, veh/h	1	23	59	561	13	6	66	175	258	3	150	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	26	66	630	15	7	74	197	290	3	169	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		NB	EB	WB
Conflicting Lanes Left	3	3	2	3
Conflicting Approach Right		SB	WB	EB
Conflicting Lanes Right	3	3	3	2
HCM Control Delay	12.4	25.2	20.3	13.8
HCM LOS	B	D	C	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	8%	0%	100%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	18%	92%	16%	0%	0%	68%	0%	100%	96%
Vol Right, %	0%	0%	82%	0%	84%	0%	0%	32%	0%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	66	117	316	13	71	281	281	19	3	100	52
LT Vol	66	0	0	1	0	281	281	0	3	0	0
Through Vol	0	117	58	12	12	0	0	13	0	100	50
RT Vol	0	0	258	0	59	0	0	6	0	0	2
Lane Flow Rate	74	131	355	14	79	315	315	21	3	112	58
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.168	0.278	0.696	0.034	0.177	0.682	0.682	0.042	0.008	0.267	0.139
Departure Headway (Hd)	8.138	7.631	7.051	8.653	8.027	7.785	7.785	7.062	9.071	8.561	8.534
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	440	471	512	413	446	463	463	507	394	419	420
Service Time	5.888	5.381	4.801	6.422	5.796	5.536	5.536	4.812	6.838	6.327	6.3
HCM Lane V/C Ratio	0.168	0.278	0.693	0.034	0.177	0.68	0.68	0.041	0.008	0.267	0.138
HCM Control Delay	12.5	13.3	24.5	11.7	12.5	25.7	25.7	10.1	11.9	14.4	12.7
HCM Lane LOS	B	B	C	B	B	D	D	B	B	B	B
HCM 95th-tile Q	0.6	1.1	5.4	0.1	0.6	5	5	0.1	0	1.1	0.5

Timings
4: SR-74 & Trumble Rd.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↷	↷	↶	↷
Traffic Volume (vph)	538	684	1051	103	109	942
Future Volume (vph)	538	684	1051	103	109	942
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	35.0	80.0	45.0	45.0	40.0	40.0
Total Split (%)	29.2%	66.7%	37.5%	37.5%	33.3%	33.3%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	31.0	73.3	38.3	38.3	35.5	35.5
Actuated g/C Ratio	0.26	0.61	0.32	0.32	0.30	0.30
v/c Ratio	1.18	0.32	0.94	0.19	0.21	1.19
Control Delay	142.2	11.5	54.6	8.7	32.9	116.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	142.2	11.5	54.6	8.7	32.9	116.9
LOS	F	B	D	A	C	F
Approach Delay		69.0	50.5		108.3	
Approach LOS		E	D		F	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 119.3
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.19
 Intersection Signal Delay: 74.8
 Intersection Capacity Utilization 96.2%
 Analysis Period (min) 15
 Intersection LOS: E
 ICU Level of Service F

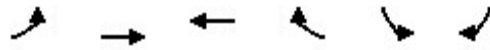
Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)

02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	538	684	1051	103	109	942
Future Volume (veh/h)	538	684	1051	103	109	942
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	555	705	1084	103	112	780
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	471	2217	1157	504	539	479
Arrive On Green	0.26	0.61	0.32	0.32	0.30	0.30
Sat Flow, veh/h	1810	3705	3705	1571	1810	1610
Grp Volume(v), veh/h	555	705	1084	103	112	780
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1571	1810	1610
Q Serve(g_s), s	31.0	11.2	34.8	5.7	5.5	35.5
Cycle Q Clear(g_c), s	31.0	11.2	34.8	5.7	5.5	35.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	471	2217	1157	504	539	479
V/C Ratio(X)	1.18	0.32	0.94	0.20	0.21	1.63
Avail Cap(c_a), veh/h	471	2241	1181	514	539	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	11.0	39.3	29.4	31.3	41.9
Incr Delay (d2), s/veh	100.9	0.1	13.6	0.2	0.1	291.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.4	4.0	16.7	2.1	2.4	38.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	145.0	11.1	52.9	29.6	31.4	333.4
LnGrp LOS	F	B	D	C	C	F
Approach Vol, veh/h		1260	1187		892	
Approach Delay, s/veh		70.1	50.9		295.4	
Approach LOS		E	D		F	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		79.2		40.0	35.0	44.2
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		74.0		35.5	31.0	39.0
Max Q Clear Time (g_c+I1), s		13.2		37.5	33.0	36.8
Green Ext Time (p_c), s		4.8		0.0	0.0	1.5
Intersection Summary						
HCM 6th Ctrl Delay			123.5			
HCM 6th LOS			F			

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕			↕	
Traffic Vol, veh/h	64	182	39	13	464	2	3	23	17	5	26	114
Future Vol, veh/h	64	182	39	13	464	2	3	23	17	5	26	114
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	2	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	70	198	42	14	504	2	3	25	18	5	28	124

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	510	0	0	242	0	0	971	899	223	919	918	509
Stage 1	-	-	-	-	-	-	361	361	-	536	536	-
Stage 2	-	-	-	-	-	-	610	538	-	383	382	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1065	-	-	1336	-	-	234	281	822	254	274	568
Stage 1	-	-	-	-	-	-	662	629	-	532	527	-
Stage 2	-	-	-	-	-	-	485	526	-	644	616	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1061	-	-	1333	-	-	159	254	819	217	248	565
Mov Cap-2 Maneuver	-	-	-	-	-	-	233	342	-	333	357	-
Stage 1	-	-	-	-	-	-	610	579	-	489	517	-
Stage 2	-	-	-	-	-	-	352	516	-	555	567	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.9			0.2			14.5			15.4		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	426	1061	-	-	1333	-	-	501
HCM Lane V/C Ratio	0.11	0.066	-	-	0.011	-	-	0.315
HCM Control Delay (s)	14.5	8.6	0	-	7.7	0	-	15.4
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	1.3

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	746	990	18	24	109
Future Vol, veh/h	0	746	990	18	24	109
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	794	1053	19	26	116

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1460 536
Stage 1	-	-	-	-	1063 -
Stage 2	-	-	-	-	397 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	122 494
Stage 1	0	-	-	-	298 -
Stage 2	0	-	-	-	654 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	122 494
Mov Cap-2 Maneuver	-	-	-	-	232 -
Stage 1	-	-	-	-	298 -
Stage 2	-	-	-	-	654 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	494
HCM Lane V/C Ratio	-	-	-	0.235
HCM Control Delay (s)	-	-	-	14.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.9

Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.

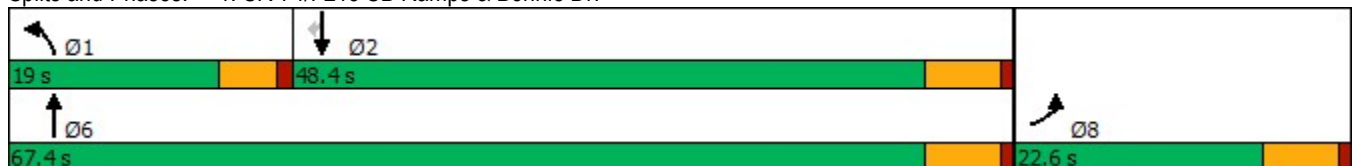


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↑	↑	↗
Traffic Volume (vph)	134	416	489	487	1006	81
Future Volume (vph)	134	416	489	487	1006	81
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		19.0	67.4	48.4	48.4
Total Split (%)	25.1%		21.1%	74.9%	53.8%	53.8%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effect Green (s)	11.1	84.6	14.0	61.5	42.5	42.5
Actuated g/C Ratio	0.13	1.00	0.17	0.73	0.50	0.50
v/c Ratio	0.61	0.28	1.76	0.38	1.13	0.11
Control Delay	46.0	0.4	381.1	5.7	97.0	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	0.4	381.1	5.7	97.0	8.9
LOS	D	A	F	A	F	A
Approach Delay	11.5			193.8	90.5	
Approach LOS	B			F	F	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 84.6
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.76
 Intersection Signal Delay: 112.5
 Intersection LOS: F
 Intersection Capacity Utilization 101.6%
 ICU Level of Service G
 Analysis Period (min) 15

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)
 02/16/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	134	416	489	487	1006	81
Future Volume (veh/h)	134	416	489	487	1006	81
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	144	0	526	524	1082	0
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	180		311	1431	988	
Arrive On Green	0.10	0.00	0.17	0.75	0.52	0.00
Sat Flow, veh/h	1810	1610	1810	1900	1900	1610
Grp Volume(v), veh/h	144	0	526	524	1082	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1900	1900	1610
Q Serve(g_s), s	6.3	0.0	14.0	7.7	42.4	0.0
Cycle Q Clear(g_c), s	6.3	0.0	14.0	7.7	42.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	180		311	1431	988	
V/C Ratio(X)	0.80		1.69	0.37	1.09	
Avail Cap(c_a), veh/h	368		311	1431	988	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.9	0.0	33.8	3.4	19.6	0.0
Incr Delay (d2), s/veh	3.1	0.0	325.2	0.1	58.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	33.7	1.3	31.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.0	0.0	359.0	3.5	77.7	0.0
LnGrp LOS	D		F	A	F	
Approach Vol, veh/h	144	A		1050	1082	A
Approach Delay, s/veh	39.0			181.6	77.7	
Approach LOS	D			F	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	19.0	48.4			67.4	14.1
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	14.0	42.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	16.0	44.4			9.7	8.3
Green Ext Time (p_c), s	0.0	0.0			1.8	0.1

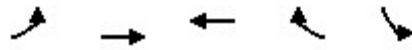
Intersection Summary

HCM 6th Ctrl Delay	123.2
HCM 6th LOS	F

Notes

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

Timings
2: SR-74 & I-215 NB Ramps

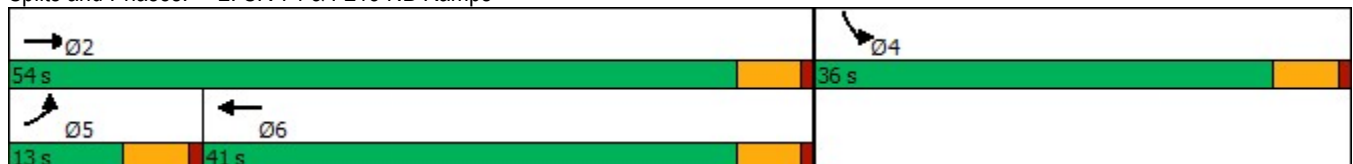


Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	51	1372	851	758	459
Future Volume (vph)	51	1372	851	758	459
Turn Type	Prot	NA	NA	Free	Prot
Protected Phases	5	2	6		4
Permitted Phases				Free	
Detector Phase	5	2	6		4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.3	22.5	22.5		22.5
Total Split (s)	13.0	54.0	41.0		36.0
Total Split (%)	14.4%	60.0%	45.6%		40.0%
Yellow Time (s)	4.3	4.3	4.3		4.3
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.3	5.3	5.3		5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None		None
Act Effct Green (s)	6.6	39.0	31.9	80.7	31.0
Actuated g/C Ratio	0.08	0.48	0.40	1.00	0.38
v/c Ratio	0.38	0.86	0.66	0.52	0.93
Control Delay	45.2	24.2	23.4	1.2	47.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	45.2	24.2	23.4	1.2	47.2
LOS	D	C	C	A	D
Approach Delay		25.0	12.9		47.2
Approach LOS		C	B		D

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 80.7
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 23.2
 Intersection LOS: C
 Intersection Capacity Utilization 79.8%
 ICU Level of Service D
 Analysis Period (min) 15

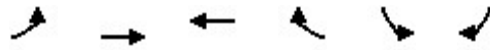
Splits and Phases: 2: SR-74 & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 2: SR-74 & I-215 NB Ramps

Mapes & Sherman (JN 14804)

02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	51	1372	851	758	459	124
Future Volume (veh/h)	51	1372	851	758	459	124
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	56	1508	935	0	504	123
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	82	1751	1335		533	130
Arrive On Green	0.05	0.48	0.37	0.00	0.38	0.38
Sat Flow, veh/h	1810	3705	3705	1610	1418	346
Grp Volume(v), veh/h	56	1508	935	0	628	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1767	0
Q Serve(g_s), s	2.3	28.1	16.8	0.0	26.2	0.0
Cycle Q Clear(g_c), s	2.3	28.1	16.8	0.0	26.2	0.0
Prop In Lane	1.00			1.00	0.80	0.20
Lane Grp Cap(c), veh/h	82	1751	1335		664	0
V/C Ratio(X)	0.68	0.86	0.70		0.95	0.00
Avail Cap(c_a), veh/h	183	2309	1693		712	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	17.3	20.4	0.0	23.0	0.0
Incr Delay (d2), s/veh	3.6	2.2	0.6	0.0	20.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	9.8	6.1	0.0	14.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.4	19.6	21.0	0.0	43.2	0.0
LnGrp LOS	D	B	C		D	A
Approach Vol, veh/h		1564	935	A	628	
Approach Delay, s/veh		20.3	21.0		43.2	
Approach LOS		C	C		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		42.2		33.9	8.8	33.4
Change Period (Y+Rc), s		5.3		5.3	5.3	5.3
Max Green Setting (Gmax), s		48.7		30.7	7.7	35.7
Max Q Clear Time (g_c+I1), s		30.1		28.2	4.3	18.8
Green Ext Time (p_c), s		6.8		0.4	0.0	3.6

Intersection Summary

HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection

Intersection Delay, s/veh 89.3

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	0	6	6	387	1	10	11	119	555	54	233	2
Future Vol, veh/h	0	6	6	387	1	10	11	119	555	54	233	2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	7	7	466	1	12	13	143	669	65	281	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	12.1	20.6	161.7	15.4
HCM LOS	B	C	F	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	0%	0%	100%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	7%	100%	25%	0%	0%	9%	0%	100%	97%
Vol Right, %	0%	0%	93%	0%	75%	0%	0%	91%	0%	0%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	79	595	4	8	194	194	11	54	155	80
LT Vol	11	0	0	0	0	194	194	0	54	0	0
Through Vol	0	79	40	4	2	0	0	1	0	155	78
RT Vol	0	0	555	0	6	0	0	10	0	0	2
Lane Flow Rate	13	96	716	5	10	233	233	13	65	187	96
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.029	0.196	1.337	0.012	0.023	0.53	0.53	0.026	0.153	0.414	0.212
Departure Headway (Hd)	7.885	7.378	6.717	9.593	9.068	8.766	8.766	7.62	9.004	8.494	8.476
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	453	486	545	375	397	415	415	473	401	427	426
Service Time	5.65	5.143	4.482	7.293	6.768	6.466	6.466	5.32	6.704	6.194	6.176
HCM Lane V/C Ratio	0.029	0.198	1.314	0.013	0.025	0.561	0.561	0.027	0.162	0.438	0.225
HCM Control Delay	10.9	11.9	184.5	12.4	12	20.9	20.9	10.5	13.3	17.1	13.4
HCM Lane LOS	B	B	F	B	B	C	C	B	B	C	B
HCM 95th-tile Q	0.1	0.7	31	0	0.1	3	3	0.1	0.5	2	0.8

Timings
4: SR-74 & Trumble Rd.

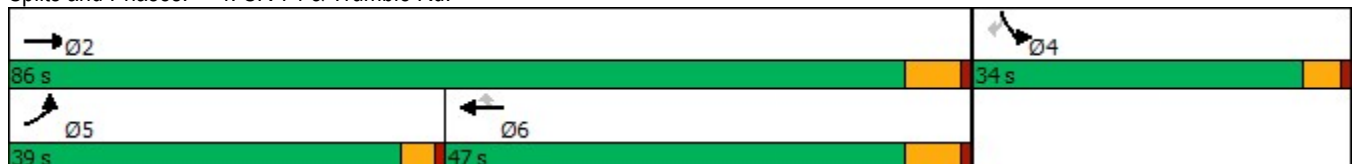


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↗	↗↗	↗↗	↗	↘	↘
Traffic Volume (vph)	751	1079	909	121	121	701
Future Volume (vph)	751	1079	909	121	121	701
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	39.0	86.0	47.0	47.0	34.0	34.0
Total Split (%)	32.5%	71.7%	39.2%	39.2%	28.3%	28.3%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effect Green (s)	35.3	75.7	36.4	36.4	27.1	27.1
Actuated g/C Ratio	0.31	0.67	0.32	0.32	0.24	0.24
v/c Ratio	1.44	0.48	0.84	0.22	0.30	0.97
Control Delay	239.0	10.3	43.7	6.0	38.3	40.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	239.0	10.3	43.7	6.0	38.3	40.4
LOS	F	B	D	A	D	D
Approach Delay		104.2	39.3		40.1	
Approach LOS		F	D		D	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 113.4
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.44
 Intersection Signal Delay: 71.7
 Intersection Capacity Utilization 85.5%
 Analysis Period (min) 15
 Intersection LOS: E
 ICU Level of Service E

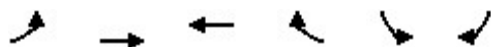
Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)

02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	751	1079	909	121	121	701
Future Volume (veh/h)	751	1079	909	121	121	701
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	808	1160	977	124	130	564
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	552	2352	1125	502	465	414
Arrive On Green	0.30	0.65	0.31	0.31	0.26	0.26
Sat Flow, veh/h	1810	3705	3705	1610	1810	1610
Grp Volume(v), veh/h	808	1160	977	124	130	564
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1810	1610
Q Serve(g_s), s	35.0	18.9	29.3	6.6	6.6	29.5
Cycle Q Clear(g_c), s	35.0	18.9	29.3	6.6	6.6	29.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	552	2352	1125	502	465	414
V/C Ratio(X)	1.46	0.49	0.87	0.25	0.28	1.36
Avail Cap(c_a), veh/h	552	2516	1290	575	465	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	10.3	37.3	29.5	34.1	42.6
Incr Delay (d2), s/veh	218.7	0.2	5.9	0.3	0.1	178.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	48.1	6.3	13.1	2.5	2.8	43.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	258.6	10.4	43.2	29.7	34.2	220.8
LnGrp LOS	F	B	D	C	C	F
Approach Vol, veh/h		1968	1101		694	
Approach Delay, s/veh		112.3	41.7		185.9	
Approach LOS		F	D		F	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		80.8		34.0	39.0	41.8
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		80.0		29.5	35.0	41.0
Max Q Clear Time (g_c+I1), s		20.9		31.5	37.0	31.3
Green Ext Time (p_c), s		9.7		0.0	0.0	4.5
Intersection Summary						
HCM 6th Ctrl Delay			105.2			
HCM 6th LOS			F			

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕			↕	
Traffic Vol, veh/h	131	461	24	11	282	4	8	33	21	2	24	107
Future Vol, veh/h	131	461	24	11	282	4	8	33	21	2	24	107
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	152	536	28	13	328	5	9	38	24	2	28	124

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	333	0	0	564	0	0	1287	1213	554	1243	1222	328
Stage 1	-	-	-	-	-	-	854	854	-	354	354	-
Stage 2	-	-	-	-	-	-	433	359	-	889	868	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1238	-	-	1018	-	-	142	183	536	153	181	718
Stage 1	-	-	-	-	-	-	356	378	-	667	634	-
Stage 2	-	-	-	-	-	-	605	631	-	341	372	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1238	-	-	1018	-	-	91	148	534	109	146	718
Mov Cap-2 Maneuver	-	-	-	-	-	-	180	233	-	180	235	-
Stage 1	-	-	-	-	-	-	292	310	-	547	624	-
Stage 2	-	-	-	-	-	-	470	621	-	233	305	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.8			0.3			22.7			15.2		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	275	1238	-	-	1018	-	-	507
HCM Lane V/C Ratio	0.262	0.123	-	-	0.013	-	-	0.305
HCM Control Delay (s)	22.7	8.3	0	-	8.6	0	-	15.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1	0.4	-	-	0	-	-	1.3

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1191	874	44	16	79
Future Vol, veh/h	0	1191	874	44	16	79
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1267	930	47	17	84

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1588 489
Stage 1	-	-	-	-	954 -
Stage 2	-	-	-	-	634 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	101 530
Stage 1	0	-	-	-	339 -
Stage 2	0	-	-	-	496 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	101 530
Mov Cap-2 Maneuver	-	-	-	-	228 -
Stage 1	-	-	-	-	339 -
Stage 2	-	-	-	-	496 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	530
HCM Lane V/C Ratio	-	-	-	0.159
HCM Control Delay (s)	-	-	-	13.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.6

APPENDIX 6.2: OPENING YEAR CUMULATIVE (2024) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.

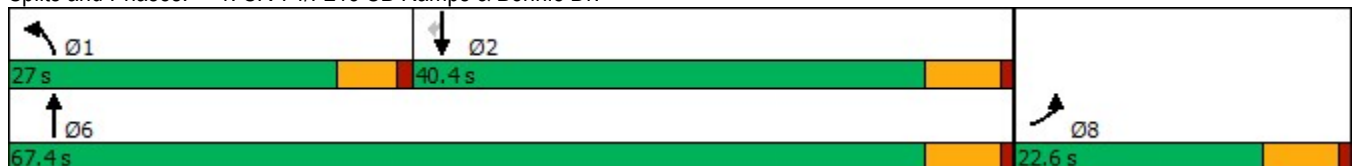


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↖	↗	↗	↖
Traffic Volume (vph)	71	363	599	615	623	84
Future Volume (vph)	71	363	599	615	623	84
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		27.0	67.4	40.4	40.4
Total Split (%)	25.1%		30.0%	74.9%	44.9%	44.9%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effct Green (s)	7.7	73.9	22.8	58.8	29.0	29.0
Actuated g/C Ratio	0.10	1.00	0.31	0.80	0.39	0.39
v/c Ratio	0.39	0.23	1.11	0.42	0.86	0.13
Control Delay	40.2	0.3	102.4	4.7	34.5	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.2	0.3	102.4	4.7	34.5	9.3
LOS	D	A	F	A	C	A
Approach Delay	6.8			52.9	31.5	
Approach LOS	A			D	C	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 73.9
 Natural Cycle: 100
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.11
 Intersection Signal Delay: 38.0
 Intersection LOS: D
 Intersection Capacity Utilization 84.3%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)
 02/16/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	71	363	599	615	623	84
Future Volume (veh/h)	71	363	599	615	623	84
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	73	0	618	634	642	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	99		582	1463	713	
Arrive On Green	0.05	0.00	0.32	0.77	0.38	0.00
Sat Flow, veh/h	1810	1610	1810	1900	1900	1610
Grp Volume(v), veh/h	73	0	618	634	642	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1900	1900	1610
Q Serve(g_s), s	2.7	0.0	22.0	7.9	21.8	0.0
Cycle Q Clear(g_c), s	2.7	0.0	22.0	7.9	21.8	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	99		582	1463	713	
V/C Ratio(X)	0.74		1.06	0.43	0.90	
Avail Cap(c_a), veh/h	439		582	1704	955	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.9	0.0	23.2	2.7	20.2	0.0
Incr Delay (d2), s/veh	3.9	0.0	55.0	0.1	7.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	16.7	0.6	9.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.8	0.0	78.3	2.8	27.9	0.0
LnGrp LOS	D		F	A	C	
Approach Vol, veh/h	73	A		1252	642	A
Approach Delay, s/veh	35.8			40.1	27.9	
Approach LOS	D			D	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	27.0	31.7			58.7	9.8
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	22.0	34.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	24.0	23.8			9.9	4.7
Green Ext Time (p_c), s	0.0	1.9			2.3	0.0

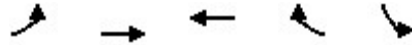
Intersection Summary

HCM 6th Ctrl Delay	35.9
HCM 6th LOS	D

Notes

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

Timings
2: SR-74 & I-215 NB Ramps

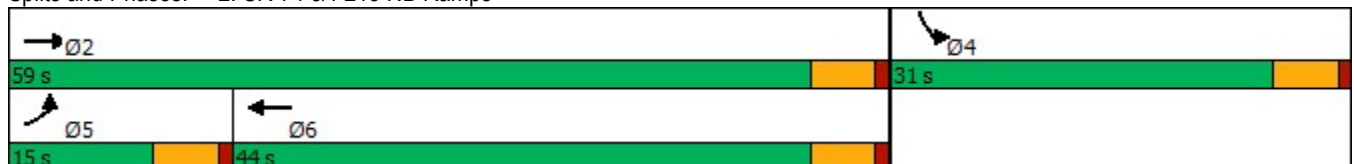


Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	58	929	1095	907	319
Future Volume (vph)	58	929	1095	907	319
Turn Type	Prot	NA	NA	Free	Prot
Protected Phases	5	2	6		4
Permitted Phases				Free	
Detector Phase	5	2	6		4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.3	22.5	22.5		22.5
Total Split (s)	15.0	59.0	44.0		31.0
Total Split (%)	16.7%	65.6%	48.9%		34.4%
Yellow Time (s)	4.3	4.3	4.3		4.3
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.3	5.3	5.3		5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None		None
Act Effct Green (s)	7.4	39.1	29.7	73.6	23.0
Actuated g/C Ratio	0.10	0.53	0.40	1.00	0.31
v/c Ratio	0.34	0.52	0.80	0.60	0.83
Control Delay	41.4	11.6	25.2	1.6	39.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	11.6	25.2	1.6	39.7
LOS	D	B	C	A	D
Approach Delay		13.4	14.5		39.7
Approach LOS		B	B		D

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 73.6
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 17.4
 Intersection LOS: B
 Intersection Capacity Utilization 72.7%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 2: SR-74 & I-215 NB Ramps

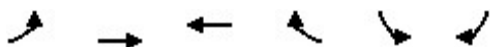


HCM 6th Signalized Intersection Summary

2: SR-74 & I-215 NB Ramps

Mapes & Sherman (JN 14804)

02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	58	929	1095	907	319	120
Future Volume (veh/h)	58	929	1095	907	319	120
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	62	988	1165	0	339	122
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	96	1933	1434		378	136
Arrive On Green	0.05	0.54	0.40	0.00	0.29	0.29
Sat Flow, veh/h	1810	3705	3705	1610	1286	463
Grp Volume(v), veh/h	62	988	1165	0	462	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1752	0
Q Serve(g_s), s	2.1	10.9	17.9	0.0	15.7	0.0
Cycle Q Clear(g_c), s	2.1	10.9	17.9	0.0	15.7	0.0
Prop In Lane	1.00			1.00	0.73	0.26
Lane Grp Cap(c), veh/h	96	1933	1434		515	0
V/C Ratio(X)	0.65	0.51	0.81		0.90	0.00
Avail Cap(c_a), veh/h	282	3118	2247		724	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	28.9	9.2	16.7	0.0	21.0	0.0
Incr Delay (d2), s/veh	2.7	0.1	0.6	0.0	8.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.9	5.8	0.0	7.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.6	9.3	17.3	0.0	29.6	0.0
LnGrp LOS	C	A	B		C	A
Approach Vol, veh/h		1050	1165	A	462	
Approach Delay, s/veh		10.6	17.3		29.6	
Approach LOS		B	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		38.6		23.6	8.6	30.0
Change Period (Y+Rc), s		5.3		5.3	5.3	5.3
Max Green Setting (Gmax), s		53.7		25.7	9.7	38.7
Max Q Clear Time (g_c+I1), s		12.9		17.7	4.1	19.9
Green Ext Time (p_c), s		4.4		0.6	0.0	4.8

Intersection Summary

HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

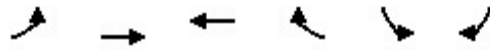
Intersection	
Intersection Delay, s/veh	23
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	1	23	59	567	13	6	66	175	285	4	150	2
Future Vol, veh/h	1	23	59	567	13	6	66	175	285	4	150	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	26	66	637	15	7	74	197	320	4	169	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	12.6	26.5	23.5	14
HCM LOS	B	D	C	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	8%	0%	100%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	17%	92%	16%	0%	0%	68%	0%	100%	96%
Vol Right, %	0%	0%	83%	0%	84%	0%	0%	32%	0%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	66	117	343	13	71	284	284	19	4	100	52
LT Vol	66	0	0	1	0	284	284	0	4	0	0
Through Vol	0	117	58	12	12	0	0	13	0	100	50
RT Vol	0	0	285	0	59	0	0	6	0	0	2
Lane Flow Rate	74	131	386	14	79	319	319	21	4	112	58
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.169	0.28	0.76	0.034	0.18	0.698	0.698	0.043	0.011	0.271	0.141
Departure Headway (Hd)	8.192	7.684	7.095	8.791	8.165	7.893	7.893	7.17	9.2	8.69	8.662
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	438	468	509	406	438	459	459	499	388	412	413
Service Time	5.942	5.434	4.844	6.563	5.937	5.646	5.646	4.922	6.969	6.458	6.43
HCM Lane V/C Ratio	0.169	0.28	0.758	0.034	0.18	0.695	0.695	0.042	0.01	0.272	0.14
HCM Control Delay	12.6	13.4	29.1	11.9	12.7	27	27	10.2	12.1	14.7	12.9
HCM Lane LOS	B	B	D	B	B	D	D	B	B	B	B
HCM 95th-tile Q	0.6	1.1	6.6	0.1	0.6	5.3	5.3	0.1	0	1.1	0.5

Timings
4: SR-74 & Trumble Rd.

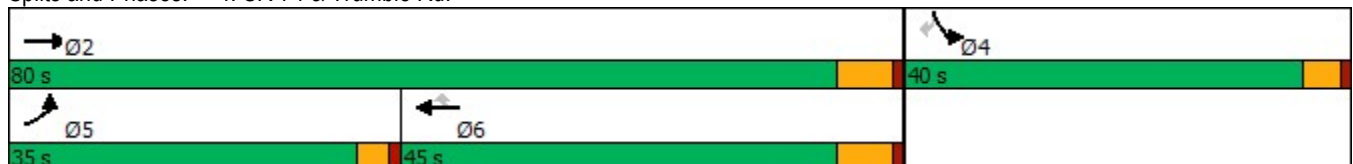


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑	↑↑	↗	↖	↗
Traffic Volume (vph)	565	684	1055	103	110	946
Future Volume (vph)	565	684	1055	103	110	946
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	35.0	80.0	45.0	45.0	40.0	40.0
Total Split (%)	29.2%	66.7%	37.5%	37.5%	33.3%	33.3%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	31.0	73.3	38.3	38.3	35.5	35.5
Actuated g/C Ratio	0.26	0.61	0.32	0.32	0.30	0.30
v/c Ratio	1.24	0.32	0.94	0.19	0.21	1.19
Control Delay	164.0	11.5	55.0	8.8	33.0	119.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	164.0	11.5	55.0	8.8	33.0	119.1
LOS	F	B	D	A	C	F
Approach Delay		80.5	50.9		110.2	
Approach LOS		F	D		F	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 119.3
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.24
 Intersection Signal Delay: 79.6
 Intersection Capacity Utilization 96.6%
 Analysis Period (min) 15
 Intersection LOS: E
 ICU Level of Service F

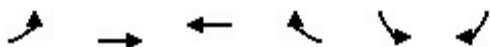
Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)

02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	565	684	1055	103	110	946
Future Volume (veh/h)	565	684	1055	103	110	946
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	582	705	1088	103	113	784
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	470	2218	1159	504	538	479
Arrive On Green	0.26	0.61	0.32	0.32	0.30	0.30
Sat Flow, veh/h	1810	3705	3705	1571	1810	1610
Grp Volume(v), veh/h	582	705	1088	103	113	784
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1571	1810	1610
Q Serve(g_s), s	31.0	11.2	34.9	5.7	5.6	35.5
Cycle Q Clear(g_c), s	31.0	11.2	34.9	5.7	5.6	35.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	470	2218	1159	504	538	479
V/C Ratio(X)	1.24	0.32	0.94	0.20	0.21	1.64
Avail Cap(c_a), veh/h	470	2239	1180	514	538	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	11.0	39.4	29.4	31.4	41.9
Incr Delay (d2), s/veh	124.2	0.1	13.9	0.2	0.1	295.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	29.4	4.0	16.8	2.1	2.4	66.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	168.3	11.1	53.3	29.6	31.5	337.6
LnGrp LOS	F	B	D	C	C	F
Approach Vol, veh/h		1287	1191		897	
Approach Delay, s/veh		82.2	51.2		299.0	
Approach LOS		F	D		F	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		79.3		40.0	35.0	44.3
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		74.0		35.5	31.0	39.0
Max Q Clear Time (g_c+I1), s		13.2		37.5	33.0	36.9
Green Ext Time (p_c), s		4.8		0.0	0.0	1.4
Intersection Summary						
HCM 6th Ctrl Delay			128.9			
HCM 6th LOS			F			

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑	↘	
Traffic Vol, veh/h	299	14	0	581	6	0
Future Vol, veh/h	299	14	0	581	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	325	15	0	632	7	0

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	340	0	649	170
Stage 1	-	-	-	-	333	-
Stage 2	-	-	-	-	316	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1230	-	407	851
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	718	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1230	-	407	851
Mov Cap-2 Maneuver	-	-	-	-	510	-
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	718	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	510	-	-	1230	-
HCM Lane V/C Ratio	0.013	-	-	-	-
HCM Control Delay (s)	12.2	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Vol, veh/h	293	5	0	581	0	0
Future Vol, veh/h	293	5	0	581	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	318	5	0	632	0	0

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	162
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	861
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	861
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕			↕	
Traffic Vol, veh/h	64	182	47	13	464	2	3	23	17	5	26	114
Future Vol, veh/h	64	182	47	13	464	2	3	23	17	5	26	114
Conflicting Peds, #/hr	0	0	2	0	0	4	0	0	2	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	70	198	51	14	504	2	3	25	18	5	28	124

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	510	0	0	251	0	0	976	904	228	923	927	509
Stage 1	-	-	-	-	-	-	366	366	-	536	536	-
Stage 2	-	-	-	-	-	-	610	538	-	387	391	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1065	-	-	1326	-	-	232	279	816	252	270	568
Stage 1	-	-	-	-	-	-	657	626	-	532	527	-
Stage 2	-	-	-	-	-	-	485	526	-	641	611	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1061	-	-	1323	-	-	158	252	813	215	244	565
Mov Cap-2 Maneuver	-	-	-	-	-	-	233	341	-	332	354	-
Stage 1	-	-	-	-	-	-	605	577	-	489	517	-
Stage 2	-	-	-	-	-	-	352	516	-	552	563	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.9			0.2			14.5			15.5		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	425	1061	-	-	1323	-	-	500
HCM Lane V/C Ratio	0.11	0.066	-	-	0.011	-	-	0.315
HCM Control Delay (s)	14.5	8.6	0	-	7.8	0	-	15.5
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	1.3

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	2	43	84	2
Future Vol, veh/h	0	2	2	43	84	2
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, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2	47	91	2

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	143	92	93	0	0
Stage 1	92	-	-	-	-
Stage 2	51	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	854	971	1514	-	-
Stage 1	937	-	-	-	-
Stage 2	977	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	853	971	1514	-	-
Mov Cap-2 Maneuver	824	-	-	-	-
Stage 1	936	-	-	-	-
Stage 2	977	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1514	-	971	-	-
HCM Lane V/C Ratio	0.001	-	0.002	-	-
HCM Control Delay (s)	7.4	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	2	45	80	6
Future Vol, veh/h	0	2	2	45	80	6
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, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2	49	87	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	144	91	94	0	0
Stage 1	91	-	-	-	-
Stage 2	53	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	853	972	1513	-	-
Stage 1	938	-	-	-	-
Stage 2	975	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	852	972	1513	-	-
Mov Cap-2 Maneuver	824	-	-	-	-
Stage 1	937	-	-	-	-
Stage 2	975	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1513	-	972	-	-
HCM Lane V/C Ratio	0.001	-	0.002	-	-
HCM Control Delay (s)	7.4	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	747	990	22	24	113
Future Vol, veh/h	0	747	990	22	24	113
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	795	1053	23	26	120

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1463 538
Stage 1	-	-	-	-	1065 -
Stage 2	-	-	-	-	398 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	122 493
Stage 1	0	-	-	-	297 -
Stage 2	0	-	-	-	653 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	122 493
Mov Cap-2 Maneuver	-	-	-	-	232 -
Stage 1	-	-	-	-	297 -
Stage 2	-	-	-	-	653 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	493
HCM Lane V/C Ratio	-	-	-	0.244
HCM Control Delay (s)	-	-	-	14.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.9

Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.

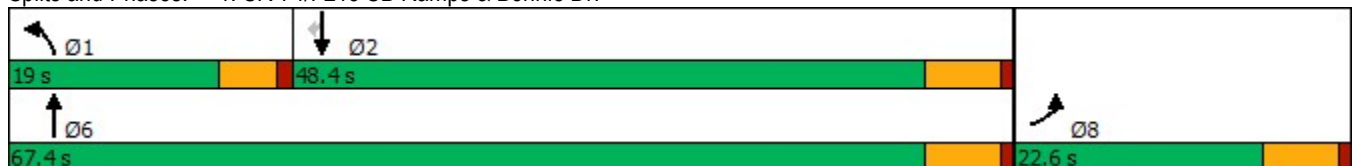


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	134	417	492	499	1013	81
Future Volume (vph)	134	417	492	499	1013	81
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		19.0	67.4	48.4	48.4
Total Split (%)	25.1%		21.1%	74.9%	53.8%	53.8%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effect Green (s)	11.1	84.6	14.0	61.5	42.5	42.5
Actuated g/C Ratio	0.13	1.00	0.17	0.73	0.50	0.50
v/c Ratio	0.61	0.28	1.77	0.39	1.14	0.11
Control Delay	46.0	0.4	385.4	5.8	99.9	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	0.4	385.4	5.8	99.9	8.9
LOS	D	A	F	A	F	A
Approach Delay	11.5			194.2	93.2	
Approach LOS	B			F	F	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 84.6
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.77
 Intersection Signal Delay: 114.1
 Intersection LOS: F
 Intersection Capacity Utilization 102.2%
 ICU Level of Service G
 Analysis Period (min) 15

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)
 02/16/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	134	417	492	499	1013	81
Future Volume (veh/h)	134	417	492	499	1013	81
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	144	0	529	537	1089	0
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	180		311	1431	988	
Arrive On Green	0.10	0.00	0.17	0.75	0.52	0.00
Sat Flow, veh/h	1810	1610	1810	1900	1900	1610
Grp Volume(v), veh/h	144	0	529	537	1089	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1810	1900	1900	1610
Q Serve(g_s), s	6.3	0.0	14.0	7.9	42.4	0.0
Cycle Q Clear(g_c), s	6.3	0.0	14.0	7.9	42.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	180		311	1431	988	
V/C Ratio(X)	0.80		1.70	0.38	1.10	
Avail Cap(c_a), veh/h	368		311	1431	988	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.9	0.0	33.8	3.5	19.6	0.0
Incr Delay (d2), s/veh	3.1	0.0	329.5	0.1	60.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	34.1	1.4	31.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.0	0.0	363.2	3.5	80.3	0.0
LnGrp LOS	D		F	A	F	
Approach Vol, veh/h	144	A		1066	1089	A
Approach Delay, s/veh	39.0			182.0	80.3	
Approach LOS	D			F	F	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	19.0	48.4			67.4	14.1
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	14.0	42.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	16.0	44.4			9.9	8.3
Green Ext Time (p_c), s	0.0	0.0			1.9	0.1

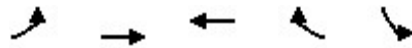
Intersection Summary

HCM 6th Ctrl Delay	124.9
HCM 6th LOS	F

Notes

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

Timings
2: SR-74 & I-215 NB Ramps

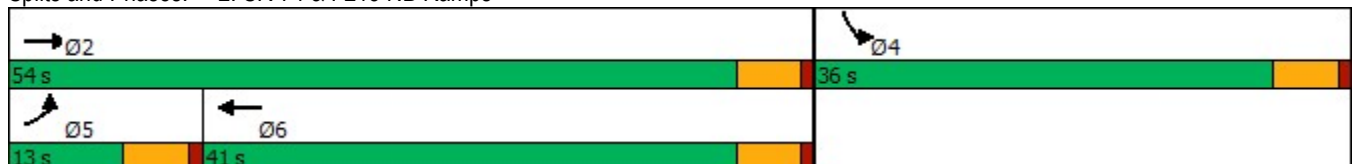


Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations	↶	↶↶	↶↶	↶	↶↶
Traffic Volume (vph)	51	1380	866	775	464
Future Volume (vph)	51	1380	866	775	464
Turn Type	Prot	NA	NA	Free	Prot
Protected Phases	5	2	6		4
Permitted Phases				Free	
Detector Phase	5	2	6		4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.3	22.5	22.5		22.5
Total Split (s)	13.0	54.0	41.0		36.0
Total Split (%)	14.4%	60.0%	45.6%		40.0%
Yellow Time (s)	4.3	4.3	4.3		4.3
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.3	5.3	5.3		5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None		None
Act Effct Green (s)	6.6	39.2	32.1	80.9	31.0
Actuated g/C Ratio	0.08	0.48	0.40	1.00	0.38
v/c Ratio	0.38	0.87	0.67	0.53	0.94
Control Delay	45.4	24.3	23.6	1.2	49.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	24.3	23.6	1.2	49.1
LOS	D	C	C	A	D
Approach Delay		25.1	13.0		49.1
Approach LOS		C	B		D

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 80.9
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 23.5
 Intersection LOS: C
 Intersection Capacity Utilization 80.3%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 2: SR-74 & I-215 NB Ramps

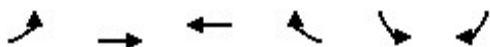


HCM 6th Signalized Intersection Summary

2: SR-74 & I-215 NB Ramps

Mapes & Sherman (JN 14804)

02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	51	1380	866	775	464	124
Future Volume (veh/h)	51	1380	866	775	464	124
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	56	1516	952	0	510	123
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	82	1752	1342		537	130
Arrive On Green	0.05	0.49	0.37	0.00	0.38	0.38
Sat Flow, veh/h	1810	3705	3705	1610	1422	343
Grp Volume(v), veh/h	56	1516	952	0	634	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1767	0
Q Serve(g_s), s	2.4	28.9	17.4	0.0	27.0	0.0
Cycle Q Clear(g_c), s	2.4	28.9	17.4	0.0	27.0	0.0
Prop In Lane	1.00			1.00	0.80	0.19
Lane Grp Cap(c), veh/h	82	1752	1342		668	0
V/C Ratio(X)	0.68	0.87	0.71		0.95	0.00
Avail Cap(c_a), veh/h	180	2270	1664		700	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	36.4	17.7	20.8	0.0	23.4	0.0
Incr Delay (d2), s/veh	3.7	2.5	0.7	0.0	21.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	10.1	6.4	0.0	14.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.2	20.2	21.5	0.0	44.9	0.0
LnGrp LOS	D	C	C		D	A
Approach Vol, veh/h		1572	952	A	634	
Approach Delay, s/veh		20.9	21.5		44.9	
Approach LOS		C	C		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		42.9		34.6	8.8	34.1
Change Period (Y+Rc), s		5.3		5.3	5.3	5.3
Max Green Setting (Gmax), s		48.7		30.7	7.7	35.7
Max Q Clear Time (g_c+I1), s		30.9		29.0	4.4	19.4
Green Ext Time (p_c), s		6.7		0.3	0.0	3.6

Intersection Summary

HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

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

Intersection

Intersection Delay, s/veh97.7

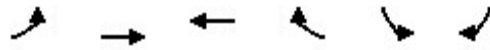
Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Vol, veh/h	0	6	6	409	1	11	11	119	567	55	233	2
Future Vol, veh/h	0	6	6	409	1	11	11	119	567	55	233	2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	7	7	493	1	13	13	143	683	66	281	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	12.3	22	179.1	15.6
HCM LOS	B	C	F	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	0%	0%	100%	100%	0%	100%	0%	0%
Vol Thru, %	0%	100%	7%	100%	25%	0%	0%	8%	0%	100%	97%
Vol Right, %	0%	0%	93%	0%	75%	0%	0%	92%	0%	0%	3%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	79	607	4	8	205	205	12	55	155	80
LT Vol	11	0	0	0	0	205	205	0	55	0	0
Through Vol	0	79	40	4	2	0	0	1	0	155	78
RT Vol	0	0	567	0	6	0	0	11	0	0	2
Lane Flow Rate	13	96	731	5	10	246	246	14	66	187	96
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.029	0.198	1.383	0.012	0.023	0.562	0.562	0.028	0.157	0.418	0.214
Departure Headway (Hd)	7.981	7.474	6.812	9.754	9.229	8.846	8.846	7.695	9.151	8.641	8.623
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	448	479	534	369	390	411	411	468	394	419	418
Service Time	5.748	5.241	4.578	7.454	6.929	6.546	6.546	5.395	6.851	6.341	6.323
HCM Lane V/C Ratio	0.029	0.2	1.369	0.014	0.026	0.599	0.599	0.03	0.168	0.446	0.23
HCM Control Delay	11	12.1	204	12.6	12.1	22.3	22.3	10.6	13.5	17.4	13.7
HCM Lane LOS	B	B	F	B	B	C	C	B	B	C	B
HCM 95th-tile Q	0.1	0.7	33.2	0	0.1	3.3	3.3	0.1	0.6	2	0.8

Timings
4: SR-74 & Trumble Rd.

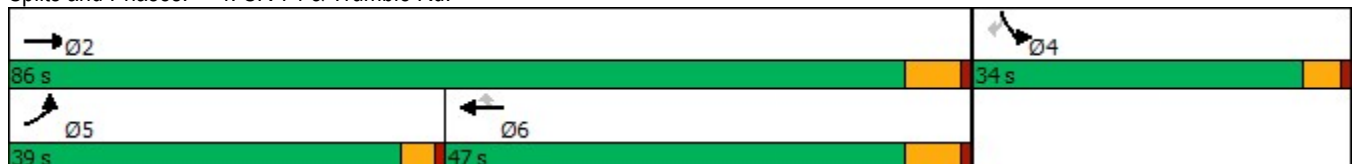


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷	↷	↷	↶	↷
Traffic Volume (vph)	763	1079	925	121	127	717
Future Volume (vph)	763	1079	925	121	127	717
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	39.0	86.0	47.0	47.0	34.0	34.0
Total Split (%)	32.5%	71.7%	39.2%	39.2%	28.3%	28.3%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	35.1	76.4	37.3	37.3	28.8	28.8
Actuated g/C Ratio	0.30	0.66	0.32	0.32	0.25	0.25
v/c Ratio	1.50	0.49	0.86	0.22	0.31	0.98
Control Delay	265.0	10.7	45.0	6.4	38.4	42.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	265.0	10.7	45.0	6.4	38.4	42.8
LOS	F	B	D	A	D	D
Approach Delay		116.0	40.5		42.1	
Approach LOS		F	D		D	

Intersection Summary

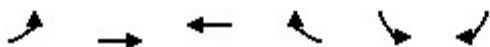
Cycle Length: 120
 Actuated Cycle Length: 115.7
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.50
 Intersection Signal Delay: 78.1
 Intersection Capacity Utilization 87.0%
 Analysis Period (min) 15
 Intersection LOS: E
 ICU Level of Service E

Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)
02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	763	1079	925	121	127	717
Future Volume (veh/h)	763	1079	925	121	127	717
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	820	1160	995	124	137	581
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	549	2358	1138	507	463	412
Arrive On Green	0.30	0.65	0.32	0.32	0.26	0.26
Sat Flow, veh/h	1810	3705	3705	1610	1810	1610
Grp Volume(v), veh/h	820	1160	995	124	137	581
Grp Sat Flow(s),veh/h/ln	1810	1805	1805	1610	1810	1610
Q Serve(g_s), s	35.0	18.9	30.1	6.6	7.0	29.5
Cycle Q Clear(g_c), s	35.0	18.9	30.1	6.6	7.0	29.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	549	2358	1138	507	463	412
V/C Ratio(X)	1.49	0.49	0.87	0.24	0.30	1.41
Avail Cap(c_a), veh/h	549	2504	1283	572	463	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	10.2	37.3	29.3	34.6	42.9
Incr Delay (d2), s/veh	231.6	0.2	6.4	0.2	0.1	198.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	49.9	6.3	13.5	2.5	3.0	45.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	271.8	10.4	43.8	29.6	34.7	241.8
LnGrp LOS	F	B	D	C	C	F
Approach Vol, veh/h		1980	1119		718	
Approach Delay, s/veh		118.6	42.2		202.3	
Approach LOS		F	D		F	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		81.4		34.0	39.0	42.4
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		80.0		29.5	35.0	41.0
Max Q Clear Time (g_c+I1), s		20.9		31.5	37.0	32.1
Green Ext Time (p_c), s		9.7		0.0	0.0	4.3
Intersection Summary						
HCM 6th Ctrl Delay			112.0			
HCM 6th LOS			F			

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	622	6	0	400	21	0
Future Vol, veh/h	622	6	0	400	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	676	7	0	435	23	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	683	0	898 342
Stage 1	-	-	-	-	680 -
Stage 2	-	-	-	-	218 -
Critical Hdwy	-	-	4.1	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	2.2	-	3.5 3.3
Pot Cap-1 Maneuver	-	-	919	-	283 660
Stage 1	-	-	-	-	470 -
Stage 2	-	-	-	-	803 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	919	-	283 660
Mov Cap-2 Maneuver	-	-	-	-	384 -
Stage 1	-	-	-	-	470 -
Stage 2	-	-	-	-	803 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	384	-	-	919	-
HCM Lane V/C Ratio	0.059	-	-	-	-
HCM Control Delay (s)	15	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↑
Traffic Vol, veh/h	619	3	0	400	0	0
Future Vol, veh/h	619	3	0	400	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	673	3	0	435	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	338
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	664
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	664
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	0	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕			↕	
Traffic Vol, veh/h	131	461	28	11	282	4	10	33	21	2	24	107
Future Vol, veh/h	131	461	28	11	282	4	10	33	21	2	24	107
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	152	536	33	13	328	5	12	38	24	2	28	124

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	333	0	0	569	0	0	1290	1216	557	1246	1227	328
Stage 1	-	-	-	-	-	-	857	857	-	354	354	-
Stage 2	-	-	-	-	-	-	433	359	-	892	873	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1238	-	-	1013	-	-	142	183	534	152	180	718
Stage 1	-	-	-	-	-	-	355	377	-	667	634	-
Stage 2	-	-	-	-	-	-	605	631	-	339	370	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1238	-	-	1013	-	-	91	148	532	108	145	718
Mov Cap-2 Maneuver	-	-	-	-	-	-	180	233	-	179	234	-
Stage 1	-	-	-	-	-	-	291	309	-	547	624	-
Stage 2	-	-	-	-	-	-	470	621	-	231	303	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.8			0.3			23.3			15.2		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	270	1238	-	-	1013	-	-	506
HCM Lane V/C Ratio	0.276	0.123	-	-	0.013	-	-	0.306
HCM Control Delay (s)	23.3	8.3	0	-	8.6	0	-	15.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.1	0.4	-	-	0	-	-	1.3

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	1	64	62	1
Future Vol, veh/h	0	7	1	64	62	1
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, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	1	70	67	1

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	140	68	68	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	72	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	858	1001	1546	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	857	1001	1546	-	-	-
Mov Cap-2 Maneuver	828	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1546	-	1001	-	-
HCM Lane V/C Ratio	0.001	-	0.008	-	-
HCM Control Delay (s)	7.3	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	9	1	63	66	3
Future Vol, veh/h	2	9	1	63	66	3
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, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	10	1	68	72	3

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	144	74	75	0	0
Stage 1	74	-	-	-	-
Stage 2	70	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	853	993	1537	-	-
Stage 1	954	-	-	-	-
Stage 2	958	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	852	993	1537	-	-
Mov Cap-2 Maneuver	825	-	-	-	-
Stage 1	953	-	-	-	-
Stage 2	958	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1537	-	958	-	-
HCM Lane V/C Ratio	0.001	-	0.012	-	-
HCM Control Delay (s)	7.3	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1197	874	46	16	95
Future Vol, veh/h	0	1197	874	46	16	95
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	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1273	930	49	17	101

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	1592 490
Stage 1	-	-	-	-	955 -
Stage 2	-	-	-	-	637 -
Critical Hdwy	-	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	-	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	0	-	-	-	100 529
Stage 1	0	-	-	-	339 -
Stage 2	0	-	-	-	494 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	100 529
Mov Cap-2 Maneuver	-	-	-	-	227 -
Stage 1	-	-	-	-	339 -
Stage 2	-	-	-	-	494 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	529
HCM Lane V/C Ratio	-	-	-	0.191
HCM Control Delay (s)	-	-	-	13.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.7

**APPENDIX 6.3: OPENING YEAR CUMULATIVE (2024) WITHOUT
PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS
WORKSHEETS**

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2024 Without Project Conditions - Weekday AM Peak Hour**

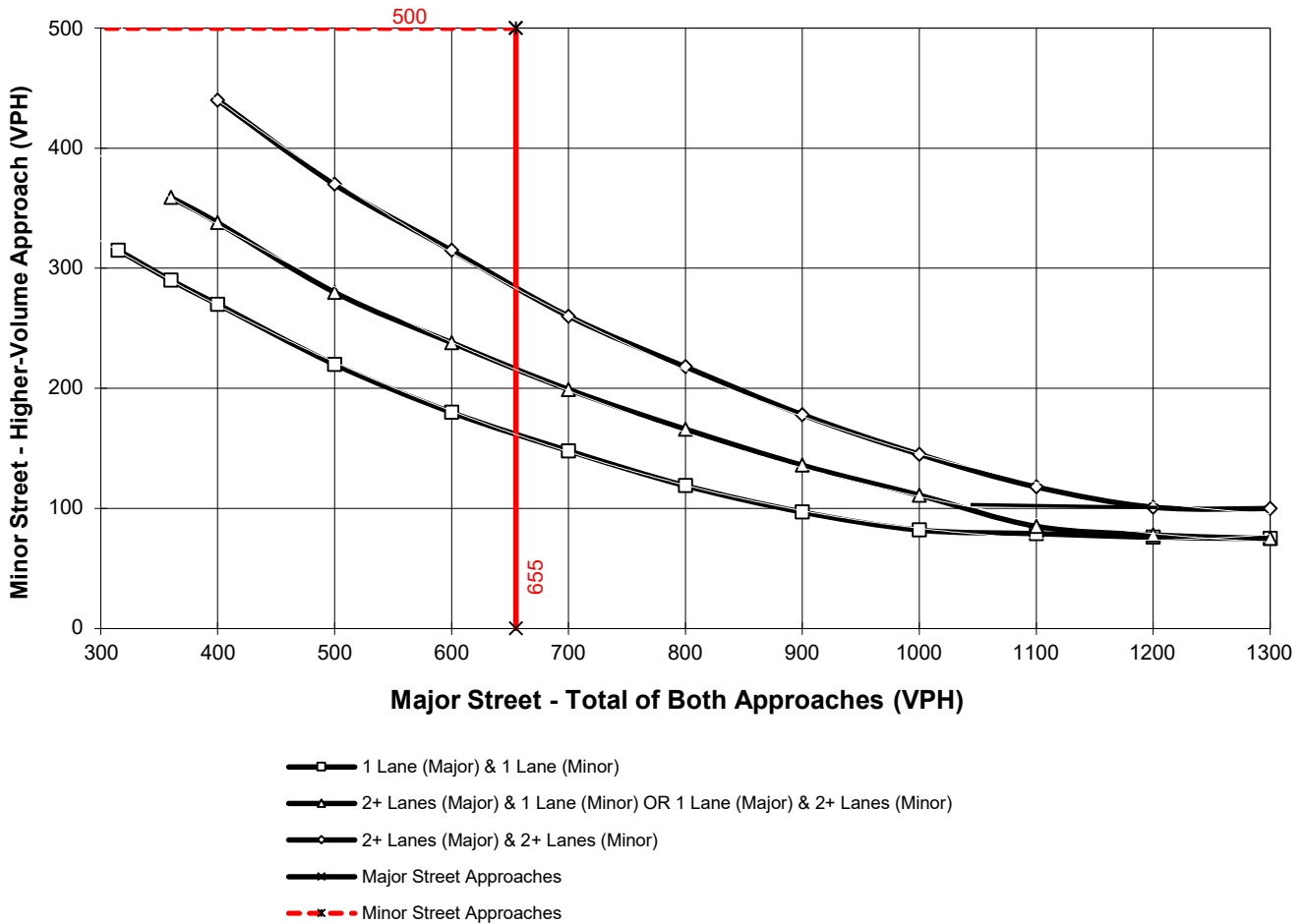
Major Street Name = **Trumble Rd.**

Total of Both Approaches (VPH) = **655**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Mapes Rd.**

High Volume Approach (VPH) = **581**
 Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2024 Without Project Conditions - Weekday PM Peak Hour**

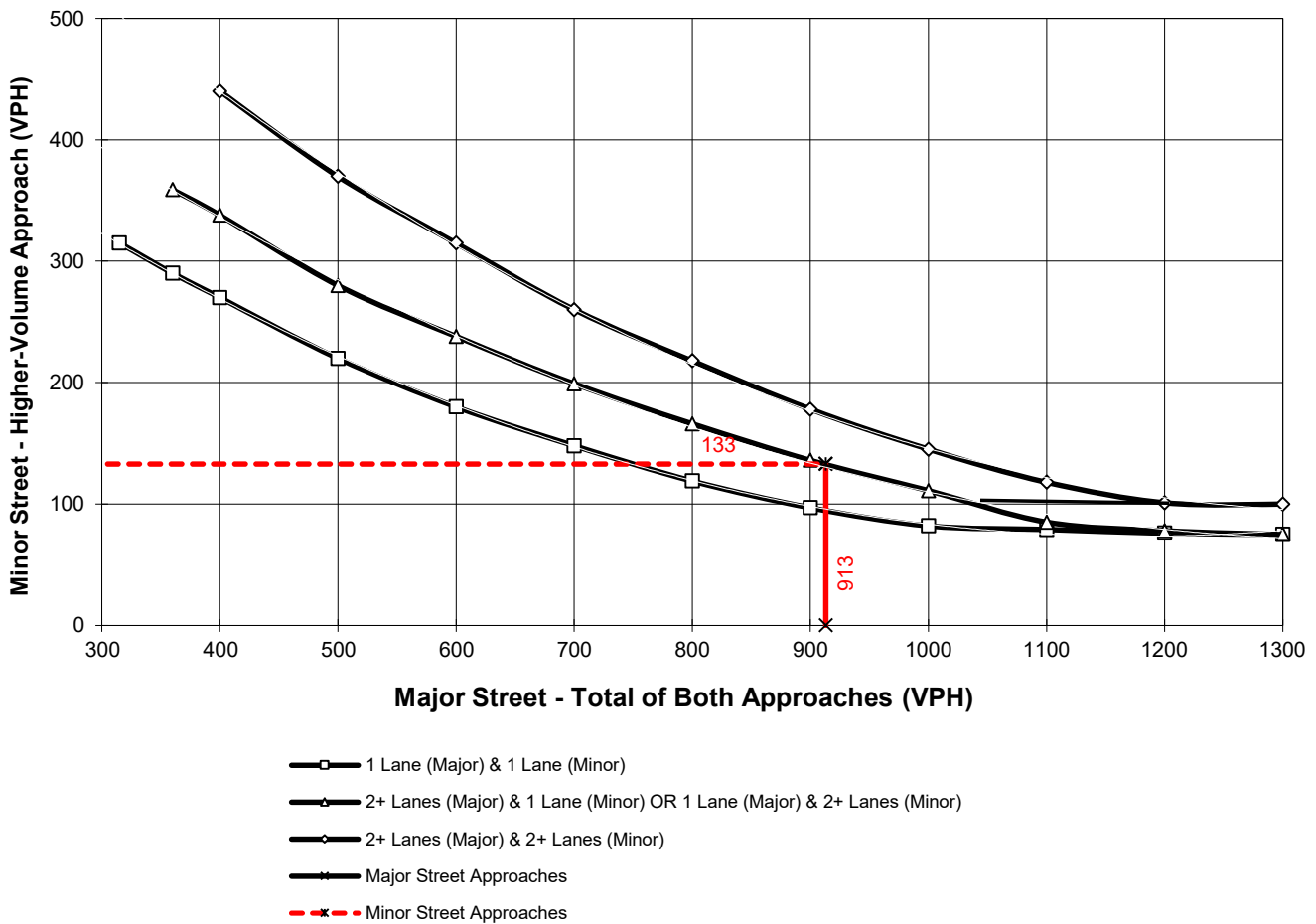
Major Street Name = **Mapes Rd.**

Total of Both Approaches (VPH) = **913**
 Number of Approach Lanes Major Street = **1**

Minor Street Name = **Sherman Rd.**

High Volume Approach (VPH) = **133**
 Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

**APPENDIX 6.4: OPENING YEAR CUMULATIVE (2024) WITH PROJECT
CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS**

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	<u>CALC</u>	<u>TRAFFIC CONDITIONS</u>	<u>2024 WP</u>
Jurisdiction: <u>City of Menifee</u>				<u>JB</u>		<u>DATE 04/21/23</u>
Major Street: <u>Mapes Rd.</u>				<u>JB</u>		<u>DATE 04/21/23</u>
Minor Street: <u>Driveway 1</u>					Critical Approach Speed (Major) <u>45 mph</u>	
					Critical Approach Speed (Minor) <u>25 mph</u>	
Major Street Approach Lanes =		<u>1</u>	lane	Minor Street Approach Lanes =		<u>1</u> lane
Major Street Future ADT =		<u>11,309</u>	vpd	Minor Street Future ADT =		<u>136</u> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);					<input checked="" type="checkbox"/>	
					or	RURAL (R)
In built up area of isolated community of < 10,000 population					<input type="checkbox"/>	

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements			
CONDITION A - Minimum Vehicular Volume		EADT			
<u>Satisfied</u>	<u>Not Satisfied</u>	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
1 11,309	1 136	8,000	5,600 *	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
	XX				
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
1 11,309	1 136	12,000	8,400 *	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>	<u>Not Satisfied</u>	80%		80%	
No one condition satisfied, but following conditions fulfilled 80% of more	XX				
	<u>A</u>				
	8%				
	<u>B</u>				
	16%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	<u>CALC</u>	<u>TRAFFIC CONDITIONS</u>	<u>2024 WP</u>
Jurisdiction: <u>City of Menifee</u>				<u>JB</u>		<u>DATE 02/16/23</u>
Major Street: <u>Sherman Rd.</u>				<u>JB</u>		<u>DATE 02/16/23</u>
Minor Street: <u>Driveway 3</u>					Critical Approach Speed (Major) <u>40 mph</u>	
					Critical Approach Speed (Minor) <u>25 mph</u>	
Major Street Approach Lanes = <u>1</u>	lane	Minor Street Approach Lanes = <u>1</u>	lane			
Major Street Future ADT = <u>1,475</u>	vpd	Minor Street Future ADT = <u>55</u>	vpd			
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);					<input type="checkbox"/>	
					or	RURAL (R)
In built up area of isolated community of < 10,000 population					<input type="checkbox"/>	

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
XX					
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
1 1,475	1 55				
2 +	1				
2 +	2 +				
1	2 +				
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
XX					
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
1 1,475	1 55				
2 +	1				
2 +	2 +				
1	2 +				
Combination of CONDITIONS A + B		2 CONDITIONS 80%		2 CONDITIONS 80%	
<u>Satisfied</u>	<u>Not Satisfied</u>				
No one condition satisfied, but following conditions fulfilled 80% of more					
	XX				
	<u>A</u>				
	2%				
	<u>B</u>				
	5%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	<u>CALC</u>	<u>TRAFFIC CONDITIONS</u>	<u>2024 WP</u>
Jurisdiction: <u>City of Menifee</u>				<u>JB</u>		<u>DATE 02/16/23</u>
Major Street: <u>Sherman Rd.</u>				<u>JB</u>		<u>DATE 02/16/23</u>
Minor Street: <u>Driveway 4</u>					Critical Approach Speed (Major) <u>40 mph</u>	
					Critical Approach Speed (Minor) <u>25 mph</u>	
Major Street Approach Lanes =		<u>1</u>	lane	Minor Street Approach Lanes =		<u>1</u> lane
Major Street Future ADT =		<u>1,521</u>	vpd	Minor Street Future ADT =		<u>81</u> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);						<input type="text"/>
						or
In built up area of isolated community of < 10,000 population						<input type="text"/>

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>				
	XX				
Number of lanes for moving traffic on each approach		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
<u>Major Street</u>	<u>Minor Street</u>				
1 1,521	1 81	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>				
	XX				
Number of lanes for moving traffic on each approach		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
<u>Major Street</u>	<u>Minor Street</u>				
1 1,521	1 81	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS 80%		2 CONDITIONS 80%	
<u>Satisfied</u>	<u>Not Satisfied</u>				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more					
	<u>A</u>				
	3%				
	<u>B</u>				
	7%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



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**APPENDIX 6.5: OPENING YEAR CUMULATIVE (2024) WITHOUT
PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS**

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Queues

1: SR-74/I-215 SB Ramps & Bonnie Dr.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	73	372	616	631	627	87
v/c Ratio	0.39	0.23	1.09	0.42	0.86	0.13
Control Delay	39.8	0.3	95.5	4.7	34.5	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.8	0.3	95.5	4.7	34.5	9.2
Queue Length 50th (ft)	34	0	~374	90	264	12
Queue Length 95th (ft)	76	0	#624	166	#467	41
Internal Link Dist (ft)	1025			1452	226	
Turn Bay Length (ft)		50	120			100
Base Capacity (vph)	426	1615	565	1567	929	813
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	0.17	0.23	1.09	0.40	0.67	0.11

Intersection Summary

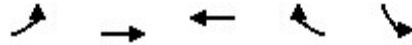
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	62	970	1161	960	457
v/c Ratio	0.34	0.50	0.80	0.59	0.82
Control Delay	41.2	11.4	25.0	1.6	38.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	11.4	25.0	1.6	38.8
Queue Length 50th (ft)	30	146	267	0	194
Queue Length 95th (ft)	72	190	363	0	#413
Internal Link Dist (ft)		1452	714		376
Turn Bay Length (ft)	245			150	
Base Capacity (vph)	261	2645	2090	1615	691
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	0.24	0.37	0.56	0.59	0.66

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)	144	447	526	524	1082	87
v/c Ratio	0.61	0.28	1.76	0.38	1.13	0.11
Control Delay	46.0	0.4	381.1	5.7	97.0	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	0.4	381.1	5.7	97.0	8.9
Queue Length 50th (ft)	73	0	~420	85	~676	15
Queue Length 95th (ft)	131	0	#651	165	#990	42
Internal Link Dist (ft)	1025			1452	226	
Turn Bay Length (ft)		50	120			100
Base Capacity (vph)	355	1615	299	1381	954	825
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	0.41	0.28	1.76	0.38	1.13	0.11

Intersection Summary

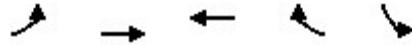
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	56	1508	935	833	640
v/c Ratio	0.38	0.86	0.66	0.52	0.93
Control Delay	45.2	24.2	23.4	1.2	47.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	45.2	24.2	23.4	1.2	47.2
Queue Length 50th (ft)	27	334	218	0	301
Queue Length 95th (ft)	69	424	289	0	#602
Internal Link Dist (ft)		1452	714		376
Turn Bay Length (ft)	245			150	
Base Capacity (vph)	173	2198	1611	1615	691
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	0.32	0.69	0.58	0.52	0.93

Intersection Summary

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

**APPENDIX 6.6: OPENING YEAR CUMULATIVE (2024) WITH PROJECT
CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS**

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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	73	374	618	634	642	87
v/c Ratio	0.39	0.23	1.11	0.42	0.86	0.13
Control Delay	40.2	0.3	102.4	4.7	34.5	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.2	0.3	102.4	4.7	34.5	9.3
Queue Length 50th (ft)	35	0	~391	90	274	12
Queue Length 95th (ft)	76	0	#627	168	#486	41
Internal Link Dist (ft)	1025			1452	226	
Turn Bay Length (ft)		50	120			100
Base Capacity (vph)	420	1615	557	1554	916	802
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	0.17	0.23	1.11	0.41	0.70	0.11

Intersection Summary

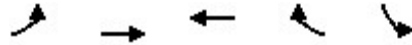
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	62	988	1165	965	467
v/c Ratio	0.34	0.52	0.80	0.60	0.83
Control Delay	41.4	11.6	25.2	1.6	39.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	11.6	25.2	1.6	39.7
Queue Length 50th (ft)	30	150	269	0	202
Queue Length 95th (ft)	72	195	364	0	#428
Internal Link Dist (ft)		1452	714		376
Turn Bay Length (ft)	245			150	
Base Capacity (vph)	258	2632	2063	1615	683
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	0.24	0.38	0.56	0.60	0.68

Intersection Summary

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

Queues

1: SR-74/I-215 SB Ramps & Bonnie Dr.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	144	448	529	537	1089	87
v/c Ratio	0.61	0.28	1.77	0.39	1.14	0.11
Control Delay	46.0	0.4	385.4	5.8	99.9	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	0.4	385.4	5.8	99.9	8.9
Queue Length 50th (ft)	73	0	~424	89	~684	15
Queue Length 95th (ft)	131	0	#654	171	#998	42
Internal Link Dist (ft)	1025			1452	226	
Turn Bay Length (ft)		50	120			100
Base Capacity (vph)	355	1615	299	1381	954	825
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	0.41	0.28	1.77	0.39	1.14	0.11

Intersection Summary

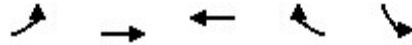
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
2: SR-74 & I-215 NB Ramps



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	56	1516	952	852	646
v/c Ratio	0.38	0.87	0.67	0.53	0.94
Control Delay	45.4	24.3	23.6	1.2	49.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	24.3	23.6	1.2	49.1
Queue Length 50th (ft)	28	337	224	0	307
Queue Length 95th (ft)	69	428	296	0	#609
Internal Link Dist (ft)		1452	714		376
Turn Bay Length (ft)	245			150	
Base Capacity (vph)	173	2191	1606	1615	689
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	0.32	0.69	0.59	0.53	0.94

Intersection Summary

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

**APPENDIX 6.7: OPENING YEAR CUMULATIVE (2024) WITH PROJECT
CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
WITH IMPROVEMENTS**

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Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.

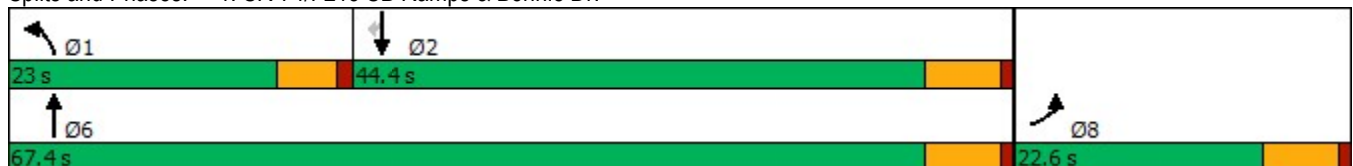


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖↗	↑	↑	↗
Traffic Volume (vph)	71	363	599	615	623	84
Future Volume (vph)	71	363	599	615	623	84
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		23.0	67.4	44.4	44.4
Total Split (%)	25.1%		25.6%	74.9%	49.3%	49.3%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effct Green (s)	7.8	66.3	16.4	51.7	27.5	27.5
Actuated g/C Ratio	0.12	1.00	0.25	0.78	0.41	0.41
v/c Ratio	0.34	0.23	0.71	0.43	0.81	0.12
Control Delay	36.6	0.3	31.4	5.0	27.7	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.6	0.3	31.4	5.0	27.7	7.7
LOS	D	A	C	A	C	A
Approach Delay	6.3			18.0	25.3	
Approach LOS	A			B	C	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 66.3
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 18.1
 Intersection LOS: B
 Intersection Capacity Utilization 68.2%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)
 02/16/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	71	363	599	615	623	84
Future Volume (veh/h)	71	363	599	615	623	84
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	73	0	618	634	642	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	113		773	1346	746	
Arrive On Green	0.06	0.00	0.22	0.71	0.39	0.00
Sat Flow, veh/h	1810	1610	3510	1900	1900	1610
Grp Volume(v), veh/h	73	0	618	634	642	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1900	1900	1610
Q Serve(g_s), s	2.1	0.0	8.7	7.6	16.2	0.0
Cycle Q Clear(g_c), s	2.1	0.0	8.7	7.6	16.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	113		773	1346	746	
V/C Ratio(X)	0.65		0.80	0.47	0.86	
Avail Cap(c_a), veh/h	574		1207	2228	1394	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.0	0.0	19.3	3.3	14.6	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.9	0.1	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	2.9	0.5	5.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.3	0.0	20.3	3.4	15.8	0.0
LnGrp LOS	C		C	A	B	
Approach Vol, veh/h	73	A		1252	642	A
Approach Delay, s/veh	26.3			11.7	15.8	
Approach LOS	C			B	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.5	26.6			43.1	9.3
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	18.0	38.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	10.7	18.2			9.6	4.1
Green Ext Time (p_c), s	0.8	2.3			2.3	0.0

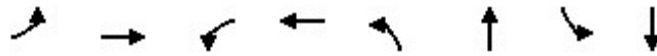
Intersection Summary

HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Notes

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

Timings
3: Trumble Rd. & Mapes Rd.

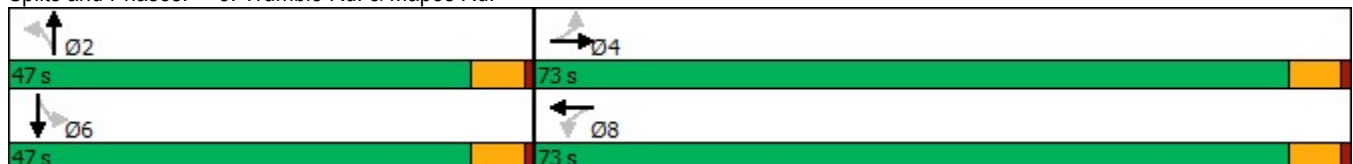


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔↔	↔↔	↔	↔	↔↔	↔	↔↔
Traffic Volume (vph)	1	23	567	13	66	175	4	150
Future Volume (vph)	1	23	567	13	66	175	4	150
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Total Split (s)	73.0	73.0	73.0	73.0	47.0	47.0	47.0	47.0
Total Split (%)	60.8%	60.8%	60.8%	60.8%	39.2%	39.2%	39.2%	39.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	1.0	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)		5.8	5.8	5.8	5.8	5.8	5.8	5.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		15.7	15.7	15.7	11.6	11.6	11.6	11.6
Actuated g/C Ratio		0.40	0.40	0.40	0.30	0.30	0.30	0.30
v/c Ratio		0.07	0.62	0.03	0.20	0.44	0.02	0.16
Control Delay		3.9	12.6	6.5	13.1	6.0	11.2	11.4
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		3.9	12.6	6.5	13.1	6.0	11.2	11.4
LOS		A	B	A	B	A	B	B
Approach Delay		3.9		12.4		6.9		11.4
Approach LOS		A		B		A		B

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 39.2
 Natural Cycle: 50
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 9.6
 Intersection Capacity Utilization 60.3%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service B




















Splits and Phases: 3: Trumble Rd. & Mapes Rd.



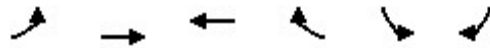
HCM 6th Signalized Intersection Summary
 3: Trumble Rd. & Mapes Rd.

Mapes & Sherman (JN 14804)

02/16/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	23	59	567	13	6	66	175	285	4	150	2
Future Volume (veh/h)	1	23	59	567	13	6	66	175	285	4	150	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	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	1	26	66	637	15	7	74	197	320	4	169	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	103	702	546	1262	457	213	545	578	512	325	1170	14
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	12	1884	1464	2568	1225	572	1233	1805	1600	896	3654	43
Grp Volume(v), veh/h	27	0	66	637	0	22	74	197	320	4	83	88
Grp Sat Flow(s),veh/h/ln	1896	0	1464	1284	0	1797	1233	1805	1600	896	1805	1892
Q Serve(g_s), s	0.0	0.0	1.1	8.2	0.0	0.3	1.7	3.1	6.4	0.1	1.2	1.2
Cycle Q Clear(g_c), s	0.3	0.0	1.1	9.3	0.0	0.3	3.0	3.1	6.4	6.6	1.2	1.2
Prop In Lane	0.04		1.00	1.00		0.32	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	806	0	546	1262	0	670	545	578	512	325	578	606
V/C Ratio(X)	0.03	0.00	0.12	0.50	0.00	0.03	0.14	0.34	0.62	0.01	0.14	0.14
Avail Cap(c_a), veh/h	3441	0	2603	4870	0	3195	1494	1967	1744	1015	1967	2062
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(l)	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	7.5	0.0	7.8	10.8	0.0	7.5	10.2	9.8	10.9	13.7	9.2	9.2
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	0.0	0.1	0.3	1.3	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	0.1	0.0	0.3	1.4	0.0	0.1	0.3	0.8	1.6	0.0	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.6	0.0	7.9	11.2	0.0	7.5	10.3	10.1	12.2	13.7	9.3	9.3
LnGrp LOS	A	A	A	B	A	A	B	B	B	B	A	A
Approach Vol, veh/h		93			659			591			175	
Approach Delay, s/veh		7.8			11.0			11.3			9.4	
Approach LOS		A			B			B			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		17.9		19.9		17.9		19.9				
Change Period (Y+Rc), s		5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		41.2		67.2		41.2		67.2				
Max Q Clear Time (g_c+I1), s		8.4		3.1		8.6		11.3				
Green Ext Time (p_c), s		3.5		0.6		0.9		2.8				
Intersection Summary												
HCM 6th Ctrl Delay				10.7								
HCM 6th LOS				B								

Timings
4: SR-74 & Trumble Rd.

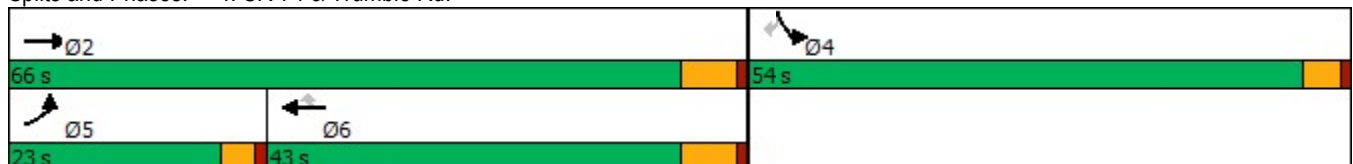


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↗↘	↑↑	↑↑	↗	↘	↗
Traffic Volume (vph)	565	684	1055	103	110	946
Future Volume (vph)	565	684	1055	103	110	946
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	23.0	66.0	43.0	43.0	54.0	54.0
Total Split (%)	19.2%	55.0%	35.8%	35.8%	45.0%	45.0%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effect Green (s)	19.0	60.0	37.0	37.0	49.5	49.5
Actuated g/C Ratio	0.16	0.50	0.31	0.31	0.41	0.41
v/c Ratio	1.05	0.39	0.98	0.19	0.15	1.11
Control Delay	100.8	19.4	63.5	9.6	22.8	87.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	100.8	19.4	63.5	9.6	22.8	87.3
LOS	F	B	E	A	C	F
Approach Delay		56.2	58.7		80.6	
Approach LOS		E	E		F	

Intersection Summary

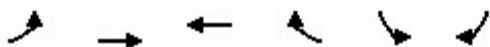
Cycle Length: 120
 Actuated Cycle Length: 120
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.11
 Intersection Signal Delay: 64.5
 Intersection Capacity Utilization 96.6%
 Analysis Period (min) 15
 Intersection LOS: E
 ICU Level of Service F

Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)
02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	565	684	1055	103	110	946
Future Volume (veh/h)	565	684	1055	103	110	946
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	582	705	1088	54	113	511
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	642	2020	1219	531	611	543
Arrive On Green	0.18	0.56	0.34	0.34	0.34	0.34
Sat Flow, veh/h	3510	3705	3705	1572	1810	1610
Grp Volume(v), veh/h	582	705	1088	54	113	511
Grp Sat Flow(s),veh/h/ln	1755	1805	1805	1572	1810	1610
Q Serve(g_s), s	16.6	10.9	29.1	2.4	4.5	31.4
Cycle Q Clear(g_c), s	16.6	10.9	29.1	2.4	4.5	31.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	642	2020	1219	531	611	543
V/C Ratio(X)	0.91	0.35	0.89	0.10	0.19	0.94
Avail Cap(c_a), veh/h	654	2124	1310	570	878	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	12.3	32.0	23.2	23.9	32.8
Incr Delay (d2), s/veh	15.8	0.1	7.8	0.1	0.1	12.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	3.8	13.0	0.9	1.8	26.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.7	12.4	39.8	23.3	23.9	45.7
LnGrp LOS	E	B	D	C	C	D
Approach Vol, veh/h		1287	1142		624	
Approach Delay, s/veh		32.4	39.0		41.7	
Approach LOS		C	D		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		63.1		38.9	22.6	40.4
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		60.0		49.5	19.0	37.0
Max Q Clear Time (g_c+I1), s		12.9		33.4	18.6	31.1
Green Ext Time (p_c), s		4.8		1.0	0.1	3.3
Intersection Summary						
HCM 6th Ctrl Delay			36.8			
HCM 6th LOS			D			

Timings

1: SR-74/I-215 SB Ramps & Bonnie Dr.

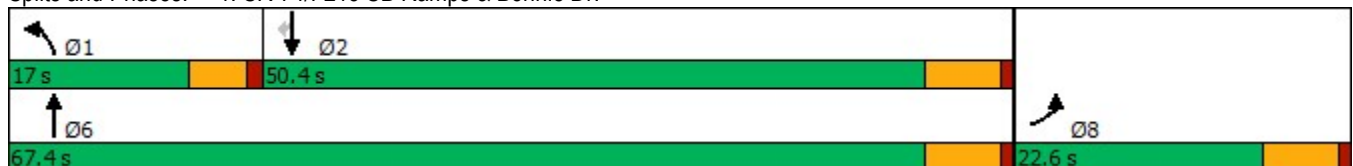


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	134	293	414	381	826	81
Future Volume (vph)	134	293	414	381	826	81
Turn Type	Prot	Free	Prot	NA	NA	Perm
Protected Phases	8		1	6	2	
Permitted Phases		Free				2
Detector Phase	8		1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	22.6		10.0	24.2	24.2	24.2
Total Split (s)	22.6		17.0	67.4	50.4	50.4
Total Split (%)	25.1%		18.9%	74.9%	56.0%	56.0%
Yellow Time (s)	5.0		4.0	5.0	5.0	5.0
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)	6.0		5.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	None	None	None
Act Effect Green (s)	10.9	81.4	12.1	58.4	41.2	41.2
Actuated g/C Ratio	0.13	1.00	0.15	0.72	0.51	0.51
v/c Ratio	0.60	0.20	0.85	0.30	0.93	0.10
Control Delay	44.6	0.3	52.9	5.2	36.2	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.6	0.3	52.9	5.2	36.2	7.3
LOS	D	A	D	A	D	A
Approach Delay	14.2			30.0	33.6	
Approach LOS	B			C	C	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 81.4
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 28.4
 Intersection Capacity Utilization 76.9%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service D

Splits and Phases: 1: SR-74/I-215 SB Ramps & Bonnie Dr.



HCM 6th Signalized Intersection Summary
 1: SR-74/I-215 SB Ramps & Bonnie Dr.

Mapes & Sherman (JN 14804)
 02/16/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	134	293	414	381	826	81
Future Volume (veh/h)	134	293	414	381	826	81
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	144	0	445	410	888	0
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	183		538	1386	961	
Arrive On Green	0.10	0.00	0.15	0.73	0.51	0.00
Sat Flow, veh/h	1810	1610	3510	1900	1900	1610
Grp Volume(v), veh/h	144	0	445	410	888	0
Grp Sat Flow(s),veh/h/ln	1810	1610	1755	1900	1900	1610
Q Serve(g_s), s	5.5	0.0	8.7	5.3	30.7	0.0
Cycle Q Clear(g_c), s	5.5	0.0	8.7	5.3	30.7	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	183		538	1386	961	
V/C Ratio(X)	0.79		0.83	0.30	0.92	
Avail Cap(c_a), veh/h	424		595	1647	1191	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.1	0.0	29.1	3.3	16.2	0.0
Incr Delay (d2), s/veh	2.8	0.0	7.8	0.0	9.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	3.9	0.8	12.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.9	0.0	36.9	3.3	25.8	0.0
LnGrp LOS	C		D	A	C	
Approach Vol, veh/h	144	A		855	888	A
Approach Delay, s/veh	33.9			20.8	25.8	
Approach LOS	C			C	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	15.9	41.8			57.7	13.2
Change Period (Y+Rc), s	5.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	12.0	44.4			61.4	16.6
Max Q Clear Time (g_c+I1), s	10.7	32.7			7.3	7.5
Green Ext Time (p_c), s	0.1	3.1			1.3	0.1

Intersection Summary

HCM 6th Ctrl Delay	24.1
HCM 6th LOS	C

Notes

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

Timings
3: Trumble Rd. & Mapes Rd.



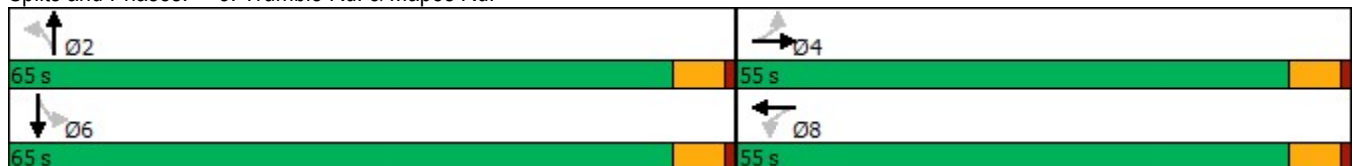
Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↔↔	↔↔	↔	↔	↔↔	↔	↔↔
Traffic Volume (vph)	6	221	1	11	119	55	233
Future Volume (vph)	6	221	1	11	119	55	233
Turn Type	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	4		8		2		6
Permitted Phases		8		2		6	
Detector Phase	4	8	8	2	2	6	6
Switch Phase							
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	23.8	23.8	23.8	23.8	23.8	23.8	23.8
Total Split (s)	55.0	55.0	55.0	65.0	65.0	65.0	65.0
Total Split (%)	45.8%	45.8%	45.8%	54.2%	54.2%	54.2%	54.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8
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)	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	Min	Min	Min	Min
Act Effect Green (s)	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.33	0.33
v/c Ratio	0.01	0.29	0.03	0.04	0.35	0.21	0.24
Control Delay	6.8	10.0	5.6	8.9	4.1	10.9	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.8	10.0	5.6	8.9	4.1	10.9	9.3
LOS	A	A	A	A	A	B	A
Approach Delay	6.8		9.7		4.3		9.6
Approach LOS	A		A		A		A

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 34.9
 Natural Cycle: 50
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.35
 Intersection Signal Delay: 7.4
 Intersection Capacity Utilization 48.0%
 Analysis Period (min) 15

Intersection LOS: A
 ICU Level of Service A





















Splits and Phases: 3: Trumble Rd. & Mapes Rd.



HCM 6th Signalized Intersection Summary
3: Trumble Rd. & Mapes Rd.

Mapes & Sherman (JN 14804)

02/16/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	6	6	221	1	11	11	119	248	55	233	2
Future Volume (veh/h)	0	6	6	221	1	11	11	119	248	55	233	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	7	7	266	1	13	13	143	299	66	281	2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	539	463	1256	34	443	545	612	544	409	1246	9
Arrive On Green	0.00	0.29	0.29	0.29	0.29	0.29	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	0	1936	1579	2759	116	1512	1114	1805	1603	961	3674	26
Grp Volume(v), veh/h	0	7	7	266	0	14	13	143	299	66	138	145
Grp Sat Flow(s),veh/h/ln	0	1805	1616	1379	0	1628	1114	1805	1603	961	1805	1895
Q Serve(g_s), s	0.0	0.1	0.1	2.4	0.0	0.2	0.3	1.8	4.8	1.9	1.7	1.7
Cycle Q Clear(g_c), s	0.0	0.1	0.1	2.5	0.0	0.2	2.0	1.8	4.8	6.7	1.7	1.7
Prop In Lane	0.00		0.98	1.00		0.93	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	0	529	473	1256	0	477	545	612	544	409	612	643
V/C Ratio(X)	0.00	0.01	0.02	0.21	0.00	0.03	0.02	0.23	0.55	0.16	0.23	0.23
Avail Cap(c_a), veh/h	0	2816	2521	4751	0	2540	2258	3388	3009	1886	3388	3558
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(l)	0.00	1.00	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	0.0	7.9	7.9	8.8	0.0	8.0	8.2	7.5	8.5	11.2	7.5	7.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.9	0.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.9	0.3	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.9	7.9	8.9	0.0	8.0	8.2	7.7	9.3	11.4	7.6	7.6
LnGrp LOS	A	A	A	A	A	A	A	A	A	B	A	A
Approach Vol, veh/h		14			280			455			349	
Approach Delay, s/veh		7.9			8.8			8.8			8.3	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.5		15.0		16.5		15.0				
Change Period (Y+Rc), s		5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		59.2		49.2		59.2		49.2				
Max Q Clear Time (g_c+I1), s		6.8		2.1		8.7		4.5				
Green Ext Time (p_c), s		2.8		0.0		1.9		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				8.6								
HCM 6th LOS				A								

Timings
4: SR-74 & Trumble Rd.

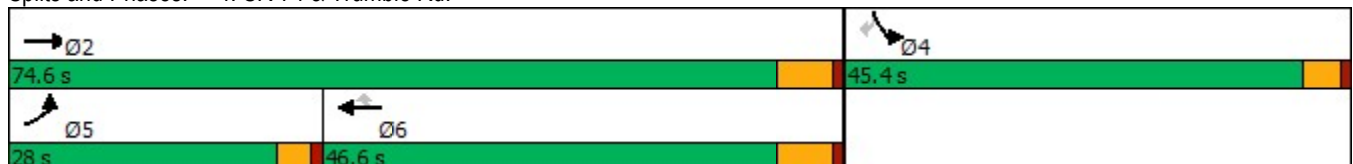


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↗↗	↑↑	↑↑	↖	↖	↖
Traffic Volume (vph)	444	901	798	121	127	529
Future Volume (vph)	444	901	798	121	127	529
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	11.0	41.6	41.6	30.5	30.5
Total Split (s)	28.0	74.6	46.6	46.6	45.4	45.4
Total Split (%)	23.3%	62.2%	38.8%	38.8%	37.8%	37.8%
Yellow Time (s)	3.0	5.0	5.0	5.0	3.5	3.5
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	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.5	4.5
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effect Green (s)	15.8	46.2	26.0	26.0	15.2	15.2
Actuated g/C Ratio	0.22	0.63	0.36	0.36	0.21	0.21
v/c Ratio	0.63	0.42	0.67	0.20	0.36	0.84
Control Delay	33.0	8.2	24.3	5.2	29.6	20.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	8.2	24.3	5.2	29.6	20.6
LOS	C	A	C	A	C	C
Approach Delay		16.4	21.8		22.3	
Approach LOS		B	C		C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 73.1
 Natural Cycle: 85
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 19.4
 Intersection Capacity Utilization 63.6%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

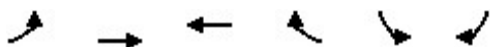
Splits and Phases: 4: SR-74 & Trumble Rd.



HCM 6th Signalized Intersection Summary
4: SR-74 & Trumble Rd.

Mapes & Sherman (JN 14804)

02/16/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖↗	↕	↖↗	↖	↗	↖
Traffic Volume (veh/h)	444	901	798	121	127	529
Future Volume (veh/h)	444	901	798	121	127	529
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	477	969	858	119	137	435
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	595	1987	1170	522	543	483
Arrive On Green	0.17	0.55	0.32	0.32	0.30	0.30
Sat Flow, veh/h	3510	3705	3705	1610	1810	1610
Grp Volume(v), veh/h	477	969	858	119	137	435
Grp Sat Flow(s),veh/h/ln	1755	1805	1805	1610	1810	1610
Q Serve(g_s), s	9.2	11.6	14.8	3.8	4.0	18.2
Cycle Q Clear(g_c), s	9.2	11.6	14.8	3.8	4.0	18.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	595	1987	1170	522	543	483
V/C Ratio(X)	0.80	0.49	0.73	0.23	0.25	0.90
Avail Cap(c_a), veh/h	1198	3522	2085	930	1053	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	9.7	21.1	17.3	18.6	23.6
Incr Delay (d2), s/veh	1.0	0.2	0.9	0.2	0.1	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.4	5.5	1.2	1.5	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.0	9.9	22.0	17.6	18.7	26.1
LnGrp LOS	C	A	C	B	B	C
Approach Vol, veh/h		1446	977		572	
Approach Delay, s/veh		16.2	21.4		24.3	
Approach LOS		B	C		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		44.7		25.6	15.9	28.8
Change Period (Y+Rc), s		6.0		4.5	4.0	6.0
Max Green Setting (Gmax), s		68.6		40.9	24.0	40.6
Max Q Clear Time (g_c+I1), s		13.6		20.2	11.2	16.8
Green Ext Time (p_c), s		7.4		0.9	0.7	6.0
Intersection Summary						
HCM 6th Ctrl Delay			19.5			
HCM 6th LOS			B			

H.2 - Vehicle Miles Traveled Screening Evaluation



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June 22, 2022

Mr. Rob Blough
City of Menifee
29714 Haun Road
Menifee, CA 92586

**MAPES AND SHERMAN COMMERCE CENTER VEHICLE MILES TRAVELED (VMT)
SCREENING EVALUATION**

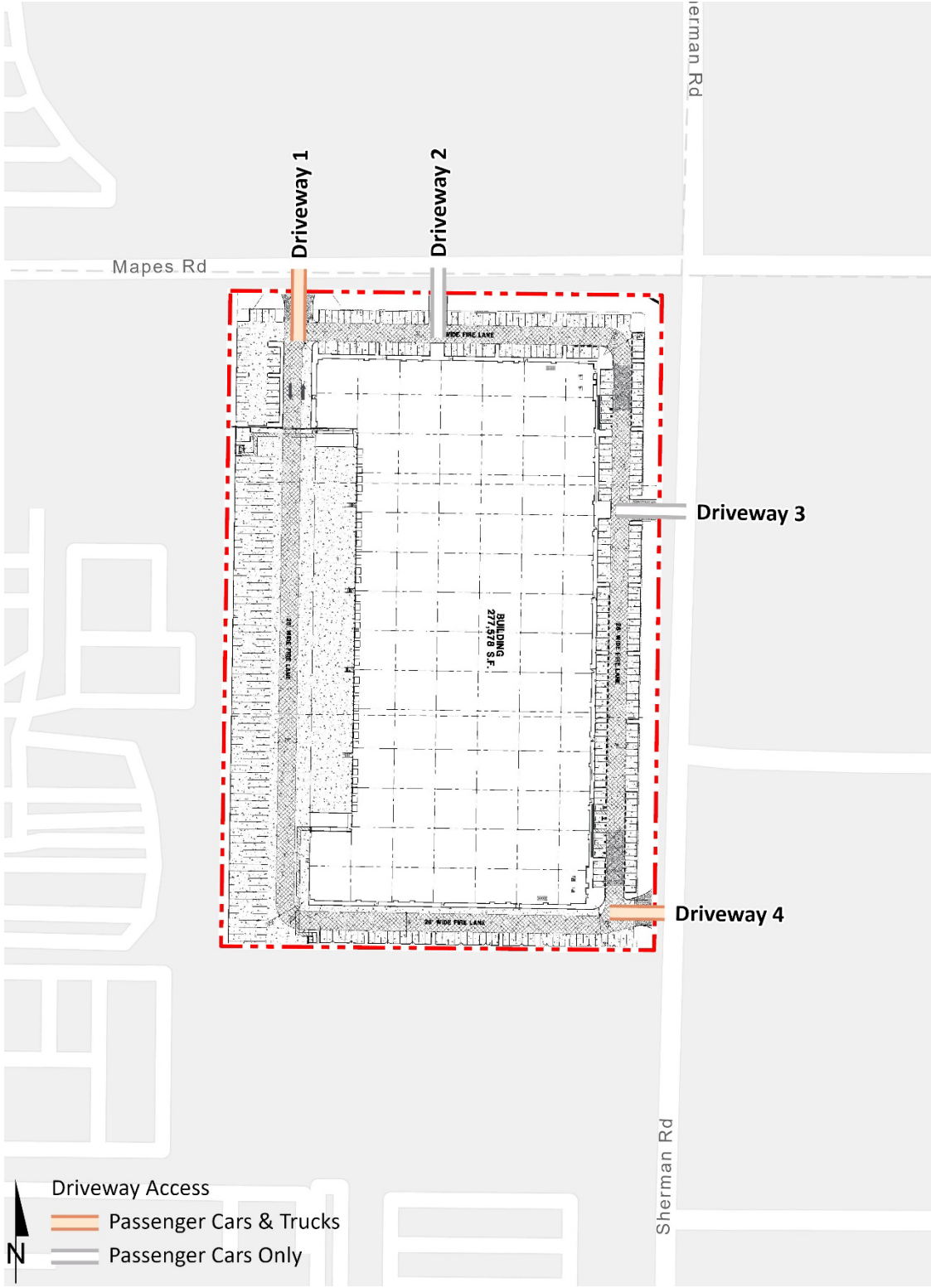
Mr. Rob Blough,

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Screening Evaluation for the Mapes and Sherman Commerce Center development (**Project**), which is located on the southwest corner of Sherman Road and Mapes Road (APNs: 329-030-003, 048, 049) in the City of Menifee.

PROJECT OVERVIEW

It is our understanding that the project is to consist of the development of an approximately 277,578 square foot high-cube fulfillment center warehouse building. A preliminary site plan can be found in Exhibit 1.

EXHIBIT 1: PRELIMINARY SITE PLAN



BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which requires all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (**Technical Advisory**) (1).

The City of Menifee City Council adopted analytical procedures, screening tools, and impact thresholds for VMT, which are documented in the recently updated City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (January 2022) (**City Guidelines**) (2). For the purposes of this evaluation the City Guidelines have been used.

VMT SCREENING ASSESSMENT

The City Guidelines provides details on appropriate screening criteria that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without conducting a more detailed project level analysis. To aid in the project-level VMT screening process, the City of Menifee utilizes the WRCOG VMT Screening Tool (**Screening Tool**). The web-based Screening Tool allows a user to select an assessor's parcel number (APN) to determine if a project's physical location meets one or more of the land use screening thresholds documented in the City Guidelines. Screening criteria is broken into three steps:

- Step 1: Transit Priority Area (TPA) Screening
- Step 2: Low VMT Area Screening
- Step 3: Project Type Screening

A land use project need only to meet one of the above screening criteria to result in a less than significant impact.

STEP 1: TPA SCREENING

Consistent with guidance identified in the City Guidelines, projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing "major transit stop"¹ or an existing stop along a "high-quality transit corridor"²) may be presumed to have a less than significant impact absent substantial evidence to the contrary.

However, the presumption may not be appropriate if a project:

¹ Pub. Resources Code, § 21064.3 ("Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").

² Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Based on the Screening Tool, the Project site is shown not to be located within a TPA. (See Attachment A).

TPA screening criteria is not met.

STEP 2: LOW VMT AREA SCREENING

City Guidelines state that “Residential and office projects located within a low VMT-generating area are presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if there is a reasonable expectation that the project will generate VMT per service population that is similar to the existing land uses in the low VMT area.”³ The City uses the WRCOG screening tool to determine low areas of VMT. The screening tool uses the sub-regional RIVCOM to measure VMT performance within individual traffic analysis zones (TAZ’s) within the region. The Project’s physical location based on parcel number is identified in the Screening Tool to determine project generated VMT as compared to the City’s impact threshold (i.e., baseline project-generated VMT per service population exceeds the County of Riverside General Plan Buildout VMT per service population).

The parcel containing the proposed Project was selected and the screening tool was evaluated for VMT per service population measure of VMT. The Project resides within TAZ 1098 and was shown to generate 32.1 VMT per service population whereas the City’s impact threshold (i.e., County of Riverside General Plan Buildout VMT per service population) is 33.6 VMT per service population. Based on the Screening Tool results, the Project is located within a low VMT generating zone (See Attachment A). Additionally, the Project is consistent with the RTP/SCS and will not be seeking a General Plan amendment nor a change of zone.

Low VMT Area screening criteria is met.

STEP 3: PROJECT TYPE SCREENING

The City Guidelines identify that local serving retail less than 50,000 square feet or other local serving essential services (e.g., local parks, day care centers, public schools, medical/dental office

³ City Guidelines; Page 11

buildings, etc.) are presumed to have a less than significant impact absent substantial evidence to the contrary. The Project does not intend to develop any local serving retail uses.

Additionally, the City Guidelines also indicate that projects generating fewer than 110 daily vehicle trips may be presumed to have a less than significant impact. Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021 (3). The proposed Project is anticipated to generate 592 daily vehicle trips, which is above the 110 daily vehicle trip threshold (see Attachment B).

The Project Type screening threshold is not met.

CONCLUSION

In summary, the Project was evaluated consistent with available screening criteria as presented in the City Guidelines. The Project was found to meet the low VMT area screening criteria; no further VMT analysis required.

If you have any questions, please contact me directly at aso@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.



Alexander So
Senior Associate

REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **City of Menifee.** *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled.* January 2022.
3. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.

ATTACHMENT A
WRCOG SCREENING TOOL

ATTACHEMENT B
PROJECT TRIP GENERATION

TABLE 1: TRIP GENERATION RATES

Land Use	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center Warehouse ¹	TSF	--	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks			0.006	0.002	0.008	0.003	0.008	0.011	0.162
5+-Axle Trucks			0.008	0.003	0.011	0.003	0.007	0.010	0.217

¹ Vehicle Mix Source: [High Cube Warehouse Trip Generation Study](#), WSP, January 29, 2019.

Inbound and outbound split source: ITE [Trip Generation Manual](#), Eleventh Edition (2021) for ITE Land Use Code 154.

² TSF = thousand square feet

TABLE 2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Actual Vehicles:								
High-Cube Fulfillment	277.578 TSF							
Passenger Cars:		22	7	29	11	29	40	486
2-4axle Trucks:		2	1	3	1	2	3	46
5+-axle Trucks:		2	1	3	1	2	3	60
Total Truck Trips (Actual Vehicles):		4	2	6	2	4	6	106
Total Trips (Actual Vehicles)²		26	9	35	13	33	46	592

¹ TSF = thousand square feet

² Total Trips = Passenger Cars + Truck Trips.